

**RE-ACCREDITATION REPORT (RAR)  
FOR  
ASSESSMENT AND ACCREDITATION  
OF THE UNIVERSITY FOR CYCLE 3**

**SUBMITTED TO  
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL  
BANGALORE**

**BY**



**GURU JAMBHESHWAR UNIVERSITY OF  
SCIENCE & TECHNOLOGY  
HISAR (HARYANA)  
(Established by the State Legislature Act 17 of 1995)**

**APRIL 2014**

**(UNIQUE TRACK ID: HRUNGN10068)**

## Contents

Contents		Page No.
<b>Part-A</b>	<b>Preface from the Vice-Chancellor</b>	06
<b>Part-B</b>	<b>i) Executive Summary-The SWOC Analysis of the Institution</b>	08
	<b>ii) Quality Sustenance and Enhancement Measures Undertaken during last 4 years</b>	25
<b>Part-C</b>	<b>Profile of the Institution</b>	33
<b>Part-D</b>	<b>Criteria-wise Analytical Report</b>	
	<b>Criterion I : Curricular Aspects</b>	51
	1.1 Curriculum Design and Development	
	1.2 Academic Flexibility	
	1.3 Curriculum Enrichment	
	1.4 Feedback System	
	<b>Criterion II: Teaching-Learning and Evaluation</b>	61
	2.1 Student Enrolment and Profile	
	2.2 Catering to Student Diversity	
	2.3 Teaching-Learning Process	
	2.4 Teacher Quality	
	2.5 Evaluation Process and Reforms	
	2.6 Student Performance and Learning Outcomes	
	<b>Criterion III : Research, Consultancy and Extension</b>	77

3.1	Promotion of Research	
3.2	Resource Mobilization for Research	
3.3	Research Facilities	
3.4	Research Publications and Awards	
3.5	Consultancy	
3.6	Extension Activities and Institutional Social Responsibility	
3.7	Collaborations	
	<b>Criterion IV : Infrastructure and Learning Resources</b>	<b>117</b>
4.1	Physical Facilities	
4.2	Library as a Learning Resource	
4.3	IT Infrastructure	
4.4	Maintenance of Campus Facilities	
	<b>Criterion V: Student Support and Progression</b>	<b>133</b>
5.1	Student Mentoring and Support	
5.2	Student Progression	
5.3	Student Participation and Activities	
	<b>Criterion VI : Governance, Leadership and Management</b>	<b>145</b>
6.1	Institutional Vision and Leadership	
6.2	Strategy Development and Deployment	
6.3	Faculty Empowerment Strategies	
6.4	Financial Management and Resource Mobilization	
6.5	Internal Quality Assurance System (IQAS)	
	<b>Criterion VII : Innovations and Best Practices</b>	<b>161</b>

7.1 Environment Consciousness

7.2 Innovations

7.3 Best Practices

## **Part-E Evaluative Reports of the Departments**

### **Faculty of Engineering & Technology**

1.	Department of Computer Science & Engineering	173
2.	Department of Printing Technology	201
3.	Department of Electronics & Communication Engineering	220
4.	Department of Biomedical Engineering	238
5.	Department of Mechanical Engineering	253

### **Faculty of Environmental and Bio Sciences & Technology**

6	Department of Environmental Sciences & Engineering	276
7	Department of Bio & Nano Technology	299
8	Department of Food Technology	336

### **Faculty of Physical Sciences**

9	Department of Chemistry	350
10	Department of Mathematics	367
11	Department of Applied Physics	386

### **Faculty of Media Studies**

12	Department of Communication Management & Technology	408
13	Department of Advertising Management & Public Relations	425

<b>Faculty of Medical Sciences</b>	
14. Department of Pharmaceutical Sciences	441
15. Department of Physiotherapy	458
16. Department of Applied Psychology	473
<b>Faculty of Religious Studies</b>	
17. Guru Jambheshwar Ji Maharaj Institute of Religious Studies	485
<b>Haryana School of Business</b>	
18. Haryana School of Business	493
<b>Directorate of Distance Education</b>	542
<b>Annexures I to VII</b>	554
<b>Statement of Compliance</b>	577
<b>Declaration by the Head of the Institution</b>	578



Guru Jambheshwar University of Science & Technology,  
Hisar (Haryana)

Dr. M. L. Ranga,  
Vice-Chancellor

Dated: April 28, 2014


#### Preface

I have the honour to write preface to Re-accreditation Report (RAR) being submitted to National Accreditation and Assessment Council for third cycle of accreditation of this University, which has the privilege of having been accredited as 'A' grade University consecutively twice in 2002 and 2009. The present RAR is an outcome of rigorous exercise undertaken by Steering Committee comprising of senior faculty with a Deputy Registrar as Member Secretary. The committee headed by the Dean Academic Affairs held consultations and long discussions with the Chairpersons and teachers of the Teaching Departments and other senior functionaries through organized visits and once in a while talks wherever and whenever necessary. The inputs received from them constitute the body and soul of the report.

As per NAAC guidelines, the report is organized in five major parts numbered A to E alphabets. This preface implies part A and part B encompasses Executive Summary with SWOC analysis of the institution, followed by Quality Sustenance and Enhancement Measures taken during last four years. Having given profile of the university in part C, the criterion-wise analytical report on seven criterion is given in part D. In part E, Evaluative Reports of the Departments are presented faculty wise. The report ends with a statement of compliance and declaration by me as Vice Chancellor of this University. It needs mention that all specifications mentioned in the NAAC manual have been complied with while organizing the report and its size has also been limited in the number of pages stipulated by the guidelines. All requisite annexures called for in part C – Profile of the University have also been at the end of this part.

There are several documents and information of the university of which references have come while discussing the criteria-wise inputs and presenting evaluative reports of the departments. In keeping with the spirit of NAAC guidelines, we have avoided adding the voluminous annexures containing policies, ordinances, list of research papers, etc. The same will be presented before the 'Peer Team' at the time of its visit. Glance through the contents and details given in the report evidences that the university fraternity has done good work in all manifestations for achieving the vision, mission and goals of the university.

I look forward to the 'Peer Team' visit for assessment of our work and facilities for the third cycle accreditation.

  
(M. L. Ranga)

## **Part-B**

- (i) Executive Summary- SWOC Analysis of the Institution**
- (ii) Quality Sustenance and Enhancement Measures Undertaken during last 4 years**

## **(i) Executive Summary-The SWOC Analysis of the Institution**

Guru Jambheshwar University of Science and Technology, Hisar, was established on October 20, 1995 by an Act of the Legislature of the State of Haryana and formally inaugurated on November 1, 1995. The objectives of the University as enshrined in the Act are to facilitate and promote studies and research in emerging areas of higher education with focus on new frontiers of Technology, Pharmacy, Environmental Studies, Non-conventional Energy Sources, Mass Media and Management Studies and also to achieve excellence in these and connected fields. The University has drawn its Vision and Mission which have been defined keeping in view the objectives of the University enshrined in its Act.

**Vision:** To develop the University as a Centre of Excellence for the quality teaching, research and extension services to produce the dynamic and the knowledgeable human resources and act as a knowledge power-house capable of contributing to the national development and welfare of the society.

**Mission:** The University aspires to be a globally recognized Centre of Excellence in the field of technical education and research. It strives to achieve this by introducing innovative job oriented courses, employing competent and motivated faculty, developing state-of-the-art infrastructure, striking purposeful linkages with industry and professional bodies, and promoting quality of work life on campus. The University focuses on the student community to imbue them with passion for knowledge and creativity and to promote sustainable growth in academic resources, student placements, holistic human development with a strong conviction for professional ethics, social and environmental issues.

The University has taken a number of steps to promote quality technical education and has already made a mark in certain areas that contribute to promote quality education in the present global competitive environment. An executive summary of the report with SWOC analysis is presented as follows:

### **1. Curricular Aspects**

The university follows a systematic process and provides complete autonomy to the departments for design and development of the curricula. The University has evolved a well-defined system of designing and updating Course Curricula for various academic programmes with the active participation of industry and academia. For designing and development of course curricula, the model Curriculum of UGC and other academic bodies, wherever available, and needs of the industry and respective profession are taken into



account. Industry experts and academicians constitute Board of Studies (BOS) who frame and update Course Curricula of an academic programme. The curricula of various courses offered by the different departments of the University are first considered in the respective Staff Council of the Department and then in Board of Studies. There are normally two expert members in each of the Board of Studies from outside the university. Thereafter, it is deliberated in the meeting of respective Faculty again involving two outside experts. The recommendations of the Faculty and Board of Studies are placed before the Academic Council, where the Course Curriculum is thoroughly deliberated, finalized and approved.

University is presently offering 45 Regular Programmes on Campus and 17 Programmes through Distance Mode with Ph.D. facilities in all the Departments. There are 18 Teaching Departments classified in 7 Faculties for coordinated teaching in particular and effective governance in general. The regular on campus programmes include 10 M.Tech., 4 M.Pharma., 5 Master of Physiotherapy, 10 M.Sc., 7 B.Tech., 5 MBA, MCA, M.Com., B.Pharma. and Bachelor of Physiotherapy. The Distance Education Programmes include 8 P.G. Courses, 7 P.G. Diploma Courses and 2 U.G. Courses. The academic patronage of Distance Education Programme lies with the respective University Teaching Departments. These Distance Education Programmes stand approved by the joint committee of UGC, AICTE and DEC. Further, fourteen Colleges/Institutes of Engineering, Management and Computers are affiliated to this University and they are offering B.Tech., M.Tech., MBA, BBA, MCA, BCA and B.Arch. programmes. All the programmes are open for foreign students as well. Keeping this in view, 15% supernumerary seats of the total sanctioned intake in each course are available for Foreign Nationals. The admission of foreign students is made on merit based on score of qualifying examination. A few rooms in boys and girls hostels are reserved for foreign students. Extra facilities as per the instructions of the UGC/MHRD are created for the foreign students. University has signed MoU with EdCIL to admit foreign students for various Programmes on behalf of the university.

The review and up-gradation of course curricula of various Programmes in different departments of the university are done periodically as and when necessary depending upon the feedback from the stake holders and need of students to make it socially relevant, job oriented and knowledge intensive.

During the last five years, a number of Programmes have been

introduced in emerging areas, mainly at PG level, in order to fulfill the societal needs, corporate and institutional demands, and general employment prospects. Following are the newly introduced PG Programmes in various departments:

- M.Tech (Printing Technology)
- M.Tech (Bio-Medical Engineering)
- M.Tech. (Geo-informatics)
- Master of Physiotherapy (Neurological disorders)
- Master of Physiotherapy (Pediatric Physiotherapy)
- Master of Physiotherapy (Cardiothoracic and Pulmonary Disorder)
- M.Com

## **2. Teaching-Learning and Evaluation**

The university ensures that wide publicity is done and transparency is maintained in the admission process adopted for all academic programmes. Advertisements for admission notification are given in the leading regional and national newspapers and hosted on university website ([www.gjust.ac.in](http://www.gjust.ac.in)). The university prospectus - a complete handbook of information for admission process- is published every year in the months of May/June. The transparency in admissions is ensured from the date of notification till the date of admission.

The merit list for admissions is prepared and same is notified on the notice board as well as on the Website of University. The students are called for counseling as per published schedule and on the spot category wise admissions are made in a fair and transparent manner. The merit is drawn on the basis of entrance tests conducted by respective department except B.Tech programmes. With respect to B.Tech. programmes, the admissions are made at State level on the basis of AIEEE examination merit and on line counseling. With respect to MBA, M.Tech and M. Pharma programmes, admissions are made on the basis of candidates score in CAT, GATE and GPAT examinations, respectively. In case some seats remain vacant as a result of this process then the same are filled up on the basis of entrance conducted for the purpose by these departments.

The university adequately plan and manage its human resources to meet the changing requirements of the curricula. Whenever vacancies arise and recruitments take place, the departments submit their academic requirements i.e. specialization for teaching and research for recruitment through staff council to the university.

Faculty members are required to attend orientation /refresher courses organized by its Academic Staff College or those of other universities. University also deposes faculty to attend workshops, conferences and symposia and facilitate study leave and sabbatical leave to enhance academic and research acumen of the teachers. Teachers also undertake research projects in emerging and innovative areas and also take part in summer/winter school, training workshops in their respective specializations. About 72 per cent of our teachers hold Ph.D qualification and most of the remaining teachers are registered for Ph.D.

The University follows Credit Based System (CBS) of evaluation, which has been re-visited and revamped twice during last 5 years to make it simpler and externally acceptable. The university ensures transparency in evaluation process, while ensuring confidentiality for sanctity of system. Immediately on receipt of the answer books from the examination centers the packets are opened and A part of the answer book is detached and sent to the EDP cell for creating data base of the students. After the removal of A part it cannot be ascertained that to which candidate or the Roll Number answer books pertains which results in transparency and confidentiality in the examination system. The answer books are dispatched to the examiners duly sealed and stamped. To some extent, the EDP Cell facilitate an integrated examination platform as there is automation from the stage of inputing awards to the preparation of DMCs and degrees.

### **3. Research, Consultancy and Extension**

University has a dedicated team of well qualified faculty members engaged in teaching and research activities. The total number of papers published by the faculty in peer reviewed journals of national and international repute since 2009-10 is 1935. Of the total 1219 publications listed on Scopus till date, 755 publications (61%) were listed since 2009-10. As per Scopus database, the Citation Index and H-Index of the faculty range up to 466 and 28, respectively, while the Impact Factor of the papers is up to 6.05. Besides this, the faculty members have published 48 text books including 17 edited books and contributed 76 chapters in books since 2009-10. The teachers of this university are actively involved in research and have not only produced quality publications in journals of national and international repute during this period but the H-Index of the University has also gone up to 45 at present from 17 in 2009-10. More than 50 teachers have their own H-Index on the basis of quality publication in the periodicals of

high repute. The University has already filed eight patents in last five years through University's IPR-Cell and some more are in pipeline. Faculty members mobilized and completed projects worth more than Rs.2.5 crores during last 4 years. To support the culture of innovative research activities, the university sanctioned Rs. 1.00 lakh each to five research proposals from the UGC grant received for the purpose. There is a condition that each awardee will publish at least one paper from output of such research in a good research journal.

Eight departments of the university have been awarded the SAP-DRS projects by UGC and the same has added to their stature and infrastructure. These include the Department of Environmental Sciences & Engineering, Bio & Nano Technology, Haryana School of Business, Computer Science & Engineering, Mathematics, Communication Management & Technology, Pharmaceutical Sciences and Applied Physics and the quantum of assistance received by the university is Rs 3,78,71,092/-. In addition to this, Department of Bio & Nano Technology is being provided HRD grant of **Rs. 1,83,50,556/-** for M.Sc. Biotechnology course by the Department of Biotechnology, Govt. of India since 2000, Bioinformatics Facility (BIF) grant of **Rs. 15,45,751/-** by Department of Biotechnology, Govt. of India since 2006, HRD grant for M.Tech. Nano Science & Technology by Ministry of Science & Technology Govt. of India under Nano Mission program to the tune of Rs. 3.43 crore since 2008. DST-FIST grants **Rs. 1,24,35,000** has been awarded to Department of Bio & Nano Technology, Department of Pharmaceutical Science, and Department of Applied Physics. These grants improved research infrastructure and teaching facilities, which also helped the students of the university in training and placement.

On successful implementation of TEQIP-I by this university, the World Bank has provided funds under TEQIP-II scheme also. The University has also received financial assistance from various other agencies like MHRD, MHFW, Ministry of Defence (DRDO), Ministry of Social Justice and Empowerment, Ministry of Youth Affairs and Sports, National Board for Higher Mathematics, Distance Education Council, Ministry of Women and Child Welfare, Department of Scheduled Castes, Haryana.

The interdisciplinary research is also promoted by the university. The teachers of different specializations from the department as well as from the other departments are supervising jointly the Ph.D scholars. The faculty members from different departments undertake joint research projects from external funding agencies in their research areas. There are ongoing research projects in the university where

faculty members of Physics, Chemistry, Environment Sciences, Bio and Nano Technology, CMT, Applied Psychology have joined hands together and presently six collaborative projects funded by BARC, BRNS and NPCIL are being undertaken at Radio Ecology Centre, GJUS&T Hisar. Further, there is International collaborative project sponsored by DRDO, DST, Govt of India and Ministry of Science & Technology, Thailand which is currently implemented by this university jointly with Asian Institute of Technology, Bangkok, Thailand.

The total number of successful Ph.D scholars guided by the faculty members from April 2009 to March 2014 is 274 on an average of 1.62 per faculty. At present, 312 are enrolled for Ph.D and more than 70 percent of them are fellowship holders. The MoU with INFLIBNET for electronic dissemination of Ph.D thesis through open access in Shodhganga is in process. In order to check malpractices and plagiarism in research, a research methodology orientation course is organized every year by the Academic Staff College for Ph.D scholars. In this course the participants are taught among other things the ethics of research, plagiarism and ways to circumvent the same. As this is an important area where an institution of higher learning need to emphasise, the university is actively considering subscribing to or preparing robust software and devising a policy with all checks and balances contained therein for weeding out possibilities of plagiarism.

#### **4. Infrastructure and Learning Resources**

The University has an environment friendly campus spread on a land area of 372 acres, out of which 225 acres have so far been developed. The built up area, at present, is more than 132315 Sq. Mtrs. with an addition of over 47250 Sq. Mtrs. during last four years and the area under construction, at present, is more than 15400 Sq. Mtrs. The various building infrastructural facilities on the campus include: Eight Teaching Blocks, Three Boys Hostels, Four Girls Hostels, One Working Women Hostel, University Central Library, Research Laboratories in every Department, University Computer and Informatics Centre, Administrative Block, University Health Centre, University Sports Grounds, Two Multipurpose Halls for Indoor Games, VIP Guest House, Faculty House, V.C. Residence, University Cafeteria, Shopping Complex, Open Air Theatre, Post Office, Bank, Guru Jambheshwar Bhawan, Water Treatment Plant, Sewerage Treatment Plant, Animal House, Bio Nano-Science Research & Technology Centre, University Sports Stadium. In addition to this, the

university has constructed more than 300 residential quarters on the campus thereby adding 418 houses during last four years.

The University has been augmenting its physical and IT infrastructure and learning resources to keep pace with the changing technology. The labs are equipped with the state-of-the-art scientific apparatus comparable with any of the top Institutions of higher learning in India. The University strictly adheres to the provisions of the National Building Code of India in the construction of new buildings. Wherever needed, the buildings in the campus are made conducive to differently abled people by providing ramps with SS railings and provision for lifts. To create a physical ambience for the faculty in terms of adequate research laboratories, computing facilities and allied services, suggestions are invited from different faculty members through their respective staff councils for the creation of new facility for any particular department/faculty, on the basis of their experience in their respective field. By following this policy few state of the art buildings have recently been created in the University campus. The planning for creation and enhancement of infrastructure in the University campus is done through building committee, finance committee, planning board and court of the University.

The university has its own Web Policy regarding the management of University websites i.e. [www.gjust.ac.in](http://www.gjust.ac.in) & [www.ddegjust.ac.in](http://www.ddegjust.ac.in). All licensed softwares are updated time to time by the agencies from whom these are procured. The university has followed and implemented e-waste management policy as communicated by the state government for the Green Computing in the University campus. High speed Internet connectivity to the faculty, research scholars and students is provided for their research and academic activities. The internet facility is also available in the hostels through Wi-Fi connectivity.

The repair/maintenance/renovation/addition & alteration work of residential/non-residential buildings including the Horticulture/landscaping works are looked after by the University Works Department. Our University is exempted from '0' Amp. L.R. (load restriction), which in common parlance is known as 'HOT LINE'. The University infrastructure stands well recognized for its ambience and maintenance by way of awards and appreciation by the external world as well.

As University has been constructed in a phased manner as per the availability of the finance, the buildings created at the start of the establishment of the University lack some ultra-modern facilities of

lifts etc. There is an opportunity of construction of self sustainable buildings and creation of solar power plants in the University campus as Hisar region has more than 325 sunny days in a year. Possibilities for creation/setting up of e-library and a total WIFI campus can be explored in the near future. There is a big challenge for maintenance of water services, buildings, road network, electricity network, telephone services, LAN services, ours being a huge campus spreading over 372 acres.

## **5. Student Support and Progression**

University provides student mentoring support system at department level as well as at university level. At department level tutorials and grievance redressal cells (student counseling cell, anti-ragging, anti-eve-teasing cells,) are functional. At university level the task of mentoring and providing financial as well as motivational support is regularly being done by the offices of Dean Students Welfare ( DSW), Directorate of Sports, Training and Placements Cell, National Service Scheme and Director Youth Welfare (DYW). These cells provide overall guidance to the students for academic assistance and holistic personality development. Remedial coaching to students is provided by TEQIP Cell, coaching centre for SC/ST, OBC (non-creamy layer) and ministries, and the respective departments at their own level.

The university has enrolled more than 4700 students in various regular programmes on campus and more than 6000 students through Distance Education programmes during the session 2013-14. The University follows the reservation policy in admission as prescribed by the State Government. In B-Tech programme, 25% of the seats are reserved for the for women candidates. The students' strength has almost doubled in the last five years. The University ensures admissions by filtering through Central and State level entrance tests. The nature of the programmes itself ensures the seriousness of the students in academics which is reflective in negligible dropout rate. The students once admitted generally complete the degree.

The placement scenario is encouraging and almost every student completing degree from the University gets placed profitably either through Training and Placement Cell or by his or her personal efforts. A large number of the students also go for competitive examinations like IAS, NET, SLET, GATE, GRE, TOFFEL, GMAT for which coaching facilities are available in the University. Some students get overseas placements also after equipping them with technical degree from here. As per the records available, more than 350 students have qualified NET/SLET/GATE during the last five years. Being a

technical University majority of the students prefer employment in industrial and corporate organizations.

The University has an institutional mechanism for placement of students. For this purpose, a Central Placement Cell comprising of Director Placement, Assistant Director, Placement and other supporting staff are appointed. Besides, Training and Placement Officer is separately appointed for the Haryana School of Business running five MBA programmes. The placement offices mobilize the companies for placing the students in different jobs after completion of the degrees and in company training during the currency of their programmes.

## **6. Governance and Leadership**

The governance and leadership mechanism of the University is well defined, systematized, gender-sensitive and democratic. The vision, mission and objectives of the University are well defined and displayed on University Website and prominent places for information of all concerned. The rule of law prevails in the system and provisions of the Act, Statutes and Ordinances are strictly followed. The employee satisfaction level is high and legal disputes are almost negligible. The cases of career advancement are taken up timely and every eligible employee has got promotion on time. There is regular and automatic monitoring of their cases. The work culture is highly congenial and there is no man days lost due to strike, etc. in the past. The input from students availed through formal and informal channels are factored into important decisions concerning them. The focus is on holistic personality development of learners through quality education, moral and ethical lectures, communication skills, knowledge of computer applications, environment awareness and basics of management so that our product becomes comparable to that of the best institutions in technical education.

A well defined system of financial management is also in force. The University budget with allocation of funds to all departments, branch offices and other priority areas is prepared and approved well before the start of new financial year. After in house discussions, the budget is placed before Finance Committee, Executive Council and University Court for the final approvals. All budget allocations are subject to financial sanction before incurring expenditure and internal/external Audit before releasing payments. The university has its own perspective plan for academic development and all relevant aspects that are considered essential in the development of policies and



strategies, which mainly include: vision and mission, teaching and learning, research and development, community engagement, human resource planning and development, industry interaction and internationalization of academics.

## **7. Innovative and Best Practices**

University is recipient of 'Green Campus of the Year' award by the World Management Congress at India International Centre, New Delhi. The award was given by Irina A. Orolbaeva, Ambassador of Kyrgyzstan to India, on the occasion of a programme organized by the World Management Congress on 'Beginning the Management Decade 2010-2020'. University has taken many initiatives to make the campus eco friendly. Communication Multi-media and Infrastructure Association of India has adjudged this University as the best Infrastructure and Green Campus University of Haryana for year 2014. In terms of Energy Conservation LED fixtures & Solar luminars have been provided in university. University has eliminated the use of electricity for heating water by using solar heating system in hostels. University has also reduced electricity consumption with high efficiency lighting, tube-lights and ventilation system. LED lights have been installed in Auditorium, Nano Sc and HSB building. No bulb is used for light purpose.

University is also making use of Renewable Energy. A solar power plant of 3KW is successfully working. Two another projects have been submitted to state / central agencies for obtaining subsidy to implement the projects. Rain water harvesting system has been installed at various pockets of university for water recharge. In order to achieve, Carbon Neutrality green house gases emissions have been reduced to restrict personnel transportation and promote eco friendly conveyance in the campus. University also collects solid waste to reduce green house gases emission. The University has planted approximately 30000 saplings during last four years. Also green land is used for carbon sequestration. About 125 big trees (more than 50 years old) have been transplanted in campus. University is making efforts for Hazardous Waste Management by implementing improved irrigation system, waste water treatment and use of treated waste water for lawn irrigation. A sewage treatment plant of capacity 2.5 MLD has been installed and commissioned. The university has a contract with a company (Synergy Waste Management) for picking up wastes and residuals from University Health Centre, Department of Pharmaceutical Sciences etc. of the university.

The very conception of the university is highly innovative and benignly sensitive to the evolving requirements of the economy and society. The university has been a pioneer in starting professional and highly job oriented courses. To discharge social responsibility, the Department of Mass Communication adopts villages, the UCIC organizes computer literacy/training programmes for wards of employees and the university grants 100 percent fee concession to the wards of fourth class employees. Recently, the university organized a science conclave for the school children in which more than 2000 children from several schools of Hisar and surrounding areas participated.

The University has adopted many innovations particularly after accreditation in 2009 to promote quality technical education. Internal Quality Assurance Cell is fully activated on the pattern recommended by the NAAC. In the spirit of consolidation state-of-the-art infrastructure facilities, governance and leadership innovations, teaching and research, IT enabled resources, library and other learning resources, physical infrastructure have been initiated.

It is realized that university administration and academic processes can be made more effective with a robust IT system in place. Administrative offices like Accounts Branch, Examination Branch, Directorate of Distance Education, Admission Cell, University Library etc. are at verge of full automation. The university has in-house designed and developed Result Preparation Software and employees/student support system. Keeping in view these advancements in automation, University has identified “Total Computerization - A Step towards Paperless Offices” as its first best practice.

### **SWOC-Analysis**

The University strives to promote excellence in quality of teaching and research and attempts to provide best possible services to students apart from regular teaching activities. A SWOC analysis of different facilities available and planned is as given below:

1. **Hostels:** There are eight Hostels (three for boys, four for girls and one for working women) which can accommodate about 2000 students. All the hostels are fully equipped with modern amenities like electric geysers, music systems, telephone facilities, water coolers fitted with water purifier, insect killers and adequate playgrounds and other recreational facilities like colour television,

chessboards, carom boards. Each hostel has a common room where newspapers and latest magazines are available to the students. Further, all hostels have Internet and Wi-Fi facilities. The girl hostel complex also has a dedicated ATM facility, Cyber Cafe, Stationary shop. The lawns around the hostels are developed aesthetically to provide refreshing view while entering or leaving hostel. Hostel accommodation is provided strictly on merit and the hostel residents are governed by the terms and conditions as contained in the University Hostel regulations. As it is a challenge to meet ever increasing demand for hostel accommodation, the University devised a strategy to add one block/hostel every year for boys and girls both. Therefore, the construction of one new block in girls' hostel complex and one full fledged multi-storey boys' hostel has already started.

2. **University Computer & Informatics Centre:** The University Computer & Informatics Centre (UCIC) was established in 1998 to meet the computing requirements of all the students, research scholars, faculty and staff of the University. It has more than 140 networked computers with latest configuration servers, other peripherals and internet facility. Online journals facility is also available under INFLIBNET, a UGC programme. All online journals of publishers like IEEE, Emerald, ACS, AIP, APS, EPW, IOP, OUP, RSC ISID, JCCC, JSTOR, Annual Reviews, Cambridge University Press, Project Muse, Springer Link, Taylor & Francis, Web of Science and Wiley-Blackwell are provided through University network. The UCIC is effectively performing the task of building up data processing capabilities of many branches of the University and imparting intensive training to the staff of the University. Growing number of users has lent an opportunity as also challenge to further expand the UCIC infrastructure particularly more language labs for enhancing the soft-skills of students.
3. **Training & Placement Cell:** The Training & Placement Cell takes care of training and campus placements for the students. The Cell is equipped with appropriate infrastructure to execute the placement process. Arrangements for Pre- Placement talks, written tests, group discussions, personal interviews etc. are handled by the staff at the Training & Placement Cell in coordination with the respective departments. The Placement activities are handled by the Placement Cell, for final year students from different departments under the guidance of Head, Training and Placement Cell. The Training and Placement Cell keeps liaison with the potential industries and provides necessary guidance to the

students. The Cell facilitates arranging on-campus placements of students in various industries, makes arrangements for students to participate in off-campus drives organized at various institutions/industries. The Cell is attempting to tie-up with industrial houses so that the training and placement activities are augmented for the students but the slowdown in the overall economy has hampered the required pace in this connection. While long distance from major industrial firms and business centres can be viewed as a weakness, the growing entrepreneurial establishments in and around Hisar comprise potential opportunity to exploit. The Cell also needs to withstand the travails of overall economic stagnation and mushrooming of institutions posing competition.

4. **University Library:** The University Library is centrally located in a circular designed three storied building. The Library has two Reading Halls with a total capacity of 250 seats. The Library functions in two shifts from 9.30 a.m. to 7.00 p.m. and also remains open on Saturdays and Sundays. During examinations days, Night Reading Hall remains open round the clock. The University Library has a collection of 91000 books and 4778 bound volumes of journals. The Library has access to more than 6000 e-journals of 17 publishers through UGC-INFONET Consortium. Using the Integrated Software Libsys: the complete database of Library, holdings of books and Library membership has been created. By using LS Digital Software-an add on software to LibSys, the Library has created its institutional repository also. The Library has created separate dedicated Internet Lab for SC/ST Students. The LSWeb OPCA- an add on to LibSys Software has been installed and the Online Catalogues have now been extended to campus-wide through Intranet. The University Library has very recently created “e-research database lab” for the students, researchers and teachers of the University. To withstand the challenge of growing members, which now are more than 5200, the University is planning to enhance the sitting capacity for the readers from presently 250 to 500.
5. **Sports Complex And Facilities:** The Sports Complex has one Multipurpose Hall for Indoor games i.e. Badminton, Table-Tennis, Carom board, Chess, 16 station Multi-Gym, Yoga and Weight lifting, one half cemented Cricket pitch, one ground each for Football, Hand ball, Cricket and Athletic Track of 400 meter and three Volley grounds. In addition, two cemented Basket ball courts, two Volleyball courts; two synthetic Lawn Tennis courts are also there. One cemented Lawn tennis court with practice wall and one Synthetic Badminton Rex Court have recently been constructed.

The Sports Equipments/kits are issued to the students as well as to the University employees during tournaments. However, the inclement weather during most parts of the year and nature of courses being very demanding form the challenges to cope with for mobilizing more students towards sport activities. To some extent these challenges are withstood by earmarking sports time from 6 A.M. to 9 A.M. and 4 P.M. to 9 P.M.

6. **University Health Centre:** The University Health Centre caters to the medical needs of University Staff and students. It is spacious enough to accommodate 2 doctors' cabins, Dental clinic, a dispensing room, a laboratory, a medicine store, a minor O.T. and an observation room with 3 beds facility. The staff of Health Centre is Medical Officers-one S.M.O. (Female), one male M.O. and One Dental Surgeon; Paramedical and other Staff. The University Health Centre has the facility of providing Medical Aid to all common ailments with routine blood tests like haemogram, blood sugar, Lipid Profile, S. Bilirubin, S. Creatinine, Urine test, sputum & stool examination, ECG, etc., Health Centre provides First Aid to all the accident cases, Preliminary care to all major diseases, 24 hours Ambulance Service for transporting the referred patients and free medicines to all the employees and their wards and students. However, the university has very limited Indoor-Patient facility in its health centre and it therefore, needs expansion. The availability of specialist doctors and viability of a full-fledged hospital with all in house facility comprise the challenges to withstand.
  
7. **Central Instrumentation Laboratory:** The Central Instrumentation Laboratory (CIL) is established for the students, research scholars and teachers of the university who are actively engaged in R&D activities in the emerging areas of Science, Technology & Engineering. The CIL is presently having sophisticated instruments like High Performance Liquid Chromatograph (HPLC), Atomic Absorption Spectrophotometer (AAS), UVVIS- NIR-Spectrophotometer, Fourier Transform (FTIR) Spectrometer, Differential Scanning Calorimeter (DSC) and Lyophilizer. Recently, Nuclear Magnetic Resonance (NMR) Spectrometer (400 MHz) has been installed and the process of purchase of other sophisticated instruments is in progress. These instruments are of multidisciplinary utility. These instruments are generally used to pursue R&D activities by the students of Department of Bio & Nano Technology, Food Technology, Pharmaceutical Science, Applied Physics, Environmental Science & Engineering and Chemistry. A new building is already under

construction for the expansion of CIL and more facilities are planned to be added in next phase. Though the lab has also started earning by way of putting it to external use, yet there are further opportunities which can be taken advantage of by taking it as a challenge.

8. **Business Development Group And Consultancy:** The University has constituted the Business Development Group (BDG) headed by a Professor mandated to foster closer ties with the Corporate World, Industry Associations, Government agencies, multi-lateral bodies and others for the purpose of soliciting consultancy assignments, collaborative research projects, establishment of study chairs and placement activities of the students. The BDG is the nodal agency to coordinate the consultancy activities in the University. Some teachers of this University made a mark by mobilizing 296 consultancy testing assignment worth more than Rs. 1.92 crores since 2009-10. The consultancies received from various agencies includes Haryana Government, Haryana State Finance Commission, Public Health Department, Govt. of Haryana, Haryana State Pollution Control Board (HSPCB), Panipat Thermal Plant, Khedar Power Plant, Panipat Co.Op. Sugar Mills Ltd., Panipat, Escort Ltd., AMG Tractor Plant, Hisar-Jind Cooperative Milk Producer Union Ltd. Milk Plant, Jind, JCB India Ltd., Ballabgarh. Notwithstanding a good beginning, the consulting and extensions activities of this university are yet to take off fully and therefore, more efforts through policy measures will be required to be made. An ostensible challenge in this regard is carving out time from very busy academic and research schedule of the teachers round the year.
9. **Intellectual Property Rights & Technology Commercialization Cell (IPR & TCC):** The IPRs are a bundle of exclusive rights over creations of the mind, both artistic and commercial. The University has established a separate Cell for the purpose of documentation and commercialization of research. The very purpose of creating this Cell is to ensure the 'commercial use' of University's in-house research outcomes to outside world and assist the teachers in filing patents. The University has devised an IPR policy document (available on university website) contains certain facilitating provisions and guidelines which help the teachers in filing patents and transferring technology for commercial use. Though a good beginning by filing 08 patents has been made, yet the University foresees likely opportunities and obvious challenges in this regard. It is expected that the offshoots of gradually increasing

publications will culminate into patentable works also in a foreseeable future.

10. **Campus Wide Networking Cell:** In order to cater needs of Information & Communication Technologies for students, staff and faculty of University, Networking Cell has been set up in the University. At present all central and departmental, webs stand networked via a combination of wired and wireless mechanism. The wired network consists of more than 2300 nodes and likely to be extended up to 3000 nodes. Networking is empowered by a bandwidth of 1 Gbps under NME/NKN project of MHRD. Still a part of networking is connected through WIFY and efforts are on to connect it through Fiber Cable so as to ensure the best speed of Internet in the whole campus of this university. The maintenance of so elaborate networking infrastructure to provide uninterrupted service is in itself a challenge, even though the university has assigned a maintenance contract for the purpose.
11. **Academic Staff College:** The UGC- Academic Staff College (ASC) was established during the 11th Plan in this university with the objective to impart teaching/research orientation and refresh domain knowledge Programmes for students at Ph.D./postdoctoral levels from CSA/DSA/SAP departments are also organized by the ASC. The ASC also conduct short term courses of one week duration in various fields for the professional development of senior faculty, and also the capability enhancement programmes for non academic staff. In all it organized 60 programmes since 2009-10 benefitting more than a thousand teachers, scholars and students. In recognition of good work done to discharge its functions, the ASC has been ranked number one in India in the overall ranking of NAAC in 2012-13. The new recruitments and promotions of teachers and increase in number of research scholars in times to come appear to be fair opportunities for sustenance and growth of ASC activities in the University. Therefore, a separate building with all dedicated facilities has already been planned.
12. **Other Specialized Centres And Cells:** The University has also created several specialized centres and cells to provide extension and other services on and off the campus. To mention a few, these include centre for Behavioral Research and Intervention, NSS Wing, Women Cell, Convention Centre, Radio Ecology Centre, FRAC, Bio-Nano Technology Centre. These centres are working well in their own right, yet there are a host of opportunities with associated challenges to put them to optimum use. The Radio Ecology Centre, Bio Nano Technology Centre and FRAC will need

to gear their drive towards patentable research and extension, while the outputs of Centre for Behavioural Research and Intervention have the potential for societal use.

The University convention centre with facility of main hall of 1800 capacity and three seminar halls each with a capacity of 250, 125 and 125 persons. With this facility laid with all modern amenities and furnishings can be used to run more than one programmes simultaneously. As it involves huge investment, it needs to be made self sustainable for its maintenance and upkeep. Accordingly a policy for partial commercialization of this facility has been prepared and Works Department in-charge of this centre has started mobilizing funds through external use.



## **(ii) Quality Sustenance and Enhancement Measures Undertaken during last 4 years**

---

The University has undertaken a number of steps, especially during last four years, to promote quality higher and technical education as the university is constantly striving to add to quality in all aspects covering curriculum, evaluation, research, corporate living and standards, physical and intellectual infrastructure, etc. The University has, by now, made a mark in certain areas contributing to enhancement of quality expected of a good academic institution to withstand challenges of global competitive environment. This is in keeping with this spirit that the university has been accredited 'Grade-A' by NAAC in 2002 and 2009. The university has been taking necessary steps not only to sustain its existing level of quality but also to take enhancement measures outlined here-in-after.

Based on multifaceted, comprehensive and well-defined procedures, the curriculum is regularly being updated with student and faculty feedback. The curricular for Ph.D. degree include course work comprising three advanced level compulsory and elective courses followed by research work leading to submission of thesis. There has been across the board revisions almost after every three years and enrichment has been contributed by broadened mental horizons of faculty members through participation in international and national training programmes, association of industry representatives in the Board of Studies and Academic Council, freedom of faculty interaction in monthly staff council meetings and formal or informal stakeholders' (students, alumni and employers) feedback. Industry feedback and participation have constantly been ensured to update and re-structure the curriculum for disciplines like science, technology and management, which form the core of this university. Further, the teachers of this university have been going for advanced training in India and abroad which have significantly contributed to quality of the curriculum designing and development process involving the ideas across national borders brought by visiting professors. This has made the curricular practices globally relevant and practically useful. The university has purposely, conscientiously and continuously followed this policy during last four years.

At present, the university is offering 45 regular programmes and 17 programmes through distance mode. In order to provide valuable inputs to the entrants, the teaching departments follow a multi-pronged strategy as outlined above to devise their course curricula. The university has added 11 new programmes during last four years and restructured five programmes. The total number of students in regular programmes is over 4700 and the teacher students' ratio is about 1:15. Since most of the programmes are professional

and job-oriented in nature, thus, majority of our passing-out students are opting their career in corporate world and have achieved respectable level of acceptance in their areas of specializations and employment.

Zeal to incorporate the best in curricula for research and other programmes is a sine qua non of each teaching department, due largely to a young faculty with ample research acumen as reflected in 1935 research papers published by them in journals of national and international repute during last four years. The total number of publications listed on Scopus till date is 1219 of which 755 publications have been listed since 2009-10. As per Scopus database, the Citation Index of the faculty range up to 466 and H-Index range up to 28 along with the Impact Factor of the papers ranging up to 6.05. Besides this, the faculty members have published 48 text books including 17 edited books and contributed 76 book chapters since 2009-10.

The teachers of this university are actively involved in research and have not only produced quality publications in journals of national and international repute during this period but the H-Index of the University has also gone up to 45 at present from 17 in 2009-10 and there are more than 50 teachers having their own H-Index on the basis of quality publication in the periodicals of high repute. The University has already filed eight patents in last five years through University's IPR-Cell. With quality enhancement of research labs and other facilities some of our labs are accredited or recognized for testing by the State Government and corporate sector. Resultantly, 296 consultancy projects worth more than Rs. 1.92 crore were completed by the faculty during this period. In recognition of the good work done in research and academics faculty members of the university received 24 awards/recognitions in the last four years.

There are some other good practices which added to competence and skills of learners towards achieving excellence. The curricular structure of all B.Tech programmes of the university that facilitates learners to undertake basic and specialized courses in the first and second year and advanced studies and training in the third and fourth year is the one that evidences rigour in way forward towards quality sustenance and enhancement. Somewhat similar is the arrangement of our Post Graduate level technical and professional programmes that encompasses a blend of theory and practice in much needed equitable proportion and leave ample room for self learning, co-curricular activities and soft-skills development. Ever increasing enthusiasm of students, particularly during the last couple of years, in NSS, sports, literary competition, cultural and tech fests, blood donation and the like go well to lend credence to the belief that nature of technical and professional education is not necessarily an impediment in such participation. In keeping with the

spirit of quality and innovation, the last four years witnessed the launching of some new programmes including M.Tech (Printing Technology), M.Tech (Bio-Medical Engg), M.Tech (Geo-Informatics), M.Com, and MPT in three disciplines namely Neurological Disorders, Pediatric and Cardiothoracic & Pulmonary Disorder. The restructuring of some of them was also not afforded unduly long time in the best interest of quality, say, M.Sc (Development Communication) and PG Diploma in Defence Journalism programmes were closed and their rich contents were incorporated in other relevant programmes to enhance employability of pass-out students. That venturing to experiment with something new is a way to growth has, thus, been well recognized by the university. Such thinking has been a natural corollary of the much cherished vision, mission and goals of the university and the philosophy enshrined in the preamble of its Act.

The teaching, learning and evaluation are vital to any educational institution and require meticulous planning and responsible execution mainly through team work and coordination. Where any one of these receives inadequate attention, the other two may fall away making all educational efforts inconsequential, the university authorities feel. In the light of the same, this university looks upon these practices as pointers that lead towards the quality, efficiency and responsiveness. The curriculum of each course of a programme is planned in a way that it proceeds in a sequential and logical manner. Each teacher is incumbent to plan the course curricula to be taken up by him or her and convey the same to the class in the beginning of each semester. The academic calendar notified by the university before start of each session serves as an important guide in devising a teaching. While this university was the first in this region to have introduced continuous evaluation of its teaching-learning outcomes by adopting credit based system (CBS) as far back as in 2006-07, the same was subjected to amendments twice during last four years to weed out hick-ups in grade ascertainment and to bring about more transparency.

In order to bring the below average or the average students at par with the others to withstand the rigour of enriched and advanced courses, remedial coaching is provided by Coaching Centre for SC/ST,OBC (non-creamy layers) and minorities established with the financial support of UGC. More than 900 students of different disciplines have been benefitted from this support during last four years. Similarly, the course coordinators deputed for each course, have freedom to structure bridge course and execute the same in the beginning so that the students experience smooth passage to course proper. The CBS provides for at least two minor tests for internal assessment, besides class participation and punctuality, which affords an opportunity to students for self introspection on looking through their evaluated answer books and help brace them for term end exams.

To give a fair chance to candidates having qualifying degrees or certificates from universities and education boards of different states, the university kept intact the precedence of admitting students in all programmes on the basis of common entrance test, conducted by either itself or the national level agencies. Admission based on academic merit is resorted to as an exception, not as a rule. In accordance with the practice prevailing in the institutions of national importance like IITs and IIMs, the university does not have to wait for declaration of qualifying results for admitting the candidates to different courses; rather carry out early admission to have better quality of students. This system has been made a part of admission process with effect from the academic session 2012-13 and the experiment has been successful. The percentage of GATE qualified students in our M.Tech programs range from 50 percent to 75 percent who hardly face any difficulty in getting suitably placed. The policy of admissions on tap for JRF candidates desirous to pursue Ph.D has led to many fold increase in number of candidates who are 246 in number comprising 79 percent of total 312 Ph.D scholars. The year on year increase in number of JRF and holders of other fellowships like C V Raman Fellowship and Rajiv Gandhi Research Fellowship has surely led to increase in quality of research too.

Multifarious re-charging activities have been conducted for faculty development, enrichment and re-charging by way of encouraging the Assistant Professors and Associate Professors to attend training programmes, orientation and refresher courses which are helpful in updating their domain of knowledge and teaching skills. The university has its own Academic Staff College (ASC), which has conducted 15 orientation programmes, 24 refresher courses and 17 training/workshops during last four years benefiting more than 820 teachers of this and other universities and colleges. This has also contributed to in-time promotion of teachers under career advancement scheme (CAS).

The total number of national and international conferences/seminars/workshops attended by the teachers of this university during last four years is more than 280 and total number of national and international conferences/seminars/workshops/training programmes organized by different teaching departments of this university is 52 since 2009-10. Besides the self appraisal reports to be submitted by each teacher towards the end of every academic session, the university has also adopted the UGC stipulated Performance Based Appraisal System (API) for their promotions under CAS. It is important to mention here that almost all teachers whose promotion under CAS had become due were able to qualify the minimum requirement of API score required under PBAS and therefore, 9 Assistant Professors were promoted as Associate Professors, 34 Associate Professors were promoted as Professors and 5 Professors were promoted as senior Professors (sixth stage). The new recruitments of 30 teachers comprising Assistant Professors, Associate Professors and professors were also made during the reference

period according to the new norms. Similarly, the promotions of the teaching supporting and technical staff have also been done as and when they were due. Several new positions, such as Dentist, Assistant Director (Placement), Director (Youth Welfare), Public Relation Officer, whole time lady wardens, hostel caretakers, lady attendants etc were also created and filled up during last four years.

The six-days a week working followed in the university has resulted in more than 277 working days in the last academic year and on an average 199 teaching days per annum in the University during the last four academic years, thus, exceeding the UGC norms of 180 teaching days. Further, out of 274 sanctioned teaching posts, 260 have been filled up which includes 166 on regular basis and rest are on contractual basis as teaching associates. On an average, a faculty member of this university devotes 42 hours in a week towards studies, research and other administrative work and all teaching departments remain open up to 05:00 p.m. for six days in a week except second Saturday. Majority of the teachers are engaged in research activities and 119 teachers out of 166 regular teachers, about 72 percent, are holding Ph.D. degrees and others are pursuing it. The teaching staff of this university is well diversified as it represents 20 states of the country. All teachers are well connected through Internet and Intercom and are in access of several e-resources made available on-line by University Library and University Computer and Informatics Centre.

The incidence of availability of teachers for additional university work like to oversee discipline, perform examination work, etc has undergone a rise during the last four years owing, among other things, to easy availability of residential accommodation in the campus. Additional 130 houses, 60 for teachers and 70 for non-teaching staff have been constructed and allotted during last four years.

There is a system of submitting Self Appraisal Report (SAR) by teaching staff and the SAR Performa has been devised on the basis of specimen Proforma developed by the UGC and is filled up and submitted by every teacher at the end of each academic year. Further, the university has introduced API-System of performance evaluation from academic session 2012-13 as envisaged in 6<sup>th</sup> Pay Scales of UGC. The assessment of faculty performance by students is being implemented in all M Tech Programmes covered under TEQIP-II funding of World Bank. In the other academic programmes also, such feedback is regularly taken mostly informally.

Since 2009-10, the Faculty members of the university have completed 35 Major projects funded by the UGC and other agencies and 12 minor research projects with aid of University grant. At present 38 major research projects, 17 minor projects and 5 innovative minor projects funded by the university/ UGC

grant are in progress. Apart from this, one inter-institutional collaborative project, one inter-institutional and industrial collaborative project funded by Department of Science and Technology (DST), Govt of India and one Indo-Thailand International Project funded by DST, Govt of India to the department of Bio & Nano Technology are going on. The university also publishes a research journal titled 'HSB Research Review' a Bi-annual Journal of Haryana School of Business with ISSN: 0976-1179.

To address the special challenges of research programmes the university also established some specialized centres, such as, (a) Radioecology Centre—to carry out baseline environmental studies for nuclear radioecology research in collaboration with BARC, Mumbai; BRNS, Mumbai; (b) FRAC – to cater needs of industries, farmers, & others in area of food quality testing in special reference to wheat; (c) Bio & Nano Technology Centre - to train competent technocrats and creating knowledge power house in the areas of Nano-biotechnology, Microbial Biotechnology, Molecular Biology and Genetic Engineering; and (d) Centre for Behavioural Research and Intervention: to take care of psychological well-being of students and to develop the positive attitude among youth. (e) Central Instrumentation Laboratory (CIL)- To provide state-of-the-art scientific equipments for testing and experimentation by teachers and scholars of science disciplines. The HRD grant for M.Sc. Biotechnology teaching program and Bioinformatics Facility (BIF) grant by Department of Biotechnology, Govt. of India, DST-FIST grant, UGC-SAP, DST-FIST, DST-Nano Mission and DBT recognition have helped the departments concerned to improve research infrastructure and teaching facilities. This has also contributed to better training and placement of the students of this university.

The University campus having 372 acres of land, underwent substantial development with about 47250 Sq. meters (35 percent increase) in constructed area since 2009-10. Not only the span of construction but the quality designs, furnishings and fittings have also received a major fillip leading to awards and appreciations. The quality of living and physical work environment have enhanced with addition of 130 houses, sufficient number of well equipped seminar halls, campus wide networking etc. Being surrounded by lush green lawns and flora and fauna, all buildings present a picturesque look which not only provide aroma but also ease long working hours with lessor work stress. The university has been constantly enriching physical and its learning resources from time to time. The number of books rose from 64281 in 2009-10 to 91000, now registering an increase of over 30 percent, thereby adding more than 5600 books every year to make the library well stocked. The library is also rich in e-resources as it subscribes to more than 6000 online research journals of INFONIT and IEEE. During last 4 years the library also created the facility of dedicated computer lab for SC/ST students, Research

Data Base Lab and web-OPAC facility which have further enhanced the use of e-resources.

To facilitate students, research scholars and faculty members, the Internet facility is provided in the UCIC located in the University Library. For the Library Surveillances, the Library has a Close Circuit Tele-Vision (CCTV) system using 32 of cameras. As a step towards modernization of the Library, Video Conferencing facility has been provided in a hall having a seating capacity of 65 users. The whole campus is networked with WIFY and Fiber cable with 2300 internet nodes out of which university library alone has about 200 nodes. All offices and teaching departments are equipped with internet facility of very high speed and all students, teachers and officers are provided institutional IDs and passwords.

The University not only maintained but also enhanced health Care facilities for staff and students. The health centre has enough space to accommodate 2 doctors' cabins, a dental clinic, a dispensing room, a laboratory, a medicine store, a minor O.T. and an observation room with 3 beds facility and testing laboratories. In last four years the university added not only medical and para medical staff but also added medical equipments, testing facilities, one more ambulance, empanelled several hospitals within and without the city of Hisar. Now the students and staff get 24x7 medical care, besides medical insurance. The employees can bank upon the university approved specialty hospitals for high end medical aid and care.

To enrich the sports facilities, the university invested approximately Rs.1.00 crore in extending and upgrading its pavilion, play grounds, indoor game hall, sports kits and overall standards. Now the university has almost all popular indoor and outdoor game facilities with state-of-the-art playing courts, grounds, tracks and playing kits etc.

The university has also created an elaborate mechanism for purchase, maintenance, renovation and replacement of equipments, construction and maintenance of buildings and general up keep of public utilities like sanitation, security and surveillance, electricity, water, etc. The University Works Department performs most of these functions while the security, sanitation and maintenance of equipments are partially outsourced. All purchases of equipments are affected by Standing Purchase Committees of different levels as per the duly approved purchase policy of the university.

The university has a policy to ensure that the willing students get hostel accommodation in the campus. All the girls student, whether they are UG or PG students or research scholars get on demand residential accommodation in the hostels which are endowed with facilities like Cyber Café, general store, reprography, ATM, washing and ironing, medical care, etc. In the girls hostel

premises there is a separate working women hostel which accommodates the women employees and scholars of the university. In order to meet the ever increasing demand for hostel accommodation due to increasing strength of the students, the university has initiated the process of adding at least one block/building in the existing hostel premises for boys and girls both. Recently one block of 144 residential capacity has been added in the girls' hostel premises. The construction of one more block in the girls' hostel premises and one full fledged four storey boys' hostel of 600 residential capacity are under construction.

The governance structure of the university is so defined that all manifestation of its working receive due care. To further revamp the aspects of residence, health and discipline and settle different types of grievances, the university took several additional steps during the last 4 years. In order to check the incidents of ragging the university has constituted anti-ragging committee at the university level strictly in accordance with the requirement of Raghwan Committee guidelines. Besides, the university has also constituted anti-ragging committees and student counseling committees in each department. The students are also given due representations in such committees. To specifically protect the interest of women employees and students the university has also formed an anti-sexual harassment committee and a women cell, each headed by a senior lady Professor.

To sum up, the university has a very congenial work culture where all constituents including the teachers, the teaching supporting staff and students are working for achieving the vision, mission and goal of the university.



---

**Part-C**  
**Profile of the Institution**

---

## Profile of the Institution

1. Name and Address of the University:

Name:		<b>Guru Jambheshwar University of Science and Technology, Hisar - Haryana</b>	
Address:			
City:	<b>Hisar</b>	Pin: <b>125001</b>	State: <b>Haryana</b>
Website: <b>www.gjust.ac.in</b>			

2. For Communication :

Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Vice-Chancellor	Dr. M.L. Ranga	O: 01662-263101 276192 R: 01662-263102	94670-10400	01662-276240	vc@gjust.org vc_gju@yahoo.co.in
Pro Vice-Chancellor(s)	NA	O:- R:-	-	-	-
Registrar	Prof. R.S. Jaglan	O:01662-263104 R:01662-263204	94160-16241	01662-276025	registrar@gjust.org registrar_gju@rediffmail.com
Chairperson of Steering Committee/	Prof. M.S. Turan	O:01662-263674 R:01662-263263	94670-50870	01662-276240	daa@gjust.org msturan@rediffmail.com
Director of IQAC	Prof. Karam Pal Narwal	O:01662-263329 R:01662-263229	98137-05928	-do-	karampal@gjust.org karampalhsb@gmail.com

3. Status of the University

State University

State Private University

Central University

University under Section 3 of UGC (Deemed University)

Institution of National Importance

Any other (please specify)

4. Type of University

Unitary Affiliating   
 (The status of the university is affiliating as per the Act. At present, 15 Technical Institutions (except B. Pharmacy) of Hisar, Fatehabad and Sirsa Districts of Haryana State have been affiliated to the university vide Haryana Government Gazette notification dated 11.02.2011).

5. Source of funding:

Central Government	Yes
State Government	Yes
Self-financing	Yes
Any other (please specify) RUSA	Yes

6. a) Date of establishment of the University : 20.10.1995

b) Prior to the establishment of the University, was it a/an

i. PG Centre	Yes	<input type="checkbox" value="√"/>	No	<input type="checkbox" value="-"/>
ii. Affiliated College	Yes	<input type="checkbox" value="-"/>	No	<input type="checkbox" value="√"/>
iii. Constituent College	Yes	<input type="checkbox" value="-"/>	No	<input type="checkbox" value="√"/>
iv. Autonomous College	Yes	<input type="checkbox" value="-"/>	No	<input type="checkbox" value="√"/>
v. Any other (please specify) .....				
	If yes, give the date of establishment:		28.12.1992	

7. Date of recognition as a university by UGC any other national agency:

Under Section	dd	mm	yyyy	Remarks
i. 2f of UGC*	11	01	1996	The University got approval from the UGC under 12(B) within a period of 15 months of its inception.
ii. 12B of UGC*	07	02	1997	
iii. 3 of UGC#	NA			

iv. Any other ^ (specify)	19	03	2013	All technical programmes were approved in year of inception. Further, the latest extension of approval of the courses has been obtained.
i) AICTE				
ii) PCI	10	05	2013	All technical programmes were approved in year of inception. Further, the latest extension of approval of the courses has been obtained.

\* Enclose certificate of recognition. (Annexure-I)

# Enclose notification of MHRD and UGC for all courses/programmes/campus/campuses.

^ Enclose certificate of recognition by any other national agency/agencies, if any. (AICTE Annexure-II, PCI Annexure-III)

8. Has the university been recognized

a. By UGC as a University with Potential for excellence?

Yes  No

If yes, date of recognition: ..... (dd/mm/yy)

b. For its performance by any other governmental agency?

Yes  No

If yes, Name of agency..... and

Date of recognition :..... (dd/mm/yy)

9. Does the university have off-campus centres?

Yes  No

If yes, date of establishment ..... (dd/mm/yy)

Date of recognition :.....(dd/mm/yy)

10. Does the university have off-shore campuses?

Yes  No

If yes, date of establishment :.....(dd/mm/yy)

Date of recognition :.....(dd/mm/yy)

11. Location of the campus and area:

	<b>Location*</b>	<b>Campus area in acres</b>	<b>Built up area in sq. mtrs</b>
i. Main campus area	Urban	372 acres	1,32,315.00 sqm
ii. Other campuses in the country	-	-	-
iii. Campuses abroad	-	-	-

\*(Urban, Semi-Urban, Rural Tribal, Hilly Area, Any other (please specify))

If the university has more than one campus, it may submit a consolidated self-study report reflecting the activities of all the campuses.

12. Provide information on the following: In case of multi-campus University, please provide campus-wise information.

▪ Auditorium/seminar complex with infrastructural facilities:

1. Ch. Ranbir Singh Auditorium

Main Hall	= 1800 Capacity
Seminar Hall-I	= 250 Capacity
Seminar Hall-II	= 125 Capacity
Seminar Hall-III	= 125 Capacity

Besides the above four main halls, the Auditorium Complex has one Cafeteria, one Exhibition Hall, one Crush Hall, two VIP lounges, preparation rooms, offices space, AC unit in basement, etc. The halls are equipped with all kinds of audio and visual devices like sound system, LEDs, CCTV cameras, etc. A projector of 30000 lumens is installed in the main hall for screening of films, documentary etc.

All furniture and furnishings are of global standard and the Auditorium is centrally air conditioned.

2. Seminar Hall

Seminar Hall in Teaching Block No.1	= 80 Capacity
Seminar Hall in Teaching Block No.3	= 80 Capacity
Seminar Hall in Teaching Block No.4	= 150 Capacity
Seminar Hall in Teaching Block No.6	= 60 Capacity

All the above three halls are equipped with audio visual aids and central air conditioning facility.

□ Sports facilities

\* Playground

- Basketball Court (Cemented) 1 + 2(with lights)
- Volleyball Court (Clay): 2 + 2(with lights)
- Handball Court (Grassy): 1
- Football (Grassy): 1
- Athletics track (Grassy): 1
- Cemented half pitch with net (cricket): 3
- Tennis courts synthetic with lights and fencing: 2+1(cemented)
- Pavilion with Stage Sports Complex: 01 (area 1000 sq mtr.)

- Gymnasium: Multipurpose Hall with facilities/equipments of indoor games: Table Tennis, Badminton, Yoga, Chess, Weight lifting and Weight Training (13 Station Multi Gym).

\* Any other (please specify) Nil

□ Hostel

\* Boys' hostel

i Number of hostels: 03 (BH-I, BH-II, BH-III) and  
4<sup>th</sup> is under construction.

ii Number of inmates: 981  
BH-I = 452  
BH-II = 227  
BH-III = 302

iii Facilities:  
News paper, Magazine, Common room with LED, Water Cooler with Aqua guard, Geysers, Wi-fi, Indoor games, Sports, Mess, Canteen, Lawns, CCTV.

\* Girls' hostel

i Number of hostels: 04 (GH-I, GH-II, GH-III & GH-IV)

ii Number of inmates: 1086

GH-I = 219

GH-II = 313

GH-III = 410

GH-IV = 144

iii Facilities:

Cyber Café, Three CCTV Cameras at the entrance of the hostel, ATM, Shops (General Store, Laundry, Photocopy), News paper, Common room with LED, Water cooler with Aqua guard, Geysers, Wi-fi, Indoor games (carom board, Chess board, badminton etc.), Sports, Gym, Mess, Canteen, Air Conditioned ambulance, Guest room, Lawns, Grocery shop, ATM, Washing/Ironing.

\* Working women's hostel:

i. Number of hostels: 01 (one)

ii. Number of inmates: 91

iii Facilities:

Cyber Café, Three CCTV Cameras at the entrance of the hostel, ATM, Shops (General Store, Laundry, Photocopy), News paper, Common room with LED, Water cooler with Aqua guard, Geysers, Wi-fi, Indoor games (carom board, Chess board, badminton etc.), Sports, Mess, Canteen, Air Conditioned ambulance, Guest room, Lawns

Residential facilities for faculty and non-teaching:

Sr. No.	Description of Category	Available Nos.	Remarks
1.	'A' Type Houses	77	Non-Teaching
2.	'C' Type Houses	58	Non-Teaching
3.	'D' Type Houses	48	Faculty & Non-Teaching
4.	'E' Type Houses	26	Faculty & Non-Teaching
5.	'F' Type Houses	10	Faculty
6.	Married Teachers Flat	48	Faculty & Non-Teaching

Cafeteria: Yes, two cafeterias, with sitting of about 100 and 300 persons at a time.

- Health centre – Nature of facilities available – inpatient, outpatient, ambulance, emergency care facility, etc.

It is a primary health care centre to cater the medical & dental care needs of the University staff and students. It is spacious enough to accommodate 3 doctor’s cabins for OPD, a Dental clinic, a dispensing room, a laboratory, a medicine store, a minor O.T and an observation room with 3 beds facility.

Staffing of Health Centre:

Sr No.	Staff	Number
1.	Senior Medical Officer	1
2.	Medical Officer	1
3.	Dental Surgeon	1
4.	Pharmacist	1
5.	Lab Technician	1
6.	Staff Nurses	3

Various Facilities at Health Centre:

- Medical Aid for all common ailments.
- First Aid to all the accident cases.
- Preliminary care with respect to all major diseases.
- Laboratory facilities like routine blood test, liver function test, kidney function test, Lipid profile, diabetic profile, urine tests etc. It is well equipped with latest model of auto analyzer and cell counter.
- Dental care facilities equipped with latest equipments like RVG, Apex Locator, and Scaler etc.
- Free Medicines to all the employees and their wards and students.
- 24 hours Ambulance Service for transporting the referred patients.
- For referral, besides the approved hospitals in Hisar i.e. N.C. Jindal Institute of Medical Care & Research, Civil Hospital & Sarvodya Hospital, 11 other private hospitals are also on panel. Medical reimbursement is provided to employees for indoor treatment cases.

- Facilities like banking, post office, book shops, etc. : Yes,

There is one bank, one post office, one book shop, one gift and general store, reprography facility, etc. are available in University Shopping Centre.



- Transport facilities to cater to the needs of the students and staff :

The University has two buses for the use of students for Educational/Industrial Tour and 50% concession is given on Educational & Industrial Tours for the regular students of the University. The University Bus is also provided free of cost to the students for participation in various Sports Tournaments, Inter-University Youth Festival and Industrial visits, if they are part of course curriculum etc. Bus service is also provided free of cost in the campus to commute from City Gate to TB-VII during Morning and Evening hours.

- Facilities for persons with disabilities:
  - i. Ramps with SS railings are provided in all teaching blocks, auditorium and hostels.
  - ii. Lift facility besides ramp, is provided in auditorium and Bio Nano Science Centre

- Animal house:

Animal House has been constructed with a built-up area of 540 Squares meters on the university campus to cater the needs of Department of Pharmaceutical Sciences for housing the Laboratory animals required for teaching of B.Pharm. and M. Pharm. (Pharmacology) classes; and for carrying out research activities. This Animal House has been built as per the requirements of CPCSEA (Committee for the purpose of supervision of experiments on animals, Ministry of Environment and Forests, Govt. of India). Various Laboratory animals like Swiss albino mice, Wistar albino rats, New Zealand white rabbits, golden hamsters and guinea pigs are procured from Disease Free Small Animal House, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar as and when required. Institutional Animal Ethics Committee (IAEC) has been constituted as per the norms of CPCSEA.

- Incinerator for laboratories: Outsourced.  
Health Centre uses needle burner and other laboratory waste is collected by a waste management company.
- Power house: Yes, 4 numbers of 11KV Sub-station are in place.
- Waste management facility: Yes,  
2.5 MLD Sewage Treatment Plant: E-Waste Management; vermi composting of dry and dead plants, etc., Health Centre uses Needle burner,

13. Number of institution affiliated to the university :

Type of colleges	Total	Permanent	Temporary
Arts, Science and	-	-	-

Commerce			
Law	-	-	-
Medicine	-	-	-
Engineering	08	-	08
Education	-	-	-
Management	07	-	07
Others (specify and provide details)	-	-	-

14. Does the University Act provide for conferment of autonomy (as recognized by the UGC) to its affiliated institutions? If yes, give the number of autonomous colleges under the jurisdiction of the university.

Yes  No  Number  Nil

15. Furnish the following information:

Particulars	Number	Number of students
a. University Departments		
Undergraduate	03	2682
Post graduate	14	1752
Research centres on the campus	-	-
b. Constituent colleges	-	-
c. Affiliated colleges	14	6241
d. Colleges under 2(f)	-	-
e. Colleges under 2(f) and 12(B)	-	-
f. NAAC accredited colleges	-	-
g. Colleges with potential for Excellence (UGC)	-	-
h. Autonomous colleges	-	-
i. Colleges with Postgraduate Departments	11	1298
j. Colleges with Research Departments	-	-
k. University recognized Research Institutes/Centres	No	-

\* PG Department provides research facilities to Ph.D students.

16. Does the University conform to the specification of Degrees as enlisted by the UGC?

Yes  No

If the university uses any other nomenclatures, please specify.

17. Academic programmes offered by the university departments at present, under the following categories: (Enclose the list of Academic programmes offered).

Programmes	Number
UG	Regular (9)+ Distance (2)=11
PG	Regular(36)+Distance(8)=44
Integrated Masters	No
M.Phil.	No
Ph.D.	16
Integrated Ph.D.	No
Certificate	-
Diploma	-
PG Diploma	7(Distance mode)
Any other (please specify)	-
Total	78

List of regular U.G./P.G. programmes (Annexure-IV)

List of Distance learning U.G/P.G. programmes (Annexure-IV)

18. Number of working days during the last academic year: 277

19. Number of teaching days during the past four academic years.

Academic Year	Teaching Days
2009-10	210
2010-11	199
2011-12	189
2012-13	199

(Teaching days' means days on which classes were engaged. Examination days are not to be included)

20. Does the university have a department of Teacher Education?

Yes  No

If Yes,

a. Year of establishment .....(dd/mm/yy)

b. NCTE recognition details (if applicable)

Notification No.....

Date: .....(dd/mm/yy)

c. Is the department opting for assessment and accreditation separately

Yes  No

21. Does the university have a teaching department of Physical Education?

Yes No

If yes,

a. Year of establishment.....(dd/mm/yy)

b. NCTE recognition details (if applicable)

Notification No.....

Date :.....(dd/mm/yy)

c. Is the department opting for assessment and accreditation separately? NA

Yes  No

22. In the case of Private and Deemed Universities, please indicate whether professional programmes are being offered? N.A.

Yes  No

If yes, please enclose approval/recognition details issued by the statutory body governing the programme.

23. Has the university been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon. Yes, (AICTE and PCI approvals are at Annexure-II & Annexure-III and no report as such is received)

24. Number of positions in the university :

Positions	Teaching faculty			Non-teaching staff	Technical staff
	Professor	Associate Professor	Assistant Professor		
Sanctioned by the UGC/University/ State Government	36	75	163	667	153
Recruited	09	37	120		
yet to recruit	27	38	43		
Number of persons working on contract basis	-	-	129	247	48

25. Qualifications of the teaching staff :

Highest qualification	Professor*	Associate Professor*	Assistant Professor	Total
-----------------------	------------	----------------------	---------------------	-------

	Male	Female	Male	Female	Male	Female	
<b>Permanent teachers</b>							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	46	16	15	01	29	12	119
M.Phil.	-	-	-	-	02	-	02
PG	-	-	03	-	28	14	45
<b>Temporary teachers</b>							
Ph.D.	-	-	-	-	07	11	18
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	59	47	106
UG	-	-	-	-	04	01	05
<b>Part-time teachers</b>							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-

\* Position of Professors and Associate Professors include those promoted under CAS.

26. Emeritus, Adjunct and Visiting Professors: **(04)**

	Emeritus	Adjunct	Visiting
Number	01	-	03

\*Besides 46 eminent professors/experts visited on request of departments from time to time.

27. Chairs instituted by the university :

	Chairs *
School/Department	Nil

\*The university has a Department named Guru Jambheshwar Institute of Religious Studies which conducts research on different religions and their comparisons.

28. Students enrolled in the university departments during the current academic year, with the following details :

Students	UG	PG	Inte- grated Maste rs	M. Phil.	Ph.D.	Inte- grated Mast- ers	D.Litt / D.Sc.	Certi- ficate	Dip- loma	PG Dipl- oma
	*M*F	*M*F	*M*F	*M*F	*M*F	*M*F	*M*F	*M*F	*M*F	*M*F
From the	M-484	M-396	-	-	M-33	-	-	-	-	-

state where the university is located	F-157	F-334			F-64					
From other states of India	M-6 F-4	M-17 F-25	-	-	M-01 F-10	-	-	-	-	-
NRI students	-	-	-	-	-	-	-	-	-	-
Foreign students	M-11 F-01	M-03 F-0	-	-	-	-	-	-	-	-
Total	663	875	-	-	108	-	-	-	-	-

\*M-Male \*F-Female

29. Unit Cost of education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

- (a) including the salary component = Rs. 1.44 lakhs  
(b) excluding the salary component = Rs. 0.53 lakhs

30. Academic Staff College

- Year of establishment: April, 2009  
 Number of programmes conducted (with duration) : 60

\* UGC Orientation: 15

Sr. No.	No. of UGC Orientation Programmes conducted	Duration	Remarks
1.	15	4 weeks per programme	

\* UGC Refresher: 24

Sr. No.	No. of UGC Refresher Programmes conducted	Duration	Remarks
1.	24	3 weeks per programme	

\* UGC Special Programmes: 17

Sr. No.	No. of UGC special Programmes conducted	Duration	Remarks
1.	1	3 weeks (13.11.2013 to 03.12.2013)	Special Winter School on Disaster Management
2.	1	3 days	Workshop on disaster

		(14.02.2013 to 16.02.2013)	management
3.	1	One week (01.03.2013 to 06.03.2013)	One week training programme on Writing research project proposal & Research Papers (All Levels)
4.	1	10 days (03.10.2013 to 12.10.2013)	10 days Research Methodology course for Ph.D scholars sponsored in collaboration with ICSSR, MHRD, New Delhi
5.	6	01 week (08.03.2010 to 13.03.2010), (28.02.2011 to 05.03.2011), (14.03.2012 to 20.03.2012), (26.02.2013 to 06.03.2013), (22.02.2014 to 28.02.2014) & (28.02.2014 to 06.03.2014)	Interaction programme cum workshop on Research Methodology for Pre Ph.D. scholars
6.	3	5 days (25.10.2010 to 29.10.2010) 3 days (18.10.2012 to 20.10.2012)  01 week (15.01.2014 to 24.01.2014)	Short term training programmes for non academic staff of the University
7.	1	(20.09.2013 to 28.09.2013)	Faculty development programme in collaboration with TEQIP
8.	1	(26.09.2013 to 27.03.2013)	Technical staff development organized in collaboration with TEQIP
9.	1	(27.09.2013 to 28.09.2013)	Staff development programme organized in collaboration with TEQIP
10.	1	01 week (14.01.2011 to 20.01.2011)	Short term course for Professional Development Programme for Professor and Reader

\* University own programmes: 04

Sr. No.	Staff / Students	Duration		Total
		From	To	Days
1	Computer skills Workshop of DDE Employee's	14.03.2011	21-03-2011	07 days

2	Computer Training programme for Clerk-cum-JDEOs	18.04.2011	22.04.2011	05 days
3	Training of Accounts Personnel on computerized payroll system	09.09.2011	09.09.2011	1 day
4	Short Term Training Course AutoCad-2013	29-07-2013	11-09-2013	45 days

31. Does the university offer Distance Education Programmes (DEP)?

Yes  No

If yes, indicate the number of programmes offered. 17 (seventeen)

Are they recognized by the Distance Education Council? Yes,

All programmes offered through Distance Education Mode stand approved by the Distance Education Council.

32. Does the university have a provision for external registration of students?

Yes  No

If yes, how many students avail of this provision annually?

33. Is the university applying for Accreditation or Re-assessment? If Accreditation, name the cycle

Accreditation: Cycle 1  Cycle 2   
Cycle 3  Cycle 4   
Re-assessment:  NA

34. Date of accreditation\* (applicable for Cycle-2, Cycle-3, Cycle-4 and re-assessment only)

Cycle 1: 01.10.2002, Accreditation outcome/Result Grade-A

(Annexure-VI)

Cycle 2: 15.06.2009, Accreditation outcome/Result Grade-A (CGPA-3.26)



(Annexure-VII)

Cycle 3:..... (dd/mm/yyyy), Accreditation outcome/ Result.....

Cycle 4:..... (dd/mm/yyyy), Accreditation outcome/Result.....

\* Kindly enclose copy of accreditation certificate(s) and Peer Team Report(s)

35. Does the university provide the list of accredited institutions under its jurisdiction on its website? Provide details of the number of accredited affiliated/constituent/autonomous colleges under the university:

No such institutions.

36. Date of establishment of Internal Quality Assurance Cell (IQAC) and dates of submission of Annual Quality Assurance Reports (AQAR).

IQAC                      03.01.2004    (dd/mm/yyyy)

AQAR                    (i)    22.11.2012 (dd/mm/yyyy)  
                              (ii)    22.11.2012 (dd/mm/yyyy)  
                              (iii)  22.11.2012 (dd/mm/yyyy)  
                              (iv)    27.11.2013 (dd/mm/yyyy)

37. Any other relevant data, the university would like to include (not exceeding one page).

Nil
-----

**Part-D**  
**Criteria-wise Analytical Report**

## **Criterion I: Curricular Aspects**

---

### **1.1 Curriculum Design and Development**

The Guru Jambheshwar University of Science and Technology facilitates and promotes studies and research in the areas of higher education with emphasis on new frontiers of technology, pharmacy, environmental studies, non-conventional energy sources and management studies, and also to achieve excellence in these and connecting fields. In view of the above, the university has introduced innovative and job oriented courses which are relevant to the emerging areas of higher Technical Education and are in consonance with the objectives of the University as enshrined in its Vision and Mission. The curricula of various courses are designed and developed so as to achieve excellence in quality teaching, research and extension or consultancy services to produce dynamic and knowledgeable human resources for contributing to the national development and welfare of the society. The University also focuses on the student community by instilling in them passion for knowledge and creativity and to promote sustainable growth in academic resources, etc.

The university follows a systematic process and provides complete autonomy to the departments for design and development of the curricula. The University has evolved a well-defined system of designing and updating Course Curricula for various academic programmes with the active participation of industry and academia. For designing and development of course curricula, the model Curriculum of UGC and other academic bodies, wherever available, and needs of the industry and respective profession are taken into account. Industry experts and academicians constitute Board of Studies (BOS) who frame and update Course Curricula of an academic programme. The curricula of various courses offered by the different departments of the University are first considered in the respective Staff Council of the Department and then in Board of Studies. There are normally two expert members in each of the Board of Studies from outside the university. Thereafter, it is deliberated in the meeting of respective Faculty again involving two outside experts. The recommendations of the Faculty and Board of Studies are placed before the Academic Council, where the Course Curriculum is thoroughly deliberated, finalised and approved.

The aspects of employability, innovation and research are considered

while designing a Course Curriculum as it involves Industrial Training, Industrial Tours and Innovative Research Projects.

As per needs of the industry and other academic organisations, the university has designed job oriented courses in engineering, management, pharmaceutical sciences, physical sciences, communication management and technology, biotechnology, nano-science and technology, physiotherapy, environmental studies, food technology, psychology, etc. for making the students employable. The industrial training, industrial projects and industrial tours have been made integral part of the curriculum in various programmes so that the students get exposure to industrial environment. The laboratories are equipped with modern and sophisticated instruments so that students get hands-on-training within the campus for enhancing their skills in different areas. The course curricula are regularly up-dated keeping in view the current developments in all spheres of science, technology, engineering, management and needs of the society and industry. In restructuring exercise undertaken from time to time, the nomenclatures of M.Tech. VLSI Design & Embedded System, M.Tech. Integrated Product Design & Manufacturing, M.Tech. Printing & Graphics Communication, M.Sc. in Industrial Microbiology and M.Sc. (Applied Psychology) were changed to M.Tech. (Electronics & Communication Engineering), M.Tech. (Mechanical Engineering), M.Tech. (Printing Technology), M.Sc. (Microbiology) and M.Sc. (Psychology), respectively to promote the employability of the students.

In order to keep pace with the recent developments, the different departments of the university conduct meetings in collaboration with the experts and industry representatives and incorporate the suggestions in curriculum for innovation and current relevance. As a result of such exercises, innovative courses are also introduced so that the students may compete globally.

The University lays much emphasis on research besides teaching as research has become an important indicator of progress. The course curricula are designed in such a way that maximum number of students qualify for the NET-JRF (UGC-CSIR), ICAR, ICMR, GATE and other national level examinations for pursuing research in upcoming areas of excellence. The university also promotes innovative research projects. In almost all the departments, the university offers Pre-Ph.D. programme leading to registration to Ph.D. for encouraging research in different disciplines as per the latest UGC guidelines of 2009. The seminars/conferences/symposia are conducted by various departments of the university on their thrust areas of research. It is pertinent to note that a student pursuing Ph.D. programme is required

to publish two research papers in refereed journals and attend at least one seminar/conference/symposium, while a student pursuing M.Tech. Degree is required to publish one research paper. The students of Pre-Ph.D. course undergo one week training in Research Methodology conducted by UGC-ASC of the University. The Radio-Ecology Centre is also established in the university to cater to the needs of the students for pursuing higher research in related field of nuclear sciences. To promote the research activities, the university has established Central Instrumentation Laboratory (CIL) having sophisticated instruments like NMR, HPLC, AAS, FTIR, UV-VIS-NIR, DSC, etc.

The guidelines of the regulatory bodies like UGC/AICTE/DBT/DST/PCI etc. are followed to a maximum extent for developing and/or restructuring the curricula. Special care is taken to incorporate the contents of NET/GATE syllabi for the same, which is evident from that a good number of students have cleared in these examinations. Some of the programmes are instrumental in creating national impact. Senior faculty members of our university are associated with these regulatory bodies in different capacities, which is found beneficial in developing course curricula.

Further, the university interacts with industry, research bodies and civil society in the curriculum revision process. The Academic Programmes provide dynamic and knowledgeable human resources for national development and welfare for achieving excellence in the field of technical education and research. Therefore, the feedback from students and alumni, who are placed at higher positions in industry as well as scientists in reputed institutes, is received formally and informally which plays a vital role in enrichment of curricula. The training and placement cell of the university also helps in this regard by arranging interaction on various aspects of curricula. The representatives from industry/research bodies/society are specially invited as and when required in our Board of Studies, Faculty and Academic Council meetings besides the academic peers for curriculum revision. The university has benefitted a lot through interactions with the stakeholders. Further, the curricula are designed in a way that the students are capable to compete globally.

The University facilitates the introduction of the new programme of studies in its affiliated colleges through a well-defined process. Any need-based new programme to be introduced in affiliated colleges is screened for its viability by the respective staff councils and submitted to Board of Studies. The Board of Studies after thorough deliberation recommends it to Colleges Branch and Academic Branch for onwards submission, discussion and recommendation by Academic council.

The university also encourages its colleges to provide additional skill-oriented programmes relevant to regional needs.

## **1.2 Academic Flexibility**

At present the University is offering 45 Regular Courses on Campus (Annexure-IV) and 17 Courses through Distance Mode (Annexure-V), with Ph.D. facilities in all the Departments. There are 18 Teaching Departments in the University and 7 Faculties (including Haryana School of Business) which perpetuate these Programmes. The regular on campus programmes include 10 M.Tech. 4 M.Pharma. 5 Master of Physiotherapy, 10 M.Sc., 7 B.Tech., 5 MBA, MCA, M.Com. B.Pharma. and Bachelor of Physiotherapy. The Distance Education Programmes include 8 P.G. Courses, 7 P.G. Diploma Courses and 2 U.G. Courses. The academic patronage of Distance Education Programme lies with the respective University Teaching Departments. These Distance Education Programmes stand approved by the joint committee of UGC, AICTE and DEC.

Fourteen Colleges/Institutes of Engineering, Management and Computers are affiliated to this University and they are offering B.Tech., M.Tech., MBA, BBA, MCA, BCA and B.Arch. Programmes. The University has also added various innovative courses in the last five years. The colleges/institutes affiliated to the university may choose to start the following programmes:

B.Tech. – Electronics and Communication Engg., Computer Science and Engg., Information Technology, Mechanical Engg., Printing Technology, Bio Medical Engg., Food Engg., Civil Engg., Electrical Engg, Automobile Engg., Electronics & Electrical Engg.

M.Tech. – Electronics and Communication Engg., Computer Science and Engg., Information Technology, Mechanical Engg., Printing Technology, Bio Medical Engg., Food Engg., Nano Science and Technology, Optical Engg., Geo-informatics, Environmental Science and Engg, Civil Engg., Electronics & Electrical Engg.

Others - M.B.A., B.B.A., B.C.A., B.Arch.

Most of the programme curricula are designed in such a way so as to have the Core courses, which are compulsory. They are generally combined with elective options to provide specialisation in different areas of a particular discipline. The final allotment of specialisation is made with reference to criteria adopted by the departments by following a transparent and rational procedure. For further enrichment

of courses and instil ethics the students are also given lessons on environmental studies and volumes and ethics. These courses are useful for the all-round development of the students. Further, M.C.A. (five years integrated) and M.C.A. are offered through distance education in modular form. There is also a provision of admission under lateral entry (LEET) in M.C.A., B.Tech. and B. Pharma. courses.

All the programmes are open for foreign students as well . Keeping this in view, 15% supernumerary seats of the total sanctioned intake in each course are available for Foreign Nationals. The admission of foreign students is made on merit based on score of qualifying examination. A few rooms in boys and girls hostels are reserved for foreign students. Extra facilities as per the instructions of the UGC/MHRD are created for the foreign students. University has signed MoU with EdCIL to admit foreign students for various courses on behalf of the university. The university has established a separate Cell to facilitate the admission process and various issues relating to foreign students. The students from Nepal, Afghanistan and Rewanda have taken admission in the courses of B.Tech and MBA.

There is a facility of dual degree and twinning programmes to some extent only in Distance Education programmes for regular students of the University. A student can pursue two programmes simultaneously through combination of Distance and regular modes from the same or different Universities/Institutions in various combinations, viz., one degree and one Diploma or two Diplomas etc.

The University also offers self-financing programmes in some branches of B.Tech. and M.Tech., M.Sc. (Biotechnology), M.Sc. (Microbiology), M.Pharma, Bachelor of Physiotherapy, Master of Physiotherapy and MBA (Part Time). The policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programmes. The concept of self-financing in the University is to have different fee structure for such courses in order to be self-sustainable without compromising on quality/admission criteria.

This university is the first in the state to adopt Choice Based Credit System (CBCS) in all the courses offered at university campus and in its affiliated colleges/institutes. Currently, all regular programmes are offered in semester system of examination. It also provides the flexibility of bringing together all the courses through distance education mode of all the statutory Universities/Deemed to be Universities including open/private universities established by an Act of State Legislature/Parliament which are approved by UGC, and DEC or the joint committee of UGC, AICTE & DEC for fresh admission.

Most of the programmes at University campus and in its affiliated colleges are of inter-disciplinary nature.

### **1.3 Curriculum Enrichment**

The review and up-gradation of course curricula of various courses in different departments of the university are done periodically as and when necessary depending upon the feedback from the stake holders and need of students to make it socially relevant, job oriented and knowledge intensive. The revision and changes in the curricula are facilitated through Board of Studies of the department concerned followed by Academic Council. For revision of the existing programs, following strategies are being adopted:

- Course Co-ordinator's knowledge/perception about the need to revise
- Feedback from Stakeholders
- Feedback from Staff Council of the Department
- Feedback from the External experts in BOS /Research bodies/Civil Society
- Workshop with subject experts/peers from other universities/institutes.

In the last five years, 100% courses in different departments underwent revision of the syllabus. While reviewing/revising the course curricula, efforts are made to integrate theoretical knowledge with practical training/lab-work. Employment potential is also given due consideration in this process. Overall, there is a regular updating of curricula as per current industry requirements, placement record of the pass-out students, alumni feedback, opinion of experts, etc. Recently, the university has taken an initiative to revise/upgrade the curricula of some departments covered under Technical Education Quality Improvement Program (TEQIP-II) of World Bank to meet the latest requirements of the industry and other stakeholders. During the last five years, a number of courses have been introduced in emerging areas, mainly at PG level, in order to fulfil the societal needs, corporate and institutional demands, and general employment prospects. Following are the newly introduced PG courses in various departments:

- M.Tech (Printing Technology)
- M.Tech (Bio-Medical Engineering)
- M.Tech. (Geo-informatics)
- Master of Physiotherapy (Neurological disorders)
- Master of Physiotherapy (Pediatric Physiotherapy)



- Master of Physiotherapy (Cardiothoracic and Pulmonary Disorder)
- M.Com

In addition to this, the nomenclatures of few courses were changed and restructuring carried out, keeping in view the job prospects of the students and acceptability in the academic community.

The university aims at developing intellectual skills, offering career training and promoting community orientation through value added courses offered by it. In a way, value addition is inherent in all the courses, which aim at developing good skills and traits among students. For example, the establishment of the Department of Religious Studies coincides with inception of university, which promotes comparative study and research related to various religions of the entire world. The main aim of this department is to sensitize students towards the main characteristics of Indian Culture, i.e., secularism, moral values, communal harmony, etc. The Language lab and the courses offered by CMT department of the university help in developing skills of writing, expression, and critical appreciation and train students to specialize in Electronic Media, Advertising Management, Public Relations and Corporate Communication, Social Marketing and Development Communication, and many more.

Similarly, courses in basic/applied Sciences (viz. Chemistry, Physics, Environment Science and Biotechnology) help to develop skills in handling sophisticated instruments, managing a variety of chemicals, sharpen keen observation, working in modular laboratories and also provide the required training for technical / scientific careers.

Case studies, group discussions, learning through field work, simulation exercises, seminars, and workshops are integral part of effective teaching and learning process in various professional courses such as MBA, B. Tech, M.Tech, etc. These activities enhance career prospects of the students through all round development of their personality. Printing Technology, Food Engineering, Computer Science & IT, Mechanical engineering, Electronics Engineering, Biomedical Engineering, Nano Technology, etc. are the important courses offered so that larger number of students can make a mark the job market and contribute to development of the society as well as the nation. Departments like Psychology, Physiotherapy and Pharmaceutical Sciences also seek to promote community service and awareness towards physical and mental health care.

Higher order skill development of the students is also being taken care of by encouraging them to participate in variety of co-curricular (Cultural and Sports) and social activities (NSS). Students also engage themselves in multifarious activities such as quizzes, extempore debates, panel discussions, paper presentations, management games, etc. which help them in developing their personality, improving communication skills, enhancing the level of confidence, and inculcating interpersonal skills, which are essential attributes for a successful career. Students are also encouraged to undertake a number of other co-curricular activities under the supervision of the faculty such as industrial tours and academic visits. Added to this, almost each professional course of study has incorporated one ICT-based paper of a certain level in its course curricula. Further, modern teaching aids, Wi-Fi facility in the entire university campus and fast internet connectivity help the students to acquire necessary computer skills and needed information in an effective way.

#### **1.4 Feedback System**

Almost all university teaching departments obtain students feedback regarding the curriculum and its teaching. In some departments, the feedback from students is collected using the in-house format. The feedback is conveyed to the teacher concerned for information and corrective measure through staff council. Moreover, the continuance of the visiting guest faculty also depends on the feedback from the students. The feedback from the students to revise or update the existing curriculum is discussed in staff council and Board of Studies of the concerned department. The suitable changes are introduced in the curriculum to make the course more relevant and career oriented as per the requirements.

The university also elicits feedback on the curriculum from national and international faculty and also from employers, community, academic peers and industry experts. However, this feedback mechanism varies from department to department. Academic peers are invited as outside subject experts in different academic bodies like Board of Studies, Faculty, and Academic Council. Subject experts/scientists are also invited for extension lectures, conducting of practical exams, holding viva-voce and evaluating infrastructure, laboratories and research facilities. Further, organization of seminars, conferences, workshops, etc. provides an important platform to interact with senior academicians/subject experts from other universities. This process provides strong informal inputs for curriculum up-gradation.

Formal and informal feedback on curriculum is also collected from corporate executives through discussions, meetings, invited talks, etc. by the training and placement cell of the university. These efforts are further supplemented in different ways by the individual departments running job-oriented courses.

Further, there is a provision for representation of teachers from affiliated colleges in BOS and other Academic Bodies of the University and there is active involvement of these teachers for obtaining feedback on curriculum development and enrichment. The university academic bodies, where there is adequate representation of faculty from affiliated institutions, serve as effective platforms for exchange of views on all important issues related to curriculum. The faculty members of affiliated institutions are encouraged to give suggestions about the course design / required changes in the individual subjects during the meeting of the respective Board of Studies. The meeting of BOS is convened by the Chairperson of the department concerned, who also Chairs BOS, at least twice in a year to discuss academic issues including curriculum enrichment.

For ensuring the effective development of the curriculum, following measures are undertaken by the university for quality sustenance & quality enhancement:

- The periodic meetings of BOS, Faculty and AC are held by the University for analysing and incorporating the feedback obtained from various stakeholders through formal and informal channels for qualitative improvement of the course curricula. Care is taken to ensure that curricula design is in tune with the norms and standards recommended by the UGC/AICTE.
- The University has constituted an Internal Quality Assurance Cell (IQAC), which has been functioning as an effective nodal agency for monitoring implementation/ strengthening of quality measures related to various academic activities including the curriculum development.
- There is provision of eminent external experts in research committees and Boards of Studies ensures continuous feedback, regular improvement and quality enhancement in curriculum development and research.
- The expansion of academic horizon has been undertaken by the university through introduction of new courses with potential job prospects in emerging and inter-disciplinary areas. The nomenclature of few courses was also changed keeping in view the wide acceptability by the academic community/industry. Most of these courses are interdisciplinary in nature and thereby meet the needs of emerging technology.

- In order to promote quality research, the University played a lead role in implementing the new guidelines for admission to Ph.D. in accordance with the latest UGC norms. The university keeps on revising/upgrading the Ph.D. curricula as per the feedback/needs of the latest technology and research.
- The teaching learning process has been strengthened by use of computers with latest learning resources/software. The University has introduced computerization and internet facilities on large scale with ICT access throughout the campus.

Other information regarding Curricular Aspects which University likes to include is presented below:

- Govt. of India provided financial support under World Bank Project TEQIP-II for technical education quality improvement in this university in 2012. This has helped various teaching departments to undertake a number of activities for quality improvement, which include: curriculum development workshops, Conference/Seminars on latest trends in research as well as lab establishment/up-gradation as per needs of industry/stake holders. The university also provided a unique opportunity to its faculty members of various teaching departments under TEQIP-II to visit abroad/foreign countries for training and/or research interaction. These visits in organizations/institutions of international repute have provided a rare platform to interact with internationally renowned experts thereby providing significant inputs for curricula up-gradation/lab development/training and research.
- The University has also done a commendable work in developing linkages with outside academic/research bodies at national and international levels through Research projects, signing of MoUs and visits by delegates from research bodies (DRDO, DST, DBT, etc.).
- To encourage foreign students, the University has made provision for supernumerary seats in each course of study, subject to the given admission rules and eligibility. This process has provided a global platform of interaction among students from different countries including India.

## **Criterion II: Teaching-Learning and Evaluation**

### **2.1 Student Enrolment and Profile**

The university ensures that wide publicity is done and transparency is maintained in the admission process for all academic programmes. Advertisements for admission notification are given in the leading regional and national newspapers and also hosted on university website ([www.gjust.ac.in](http://www.gjust.ac.in)). The university prospectus - a complete handbook of information is published every year in the months of May/June. The university prospectus contains detailed information about the programmes offered, number of seats available, eligibility criteria and rules and regulations governing the admissions. The prospectus also provides information on reservation policy, fee structure, fee concessions, scholarships available and the facilities (Hostel, sports etc) available for the students in the university. The admissions are made through department level admission committees formed with approval of the competent authorities. A nominee of the Vice-Chancellor is also present as an observer for Ph.D admissions.

The merit list for admissions is prepared and it is notified on the notice board as well as on the Website of University. The students are called for counseling as per published schedule and on the spot category wise admissions are made on the spot in a fair and transparent manner. The merit is drawn on the basis of entrance tests conducted by respective department except B.Tech programmes. With respect to B.Tech. programmes, the admissions are made at State level on the basis of AIEEE/JEE examination score and through on line counseling. With respect to MBA, M.Tech and M. Pharma programmes, admissions are made on the basis of score in CAT, GATE and GPAT, respectively. In case some seats remain vacant as a result of this process then the same are filled up on the basis of entrance test conducted for the programme by the departments concerned.

Almost similar process is followed for the admissions to affiliated colleges. These admissions are monitored by Dean of Colleges of the university so as to ensure transparency and fairplay.

The university has a mechanism to review its admission process and students profile annually and the outcome of such an analysis has contributed to the improvement of the process.

The admission process is reviewed through university admission committee. Views of the faculty members on the eligibility criteria, admission schedule and admission process are discussed at department level and then communicated to the university admission committee. Further, deliberations take place in the meetings of the admission committee to review and incorporate the innovative suggestions in the admission process. The issues resolved and suggestions made during admission committee meetings are incorporated in the prospectus by a committee headed by Dean Academic Affairs with two to three other senior Professors of the university. The student profile is compiled by the Registration Branch for discussion in the meetings of Deans Committee and admission Committee. In this way, the admission procedure is being continuously refined over the years. The university has a policy in place to increase/improve access for students belonging to the categories such as SC/ST,OBC, women, persons with varied disabilities, economically weaker sections and outstanding achievers in sports & other extra co-curricular activities. These categories are provided reservation in admissions as per State Government rules. There is a multi-pronged approach to increase the access of SC/ST students which includes relaxation in the percentage in qualifying examination for eligibility purpose and reservation policy as per Haryana Government rules. Further, post matric scholarship is given to all such SC/ST students whose annual family income is below Rs. 2.5 lac. There is a provision for Remedial coaching for SC/ST students to prepare them for UGC-NET/JRF and other competitive examinations. The financial support for the remedial coaching is provided by UGC.

For OBC also there is a provision of reservation of seats as per Haryana Govt. rules. Further, fee concession and scholarships are provided to these students if the family income is up to Rs. 1 lac.

The girl students are encouraged to take admissions by providing them a gender equitable and safer study environment on the university campus. Women cell is there to address any gender specific needs of the girl students. Hostel facility with all utility services is provided to all girl students.

Persons with varied disabilities also get the benefit of the reservation policy as per the Haryana Govt. rules. The university is sensitive to provide an infrastructure that is friendly to differently abled persons. The ramps with SS railings and lifts are provided at all appropriate places. With the onset of new reservation policy of Haryana Government with effect from 2012-13, seats are also reserved for

economically backward persons in general category. The outstanding achievers in sports activities are given special weightage of up to 5 marks in admissions.

The students admitted in the last four years in the university departments are given below:

Categories	2009-10		2010-11		2011-12		2012-2013	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	449	208	510	253	527	290	531	224
ST	1	0	1	0	2	2	-	-
OBC (BCA & BCB)	621	346	640	416	705	438	650	374
General	1470	1021	1729	1153	1664	1114	1708	1118
Others (PH, ESM, FF)	14	10	18	12	20	9	22	22

In so far as the demand ratios for various programmes of the university departments and affiliated colleges are concerned, these are mixed trends. The demand ratio has undergone a rise in the case of M.Sc. programmes in Chemistry, Physics and Mathematics, all M.Tech programmes, some B. Tech programmes, B.Pharma and M. Pharma programmes, M. Com and Ph.D programmes. However, a stable trend has been registered with respect to MBA programmes. The demand ratio has recently faced a decline with respect to some programmes including M.Sc. in Mass Communication, Advertising and Public Relations, Environmental Science, Bachelor of Physiotherapy and Master of Physiotherapy. On an analysis, it is noted that the decline is attributed to the factors like mushrooming of institutions offering these programmes through both regular and distance learning modes. The M.Sc. programmes have, however, picked up in recent past, particularly due to students tilt from Engineering to basic sciences due to increase in employment avenues and reverse being the case with regard to engineering and other technically qualified students. The programme-wise demand ratios are reflected in the following table:

Programmes	2009-10	2010-11	2011-12	2012-13	2013-14
UG (B.Tech.)	* Admissions to all the B.Tech. courses were made by Haryana State Technical Education Society (HSTES), Panchkula Therefore, a separate demand ratio for this university is un-ascertainable.				
UG (BPT)	3:1	2:1	3:1	1:1	2:1
UG (B.Pharma)	* Admissions to all the B.Pharm. courses are made by Haryana State Technical Education Society (HSTES), Panchkula Therefore, a separate demand ratio for this university is un-ascertainable			5:1	7:1
PG	6:1	7:1	8:1	8:1	8:1
Ph.D.	13:1	14:1	11:1	13:1	8:1

During the last four years, the university had to discontinue four programmes, viz., M.Sc. Nano Sciences and Technology, B. Tech. Printing and Packaging Technology, M.Sc. Development communication and PG Diploma in Defence Journalism. It was noticed that M.Sc. Nano Sciences and Technology has not been well received particularly owing to much focused employment opportunities for the candidates passing this programme. Another important reason was that the department is also running M. Tech Nano Science & Technology which registered higher demand than that for M.Sc. programme. Having discontinued the M.Sc. programme under reference, its specialized subjects were made a part of M. Sc. Bio Technology and M.Sc. Microbiology programmes being run in the same department.

Further, B.Tech. Printing & Packaging was discontinued due to simultaneously running of B. Tech. Printing Technology programme which had higher demand. Therefore, the restructuring was done by way of inserting packaging specialization in B. Tech. Printing itself. The M.Sc. Development Communication and P.G. diploma in Defence Journalism were discontinued due to decline in demand, particularly due its niche market for employment.

## 2.2 Catering to Student Diversity

The students on campus have a diverse demographic mix of urban & rural, males & females, previous educational backgrounds, etc. Due to diverse backgrounds, it is deemed imperative that the university organise orientation/induction programme for freshers. Annual



induction programmes are conducted by the university to familiarize the fresher students about university infrastructure/facilities, officers of the university, programmes run by the university, syllabus, scholarships, NSS, Sports activities, SC/ST cell and Women Cell etc. All the officers, in-charges and branch heads are made available to students to address their queries during these programmes. Besides, one day orientation at apex level, the department level fresher parties are also organised by the senior students for smooth induction of freshers.

The course coordinators are responsible for addressing the differential academic and other socio-cultural needs of the students from diverse backgrounds. The differential needs of the students are identified initially through their marks in qualifying examination and entrance test. First few lecturers are dedicated to identify the different learning groups in the class through group discussions and quizzes. Some of the best students of the senior class are invited to help the junior students. The remedial classes are organized by a special cell named SC/ST Coaching Centre for NET-UGC, Competitive Exams and Remedial Coaching created for the purpose with UGC support. The teachers are also incumbent to conduct extra classes for remedial coaching by the teachers at departmental level. Some basic reading material is also provided by the teachers to the slow learners.

Advanced learners are identified initially through merit of entrance test and subsequently through Credit Based System of evaluation adopted by the university. Advanced study material is provided (i.e. research papers, reference books, video lectures etc.) to the advanced learners. Advanced learners are motivated for discussions with the subject experts and to be facilitators for the slow learners. The advance learners emerge in the due course of teaching and respective teachers address their learning needs.

### **2.3 Teaching-Learning Process**

The teaching learning process and schedule are finalised well before start of admission process with due deliberation in an academic committee headed by Dean Academic Affairs and participated by three/four senior professors of the university. The academic calendar includes teaching schedule, examination (internal and external) schedule, preparatory days, autumn, winter and summer breaks, etc. In the beginning of the semesters, course co-ordinators provide the copy of the syllabus and the teaching/evaluation plans to the students.

The university calendar is also given in university prospectus as well as on the university website. Evaluation is done through minor tests, seminars, assignments and end semester examinations.

The course coordinators prepare and provide the course outline and tentative schedule of lectures to the students before commencement of the courses. The process of implementation is controlled individually. In normal circumstances the curricula are completed within stipulated time period enshrined in academic calendar. In exceptional situations, individual faculty members take extra classes for completing the curricula. Student-teacher interaction is given the highest priority in the teaching-learning process to make it student centric. In many departments, students also under-take project work, where the self learning is very important. In some departments, students are involved in several learning activities like case presentation, field work, article reviews etc. The learning is made student centric by organizing workshops, group discussions, quizzes and seminars on various topics of the syllabus.

University encourages the teaching departments to invite experts/professionals from institutions/ industries of national repute to deliver lectures for students. University allocates funds for inviting experts as part of organising seminars /conferences etc. Further, students are encouraged to attend seminars, conferences and workshops arranged by various departments and academic staff college. The university formally encourages blended learning by using e-learning resources. For making this effective, all the faculty members are provided PCs and internet facility. Internet facility is also available to the students in their respective departments, computer centre and in hostels. Students are encouraged for optimal use of INFIBNET facilities and data basis like PROWESS for their reference.

The university has taken initiatives to strengthen the ICT infrastructure on the campus. In some departments e-learning based on open educational resources takes place. Some faculty members also encourage students to learn from MIT courseware, Coursera and NPTEL etc. The management students with finance specialisation are given live demonstration of stock market and derivative trading.

Though, there is no formal designated group among the faculty to monitor the trends and issues regarding developments in open source community as such, yet most of such assistance and inputs are provided by the librarian and Head, UCIC to facilitate 24X7 learning. Further, University Library and Cyber Laboratory are accessible

beyond teaching schedules. IP-based access has been provided to the students for thousands of e-journals, some data basis etc.

There is a counseling cell in each department for mentoring, guiding and counseling students. In addition, Department of Psychology extends support to the students for psycho-social counseling, from which a number of students have been benefited. In addition, Parent-Teacher interactions are also organized to make the parents aware about the overall performance and behaviour of their wards which are monitored by the committees formed at the department levels. Further, faculty members are always available to students to guide in their academic pursuits and help to solve their personal problems.

There have been in use a number of innovative teaching approaches used by the teachers of the various departments. In science and engineering laboratories, experiments are planned and conducted in an open-ended manner so as to facilitate better understanding of the subject. Various departments have incorporated compulsory industrial training /projects of 2-6 months as a part of course curricula in order to enable the students to have first-hand experience of technical work skill. Educational tours at department level, participation in conferences, seminars, debates, essay writing /poster making competition etc. are organised on regular basis.

Science quizzes, poster presentations, debates, paper readings/writings, and technical fests are organized to instil the scientific temper among the students. For example the university recently organised a science conclave for instilling scientific temper among the learners. Several new and sophisticated equipments have been added in research and teaching laboratories in various departments for advanced learning and research. In all M. Tech and several PG programmes student projects are made mandatory. There is compulsory in company training for MBA students and they execute projects under mentorship of corporate executives. In other PG programmes, the projects are guided by faculty members.

There is well qualified pool of teachers to meet requirements of academic programmes. All the appointments are made as per UGC/AICTE norms. The shortfall is supplemented through visiting faculty, teaching associates and invited experts.

To enable the faculty to prepare computer-aided teaching/ learning materials, the Academic Staff College has taken an imitative to launch faculty orientation/development programmes. Most of faculty members are techno-savvy and can make use of computers,

printers, scanners, LCD projectors and other multimedia technology as teaching aids.

## 2.4 Teacher Quality

The university adequately plan and manage its human resources to meet the changing requirements of the curricula. Whenever vacancies arise and recruitments take place, the departments submit their academic requirements i.e. specialization for teaching & research for recruitment through staff council to the university. Faculty members are required to attend orientation /refresher courses organised by its Academic Staff College or those of other universities. University also deputed faculty members to attend workshops, conferences and symposia and also facilitate study leave and sabbatical leave to enhance academic and research acumen of the teachers. University also encourages teachers to undertake research projects in emerging and innovative areas and also take part in summer/winter school, training workshops in their respective specialisations. About 72 per cent of our teachers hold Ph.D qualification and most of the remaining teachers are registered for Ph.D.

The University has a qualified pool of teachers as discerned in the qualification-wise details given below:

Highest Qualification	Professors		Associate Professors		Assistant Professors		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.							
Ph.D.	46	16	15	01	29	12	119
M.Phil.					02		02
PG			03		28	14	45
Temporary teachers/Teaching Associate							
Ph.D.					07	11	18
M.Phil.							
PG					59	47	106
UG with experience					4	1	5

To ensure diversity in its faculty recruitments the advertisements are given in national level dailies and the University website to encourage participation from other states too. The selection committees are broad based by including external experts from outside state and institutes of national importance.

The following table depicts position of diversity in faculty.

<b>Dept./School</b>	<b>% of Faculty from the same university</b>	<b>% of Faculty from the other universities within the state</b>	<b>% of Faculty from the other universities outside the state</b>	<b>% of Faculty from the other countries</b>
1.Bio & Nano Technology	12	63	25	Nil
2. Mathematics	Nil	83	17	Nil
3.HSB	6	72	22	Nil
4.Pharmaceutical Science	7	20	73	Nil
5.Computer science & engineering	10	80	10	Nil
6.Mechanical engineering	25	25	50	Nil
7.Biomedical engineering	50	30	20	Nil
8.Printing Technology	67	11	22	Nil
9.Physiotherapy	20	40	40	Nil
10.Communication Management &Technology	40	Nil	60	Nil

11. Electronics & Communication Engineering	Nil	92	08	Nil
12. Chemistry	Nil	70	30	Nil
13. Environment Sc. & Engg.	20	60	20	Nil
14. Applied Psychology	Nil	100	Nil	Nil
15. Food Technology	Nil	100	Nil	Nil
16. Applied Physics	-	70	30	-
17. Advt. Management & Tech.	66	-	34	-
18. Religious Study Centre	-	100	-	-

The university has also been appointing Visiting Professors and Professor Emeritus from time to time. Though the formally appointed Professor of Emritus and visiting Professors are not many, but there are more than 40 eminent professors and other experts visited the university departments for expert lectures as and when requested.

The University extends following facilities to academically recharge the faculty:

- Research grants for minor research projects
- Study/Academic leave for pursuing Ph.D and Post Doctorate
- Financial support for participation in National & International conference
- Refresher/Orientation and Faculty development programme are conducted
- Financial support to organize conference/seminar/workshop
- Sabbatical leave to Professors for pursuing higher research.

The position of faculty who have attended staff development programme w.e.f. 2009-10 is presented below:

<b>Faculty Recharging Programmes</b>	<b>2009-2010</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Refresher courses	25	17	17	14	14
HRD programmes	8	5	5	4	2
Orientation programmes	7	11	3	--	2
Staff training conducted by the university (FDP)	7	4	6	5	15
Staff training conducted by other institutions (FDP)	6	1	1	4	4
Summer / Winter schools, workshops, etc.	34	53	62	60	41

The position of faculty participation in seminars/workshops/conferences is as follows:

<b>No. of faculty</b>	<b>2009-2010</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>

Invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies?	27	23	40	28	26
Participated in external Workshops / Seminars Conferences recognized by national / international professional bodies	32	36	48	61	41
Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies	20	30	31	41	31
Teaching experience in other universities / national institutions and other institutions	5	5	5	4	3
Industrial engagement	4	7	5	6	4



International experience in teaching	-	1	-	-	-

The university has a formal system to discuss about curriculum development, teaching-learning methods, examination reforms, content / knowledge management, etc. for its faculty aimed at enriching the teaching-learning process. The important levels for this purpose include staff councils, Boards of Studies, Faculty and Academic Councils.

The Faculty headed by the Deans coordinates teaching and research among Teaching Departments falling in a particular Faculty. The pending issues with respect to these matters are also finalised in Deans Committee chaired by the Vice-Chancellor.

University has provision to encourage faculty mobility between institutions through MOUs. Faculty members also visit other universities to deliver guest lecturers as resource persons. Faculty members can take lien /leave for undertaking teaching/research assignments at other universities/institutions. University has also entered into MOUs with several academic institutions /industries, containing provisions for mutual faculty visits/ student exchange. Some of the faculty members also carried out collaborative research work in national /international laboratories.

## 2.5 Evaluation Process and Reforms

The university ensures that all the stakeholders are aware of the evaluation processes. The rules/process are published in university prospectus and placed on university website. The chairperson/course coordinator makes the students aware about the evaluation process.

The ordinances concerning various examinations, re-evaluation, appointment of examiners etc., have been included in the University calendar volume II which is available to all stakeholders and also included in mandatory disclosures on the university website. Besides, the students are shown their answer books of all internal assessment tests so that they are able to learn their deficiencies and brace for improvements.

The University has introduced the following examination reforms which have been implemented in the University Teaching Departments as well as in the affiliated colleges:

- (i) Facility of getting provisional D.M.C. downloaded from university website has been provided to the students who are having re-appear in their examinations.
- (ii) All results of teaching departments, affiliated colleges as well as distance education courses are uploaded on the University Website and also the results notifications are sent to the concerned colleges through E-mail.
- (iii) The online receipt of sessional awards from study centres in respect of distance education courses has been introduced and the same is being planned for regular programmes.
- (iv) D.M.C. and Degrees to the students are issued on paper with security features as well as tearless and waterproof.
- (v) Facility of issuing Ph.D. Certificate to the research scholars as soon as degree is approved by RDC.
- (vi) Facility of appearing in the special supplementary examinations for the students who have already appeared in their final semester examination and are having re-appear in their previous semesters has been provided to the students.

There is already provision in the C.B.S. ordinance that results for any course will be declared within 15 days of the receipt of last award of that class. In order to ensure implementation of this clause the examination wing also organises on the spot explanation of answer books whenever needed. In case of delay in receipt of awards the examiners are contacted personally and awards are collected by deputing the messengers to ensure timely declaration of the result.

The university ensures transparency in evaluation process, while ensuring confidentiality for sanctity of system. Immediately on receipt of the answer books from the examination centers the packets are opened and 'A' part of the OMR sheet on answer book is detached and sent to the EDP cell for creating data base of the students. After the removal of 'A' part, it cannot be ascertained that to which candidate or the Roll Number answer books pertains which results in transparency and confidentiality in the examination system. The answer books are dispatched to the examiners duly sealed and stamped. To some extent, the EDP Cell facilitate an integrated examination platform as there is automation from the stage of imputing awards as to preparation of DMCs and degrees. For Ph. D evaluation, the university follows the guidelines of the University Grants Commission of Ph.D Regulation

2009, which have been incorporated in the ordinance for Ph.D. and the process of evaluation of Ph.D. thesis is carried out as per provisions of the ordinance. The Scholars have to defend their work prior to submission as well as post evaluation through presentation before DRC and open viva-voce examination, respectively.

The degree certificate carries name of Faculty from which a student has passed or completed the degree. In order to address the grievances of the students, the internal marks of minor test and answer books are shown to the students for their satisfaction before sending to the examination branch. Moreover, there is provision of re-evaluation of answer books of term end exams. If a student is not satisfied with the score as obtained in any external examination, he/she can apply for re-evaluation which is carried out as per the rules of the university. After re-evaluation there is provision of getting the answer book inspected for satisfaction of the student. The answer book is also shown to the student if request is received under RTI.

To improve the process and functioning of the examination division/section, the e-mails received from the students about their grievances are downloaded and necessary action is taken by the concerned branch. The information concerning these issues intimated to the students through e-mail.

## **2.6 Students Performance and Learning Outcomes**

The University has appropriately recognized that the academic commitment to teaching and learning vis-à-vis students' performance and learning outcomes must be articulated and used for improving the educational experiences being offered. While there is certainly a strong external drive for students' learning outcomes, the process, focuses primarily on improving student learning. The preamble of each curriculum carries the course objectives which a teacher keeps in mind while imparting learning and during evaluation of students' performance. The monitoring of outcomes has been bit easier in internal evaluation. The external evaluation, where the reliance is placed on merely instruction to paper setters/examiners, has been found wanting in this regard. The learning outcomes are reflected in employability through placements and students progression and their grades. The university also carries out result –analysis especially where pass percentage is very low, say below 25%. The committee comprising of Dean Academic Affairs, Dean and Chairpersons of department concerned and Controller of Examinations sit together to discuss the result position before its formal declaration and go into the causes of low performance. The subject experts are also associated

wherever needed. The suggestions by the committee may include restructuring of curriculum, imparting additional learning to students, grant of ad hoc grace marks etc. The learning outcomes are also discussed in staff council meetings and strategies for further improvement in terms of course revision and teaching methodology are devised. The e-resources are given as a supplement to class room teaching. Class room teaching is enriched by power point presentations and use of smart boards. The students are also motivated to use these technologies in their class room presentations, preparation of project reports, preparation of research papers for seminars and conferences etc. For all these endeavours to be successful, the university has provided necessary infrastructural support in the form of campus wide networking, Wi-Fi, cyber cafe, LED/DLP projectors, etc.

## **Criterion III: Research, Consultancy and Extension**

---

### **3.1 Promotion of Research**

All faculty members and research scholars of the university are actively engaged in research. The university has a two tier mechanism to monitor the quality of research and address issues related to research.

- (i) Departmental Research Committee: Every department of the university has a Departmental Research Committee (DRC) to monitor research projects and Ph.D research work of the students. All the faculty members possessing Ph.D degree constitute the DRC. The DRC suggests changes in the synopsis and recommends structural changes in thesis at the time of Pre-thesis presentation, and finally approves the thesis for submission after the scholar has published two research papers from the thesis work and has attended one conference/seminar.
- (ii) Research Degree Committee: The Research Degree Committee (RDC) is the apex body at the university level chaired by the Vice- Chancellor, Dean of the Faculty, Chairperson of the department concerned and the Ph.D Supervisor constitute the RDC. It lays down quality policies and monitors the quality of research. The RDC recommends award of Ph.D based on careful scrutiny of evaluation of Ph.D Thesis examiners report and Viva-voce examination report.

In order to promote research in its constituent/affiliated colleges, the university organizes seminars, conferences, workshops, trainings at national & international level regularly for the faculty and students. To motivate the faculty for research, there is also a provision for direct admission to Ph.D program for regular faculty members.

The Guru Jambheshwar University of Science & Technology is amongst the top Indian universities in terms of quality research publications with good impact factor, high citation and H-index. The university has adopted many proactive mechanisms to facilitate the smooth implementation of research schemes/projects. The university provides seed money up to Rs 40,000/- for the faculty to initiate research work. Apart from this, university also invites innovative proposal from faculty which

can be supported to the tune of Rs 1 Lakh. The Principal Investigator (PI) enjoys financial independence for implementation of their research projects. Once the grant is received, it is immediately allocated to concerned teachers. The PI's of projects have full autonomy as enjoyed by Chairman/Head of the department for purchase related procedures. They can put purchase order up to Rs. 30,000/- per day at par with Chairman and have financial power of Rs. 5000/- and up to Rs. 50000/- in a year for smooth functioning of the projects. Further, significant amount of overhead charges (70 %) can be utilized by the PI for his infrastructural facilities. There is complete independence to PI for participation in conferences/workshops/symposia/seminars which are related to his/her research areas. Apart from this, duty leave is given to PI for field visit related to his research project. The audit of any kind of purchase is made regularly and once the utilization certificate (UC) is put up to the authorities, it is completed within a week's time. The UC's are regularly submitted to the concerned funding agencies.

There is a culture of interdisciplinary research in the university. Many Ph.D students are jointly supervised by the teachers of different expertise of the same department as well as from the other department depending upon the specialization of the concerned faculty member. The faculty members from different departments undertake joint research projects from external funding agencies depending upon the problem/challenge they want to address in their research. In the Radio Ecology Centre of the university, six research projects are on-going where faculty members of Physics, Chemistry, Environment Sciences, Bio and Nano Technology, CMT, Applied Psychology have joined hands together to address the challenges faced by the society. The university has MoUs with different national institutions (e.g. NRCE Hisar, NABI Mohali, CIRB Hisar, TCG Life sciences Kolkata, etc) and students are doing their research work by utilizing research facilities of these institutions. Research projects from national funding agencies like DST, UGC, BARC, BRNS are currently ongoing jointly by faculty members of this university and scientists from those institutions. Further, there is international collaboration and project sponsored by DST, Government of India and Ministry of Science & Technology, Thailand is currently implemented by this university jointly with Asian Institute of Technology, Bangkok, Thailand. The faculty members have participated in joint call of research proposals under international bilateral scheme of collaboration. The

interdisciplinary research is promoted by encouraging the faculty members to apply for international fellowships.

Faculty members of this university have already availed Commonwealth fellowship, BOYSCAST fellowship, DAAD, Nehru-Fulbright fellowship and spent significant time abroad (up to one year) so as to widen their horizons and learn latest trends and techniques in emerging areas and implement the same in their research areas by way of international collaboration. Further, university promotes its faculty members to attend international conferences abroad and provides them financial support along with duty leave so that teachers can become abreast of latest happenings in their research areas.

Apart from this, there is World Bank TEQIP-II programme going on in our university from last two years where eight departments (Department of Food Technology, Mechanical Engineering, Electronics and Communication Engineering, Bio and Nano Technology, Printing Technology, Optical Engineering, Environmental Sciences & Engineering and Computer Science & Engineering) are participating and it is mandatory for faculty member of each department to undergo training abroad. Many faculty members have already availed training in research areas of their interest under this programme.

The university is proactive and have gone one step ahead and directed every teacher whosoever attend training abroad must give a presentation to the faculties of concerned discipline and Dean under the intimation to the Vice-Chancellor. This gives a unique chance to every faculty member present there to enrich their knowledge in the subject domain and can learn research activities of the research abroad that ultimately helps in international collaboration.

The details of workshops/ training programmes/ sensitization programmes conducted by the university to promote a research culture on campus are as follows:

<b>S.No</b>	<b>Title of Workshop/ training Program and sensitization programs</b>	<b>Date</b>	<b>Funding</b>
1	One day "IUAC Acquaintance Program on Accelerator Based Science & Technology" organized by Department of Physics.	23 Oct., 2009	IUAC
2	One Week Workshop on "Research Methods in Business Management" organized by HSB, GJUS&T.	3-8 March, 2010	UGC- SAP
3	National workshop on 'Recent Trends in Engineering & Technology', RTET-2010	6 March, 2010	University
4	One day national workshop on "Career Opportunities in Packaging Technology" organized by Department of Printing Technology.	9 September, 2010	University
5	Kshitij-2010 – IT Fest organized by Department of Computer Science & Engineering	19-20 Oct.2010	HSCS
6	"World Food Day" by Department of Food Technology.	16 October 2010	University
7	3 <sup>rd</sup> Annual National Conference on "Business and Management" organized by HSB.	10-11 March, 2011	University
8	National Workshop on 'Chemistry in our life' organized by Department of Chemistry	14 March, 2011	University
9	National workshop on 'Recent Trends in Engineering & Technology', RTET-2011	15 March, 2011	University
10	Three-day National Workshop on "Development of Self-Learning Materials for Distance Education" conducted by the Directorate of Distance Education, GJUST, Hisar.	17-19 March, 2011	Distance Education Council, IGNOU, New Delhi
11	One day National Workshop on "Computational Mathematics" organized by Department of Mathematics.	26 March, 2011	University



12	“World Health Day” organized by Department of Food Technology	07 April 2011	University
13	One day Workshop on “Trends in Optical Coating for Head Up Display & High laser Damage Threshold” organized by Department of Physics.	27 June, 2011	University
14	One day National Workshop on “Patent Awareness vis-à-vis Intellectual Property Rights” Organized by Intellectual Property Rights and Technological Commercialization Cell, GJUS&T, Hisar	9 August, 2011	Haryana State Council for Science & Technology; TIFAC, DST, Govt. of India, New Delhi
15	Workshop on “Handling and care of Laboratory Animals” organized by Department of Pharmaceutical Sciences	Oct. 20-22, 2011	University
16	Ten days short training course on “Application of Nanotechnology in Animal Sciences” organized by Department of Bio & Nano Technology in collaboration with National Research Centre on Equines, Hisar	1-10 February, 2012.	Indian Council of Agricultural Research
17	National Workshop on ‘Recent Trends in Engineering & Technology’, RTET-2012	15 March, 2012	University
18	One week in-house Workshop on “Research Methods in Business Management” organized at HSB.	20 - 26 March, 2012	UGC –SAP
19	National workshop on “Modern methods in Pharmaceutical Research” organized by Department of Pharmaceutical Sciences	April 28-May 4, 2012.	University
20	Nirman-2013 -An IT Fest organized by Department of Computer Science & Engineering	20-21 Nov,2012	University
21	National Workshop on “Intellectual Property Rights & Technology Commercialization” organized	18 March, 2013	IPR&TC Cell, GJUST, Hisar

	by Intellectual Property Rights & Technology Commercialization Cell.		
22	Workshop on Mobilization of Lumbosacral Joint in Clinical Conditions, organized by Department of Physiotherapy	20 March 2013	University
23	Short Term Training Programme (STTP) on “Tribology of Bearings for Ultra- Precision Machining” Department of Mechanical Engineering	18-22 April , 2013	University
24	Umang-2013 - IT Fest organized by Department of Computer Science & Engineering	20-21 April, 13	University
25	One day workshop on “Emerging Trends in Digital Printing” organized by Department of Printing Technology.	27September, 2013	University
26	Workshop on recent Trends in Spinal Cord Injury Rehabilitation organized by Department of Physiotherapy	11 - 12 November, 2013	University
27	National Workshop on Preventing crime- A Psycho Social Perspective organized by Department of Psychology	21 Jan., 2014	University
28	Science Conclave on Challenges in Science: inspiring Youth organized by Faculty of Physical Sciences	18-19 February, 2014	DST Govt. of Haryana
29	Workshop on Assessment and Mobilization of Cervical Spine in Clinical Conditions organized by Department of Physiotherapy	28 Feb and 1 March, 2014	University
30	Hands on Training on “Tools and Techniques in Bioinformatics for Genes and Protein Analysis” organized by Department of Bio & Nano Technology	6-7March 2014.	Department of Biotechnology BIF program

31	International Women Day organized by Women Cell of the university	11March, 2014.	University
32	Two day Techno-cultural festival Umang-2014 organized by Department of Advertising Management	18-19 March, 2014	University

The university invites eminent professors to deliver expert lectures where they present their research activities and share their experiences with the faculty members, research scholars and students. The students, scholars as well as faculty members get exposure to new ideas and get answers to their research queries. Such interaction at common platform where peer interacts often shows a road to success to students as well as faculty members in their research endeavours. These interactions result in knowledge and sharing of research facilities at different places.

The university spends more than 10% of its budget on research and strengthening research facilities. This includes the grants received from the funding agencies also. The actual utilization is more than 98% of the allocated grant.

The university also encourages research by allowing Post-Doctoral fellows Research Associateship awarded by different agencies to join. One UGC Post-doctoral fellow, one UGC PDF, two DST- Women Scientist have joined the Department of Bio & Nano Technology and pursuing research.

The university allows sabbatical leave for pursuing higher research in premier institutions within the country and abroad. Three professors of the University have utilized sabbatical leave for higher research and book writing during last 5 years. The output of these faculty members is monitored by the University by inviting them to make a presentation to the faculties of concerned discipline and Dean under the intimation to the Vice-Chancellor.

The list of national and international conferences organized by the university is given below:

<b>Sr. No</b>	<b>Title of International and National Seminar/ Conferences</b>	<b>Date</b>	<b>Funding</b>
1	One day National seminar on “Recent Developments in Package Printing” organized by Department of Printing Technology.	21-12-2009	GJUS&T, Hisar
2	National conference on “Role and applications of ICT in inaccessible areas (RAICTIA-10)” organized by Department of Computer Science & Engineering.	17-18 Feb. 2010	UGC- SAP
3	Two days National Conference on Mathematical Modeling and Simulation (MMSim2010) organized by Department of Mathematics.	20-21 March, 2010	UGC-SAP and GJUS&T, Hisar.
4	2 <sup>nd</sup> National Conference on Business and Management organized by HSB.	26-27 March, 2010	GJUS&T, Hisar
5	National seminar Multidisciplinary approach in frontier areas of environmental science and engineering (MAFAESE) organized by Department of Environmental Sciences & Engineering.	4-5 March 2011	University& UGC SAP
6	3 <sup>rd</sup> Annual National Conference on “Business and Management” organized by HSB.	10-11 March, 2011	GJUS&T, Hisar
7	National Seminar on “Management of Higher Technical Education: Quality Challenges and Ethical Dilemmas” organized by HSB	22 March, 2011	ICSSR
8	National Seminar Strategies for Mitigation of Environmental Degradation and Climate change organized by Department of Environmental Sciences & Engineering.	2-3 March, 2012	UGC-SAP & University
9	4 <sup>th</sup> National Conference on “Business and Management” organized by HSB	9-10 February, 2012	GJUS&T, Hisar
10	1 <sup>st</sup> International Online Conference on Psychology and Allied Sciences on “New Horizon in Social Sciences Research” Organized by Center for Behavioural Research & Intervention, GJUS&T, Hisar.	25-26 November, 2012	Indian Association of Health, Research & Welfare
11	5 <sup>th</sup> Annual Conference on	7-8 February,	GJUS&T,

	“Business and Management” organized by HSB	2013	Hisar
12	National Seminar on “Recent trends of Nanotechnology in pharmaceuticals” organized by Department of Pharmaceutical Sciences.	2March, 2013	GJUS&T, Hisar
13	Two days National Conference on “Emerging Trends in Quality Education: The Road Ahead”.	29-30 August, 2013	IQA Cell, GJUS&T, Hisar
14	6 <sup>th</sup> Annual Conference on “Business and Management” organized by HSB	6-7 February, 2014	GJUS&T, Hisar
15	National conference on Women Empowerment- Challenges and Solution	20-21 February, 2014	University
16	National Conference on Recent Developments in Chemical Sciences organized by the Department of Chemistry	25-26February, 2014	University
17	Two days National Conference on “Print Quality of Sheet Fed Offset & Digital Printing Technologies” organized by Department of Printing Technology.	26-27 February, 2014	GJUS&T, Hisar
18	National Seminar on ‘Values in Journalism’ organized by Department of Mass Communication and Technology.	7&8 March, 2014	University
19	2nd National Conference on Photonics & Materials Science organized by Department of Physics.	20-21 March, 2014	GJUS&T, Hisar

### 3.2 Resource Mobilization for Research

In the university budget, sufficient funds in the form of Chemicals, Glasswares, equipment’s, books and journals, contingency and Travel are made for every department to support the student’s research projects.

The university encourages and motivates faculty members and researchers to file patents for their meaningful findings. The university has already set up Intellectual Property Rights and Technology Commercialization Cell (IPR & TC Cell) in the campus. University has established IPR&TC Policy. IPR&TC cell has conducted many conferences/workshops for awareness and motivation of Faculty and scholars of the university. IPR&TC cell also contact faculty individually for filing the

patents. 4 Patents have been published and 4 have been filed with complete specifications recently. Besides this three patents including one European patent awarded earlier have been extended by the university.

List of Titles for which patents have been filed/ Published by the university:

Sr. No	Name of the Faculty member	Title of Patent	Application No	Dates
1	Prof . Surendra Kumar Sharma and Mr. Naresh Kumar	A Novel Bio-derived Extract based Anti-malarial Composition and Method of preparation of same.	1839/DEL/2013	21.06.2013
2	Prof . Surendra Kumar Sharma and Mr. Harneet Singh	Composition comprising Herbal extract of Jatrophaintegerrima Jacq and uses thereof	2398/DEL/2013	13.08.2013
3	Prof . Surendra Kumar Sharma and Mr. Harneet Singh	Anti-Diabetic comprising Herbal Extract of Jatrophaintegerrima Jacq and uses thereof	3744/DEL/2013	24.12.2013
4	Dr. Milind Parle, Mr. Sameer Dhingra	Device for inducing Depression in Rodents	775/DEL/2012	08/06/2012
5	Dr. Milind Parle, Mr. Sameer Dhingra, Mr. Uday Gaikwad	Device for inducing Obsessive-Compulsive Disorder in Laboratory Animals	3087/DEL/2012	07/12/2012
6	Dr. Milind Parle, Ms. Monu, Mr. Sandeep	Device for measuring Pain of Laboratory Animals	2516/DEL/2013	15/11/2013

	Kumar			
7	Dr. Milind Parle, Ms. Isha Dhamija	Device for inducing Anxiety-Disorder in Laboratory Animals	1421/DEL/2013	4/3/2013
8.	Anju Manuja, Gaurav Bhanjana, Sandeep Kumar, Harmanmeet Kaur, Neeraj Dilbaghi	“Nano drug delivery for Quinapyramine sulphate”	2560/DEL/2011	08/03/2013

At present Seventeen Minor projects and 5 Innovative projects funded by the university/ UGC grant are ongoing. In addition 38 major research projects funded by outside agencies are ongoing. The list of research projects sanctioned to the faculty of the university is given below:

	Year wise	Name of the Project	Name of the funding agency	Total grant received
<b>Minor Projects</b>				
Dr. Suresh Mittal	2014	A study of investment Pattern of Households in Haryana	University	Rs40,000/-
Dr. Namita Singh	2013	Elucidation of Phenanthrene degradation Potential of the bacterial consortium	University	Rs 40,000
Dr. Rajesh Thakur	2013	Studies on microbial adhesion on surfaces leading to bio-fouling of Engineered structures	University	Rs 40,000
Mr. Manish Kumar	2014	Development of Ohmic Heating assembly & standardization of its operating conditions	University	Rs 40,000
Ms. Anju Gupta	2014	Design & development of blood viscometer for	University	Rs 40,000

		INR measurements		
Dr. David Joseph	2014	Nonlinear studies of crystal & glasses by optical bistability	University	Rs 40,000
Dr. Rajesh Poonia	2014	Synthesis & Characterization of Bismuth based oxide glasses	University	Rs 40,000
Sh. Ravish Garg	2014	To investigate diffusion of Drug through Tract-Etch membrane to mimic skin membrane	University	Rs 40,000
Dr. Munish Gupta	2014	Experimental study of heat transfer in a heat exchanger using nano-fluids	University	Rs 40,000
Sh. Anjan Kumar Baral	2014	Print quality evaluation of different grades of paper in a sheet fed offset printing & digital printing	University	Rs 40,000
Dr. Santosh Kumari	2014	Eco-friendly biosynthesis, characterization and antimicrobial activity of silver nano particles synthesized from leaf extract of Ocimumbasilicum (Marua plant)	University	Rs 40,000
Ms. Anju Gupta	2014	Design and development of Blood Viscometer for INR Measurements	University	Rs. 40,000/-
Dr. Vikas Verma	2014	Synthesis of New imidazates derivative	University	Rs. 40,000/-
Prof. Alka Sharma	2014	Design and construction of Laboratory scale Solar Dehydrator	University	40000 (INR)
Prof. Aradhita Ray	2014	Extraction of photo chemicals from fruit and vegetable wastes	University	35000 (INR)
Dr. Sandeep Jain	2014	Design, Synthesis & Evaluation of some novel anthcenones for antipsoriatic activity.	University	40000 (INR)



Sh. Ashwani Kumar	2014	Design, Synthesis & Evaluation of some compounds for Anti-Alzheimer's activity	University	40000 (INR)
<b>Major Projects</b>				
Prof. N. K. Bishnoi	2014	Assessment of Competitiveness of Hisar using Porter's Diamond Framework Approach	Innovative Research Project	Rs. 1,00,000/-
Dr. Vikas Verma	2014	Synthesis & Anticancer activities of Oxazine Derivative	Innovative Research Project	Rs. 1,00,000/-
Dr. Neeraj Dilbaghi	2014	Design and Synthesis of Fungicide Loaded Polymer Nanocapsules for Agriculture use	Innovative Research Project	1.00 Lakhs
Dr. Rajesh Punia	2014	Non Linear Optical properties of heavy metal oxide doped glasses	Innovative Research Project	1.00 Lakhs
Dr. N. K. Bishnoi	2014	A research Proposal to assess competitiveness of Hisar using Porter's Diamond Framework approach.	Innovative Research Project	1.00 Lakhs
<b>Other Agencies-</b>				
<b>Major Projects</b>				
Prof. Nawal Kishore & Dr. Rajender Kundu	2010-14	Studies on base line radioactivity in environment matrices around nuclear power plant site in Haryana	DAE-BRNS	16.05 lacs
Prof. Devendra Mohan	2011-14	Optical Limiting and Degenerate four Mixing in Nonlinear Optical Materials using Lasers, Sponsored by BRNS-DAE	DAE	19,03,750/-
Prof. Devendra Mohan	2011- 14	Ion Beam Modifications of Dye Sensitized Solar Cells, Sponsored by IUAC, Delhi (Nov. 2011)	IUAC New Delhi	9,51,000/-

Prof. Sneh Lata Goyal	2011-14	Theoretical Simulation of Induced Activity and Production Cross section of Radio nuclides in neutron and Charged Particle Induced Reactions	DAE-BRNS Mumbai	14, 93,500/-
Prof. Sneh Lata Goyal, Prof Nawal Kishore	2012-14	Study of Thermal, Electrical & Structural Properties of Conducting Polymers”	UGC, New Delhi	12,59,600/-
Prof. Ashish Agarwal	2013-16	Investigation of Crystal Structure, Dielectric and Magnetic Properties of Rare Earth/Transition Metal Doped BiFeO <sub>3</sub> Multiferroics	DST	13.4 lacs
Prof. A. Agarwal	2013-16	Study of Phase Transition and Magneto-Electric Coupling Properties of Modified Multiferroics.	UGC	11.4lacs
Prof. Rakesh Dhar & Dr Rajesh Thakur	2011-14	To Evaluate the various Thin Film Formulations for application in control of Biofouling.	UGC	12 lacs
Dr. Neetu Ahlawat	2012-15	Microwave Synthesis of Ferroelectric Ceramics and their Structural Characterization	UGC	14.28 lacs
Dr. R.S. Kundu	2012-15	Study of Structural, Optical and Electrical Properties of Heavy Metal Oxide Glasses	UGC	14.28 lacs
Dr. Munish Ahuja	2012-15	Modification of national polysaccharides and their evaluation for pharmaceutical applications	UGC	Rs. 8.88 Lacs
Prof. D.C. Bhatt	2012-15	Optimization of Technological aspects of anti-tubercular drugs for targeting to lungs	UGC	Rs. 5.75 Lacs

Dr. R Baskar	2011-14	Geomicrobiology processes in the subsurface Ecosystems: A study of speleothems from Garo Hills, Meghalaya	UGC	Rs. 8.93 Lacs
Prof. Narsi R Bishnoi	2013-16	Potential of thermo philiclignolytic bacterial enzymes for biomass conversion to biofuel	UGC	Rs. 14.1Lacs
Dr. C.P. Kaushik	2010-13	Studies on Synthesis Characterization and Biological Activities of 1,4-distributed 1,2,3-triazoles: A click chemistry approach	UGC	Rs. 9.9 Lacs
Dr. Satbir Mor	2012-14	Synthesis and characterization of plazole and thiazine derivatives	UGC	Rs. 1.4 lacs
Dr. Tika Ram & Dr. Dalbir Singh	2011-2013	A Study of Social Marketing Programme on HIV/AIDS in Haryana	UGC	Rs.6.11 lacs
Prof. Pardeep Gupta	2012-14	A Study of Business Forecasting in Indian Corporate Sector	UGC	Rs. 4.53 Lacs
Dr. Deepa Mangla	2 Years (2013 – 2015)	The Influence of Personality and Risk Tolerance on Behavioural Biases of Individual Equity Investors in Northern India	UGC	Rs.6.29Lacs
Dr. Vinod Chhokar	2012-15	Identification and molecular characterization of genes encoding enzymes of anthraquinones biosynthesis pathway in Aloe vera (Three Years)	UGC	Rs 15.55 Lacs
Dr. Namita Singh	2011-14	Cellulase production from indigenous fungal strains using Agro- Industrial wastes and its characterization.	UGC	Rs. 9.95 Lacs

Prof B. S Khatkar	2012-15	Identification of Gluten Proteins as molecular markers of wheat quality	UGC	13.8 Lacs
Prof. N. K. Bishnoi	2012-15	A Study on Economic Analysis and Normative Assessment of State Resources.	4th State Finance Commission, Haryana	Rs. 1.2 Lacs
Prof. V. K. Bishnoi	2013-14	Performance Appraisal of Implementation of Sarv Shiksha Abhiyan in Haryana	Haryana School Shiksha Pariyojana Parishad	Rs. 5.5 Lacs
Dr. Neeraj Dilbaghi (PI)	2009-14	Transfer Factor of Radionuclides (Natural and Fallout) in Flora around the proposed Nuclear Power Plant Site in Haryana	(BARC-BRNS)	Rs. 21.7 Lacs
Dr. Sandeep Kumar	2013-16	Synthesis, Characterization and Evaluation of nano materials for removal of Cadmium and Lead	DST Fast Track Scheme	Rs. 15.0 Lacs
Dr. N. R. Bishnoi	2014-17	Biodiesel production and Carbon dioxide sequestration by different fresh water microalgae species	AICTE	Rs. 18.52 lacs
Dr. Neetu Ahlawat	2012-14	Ferroelectric and Dielectric Properties of Lead Free Ceramics	AICTE	Rs. 9 lacs
Dr. Umesh Arya	2012-14	Linguistic Construction in News Paper Headline	UGC	Rs2.25 lacs
Dr. Yudhvir Singh	2012-15	Secured model for detection, prevention and recovery of DDoS attacks in mobile ad-hoc networks	UGC	12.54 Lacs
Prof. Anubha Kaushik	2011-14	Photobioreactor based sustained hydrogen production integrated with heavy metal removal	UGC	10.4 Lacs

		from wastewater using cyanobacterial system		
Dr. Rajesh K. Lohchab	2011-14	Anaerobic treatment of municipal solid waste in leachate recirculation bioreactor	UGC	10,69,800/-
Dr. Rajesh K Lohchab	2012-15	Low Cost Technology Development for Treatment of Rural Areas Household Wastewater/Sewage	AICTE	24,70,000.00
Dr. H. C. Garg	2012-15	Development of Aerostatic Bearings for Ultra precision Machining”	UGC	Rs. 7.55 Lacs
Dr. Asha Gupta	2011-14	Application of microbial biomaterials for heavy metal detoxification of waste water	UGC	Rs. 11.26 Lacs
Dr. Jyotsana	2012-14	A study of ecological attitude, attitude towards nuclear power, risk acceptance, stress and general well being of people residing in the vicinity of proposed nuclear power plant site.	UGC	Rs. 9.36 Lacs
Dr. Jyotsana	2010-14	Studies on Demographic Surveillance around proposed nuclear power plant site in Haryana covering a distance of 30 km from the site.	BARC/DAE	Rs. 23.4Lacs
Dr. David Joseph	2011-14	Non-Linear Optical Properties of Rare Earth Doped Glass	UGC	Rs. 5.71 Lacs

Many departments of the university have been recognized for their research activities by national / international agencies like UGC-SAP, DST-FIST, DBT, ICSSR, DST Nano mission etc.

UGC SAP-DRS has been awarded to eight departments since 2009, namely Department of Environmental Sciences & Engineering, Bio & Nano Technology, Haryana School of Business, Computer Science & Engineering, Mathematics, Communication Management & Technology, Pharmaceutical Sciences and Applied Physics and the quantum of assistance received by the university is Rs 3,78,71,092/-. In addition Department of Bio & Nano Technology was awarded HRD grant for M.Sc. Biotechnology teaching program by Department of Biotechnology, Govt. of India since 2000, Bioinformatics Facility (BIF) grant by Department of Biotechnology, Govt. of India since 2006 HRD grant for M.Tech. Nano Science & Technology by Ministry of Science & Technology Govt. of India to the tune of Rs. 3.48 crore since 2008 under Nano Mission program. DST-FIST grant has been awarded to Department of Bio & Nano Technology, Department of Pharmaceutical Science, and Department of Applied Physics and Department of Chemistry. UGC-SAP, DST-FIST, DST-Nano Mission and DBT recognition has helped every department to improve research infrastructure and teaching facilities that helped in better training and placement of the students of this university.

Under DST-Nano Mission programme, two national collaborative research projects have been sanctioned from DST, Govt. of India and it also helped to fetch one international research project from DST, Govt. of India and MOST, Thailand. The list of departments along with quantum of assistance received from different funding agencies is given below:

S.No	Scheme	Quantum of Assistance
1	UGC- SAP-DRS-I/II (Environmental Sciences & Engineering, Bio & Nano Technology, Haryana School of Business, Computer Science & Engineering, Mathematics, Communication Management & Technology, Pharmaceutical Sciences and Applied Physics)	Rs. 3,78,71,092/-
2	DST- FIST (Physics, Chemistry, Pharmaceutical sciences and Environmental	Rs. 1,24,35,000/-

	sciences)	
3	DBT sponsored M.Sc Biotech Teaching programme	Rs 1,83,50,556/-
4.	DST- Nanomission M.Tech Nano Science & Technology programme	Rs. 3,42,60,000/-
5.	ICSSR Director- ASC	Rs. 5,00,000/-
6.	DBT Bioinformatics Facility (BIF) Grant	Rs. 15,45,751/-
	Total	Rs. 10,49,62,399/-

The Faculty members of the university have completed 12 minor research projects out of University grant, one minor research project from the UGC and 35 Major projects funded by the UGC and other agencies since 2009. The list of the completed projects during the last four years is given below:

#### List of Completed Projects

	Year wise	Name of the Project	Name of the funding agency	Total grant received
<b>Minor Projects</b>				
Dr. Anju Verma & Dr. Ubba Savita (Minor research project)	2009	Perception & expectation of the Stakeholders towards retailing as a career option	GJUS&T, Hisar	Rs. 30,000/-
Sh. Ravish Garg	2010	To study transport of Biomolecules through Trach Etch Membrane and explore Biomedical Applications	GJUS&T, Hisar	Rs. 30,000/
Sh. Ravish Garg & Md. Kaushik Chowdhary	2010	To design low cost Instrumentation for eliminating	GJUS&T, Hisar	Rs. 25,000/

		noise in Electronic Stethoscope		
Dr. R Bhaskar	2010	Geomicrobiological investigations on speleothems from Dharamshala caves, HP, India.	GJUS&T, Hisar	Rs. 30,000/-
Sh. Ravish Garg	2011	Formation of Micro-structures using Track Etch membrane as template	GJUS&T, Hisar	Rs. 30,000/
Dr. Suresh Mittal	2012	A Study of Investment Pattern of Households in Haryana	GJUS&T, Hisar	Rs. 40,000/-
Dr. Khujan Singh	2012	Farmer's Participation towards FDI in Retail in India	GJUS&T, Hisar	Rs.40000/-
Sh. Ravish Garg	2012	Synthesis of Low Dimensional Structures of Conducting Polymers	GJUS&T, Hisar	Rs. 40,000/
Dr. Neetu Ahlawat	2010	Synthesis & Characterization of Bi/Pb Based Oxide Glasses	GJUS&T, Hisar	30,000/-
Prof. Sneha Lata Goyal	2010	Synthesis & characterization of conducting polymers	GJUS&T, Hisar	30,000/-
Prof. Rakesh Dhar	2010	Synthesis & Characterization of TCO Based Thin Film	GJUS&T, Hisar	30,000/-



Dr. David Joseph	2010	Non-Linear Optical Properties of Rare Earth Doped Glass	GJUS&T, Hisar	30,000/- 40,000/-
<b>Other Agencies- Minor Projects :</b>	<b>Year wise</b>	<b>Name of the Project</b>	<b>Name of the funding agency</b>	<b>Total grant received</b>
Dr. Vikas Verma	2008-10	Hypervalent Iodine Compounds in Organic Chemistry	UGC	Rs. 1,80,000/-
Major Projects				
Prof. Nawal Kishore & Dr. Rajender Kundu	2008-11	Synthesis & Characterization of Nano Composite/Micro-crystallites based Glass Ceramics	DRDO	11.78 lacs
Prof. Nawal Kishore	2008-11	Development & Characterization of Optical Materials for Photonics System and Devices	DRDO Through IRDE Dehradun	5.93 crores
Prof. Devendra Mohan	2008-12	Study of Optical Power Limiting and Bistability in Optical Materials	UGC	8,52,920/-
Prof. Sujata Sanghi & Prof. Ashish Agarwal	2008-11	Structure, dielectric behaviour and impedance spectroscopy of mixed transition metal/alkali oxide glasses	UGC	10 lacs
Prof. Sujata Sanghi & Prof. Ashish Agarwal	2008-11	Fabrication and Characterization of glass metal nano composites	AICTE	6.5 lacs

Prof. Sujata Sanghi &	2008-11	Development and characterization of heavy metal oxide glasses as photonic materials	CSIR	10.23 lacs
Dr. Sumatra Singh	2009-12	Standardization and formulation of same anti-psoriatic plant drugs	UGC	Rs. 7.88 Lacs
Dr. Parveen Sharma	2007-10	Biomass mediated removal of textile dyes from waste effluents and characterization of microbial consortia using 16S-rRNA as molecular markers"	UGC	10,50,100.00
Dr. R Baskar	2006-09	Awarded UGC major research project "Geomicrobiology of speleothems, Meghalaya caves, Meghalaya, India".	UGC	Rs. 7,01,600/-
Sandeep Singh	2007-10	Behaviour Modification in HIV/AIDS among Adolescents	UGC	Rs. 5,28,600/-
Dr. J.B. Dahiya	2008-11	Development of flame retarded fibre forming polymer nano composites	UGC	Rs. 5,64,800/-

Dr. Ashok K. Sharma	2008-11	Synthesis and characterization of polymer carbon nano composites for supercapacitor Application	UGC	Rs. 9,51,800/-
Dr. Jai Devi	2008-11	Eco-friendly methods of synthesis, Characterization, electron transfer properties applications of organo-silicon complexes with oxygen, nitrogen and sulphur donor ligands	UGC	Rs. 5,39,800/-
Dr. Devinder Kumar	2009-12	Synthesis and biological activities of 2-aminoimidazoles and related compounds.	UGC	Rs. 7,16,545/-
Dr. Kashmiri Lal	2010-11	Synthesis & biological studies of Trizade based compounds using click chemistry	UGC	Rs. 1,90,000/-
Prof. Dharminder Kumar / Prof. Yogesh Chaba	2009-12	Role and Application of ICT in Inaccessible areas(UGC-SAP)	UGC	31.85 lacs
Prof. Dharminder Kumar / Dr. Varun Kumar	2007-10	Evolution of data mining techniques  based decision support system model for health care	UGC	7.91lacs
Prof. Pardeep Kumar Bhatia	2007-10	Smart Form Analyzer: An Analytical	UGC	10.23lacs

		Tool		
Prof. Yogesh Chaba Dr. Yudhvir Singh	2007-10	Development of Model of Secured Communication in Mobile Adhoc Network	UGC	9.46 lacs
Prof. B.K.Punia	2007 – 10	Performance Appraisal of Academia in Indian University system : A Diagnostic Analysis	UGC	Rs. 5,06,000/-
Prof. Vinod Bishnoi	2007 – 10	Understanding Rural Consumers & impact of Marketers Efforts on their mindset A case study of select consumer products in Haryana	UGC	Rs. 4,37,400/-
Prof. Karam Pal Narwal	2010-12	An Empirical Investigation of relationship between corporate Intellectual capital and Financial performance reporting system	UGC	Rs. 6,80,000/-
Prof. Ved Pal Sheera	2007-10	A Study of Productivity and Efficiency of Commercial Banks in India during Pre and Post-liberalization Environment”	UGC	Rs. 4,50,000/-
Prof. Ved Pal Sheera	2007-10	A Study of State Finances of Haryana	UGC	Rs.2,73,000/-

Dr. Ashok Chaudhury	2009-13	Cataloguing the Genetic Diversity of Trigonella using DNA based Molecular Markers	UGC	11.72 Lakhs
Dr. M.L. Batra and Prof. C.P. Kaushik	2010-213	Ground water quality near industrial area of Gurgaon and Faridabad district and environmental impacts of industrial effluent irrigation	UGC	12,50,000.00
Prof S.K. Sharma	2007-10	Diagnostic Characterization and Phytopharmacological Evaluation of Some Traditional Anti-Fertility Plants	AICTE	Rs. 7.85 Lacs.
Prof S.K. Sharma	2007-08	Standardization and Quality Control Studies of MML Oil	Central Council for Research in Ayurveda and Siddha (AYUSH)	Rs. 8.2 Lacs
Prof. MilindParle	2008-11	Psychopharmacological Investigations for the effective management of Neuropsychiatric Disorders	AICTE	Rs. 15 Lacs
Dr. V. K Garg and Dr. Mukul Bishnoi	2009-12	Ecological risk assessment for Narora Atomic Power	DAE/BRNS	Rs. 31 Lacs

		Station, Narora		
Dr. Mukul Bishnoi and Jitender pal	2009-12	Air and water Quality monitoring at a proposed Nuclear Power Plant Project site in Haryana	DAE/BRNS	Rs. 34 Lacs
Prof. Narsi R Bishnoi	2007-09	Bioremediatio n of heavy metals contaminated waste water	HSCST, Panchkula ,	4,44,360.00
Prof. Yogesh Chaba/Mr. Sunil Nandal	2008-10	Design of Architecture for Ubiquitous Computing	AICTE-RPS	16.0 lacs
Dr. N. K. Bishnoi	2011-12	Impact Assessment of IGDWS in Hisar	Engineer in Chief, Public Health Haryana	Rs. 2,93,000 /-
Dr. Neeraj Dilbaghi	2006-10	Genetic Diversity and Phylogenetic relation among rhizobia nodulatingAca cia spp	UGC	Rs 6.83 /-

Apart from this one Inter-institutional collaborative project and one inter- Institutional and industrial collaborative projects funded by DST, Govt of India are going on as mentioned below:

Investigators	Year	Name of Project	Funding Agency	Sanctioned Amount
Dr. Neeraj Dilbaghi & Dr. Sandeep Kumar( Co-investigators) Dr. Anju Manuja, NRCE, Hisar (PI)	2012-15	Synthesis, Characterization and evaluation of drug- loaded nanoformulations against Trypanosomaevansi in animal model	DST	Rs. 35.21Lakhs
Dr. Neeraj Dilbaghi (PI) & Dr. Sandeep Kumar, Dr. S.C. Yadav, Co- Investigator, NRCE, Hisar. & M/s Biomex instruments Ltd, Chandigarh	2014-16	Development of Nano gold based immunochromatograp hy/ immuno dot blot assay for detection of Trypanosomaevansi infection in animals	DST	23.7 Lakhs

Also, the following five collaborative research projects of Radioecology Centre between GJUST faculty & scientists of BARC, BRNS, DAE, Mumbai are in progress:

- Studies on demographic surveillance around proposed nuclear power plant site in Haryana covering a distance of 30 km from the site.
- Studies on Water and Air Quality in Hisar and Fatehabad districts of Haryana covering a distance of 30 km from the proposed nuclear power plant site.
- Studies on baseline radioactivity in different environment matrices around proposed nuclear power plant site in Haryana.
- Radiological assessment of exposure to terrestrial and aquatic non-human biota in the vicinity of the proposed plant site in Haryana.
- Theoretical simulation of induced activity and production cross-section of radionuclides in neutron and charged particle induced reactions.

In addition, one Indo- Thailand International Project funded by DST, Govt of India to the department of Bio & Nano Technology is ongoing namely:

Investigators	Year	Name of Project	Funding Agency	Sanctioned Amount
Dr. Sandeep Kumar & Dr. Neeraj Dilbaghi (India) & Dr. Mousa Nazhad, Asian Institute of Technology, Thailand	2013-16	“Developing Filter Paper for Production of Safe Drinking Water”	DST and Ministry of Science & Technology, Thailand	Rs 8.85 Lakhs

### 3.3 Research Facilities

In order to improve its infrastructure requirements to facilitate research, the university has set up CIL (Central Instrumentation Facility) that caters to the need of students, research scholar as well as faculty members. A separate air conditioned building of CIL is under construction and is near completion. The Department of Applied physics has set up RAMAN lab with the support from DRDO and has established outstanding facility for coating. Further, renovation of existing labs and classrooms are facilitated by the university as per the need of specific disciplines. The university has UCIC facilities for accessing scientific databases, online journals and INFLIBNET facilities for sharing information with other universities. The access of online journals and databases has been provided over campus wide network. The library has one internet lab for SC/ST students and one

research database lab for research scholars and faculty members. The research database lab consists of 28 computers out of which 10 systems have been equipped with SPSS software exclusively. The university has excellent auditorium of 2000 sitting capacity along with three seminar halls of capacities ranging from 100 plus to 250 for organizing international conferences/seminars/workshops/symposia etc. where deliberations are held by scientific community on emerging disciplines that ultimately help to formulate research problems for students and research proposal for faculty members. Further, researchers from the different department share their research facilities.

The university has an IPR Cell, IQA Cell and University Computer & Informatics Centre (UCIC) - a central facility to meet the computing requirements of all the students, research scholars, staff and faculty of the University. The access of online journals and databases has been provided over Campus wide network.

Some of the prominent instruments available in the Central Instrumentation Laboratory (CIL) include : Nuclear Magnetic Resonance (NMR) Spectrometer, Fourier Transform Infrared (FTIR) Spectrometer, Differential Scanning Calorimeter (DSC), UV-VIS-NIR Spectrometer, High Performance Liquid Chromatograph (HPLC), Atomic Absorption Spectrometer (AAS), Lyophilizer, Deep Freezer and basic equipments like BOD incubator, orbital shaking incubator, Ultrasonic water bath etc.

The funding allotted to CIL during the period 2009-2010 to 2013-2014 is given below:

University Grant (Rs.)

<b>Head of Account</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Equipment/ Accessories/ AMC of equipment	500000	1500000	6500000	7000000	5000000
Stationery & Contingencies	40000	40000	40000	40000	40000
TA/DA & other Unforeseen Exp.	30000	30000	30000	30000	30000
Glasswares & Chemicals	300000	300000	300000	300000	300000
<b>Total</b>	<b>7870000</b>	<b>1870000</b>	<b>6870000</b>	<b>7370000</b>	<b>5370000</b>



UGC Grant (Rs.)

Head of Account	2010-11	2011-12	2013-2014
IMF UGC General Development Grant 11 <sup>th</sup> plan period (Merge Scheme)	1087298	-	-
Addition UGC Grant 11 <sup>th</sup> plan	-	5500000	-
Equipment General Development Assistance Scheme	-	4463710	-
General Development Assistance Scheme under plan grant during 12 <sup>th</sup> plan period (Lab Equipment & Infrastructure)	-	-	2000000
General Development Assistance Scheme under plan grant during 12 <sup>th</sup> plan period (Annual Maintenance Contract) (AMC)	-	-	300000
Total	1087298	9963710	2300000

Besides this, CIL has earned Rs. 2,67,400/- in the financial year 2013-14 by analysis of samples for NMR studies.

As a research support the university also provides residential facilities (with computer and internet) in Girls Hostels and internet facilities in the Boys Hostels. In addition, five houses have been earmarked for Married Registered PhD Research Scholars/Post-Doctoral fellows in Married Teachers Flats. Summer fellows/Visiting Academia is provided accommodation in VIP Guest House/Faculty House/Academic Staff College Guest House as and when required.

To address the special challenges of research programmes the university has following specialized centres:

- 1) Radioecology Centre–To carry out baseline environmental studies for nuclear radioecology research in collaboration with BARC,

- Mumbai; BRNS, Mumbai; NPCIN, India.
- 2) Food Research & Analysis Centre (FRAC) – To cater needs of industries, farmers, & others in area of food quality testing in special reference to wheat.
  - 3) Bio & Nano Technology Centre- To train competent technocrats and creating knowledge power house in the areas of Nano biotechnology, Microbial Biotechnology, Molecular Biology and Genetic Engineering.
  - 4) Centre for Behavioural Research and Intervention- To take care of psychological well-being of students and to develop the positive attitude among youth, to provide counselling to students and patients, carrier counselling, personality development awareness programme and workshops.

The Radioecology centre and Bio and Nano Technology centre are of national/ international recognition. In these centres facilities are used by the faculty members and research scholars of neighbouring institutes also for meeting their research demands. Hands on trainings to faculties and students are organized by the Bio & Nano Technology centre.

### **3.4 Research Publications and Awards**

The Teaching Departments and Faculty Members are actively publishing their works and some awards are also to their credits. HSB Research Review a Bi-annual refereed journal of Haryana School of Business. Journal ISSN is 0976-1179, is regularly published with financial aid from University. The Director HSB and dean HSB are its Chief Editor and Managing Editor respectively.

The total number of papers published by the faculty in peer reviewed journals (National / International) is 1935 since 2009. The total no. of publication listed on Scopus is 1219 and from 2009 to 2014 is 755. As per Scopus database the Citation Index of the faculty range up to 466. The Impact Factor of the papers ranges between 0 to 6.02 and Faculty's h-index ranges between 0-27 (as per Scopus database). Besides this the faculty members have published 48 books including 17 edited books and contributed 76 chapters in since 2009.

The faculty members listed below are serving on the editorial advisory boards of national and International journals:

<b>Sr. No.</b>	<b>Name of faculty member</b>	<b>Editorial Advisory Board of Journal</b>
1.	Prof. M.S. Turan, Haryana School of Business	Member Editorial Advisory Panel of the Journal of Banking, Information Technology and Management, Jaipur (India) Member of Editorial Advisory Board of KAIM Journal of Management and Research (Bi-annual Journal) Member of Editorial Board of Management Vista Journal published by GGS Institute of Management, Yamunanagar. Member of Editorial Advisory Board, HSB Research Review, A Bi-annual Refereed Journal of Haryana School of Business, GJUS&T, Hisar. Member, Editorial Advisory Board on "PARBANDHAN" Journal published by Modi Institute of Management, Modi Nagar. Member of Referee Board, GYAN Management: An International Bi-Annual Refereed Journal of Management & Technology, Mohali (Punjab). Member Editorial Board of IQRA INTERNATIONAL MANAGEMENT JOURNAL
2.	Prof. Parveen Sharma, Department of Environmental Sciences	Asstt. Editor of Indian Journal of Environment and Ecoplanning
3.	Prof. Dharminder Kumar, Department of Computer Sciences & Engg	Editor in-chief, International Journal of Artificial Intelligence and Knowledge Discovery.
4.	Prof. R Malhotra, Department of Chemistry	Associate Editor of International Journal of Agric. Bio. Research.
5.	Prof.(Dr.) Bandana Pandey, Department of Advertisement Management	Member of Editorial Board of Global Media Research Journal, University of Kolkatta.

6.	Prof. HC Garg, Department of Mechanical Engineering	Member, Advisory Board of: Journal of Engineering and Technology (Medknow Publications) International Journal of Control Engineering & Technology (IJCET)
7.	Prof. Kuldip Singh Bansal, Department of Mathematics	Member Editorial Board, Mathematical Journal of Interdisciplinary Sciences ISSN: 2278-9561
8.	Prof. Manoj Dayal, Department of Communication Management & Technology	Journal of Communication (An International Journal on media research) New Delhi
9.	Prof. Milind Parle, Department of Pharmaceutical Sciences	Chief Editor-Annals of Pharmacy & Pharmaceutical Sciences, Member Editorial Board: International Research Journal of Pharmacy, Advisory board member of International Journal of Medical Sciences
10.	Prof. Karam Pal Narwal, Haryana School Of Business	Editor, HSB Research Review- A Bi- annual Refereed Journal
11.	Dr. Dinesh Dhingra, Department of Pharmaceutical Sciences	Member Editorial Board, Pharmacologia (UK)
12.	Dr. Satbir Mor, Department of Chemistry	Member, Editorial Board of Referees (EBR), ARKIVOC-U.S.A. (Organic Chemistry Journal).
13.	Dr. V.K.Garg, Department of Environmental Sciences	Member of Editorial board of Journal of Scientific and Industrial Research (NISCAIR), Member of Editorial board of Indian Science Abstract, Chief Editor of Journal of Environmental science and Sustainability, Member of Editorial board of International journal of Environment and waste Management ( Guest Editor for 8-10 Volumes), Member of Editorial board of Water and Development.

The faculty members of the university have received many awards/recognitions in the last 5 years. Besides this large number of faculty members have been awarded prestigious overseas fellowships- Commonwealth fellowships, Boyscast fellowship, DAAD, Nehru-Fulbright fellowship and Best Paper awards from time to time. Some of the awards/ national and international recognition received by the faculty from reputed professional bodies and agencies are listed below:

S.No	Name of faculty member	Awards/ Recognitions
1.	Prof. M. S.Turan	<p># Best Research Paper Award for research paper titled “Transition from GAAP to IFRS: An evidence from U.K.”, in International Conference organized by “Research Development Research Foundation &amp; Research Development Association” Jaipur on January 22-23, 2011.</p> <p># Best Research Paper Award for research paper titled “Revenue Diversification and Income Stability in Indian Banking Sector.”, selected in absentia in 14thInternational Conference organized by “Research Development Research Foundation &amp; Research Development Association” Jaipur, February, 1-2, 2014</p> <p># Best Research Paper Award for research paper titled “Credit Collection Operations of Micro, Small and Medium Enterprises in Haryana” selected in absentia in 14thInternational Conference organized by “Research Development Research Foundation &amp; Research Development Association” Jaipur, February, 1-2, 2014</p> <p># CMAI National Haryana Education Award titled, Pioneer in Management Studies in Haryana”, February 1, 2014.</p>
2.	Prof. Kuldip Singh	<p># Award of Excellence by the MD University, Rohtak on February 12, 2012 during 2nd Alumni Meet.</p>
3.	Prof. Usha Arora	<p># Bharat Jyoti Award by India International Friendship Society, New Delhi in 2006.</p> <p># Rashtriya Gaurav Award by India International Friendship Society, New Delhi in 2012.</p> <p># “Best Citizen of India Award” by Best Citizen Award Publishing House, New Delhi in 2012.</p> <p>#“Best Professor in Marketing Management” by Dainik Bhaskar National Education Leadership Award, Mumbai, 2013.</p>

4.	Prof. S. C. Kundu	<p># Prof. Manubhai M Shah Memorial Award for Excellence in Commerce &amp; Business Management, 2013.</p> <p># Best Research Paper Award for the paper titled “Applications of Human Resource Information Systems in Education Management: A Review”, presented in Global Conference – Management Education for the New World jointly Organized by Advent age Education Foundation, CIBER, Laxpra Foundation (Udaipur) and University of Connecticut (USA) on January 5-6, 2013, Udaipur.</p> <p># 20th Dewang Mehta Business School Award for for Best Professor in Human Resources Management on 24th November, 2012</p>
5.	Prof BS Khatkar	Best Paper award in 1st International Conference on Food Properties held at Kuala Lumpur, Malaysia in 2014
6.	Prof Alka Sharma	2nd prize in Poster Presentation in “International Conference on Food Technology: Impact on Nutrition and Health (ICFIN) -2013 held at JNU, New Delhi
7.	Prof. Devinder Kumar	Best Teacher Award by Chemical Research Society of India (CRSI) on 5-2-2011 during national Symposium in chemistry at NISER, Bhubaneswar.
8.	Prof. Yogesh Chaba	Best Paper Award at International Conference on VLSI, Communication and Instrumentation (ICVCI 2011), Kottayam (India) – 2011
9.	Prof H. C. Garg	<p># RashtriyaGaurav Award conferred for ‘Meritorious Services, Outstanding Performance and Remarkable Role’ in academic and administrative spheres by the India-International Friendship Society (IIFS) February 9, 2013 at New Delhi-India.</p> <p># Letter of Appreciation from Prof. Shigeka Yoshimoto, host researcher, Tokyo University of Science, Tokyo (Japan)</p>
10.	Prof Ashok Chaudhary	Awarded Fulbright Nehru Senior Research Fellowship 2011-2012 at Crop Science Department, N C State University, and Raleigh, NC, USA.
11.	Prof. J.B. Dahiya	Common Wealth Academic Staff Fellowship, UK
12.	Prof. Saroj	Common Wealth Academic Staff Fellowship
13.	Prof. Bandana Pandey	-# RashtriyaGaurav Award, 2009

		<p># Best Citizen of India Award, 2010</p> <p># Best Professor Teaching Advertising Management Award by ABP News Channel in 2013.</p> <p># Nominated for Shiksha Rattan Award, 2013</p>
14.	Dr. Ravish Garg	Best paper presentation awarded in International Conference on Biomedical Engineering and Assistive Technologies (BEATS 2014), Chandigarh, for paper entitled “Analysis of Hjorth and Spectral Density parameter during normal and pain analysis of EEG”
15.	Dr Vinod Chhokar	Awarded Boyscast Fellowship by Department of Science & Technology, Govt of India (2009-10)
16.	Dr Namita Singh	<p># EP Odum Gold Medal: International Society for ecological Communication June 2009. (Dr Namita Singh)</p> <p># First, Second and Third Prizes in Poster Presentation Award</p> <p>National Conference on Multidisciplinary Approach in Frontier Areas of Environmental Science &amp; Engineering (MAFAESE2011), held at Department of Environmental Science &amp; Engineering, GJUS&amp;T, Hisar, 04-05 March 2011.</p>
17.	Dr. V.K.Garg, Department of Environmental Sciences	Thomson Reuters Citation Award-2012 for maximum citation in environmental science.

The total number of successful Ph.D scholars guided by the faculty members from 2009 to March 2014 is 274 at an average of 1.62 per faculty. The MoU with INFLIBNET for electronic dissemination of Ph.D thesis through open access in Shodhganga is in process.

The university strongly denounces plagiarism. In order to check malpractices and plagiarism in research, a research methodology orientation course is organized every year by the Academic Staff College for Ph.D scholars. In this course the participants are informed about plagiarism and ways to get rid of the same. The Ph.D prospectus also carries a clause warning against plagiarism. In addition, before submission of the thesis the supervisor of the scholar also checks the thesis for plagiarism using plagiarism Software. Above all, the Academic Council of the university has the right to withdraw the degree if plagiarism or duplication or any other form of malpractice is

detected at any stage. No case of plagiarism has been reported in the university so far.

The University promotes interdisciplinary research culture among its faculty members and scholars. Many Ph. D students are jointly supervised by the teachers of different expertise of the same department as well as from the other department depending upon the specialization of the concerned faculty member. The faculty members from different departments undertake joint research projects from external funding agencies depending upon the problem/challenge they want to address in their research. There are ongoing research projects in the university where faculty members of Physics, Chemistry, Environment Sciences, Bio and Nano Technology, CMT, Applied Psychology have joined hands together and currently six collaborative projects are undertaken at Radio Ecology Centre, GJUS&T Hisar funded by BARC, BRNS and NPCIL. Research projects from national funding agencies like DST, BRNS are currently ongoing jointly by faculty members of this university and scientists from those institutions. Further, there is international collaboration and project sponsored by DST, Govt of India and Ministry of Science & Technology, Thailand currently implemented by the department of Bio & Nano Technology jointly with Asian Institute of Technology, Bangkok, Thailand. The faculty members have participated in joint call of research proposals under international bilateral scheme of collaboration. The interdisciplinary research is promoted by encouraging the faculty members to apply for international fellowships. Faculty members of this university have already availed Commonwealth fellowship, BOYSCAST fellowship, DAAD, Nehru-Fulbright fellowship and spent significant time abroad (up to one year) so as to widen their horizons and learn latest trends and techniques in emerging areas and implement the same in their research areas by way of international collaboration. Further, university promotes its faculty members to attend international conferences abroad and provides them financial support along with duty leave so that teachers can become abreast of latest happenings in their research areas. Apart from this, there is TEQIP-II programme going on in our university from last two years where eight departments (Dept of Food Tech, Mechanical Engineering, Electronics and Communication Engineering, Bio and Nano Technology, Printing Technology, Optical Engineering, Environment Sciences & Engg and Computer Science & Engineering) are participating and it is mandatory for faculty member of each department to undergo training abroad. Many faculty members have already availed training in research areas of their interest under this programme.



The University has also instituted Madhu Bhasin Memorial Award of the value of Rs. 11000/- to eminent persons in the field of Environment sciences.

Faculty members are provided incentives in the form of travel grant for attending trainings, conferences, seminars at international and national level out of TEQIP Grant and UGC Unassigned grant. Many faculty members have attended training, conferences and seminars availing such grants.

### 3.5 Consultancy

Consultancy is an integral activity wherein the university encourages its faculty to share their expertise with different stakeholders including corporate houses, industry associations, government and non-government organizations. The primary goal of this activity is to protect the interests of the University with regard to education, learning and research. The Vice-Chancellor or the Designated Officer is the final authority on defining the scope and ambit of the work undertaken under the provision of this policy. The salient features of this policy includes granting complete academic autonomy and freedom to its faculty as well as providing infrastructure facilities including office, space, equipments, laboratory and access to data bank (including on line data), library by the university. Further, the amount received in the form of consulting fee is shared in the ratio of 60 and 40 by the Consultant-in-Chief (CI) and the University respectively. Out of the total share of the University, 50 per cent goes to the Business Development Group, a separate cell created by the University while remaining 50 per cent goes to the department concerned (Department of the CI) for the purpose of equipment and/or any other academic activity. Additionally, money available with Business Development Group is used for promoting closer linkages with the corporate world, government and non-government sectors for the purpose of soliciting consulting assignments.

#### Consultancies Undertaken by the Faculty from 2009-10 to 2012-13

Sr. No.	Year	Total No. of Consultancy	Amount (approx. Rs.)
1	2009-10	15	6,59,758
2	2010-11	69	35,61,976

3	2011-12	91	54,71,982
4	2012-13	121	96,02,527
	Total	296	1,92,96,243

The university has an Industry Institute Partnership Cell (IIPC) which was established in the University in the year 2004-05. The purpose of establishing IIPC was to promote activities relating to consultancy, extension series, collaboration with industry and other such activities for the promotion of technical education. The cell was merged in the Business Development Group (BDG) in the year 2012.

In order to publicize the expertise of the University for Consultancy Services, the specialization area of all the teaching faculty of the university is made available on the University website. The same is leveraged to publicize the expertise of the University for Consultancy Services. As per the existing policy, the individual teachers are encouraged to apply for various consultancy assignments from the Government as well as Corporate Sector. In some of the cases, the consultancy is also received by the University from various sources. The same is allocated to the teacher having requisite expertise on the advice of the Chairperson by the Vice-Chancellor.

The broad areas of consultancy services provided by the university include: Socio-economic impact assessment of Government schemes, SWOT analysis of organizations, Survey and data analysis for Corporate Sector, Economic and financial analysis of regional economy and fiscal management, Analysis of Air pollution, Water pollution and Land pollution.

### **3.6 Extension Activities and Institutional Social Responsibility (ISR)**

University has its own NSS cell, Women Cell/ Anti Sexual Harassment Cell and Directorate of Youth Welfare, which promote students to participate in various social activities and inculcate social and moral values in students. It develops leadership qualities and team spirit among students.

University engross students and faculty members in various activities which contribute to the holistic development of the students and promote university neighbourhood network. Various group discussions, camps have been organised such as seven days camp at village Mayyad from 09-01-2011 to 15-01-2011, state level blood donation camps organized twice on campus and collected more than

one thousand unit both times, group discussion on 19-11-2010 to mark Kaumi Ekta Week, a patriotic cultural programme based on communal harmony on 25-11-09 to celebrate the Flag Day etc

University encourages students and faculty to participate in extension activities by providing them various awards and facilities such as participation certificates and motivational seminars which develop confidence, personality and other qualities. Various such programmes include “PRERNA-2013” for providing NSS merit certificates to 33 meritorious volunteers. Four NSS volunteers participated in the “Youth to the edge Camp” organized by the NSS wing of Ministry of Youth Affairs & Sports in collaboration with the Ministry of Development of North Eastern Region held at Hayuliang, Arunachal Pradesh from April 13, to April 20, 2012. Two NSS volunteers one in the female category and other in the male category were declared the best campers in the event and received the appreciation certificates.

The University highlighted the most important issues of concern by organizing various camps in villages and University campus. It provides awareness to students to understand the problems of the most vulnerable sections of society. In this effort NSS unit launched the programme titled “AK PARYAS” from 23-04-2011 to 23-05-2011 for the helping the poor children to take admission in schools under the Right to Education Act (RTE) and organization of awareness programme “Empowering Women, Empowering India” from 08-01-2013 to 08-03-2013 and International Women Day on 11-3-2014.

University has tracking mechanism to track student’s involvement in various social movements and activities by enrolling them in various units such as NSS cell, Cultural unit and sports activities etc.

University encourages students and faculty to participate in motivational seminars which helps develop their confidence, personality and other qualities. Various such programmes organized include first state level day-night seven days NSS camp “SPANDAN” at the university campus from 23-10-2012 to 29-10-2012 in coordination with Directorate of Higher Education Haryana, seminar on “National Development” on 25-03-2010 with Sh. Arvind Kejriwal as chief guest and key speaker and celebration of Anti-Terrorism Day on 21-05-2009. University encourages community to participate in its activities and contribute to community development by organizing various programmes such as International Peace (15-09-2010), International Literacy day (08-09-2010), World AIDS Day (01-12-2010), National Voter’s Day (25-01-2012) and awareness programme for prevention of HIV/AIDS for drivers (13-04-2011).

To discharge social responsibility, the Department of Mass Communication adopts villages, the UCIC organizes computer literacy/training programmes for wards of employees and the university grants 100 percent fee concession to the wards of fourth class employees. Recently, the university organized a science conclave for the school children in which more than 2000 children from several schools of Hisar and surrounding areas participated.

### **3.7 Collaboration**

University has signed a number of MoU's with International and National institutions, viz., University of Manitoba, Winnipeg, Manitoba, Canada; University of Maryland, USA; The George Washington University, Washington DC, USA; TCG Life Sciences Limited, Kolkata; EdCIL(India) Ltd.; Centre for Plant Biotechnology, Hisar; National Agri Biotechnology Institute, Mohali; National Research Centre on Equines, Hisar; Central Institute for Research on Buffaloes, Hisar; Haryana Space Application Centre, Hisar; Centre for Innovative and Applied Bioprocessing, Mohali; BARC, Mumbai; BRNS, Mumbai; NPCIL, Mumbai. Department of Physiotherapy have also signed MoU's with Maharaja Agarsain Medical College, Agroha; various Hospitals in Hisar; Ministry of Health & Family Welfare; Industry Academia Partnership with Venus Research Medical Centre, Baddi, Himachal Pradesh.

These linkages/collaborations have contributed significantly to improve academic and research activities. Two collaborative research projects have been awarded by DST, Govt. of India after MoU with National Research Centre on Equines, Hisar. One collaborative research projects is also going on between scientists of Central Institute for Research on Buffaloes, Hisar & faculty members of the University as a result of collaboration with CIRB, Hisar. Besides, research enhancement, these linkages have also resulted in increased avenues for students' summer training, organization of joint short term training programs, joint publications, faculty development, extension activities, sharing of intellectual capital, organizing expert lectures, and students' dissertation projects.

The MoUs of the University with BARC, Mumbai, BRNS, Mumbai and NPCIL, Mumbai have resulted in creation/ establishment of Radioecology Centre at the university campus with an aim to carry out baseline environmental studies for nuclear radioecology research. The University is first in the country to establish Centre for Radio Ecology and to undertake research and development activities.

## **Criterion IV: Infrastructure and Learning Resources**

---

The University has been augmenting its physical and IT infrastructure and learning resources to keep pace with the changing technology. The University labs are equipped with the state-of-the-art technology and scientific apparatus comparable with any of the top Universities in India. University's teaching and research take place in its widely spread and environment friendly campus. The University has its own bus services to facilitate students to move across the campus. In the last five year, lot of investments have been made to augment the built-up area, equipments, class room furniture, books and e-learning resources and IT equipments to improve the teaching-learning and research environment.

### **4.1 Physical Facilities**

University plans for physical infrastructure and its optimum utilization on a continuous basis. University has a Building Committee under the Chairmanship of the Vice-Chancellor and is represented by the Director-General, Technical Education Department Haryana or nominee, Engineer-in-Chief, Haryana PWD (B&R) Deptt. or nominee, University Engineer and Architect etc. as members, meetings of which are held at regular intervals to approve the different buildings/other infrastructures along with drawings & designs.

The University strictly adheres to the provisions made in the National Building Code of India in the construction of new buildings.

University Works Department invites requirement from all the teaching departments for creation and enhancement of infrastructure in their respective departments. On the basis of the requirements, the projects are put up in the building Committee for its approval and after that the budget provisions are made for the next financial year. Following this policy a few ultra-modern buildings have recently been created in the University campus. The planning for creation and enhancement of infrastructure in the University campus is done through finance committee, planning board and court of the University.

To create conducive physical ambience for the faculty in terms of adequate research laboratories, computing facilities and allied services, suggestions are invited from different faculty members through their respective staff council in connection with the creation of new facility for any particular department/faculty, on the basis of their experience in their respective field. It is made mandatory that all purchases of lab

equipments, computers and books will be made only if these are recommended by staff councils of University Teaching Departments. All teaching departments are provided with the facilities like office room, common room and separate rest rooms for women students and staff etc. Similarly, the infrastructure facilities are disabled-friendly in that all the buildings have ramps with SS railing. The two multi-storeyed buildings including auditorium and Bio-Nano Science Department are equipped with lifts and other modern infrastructure and furnishings.

University caters to requirements of residential students in consultation with Chief Warden & Deputy Chief Warden (Male/Female) who participate in planning for the construction of Hostels for boys as well as girl students. In this way hostels are provided facilities like Cyber cafe, Shopping Centre, Gymnasiums, General Stores, Bank, ATM, Post Office, indoor games, etc. The capacity and occupancy of boys and girls hostels are given below:-

➤ <b>Girls Hostel</b>		<b>Capacity</b>	
<b>Occupants</b>			
• Girls hostel No. 1	=	225	219
• Girls Hostel No.2	=	120	313
• Girls Hostel No. 3	=	297	410
• Girls Hostel No. 4 (Phase-I)	=	144	144
• Girls Hostel No. 4 (Phase-II)	=	120	
(Under Construction)			
➤ <b>Boys Hostel</b>		<b>Capacity</b>	
<b>Occupants</b>			
• Boys Hostel No. 1	=	288	452
• Boys Hostel No.2	=	120	227
• Boys Hostel No. 3	=	288	302
• Boys Hostel No. 4	=	360	
(Under Construction)			
➤ <b>Working Women Hostel</b>	=	<b>96</b>	<b>91</b>

University has its own Health Centre with all medical facilities for teaching, non-teaching and students along with one Sr. Medical Officer, One Medical Officer, one Dental Surgeon, three staff nurse, one pharmacist & one lab technician. Health Centre has space to accommodate three Doctor's cabins for OPD, one Dental Clinic, one dispensing room, one laboratory, one medicine store, one minor OT

and one observation room with three bed facility. In addition to this, the University has also empanelled hospitals in Hisar, NCR and Chandigarh region for specialised indoor treatment facilities to the employees. Physiotherapy Department located in Health Centre premises also extends OPD and laboratory facilities to the needy employees and students.

To promote students' interest in the sports and cultural events/activities, University has its own convention centre with facility of Main Hall of 1800 capacity and three seminar halls of a capacity of 250, 125 and 125 respectively for cultural events/activities. Several teaching blocks housing teaching departments also have dedicated seminar hall and conference room facilities for smooth conduct of within department students' activities of curricular and co-curricular nature. The University has its own sports stadium with facility of Cricket, Football, Volley ball, Track and two State of the Art Synthetic Lawn Tennis Court of International level etc. and also facilities of indoor games to promote the interest in sports activities of the students. To promote cultural activities, a separate department named, Directorate of Youth and Cultural Affairs was established in 2012-13. This directorate, headed by Director, organises inter-college youth festival and facilitates students' participation in inter-University youth festivals. Talent search activities are performed prior to holding university youth festival. The University has created a separate budget head to impart financial support to these activities.

#### **4.2 Library as a Learning Resource**

The University has a strategically located sprawling library which is guided by an advisory committee consisting of the following:-

1. The Vice-Chancellor Chairman
2. The Registrar
3. Dean Academic Affairs
4. The Chairpersons of Teaching Departments
5. Two other teachers to be nominated by the Vice-Chancellor
6. The Librarian Member-Secretary

Following initiatives have been taken by the committee from time to time:-

Allocation of funds for purchase of books and electronic resources for use of students, faculty and others

Framed rules for managing of the library and carry out day to day operations.

Created Internet lab for SC/ST Students

Created E-resources data-base lab for use of researchers and faculty members

Automation of Library:

Some important details about library capacity and layout are:

- Total area of the library (in Sq. Mts.)  
Total seating capacity
- 4875 Sqm 250
  
- Working hours
- 9.00am to 7.00pm on normal working days
- 9.00am to 5.00pm on Saturdays & Sundays
  
- Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)

2 bay SC/ST Lab (area = 275 Sqft.)

4 bay research Database Lab (area = 550 Sqft.)

18 individual reading carrels, 8 bay reading hall-1

5 bay news paper and magazine & journal reading hall

- Clear and prominent display of floor plan; adequate sign boards; fire alarm; access to differently-abled users and mode of access to collection

Yes, in the basement and reading area fire alarms are installed and extinguishers have open access.

Details of the library holdings are given as under:

- a) Print (books, back volumes and theses): 91000
- b) Average number of books added during the last three years:  
 $6741+6264+3812=16817/3=5605$
- c) Non Print (Microfiche, AV): Yes
- d) Electronic (e-books, e-journals): Yes, Electronic journals of 17 publishers subscribed through INFONET programme of UGC. Other than that Emerald Management XT has also been subscribed by the Library.
- e) Special collections (e.g. text books, reference books, standards, patents) : Yes, text books and reference books are available in the Library to meet the informational/study requirements of the users. Reference section comprises such collection of dissertations, doctoral thesis and project reports.
- f) Book Banks: Yes, Books are issued the students of SC/BC and Engineering students for whole semester from book bank.
- g) Question Banks: Yes, old question papers are available for the students for consultation.



The library deploy following tools to provide access to its collection of resources:

- Online Public Access Catalogue: yes, OPAC users can access the status of the books in the Library.
- Electronic Resource Management package for e-journals: Yes, J. Gate plus, J. Gate has been subscribed by the Library to search the material on single platform.
- Federated searching tools to search articles in multiple databases: J. Gate plus for electronic journals.
- Library Website: Yes, Information of the Library is available on the University web-site and UCIC, which maintains the website is located in library premises itself.
- In-house/remote access to e-publications: Yes

The extent of ICT deployed in the library is detailed below:

- Library automation: Yes, Libsys software has been used in the Library for in-house operations. The databases of library users and reading material have been created through this software
- Total number of computers for general access: 50 (28 computers in research database Lab & 22 in SC/ST Lab)
- Total numbers of printers for general access: One, Heavy Duty
- Internet band width speed: Yes, 10mbps
- Institutional Repository: Yes  
Content management system for e-learning: Yes, Free access is provided to e-journals and electronic databases. Access is provided to “J-Gate Plus” database which facilitates the searchers to search all articles from electronic journals of various publishers on a single platform.
- Participation in resource sharing networks/consortia (like INFLIBNET): Yes

The details (per month) with regard to library usership are:

- Average number of walk-ins: App. 140 visitors per day
- Average number of books issued/returned: App. 235 per day
- Ratio of library books to students enrolled: 19:1
- Average number of books added during the last four years:
  - $2872+6741+6264+3812=19689/4=4922$
- Average number of login to OPAC: 3600 per month (approx)
- Average number of login to e-resources: 3500 per month (approx.)
- Average number of e-resources downloaded/printed: N. A.

Number of IT (Information Technology) literacy trainings organized: Yes, Organized workshop on research database awareness for research scholars. Provided Library orientation to newly admitted students of all courses.

Newly admitted students are acquainted with respect to Library rules/resources & services.

Details of specialized services provided by the library with regard to:

- Manuscripts: 400 Ph. D theses of different disciplines are available in library
- Reference Services:-University library provide reference services to the users with objective to provide information instead of tools of information.
- Reprography:- This service is provided by the library through commercial vendor on subsidized rates.
- Inter Library Loan:- The ILL service is provided on the request of the library members but in most of the cases the required chapter of the book or article from a journal is requested from the other libraries in the form of soft copies through mail.
- Information Deployment and Notification: The admission notifications, carrier notifications, notifications including library notices and other useful information are displayed on Library Notice Board.

- OPAC: Library is using Libsys software for its in house services to library members and provides OPAC services. Through its Web OPAC module the OPAC is available over campus wide network.
- Internet Access: Internet access is provided to SC/ST students in the Internet lab meant for them and to Research Scholars in the Research Database lab in the library. Besides there are several internet nodes for office use in the library.
- Downloads: Library electronic resources are accessible via campus wide network and in UCIC.
- Print outs: A printer has been installed in the e-research database lab for the use of researchers and faculty members.
- Reading list/Bibliography compilation in house/ remote access to e-resources: Reading list can be generated through the libsys software to meet the informational thrust of the users. Access to OPAC and electronic journals has been provided by the library through CWN of University.
- In-house/remote access to e-resources:- Access to electronic resources and databases has been provided in the Library for users.
- User orientation and assistance in searching database:- Users of the library are oriented with respect to the use of library services. The teachers attending refresher courses are invariably given live demonstration of using library. Restoration services are provided by restorers.
- Assistance in searching Databases INFLIBNET/ IUC facilities- The library helps the students and research scholars in searching of information from various databases purchased and provided by INFLIBNET to library.

Details of the annual library budget and the amount spent for purchasing new books and journals are as below:

**Budget Allocated for expenditure on Books & Electronics Resources**

<b>Sr. No.</b>	<b>Year</b>	<b>Books Purchased</b>	<b>Amount allocated (inRs.)</b>	<b>Expenditure (in Rs.)</b>
1	2009-2010	2872	6346742.00	3926109.00
2.	2010-2011	6741	5474891.00	5425004.00
3.	2011-2012	6264	7370198.00	6849657.00
4.	2012-2013	3537	7843685.00	4744088.00

## Budget Allocated and expenditure for Journals & Electronics Resources

<b>Sr. No.</b>	<b>Year</b>	<b>Amount allocated (in Rs.)</b>	<b>Expenditure (in Rs.)</b>	<b>Balance (In Rs.)</b>
1	2009-2010	1200000.00	612694.00	587306.00
2	2010-2011	1600000.00	716512.00	883488.00
3	2011-2012	1600000.00	797660.00	602340.00
4	2012-2013	9850000.00	851578.00	133422.00

Initiatives taken by the university to make the library a 'happening place' include

Open access – Library is providing open access to its users. Users are free to choose and read any material available in the library.

Reading Hall - Air conditioned reading hall with a sitting capacity of 75 persons which remains open beyond working hours.

Congenial surroundings - Library is surrounded by lush green environment endowed with fountains, lights and benches.

Centrally located - Library is centrally located and easy to reach from any corner of the university.

Branded comfortable furniture - Library possesses branded furniture, which enhances the sitting quality of the users.

Modern ICT facilities - Library is equipped with modern information communication infrastructure. Two computer labs with internet facility have been developed in the library for the use by users.

The library collects feedback from its users through

- i) Suggestion box
- ii) Complaint & suggestion register
- iii) Personal contact

Suggestion box has been provided at the entrance of the library for the valuable suggestions from the users. A complaint / suggestion register is provided in the night reading hall and whenever a suggestion /complaint is received from any member, prompt action is taken to circumvent the problem, if any.

The following efforts made towards the infrastructural development of the library in the last four years.

- i) Two computer labs have been installed in the library, one for the use of SC/ST students of the university and second for the use of researchers and faculty members.
- ii) 32 CCTV cameras have been installed for general security and security of resources.
- iii) Research databases have been subscribed in the library for the use of students and faculty members.

### 4.3 IT Infrastructure

Presently the University Networking Cell is looking after the Campus Wide Network (CWN) having as many as 2300 nodes and Wi-Fi activities covering almost all the hostels and residential area of the University. For ensuring network security, a user id and password are issued to every user of the network. Email services are also provided to all users through their dedicated email server. A user can have an access to the internet facility only after the authentication. University Computer & Informatics Centre (UCIC) is maintaining its own independent network in the library building. All the users of this network have been allocated separate user id and password to access the internet in UCIC. Certain unwanted websites are blocked as a matter of policy so that the general office working and studies of students are not unnecessarily hampered. The information and network security are protected through the firewall system of Campus Wide Networking Cell and UCIC. The university has its own Web Policy regarding the management of University websites i.e. [www.gjust.ac.in](http://www.gjust.ac.in) & [www.ddegjust.ac.in](http://www.ddegjust.ac.in). All licensed software are updated time to time by the agencies from whom these are procured. The university has followed and implemented e-waste management policy as communicated by the state government for the Green Computing in the University campus. Besides, the University also has a policy in place to dispose-off old computers under buy-back scheme. The University has sufficient number of computers with latest configuration and its allied items. These are being used effectively and efficiently in the academic as well as administrative activities of the University.

The different number of itms is as under:

Items	Teaching Department	Administrative Office	Total
Computer	1119	165	1284
All-in-One Computer	26	6	32
Laptop	139	9	148

Server	19	3	22
Printer	251	86	337
MFP Printer	32	26	58
Scanner	37	15	52
DLP/LCD Projectors	57	6	63
Interactive Board	11	1	12

- Computer-student ratio As per AICTE norms, wherever required.
- Dedicated computing facilities - Yes  
The University Computer & Informatics Centre (UCIC), Campus Wide Networking Cell (CWN), University Library and teaching departments provide dedicated and centralized facility with specialized computing software for the academic and research purpose to the University faculty members, researchers and students.

Department/Central Computing	Specialised Lab
Printing Technology	Graphics Lab
	Princt Lab
Computer Sc. & Engineering	Data Mining & Software Lab
	Mobile & Wireless Lab
	Data Security
	Soft Computing Lab
	Network Lab
	SPSS Clementine
Electronics & Communication Engineering	Mentor Graphics HEP
	Orcad Simulation Suite & PCB Design Suite
	Optism V 5.2
	Keil Software for 8051 & ARM
	Qualnet
Mechanical Engineering	AutoCAD lab
Mass Communication	Multimedia Lab
Environment Science & Engineering	DIP Lab based on GIS software
Bio & Nano Technology	MATLAB
Mathematics	MATLAB
Haryana School of Business	SPSS
	Prowess (CMIE)
UCIC	Language Lab, AutoCAD Lab
Library	Libsys, SPSS Lab, Two Labs for access

	of e-resources
CWN Cell	Nebero Firewall Unlimited
	Email Server Unlimited

- LAN facility - Yes  
University has a network of around 2300 nodes through Campus Wide Networking cell. In addition to CWN network, library building has an independent network of around 200 nodes through the University Computer & Informatics Centre. Internet service is also available on all the 2300 nodes.
- Proprietary software  
Each teaching department procures academic software as per its requirements. Only legal versions of operating systems and software etc. are allowed to be used in the computers. The University prefers to purchase computers with preloaded licensed windows operating systems. The University also encourages the students, scholars and the users to use the Open Source Software extensively.

<b>Specialised Software</b>
SPSS
Prowess (CMIE)
Prinect Lab
Qualnet
Mentor Graphics HEP
Orcad Simulation Suite & PCB Design Suite
Optism V 5.2
Keil Software for 8051 & ARM
Qualnet
AutoCAD
Sound Forge Pro
Toon Boom Studio
Dream Weaver
DIP GIS Software
ERDAS
MOE Software
Bioinformatics Software
DNA Star
Synergy Software
Phalizatic Study Software
Rapid N Cube
Optiwave
OptiFDTD
Optifiber
Lab View & Vision

Scitech
Millennium 32 for HPLC
Cary Win UV 3.0 version for UV-VIS-NIR
Avanta for Atomic Absorption Spectrophotometer
Top Spin for NMR Spectrophotometer
Universal Analysis for DSC
Nebero Firewall Unlimited
Email Server Unlimited
MS Windows 2003/2008 Enterprise & SBS Server
Red Hat Linux Server
MS Windows 2007/2008
Adobe Acrobat Professional
MS Office 2007/2010/2013

- Number of nodes/ computers with internet facility : 2300/1269  
All the computers (PCs and Laptops) have Internet facility in the University campus.
- Any other (please specify)  
The university is always ready to procure the latest world class IT infrastructure to enhance and facilitate e-Learning.

The institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities are:

- University always ensures to provide latest configuration computers and its peripherals with licensed software to the faculty, research scholars and students for effective and interactive teaching learning.
- High speed Internet connectivity to the faculty, research scholars and students is provided for their research and academic activities. The internet facility is also available in the hostels through Wi-Fi connectivity. Besides the existing one, the Campus Wide Networking Cell is further planning to extend the internet facility to each and every room of the hostels in a phased manner. It is also in process to extend Wi-Fi facility with latest technology to some new teaching departments/buildings.
- The University is connected through National Mission on Education through ICT (NMEICT) project of MHRD. The future plan is to shift from NMEICT to NKN.
- There is a plan to convert all the classrooms to smart classes in near future. All the class rooms and laboratories should have Interactive boards, Interactive Panels, Digital Visualizer, Electronic Podium, Information Kiosks etc.
- The UCIC intends to provide infrastructure for video conferencing of Vice-Chancellor and Registrar with Deans,



Directors/Chairpersons of the different departments & cells, Incharges of different branches and Officers of the University.

- Up-gradation of hardware, network and software infrastructure is done regularly.

Details on access to on-line teaching and learning resources and other knowledge and information database/packages provided to the staff and students for quality teaching, learning and research:

- A free access to Online Journals funded by INFLIBNET-UGC is provided to all students and teachers through the Campus Wide Network.
- NMEICT project has made it easy to access Knowledge and information database/packages of other educational institutions.
- Students are encouraged and they do use national level online resources available at NPTEL and MIT videos for their relevant courses.
- All Ph.D. theses of the University are available in the University Library in digital format.
- Latest collections of books and journals are kept available separately in the library.
- Interactive Boards, Computers, laptops, LCD projectors are provided to the departments to enhance the quality of teaching, learning and research.

The IT facilities available to individual teachers for effective teaching and quality research include:

- Personal computer/laptop with free hi-speed internet access through Campus Wide Networking in class rooms, laboratories, faculty cabins as well as in their residences.
- Free access to Online Journals funded and provided by INFLIBNET-UGC
- Availability of Wi-Fi facility in the University Campus has also encouraged the faculty members, researchers and students to learn and perform even outside the classrooms and laboratories.
- The DLP/LCD projectors, Interactive boards, Computers, Laptops are being used in seminars, workshops, symposium and class room teaching and other curricular activity.

Details of ICT-enabled classrooms/learning spaces available within the university and their utilization action for enhancing the quality of teaching and learning

- Most of class rooms, laboratories and library have internet connection through Campus Wide Networking.
- All Departments have requisite DLP/LCD projectors and interactive boards also.

- The University has four A/C seminar halls with LCD projectors interactive podium and public address systems.
- The University has a language lab in University Computer & informatics Centre (UCIC) where language skills of the University students are improved.
- Measures taken for maintenance of the computers and their accessories include deployment of qualified, well-trained and experienced computer technicians in UCIC, maintenance contracts for CWN and all new computer and accessories. After expiry of warranty period, any IT item under repair/faulty condition has to be sent to the University Computer & Informatics Centre (UCIC) for repair purpose. If it is not repairable at UCIC then repair is got done from its proprietary service station or local repair centre. All repair type complaints related to Computer and its accessories are registered online on the University website and handled on the first-cum-first-serve basis.

University has web policy to allow free access to online educational resources for academic and research purpose to all faculty members, researchers and students. University has restricted only the illegal and unsocial website through firewall system.

Details on the consolidated expenditure made in the annual budget year-wise for procurement, up-gradation, deployment and maintenance of the computers is listed below:

Sr.No.	Year	Expenditure (in Rs.)
		Computer, accessories & Software
1.	2010-11	53,80,838
2.	2011-12	2,17,61,754
3.	2012-13	1,21,11,936
4.	2013-14	88,80,925

\*Budget allocation for computers is a part of “Equipment Head” of respective deptt./ branch budget .

For the gradual transfer of teaching and learning from closed university information network to open environment, all departments are connected to National Knowledge Network with 1 Gbps leased line thorough Campus Wide Network. Internet facility and Wi-Fi connectivity are available round the clock. All faculty members are encouraged to prepare their course content in electronic format so as to use the materials in an open environment. University also focuses on co-curricular activities to enhance the learning capabilities of students and upgrade the teaching-learning

methodology by training of the faculty members and guiding the students to participate in activities like conferences, workshops, symposium etc. University has organised various expert lectures and conducted activities like paper presentation, workshops etc in the past and plans to continue with such activities to provide a broader exposure of the field to the students.

- Faculty and students are increasingly participating in the online groups and forums such as Google Scholar, Research Gate, Scopus etc, hence making them a part of global groups and analysing themselves in relation to other students and researchers in their domains across the globe. Interaction with industries and R&D organisations is also envisioned to understand and analyse the present status and future requirements of the market.

#### **4.4 Maintenance of Campus Facilities**

The university has elaborate mechanism and system for overseeing the maintenance of buildings, class-rooms and laboratories.

The repair/maintenance/renovation/addition & alteration work of residential/non-residential buildings including the Horticulture/landscaping works are looked after by the University Works Department headed by Superintending Engineer and supported by team of other officers and technical staff. There are separate specialized divisions headed by concerned Executive Engineers and supported by Sub-Divisional Engineers/Junior Engineers and other technical staff for creation and maintenance of utilities like electricity, civil works, health and sanitation, telephones, water works, sewerage systems etc. Our University is exempted from '0' Amp. L.R. (load restriction), which in common parlance is known as 'HOT LINE'. University has executed various annual maintenance rate contracts for maintenance of various types of services and equipments.

The University infrastructure stands well recognised for its ambience and maintenance by way of awards and appreciation by the external world as well. Recently Ch. Ranbir Singh auditorium of the University has been conferred a medal and a certificate by Construction Industries Development Corporation (a statue body of planning Commission of India) under "Best construction Projects" category along with 14 projects concerning all over the country in the field of buildings, railways, bridges, highways etc. Similarly, the University also received two awards for its green campus. The awards are titled as "Green Campus of the Year" by World Management Congress in the

year December, 2009 and “Best infrastructure and Green Campus University in Haryana “by CMAI in the year February, 2014. Besides, the external infrastructure, the university has also created some such infrastructure in its laboratories which is used for extending consultancy and testing facilities to government departments and the industries. To mention a few, the labs facilities and apparatus available in the department of Environmental Sciences and Engineering, Department of Bio and Nano Technology and Central Instrumentation Laboratory are well known for such purposes.

## **Criterion V: Student Support and Progression**

---

### **5.1 Student Mentoring and Support**

University provides student mentoring support system at department level as well as at university level. Such department has a student counselling cell, anti-ragging and anti-eve-teasing cells, are functional. At university level there is a Grievance Redressal Cell and Anti-Eve-Teasing Cell in both of which there is students' representation too. The task of mentoring and providing financial as well as motivational support is regularly being done by the offices of Dean Students Welfare (DSW), Directorate of Sports, Training and Placements cell, National Service Scheme, Director Youth and Cultural Affairs (DYW). These cells provide overall guidance to the students for academic assistance and holistic personality development. Apart from classroom interaction, the university has the provisions of tutorials and remedial coaching classes for the students. University organizes workshops on research methodology for students by engaging them in research activities. Students are also involved in research projects. They are the integral part of the organizing teams for seminars and conferences. Besides this, educational tours, expert lectures, field visits, panel discussions, exhibitions, induction programmes are instrumental in academic mentoring.

The university runs regular communication skills programmes in all the undergraduate courses. The course is designed to provide expertise in written language. Language lab is functional for developing the soft skills among students. Faculty members are helping the students in career counselling on regular basis. The training and placement cell of the university provides the specific information on career guidance and placements. University provides medical treatment, physiotherapeutic assistance and psychological counselling for the health and well being of students on regular basis. University has organized work-shops, seminars, street plays, field visits and awareness campaigns on positive youth development as well as on drug-de-addictions, prevention of HIV infection, preventing smoking and alcoholic behaviour. Students' organizing skills are further honed by conducting personality development activities and workshops besides involving them into organization of seminars and workshops. University provides a larger platform to the students through intra and inter-University sports, cultural and academics competitions.

University publishes the prospectus for regular and distance courses through Academic Council which contain information regarding

courses available, number of seats, eligibility, reservation policy, fee structure, academic calendar, general guidelines for the students, various students support cells, students welfare schemes and the phone numbers of the concerned officials. Prospectus for the hostels is printed separately which apprise the students regarding general rules and regulations of hostels and other hostel facilities.

University provides following scholarships and other support for financial assistance as well as to honour the meritorious students:-

1. Gold Medal for Toppers
2. C.V. Raman fellowship
3. Rajiv Gandhi National fellowship for SC students to pursue PhD course
4. Silver Jubilee scholarship
5. Merit scholarship
6. P.G. Scholarship for professional courses
7. Prize/awards in Sports/Extra Curricular Activities
8. University Research Scholarship
9. Scholarship for SC students
10. Stipend for BC students
11. Laptop facility for SC Students
12. Physically Handicapped scholarship
13. GATE Scholarship
14. Non-GATE Scholarship
15. Merit Based Cash Award to Girls
16. Book Bank facilities for SC students
17. Guru Harikrishan Scholarship
18. Remedial Coaching for SC/ST students
19. Coaching scheme for entry into services for SC/ST Students
20. Coaching for NET/SLET to SC/ST Students
21. Earn-while-you-learn Programme

For helping the foreign students the foreign student's cell is functional in the university. There is a separate wing in the hostel for such students. Need based language adaptability courses are conducted for these students. Due care is imparted for acceptance of cultural diversity. Foreign students are involved in various sports and cultural activities. University provides all the documentary support to the students who wish to apply for the educational loans as per policy of the banks which varies from place to place.

University official website [www.gjust.ac.in](http://www.gjust.ac.in) provides comprehensive information regarding courses and facilities available for the students. Online conferences and viva examination of the students are also conducted. For physically challenged students university has made provisions for ramp facilities, bus service in the campus and reservation of seats in courses and preference in allotment of rooms on the ground floor in hostels. University provides the financial assistance to SC/ST, OBC and economically weaker sections as per state /centre government norms. All the students are medically insured. The health centre of the university has three ambulances giving round the clock services, three bed dispensary with three doctors and complete blood testing laboratory. The general OPD in the Health Center caters approx.100 patients per day. Physiotherapy department, housed in the same building, also attend to students and employees through OPD arrangement. Almost all the departments have their own computer labs where regular practicals are held. The language lab in the UCIC conducts courses for the students to enhance their language and computer skills. For slow learners, the university organizes tutorials and remedial classes. Regular field trips, educational tours, internship, and interaction with outside experts are part of the university curriculum.

University provides facilities for various competitive examinations. The coaching centre for SC/ST,OBC (non-creamy layers) and minorities for remedial courses established with UGC aid in the university provides guidance and conduct coaching classes for students appearing for civil services, defense services, NET/SLET and other competitive exams. Faculty members of the university guide and motivate the students for competitive examinations in the subjects concerned. Placement cell imparts the students' career guidance to on regular basis. As a result of these and other such efforts a number of students have been able to qualify the competitive examinations during the last 04 years. During the period under review 346 students qualified the UGC-CSIR-NET, UGC-NET, SLET, GATE, defence and civil services examinations.

University believes in the holistic development of students and provides number of facilities to increase their participation in sports and cultural activities. Some of the attractions of such participation include, weightages of sports, and cultural activity certificates in admission, counting of extracurricular activities in internal assessment, provision of cash prizes for achievers opportunity for re-conduct of examination for the students involved in sports and cultural activities special dietary provisions etc. University sports department provides sports uniform and playing materials to help and motivate the students towards sports. A full-fledged Placement Cell is established in the

university to provide the facility for identification of job-opportunities, preparing students for interview, and to develop entrepreneurship skills. The placement cell displays the information related to job opportunities, organizes workshops and seminar on regular basis for skill development, making the students aware about the present scenario of job market. The cell conduct aptitude testing and mock interview as well. The pre placement talk followed by coordination of campus interview by inviting companies /firms/organizations is also the onus of this cell.

A number of students have been selected in reputed organizations through campus interview during the last four years. The placements through campus and off campus mode were approximate 56 per cent and 36 percent respectively, while approximately 5 per cent of the pass outs opted for entrepreneurship as their career. All the departments have formal or informal alumni associations which are functional at physical and at virtual level (Face book and other similar social websites).The alumni constantly update the latest trends in the markets on these websites which help in the up gradations of the departmental syllabi. These associations also provide informational and placement support for the students in getting internships and final placements. Alumni associations helps in providing the information about difficulties faced by pass out students in getting placement, feedback on enriching the syllabi, over all curriculum development and facilitation of industry-institute linkage programme etc

The university has robust mechanism in place to addresses the grievances of the students at department level as well as at university level. Teachers help the needy students individually and in tutorials for resolving their academic and personal problems. Majority of the students grievances are related to adjustment, stress, and academic concerns. The students counselling cells, anti-ragging cell, anti-eve teasing cells, women cell, proctorial board, centre for behavioural research & intervention are involved in solving the students' problems. Each department has a counselling committees comprising of students, research scholars and faculty members. Suggestion boxes are placed in the hostels and at various locations in the university to elicit students' suggestion on different issues. University promotes gender-sensitive environment in the university. At policy level there is women cell, anti-eve teasing cells, proctorial board and a committee to look into the cases of sexual harassment at work-place which is almost nil in this university.

University organized number of activities like celebration of women's day, one month programme named Empowering women , Empowering India' , workshops and seminars on prevention of crime against



women, survey to know the causes of gender-specific crime, poster making and slogan making competitions on gender awareness, honouring the girls' toppers of the university, cultural activities on gender-sensitization etc. Large numbers of girls' students are involved in organization and participation of cultural and sports activities in the university. The biggest policy decision of the university regarding women safety is to provide hostel accommodation to all the girls' students who need it. All the girls' hostels are fully equipped with emergency medical aid and 24 x 7 ambulance service, besides ATM and cyber cafe facility. To deal with sexual harassment issues, university has established bottom up model with Zero Tolerance for issues like sexual harassment, and ragging.

Regular interaction with students is maintained at department level and students have the liberty to register their complaints to any of these cells irrespective of the channels. In order to keep a strict vigil on undesired elements proctorial duties of teachers and administrative staff are arranged who take rounds at stipulated times and whenever needed report the matter to university security office. Monitoring and vigilance are also carried out through CCTV camera which are installed at all strategic locations.

University offers a big platform to the women students as well as to the women employees in honing their cultural and sports talent. Sports calendar of the university provides equal numbers of sports event options to the girls and boys students and encourage girls students for more participation in sports activities. Inter college and inter department sports events are compulsorily organised once in a year in the university. The university hosted the All India Women Tennis and Football Tournaments during the last four years. Directorate of Youth and Cultural Affairs, NSS Wing has been organising different cultural events at department and at university level. Selected teams are further encouraged to participate in state and national youth festivals. It is seen that there is almost equal participation of girls and boys in sports activities, while the girls outnumbered boys in cultural activities.

There are anti-ragging committees in all departments as well as an umbrella committee at apex level. To make students aware of the seriousness of such issues a special page of University Hostel Prospectus is dedicated to impart knowledge about such type of issues. All the information and punishments related to ragging are in public domain with the phone numbers of the officials concerned. The induction programmes also sensitize the students regarding the Zero Tolerance of Ragging in the university.

The University has an institutional mechanism for placement of students. For this purpose, a Central Placement Cell comprising of Director Placement, Assistant Director, Placement and other supporting staff is established. Besides, Training and Placement Officer is separately appointed for the Haryana School of Business running five MBA programme. The placement offices mobilise the companies for placing the students in different jobs after completion of the courses and in company training during the currency of their programmes. The prominent companies which visited the campus during the last four years include the following:

#### List of Companies

Andhra Bank	G3 IT Hub Pvt. Ltd.
Angel Broking	Gaurdian Life Care, Gurgaon
Asian Electronics Ltd., New Delhi	Gawaria Construction Ltd. Gurgaon
Aviva Life Insurance Co. Ltd.	Godfrey Phillips India Ltd.
Axis Bank Ltd. Panchkula	Grasim Industries Limited, Bhiwani
Bajaj Allianz Insurance Co.	Greaves Cotton Limited, Mumbai
Bank Of India	HDFC Bank
Baxter India Pvt. Ltd.	Hospimax Healthcare Pvt. Ltd.
Bikanar NamkeenBhandar, New Delhi	HSBC
Birla Sun Life Insurance Co.	HT Media Ltd.
Budget Logistics Pvt. Ltd.	Hutch, Gurgaon
Canara Bank	IBM Daks, Gurgaon
Ceasefire Industries Limited, New Delhi	ICICI Bank
C-Max Healthcare, New Delhi	ICICI Prudential Life Insurance Company Limited
CMS Infosystem Pvt. Ltd. Delhi	IDBI Ltd.
Cognizent Pvt. Ltd.	Indain Navy
Copal Partners Ltd, Gurgaon	India Bulls Securities Limited, New Delhi
Cyber Links, Gurgaon	India Infoline Ltd, Chandigarh
Darcl Logistics Limited	Indiabulls Securities Ltd.
DCM Textiles Hisar	IndiaMart InterMesh Ltd., Noida
Dena Bank	Indian Army
DLF Limited	IndusInd bank Ltd., New Delhi
Dupont	ING Life Insurance Co Ltd., Hisar
E-Connect Solutions	ITC
Essar Steel Ltd	Jai Bharat Gum & Chemical Ltd.
Future Generali Insurance Co. Ltd.	Siwani Mandi

Jindal Industries Ltd.
Kajaria Ceramics Ltd.
Karvey Stock Broking Co. Ltd.
Kotak Mahindra Old Mutual Life Insurance Limited
Kumar Printers, Gurgaon
L&T Finance, Sirsa
Labh Group Ltd
Lustra Printing Process Pvt. Ltd. Bahadurgarh
Max Newyork Life Insurance Co. Ltd.
Minda Industries
Minda Industries, Gurgaon
Money Matter Inc. Mohali
MTS
NPP Pvt. Ltd. Baddi
Oriental Bank of Commerce
Paper Product Ltd. Mumbai
Parle Biscuits Private Ltd.,
Philips India Ltd.
PLG Power Ltd. Mumbai
PPL, Thane
PR Pack Ltd.
Punjab National Bank
Radio Mantra (FM), Hisar
Ranbaxy
Reliance Digital
Reliance Life Insurance, Gurgaon
Religare, New Delhi
Roop Automotives Ltd. Sohna, Gurgaon
Roop Polymer Limtied, Sohna
Sakata Inx (India) Ltd.
Sherkhan Ltd.
Shriram Transport Finance Company Ltd.
Siegwerk India Private Limited, New Delhi
Silicon Valley Systech. (I) Pvt. Ltd

Standard Charter Bank, Chandigarh
State Bank Of India
Surya International Ltd.
Syscom Corporation, Ltd.
Techmesh products India Pvt. Ltd
Technovo Imaging Ltd.
Thomas Cook (India) Ltd., Chandigarh
Thomosn Digital
UCO Bank
Unicon Investments Solutions Noida
Union Bank of India
UST Globel
Vexsys System
Woodland Shoes

For the redressal of the students grievances, there is a complete structural mechanism comprising of the Dean Students Welfare, Proctor, and department level Advisory Councils, who listen to the students and sort out their problems. Though, the existence of routine grievances of minor nature cannot be ruled out, yet the grievances of serious nature are almost conspicuous by their absence. This is because due attention is imparted to the students by the Chairpersons and faculty in their respective departments on a regular basis. The University does promote a gender sensitive environment by conducting gender related programmes and establishing a cell to deal with issues related to sexual harassment. For gender sensitization the university celebrates international women day, Mothers' Day, save girl child and anti-feticide movements etc. The anti-sexual cell is established with a senior lady teacher as its chairperson. All cases related to sexual harassment are referred to this cell.

The University elicits the cooperation of its stakeholders including the parents, media persons, employers, the Government and Alumni in the interest of overall development of the students. For example, each department is incumbent to conduct parent teacher meet to apprise the former about the performance of their wards and discuss about their career plans. The apex level anti-ragging committee of the university is also represented by the parents, media persons, local administration and students, besides the senior university functionaries. All these endeavours of the university have proved very beneficial in devising strategies for overall discipline in the university and development of the students.

## 5.2 Student Progression

Details of student strength enrolled in the university during the session 2013-14:-

Sr. No	Course	No. of students
1	Undergraduate	2682
2	Post-Graduate	1752
	Total	4434

<b>Student Progression</b>	<b>Percentage</b>
UG to PG*	15.5%
PG to M.Phil*	1.61%
PG to Ph.D	15.55%
Ph.D to Post-Doctoral	0.22%
Employed	
Campus selection	55.66%
Other than campus recruitment	35.66%
Entrepreneurs	8.68%

Programme-wise pass percentage of the students during the time span stipulated by the university is as under.

	2009	2010	2011	2012	2013
B.Tech	89.84%	96.01%	83.99%	83.02%	90.20%
M.Tech	82.90%	53.84%	72.82%	52.12%	48%
M.SC	87.79	81.25%	85.11%	90.51%	76.74%
MBA	94%	82.75%	85.35%	90.55%	67.91%
B.Pharma	80%	88.70%	96.61%	75.80%	36.50%
M.Pharm a	100%	100%	91.66%	98%	97.91%
Bachelor of Physiothe rapy	--	83.33%	96.61%	89.13%	61.11%

Masters of Physiotherapy	--	--	69.56%	82.60%	100%
MCA	98.45%	97.61%	95%	96.15%	77.04%

Following is the position regarding number of students appeared/qualified in the competitive examination during the last four years:

Sr. No	Name of examination	Number of students qualified
1	UGC-CSIR-NET	234
2	UGC-NET	24
3	SLET	--
4	GATE/CAT/GRE/TOFEL/ GMAT/ Central/ state services	153
5	Defence	10
6	Civil Services	15
7	Others	10

Ph.D theses submitted/ accepted/ resubmitted/rejected from January 2010 March-2014 are as under:

Submitted	210
Accepted	197
Resubmitted	6
Rejected	Nil

### 5.3 Student Participation and Activities

The university facilitates students' participation in several sports, cultural and extra- curricular activities in the campus. For systematic organisations of these activities, the university draws its sports calendar and cultural calendar well before the start of an academic session. To strengthen these activities, there is Sport Council and Cultural Council headed by the Vice-chancellor and participated by other senior functionaries of the university and its affiliated colleges. The prominent sports activities available to the

students include Cross Country (Men), Cricket (Men), Football (Men), Basketball (men & women), Kabaddi (Men), Volleyball (Men & women), Table Tennis(men), Badminton (men & women). Almost every year, the inter-college tournaments for these take place in the month of Sept., October & November in the university. The inter- university participation, which invariably take place in November to January, depends upon the schedule announced by Association of Indian Universities (AIU). The university organises its inter-college athletic tournament in the first week of March every year. The University hosted All India Inter University Football Championship for women from 27<sup>th</sup> December to 4<sup>th</sup> January 2014. Besides these sports activities, the university also holds inter-house tournaments so that an added number of students can have participation and the best from amongst them can be selected for inter-university tournaments.

Similarly, the university also organises different cultural and co-curricular activities. Every year, the university organises a Youth Festival in which the affiliated colleges also participate and the winning teams then are considered for participation in the inter-university youth festival. This youth festival, which encompasses participation in 42 cultural items, is organised in mid October every year. The other co-curricular activities include celebration of Republic Day, Independence Day, Sadhbhawana Diwas, National Hindi Diwas, Talent of competition, national education day, etc. under the aegis of the Directorate & Youth and Cultural Affairs of the university. The cultural events and curricular activities are also organised by the NSS Wing of the University. To list a few, such activities include State level Blood Donation Camp, NSS Day Celebration, Pre-Republic Day Screening Camp, Tracking & Mountaineering, World AIDS Day Red Ribbon campaign, Tree Plantation etc.

The university makes efforts to promote heritage consciousness among the students by making special provision of educational and industries trips in the important places. It is almost every year that each department facilitates its students to go for such visits to broaden their mental horizons. The students are also encouraged to participate in some literary activities beyond their course curriculum. For this purpose, the university brings out a magazine in which the students not only can express themselves by way of publishing their fictions, poems, or essays, but also join the editorial team. During NSS camps, other activities organised from time to time, the students from this campus and also from other institutions participate in Poster Competitions, Painting competitions, Collage making competitions, Clay modelling competition etc. Though, there is no provision of elected Student councils, yet their participation in almost all kind of activities in the

university is highly encouraged and appreciated. There is students representation in their apex level anti-ragging committee of the university, the organising committees for holding sports and cultural activities, placement activities, hostel management, etc. The senior students, particularly the research scholars are given due representation in the departmental level Student Counselling Committees. Whenever the university organised any important function, the students play a keen role in their successful organisation

There are sports and cultural calendars of the university having all the information regarding the nature of event, and schedule of event. Departments also organize extracurricular activities like 'UMANG FESTIVAL', 'KSITIZ, and celebrate specific days. Students regularly participate in plantation drive, polio campaigns, literacy programme, youth development activities, celebration of patriotic events(Maa Tuzhe Salam etc.), educational tours, adventure camps, hostels cultural programme. NSS wing of the university organized number of cultural and extracurricular activities. More than 1000 students donated the blood in Blood Donation camps organized by NSS wing of the university. Students participated in various states level/zonal/national level activities like; participation in Republic Day parade at Rajpath. NSS volunteers got the Best male and Best female camper awards in national camps.

For promoting heritage consciousness, university organizes educational tours, exhibitions on the life of freedom fighters, adventure camps, and monumental visits all over the country. The Historical Tombs falling within the premises of the university are properly preserved and maintained.

University publishes one student's magazine and the students are part of editorial team of this magazine. CMT Department of the university runs fortnightly Gram Pahal Newspaper and has published 50 editions of this newspaper. University involves the students in various activities and gives sufficient representation in committees like, cultural advisory committees, NSS Advisory Board, students counselling cell, hostel management committees, anti-ragging committee and Grievance Redressal Cell. They are also associated in organization of seminars, workshops, cultural and sports events.



## **Criterion VI: Governance, Leadership and Management**

### **6.1 Institutional Vision and Leadership**

The University has been established by Haryana State Legislature Act 17 of 1995. The Act provides for various provisions regarding Governance and Leadership in the University. The Governor of the State is the Chancellor and Head of the University. The Vice Chancellor, who is the Chief-Executive Officer of the University, is appointed by the Chancellor on the recommendations of the Government for a term of 3 years from the panel of three eminent persons drawn by the Search Committee duly constituted for this purpose. The office of the Vice-chancellor has never remained vacant and whenever it is due the regular appointment is made as per laid norms and provisions under the University Act.

The Act also provides for various authorities which include the Court, the Executive Council, the Academic Council, the Board of Governors of Haryana School of Business, the Finance Committee, the Planning Board, the Faculties and the Board of Studies & Research. The statutory authorities of the university meet frequently to review plans and implementations of all academic and administrative matters. Performance of the university teaching departments is discussed in meetings of Staff Council, the Faculties and the Academic Council. The Executive Council is the apex governing body of the University. The issues relating Annual Account and Audit Report, Academic Report and Future Policies are taken up by the Court under the Chairmanship of the Hon'ble Chancellor.

The objectives of the University as enshrined in the Act are to facilitate and promote studies and research in emerging areas of higher education with focus on new frontiers of Technology, Pharmacy, Environmental Studies, Non-conventional Energy Sources, Mass Media and Management Studies and also to achieve excellence in these and connected fields. The University has drawn its Vision and Mission which may be read as under:

**Vision:** To develop the University as a Centre of Excellence for the quality teaching, research and extension services to produce the dynamic and the knowledgeable human resources and act as a knowledge powerhouse capable of contributing to the national development and welfare of the society.

**Mission:** The University aspires to be a globally recognized Centre of Excellence in the field of technical education and research. It strives to achieve this by introducing innovative job oriented courses, employing competent and motivated faculty, developing state-of-the-art infrastructure, striking purposeful linkages with industry and professional bodies, and promoting quality of work life on campus. The University focuses on the student community to imbue them with passion for knowledge and creativity and to promote sustainable growth in academic resources, student placements, holistic human development with a strong conviction for professional ethics, social and environmental issues.

The mission statement of the university clearly defines the institution's distinctive characteristics wherein it intends to facilitate and promote studies, research and consultancy in emerging areas of higher education with focus on new frontiers of Technology, Pharmacy, Environmental Studies, Non-conventional Energy Sources and Management Studies, and to achieve excellence in these and allied fields.

Institution's Contribution to Core Values: Guru Jambheshwar University of Science and Technology has been established to facilitate and promote studies and research in emerging areas of Science, Technology, Management, etc. The Vision and Mission have been defined keeping in view the objectives of the University enshrined in its Act. The University has taken a number of steps to promote quality technical education and strives to open up new vistas in the relevant areas. The University has already made a mark in certain areas that contribute to promote quality education in the present global competitive environment. The contributions of the University in the core values as identified by NAAC are elaborated in the following paragraphs.

- a) Contributions to National Development: The University has organized a number of National Seminars/Conferences on the issues of national concern, i.e., energy conservation, food, health, pharmaceuticals, environment, management, etc. Research projects on social development, i.e., Reducing HIV/AIDS Vulnerability, Exploring the psychological influences in crime among youth, DRDO projects for defense research and consulting, etc. have been taken up. Further, community surveys on female feticides, HIV/AIDS awareness, Entrepreneurship development, Environment protection etc. are frequently conducted and Exhibitions are also organized. Blood Donation Camps, Patriotic Cultural Evenings are regularly organized on the campus of this

university so as to instill a sense of human welfare and nationalism among students. As a human gesture, the financial assistance is contributed by the staff-members during national level natural calamities

The University has introduced various welfare schemes for promotion of higher technical education among deprived sections of society and women. The Directorate of Distance Education with its vision to 'reach the unreached and education at doorsteps' has been imparting professional education since inception of University and several thousands learners from all over the country stood to gain from this endeavour of the University. Being a State Technical University, it follows all applicable norms of the Central and State Government in admissions, faculty recruitments and management of finances, etc.

- b) Fostering global competencies among students: With a view to foster global competencies among students, involvement of the students in the research areas of international concern is stressed upon. Updating the syllabi as per the global needs is implicit in the University policy. The students get global exposure via access to the latest academic and research information from data-bases and e-resources available in the University Library, participation in the national/international conferences, training in multinational organizations etc. The University has taken a number of initiatives to promote quality education and overall personality development of the students' to match the requirements of job markets in globally competitive economy. The availability of quality infrastructure, competent and well qualified faculty in adequate number, regular up-gradation of course curriculum, matched with global standards, free availability of Internet facility on the campus, special focus on research and extension activities, etc. are helping in fostering global competency among students. The students of all technical programmes undergo 2 to 6 months industrial training and thus at to this competence. The funds allocated under the TEQIP-I & II of the World Bank have further strengthened the labs and research infrastructure in the University. There is a provision for supernumerary seats with 15 percent reservation in admissions for foreign students in each programme under PIHEAD (Promotion of Indian Higher Education Abroad) scheme of the UGC.
- c) Inculcating value system among students: For inculcating moral values among students, the ethical contents form an important part

of syllabi. The teachings of Guru Jambheshwar Ji (a great environmentalist and spiritual figure) are taught to all the university students through special lectures delivered from time to time. The students are involved in various social activities, like tree plantation, blood donation, exhibitions relating to social issues, etc. so as to inculcate among them a sense of belongingness to humanity and environment. The students of Physiotherapy participate in three OPD service rendered by the department and students of psychology associates themselves with their teachers in counseling of students of the campus. The Guru Jambheshwar Ji Maharaj Institute of Religious Studies has produced a number of publications about comparative study of religions and environment protection. The faculty from this department also delivers lectures on ethics and moral values in all the classes in various departments. The University has also organized in the past seminars on relevance of 'Human Values in Governance and Management' and of 'Science and Spirituality' sponsored by the UGC in which the faculty and the students participated. On various auspicious occasions the Department of Religious Studies also organizes HAWANS and arranges for specialized lectures on spirituality. The University also celebrates Environment Day, World Food Day, AIDS day, Republic Day, Independence Day, Martyrdom Day, Science Day and all other important events to create general awareness among the students. NSS unit also keeps actively organizing various activities from time to time.

Students are sensitized to India's rich cultural heritage through events like SPIC MACAY and screening of documentaries. Besides this, the students are also encouraged to participate in North Zone Festivals and National Youth Festivals.

- d) Fusion of Technology and Governance: For the purpose of promoting use of technologies, teaching computer education has been made as part of syllabi in every academic programme. The campus wide networking has been provided in the whole university to facilitate the use of Internet. The computer facilities in the departments for faculty and students are available round the clock. Latest lab equipments for teaching and research have been created. Workshops and training programmes for students, lab staffs and faculty members on the use of new technologies are held frequently.

The University has taken initiatives to promote e-governance to enhance existing administrative efficiencies, drive down

communication costs and increase transparency in the functioning of various departments. These initiatives include computerization of accounting and examination systems, provision of library e-services establishment besides upgradation of University Computer and Informatics Centre. The payrolls, electricity bills, provident fund, tax deducted at source are fully automated and mandated through university designed software. The EDP Cell in Examination Wing is upgraded to speed up the declaration of results without errors. Results of the entrance examinations are declared the same day and placed on the university website immediately. The students are provided computerized Detailed Marks Certificates and the Degrees with security features and students' photographs on it. The University Library is fully automated in its functioning using LibSys software. The data are digitally generated and stored in the library systems. The admission process of the University is also computerized. The students are required to fill the information in the OMR Sheet which is used by registration branch to create and maintain the data bank of the students. The same practice is followed in case of admissions to various courses in the Directorate of Distance Education. The use of computing process is adopted starting from filling of admission form till the award of degree. The UCIC, apart from maintaining the EDUSAT and Language Labs, plays, key role in software development, hardware maintenance, providing training to university employees and also to the employees of various government departments in collaboration with State government. Online tests for admissions to various courses in the State are also facilitated by the UCIC. In addition, it also takes care of the Internet facility and online research journals. There is a University Statistical Cell created at the behest of the UGC to regularly maintain and periodically supply requisite information to various apex bodies.

- e) Quest for Excellence: An enshrined in its vision and mission students, the University has discerned its quest for excellence in all its activities and pursuits. The state-of the art infrastructure in terms of recently constructed world class buildings, latest scientific apparatus in CIL and other Labs, the green campus, hounoured through Awards, rich treasure of physical and e-resources, latest and updated course curricular, campus wide networking etc. discern that the quality forms top priority of the University in all walks of its life. The University is continuously exploring the new

vistas of knowledge, amalgam of science, technology and management, contribution of students and faculty at national and international fronts, updating the appraisal system, involvement of students and faculty in designing of new products and patents, entering into MoUs with institutes of repute and holistic perspective of education. The University has subscribed to the high and international online research journals and accessibility is open for all the students, teachers and other staff. The curriculum of courses is updated regularly by the dedicated internal and outside experts of international/national repute. Quality research is the growing thrust area in the University after quality teaching. All the departments are encouraged to go for collaborative research projects. The University visualized the need to upgrade the processing of result declaration and thus computerized the declaration of results. The University has successfully introduced the modified Credit Based System as per the internationally acceptable norms.

The University is the first in the State to conceive with the idea of establishing a Knowledge Park which will facilitate the fusion of industry and technical education. The University plans to develop a Centre of Excellence in Bio-Nano research and technology. It is the major research potential area in the coming times with plenty of employment opportunities and research funding. The Media Production Studio created in the Department of Communication Management and Technology is the state-of-the-art studio in North India. It provides excellent training ground for the students to learn the intricacies of media production. The Academic Staff College of this University was ranked at number one in India by the NAAC in 2012-13, as it has made a mark in the area of teachers and scholars training, refresher and orientation courses. The newly constructed Auditorium of this University has been awarded by the Planning Commission as best construction project during 2013-14 and the newly constructed building of Haryana School of Business and Nano-Science and Technology have also been widely appreciated for their world-class infrastructure in this University.

From the overall academic and administrative operations of the university, it is can be visualized that the university is focusing on its best possible contribution to national development, fostering global competencies among students, inculcating a sound value system among students promoting use of technology and quest for excellence especially in the

field of technical education as we are one of the leading state technical university in the country. However, the university has miles to go in its consistent objectives of striving for excellence and therefore the institutional motivation and administrative commitment is truly reflected in its all academic/ administrative activities on the campus.

## **6.2 Strategy Development and Deployment**

The Act provides for the following authorities of the University wherein decision are made from time to time for implementation of its vision and mission:

1. The Court
2. The Executive Council
3. The Academic Council
4. The Board of Governors, HSB
5. The Finance Committee
6. The Faculties
7. The Planning Board

The Executive Council is the apex decision-making body of the University. The Academic Council is the principal academic body of the University. The Academic Council takes all policy decision and exercises general supervision over all academic matters of the University. The Finance Committee examines the accounts and submits the annual budget to the Executive Council and the University Court for the final approval. The various Faculties/Schools constituted under the Act and Statutes co-ordinate teaching and research work in the teaching departments.

The Act provides for the following officers of the University, who form the organization for strategic development and deployment:

1. The Chancellor
2. The Vice-Chancellor
3. The Registrar
4. The Director, Haryana School of Business
5. The Dean Academic Affairs
6. The Proctor
7. The Chief Warden
8. The Dean Students Welfare
9. The Dean of Colleges
10. The Controller of Examinations

The functions of all these officers have been well defined in the Act, Statutes and ordinances of the university. The Vice Chancellor is the Chief Executive and Academic Head of the University and exercises general control over the affairs of the University and gives effect to the decisions of various authorities. The Registrar, who is the Chief Administrative Officer and custodian of the university records, works directly under the superintendence, direction and control of the Vice-Chancellor. All other officers discharge respective duties in accordance with the provisions of the statutes, ordinances and under the guidance of the Vice Chancellor.

For generating inputs for strategic development, deployment and facilitating University administration, the following administrative branches have been created:

1. Academic Branch
2. Accounts Branch
3. Conduct Branch
4. Directorate of Distance Education
5. Establishment Branch
6. Faculty Branch
7. General Branch
8. Public Relation Branch
9. Purchase Branch
10. Registration Branch
11. Result Branch
12. Secrecy Branch
13. SC/ST and Scholarship Branch
14. IPR & TC Cell
15. BDG Cell
16. IQAC Cell
17. Legal Cell
18. PIO Cell
19. Statistical Cell
20. UGC NET Cell
21. University Women Cell
22. Prevention of Sexual Harassment Cell
23. University Training and Placement Cell
24. University Computer and Informatics Centre

All these Branches/Cells work under the direct supervision of the Registrar of the University. The Controller of Examinations is the



incharge of Examinations which include Conduct Branch, Secrecy Branch and Result Branch. The teaching departments have adequate academic, administrative and financial autonomy and the Chairpersons are appointed on rotation basis as per the provisions of the University Act. The Dean of Faculty coordinates teaching and research in the university teaching departments. The Board of Studies and Research (BOSR) of different university teaching departments are headed by the Chairperson concerned and BOSR are responsible for introduction of new curriculum, syllabi, academic programme, their regular revision or updating and overall academic supervision. Besides senior academicians from within and outside, professionals from industry are also nominated in BOSR on the recommendations of the Chairpersons. The university teaching departments run academic programmes duly approved by the Academic Council and the Executive Council of the University.

The governance and leadership in the University is very much professional, systematized, gender-sensitive and democratic. The vision, mission and objectives of the University are well defined and displayed at all the prominent places for effective communication to all concerned. The rule of law prevails in the system and provisions of the Act, Statutes and Ordinances are strictly followed. The employee satisfaction level is high and legal disputes are almost negligible. The cases of career advancement are taken up timely and every eligible employee get promotion on time. The work culture is highly congenial and the man days lost due to strikes, etc. have been minimal in the past. The students' viewpoints gathered informally important input in decisions concerning them. The focus is on holistic personality development of learners through quality education, moral and ethical lectures, communication skills, knowledge of computer applications, environment awareness and basics of management so that our product becomes comparable to that of the best institutions in technical education.

The university has its own perspective plan for academic development and all relevant aspects that are considered essential in the development of policies and strategies, include, vision and mission, teaching and learning, research and development, community engagement, human resource planning and development, industry interaction and internationalization of academics.

The university has defined internal organizational structure and decision making processes for their effectiveness. The university teaching

departments are headed by the Chairpersons and the faculties are headed by the Deans; within the departments and faculties the role of teachers is encouraged through staff councils. Likewise, all branches and cells are headed by branch officers and incharges under the supervisions of Registrar. The financial powers are delegated to Chairpersons and Branch Officers from time to time and, in certain cases, the administrative and financial approvals are sought from Vice-chancellor, wherever necessary. The University has taken a number of steps to ensure quality education. It includes quality infrastructure in the form of well equipped class-rooms, modern departmental laboratories, common facilities like the UCIC, Campus Wide Networking, and Wi-Fi system, well stocked library and the Central Instrumentation Laboratory with latest machines of common use by various departments. Proper maintenance and repair of the equipments is ensured by way of AMC's and Committees. Purchase procedures are transparent and well defined in the University. There are different purchase committees to deal with cases involving different amounts. The High Powered Standing Purchase Committee (HPSPC) deals with purchase cases involving expenditure above Rs.10 lac. The Standing Purchase Committee-I (SPC-I) deals with cases from Rs.1 lac to 10.00 lac. SPC-II deals with cases of purchases involving amount of Rs.5001 to 1 lac. SPC-III deals with purchases from Rs.501 to 10000. The purchases are affected through tenders, quotations depending upon the amount and the nature of purchase. There are separate committees for finalizing chemicals and glass-ware rate contracts. Building Committee takes care of construction and maintenance of buildings.

The academic programmes of eligible departments namely, Environmental Science and Engineering, Management and Pharmaceutical Sciences have already been once accredited by the National Board of Accreditation (NBA). Process for NBA accreditation of B.Tech. (CSE), B.Tech. (IT), MCA in the departments of Computer Science and Engineering, B.Tech. Electronics and Communication Engineering and B.Tech. Printing Technology has started.

Recently the university conducted periodically conducts an academic performance audit cum mock assessment of different teaching departments and central offices. The exercise proved to be very useful in that it gave an opportunity to the teaching departments to identify their strengths, weaknesses, opportunities and challenges. Consequently, the Chairpersons of the teaching departments got an opportunity to further build upon their strengths, circumvent their weaknesses, plan for taking advantages of the

emerging opportunities and withstand the challenges. For all affiliating colleges/institutions, the Dean of Colleges through Colleges Branch coordinates and oversees the academic performance of all affiliated colleges and institutions.

### **6.3 Faculty Empowerment Strategies**

To update the knowledge and skills of teaching and non-teaching staff, training programmes are organized regularly both in Academic Staff College and university teaching departments. The teaching staff is required to attend refresher courses, orientation courses, seminars and conferences as per the requirements of the UGC and the State Government under Career Advancement Schemes. The teachers are encouraged to participate in national and international conferences for which payment of travelling expenditures and delegation fee are made by the University depending upon availability of funds for this purpose. The university authorities always encourage faculty members to generate resources by way of submitting research projects and undertaking consultancy and extension activities and also to encourage faculty members to publish their research in high quality research Journals of international and national repute. The H-Index of the university is more than 45 at this moment that speaks of quality of publications by the faculty of this university. It needs special mention here that the CGPA score of this university was 3.26 when NAAC carried its 2<sup>nd</sup> cycle of accreditation process and awarded Grade 'A' to this university.

The requirements for additional teaching and non-teaching staff are first discussed at the staff council level and then the cases are forwarded to the higher authorities with full justification of job-profile and job-description vis-à-vis the specialization required on case to case basis. The University needs to get the formal approval from the State Government for sanctioning of various posts. The selection process for teaching posts involves advertisement in different national dailies and on-line on the university website, screening of applications followed by interview by the Selection Committee constituted as per the latest guidelines of the UGC under the Act. The Executive Council is the competent authority for appointments to all posts carrying Pay-Band III and above. In the case of the posts carrying basic pay less than that, the Vice Chancellor is the competent appointing authority.

For non-teaching staff in addition to compulsory computer training various types of short term skill up-gradation programmes and lectures are arranged frequently. Only recently all Lab-Attendant-cum-Cleaners and Lab Technicians have undergone departmental training. There is a system of annual Self Appraisal Report for teachers and Annual Confidential Report for non-teaching staff. These reports are evaluated by the higher authorities from time to time and adverse entries, if any, are communicated to the employee concerned immediately.

The academic and administrative leadership is provided by the university to its affiliated colleges through Dean of Colleges and the necessary support and encouragement given to them to become autonomous in academic process. For redressing the students' grievances and their welfare in the university, there is Dean Students Welfare, who takes care of all issues relating to students welfare. All the cases relating to unfair means are decided by the Standing Committee constituted by the Academic Council for this purpose. The decision making is more or less participative at various levels. There is a provision of staff council at department level. The BOSR, the Departmental Research Committees, the Faculties, the Academic Council, the Executive Council and the Court have representatives from teaching community. The students are also encouraged to give suggestions for general improvement in academics and administration. The suggestion boxes are placed at conspicuous places like the Library, Administrative Block, Accounts Branch, etc. where the students put slips giving suggestions of various issues concerning them.

The UGC- Academic Staff College (ASC) has been established during the 11th Plan in this University in accordance with the National Policy of Education. The objectives of ASC are to enhance the faculty motivation skills and knowledge through systematic orientation in specific subjects, techniques and methodologies, and thereby inculcate the right kind of values that would in turn encourage them to take initiatives for innovative and creative work and also to arrange programmes for heads of departments, principals, deans, officers, etc. must be organized with a view to acquainting the top-level administrators with what teachers are learning in the orientation programmes, which is helpful for effective decision making by the top level administrative and its implementation to achieve the excellence in the connected fields. The functions of ASC in the university are to plan, organize, implement, monitor and evaluate orientation courses for newly appointed college/university teachers. The ASC also organizes refresher courses for serving teachers, and orientation

programmes for senior administrators and heads of departments, principals, officers, etc. Programmes for students at Ph.D./postdoctoral levels from CSA/DSA/SAP departments are also organized by the ASC.

#### 6.4 Financial Management and Resource Mobilization

The university has a well defined organization for financial management and resource mobilization. The annual budget for every year is prepared and approved by the Finance Committee, the Executive Council and the University Court. The budget is prepared after taking into consideration the demands for financial grants from various departments and offices and development projects. The sources of income of the university are as follows:

- a) Grant-in-aid from the Haryana State Government
- b) Grant from UGC and Other State & Central Funding Agencies.
- c) Income from Distance Education Courses.
- d) Internal Income including fees and fines from Courses under State Plan and Self-Financing Courses
- e) Deposits and Remittances.
- f) Endowment Trust Funds.

The University receives grant-in-aid from the State Government under plan scheme only; however, the request for inclusion of committed expenditure under 'non-plan scheme' is under active consideration of the State Government. The following table depicts the overall Income of the University during last five years:

Sources of Income (Rupees in Lacs)	2009- 10	2010- 11	2011- 12	2012- 13	2013- 14
a) Grant-in-aid from the State Government	1100.00	2000.00	3500.00	3500.00	3200.00
b) Grant from UGC and Other State & Central Funding Agencies	791.88	1100.75	963.56	877.06	1091.83
c) Income from Distance Education	3232.75	2500.00	1900.00	1231.10	1600.00

Courses					
d) Internal Income including fees and fines from Courses under State Plan and Self-Financing Courses	766.00	768.00	768.00	947.00	947.00
f) Deposits and Remittances	303.14	396.50	373.00	478.00	488.00
g) Endowment Trust Funds	2.28	2.30	2.30	2.32	2.32

There is a system of internal audit, pre-audit by the auditors of the State Government followed by annual post-audit by the A.G. Haryana. The finances of the University are professionally managed as the university has hired Chartered Accountant firm for advising on annual balance sheet and income expenditure statement. The Accounts Branch is fully computerized and records are transparent. Whenever, there are some objections, audit requisitions and audit paras, the required explanation is timely given by the respective DDOs and as such all pending issues are resolved in time as per laid procedures and there has been no case of financial embezzlement in the history of the University till date.

The surplus funds are invested on the recommendations of the Investment Committee and the University is managing its finances in a way that the dependence on State grants is minimal especially for the developmental projects. In addition to the generation of the funds from internal resources in the form of fees from self financing courses and distance education programmes, the University is getting assistance from various external agencies like UGC, AICTE, DST, DBT, World Bank, BARC, DEC, etc. Further, the university has a commercialization policy for rented out auditorium for private and public functions by outsider institutions/organizations. The income through consulting activities has also started contributing to university's income in recent years.

Moreover, our University was first amongst the universities of this region to have paid all arrears of 6<sup>th</sup> Pay Commission in time and also first university in this region to have granted promotion to all eligible teachers

under Career Advancement Schemes of UGC and as such no single case of promotion is pending with office as on date. This has been quite motivating to the teaching fraternity of this university to have a perception that their due benefits are granted in time.

## **6.5 Internal Quality Assurance System**

The IQAC in the university came into being on 03-01-2004 and has been working regularly effectively as per the norms of NAAC. It was recently reconstituted, as per the guidelines of UGC, on 02.01.2013 vide Endst. No. NAAC/IQAC/2013/165-239. The IQAC is a nodal agency of the University for ushering in the era of total quality management by working out intervention strategies to enhance overall quality in the institution. The meeting of IQAC have been conducted on regular intervals and all Annual Quality Assurance Reports (AQARs) have been files with NAAC within due dates. Further, annual report of the IQAC on quality enhancement measures is placed before the University Court in its annual meeting for its perusal.

The IQAC has been instrumental in evolving the quality practices and their implementation. The unique features include that on an average a faculty member devotes more than 40 hours in a week towards studies, research and other administrative work and departments remain available up to 05:00 p.m. for six days in a week. The teachers remain available during this period either in the respective departments or laboratories or library or computer centre. All the teaching staff is well connected with administration through Internet and Intercom. Remedial courses and bridge courses are organized wherever required to cover up the deficiencies of the weaker students.

There is a system of Self Appraisal Report (SAR) for teaching staff. The SAR Proforma has been devised on the basis of specimen Proforma developed by the UGC and is filled up by every teacher at the end of each academic year. Assessment of faculty performance by students is being implemented in all MTech Programmes covered under TEQIP duly funding of World Bank. In the other departments also, such students' feedback is taken by the faculty members for making necessary improvements in teaching pedagogies and course contents. The teachers actively contribute their services in examination duties, admission duties

and other administrative responsibilities as assigned from time to time. The University has decided to allocate at least 10 percent of the university budget for R&D activities.

Further, Several senior faculty members are acting as reviewers/guest editors for international journals and members of editorial boards of national and international journals. Several MoUs signed with different institutions especially with University of Manitoba, Canada and University of Maryland, USA for academic exchange programmes. Signing of MoUs with BARC, Mumbai and TCG Life Sciences, Kolkata for research collaboration are adding to its research value.

The University has its policy to keep the teachers updated through training programmes, orientation and refresher courses which update them in their respective field of knowledge. Further the IQAC has constituted various standing committees for continuously suggesting the benchmarks for (a) administrative-processes and citizen charter; (b) students support services; (c) teaching-learning pedagogies; (d) research-quality standards; (e) extension-cum-social interface (f) mock assessment on the pattern of NAAC; (g) university's website updating & information standardization process and (h)for the university's publicity and competitive-marketing policy. All these committees are quite active and have been instrumental in promulgating various policies that encourages sustainable quality in all spheres of academics.



## **Criterion VII: Innovations and Best Practices**

---

### **7.1 Environment Consciousness**

The Guru Jambheshwar University of Sc & Tech, Hisar, has been named after Guru Jambheshwar Ji Maharaj, a Saint environmentalist of 15th century. He was a great visionary, who had foreseen the drastic consequences of man's action, destroying nature for economic development. University truly follows the environment related principles of Guru Jambheshwar Ji Maharaj. The University is situated over a sprawling area of about 372 acres. It presents a spectacle of harmony in architecture and natural beauty. Approximately, 225 acres of land has been developed provided with all modern facilities such as road networks, water supply, street lighting, electricity supply and parks / lawns. Rest of the area is full of greenery. University is running M.Tech. and M.Sc. Environment Science courses in Department of Environment Sc & Engineering since its inception.

University is recipient of 'Green Campus of the Year' award by the World Management Congress at India International Centre, New Delhi. The award was given by Irina A. Orolbaeva, Ambassador of Kyrgyzstan to India, on the occasion of a programme organized by the World Management Congress on 'Beginning the Management Decade 2010-2020' University has taken many initiatives to make the campus eco friendly. Communication Multi-media and Infrastructure Association of India (CMAI) has adjudged Guru Jambheshwar University of Science and Technology (GJUST) as the best Infrastructure and Green Campus University of Haryana for year 2014. In terms of Energy Conservation LED fixtures & Solar laminar have been provided in university. University has eliminated the use of electricity for heating water by using solar heating system in hostels. University has also reduced electricity consumption with high efficiency lighting, tube-lights and ventilation system. LED lights have been installed in Auditorium, Nano Sc. and HSB building. No bulb is used for light purpose.

University is also making use of Renewable Energy. A solar power plant of 3KW is successfully working. Two another projects have been submitted to state / central agencies for obtaining subsidy to implement the projects. We have also made provision in budget for

setting up of solar power plant. Rain water harvesting system has been installed at various pockets of university for water recharge. In order to achieve, Carbon Neutrality green house gases emissions have been reduced to restrict personnel transportation and promote eco friendly conveyance in the campus. University also collects solid waste to reduce green house gases emission. As far as plantation is concerned university has planted approximately 30000 saplings during last four years. Also green land is used for carbon sequestration. About 125 big trees (more than 50 years old) have been transplanted in campus. University is making efforts for Hazardous Waste Management by implementing improved irrigation system, waste water treatment and use of treated waste water for lawn irrigation. A sewage treatment plant of capacity 2.5 MLD has been installed and commissioned. The university has a contract with a company (Synergy Waste Management) for picking up wastes and residuals from University Health Centre, Department of Pharmaceutical Sciences etc. of the university.

University has its own E-Waste policy in collaboration with HARTRON as per policy of state Government circulated by Secretariat for Information Technology vide letter no 03/20/2000/3SIT/2242, dated 28/3/2011. University has also initiated process of disposing off computers and it's allied items for VC Office, Registrar office, Applied Physics, CSE, BME, Mathematics Department, CIL Lab, Mathematics, Academic Branch, General Branch, UCIC, University Library and Accounts Branch. Other Departments/Offices of university are also in the process of disposing E-Waste. The University has started the process of Green Audit of its Campus and has also applied for EIA (Environment Impact Assessment) certification.

## **7.2 Innovations**

The very conception of the university is highly innovative and benignly sensitive to the evolving requirements of the economy and society. The university has been a pioneer in starting professional and highly job oriented courses. After the rapid expansion of its facilities and academic programmes, the university has been in a mode of consolidation of the gain so that quality of academic programmers and relevance of research can be ensured.

The University has adopted many innovations particularly after accreditation in 2009 to promote quality technical education. Internal Quality Assurance Cell was fully activated on the pattern recommended by the NAAC. In the spirit of consolidation state-of-the-art infrastructure facilities, governance and leadership innovations, teaching and research, IT enabled resources, library and other learning resources, physical infrastructure have been initiated. Innovative practices being followed by university are listed as given below:

- A Knowledge Park for commercialization of research outcomes has been conceptualized as adjunct to the university. The knowledge park is proposed to develop necessary support system to encourage hi-tech startups. The State Government has agreed to transfer around 171 acres of land to the university for the purpose. The knowledge park is based on the model of Techno-park Trivandrum.
- The teaching departments are encouraged to generate resources for constant up gradation of physical facilities and equipments from various funding sources including World Bank, DBT, Ministry of Food Processing Industries, MHRD, MHFW, Ministry of Defence (DRDO), Ministry of Social Justice and Empowerment, Ministry of Youth Affairs and Sports, National Board for Higher Mathematics, Distance Education Council, Ministry of Women and Child Welfare, Department of Scheduled Castes, Haryana and of course, from the State Government, the AICTE and the UGC.
- The university was first in region to implement computerized answer script recognition system in 2001. All the answer scripts bear a barcode system. OCR is used to read the barcode and particulars of students so as to ensure full confidentiality and speed up of work.
- The university is first in region to promote education for SC students by giving them facility of taking admission by paying token amount of Rs. 1000/- at the time of admission. Rest of the fee is received from scholarship amount automatically without any hardship to SC students.
- The ASC of the University has been organizing courses of various durations to meet the training need of the

faculty and ministerial staff of the university. The ASC was graded as number one ASC of India during last year for its innovations and quality of work.

- The Department of Business Management has been elevated to the status of Haryana School of Business merging Departments of Business Management and Business Economics and accorded an elevated status. The HSB has introduced following innovative practices
  - Regular publication of bi-annual research journal
  - Organization of three week workshop on various topics related to research methodology of business issues.
  - Admissions to all MBA programmes on CAT score basis.
- The library of the University is modernized and equipped with e-books, e-journals, e-newspapers, other learning e-resources, computing facility, soft-wares and other equipments. The library services are fully computerized. The library cards and books are bar coded which added to efficiency in issue and return process.
- Strengthening of University research base:
  - Admissions to Ph.D. programmes are made on the basis of entrance test and UGC regulations of year 2009 are followed.
  - It is made mandatory to publish two research papers in refereed journals before submission of Ph.D thesis, presentations and seminars by research scholars at regular intervals and limiting the size of thesis to 200 pages.
  - One research paper is also required to be published in a journal before submission of M.Tech. research project.
  - Majority of the faculty members hold major sponsored research projects sanctioned by external agencies.
  - Faculty members are required to make presentation in front of faculty members before submission of their proposals for research

projects for funding and papers in National / International conferences.

- The consultancy and extension activities are picking up and some labs have been recognized by government departments and corporate for testing purposes.
- The University has established Business Development Group in order to promote activities in the areas of University Industry interaction, academic exchange, sponsored research projects and consultancy. The University has gone for MoUs with two foreign universities i.e., University of Manitoba, Canada and University of Maryland, USA to promote academic exchange programmes. MoUs with BARC, Mumbai and TCG Life Sciences, Kolkata were also executed.
- The University was first in region to implement credit base system in 2006. In July 2009 this system was further revised for better and transparent evaluation of students and to take a leap towards continuous evaluation of students and flexibility in learning. It has helped improve teaching-learning process and has fastened the process of declaration of the results. Having gained experience with this system we are continuously making improvements in CBS wherever required. It is envisioned to make CBS comparable to international standards and practices so as to facilitate credit transfer.
- All the students have been provided campus wide Wi-Fi service to enable to them to remain connected with the best and latest and avail benefit of e-learning resources provided by the university library. Students are also provided with Institutional Email address on university official domain.
- University has a policy to hold qualifying test for recruitment of teachers, in case applications are more than fifty and candidates are called for interview in ratio of 1:10.
- For week students university has a policy to arrange extra classes through TEQIP funding.

- For the overall development of students, state of the art facilities related to sports and cultural activities have been made available to the students.

### **7.3 BEST PRACTICES**

#### **1. 1<sup>st</sup> Best Practice**

Total Computerization - A Step towards Paperless Offices

#### **2. Objective of the Practice**

More and more, communication networks based on modern telecommunication technology are allowing all forms of information, whether voice, data, text or video to be exchanged to and from anywhere and at any time, leading to thorough transformation of the world. It is realized that university administration and academic processes can be made more effective with a robust IT system in place. With this in view, the university endeavored to remain ahead of others with regard to technological developments to implement and maintain the total computerization through paperless official business. Following are the major objectives/ intended outcomes of this “best practice”

- Improvement in the quality of services by re-engineering the administrative processes in order to extend convenience, minimization of expenditure/ manual work and sharing of information.
- To ensure greater transparency, legibility, efficiency, objectivity, accountability and speed that can help circumvent unbridled discretion and corruption by providing improved services in a time bound manner.
- Greater control over the processes without any delay.
- Maintenance of voluminous record in electronic form and minimization of use of paper, keeping with the spirit of environment protection.
- Instant access to information (if needed), in turn, reduction in response time.

### 3. The Context

Advances in ICT have been accelerating at an unparalleled pace in history. Many breakthroughs can be described as revolutionary. More and more, communication networks based on modern telecommunication technology are allowing all forms of information, whether voice, data, text or video to be exchanged to and from anywhere and at any time, leading to thorough transformation of the world. It is realized that university administration and academic processes can be made more effective with a robust IT system in place. With this in view, the university endeavored to remain ahead of others with regard to technological developments to implement and maintain the total computerization through paperless official business.

### 4. The Practice/Evidence of Success

Administrative offices like Accounts Branch, Examination Branch, Directorate of Distance Education, Admission Cell, Library etc. are at verge of full automation. The university has in-house designed and developed Result Preparation Software which prepares results, DMCs or degrees for all kinds of examinations conducted by the university. The awards are collected on OCR and OMR sheets for easy data entry. Representatives of various universities visit University's EDP Cell to see the result preparation process.

Using the Integrated Library Computer Software (Libsys) the complete database of Library, holdings of books and Library membership have been computerized. The Library provides On-Line Public Access Catalogue (OPAC) facility to the readers to search and know the status of the reading material available in the Library. OPAC is now extended to the desktop of every user over Intranet by using WEB-OPAC and it functions even if the internet is not functional for want of connectivity.

University Computer & Informatics Centre (UCIC), a central facility, furnishes the needs of maintenance of software/ hardware installed in these offices. UCIC has indigenously designed and developed the university magnificent website. The site is

continuously maintained and updated to cover all day-to-day activities.

In order to cater to all needs of Information & Communication Technologies for students, staff and faculty of university, a dedicated facility of Networking Cell has been setup in the university. At present all the teaching departments, hostels (common room), administrative blocks and other offices have been connected with a combination of wired and wireless network. The internet connectivity has been provided through 150 Mbps (NME) leased line free of cost to all constituent of university on 24 X 7 basis. The intranet embedded with institutional Email IDs is used for the circulation/ communication of common notices/information. The network has been empowered through high capacity and secured active and passive components. University is also in the process of expanding this network to newly created buildings and setting up a reliable and secured Wi-Fi Campus under Phase-III.

#### 5. Problems Encountered & Resources Required

As any change is naturally resisted and computerization cannot be an exception, the university took it as a challenge to reckon with right from beginning. To overcome this challenge, the staff members were formally trained to initiate, develop, implement, and maintain computerized applications in the entire university system. Secondly, 'Computer Literacy' is made essential qualification in the eligibility criteria of new appointments, particularly for administrative staff.

### **2<sup>nd</sup> Best Practice**

#### 1. Title of the Practice

“Minor Research Projects through University funding”

#### 2. Objective of Practice

It has been felt that today there is an urgent need to foster innovative technologies/ideas which have the potential to contribute in socio-economic growth of the Nation and to



strengthen the country scientifically and technologically. To inculcate an advanced scientific temper amongst university teachers so as to enable the Nation to leapfrog in to next phase of development as a predominantly knowledge-based society, the University intends to encourage the teachers to adopt methodological approach and to upgrade their teaching abilities by taking up the research projects and get an exposure to the agencies/institutions of international repute.

### 3. The Context

While continuously involved in the teaching and other administrative assignments, many teachers even with their will to contribute for research work have hardly the time to go for the project grants to outside agencies and also carrying out their research work by giving regular visits to outside laboratories while also completing their project in a fixed time frame. In order to create a research temper especially among young teachers and to promote excellence in research in higher education, a scheme to support minor research programmes of university teachers in various disciplines has been incepted, keeping in mind that being a Science & Technology University, steadily it could be made a major hub of research in all disciplines in near future, in addition to the inculcation of innovative research skills and motivating them in adopting suitable research facilities at nodal level.

### 4. The Practice

Since the inception of this scheme of minor research project, during every session, the teachers especially the young teachers are showing their keen interest in applying under this scheme and have successfully completed their projects within the fixed time frame and have also contributed research papers in various reputed journals of National and International level. Keeping in view the enthusiastic approach of University Teachers, the scheme which was earlier proposed with a max. grant of Rs. 30,000/- per teacher in session 2009-10 (for session 2010-11) had been enhanced to Rs. 40,000/- per teacher just after a couple of sessions and the award of research project grant was allowed to all the teachers who have shown their interest and have successfully completed their respective projects. The University has allowed approx. Rs. 14 lac

for this innovative practice in a short span of just 4 years where University Teachers have worked on over 40 research projects during this short span.

#### 5. Evidence of Success

The publication of research papers in various National and International Journals, which is one of the mandatory conditions for carrying out projects under such a scheme, is in itself an evidence of success of such an initiative of the University. It had been made mandatory for all the teachers who work under scheme to publish one research paper. During last three years it has been observed that outcome of this research scheme has been very fruitful as most of the teachers have been able to publish even more than one research paper per head.

#### 6. Problems Encountered & Resources Required

Although there seems to be no major problem encountered by the University except the financial implications that has never been the limiting factor for the University when the question of academic improvement and upliftment of academic growth of teachers or students arises. On the contrary, University authorities strongly feel that the participation of teachers should be enhanced for adopting this new practice of Minor Research Projects to a large extent by motivating and encouraging the teachers in this regard. Additionally, the university also sanctioned rupees one lakh per minor research project to five teachers in 2013-14 for undertaking innovative research project under scheme of innovative research activities a sub head of UGC development grant.

Some of the New Innovations and Best Practices which the university would like to pursue are as under:

1. Complete automation of administrative offices of the university.
2. System of Open Book Exam as a part of internal assessment of the students.
3. Launching of some integrated academic and research programmes.

## **Evaluative Reports of the Departments**

**Faculty of Engineering and Technology**  
**The Departmental Profile**

## Evaluative Report of the Department of Computer Science & Engineering

---

1. Name of Department : Computer Science & Engineering
2. Year of establishment : 1995
3. Is the department part of a School/Faculty of the university?  
Yes/Faculty
4. Course/Programmers and subject combination offered:
  - PhD(CSE)
  - M.Tech.(CSE)
  - M.C.A
  - B.Tech.(CSE)
  - B.Tech.(IT)
5. Interdisciplinary programs offered and department involved:  
The B. Tech. (CSE/IT) programmes interdisciplinary in the sense that diverse courses in the subjects like Math's, Physics, Chemistry, and Mechanical Engineering and Economics are offered in the first year.
6. Courses in collaboration with other universities, industries, foreign institutions, etc.: UST Global Campus Business Partner
7. Details of Programmes discontinued , if any, with reasons : NIL
8. Examination System: Credit Based System (Semester System)
9. Participation of the department in the courses offered by the other departments:  
Courses based on Fundamental of Computers, various programming languages, networking and computer graphics are offered by the department to the various streams of B.Tech. programmes
10. Number Of Teaching posts sanctioned and filled:

Post Name	Sanctioned	Filled	Actual(including CAS & MPS)
Professor	06	00	05
Associate Professors	12	06	03
Asst. Professors	24	14	14*
Full Time contractual	NIL	18+2**	20

\*One on EOL, \*\*Guest Faculty

11. List of Faculty on Regular basis :

Sr. No.	Name (s) of the Teaching Faculty	Designation	Qualifications	Experience a) Teaching b) Industry c) Research (years)	No. of Ph.D. students guided for the last 4 years Completed +submitted +registered
1	Prof. Dharminder Kumar	Professor	Ph.D.	25	2+2+5
2	Prof. Dinesh Kumar	Professor	Ph. D	22	0+0+3
3	Prof. Saroj	Professor	Ph. D.	17	0+0+2
4	Prof. Yogesh Chaba	Professor	Ph.D.	18	2+3+2
5	Prof. Pardeep K.Bhatia	Professor	Ph.D.	21	3+1+2
6	Dr. Rishipal Singh	Associate Professor	Ph. D.	14	0+0+5
7	Dr. Dharmender Kumar	Associate Professor	Ph. D	12	0+0+1
8	Dr. O.P Sangwan	Associate Professor	Ph. D	9	0+0+2
9	Ms. Jyoti	Assistant Professor	MCA, M. Tech	15	Nil
10	Ms. Sunila	Assistant Professor	MIT, M. Tech	8	Nil

11	Ms. Ritu	Assistant Professor	M. Tech	9	Nil
12	Mr. Sunil Kumar	Assistant Professor	M. Tech	9	Nil
13	Mr. Sanjeev Kumar	Assistant Professor	M. Tech	10	Nil
14	Mr. Jaswinder Singh	Assistant Professor	M. Tech	9	Nil
15	Mr. Jai Bhagwan	Assistant Professor	M. tech.	2	Nil
16	Mr. Manoj	Assistant Professor	M. Tech.	1.5	Nil
17	Mr. Abhishek Kajal	Assistant Professor	M. Tech.	4.5	Nil
18	Mr. Narender Kumar	Assistant Professor	M. Tech.	6	Nil
19	Mr. Amandeep	Assistant Professor	M. Tech.	2	Nil

12. List of senior visiting fellows, adjunct faculty, emeritus professors :  
No such appointment is made, but following visited the department on request:

<b>Sr. No</b>	<b>Name</b>	<b>Designation</b>
1	Dr. R. K. Dutta	Director, MERIT, Delhi
2.	Prof. Karmeshu	JNU, New Delhi
3.	Dr. M. M. Pant	Ex-PVC, IGNOU, Delhi
4.	Prof. Naseeb Singh Gill	M.D.U. Rohtak
5.	Prof. R. S. Chillar	M.D.U. Rohtak
6.	Prof. (Retd.) Ashok Kumar	KUK

7.	Prof. Durgesh Pant	KOU, Haldwani
8.	Prof. M. N. Hooda	Director, BVICAM, Delhi

13. Percentage of classes taken by temporary faculty: About 50%
14. Program-wise student teacher ratio. (Please see how teachers are to be distributed) :
- Total Teachers: Total=39{(Permanent (19):5Prof+3Associate Prof+ 11 Assistant Prof), Contractual=20{(18TA+2GF)}
- Total M.Tech. Students: 60(51) Student Teacher Ratio- 12:1
- Total MCA: 180+ 12= 192(172) Student Teacher Ratio- 18:1
- Total B.Tech (CSE): 480 + 24x3=552+5% TFW (565), Student Teacher Ratio- 18:1
- Total B.Tech (IT): 240+12x3= 276+5% TFW (250), Student Teacher Ratio- 18:1

Note: Services of teachers are to be taken from other engineering departments for specialized courses such as electronics based courses, math's etc.

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

Position	Sanctioned	Filled
System Manager	1	1
Programmer	1	-
A.T.O.	-	1
Supdt.	1	-
Dy. Supdt.	2	-
Tech Asst – I	2	1
Asst cum DEO	5	3
Sr. Scale Stenographer	1	-



JLA	2	-
Lab Tech	3	1
Steno Typist	3	-
Clerk cum JDEO	5	2
Lab-Attendant-cum Cleaner	8	9
Peon	4	1+2(thru contractor)
OTHERS		
Senior Hardware Technician	-	1(on contract)

16. Research thrust area as recognized by major funding agencies :

Data Mining, Mobile Communication, Image Processing, Soft Computing, Software Engineering, Etc.

17. Ongoing projects from national and international funding agencies :

17.1 National ongoing project: NIL

17.2 International ongoing project: 01 (TEQIP-II)

Sr. no	Name of agency	Project title	Name of the Investigator(s)/Co-investigator	Grant received
1.	World Bank	TEQIP – II (1.2)	Mr. Jaswinder Singh/ Mr. Jai Bhagwan	As per Allocation

18. Inter-institutional collaborative project and associated grant received:

NIL

19. Departmental projects funded by DST-FIST; UGC-SAP/ CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

Sr. no	Name of agency	Project title	Name of the Investigator(s)/ Co-investigator	Grant received (in lacs)
1.	UGC-SAP	Role and Application of ICT in Inaccessible areas(UGC-SAP)	Prof. Dharminder Kumar / Prof. Yogesh Chaba	20+3.95+3.95+3.95= 31.85
2.	UGC/ MRP	Evolution of data mining techniques based decision support system model for health care	Prof. Dharminder Kumar / Dr. Varun Kumar	7.91800
3.	UGC/ MRP	Smart Form Analyzer: An Analytical Tool	Prof. Pardeep Kumar Bhatia	10.233
4.	UGC/ MRP	Development of Model of Secured Communication in Mobile Adhoc Network	Prof. Yogesh Chaba/ Dr. Yudhvir Singh	9.468
5.	AICTE-RPS	Design of Architecture for Ubiquitous Computing	Prof. Yogesh Chaba/ Mr. Sunil Nandal	16.0

20. Research facility/ Centre with: NIL
- State recognition

- National recognition
  - International recognition
21. Special research laboratories sponsored by created by industry or corporate bodies : NIL
22. Publication :
- Number of papers published in peer reviewed journals(national/international)

Sr. No.	Name	Total International Journal	Total National Journal	Total National Seminar/ Conference	Total International Seminar / Conference	International Databases
1.	Prof. Dharminder Kumar	17	00	15	03	12
2	Prof. Dinesh Kumar	07	00	03	06	14
3	Prof. Saroj	13	00	12	09	09
4	Prof. Yogesh Chaba	33	00	03	03	10
5	Prof. Pardeep K. Bhatia	14	02	06	09	10
6	Dr. Rishipal	08	00	02	04	05
7	Dr. Dharmender Kumar	14	01	09	01	07
8	Dr. OP Sangwan	10	00	03	08	11
9	Ms. Jyoti	04	00	02	02	04
10	Ms. Sunila	12	00	06	02	00
11	Ms. Ritu	00	01	04	01	00
12	Mr. Sunil Kumar	04	00	04	01	00
13	Mr. Sanjeev Kumar	09	00	06	03	00

14	Mr. Jaswinder Singh	04	00	04	01	00
15	Mr. Jai Bhagwan	02	00	00	00	01
16	Mr. Manoj	03	01	02	00	00
17	Mr. Abhishek Kajal	06	00	00	00	00
18	Mr. Narender	03	00	04	00	00
19	Mr. Amandeep	01	00	04	02	00

- Monographs                   NIL
- Citation Index:               Ranging up to 64
- h-Index:                       Ranging up to 5
- Impact Factor:               Average       2

Name of teacher	Number of Chapter	Year
Prof. Dharminder Kumar	01	2009
Prof. Dinesh Kumar	03	2010
Prof. Saroj	01	2010
Prof. Yogesh Chaba	02	2010
Prof. Dinesh Kumar	02	2011
Prof. Saroj	01	2011
Prof. Dinesh Kumar	02	2013

- Chapters in Books
- Books with ISBN with details of publishers

Author name	Title	Year of publication	Type of Book	ISBN Number
Prof. Dharminder Kumar, and Dr. Sangeeta Gupta	MIS	Excel Publishers	Text	971-81-7446-427-1

Dr. Pardeep K. Bhatia	Computer Graphics	IK Publication, 2013, 3 <sup>rd</sup> Edition	Text	9789380026176
Dr. Pardeep K. Bhatia	ASP.NET	IK Publication, 2014, 1st Edition	Text	978-93-82332-36-7
Dr. Om Prakash Sangwan (Co-authored with Prof. Yogesh Singh )	Soft Computing Techniques in Software Engineering	Lambert Academic Publishing , 2012	Reference	978-3-659-28023-8

23. Details of patents and income generated: NIL

24. Areas of consultancy and income generated: NIL

25. List of faculty selected national/international to visit other laboratories/institutions/industries in India and abroad:

Sr. No.	Faculty Name	National/ International	Lab./inst./ industries name	India /Abroad
1.	Prof. Saroj Nominated by UGC for Commonwealth Academic Fellowship for year 2014	International	University of Kent, UK	Abroad

Sr. No.	Name of Teacher	Professional Bodies / National Bodies	Detail of Expert Committee	Academic Bodies of other institutes/Editorial Board
1.	Prof. Dharminder Kumar	<ul style="list-style-type: none"> <li>▪ Lifetime member of Computer Society of India.</li> <li>▪ Lifetime member of Society for Promotion of science and Technology in India.</li> <li>▪ Member of Finance Committee, HSCS/HSTES Panchkula.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Member advisory Committee of UGC-SAP Programme University of Hyderabad.</li> <li>▪ Expert Member of National Board of Accreditation Committee.</li> <li>▪ Expert Member, UGC(MRP Committee)</li> <li>▪ Expert Member UGC(Universit y for Potential for Excellence)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Editor in-chief, International Journal of Artificial Intelligence and Knowledge Discovery.</li> <li>▪ Member UG/PG BOS, Central University of Haryana, Mehndergar.</li> <li>▪ Member, BOS, IGU, Meerpur, Rewari.</li> <li>▪ Member, UIET, MDU, Rohtak.</li> </ul>
2.	Prof. Dinesh Kumar	<ul style="list-style-type: none"> <li>▪ Lifetime member of ISTE.</li> <li>▪ Lifetime member of CSI.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Convener, Inspection Committee Engineering institute.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Expert Member,</li> <li>▪ Board of study in Electrical Engineering and Electronics.</li> <li>▪ Faculty of Technology and Engineering from 1/9/2011 to 31/08/2014.</li> <li>▪ The Maharaja Saya Ji Row University of Baroda, Gujarat.</li> <li>▪ Member UG Board of studies Department of Computer Science and Application, MDU Rohtak from 19 June, 2012- 18 June, 2014.</li> </ul>
3.	Prof. Pardeep K. Bhatia	<ul style="list-style-type: none"> <li>▪ Lifetime membership of CSI.</li> <li>▪ Lifetime</li> </ul>	<ul style="list-style-type: none"> <li>▪ Member of advisory committee, organizing</li> </ul>	<ul style="list-style-type: none"> <li>▪ DRC, Department of CSE, MDU Rohtak.</li> </ul>

		<p>membership of Information Journal of Information Processing.</p> <ul style="list-style-type: none"> <li>▪ Membership of ACM SIGSOFT.</li> </ul>	<p>committee, chaired a session of various conferences organized by RG education society, Rohtak.</p>	
4.	Dr. Dharmender Kumar	<ul style="list-style-type: none"> <li>▪ Lifetime membership of CSI.</li> </ul>		
5.	Dr. Om Prakash Sangwan	<ul style="list-style-type: none"> <li>▪ Member, IACSIT (International Association of Computer Science and Information Technology, USA (Membership No. 80331424)</li> <li>▪ Life Member, Computer Society of India, India. (Membership No. 01083699)</li> <li>▪ Member, Computer Science Teacher Association, New York, USA (Membership No. 4711935)</li> <li>▪ Member, International Association of Engineers (IAENG), Hong Kong (Membership No. 123697)</li> </ul>		

26. Faculty serving in :  
National committees, b) International committees, c) Editorial Boards, any other. (Teacher-wise Detail)

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs). (Year wise Detail) :

Year 2013

<b>Sr. No.</b>	<b>Name of Teacher</b>	<b>Title of Programme</b>	<b>Host Organization</b>	<b>Place</b>	<b>Date</b>
1.	Prof. Dinesh Kumar	National Workshop on Intellectual Property rights and technology commercialization.	IPR & TC cell GJUS&T	Hisar	18 March, 2013
2.	Prof. Dinesh Kumar	Workshop on ICQ	IPR & TC cell GJUS&T	Hisar	29-30 August, 2013
3.	Dr.Dharmender Kumar	Refresher Course in Information Technology	CSE Deptt, Academic Staff Colleges, GJUS&T	Hisar	3-22 June, 2013



4.	Ms.Sunilla, Ms.Ritu Mr.Sanjeev Kumar Mr.Sunil Kumar Mr.Jaswinder Singh	FDP on Recent advances in Engineering and Technology	TQIP-2, Academic Staff College	Hisar	20-28 Sept, 2013
----	---	---	---	-------	------------------------

Year 2012

<b>Sr. No.</b>	<b>Name of Teacher</b>	<b>Title of Programme</b>	<b>Host Organization</b>	<b>Place</b>	<b>Date</b>
1.	Prof. Dinesh Kumar	National Workshop on Recent Trends in Engineering and Technology	Guru Jambheshwar University of Science and Technology, Hisar	Hisar	15 March 2012
2.	Prof. Saroj	Recent Trends in Computing, Mechatronics and Communication,	RTCMC-2012, Organized by OM Institute of Technology and Management, Hisar.	Hisar	25-26 Feb. 2012
3.	Prof. Saroj	Role of Information and Communication Technology in Inaccessible Areas	Department of Computer Science and Engineering, G.JU.S.&T., Hisar.	Hisar	21 March 2012

4.	Mr.Jaswinder Singh Mr.Sanjeev Kumar	Orientation Programme (OP-IX)	Academic Staff College (ASC), GJUS&T-Hisar	Hisar, Har-yana	09 <sup>th</sup> May, 2012 to 05 <sup>th</sup> June 2012

Year 2011

Sr. No.	Name of Teacher	Title of Programme	Host Organization	Place	Date
1.	Prof. Saroj	UGC Sponsored one Week Sponsored Professional Development Programme	GJUS&T, Hisar	Hisar	14-20 January, 2011
2.	Prof. Pardeep K. Bhatia	UGC Sponsored Refresher Course in I.T	ASC, KUK	Kurk-shetra	15 June, 2011
3.	Prof. Pardeep K. Bhatia	UGC Sponsored Refresher Course(Computer Science & Engineering) on "An overview of MATLAB".	ASC, GJUS&T	Hisar	23 May 2011 11 June 2011

4.	Prof. Pardeep K. Bhatia	UGC Sponsored Refresher Course(Computer Science & Engineering) on “Neuro - Fuzzy Relational Model for Software quality assessment”	ASC, GJUS&T	Hisar	23 May 2011
					11 June 2011

Year

Year 2010

Sr. No	Name of Teacher	Title of Programme	Host Organization	Place	Date
1.	1. Prof. Dharminder Kumar 2. Mr. Sanjeev Kumar	Engineering & Technology	ASC, GJUST, Hisar	Hisar	5 January, 2010
2.	Prof. Dharminder Kumar	Engineering & Technology (G/O)	ASC, GJUST, Hisar	Hisar	9 January, 2010
3.	Prof. Dharminder Kumar	Faculty Development Programme	CCSHAU	Hisar	13 May, 2010
4.	Prof. Dinesh Kumar	Role and Applications of ICT in inaccessible Areas (RAICTIA-10)	GJUS & T, Hisar	Hisar	17-18 Febuary, 2010

5.	Prof. Dinesh Kumar	Intelligent Systems and Nanotechnology (HSN-2010)	Institute of Science & Technology, Klawad, Distt. Yamuna Nagar	Yamuna Nagar	26-28 Febuary, 2010
6.	Prof.Dinesh Kumar Prof. Saroj Mr.Sunil Kumar Mr.Jaswinder Singh Mr.Sanjeev Kr.	Recent Trends in Engineering & Technology	GJUS & T, Hisar	Hisar	6 March, 2010
7.	Prof. Dinesh Kumar	Engineering & Technology	GJUS & T, Hisar	Hisar	21 Dec., 2009 to 09 Jan., 2010
8.	Sunil Kumar Mr.Jaswinder Singh	Refresher course on Engineering Sciences	GJUS & T, Hisar	Hisar	21 Dec., 2009 to 09 Jan., 2010
9.	Mr. Jaswinder Singh Mr. Sanjeev Kumar, Ms. Ritu	Workshop on Network & Information Security NIS-10	DCRUST, Murthal	Murthal	21 October, 2010

Faculty underwent staff development programmes during the last four year: (Year Wise Detail):

Faculty Recharging Programmes	2009-10	2010-11	2011-12	2012-13	2013-14
Refresher courses	1	1	-	-	2
HRD	-	-	-	-	-

programmes					
Orientation programmes	-	1	-	-	-
Staff training conducted by the university	1	1	-	-	5
Staff training conducted by other institutions	1	-	-	-	-
Summer / Winter schools, workshops, etc.	-	-	-	-	-

28. Student projects:

- a) Percentage of students who have done in-house project including inter-departmental projects: 68%
- b) Percentage of students doing project in collaboration with other universities/industry/institute: 32%

Year Wise Detail:

2009-2010		2010-11		2011-12		2012-13		2013-14	
No. of projects executed									
within the university	outside the university	within the university	outside the university	within the university	outside the university	within the university	outside the university	within the university	outside the university
82	42	93	41	89	39	86	48	110	48

29. Awards/ recognitions received at the national and international level:

Sr. No.	Name	Awards Name	National/international
1.	Prof. Saroj	Common Wealth Academic Fellowship	International
2.	Prof. Yogesh Chaba	Got Best Paper Award	IETE/ISA International Conference on VLSI, Communication and Instrumentation (ICVCI 2011), Kottayam (India) – 2011
3.	Prof. Saroj	Teacher's Fellowship under Faculty Improvement Programme of UGC	National
4.	Dr. Rishipal Singh	Teacher's Fellowship under Faculty Improvement Programme of UGC	National
5.	Ms. Jyoti	Teacher's Fellowship under Faculty Improvement Programme of UGC	National

a) Faculty NIL

b) Doctoral Students NIL

30. Seminars /Conference/ Workshops organized and the source of funding(national / international) with details of outstanding participants, if any:

Sr. No.	Name of Workshop/ Conference	Date and Year	Funding Agency and Amount(in lac)
1.	RACTIA	17-18 Feb,2010	UGC, 1 .0
2.	RACTIA	9 March,2012	UGC, 1.76
3.	RACTIA	5-March, 2013	UGC, 1.60

31. Code of ethics for research followed by the departments: University policy is being followed: As per university norms.
32. Student profile programs wise:

Name of the Programs	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B. Tech. (CSE/IT)	CENTRALISED				
MCA	CENTRALISED				
M. Tech.*	1463	73	78	4.9%	5.3%
Ph. D.	813	08	14	0.9%	1.7%

Programmes	2009-2010		2010-11		2011-12		2012-13		2013-14	
	No. of Applications Received	No. of students Admitted	No. of Applications Received	No. of students Admitted	No. of Applications Received	No. of students Admitted	No. of Applications Received	No. of students Admitted	No. of Applications Received	No. of students Admitted
CSE/IT		140	-	141	-	155	-	153	-	152
		72	-	71	-	74	-	74	-	55

M. Tech	333	30	318	30	332	31	480	30	-	30
MCA	-	60	-	61	-	60	-	59	-	56
Ph.D.	174	00	151	06	203	06	171	04	114	06

33. Diversity of students:

Name of the Programme	% of students from the same university/ Board	% of students from same state university/ Board	% of students from universities outside state/ Board	% of students from other countries/ Board
Ph. D.+ Pre-Ph.D.	31%	44%	25%	Nil
M. Tech.	34%	61%	5%	Nil
MCA	NIL	96%	4%	Nil
Btech(CSE)	NA	95%	4.28%	0.72%
Btech(IT)	NA	97.7%	2.3%	Nil

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category wise :

Competitive examinations name	No. of student	Category				
		GEN	SC	OBC	ST	Other
Civil Services	Nil					
Defense services	2	2	-	-	-	-
NET,SET,GATE	55*					
Others(GRE,CAT)	50*					

\*Approximate



35. Student progression:

<b>Student progression</b>	<b>% against enrolled</b>
UG to PG	34%
PG to M.Phil.	Nil
PG to Ph.D	15%
Ph.D to Post-Doctoral	NA
Employed	
▪ Campus selection	10%
▪ Outside Campus	60%
Entrepreneurs	1%

36. Diversity of staff:

<b>Number of faculty who are Graduates</b>	
Of the same university	2/20
From other university within the state	16/20
From university outside the states	2/20
From university outside the country	00/20

37. Number of Faculty awarded Ph.D., M. Phil, D. Sc., and D. Litt. During the assessment period :

<b>S. No.</b>	<b>Degree awarded</b>	<b>No. of faculty</b>
1.	Ph. D.	06

38. Present detail of infrastructure of department :

<b>Infrastructure</b>	<b>Detail</b>
Library	Number Of Books:16,392 Number of Titles: 6996
Internet facility for staff and student	To All at speed of 150 Mbps
Total number of class rooms	11
Class room with ICT facility	03
Student laboratory	13
Research laboratory	05

39. List of Doctoral and Post-Doctoral students, research associates:

<b>Course</b>	<b>From the host institution/ University</b>	<b>From other institutions/ Universities</b>
Doctoral 27 (17 Registered + 4 Completed Pre-Phd + 6 Pursuing Pre-Phd) 13 (10 Awarded+ 2 submitted)	8	19
Post-Doctoral	NA	NA
Research Associates	NA	NA

40. Number of post graduate students getting financial assistance from the university:  
08 Students of M.Tech(CSE) and 02 Ph.D. students from TEQIP-II

41. Was any need assessment exercise undertaken before the development of new program(s)? If so, highlight the methodology:

Yes, through staff council meetings and Feedback system from all stakeholders i.e. alumni, employer, teachers, and students.

42. Does the department obtain feedback from :

- a. Faculty on curriculum as well as teaching – learning –evaluation?  
If yes, how does the department utilize the feedback:

Feedback from faculty is taken and discussed in BOS under Chairman and faculty under Dean.

- b. Student on staff, curriculum and teaching – learning –evaluation?  
If yes, how does the department utilize the feedback:

Yes, once in a semester.

- c. Alumni and employer on the programs offered and how does the department utilize the feedback:

Yes, through alumni meet and at the time of campus recruitment and involvement in BOS and faculty meetings.

43. Detail of distinguished alumni of department(Maximum 10):

<b>Name of Alumni</b>	<b>Course</b>	<b>Designation</b>
Ms. Nisha Nain	B.Tech.(CSE)	Selected as Pilot in Air Force
Ms. Ankita Sharma	B.Tech.(IT)	Working as Captain in Indian Army
Ms. Priyanka Tyagi	B.Tech.(CSE)	Lead Eng. in Disney Mobile San Franscio
Mr. DigVijay Singh	B.Tech.(CSE)	Working in Warner Brothers Hollywood Production House
Mr. Vipin Shrewat	B.Tech.(IT)	Pursuing PhD From Berkley Uni. (Completed a project with IIT for which he has offered a scholarship of 1.7lack.
Mr. Balraj	B.Tech.(CSE)	Team Leader Mobile Application in Four Orange Technology(He has designed a mobile application “grill guide” which is rated as world top ten applications of apple mobiles)
Prof. Pardeep K. Bhatia	Ph.D.	Professor in CSE Dept,

		GJUS&T,Hissar
Prof. Yogesh Chabba	Ph.D.	Professor in CSE Dept, GJUS&T,Hissar
Dr. Dharmender Kumar	PhD	Associate Professor in CSE Dept, GJUS&T,Hissar
Mr. Sandeep Sanasrwal	B.Tech.(IT)	Co-founder technology at clever Cues.
Ms. Manmeet Kaur	B.Tech.(IT)	Senior Consultant at ORACLE, Delhi

44. Detail of the student enrichment program :

<b>Enrichment Program Name</b>	<b>Detail</b>
Special Lecture	<ol style="list-style-type: none"> <li>1. Prof. R.K. Duta, Director MERIT EX-SCI president on 5-9-2013.</li> <li>2. Remedial lecture for weak students by Dr.Pankaj, Assistant Professor by Department, GJUS&amp;T on 21-9-2013.</li> <li>3. Prof. Vikram, Dean Academics and Professor in CDLU, Sirsa on 7-10-2013.</li> <li>4. Extension lecture by Mr. Anshul, All India GATE Topper. 2012</li> <li>5. Extension Lecture by Mr. Shyam Kaushik, Executive, HP, Chennai, 2012.</li> <li>6. Two Lectures By Prof. Karmeshu, JNU, Delhi (December, 2010)</li> </ol>
Seminar	<ol style="list-style-type: none"> <li>1. Seminar by CMC, Noida on 19.4.2012</li> <li>2. Seminar by CS Infotech, Chandigarh on 20.4.2012</li> </ol>

Workshop\ Any other	<ol style="list-style-type: none"> <li>1. Mr.Vipin Sehrawat pursuing PhD from Berkley University conducted 1 week workshop on BIG DATA from 25 Nov-2 Dec2013.</li> <li>2. Personality Development Programme conducted by Mr. Pankaj, Professional Trainer (PACPL Institute)</li> <li>3. Personality Development Programme conducted by Mr. Parveen, Professional Trainer, (PDCPA Institute)</li> <li>4. Career Development Programme conducted by Mr. Dinesh Nagpal, Professional Trainer (Career Launcher Educate).</li> </ol>
CSI Student Branch	<p>Student Branch of CSI with 297 students was opened in the department.</p> <p>Under CSI we have accomplished various activities such as</p> <p>One day symposium on cyber security Ethical hacking was conducted on 5<sup>th</sup> May, 2010.</p> <p>Gurgoan Based Cyber link solution and mobile application company delivered a lecture and recruited three MCA students as Trainee.</p> <p>One day workshop on ethical hacking by Mr.Gurmeet Bindra (Pursuing Phd and a student).</p> <p>Online Aptitude test by AMCAT was conducted in 2011 and 2012.</p> <p>Seminar on “Current Technologies” by NIIT, Hisar &amp; IBM.</p>
IT Fest & PTM	<ol style="list-style-type: none"> <li>1. Umang-2013 organized on 20-21 April, Umang IT Fest Between all</li> </ol>

	<p>affiliated colleges of university.</p> <p>2. Nirman-2013 It organized on 20-21 Nov.2012. Nirman an IT Fest to short list the team for Umang-2013 between university teaching departments of university.</p> <p>3. Technocratic robotic &amp; IT Fest organized on 19-20 Nov.2012 between various teaching departments of university</p> <p>4. Kshitij-2010 organized on 19-20 Oct.2010 sponsored by HSCS with a amount of 1.63 lacks.</p>
--	--

45. List the teaching method adopted by the faculty for different programs :

Sr. No.	Method Used
1.	White Board
2.	Tutorials
3.	Assignments
4.	e-learning
5.	Power Point Presentations and Seminars

46. How does the department ensure that programme objective are constantly meet and learning outcomes are monitored?

Yes, through Group discussions, quizzes, seminars, & continuous evaluation and feedback system from various stakeholders.

47. Highlight the participation of student and faculty in extension activities?

Students and faculty are being regularly participating in NSS, Blood donation, literacy camps especially in rural areas, cultural activities like youth festivals, international women day celebration, Science conclave for school students etc.

48. Give detail of “beyond syllabus scholarly activities” of the department?

Technological enhancement workshops, seminars on current technologies, student National level IT Fest & Invited talks in specialized areas etc.

49. State whether the programme/ department is accredited/ graded by other agency. If yes give detail:

Yes, NBA Accredited (BTech (IT), B.Tech. (CSE) and MCA for 3 years.

50. Briefly highlight the contribution of the department in generating new knowledge, basic or applied:

Six faculty members did their PhD degree in last five years. Two faculty members have submitted their PhD thesis and four are pursuing their PhD degree. The Department has published about 313 research papers in International/ National Journals and Conferences. Teachers of the department are involved in research based projects funded by UGC/AICTE and they have completed four projects so far to the tune of Rs. 43.609 lacks. UGC-SAP is going on in the department to the tune of approx. Rs. 31.85 lacks. The department has also organized national conferences and IT fests. The department was also identified for World Bank financial assistance under TEQIP-I and in TEQIP-II (1.2) also.

51. Five major strength, Weakness, Opportunities and challenges (SWOC) of the department:

#### **Major Strength**

- Qualified Faculty,
- High quality Infra-structure,
- UGC/AICTE funded Projects,
- Research Environment,
- TEQIP-I&II.

#### **Major Weaknesses**

- Inadequate regular faculty,
- Less number of publications in SCI indexed journals,
- Moderate quality of Students admitted and
- Limited International exposure of the Faculty.

### **Opportunities**

- To get more funding from the UGC/AICTE/DST in the form of projects, MODROB etc.
- Motivating students for their skill up gradation
- Motivating students to appear in competitive examinations such as NET, CAT, GATE, GRE etc.
- Motivating students for international fellowships.

### **Challenges**

- To improve the academic merit of the students joining various programmes
- Getting campus placements to students
- To interact with Industries
- To interact with international universities

52. Future plan of department: The Department intends to focus on the following:

- Technology Up-gradation.
- Organization of Faculty Development Programmes.
- New Research projects from funding agencies
- Joint research work with institutes of national importance such as NITs and IITs.
- Enhancement of Placement activities.
- Quality research publications in the referred journals
- Syllabus revision MTech.is underway and Syllabus for the other programmes will also be revised in the light of the latest advances and requirement of the industry.
- NBA Accreditation/re-Accreditation.



## **Evaluative Report of the Department of Printing Technology**

---

1. Name of Department: Printing Technology
2. Year of establishment: 1996
3. Is the Department part of a School/Faculty of the University? Yes  
Faculty of Engineering & Technology
4. Names of programmes offered (UG, PG, M.Phil., Ph. D., Integrated Masters; Integrated Ph. D, D.Sc., D.Litt., etc.)
  - i) B. Tech (Printing Technology)
  - ii) B. Tech (Printing & Packaging Technology)
  - iii) M. Tech (Printing Technology)
  - iv) Ph. D.
5. Interdisciplinary programmes and departments involved:  
Other subjects like Physics, Chemistry, Mathematics, Mechanical Engineering, Electronics, Environmental Science, etc. are covered by the respective departments of the university.
6. Courses in collaboration with other universities, industries, foreign institutions, etc.:  
NIL
7. Details of programmes discontinued, if any, with reasons: B. Tech. in Printing & Packaging Technology program has been discontinued from the academic session 2013-14 due to the unavailability of teaching faculty in the particular stream in India.
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System: Semester with credit based system.
9. Participation of the department in the courses offered by other departments:  
No

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asstt. Professors/others):

	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual (including CAS &amp; MPS)</b>
Professors	02	Nil	Nil
Associate Professors	04	Nil	02
Asst. Professors	11	09	07
Others (Teaching Associates)	Nil	09	09

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No. of Ph.D./ M. Phil. students guided for the last 4 years</b>
Sh. A. K. Baral	M. Tech, M.B.A	Associate Professor & Chairman	Printing Technology	19	----
Sh. A. Pandey	M.Tech, MHRM	Associate Prof.	Printing Technology	18	----
Sh. A. Goyat	M.Tech, MBA	Assistant Professor	Printing Technology	09	----
Sh. Pankaj Kumar	M.Tech, PGDBA	Assistant Professor	Printing Technology	09	-----

Mrs. Vandana	M.Tech, MHRM	Assistant Professor	Printing Technology	09	----
Mrs. Priti Prabahakar	M.Tech (Electrical)	Assistant Professor	Power System (Electrical)	15	----
Sh. Abhishek Saini	M. Tech	Assistant Professor	Printing Technology	8 Months	
Sh. Sanjeev Kumar	M.Tech	Assistant Professor	Printing Technology	8 Months	
Sh. Satish Kumar	M.Tech	Assistant Professor	Printing Technology	8 Months	

12. List of senior Visiting Fellows, adjunct faculty, emeritus professor:  
Prof. R.K. Anayath, Dy. Director, TITS, Bhiwani
13. Percentage of classes taken by temporary faculty-programme-wise information:
- B. Tech. Printing Technology : 45%
  - B. Tech. Printing & Packaging Technology : 50%
  - M. Tech. Printing Technology : Nil
14. Programme-wise Student : Teacher Ratio
- B. Tech. Printing Technology : 15:1
  - B. Tech. Printing & Packaging Technology: 15:1
  - M. Tech. Printing Technology : 4:1
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual
- Technical support staff

Sr. No	Designation	Sanctioned Post	Filed	Actual
1	Tech. Assistant	01	01	01
2	Lab. Tech.	----	-----	02
3	Lab Attendant	09	07	07

4	Plate-Maker*	----	----	01
5	Operator*	----	----	01
6	Binder*	----	----	01

\* On contractual basis

ii) Administrative

Sr. No	Designation	Sanctioned Post	Filed	Actual
1	Dy. Supdt.	01	Nil	Nil
2	Assistant-cum-DEO	01	Nil	Nil
3	Clerk	01	01	01+01*
4	Steno Typist	01	01	01
5	Peon	01	01	01+01*

\*On contractual basis

16. Research thrust areas as recognized by major funding agencies: Print Quality Factors and Standardization in Print Production Systems (the major funding agency is TEQIP-II)
17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise:
- Minor research project on “Dot gain in Sheet Fed Offset Press” funded by University Grants Commission, New Delhi during 2010-11 sanctioned to Sh. A. K. Baral.
  - Minor research project on “Minimizing Printed Waste to the Lowest Level in Sheet Fed Offset Press” funded by University Grants Commission, New Delhi during 2011-12 sanctioned to Sh. A. K. Baral.
  - Minor research project on “Printer’s Mottle & Ink Trap Mottle on Coated paper in Single Colour Sheet Fed Offset Press” funded by University Grants Commission, New Delhi during 2012-13 sanctioned to Sh. A. K. Baral.

- d) Minor research project on “Print Quality Evaluations of Different Grades of Paper in Sheet Fed Offset printing & Digital Printing” funded by University Grants Commission, New Delhi during 2013-14 sanctioned to Sh. A. K. Baral.
18. Inter-institutional collaborative and associated grants received:
- |    |                             |    |
|----|-----------------------------|----|
| a) | National collaboration      | No |
| b) | International collaboration | No |
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. Received an amount of INR 62.5 lacs under TEQIP-II, World Bank assistance scheme.
20. Research facility/centre with:
- |   |                            |     |
|---|----------------------------|-----|
| • | State recognition          | Nil |
| • | National recognition       | Nil |
| • | International recognition. | Nil |
21. Special research Laboratories sponsored by/ created by industry or corporate bodies:
- Heidelberg, one of the major organizations in the field of Printing machines and allied products, Germany has donated a Prinect work station laboratory (worth of INR 80.00 lacs) for the teaching and research activities for the students.
22. Publications:
- |   |  |     |
|---|--|-----|
| ▪ | Number of papers published in peer reviewed journals (national/international)  | 34  |
| ▪ | Monographs   | Nil |
| ▪ | Chapters in Books  | Nil |
| ▪ | Edited Books   | Nil |
| ▪ | Books with ISBN with details of publishers   | 01  |
| • | Anjan Kumar Baral, “Sheet Fed Offset Technology” in 2010 (ISBN 978-81-909828- 2-5) published by Arihant Prakashan Pvt. Ltd., New Delhi |     |
| ▪ | Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare                      |     |

- |  |  |     |
|--|--|-----|
|  | Database-International Social Sciences Directory, EBSCO host, etc. | Nil |
|  | ▪ Citation Index-range/average                                     | Nil |
|  | ▪ SNIP   | Nil |
|  | ▪ SJR  | Nil |
|  | ▪ Impact Factor-range/average                                      | Nil |
|  | ▪ h-index  | Nil |
23. Details of patents and income generated: Nil
24. Areas of consultancy and income generated: No
25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad:
- a) Sh. Anjan Kumar Baral, Associate Professor & Chairman, visited Glasgow Metropolitan College, Glasgow, Scotland to attend training in their Printing Technology laboratories during 2009.
  - b) Sh. Anjan Kumar Baral, Associate Professor & Chairman, visited School of Printing & Packaging, Beijing Institute of Graphic Communication, Beijing, China to attend training in their Printing Technology laboratories during 2013.
  - c) Sh. Anjan Kumar Baral, Associate Professor & Chairman, visited Department of Printing Technology, Anna University, Guindy, Chennai to attend Print Speciality Teacher's training organized by PrintPromotion, Germany and exposure in their Printing Technology laboratories during 2012.
  - d) Sh. Ambrish Pandey, Associate Professor, visited Sanden, United State of America for attending training in Printing Technology during 2013.
  - e) Sh. Ambrish Pandey, Associate Professor, Germany for attending training in Printing Technology during 2013.
  - f) Sh. Pankaj Kumar, Assistant Professor, visited Sanden, United State of America for attending training in Printing Technology during 2009.
26. Faculty serving in
- a) National committees :

- I. Sh. A. K. Baral as Expert member for evaluating financial aid to the Community Colleges (Polytechnics of Printing Technology), AICTE, New Delhi on 24-07-2013.
- II. Sh. A. K. Baral as Expert member of Scrutiny Committee of AICTE, New Delhi for SKP (skill knowledge provider)/ Institutes received under NVEQP (National Vocational Education Qualification Framework) for the year 2013-14 (Polytechnics of Printing Technology), AICTE, New Delhi.
- III. Sh. A. K. Baral as member for Advisory & Technical Committee for national Conference on “Emerging Trends and Advances in Mechanical Engineering & Green Print Pack” on 30-11-2013 organized by SITM, Rewari.

b) International committees : Nil

c) Editorial Boards :

Sh. Amrish Pandey: Advisory Committee of IJPAS, New Delhi.

Sh. Pankaj Kumar: Advisory Committee of IJPAS, New Delhi.

d) any other (please specify) Nil

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs):

Sh. Anjan Kumar Baral

- I. Training on “Packaging Technology” from 02-03-2009 to 16-03-2009 at Glasgow Metropolitan College, Glasgow, Scotland, United Kingdom, under TEQIP, World Bank.
- II. Refresher course in “Engineering Sciences” at Academic Staff College, GJUS&T, Hisar from 21-12-2009 to 09-01-2010.
- III. Refresher course in “Information Technology” at Academic Staff College, GJUS&T, Hisar from 21-01-2011 to 10-02-2011.
- IV. Refresher course in “Research Methodology” at Academic Staff College, GJUS&T, Hisar from 20-09-2011 to 10-10-2011.
- V. Training on “Print Specialist Teachers” from Sept.25-27, 2012 at Department of Printing Technology, Anna University, Chennai by Print Promotion, Germany.

- VI. Workshop on “Disaster Management” from 14-02-2013 to 16-02-2014 at ASC, GJUS&T, Hisar.
- VII. Training on “Paper Testing Equipments” organized by Department of Printing Technology, GJUS&T, Hisar on 30-09-2013.
- VIII. International Training on “Quality Control in Sheet Fed Offset Printing” at School of Printing & Packaging, Beijing Institute of Graphic Communication, Beijing, China.
- IX. Attended the one day workshop on “Printing and packaging: The fastest growing industry” organized by Institute of Mass Communication and Media Technology. Kurukshetra University and North India Printers Association on 24-02-2010.
- X. One day national workshop on “Recent Trends in Engineering and Technology” being organized by Faculty of Engineering & Technology, GJUS&T, Hisar on 06-03-2010.
- XI. One day National workshop on “Career Opportunities in Packaging Technology” being organized by Department of Printing Technology, GJUS&T, Hisar on 09-09-2010.
- XII. One day National Workshop on “Chemistry in Our Lives” Organized by Department of Chemistry, GJUS&T, Hisar on 14-03-2011.
- XIII. One day National Workshop on “Recent Trends in Engineering & Technology (RTET-11)” Organized by Faculty of Engineering & Technology, GJUS&T, Hisar on 15-03-2011. Also acted as the Organizing Secretary.
- XIV. One day National Workshop on “Computational Mathematics” Organized by Department of Mathematics, GJUS&T, Hisar on 26-03-2011.
- XV. One day National Workshop on “Awareness to Save Mother Earth” Organized by Department of Environment Science and Engineering, GJUS&T, Hisar on 22-04-2011.
- XVI. One day Workshop on “Trends in Optical Coating for Head Up Display & High laser Damage Threshold” Organized by Department of Physics, GJUS&T, Hisar on 27-06-2011.
- XVII. One day National Workshop on “Patent Awareness vis-à-vis Intellectual Property Rights” Organized by Intellectual Property Rights and Technological Commercialization Cell, GJUS&T, Hisar on 09-08-2011.
- XVIII. Attended two days workshop on “Curriculum of Diploma Programmes in Printing Technology” at NITTTR, Chandigarh from 27-28, December, 2012 and was an expert.



- XIX. Attended one day National Workshop on “Recent Trends in Engineering & Technology” Organized by Dean, FET, GJUS&T, Hisar on 15-03-2012.
- XX. Attended one day Workshop on “Upcoming Ideas and Opportunities” Organized by Packaging Connections, Gurgaon on 19-07-2013.
- XXI. Attended workshop on “Quality Initiatives in Technical & Higher Educational Institutes (In compliance with NBA & NAAC Accreditation) organized by Engineering Staff College of India, Hyderabad under TEQIP-II from 22-24 October-2013.
- XXII. Attended one day workshop on “Emerging Trends in Digital Printing” organized by Department of Printing Technology, GJUS&T, Hisar on 27-09-2013 and acted as the Coordinator of the workshop funded by TEQIP-II.
- XXIII. Attended one day workshop on “e-Gazette” organized by Govt. of India Press, New Delhi on 13-12-2013.

Sh. Ambrish Pandey

- i. Training at ESCI Hyderabad.
- ii. Training at SHRUT and SMIT foundation Benguluru.
- iii. Training on “Colour measurement and colour management in printing from 25-11-13 to 03-12-13 at Bregisch University Wuperda, Germany.

Sh. Arohit Goyat

- i. Attended State Level Workshop on “Mobilization of Lumbosacral Joint in Clinical Conditions” organized by Dept. of Physiotherapy, GJUST, Hisar (March 20, 2013)
- ii. Attended National Workshop on “Intellectual Property Rights & Technology Commercialization” organized by Intellectual Property Rights & Technology Commercialization Cell (IPR & TCC), GJUST, Hisar (March 18, 2013)
- iii. Attended National Seminar on “Media Alteration : Mission, Profession & Corporatization” organized by Department of Advertising Management & Public Relations, GJUST, Hisar & sponsored by University Grants Commission, New Delhi (March 16-17, 2012)

- iv. Attended National Workshop on “Recent Trends in Engineering & Technology (RTET - 12)” organized by the Faculty of Engineering & Technology, GJUST, Hisar (March 15, 2012).
- v. Attended National Workshop on “Patent Awareness vis-à-vis Intellectual Property Rights” organized by Intellectual Property Rights & Technology Commercialization Cell (IPR & TCC), GJUST, Hisar and sponsored by Patent Informatics Centre, Hisar; Haryana State Council for Science & Technology; TIFAC, DST, Govt. of India, New Delhi (Aug 09, 2011)
- vi. Attended the National Workshop-cum-Conference on “Recent Trends in Mathematics and Computing (RTMC ’11)” organized by the Deptt. of Computer Engineering, Information Technology & Deptt. of Mathematics, The Technological Institute of Textile & Sciences (TITS), Bhiwani, Haryana (May 21, 2011)
- vii. Attended the National Workshop on “Awareness to Save Mother Earth” organized by Deptt. of Environmental Science and Engineering, GJUST, Hisar & sponsored by Ministry of Earth Sciences, Govt. of India and Society for Promotion of Science & Technology in India (SPSTI)(April 22, 2011)
- viii. Attended the National Workshop on “Trends in Media Writing” organized by Department of Advertising Management & Public Relations, GJUST, Hisar & sponsored by University Grants Commission, New Delhi (March 28, 2011)
- ix. Attended the National Workshop on “Computational Mathematics” organized by Department of Mathematics, GJUST, Hisar & sponsored by University Grants Commission, New Delhi (March 26, 2011)
- x. Attended the National Workshop on “Recent Trends in Engineering & Technology” organized by the Faculty of Engineering & Technology, GJUST, Hisar (March 15, 2011)
- xi. Attended International Training Programme “Prinect Prepress Workflow Basic Training” conducted by Print Media Academy, Heidelberg (I) Pvt. Ltd. (December 27-31, 2010) at Deptt. of Printing Technology, GJUST, Hisar.
- xii. Attended National Workshop on “New Facets of Printing Technology” organized by Institute of Mass Communication and Media Technology, Kurukshetra University, Kurukshetra (November 24, 2010)
- xiii. Attended National Workshop on “Rheology of Inks and Coatings” organized by Anton Paar India, Gurgaon (04.06.2010)

- xiv. Attended National Workshop on “Recent Trends in Engineering & Technology (RTET - 10)” organized by the Faculty of Engineering & Technology, GJUST, Hisar (March 06, 2010).
- xv. Attended the National Workshop on “Creativity in Advertising” organized by Department of Advertising Management & Public Relations, GJUST, Hisar (March 05, 2010).
- xvi. Attended a Refresher Course (RC - 01) on “Engineering Sciences (Printing Technology)” organized by Academic Staff College, Guru Jambheshwar University of Science & Technology, Hisar (21.12.2009 to 09.01.2010)

Sh. Pankaj Kumar

- I. One day national workshop on “Recent Trends in Engineering and Technology” being organized by Faculty of Engineering & Technology, GJUS&T, Hisar on 06-03-2010.
- II. One day national workshop on “Career Opportunities in Packaging Technology” being organized by Department of Printing Technology, GJUS&T, Hisar on 09-09-2010.
- III. One day National Workshop on “Chemistry in Our Lives” Organized by Department of Chemistry, GJUS&T, Hisar on 14-03-2011.
- IV. One day National Workshop on “Recent Trends in Engineering & Technology (RTET-11)” Organized by Faculty of Engineering & Technology, GJUS&T, Hisar on 15-03-2011. Also acted as the Organizing Secretary.
- V. One day Workshop on “Trends in Optical Coating for Head Up Display & High laser Damage Threshold” Organized by Department of Physics, GJUS&T, Hisar on 27-06-2011.
- VI. Attended one day National Workshop on “Recent Trends in Engineering & Technology” Organized by Dean, FET, GJUS&T, Hisar on 15-03-2012.
- VII. Attended one day workshop on “Emerging Trends in Digital Printing” organized by Department of Printing Technology, GJUS&T, Hisar on 27-09-2013 .
- VIII. Attended one day workshop on “e-Gazette” organized by Govt. of India Press, New Delhi on 13-12-2013.

Mrs. Vandana

- i. Refersher course 21-12-2009 to 09-01-2010 at ASC-GJUS&T.
- ii. Training in flexographic printing in July 2010.

- iii. FDP, ASC-GJUS&T (TEQIP-II) from 20-09-13 to 28-09-13.

Mrs. Priti Prabhakar

- i. Refresher course 20-01-11 to 10-02-11 at ASC-GJUS&T
- ii. Orientation course 13-06-11 to 09-07-11 at ASC-GJUS&T
- iii. E-learning-University of MANITOBA March 23-29, 2009.
- iv. FDP, ASC-GJUS&T (TEQIP-II) from 20-09-13 to 28-09-13.

Sh. Abhishek Saini

FDP, ASC-GJUS&T (TEQIP-II) from 20-09-13 to 28-09-13.

Sh. Sanjeev Mathur

FDP, ASC-GJUS&T (TEQIP-II) from 20-09-13 to 28-09-13.

Sh. Satish

FDP, ASC-GJUS&T (TEQIP-II) from 20-09-13 to 28-09-13.

- 28. Student projects:
  - Percentage of students who have done in-house projects including inter-departmental projects  
100% in B.Tech programme and 40% in M.Tech programme.
  - Percentage of students doing projects in collaboration with other universities/industry/institute 60% in M.Tech Programs.
- 29. Awards/recognitions received at the national and international level by:
  - Faculty Nil
  - Doctoral/post doctoral fellows Nil
  - Students: Sh. Bijender and Ms. Depika Rani were selected as best students by All India Federation of Master Printers, New Delhi into 2013.
- 30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:
  - I. One day seminar on “Career prospects in Printing & Packaging Technology” on 14-05-2009 (university funding).
  - II. One day National seminar on “Recent Developments in Package Printing” Hisar on 21-12-2009 (university funding)..

- III. One day national workshop on “Career Opportunities in Packaging Technology” on 09-09-2010 (university funding).
- IV. National Conference on “Modern Trends in Packaging Technology” on 22-03-2012 (university funding).
- V. One day workshop on “Emerging Trends in Digital Printing” on 27-09-2013 funding by TEQIP-II.
- VI. Two days National Conference on “Print Quality of Sheet Fed Offset & Digital Printing Technologies” 26-27, Feb. 2014.

31. Code of ethics for research followed by the departments: As per the university rules.

32. Student profile programme-wise:

Name of the Programme (refer to question no.4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B. Tech (Printing Technology)	Through AIEEE/JEE	219	38	36.4%	42%
B. Tech (Printing and Packaging Technology)	Through AIEEE/JEE	196	33	30.8%	35%
M. Tech (Printing Technology)	33	25	8	20.3%	56%

33. Diversity of students:

Name of the Programme (refer to question no.4)	% of students form the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M. Tech Printing Technology	80%	20%	Nil	Nil
Ph. D	100%	Nil	Nil	Nil

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise:

2010-11	-	01
2012-13	-	01

35. Student progression :

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	30%
PG to M.Phil.	----
PG to Ph.D.	10%.
Ph.D. to Post-Doctoral	----
Employed <ul style="list-style-type: none"> <li>• Campus selection</li> <li>• Other than campus recruitment</li> </ul>	i) 2009-10 - 03 ii) 2010-11 - 22 iii) 2011-12 - 18 iv) 2012-13 - 14 v) 2013-14 - 2 Rest of the students are placed through off campus placement.
Entrepreneurs	2 per cent

36. Diversity of staff:

<b>Percentage of faculty who are graduates</b>	
of the same university	67%
From other universities within the State	11%
From universities from other States	22%
From universities outside the country	Nil

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt. During the assessment period : Nil

38. Present details of departmental infrastructural facilities with regard to:

- |  |   |
|--|---|
| a) Library:                                    | Central library                             |
| b) Internet facilities for staff and students: | All the staff & students.                   |
| c) Total number of class rooms:                | 05  |
| d) Class rooms with ICT facility               | 01  |
| e) Students' Laboratories                      | 12  |
| f) Research Laboratories                       | 02 (Quality<br>Control Lab &<br>Princt Lab) |

39. List of doctoral, post-doctoral students and Research Associates:

- a) From the host institution/university Sh. A. K. Baral & Sh. A. Pandey
- b) From other institutions/universities Nil

40. Number of post graduate students getting financial assistance from the university: 18

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology: No new program is introduced.

42. Does the department obtain feedback from:

- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? Regarding the curriculum of the various programs offered by the department, at a regular interval of time, the faculty members along with the experts from the educational institutions and industries are consulted to update the content to take care of the present and future needs of the particular industrial sector. Minor changes are carried out first in the staff council followed by approval in the Board of Studies/Faculty meeting of the department and Academic Council of University.
- b) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback? No

- c) Alumni and employers on the programmes offered and how does the department utilize the feedback? Feedback from the alumni and employers are taken during the alumni meet and campus placement and the same is used for course curriculum design and practical and class room teaching methods and content development.

43. List the distinguished alumni of the department (maximum 10):

Kuldip Rathi (2002-06)	Head, Procurement	VLCC, Gurgaon
Rahul Saini (2002-06)	Project Manager	Siscom, Noida
Dipankar Gupta (1996-2000)	Press Manager	Indian Railway Press
Ramesh Panwar (2002-06)	Manager	Pine Tree Packaging
Vivek Varshney (2002-06)	Production Manager	PR Packaging
Amit Sharma (1996-2000)	Chief production Manager	Pearsons Ltd.
Nidhi Yadav(2002-06)	Production Manager	Gopson papers
Ishant Kalkal (2005-09)	Technical Manager	RSG Solutions
Rohit Munjal (2006-10)	Production Manager	Apple Packaging
Ravinder Baleshra (2006-10)	Head, Packaging Division	Marble Group

44. Give details of student's enrichment programmes (special lectures/workshops/seminar) involving external experts:

The students are required to undergo industrial training after the completion of fourth semester and sixth semester during the course of study, which is very unique to enrich their expertise and exposure to the real situations before completion of the course. At regular interval of time, workshops/seminars/conferences are organized for the students to interact with the subject experts from the academia/industry. Extension lectures/expert lectures are also organized for the students from time to time. Following experts were invited to deliver expert lectures to the students of the department during the last five years:

- a) Prof. R.K. Anayath, Dy. Director, TITS, Bhiwani
- b) Sh. Kamal Mohan Chopra, M.D., Foil Printers, Ludhiana (Punjab).



- c) Sh. Mujtaba Hussain, Saharanpur
- d) Sh. M.K. Moudgil, Press Manager, K.U. Kurukshetra
- e) Sh. J.K. Moudgil, Press Manager, P. U Chandigarh.
- f) Sh. A.K. Sinha, Director, Govt. Press, New Delhi.
- g) Sh. B.D. Mendiratta, Ex-principal, Pusa Polytechnic, New Delhi/
- h) Dr. Sunil Kumar, ACIRD, Yamunanagar.

45. List the teaching methods adopted by the faculty for different programmes:

Faculty members are adopting the following teaching methods to teach the students of the department:

- I. Preparation of subject notes in consultation of various available sources like, books, journals, reference from industry/institutions/conference proceedings, etc.
- II. Interactive class room teaching.
- III. Special class room teaching for the weak students.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

- I. Feedback from students.
- II. From industry experts.
- III. Continuous evaluations.

47. Highlight the participation of students and faculty in extension activities:

The faculty members are continuously involved in coordinators of various committees formed by the university, organizing industrial visit, study tour, trade fairs, etc. to enrich extension activities. Similarly, the students are also taking active participation in sports, NSS and other similar activities.

48. Give details of “beyond syllabus scholarly activities” of the department:

The students are encouraged to participate in various extracurricular activities and present research paper in various seminars/conferences/workshops/etc. M. Tech. students are publishing articles in various journals during their PG program. They are also preparing live projects during their study program.

49. State whether the programme/department is accredited/graded by other agencies? If yes, give details: No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:

The department imparts knowledge on basic and advanced areas of printing and packaging and also grooms the learners in practical aspects of printing on state-of-the-art machines which the department is in possession of.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

**Strength:**

1. Young and dynamic faculty members.
2. State of art facilities.
3. Faculty of the department has International exposure.
4. Industrial training (Two times trainings).
5. Course curriculum of various programs matching with the present and future needs of the industry.

**Weaknesses:**

1. Vacant teaching posts at higher position.
2. Less floor space.
3. Shortage of staff in labs/workshops.
4. Research laboratories.
5. Dependency of contractual faculty.

**Opportunities:**

1. Research activities in print technology.
2. Industry oriented research activity.
3. Short term skill oriented training programs.
4. Consultancy.
5. MOUs with International platform.

**Challenges:**

1. To fetch students with good rank in National level examinations..
2. Technologies change very fast and require high cost equipments.
3. Placement by foreign companies.

4. To procure consumables for the high speed printing machines & equipments.
5. Nearby institutions have started similar programs.

52. Further plans of the department :

- I. To develop Quality control laboratory for various print process with special importance to the industry application.
- II. To develop high end colour management lab in the department.
- III. To develop department as Centre of Excellence in the field of graphic art industry in India.

## **Evaluative Report of the Department of Electronics & Communication Engineering**

---

1. Name of Department: Electronics & Communication Engineering
2. Year of establishment: 2001
3. Is the Department part of a School/Faculty of the University? Yes
4. Names of programmes offered (UG, PG, M.Phil., Ph. D., Integrated Masters; Integrated Ph. D, D.Sc., D.Litt., etc.)
  - (i) B.Tech ECE
  - (ii) M.Tech ECE
  - (iii) Ph.D Electronics & Communication

5. Inter-disciplinary programmes and departments involved: Certain subject being interdisciplinary in nature, are taught by teachers of this Department following subjects in other department :

<b>Sr. No.</b>	<b>Subject name</b>	<b>Department</b>
1	Digital electronics	IT, CSE
2	Digital and analog communication	IT, CSE
3	Signal and System	BME
4	Electronics Engg	ME
5	Communication System	BME
6	Electronic Devices and Circuits	BME
7	Microprocessor and Interfacing	BME, FT

6. Courses in collaboration with other universities, industries, foreign institutions, etc. : No
7. Details of programmes discontinued, if any, with reasons: Nil
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System: Semester system with CBS
9. Participation of the department in the courses offered by other departments:
  - (i) Computer Science & Engg
  - (ii) Information Technology

- (iii) Biomedical Engineering
- (iv) Mechanical Engineering
- (v) Printing Technology
- (vi) Food Technology

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others):

	Sanctioned	Filled	Actual (including CAS & MPS)
Professors	2	1	2
Associate Professors	6	2	1
Asst. Professors	12	10	9+1 <sup>#</sup> (# On EOL)
Others	14	14	14

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

Sr. No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./M. Phil. students guided for the last 4 years
1.	Dr. Sandeep K. Arya	B.Tech., M.Tech., Ph.D	Professor	OCS, ROF, VLSI	20 Y	7
2.	Dr. Dushyant Gupta	M.Sc. (Electronics), M.Tech. (VLSI Design), Ph.D. (Electronics),	Professor	VLSI design and fabrication, Process modeling and simulation	Teaching 21Y Research 18 Y	3 (Pursuing)

		PGDCA, CCC				
3.	Dr. Sanjeev Dhull	Ph.D. (ECE)	Associate Professor	Signal Processing	14 Y	5 (Pursuing)
4.	Dr. Deepak Kedia	B.E., M.Tech., Ph.D.	Assistant Professor	Electronics and Com. Engg.	11Y	2 (Pursuing)
5.	Mr. Ramnish	B.E., M.Tech., Ph.D (Pursuing)	Assistant Professor	Electronics and Com. Engg.	8Y	Nil
6.	Mrs. Suman Dahiya	B.Tech., M.Tech.	Assistant Professor	Electronics and Com. Engg.	10Y	Nil
7.	Dr. Manoj Taleja	B.Tech., M.Tech., Ph.D	Assistant Professor	VLSI	11Y	Nil
8.	Mr. Vijaypal Singh	B.E., M.E., M.B.A., Ph.D (Pursuing)	Assistant Professor	Electronics and Com. Engg.	Teaching- 9.5 Y Industry-8 M	Nil
9.	Mr. Kuldeep Singh	M.Sc., M.Tech. (VLSI Design) Ph.D (Pursuing)	Assistant Professor	Micro Electronics & VLSI design	6 Y	Nil
10.	Mr. Ajay Kumar	B.Tech., M.Tech.	Assistant Professor	Antenna Design, Wireless Comm.	6 Y	Nil
11.	Mr.	B.E.,	Assistant	Electronics	2Y	Nil

	Vinod Kumar	M.Tech.	Professor	and Com. Engg.	5M	
12.	Ms. Ritu	B.Tech., M.E.	Assistant Professor	Com. Engg.	2Y	Nil
13.	Ms. Priyanka Dalal	B.Tech., M.Tech.	Assistant Professor	Electronics and Com. Engg.	1 Y	Nil

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors: Process is going on for the appointment of senior visiting Fellows, adjunct faculty, and emeritus professors:
13. Percentage of classes taken by temporary faculty-programme-wise information:
- (i) B.Tech: 49%
  - (ii) M.Tech: 12%
  - (iii) Ph.D: Nil
14. Programme-wise Teacher Student Ratio:
- (i) B.Tech: (1:16)
  - (ii) M.Tech: (1:2)
  - (iii) Ph.D: (1:2.5)
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

Positioned	Sanctioned	Filled	Actual
TA-1	Nil	1	1
Steno	1	--	Nil
Clerk	1	1+1	1+1=02
Lab Technician	2	1	1
Lab Attendant	5	8	8+1* on contract
Peon	1	1	1+1* (*on contract)
Sweeper	2	2	2
Assistant	Nil	1	Nil (on EOL)

16. Research thrust areas as recognized by major funding agencies: Optical Communication, VLSI, Wireless Communication
17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise: Nil
18. Inter-institutional collaborative projects and associated grants received:
  - a) National collaboration: Nil
  - b) International collaboration: Nil
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS,DPE; DBT, ICSSR, AICTE, etc.; total grants received: Nil
20. Research facility/centre with:
  - State recognition: The labs are equipped with state of art softwares including Mentor Graphics, Qualnet, Optism etc.
  - National recognition: Nil
  - International recognition: Nil
21. Special research Laboratories sponsored by/ created by industry or corporate bodies: Embedded System lab
22. Publications:
  - Number of papers published in peer reviewed journals (national/international) National: 15; International: 74
  - Monographs: Nil
  - Chapters in Books: Nil
  - Edited Books: Nil
  - Books with ISBN with details of publishers
  - Dr. Dushyant Gupta- 01 Analytical Modeling of Plasma Immersion Ion Implantation; L. L. Academic Publishing, Germany;
  - ISBN 978-3-659-10552-4.
  - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database- International Social Sciences Directory, EBSCO host, etc.
  - Citation Index-range/average:
    - i-10 index : up to 2
    - h-index : up to 6
    - SNIP



- SJR
- Impact Factor-range/average: Less than 1

23. Details of patents and income generated: Not yet registered
24. Areas of consultancy and income generated: The department is competent to give consultancy in the area. However, it is yet to be started.
25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad:

<b>Sr. No.</b>	<b>Name of Faculty</b>	<b>National/International Institutions</b>
1	Dr. Sandeep K. Arya	Visited Cheng Guang University Tao Yuan, Taiwan for presenting research paper in conference in June 2011
2	Dr. Sandeep K. Arya	JEPPIX International Training on “Photonics/Optical Communication” at Tule, Netherlands from 28-10-13 to 08-11-13
3	Dr. Dushyant Gupta	UK, Canada, Italy, Czech Republic
4	Dr. Sanjeev Dhull	Singapore workshop on Vivado 16-12-13 to 17-12-13
5	Dr. Sanjeev Dhull	Visited Kuala Lumpur for presenting research paper in conference in November 2011
6	Dr. Deepak Kedia	JEPPIX International Training on “Design & Fabrication of InP based Integrated Circuits” at Tule, Netherlands from 28-10-13 to 08-11-13

26. Faculty serving in :
- a) National committees  
Dr. Sandeep K. Arya: UGC NET Confidential Workshop
  - b) International committees: Nil
  - c) Editorial Boards: Nil
  - d) Any other (please specify): at University Level

Sr. No.	Name of Faculty	Responsibility
1	Dr. Sandeep K. Arya	Chairman PGBOS & UGBOS
2	Dr. Sanjeev Dhull	Member PGBOS, Member Anti Sexual Harassment Committee
3	Dr. Deepak Kedia	Member PGBOS, Member Cultural Advisory Committee, Member Faculty of Engineering and Technology, NSS Program Officer
4	Mrs. Suman Dahiya	NSS Program Officer, Hostel Warden
5	Mr. Ramnish	Member of UGBOS, PGBOS, Convener of Proctorial Board, Member of Admission Committee

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs). Teachers wise recharge activities are given below:

Dr. Sandeep K. Arya

1. One week on “Incident and Emergency Management”, sponsored by Ministry of Science & Technology, DST at Center for Disaster Management, Lal Bhadur Shastri National Academy of Administration, Mussorie, Dehradun, during 31<sup>st</sup> May to 04<sup>th</sup> June 2010.
2. Two week programme at Phononic IC’s JEPPIX w.e.f. 28<sup>th</sup> Oct 2013 to 10<sup>th</sup> Nov 2013 at TU/E Eindhoven, Netherlands.

Dr. Dushyant Gupta

1. Effect of Exponential Rise and Fall Time of the Pulse in Plasma Immersion Ion Implantation at National Workshop on Nano Technology and Applied Sciences HCTM, Kaithal (Haryana); pp 44-47; 2009.
2. Participation in FPGA Design & VHDL for Hardware Simulation and Synthesis at ASICTP (Italy) in Oct-Nov 2009.

Dr. Sanjeev Dhull

1. Attended two days workshop on Vivado from 16-12-13 to 17-12-13 in Singapore.

Dr. Deepak Kedia

1. 4-Weeks Orientation Course; 14-09-2009 to 10-10-2009; UGC Academic Staff College, GJUS&T, Hisar.
2. 3-Weeks Refresher Course on Engineering Sciences; 21<sup>st</sup> December 2009 to 9<sup>th</sup> January, 2010; UGC Academic Staff College, GJUS&T, Hisar.
3. 3-Weeks Refresher Course in “Research Methodology” from 20-09-2011 to 10-10-2011 at UGC Academic Staff College, GJUS&T, Hisar.
4. 3-Weeks Refresher Course in “Information Technology” from 15-05-2012 to 06-06-2012 at UGC Academic Staff College - B.P.S. Mahila Vishwavidyalaya, Khanpur Kalan (Sonapat)
5. 1-Week Short Term Course for Assistant Professor Grade III on “Mid Career Challenges in Higher Education” from 06-08-2013 to 12-08-2013 at UGC Academic Staff College, Panjab University, Chandigarh.
6. 2-day National Workshop on “Emerging Trends in Quality Education: The Road Ahead”, Organized by Internal Quality Assurance Cell (IQAC), GJUS&T, Hisar on August 29-30, 2013.
7. 1-Week TEQIP sponsored Faculty Development Program on “Recent Advances in Engineering & Technology” from 20-09-13 to 28-09-2013 at UGC Academic Staff College, GJUS&T, Hisar.
8. 2-Week TEQIP Sponsored International Training on “Design and Fabrication of InP based Integrated Circuits” from 28-10-2013 to 08-11-2013 at Eindhoven University of Technology, Eindhoven (Netherlands).

Mr. Ramnish

1. Attended TEQIP sponsored National Workshop on “NIS-09” at D.C.R.U.S.T., Murthal, March-6, 2009.
2. Attended National Workshop on “BME-09” at D.C.R.U.S.T., Murthal, Nov.12-13, 2009.
3. Attended National Workshop on “RTET” at G.J.U.S.T., Hisar, March.06, 2010.
4. Participated in the one day National Workshop on “PATENT AWARENESS VIS-A VIS INTELLECTUAL PROPERTY RIGHTS” at G.J.U.S.T., Hisar, August 9, 2011.

5. Attended National Workshop on “RTET” at G.J.U.S.T, Hisar, March.15, 2012.
6. Attended Workshop on research database Awareness at G.J.U.S.T., Hisar on May 7, 2013.

Ms. Suman Dahiya

1. National workshop on “Recent Trends in Engg. & Technology” organized by Faculty of Engg. & Technology GJUS&T, Hisar on March 17, 2009.
2. Workshop on “Emerging Trends in Digital Printing: organized by Printing Deptt. GJUS&T, Hisar on 27-09-2013
3. National workshop on “Recent Trends in Engg. & Technology” organized by Faculty of Engg. & Technology GJUS&T, Hisar on March 06, 2010.
4. National workshop on “RTET” organized by Faculty of Engg. & Technology GJUS&T, Hisar on March 15, 2011.

Dr. Manoj Taleja

1. Participated in 4 week orientation course organized by UGC-ASC, G. J.U.S. & T, Hisar, from 10/11/2010 to 07/12/2010.
2. Attended national workshop on “Chemistry in our lives” organized by Dept of chemistry GJ.U.S. & T, Hisar March 14, 2011.
3. Attended national workshop on “Recent trends in engineering and technology,” organized by FET, G. J.U.S. & T, Hisar, on March 15, 2011.
4. Attended National workshop on “Computational Mathematics” organized by dept of Dept of Mathematics, G JUS& T, Hisar, March 26, 2011.
5. Attended National workshop on “Trends in media writing” organized by dept of Advertising Management & Public Relations G. J.U.S. & T, Hisar March 28, 2011.
6. Attended National workshop cum-conference on mathematics and computing organized by TITS Bhiwani, May 21, 2011.
7. Attended National workshop on “Patent awareness - intellectual property rights” organized by IPR & TC cell GJUST, Hisar on Aug 09, 2011.
8. Attended national workshop on “Recent trends in engineering and technology,” organized by FET, G. J.U.S. & T, Hisar on March 16, 2012.

Mr. Vijay Pal Singh

1. Attended TEQIP sponsored one week workshop (2-6 Sept.

2013) on Computational Intelligence & Signal Processing, organized by Department of Electrical Engineering, DCRUST Murthal, Sonipat.

2. Participated in Dale Carnegie Training for High Impact Teaching Skills (HITS) conducted by Wipro under Mission10X programme from Nov. 16 to Nov. 17, 2009. The purpose of HITS is to develop some innovative and interactive ideas for teaching.
3. Participated in Intensive Teaching Workshop (ITW) conducted at Birla Institute of Technology and Science, Pilani, Rajasthan from July 18 to July 23, 2009. The purpose of ITW was to improve the teaching skills of faculty members and make them learn new teaching techniques and methodology of good teaching.
4. Attended one week workshop at D.C.R. University of Science and Technology Murthal on Emerging Trends in Electronics and Communication Industries from January 12 to January 16, 2009.

Mr. Ajay Kumar

1. Attended Two week ISTE workshop on Analog Electronics conducted by IIT Kharagpur from 4<sup>th</sup> to 14<sup>th</sup> June 2013.
2. Paper presented in 16<sup>th</sup> International Workshop on Physics of Semiconductor Devices (IWPSD-2011) held at IIT Kanpur during Dec.19-22, 2011.
3. Attended National Seminar on Nano Technology on 11<sup>th</sup> April 2009, organized by R.P.Indraprastha Group of Institutions, Karnal
4. Attended National workshop on Network Security & Cryptography on 27<sup>th</sup> – 28<sup>th</sup> Feb.,2009 organized by CSE Deptt., HCTM Kaithal
5. Attended Workshop on VLSI Design from Jan. 13,2009 to Jan. 16, 2009.orgnized by ECE Deptt., HCTM Kaithal
6. Attended Workshop on Faculty Development from July 30, 2007 to Aug 03, 2007 organized by HCTM Kaithal
7. Attended Workshop on Nano Technology & Modelling on January 5<sup>th</sup>, 2007 organized by ECE Deptt., HCTM Kaithal

Mr. Vinod Kumar

1. A Workshop on “Time Management held” on 31<sup>st</sup> Oct., 2009 at DCRUST, Murthal.
  2. A Workshop on “Basic and applications of MATLAB” from 22-26 Feb., 2010 Organized by DCRUST, Murthal.
  3. Participated in the workshop on “Embedded system design using PIC Microcontroller” held on 27-28 Oct., 2009 at HCE Sonapat.
- 
28. Student projects:
    - Percentage of students who have done in-house projects including inter-departmental projects: 100%
    - Percentage of students doing projects in collaboration with other universities/industry/institute: MTech thesis is being allowed to do at other research labs like CEERI Pilani.
  29. Awards/recognitions received at the national and international level by:
    - Faculty: Nil
    - Doctoral/post doctoral fellows: Nil
    - Students: Nil
  30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:  
RTET in 2009, 2010, 2011, 2012 funded by university under the banner of Faculty of Engg and technology, GJUS&T Hisar.
  31. Code of ethics for research followed by the departments: As stipulated in University norms, International standards and Regulatory bodies like UGC, AICTE.
  32. Student profile programme-wise:

Name of the Programme (refer to question no.4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG	Through HSCS Counseling	116	32	76.25%	86.95%
PG	192	12	08	55%	66.66%
Ph.D.	93	03	03	Appearing in Pre Ph.D.	

33. Diversity of students:

Name of the Programme (refer to question no.4)	% of students from the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
UG	NA	NA	NA	Nil
PG	60%	30%	10%	Nil
Ph.D	29%	71%	Nil	Nil

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise :

Year	GATE	Defense Services
2010	05	03
2011	10	01
2012	25	01
2013	25	01

35. Student progression :

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	10% (Approx)
PG to M.Phil.	NA
PG to Ph.D.	01 (Approx)
Ph.D. to Post-Doctoral	Nil
Employed <ul style="list-style-type: none"> <li>• Campus selection</li> <li>• Other than campus recruitment</li> </ul>	6.5%
Entrepreneurs	0.17%

36. Diversity of staff:

<b>Percentage of faculty who are graduates (Regular Faculty)</b>	
of the same university	Nil
From other universities within the State	92%
From universities from other States	8%
From universities outside the country	Nil

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt. During the assessment period: The following are awarded Ph.D degree

<b>S.No.</b>	<b>Name of faculty</b>	<b>Year</b>
1	Dr. Deepak Kedia	2011
2	Dr. Manoj Taleja	2012
3	Dr. Sanjeev Dhull	2013

38. Present details of departmental infrastructural facilities with regard to:

- a) Library: Total no. of titles: 3174  
Total no. of volumes: 8636  
Total no. of journals > 6000



Journal subscription from Emerald, J-Gateplus, CMIE, SPSS, POP of IEEE: 175

Year	Investment(Rs.)	No. of titles	No. of books
2011-12	3,91,511	419	1129
2012-13	5,55,263	214	599
2013-14	1,59,375	54	161

- b) Internet facilities for staff and students: More than 100 LAN ports are available in the department. However each lab, classroom and staff room is equipped with wired connectivity. Wi-Fi is available for entire campus.
- c) Total number of class rooms: 9 Classrooms. Well equipped with internet facility.
- d) Class rooms with ICT facility: 9 Classrooms. Well equipped with internet facility.
- e) Students' Laboratories: 12 Laboratories. Well equipped with internet facility.
- f) Research Laboratories: 2 Laboratories. Well equipped with internet facility.

39. List of doctoral, post-doctoral students and Research Associates:

- a) From the host institution/university: 3
- b) From other institutions/universities
  - 1: From CEERI Pilani
  - 1: From MDU Rohtak
  - 1: From KU Kurukshetra

40. Number of post graduate students getting financial assistance from the university:

<b>Year</b>	<b>GATE/AICTE</b>	<b>Non-GATE/World Bank</b>
2008-09	-	-
2009-10	-	-
2010-11	01	-
2011-12	01+09	-
2012-13	09+13	-
2013-14	13+16	09

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology: No new programme was started in the assessment period. M.Tech programme was initiated in 2006 with exhaustive discussion with eminent experts from CEERI Pilani.
42. Does the department obtain feedback from:
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? Yes, staff council meeting is generally held invariably in one month.
  - b) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback? Yes, both formal and informal channels for feedback are used.
  - c) Alumni and employers on the programmes offered and how does the department utilize the feedback? Telephonically and whenever they visit the department.
43. List the distinguished alumni of the department (maximum 10) : As the department is just 8 years old so most of the students are at junior/middle level of management.
44. Give details of students enrichment programmes (special lectures/workshops/seminar) involving external experts:

<b>S.No.</b>	<b>Name of Faculty</b>	<b>Date &amp; Year</b>	<b>Topic</b>
1.	Dr. P.J George KITM Kurukshetra	06-11-2009	VLSI Design
2.	Dr. Brahmjeet Singh NIT Kurukshetra	25-10-2010	Wireless Communication Engg.
3.	Dr. R.K Sharma NIT Kurukshetra	02-02-2013	Embedded Systems
4.	Dr. D.R Bhasker	13-09-2013	Recent Trends in VLSI

45. List the teaching methods adopted by the faculty for different programmes: Lectures/ Quizes/ Practicals/ Projects.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
1. By discussing the result of students in staff council.
  2. By imposing soft skills.
47. Highlight the participation of students and faculty in extension activities:
- (i) Department participated in Science Conclave – 2014 in which awareness was given to the students of rural area.
  - (ii) M.Tech. students are given teaching assignment/load
48. Give details of “beyond syllabus scholarly activities” of the department:
- (i) Quizes are organized
  - (ii) Mock Interviews are organized before placement drives & placement incharges are appointed for the students.
49. State whether the programme/department is accredited/graded by other agencies? If yes, give details:
- (i) NBA-2008 for 3 years
  - (ii) Necessary preparations are going on for the next accreditations by NBA.

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:  
There are number of publications in SCI indexed journals related to upcoming technology. Faculty has contributed in these journals
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

**Strengths:**

1. Dedicated, young and qualified faculty, 2 Professors, 1 Associate Professor, having different areas of research.
2. The Department attracts good rankers of AIEEE.
3. Department has many books in various categories in the library.
4. State of art softwares eg. Qualnet, Optsim, Mentor graphics as a part of R & D

**Weaknesses:**

1. Newly appointed Assistant Professors are just starter to research. Need more expertise.
2. Training in advanced areas required
3. Not much interaction with foreign universities to compete with global trends

**Opportunities:**

1. Faculty training and expertise building through conferences and exchange Programs.
2. Courses requiring integration of multiple disciplines in engineering for example
3. VLSI, Space Technology, Nano technology, Mechatronics etc.
4. Electronics Engineering is an emerging field. Lot of opportunities for electronics engineers.

**Challenges:**

1. Mushrooming of private colleges and increasing intake of engineering students.
2. More efforts are required to improve the knowledge and skills of the students in the interdisciplinary research areas related to other departments.
3. High rate of obsolescence.

4. Decrease in the Quality of Students and competition from private institutions/ Universities
5. Squeezing resources

52. Further plans of the department:

- (i) To strengthen existing labs by procuring new equipments in the upcoming areas of research.
- (ii) All the new faculty members are being encouraged for Ph.D.
- (iii) Consultancy, Extension activity to be started in the upcoming areas of Optical, Wireless & DSP and other areas of Electronics and communication engineering.
- (iv) Visit other universities in India and abroad of repute.
- (v) Strengthen the industry-institution linkage.

## Evaluative Report of the Department of Biomedical Engineering

---

1. Name of Department : Biomedical Engineering
2. Year of establishment : 2001
3. Is the Department part of a School/Faculty of the University? Yes, Faculty of Engineering & Technology
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph. D, D. Sc., D.Litt., etc.) :  
P.G. - M.Tech. (Biomedical Engg.)  
U.G. - B.Tech. (Biomedical Engg.)
5. Interdisciplinary programmes and departments involved : Yes  
Deptt. of Applied Physics, Chemistry and Maths are involed.
6. Courses in collaboration with other universities, industries, foreign institutions, etc. : Nil
7. Details of programmes discontinued, if any, with reasons : Nil
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System : Credit Baed Semester System
9. Participation of the department in the courses offered by other departments: Nil
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst.Professors/others):

	Sanctioned	Filled	Actual (including CAS & MPS)
Professors	01	--	--
Associate Professors	02	--	01
Asst. Professors	04	03 + 01*	02
Others Teaching Associates	--	--	04

\* Resigned in Dec 2013

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. / M. Phil. students guided for the last 4 years
Sh. Ravish Garg	M.Tech.	Chairman & Associate Professor	Biomedical Instrumentation	18 years	---
Ms. Anju Gupta	M.Tech.	Assistant Professor	Biomedical Engineering	03 years	---
Mr. Anil Khatak	M.Tech.	Assistant Professor	Electronics & Communication Engineering	03 years	---

\*\* In addition, faculties from other branches are also being deputed for the subject concerned to that department.

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors. No such appointment is made, but following visited the department on request:

- Dr. R.K. Saxena, Ex-Professor, Centre for Biomedical Engineering, IIT-Delhi, New Delhi
- Dr. S.K.Chakarvarti, Director Research & Development, Manav Rachna International University, Faridabad
- Dr. Ravinder Aggarwal, Professor, Department of Electrical & Instrumentation Engineering, Thapar University, Patiala (Punjab)
- Dr. Amod Kumar, Chief Scientist, Biomedical Instrumentation Group, CSIO, Sector-30, Chandigarh
- Dr. Monika Bansal, Associate Professor, MA Medical College, Agroha, Hisar





		Etch Membrane and explore Biomedical Applications	2011		
2.	Sh. Ravish Garg & Md. Kaushik Chowdhary	To design low cost Instrumentation for eliminating noise in Electronic Stethoscope	GJUS &T, Hisar 2010-2011	Rs. 25,000/-	Completed
3.	Sh. Ravish Garg	Formation of Micro-structures using Track Etch membrane as template	GJUS &T, Hisar 2011-2012	Rs. 30,000/-	Completed
4.	Sh. Ravish Garg	Synthesis of Low Dimensional Structures of Conducting Polymers	GJUS &T, Hisar 2012-2013	Rs. 40,000/-	Completed
5.	Sh. Ravish Garg	To Investigate Diffusion of Drug through Track-Etch Membrane to mimic Skin Membrane	GJUS &T, Hisar 2013-2014	Rs. 40,000/-	Ongoing
6.	Ms. Anju Gupta	Design and development of Blood Viscometer for INR Measurements	GJUS &T, Hisar 2013-2014	Rs. 40,000/-	Ongoing

18. Inter-institutional collaborative projects associated grants received:
- |                                |     |
|--------------------------------|-----|
| a) National collaboration      | Nil |
| b) International collaboration | Nil |
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received: Nil
20. Research facility/centre with:
- State recognition - NIL
  - National recognition -NIL
  - International recognition -NIL
- The students of other Universities of the state visit the department of Biomedical Engineering for collaborative research and project work.
21. Special research Laboratories sponsored by/ created by industry or corporate bodies: Nil
22. Publications:
- |  |          |
|--|----------|
| ▪ Number of papers published in peer reviewed journals (national/international)  | 12       |
| ▪ Monographs   | Nil      |
| ▪ Chapters in Books  | 04       |
| ▪ Edited Books   | Nil      |
| ▪ Books with ISBN with details of publishers   | Nil      |
| ▪ Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc. | 13       |
| ▪ Citation Index-range/average   | Up to 15 |
| ▪ SNIP   | Nil      |
| ▪ SJR  | Nil      |
| ▪ Impact Factor-range/average  | Up to 1  |
| ▪ h-index  | Up to 3  |
23. Details of patents and income generated: Nil
24. Areas of consultancy and income generated: No

25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad: Nil
26. Faculty serving in:  
 a) National committees b) International committees c) Editorial Boards  
 d) any other (please specify): Nil
27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs)- Refresher and orientation programmes as per the Common policy at University Level are undertaken by the teachers.
28. Student projects:
- Percentage of students who have done in-house projects including inter-departmental projects 100% B.Tech. (BME) students carry out their minor projects in-house during 7<sup>th</sup> semester.
  - Percentage of students doing projects in collaboration with other universities/industry/institute 100% B.Tech. (BME) students carry out their 16 weeks professional training outside the campus in collaboration with other universities/industry/institute during 8<sup>th</sup> semester
29. Awards/recognitions at the national and international level by:  
 Best poster/paper presentation awarded in International Conference on Biomedical Engineering and Assistive Technologies (BEATS 2014), Chandigarh, for paper entitled “Analysis of Hjorth and Spectral Density parameter during normal and pain analysis of EEG” authored by Nisha Jangra, Puneet Mishra, Somsirsa Chatterjee and Ravish Garg.
- Faculty --
  - Doctoral/post doctoral fellows --
  - Students --
30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:

One Day National Level workshops entitled ‘Recent Trends in Engineering & Technology’; RTET-2010 & RTET- 2012 were organized on 06/03/2010 & 15/03/2012 under the umbrella of Dean, FET, GJUS&T, Hisar.

31. Code of ethics for research followed by the departments - Every possible effort is made to follow the ethics of research by the department to avoid plagiarism by citing proper references in support of research literature. Also the principles and moral ethics are followed for clinical research and practice by taking necessary permissions from agencies like animal ethical committee at state and national level.
32. Student profile programme-wise:

Name of the Programme (refer to question no.4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Tech. Biomedical Engineering	Common entrance test and admissions through HCPET	06	---	Programme started w.e.f. 2013-14	Programme started w.e.f. 2013-14
B.Tech. Biomedical Engineering	Common entrance test and admissions through AIEEE, Haryana State Counseling Society	117	58	90%	95%

33. Diversity of students:

Name of the Programme (refer to question no.4)	% of students form the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Tech. Biomedical Engineering	80%	---	20%	---
B.Tech. Biomedical Engineering	NA	NA	NA	NA

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise:

Examination	No. of Students cleared
Civil Services examinations	--
Defense Services examinations	3
NET, SET, GATE	2
Other(s)	10

35. Student progression:

Student progression	Percentage against enrolled
UG to PG	30%
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed <ul style="list-style-type: none"> <li>• Campus selection</li> <li>• Other than campus recruitment</li> </ul>	More than 60% students are recruited through on & off campus placement opportunities arranged by the department in co-ordination with T&P Cell
Entrepreneurs	About 1%

36. Diversity of staff:

<b>Percentage of faculty who are graduates</b>	
of the same university	50%
From other universities within the State	30%
From universities from other States	20%
From universities outside the country	---

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt. During the assessment period – Two faculty members are pursuing Ph.D. programme at present.

38. Present details of infrastructural facilities with regard to:

- a) Library: Central Library of the University; having 2695 no. of volumes with exclusively 1599 titles exclusively of BME with e-library facility also available. Electronic access to various IEEE/IEE publications/journals through INFLIBNET under UGC
- b) Internet facilities for staff and students Available
- c) Total number of class rooms Three
- d) Class rooms with ICT facility Available
- e) Students' Laboratories

<b>Sr.No</b>	<b>Name of the laboratory/workshop</b>
1.	Anatomy and Physiology Lab
2.	Histology/Biochemistry lab
3.	Biomedical Instrumentation Lab
4.	Medical Imaging Lab/Biomedical Signal Processing lab
5.	Laser & Fiber Optics Lab
6.	Biomechanics/ Clinical Sciences
7.	Medical Electronics/Project lab
8.	Work shop (Mechanical Engineering)

- f) Research Laboratories: As above and also the students and faculty of the department make use of research centers in the University like Central Instrumentation Laboratory and research labs of other departments.

39. List of doctoral, post-doctoral students and Research Associates: Nil
- a) From the host institution/university
  - b) From other institutions/universities
40. Number of post graduate students getting financial assistance from the university:  
One post graduate student is granted SC Scholarship
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology:  
The department of Biomedical Engineering started the M.Tech. Biomedical Engineering program from the session 2013-14 after analyzing and assessing the need of present healthcare industry and research organizations as well as keeping in view the keen interest of graduates from various fields to pursue M.Tech. program in Biomedical Engineering. As very few institutes are offering PG program in Biomedical Engineering with limited number of seats, it was sought after to initiate this program with necessary approval and sanction from AICTE.
42. Does the department obtain feedback from?
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
  - b) Yes, the feedback obtained is discussed and put forward during Staff council and other meetings like Board of Studies and the relevant matters are resolved with necessary amendments.
  - c) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback? Yes, special counseling sessions are conducted from time to time and relevant suggestions by the students are incorporated in the teaching-learning methodology after discussions and are accordingly resolved in the staff council.
  - d) Alumni and employers on the programmes offered and how does the department utilize the feedback? Yes, the feedback is utilized in the revision of the syllabus and improving the teaching-learning methodologies.

43. List the distinguished alumni of the department (maximum 10):

S. No.	Name of Alumni	Name of the Organisation	Designation
1.	Mr. Himanshu Gupta	Ganga Medical Pvt. Ltd., New Delhi	Entrepreneur
2.	Mr. Abhnav Girdhar	GE Healthcare Pvt. Ltd. New Delhi	Service Engineer
3.	Ms. Archana	Metro Heart Institute, Faridabad	Trainee Engineer
4.	Mr. Inderjeet	Drager Medical India Pvt. Ltd., New Delhi	Trainee Engineer
5.	Mr. Rohit	Paras Hospital, Gurgaon	Biomedical Engineer
6.	Mr. Balvinder	Fortis Escorts, Amritsar	Trainee Engineer
7.	Ms. Mamta	Metro Hospital, Noida	Service Engineer
8.	Mr. Akshay Vats	Hospimax Healthcare Pvt. Ltd., New Delhi	Management Trainee
9.	Mr. Alok Kumar Shukla	Hospimax Healthcare Pvt. Ltd., New Delhi	Management Trainee
10.	Mr. Narender Pandey	Hospimax Healthcare Pvt. Ltd., New Delhi	Management Trainee

44. Give details of students' enrichment programmes (special lectures/workshops/seminar) involving external experts:

- Expert lectures by the following distinguished/senior/emeritus professors were organized by the department as part of student enrichment programmes
- Dr. R.K. Saxena, Ex-Professor, Centre for Biomedical Engineering, IIT-Delhi, New Delhi
- Dr. S.K.Chakarvarti, Director Research & Development, Manav Rachna International University, Faridabad
- Dr. Ravinder Aggarwal, Professor, Department of Electrical & Instrumentation Engineering, Thapar University, Patiala (Punjab)



- Dr. Amod Kumar, Chief Scientist, Biomedical Instrumentation Group, CSIO, Sector-30, Chandigarh
  - Dr. Monika Bansal, Associate Professor, MA Medical College, Agroha, Hisar
  - Dr. Rajender Aggarwal, Professor, Department of Parasitology, Lala Lajpat Rai University of Veterinary & Animal Science, Hisar
  - National Level workshops titled ‘Recent Trends in Engineering & Technology’, RTET-2010 & RTET- 2012 were organized on 06/03/2010 & 15/03/2012 under the umbrella of Dean, FET, GJUS&T, Hisar.
45. List the teaching methods adopted by the faculty for different programmes:
- Use of audio-visual aids for teaching
  - Teaching through practical demonstrations
  - Encouraging the students to participate in group discussions, presentations and submitting assignments.
  - Guidance for innovative minor projects
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?  
By taking the feedback from the passed out students and their employers
47. Highlight the participation of students and faculty in extension activities:
- The students and the faculty members are constantly motivated to come up with certain innovative ideas and implement them through minor projects at University level
  - The students and the faculty members are also motivated for participation in cultural, sports, technical and other social activities
48. Give details of “beyond syllabus activities” of the department:
- Special/expert lectures by emeritus/senior professors and distinguished alumni are organized from time to time by the department
  - Organization of workshops and other department level extra-curricular activities like paper presentation, poster making, debate/declamation, group discussions, etc.

- Conduct of mock interviews, personality and soft skills development sessions with coordination of Training & Placement Cell
  - Training programmes are also being arranged during vacations in compliance with Training & Placement Cell
  - Innovative ideas are implemented in form of minor projects by the students under the able guidance of the faculty of the department
49. State whether the programme/department is accredited / graded by other agencies? If yes, give details:                    No
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:
- The Biomedical Engineering Department has delivered its objectives in form of proficient biomedical engineers working across India and abroad in respectable positions with leading companies/industries/hospitals like Hospimax Healthcare Pvt. Ltd., New Delhi; Endocare Medical Systems; Metro Heart Institute, Faridabad; Metro Hospital, Noida; Supra Med, New Delhi; Fortis Escorts, Amritsar; Drager Medical India Pvt. Ltd., New Delhi; Paras Hospital, Gurgaon; E.Z. BioXcel Solutions Pvt. Ltd. Gurgaon; Philips India Ltd., Gurgaon; Indraprastha Apollo Hospital, New Delhi; Batra Hospital, Faridabad; GE Healthcare Pvt. Ltd., New Delhi; Havells India, Pvt. Ltd., New Delhi; Max Hospitals, New Delhi; Civil Hospitals of Haryana; etc.
  - Our students are also teaching in various organizations like Deenbandhu Chhotu Ram College of Science & Technology, Murthal; Govt. Polytechnic Colleges of Haryana; GJUS&T, Hisar; Shobhit University, Meerut; Manav Rachna University, Faridabad; etc.
  - Also the department has contributed a lot to research in form of research publications of the students and faculty in various fields.
  - Thus the graduated passed from the Department of Biomedical Engineering are serving the society in three broad categories as Clinical Engineers, Entrepreneurs and Researchers & Academicians.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

**Strengths**

- Competent, young and dynamic faculty
- Well equipped laboratories & excellent infrastructure
- Well designed curriculum
- Updated learning resources available in the university library
- Inclination towards/ Openings in innovative research & development

**Weaknesses**

- Newly developed programme
- Lack of research laboratories
- Most of the companies in the field of Biomedical Engineering, particularly in India, are offering placements in the areas of trading and customer care services instead of production, research and development
- Less awareness with the students at higher secondary level about Biomedical Engineering jobs
- Lack of awareness in the government sector leading to non-inclusion of B.Tech. (Biomedical Engineering) as eligibility conditions.

**Opportunities**

- Increasing demand for Biomedical Engineers in the Govt. Sector due to technological revolution in health sector.
- Many leading IITs, NITs and Universities are running/opening various programmes for higher studies in healthcare sector
- Biomedical Engineering is one of the branch which offers engineering perspectives along with social service to mankind
- With the advancements in medical technology, healthcare organizations/industries & hospitals are feeling the need of biomedical engineers to maintain the advanced medical equipments by establishing separate biomedical instrumentation unit
- Less competitive environment, particularly in India (in comparison to other engineering disciplines) as the well trained biomedical engineers are few; therefore, by taking

early steps, leading position could be achieved by the Department.

### **Challenges**

- Wide publicity is required to increase awareness among the prospective students about the department as well as this discipline
- Knowledge of this field must be enhanced among the recruiters (both at private as well as government level)
- Creating a research environment to uphold innovation in the field of biomedical engineering
- To attract human resource from other engineering disciplines to participate in Biomedical Engineering research and product development
- Effective communication and understanding of the broad social, ethical, economic and environmental perspectives of this stream

### 52. Further plans of the department:

- To develop new research laboratories for the PG course
- To initiate the Ph.D. (Biomedical Engineering) programme in future
- To improve the research perspectives of the department through funded projects and collaborations with various Universities, R&D Laboratories and Hospitals.

## **Evaluative Report of the Department of Mechanical Engineering**

---

1. Name of Department: Mechanical Engineering
2. Year of establishment: 2004
3. Is the Department part of a School/Faculty of the University? Yes  
Faculty of Engg. & Technology
4. Names of programmes offered (UG, PG, M.Phil., Ph. D., Integrated Masters; Integrated Ph. D, D.Sc., D.Litt., etc.)
  - i) B.Tech (Mechanical Engineering)
  - ii) M.Tech (Mechanical Engineering)
  - iii) Ph.D (Mechanical Engineering)
5. Interdisciplinary programmes and departments involved: Yes  
The Faculty from other departments is involved in teaching Mechanical Engineering Department. The Departments involved are:
  - a) Department of Mass Communication
  - b) Department of Physics
  - c) Department of Chemistry
  - d) Department of Mathematics
  - e) Department of EVS
  - f) Department of Computer Science
  - g) Department of Electronics and Communication
  - h) Haryana School of Business
6. Courses in collaboration with other universities, industries, foreign institutions, etc. : No
7. Details of programmes discontinued, if any, with reasons: Nil
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System: Semester system with credit base system

9. Participation of the department in the courses offered by other departments  
The Department offers courses (Elements of Mechanical Engineering, Manufacturing Practices and Engineering Graphics) in First Year in the following Departments:
- Department of Computer Science
  - Department of Electronics and Communication
  - Department of Printing
  - Department of Food Technology
  - Department of Bio-Medical Engineering

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst.Professors/others):

	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual (including CAS &amp; MPS)</b>
Professors	02	01	01
Associate Professors	04	-	-
Asst. Professors	09	07	-
Others	-	07*	07

\*Contractual Faculty: Designated as Teaching Associate appointed against vacant posts.

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

<b>Sr. No.</b>	<b>Name</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No. of Ph.D./M. Phil. students guided for the last 4 years</b>
1.	Dr. Hem Chander Garg	Ph.D.	Professor, Chairperson & Director (Placement)	Tribology	17	PH.D.-NIL M.Tech.-15

2.	Dr. Munish Gupta	Ph.D.	Assistant Professor	Thermal Design	11	PH.D.-NIL M.Tech.-12
3.	Sh. Pankaj Sharma	M.Tech (Mechanical) PH.D. (Pursuing)	Assistant Professor	Production	14	PH.D.-NIL M.Tech.-08
4.	Dr. Vishal Gulati	Ph.D.	Assistant Professor	CAD	14	NIL
5.	Sh. Pankaj Khatak	M.Tech .	Assistant Professor	Mechanical Engineering	9.5	NIL
6.	Sh. Puneet Katyal	M.E.	Assistant Professor	Tribology, CAD	10	NIL
7.	Dr. Mahesh Kumar	Ph.D.	Assistant Professor	Thermal Engg.	-	NIL
8.	Kamal Deep	M.Tech (Mech. Engg.) PH.D. (Pursuing)	Assistant Professor	Production Technology	11	PH.D.-NIL M.Tech.-04

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors:  
The Department is planning to invite visiting faculty for extension Lectures/Seminar in near future.
13. Percentage of classes taken by temporary faculty-programme-wise information:
- (i) B.Tech: 60%
  - (ii) M.Tech : Nil
  - (iii) Ph.D : Nil

14. Programme-wise Student Teacher Ratio:

- (i) B.Tech: (18.8 : 1) (282/15)
- (ii) M.Tech: (4.625: 1) (37/8)
- (iii) Ph.D: ( 2.5 : 1) (10/04)

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

Positioned	Sanctioned	Filled	Actual
Workshop Supdt.	01	Nil	Nil
AWS	01	01	01
TA-1/Workshop Instructor	08	07 (Workshop Instructor)	07 (Workshop Instructor)
Steno	01	01 (Contract)	01 (Contract)
Clerk	01	01	01
Lab Technician		NIL	NIL
Lab Attendant	03	03	03
Peon	01	01 (Contract)	01 (Contract)
Sweeper	01	01 (Contract)	01 (Contract)
Assistant	01	NIL	NIL

16. Research thrust areas as recognized by major funding agencies:

Prof. H.C. Garg has been given Major Research Project titled “Development of Aerostatic Bearings for Ultraprecision Machining” funded by University Grants Commission (UGC), Ministry of Human Resource Development, Government of India, New Delhi in May, 2012 (Principal Investigator). ₹ 7, 55,000.00, Duration: 3 years. UGC has identified Tribology as major thrust area.

17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise:



<b>Project Name</b>	<b>Cost (Rs.)</b>	<b>Group Members</b>
Development of Aerostatic Bearings for Ultra precision Machining (Duration: 3 years)	7, 55,000.00	H. C. Garg (Principal Investigator) Pankaj Khatak (Co Investigator)

18. Inter-institutional collaborative projects and associated grants received:  
a) National collaboration: Nil b) International collaboration: Nil
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received:  
  
World Bank Project (TEQIP-II). Total project cost: ₹ 125 million, Duration: 5 years (Mechanical Engineering is the participating Department)
20. Research facility/centre with:
- State recognition : Yes
  - National recognition : Yes
- The Department has purchased CNC Turning Center, CNC Machining Center and Wire-cut EDM in the state of art CNC Lab. These machines are highly precise and unique at national level for research purpose.
- International recognition: Nil
21. Special research Laboratories sponsored by/ created by industry or corporate bodies: Nil
22. Publications:
- Number of papers published in peer reviewed journals (national/international) : 117 Nos.
  - Monographs : Nil
  - Chapters in Books : Nil
  - Edited Books : Nil
  - Books with ISBN with details of publishers

<b>Book Name</b>	<b>Author</b>	<b>Year</b>
Elements of Mechanical Engineering (ISBN: 978-93-82332-40-4) Published by I.K. International Publishing House Pvt. Ltd.	Dr. Mahesh Kumar	2013

- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.
- Citation Index-range/average: Up to 102
- SNIP: -
- SJR: -
- Impact Factor-range/average: Impact factor has been given in the list of Publication.
- h-index: Up to 6

23. Details of patents and income generated: Nil

24. Areas of consultancy and income generated:

The Department is competent to provide consultancy in the field of Material Testing, Manufacturing and High precision CNC Machining. Efforts are being made to utilize the Departmental facilities for consultancy purpose to generate income.

25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad:

Prof. H.C Garg

- Tokyo University of Science, Japan invited him as visiting Associate Professor from October 1, 2009 to November 29, 2009. Professor Shigeka Yoshimoto, an eminent scholar of international repute, was my host researcher. The experiments on bearing characteristics of water lubricated hybrid (journal/thrust) bearings were performed to increase the speed of spindle to 5, 00,000 rpm. The thermal effects were considered numerically.

- Participated and presented a research paper in ASME/STLE International Joint Tribology Conference held at San Francisco, California-USA from October 18, 2010 to October 20, 2010.
- Participated in international seminar & short course on “Rotor Dynamics & Bearings” held at Leonardo Hotel Cologne (Köln), Germany from October 28-31, 2013 organized by ARLA Maschinentechnik GmbH, Germany and Rotor Bearing Technology & Software (RBTS), Inc. USA.

26. Faculty serving in :

- a) National committees  
Prof. HC Garg has visited as an expert in a committee constituted by UGC/AICTE for the inspection of university/college.
- b) International committees: Nil
- c) Editorial Boards:

Prof. H.C. Garg

Member, Journal Advisory Board of

- Journal of Engineering and Technology (Medknow Publications)
- International Journal of Control Engineering & Technology (IJCET)

- d) any other (please specify) --

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs):

Dr. Hem Chander Garg

Short Term Training Programme/Workshop Organised

- Organized Short Term Training Programme (STTP) on “Tribology of Bearings for Ultra- Precision Machining” in Mechanical Engineering Department, Guru Jambheshwar University of Science & Technology, Hisar-India from April 18, 2013 to April 22, 2013
- Organized National Workshop on “Recent Trends in Engineering & Technology” in Faculty of Engineering & Technology, Guru

Jambheshwar University of Science & Technology, Hisar-India  
on March 17, 2009.

#### Workshops /Short Term Courses/Summer Schools Attended

- National Workshop on “Patent Awareness Vis-à-vis Intellectual Property Rights” organized by GJUS&T Hisar, August 9, 2011.
- Summer School on “2<sup>nd</sup> Summer School in Tribology” organized by Tribology Society of India at Indian Oil Institute of Petroleum Management, Gurgaon, June 21-24, 2010.
- Workshop on “Recent Trends in Engineering & Technology” organized by GJUS&T Hisar, March 6, 2010.
- Short Term Programme on “Computer Aided Advanced Computational Method and Modeling” organized by Thapar University, Patiala, July 05-16, 2004.
- Short Term Programme on “Modelling & Simulation of Engineering and Environmental System” organized by Beant College of Engineering & Technology Gurdaspur, March 15-19, 2004.
- Workshop on “Alternative Refrigerants and Cycles” organized by I.I.T. Delhi, November 28-30, 2003.
- Short Term Programme on “Development of Attitudes, Behaviours and Non-Technical Competencies in Engineering Students” organized by NITTTR, Sector 26, Chandigarh, January 06-10, 2003.
- Short Term Programme on “Total Quality Management and ISO 9000” organized by NITTTR, Sector 26, Chandigarh, August 05-09, 2002.
- Short Term Programme on “QSS (ISO 9000) and EMS (ISO 14000)” organized by NITTTR, Sector 26, Chandigarh, January 14-18, 2002
- Short Term Programme on “Industry Institute Interaction” organized by NITTTR, Sector 26, Chandigarh, November 05-11, 2001.

Dr. Munish Gupta

#### Workshops/Refreshers Courses

1. Attended one week Faculty Development course sponsored by World Bank Project (TEQIP-II) on “Recent Advances in Engineering and Technology” from 20.09.13 to 28.09.13 at G.J.U.S&T, Hisar.
2. 28-02-2013 to 20-03-2013 in Environmental Studies (ID) at ASC, Guru Nanak Dev University, Amritsar

3. Attended Four days DST sponsored Short term training program on “Nature inspired Optimization Algorithms :Recent Trends, Theory and Applications” from 25/03/11 to 28/03/11 Organized by Institute Of Engineers, Roorkee Local Chapter, Roorkee.
4. Attended Four week Orientation course from 31/05/10 to 26/06/10 at G.J.U.S&T, Hisar.
5. Attended three week Refresher course “Engineering Science (Multidisciplinary) (Mechanical Engineering)” from 21/12/09 to 09/01/10 at G.J.U.S&T, Hisar.
6. Attended one week course on ‘CNC Technology’ from 26/12/05 to 30/12/05 at N.I.TTT&R, Chandigarh.
7. Attended one week course on ‘CAD, CAM and Robotics’ from 30/10/06 to 03/11/06 at N.I.TTT&R, Chandigarh.

Sh. Pankaj Sharma

#### Refresher courses

1. 06-12-2008 to 13-12-2008 in Advancement in Networking Research, Computer Engg. Department, Guru Jambheshwar University of Science and Technology, Hisar
2. 21-12-2009 to 09-01-2010 in Engineering Science(Mechanical Engineering) at ASC, Guru Jambheshwar University of Science and Technology, Hisar
3. 28-02-2013 to 20-03-2013 in Environmental Studies (ID) at ASC, Guru Nanak Dev University, Amritsar
4. 03-06-2013 to 22-06-2013 in Information Technology (ID) at ASC, Guru Jambheshwar University of Science and Technology, Hisar

#### Orientation courses

1. 31-05-2010 to 26-06-2010 at ASC, Guru Jambheshwar University of Science and Technology, Hisar

#### Short term course

1. 26-12-2005 to 30-12-2005 in CNC Technology at NITTTR, Chandigarh
2. 31-10-2006 to 03-11-2006 in CAD/ CAM Robotocis at NITTTR, Chandigarh
3. 01-12-2008 to 05-12-2008 in Multi-Objective Optimization Using Evolutionary Algorithm at ABV-IIIT&M, Gwalior

## Workshops

1. 04-12-2008 in Intellectual Property Rights, at Guru Jambheshwar University of Science and Technology, Hisar
2. 13-03-2009 to 14-03-2009 in Recent Trends in Printing Technology, at Guru Jambheshwar University of Science and Technology, Hisar
3. 17-03-2009 in Recent Trends in Engineering and Technology, at Guru Jambheshwar University of Science and Technology, Hisar
4. 25-04-2009 in Career Prospectus for Engineering Students in Today's Scenario, at Guru Jambheshwar University of Science and Technology, Hisar
5. 14-03-2011 in Chemistry in Our Lives, at Guru Jambheshwar University of Science and Technology, Hisar
6. 15-03-2011 in Recent Trends in Engineering and Technology, at Guru Jambheshwar University of Science and Technology, Hisar
7. 15-03-2012 in Recent Trends in Engineering and Technology, at Guru Jambheshwar University of Science and Technology, Hisar

Dr. Vishal Gulati

## Refresher Courses (3 weeks)

1. UGC sponsored refresher course on Engineering and Sciences, GJUST, Hisar; Dec. 21, 2009-Jan 9, 2010.
2. UGC sponsored refresher course on Research-Methodology, GJUST, Hisar; Sep. 20, 2011-Oct 10, 2011.
3. UGC sponsored refresher course on Information Technology, BPS Women University, Khanpur Kalan; May 15, 2012-June 06, 2012.

## Orientation Courses (4 weeks)

1. UGC sponsored orientation course at GJUST, Hisar; May 31, 2010-June 26, 2010.

## Short term courses (One week)

1. Modern Trends for Efficient Operation of Electrical Machines, CR State College of Engineering, Murthal, July 17-23, 2000.
2. CNC Technology, NITTTR, Chandigarh, Dec. 26-30, 2005.

3. CAD/CAM and Robotics, NITTTR, Chandigarh, Oct 30 to, Nov. 3, 2006.
4. Multi-Objective Optimization Using Evolutionary Algorithms, ABV-IIITM, Gwalior, Dec. 1-5, 2008.
5. Advancement in Networking Research, GJUST, Hisar, Dec. 6-13, 2008.

#### Work-Shops (One or Two days)

1. Quality assurance in Technical education, NITTR, Chandigarh, May 27-29, 2004.
2. Recent trends in Engg. And Tech., GJUST, Hisar, March 17, 2009.
3. Recent trends in Printing Tech., GJUST, Hisar, March 13-14, 2009.
4. Carrier Prospects for Engineering Students in Today's Scenario, April 25, 2009.
5. Chemistry in Our Lives, GJUST, Hisar, March 14, 2011.
6. Recent trends in Printing Tech., GJUST, Hisar, March 15, 2011.
7. Patent Awareness vis-A-vis Intellectual Property Rights, GJUST, Hisar, August 9, 2011.
8. Recent trends in Engg. and Tech., GJUST, Hisar, March 15, 2012.

#### Training Program

1. Delivered Lectures ( 30 hrs) and hands-on training On AutoCAD-2013 from August 21- Sep. 11, 2013

Sh. Pankaj Khatak

#### Attended

- Faculty development programme on recent advances in engineering and technology from 20-09-2013 to 28-09-2013, sponsored by world bank project 'technical education quality improvement programme (TEQIP-II)' jointly organized by TEQIP-II cell & Academic staff college.
- 3 week UGC sponsored Refresher course in Information Technology (ID for all steams) w.e.f. 03-06-2013 to 22-06-2013 with 'A' grade at UGC-Academic Staff College GJUS&T, Hisar
- 3<sup>rd</sup> Summer School in Tribology organized by Tribology Society of India. (20.06.2011 – 23.06.2013)

- National Workshop on “Recent Trends in Engineering & Technology” organized by GJUS&T Hiasr, March 15, 2012.
- National Workshop on Patent Awareness vis –a vis intellectual property rights organized by IPR & TC Cell, GJUS&T Hiasr. (9-08.2011).
- National Workshop on “Recent Trends in Engineering & Technology” organized by GJUS&T Hiasr, March 15, 2011.
- 4 weeks orientation course UGC Sponsored at GJUS&T, Hisar (31.05.2010 – 26.06.2010)
- 3 weeks Refresher course on ‘Engineering Sciences’ UGC Sponsored at GJUS&T, Hisar (21.12.2009 – 09.01.2010)
- Workshop on “Recent Trends in Engineering & Technology” organized by GJUS&T Hiasr, March 6, 2010.
- One day workshop on “Career Prospects for Engineering Students in todays scenario” organized by Training & Placement Cell, GJUS&T Hiasr, (25.04.2009)
- National Workshop on “Intellectual Property Rights and its Commercialization Process” organized by IPR & TC Cell, GJUS&T Hiasr. (4-12-2008).

#### Workshop/Training Programme/Course conducted

- Lectures and hands-on training delivered on CNC machines conducted by Mechanical Engineering Department, Guru Jambheshwar University of Science and Technology, Hisar (18.04.2013 – 22.04.2013).
- Lectures and hands-on training delivered on AutoCad – 2013 training course conducted by University Computer & Informatics Center, Guru Jambheshwar University of Science and Technology, Hisar (29.07.2013 – 20.08.2013).
- Expert lecture on the “Mendeley : Article Organization tool” in Finishing School Programme organized by office of TEQIP –II, Guru Jambheshwar University of Science and Technology, Hisar (18.09.2013 – 20.09.2013).

Sh. Puneet Katyal

#### Refresher Courses (3 weeks)

1. UGC sponsored refresher course on Engineering and Sciences, GJUST, Hisar; Dec. 21, 2009-Jan 9, 2010.



2. UGC sponsored refresher course in Information Technology, GJUST, Hisar; Jun. 03, 2013-Jun 22, 2013.

#### Orientation Courses (4 weeks)

1. UGC sponsored orientation course at GJUST, Hisar; May 31, 2010-June 26, 2010.

#### Faculty Development Programme (1 week)

1. World Bank Project sponsored “TEQIP-II” course in Faculty Development Programme, GJUST, Hisar; Sep. 20, 2013-Sep. 28, 2013.

#### Work-Shops (One or Two days)

1. Recent trends in Engg. And Tech., GJUST, Hisar, March 17, 2009.
2. Recent trends in Printing Tech., GJUST, Hisar, March 13-14, 2009.
3. Carrier Prospects for Engineering Students in Today’s Scenario, April 25, 2009.
4. Recent trends in Printing Tech., GJUST, Hisar, March 15, 2011.
5. Patent Awareness vis-A-vis Intellectual Property Rights, GJUST, Hisar, August 9, 2011.
6. Recent trends in Engg. and Tech., GJUST, Hisar, March 15, 2012.

Dr. Mahesh Kumar

#### STC/Workshop Attended

1. 2 weeks Staff development program on recent developments in thermal power plants at DCE, Delhi (17-28 July, 2006).
2. 1 day national workshop on nuclear energy and environment, (December 15, 2007).
3. 1 day national workshop on RTE&T, at GJUS&T, Hisar (March, 17, 2009).
4. 1 day national workshop on career prospects for engineering students in today’s scenario, at GJUS&T, Hisar (April 25, 2009).

5. 3 weeks Refresher course on 'Engineering Sciences' UGC Sponsored at GJUS&T, Hisar (21.12.2009 – 09.01.2010)
6. 4 weeks orientation course UGC Sponsored at GJUS&T, Hisar (31.05.2010 – 26.06.2010)
7. Completed 3 week UGC sponsored Refresher course in Information Technology (ID for all steams) w.e.f. 03-06-2013 to 22-06-2013 with 'A' grade at UGC-Academic Staff College GJUS&T, Hisar
8. Completed faculty development programme on recent advances in engineering and technology from 20-09-2013 to 28-09-2013, sponsored by world bank project 'technical education quality improvement programme (TEQIP-II)' jointly organized by TEQIP-II cell & Academic staff college.

Sh. Kamal Deep

#### Refresher courses

1. 18-06-2007 to 29-06-2007 in "Hydro Power and The Environment", Deptt. Of Civil Engineering, G B Pant University of Agriculture & Technology, Pantnagar, Uttarakhand.
2. 20-09-2013 to 28-09-2013 in Recent Advances in Engineering & Technology at ASC, Guru Jambheshwar University of Science and Technology, Hisar.
3. 1-09-2002 to 01-12-2002 in PRO/Engineering at Rico Softech Limited, Gurgaon.

#### Orientation courses

1. 02-05-2011 to 16-06-2011 at ASC, Guru Jambheshwar University of Science and Technology, Hisar

#### Workshops

1. 17-03-2009 in Recent Trends in Engineering and Technology, at Guru Jambheshwar University of Science and Technology, Hisar.

2. 04-10-2013 to 07-10-2013 in Applied Mechanics at IIT, Kanpur.

28. Student projects:

- Percentage of students who have done in-house projects including inter-departmental projects: 100%
- Percentage of students doing projects in collaboration with other universities/industry/institute:  
The Department is making efforts to engage students in doing projects in collaboration with other University/ industry/institute

29. Awards/recognitions received at the national and international level by:

- Faculty: Prof H. C. Garg
- Rashtriya Gaurav Award conferred for ‘Meritorious Services, Outstanding Performance and Remarkable Role’ in academic and administrative spheres by the India-International Friendship Society (IIFS) in a seminar on Economic Growth & National Integration held on February 9, 2013 at New Delhi-India.
- Letter of Appreciation from Prof. Shigeka Yoshimoto, host researcher, Tokyo University of Science, Tokyo (Japan).
- Doctoral/post doctoral fellows: Nil
- Students: Nil

30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:

Organized Short Term Training Programme (STTP) on “Tribology of Bearings for Ultra- Precision Machining” in Mechanical Engineering Department, Guru Jambheshwar University of Science & Technology, Hisar-India from April 18, 2013 to April 22, 2013

Organized National Workshop on “Recent Trends in Engineering & Technology” in Faculty of Engineering & Technology, Guru Jambheshwar University of Science & Technology, Hisar-India on March 17, 2009.

31. Code of ethics for research followed by the departments:

The students registered for Ph.D programme follow the international code and ethics in publications.

32. Student profile programme-wise:

Name of the Programme (refer to question no.4)	Applications Received	Selected		Pass percentage	
		Male	Female	Male	Female
UG	Through HSCS Counseling	251	31	54/58= 93.18% (2009 batch)	4/4= 100% (2009 batch)
PG		32	05	60%	100%
Ph.D.		10	-	-	-

33. Diversity of students:

Name of the Programme (refer to question no.4)	% of students form the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
UG	NA	NA	NA	Nil
PG	10% (Ist Year) 30% (2 <sup>nd</sup> Year)	90% (Ist Year) 60% (2 <sup>nd</sup> Year)	Nil 10% (2 <sup>nd</sup> Year)	Nil
Ph.D	50%	50%	-	Nil

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

GATE	2013	19
GATE	2012	18
GATE	2011	13
GATE	2010	10
GATE	2009	08
GATE	2008	06

35. Student progression:

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	02+06=08 (21.62%)
PG to M.Phil.	NA
PG to Ph.D.	05(50%)
Ph.D. to Post-Doctoral	NA
Employed	
• Campus selection	10%
• Other than campus recruitment	65%
Entrepreneurs	25%

36. Diversity of staff:

<b>Percentage of faculty who are graduates (Regular Faculty)</b>	
of the same university	25%
From other universities within the State	25%
From universities from other States	50%
From universities outside the country	-

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt. During the assessment period:
- (i) Dr. Vishal Gulati (2009)
  - (ii) Dr. Munish Gupta(2011)
  - (iii) Dr. Mahesh Sharma(2012)

38. Present details of departmental infrastructural facilities with regard to:

- a) Library:  
Yes, the central Library is located near to the Department and the students have full access of the library.
- b) Internet facilities for staff and students:  
The 60 number of nodes are provided in the Department for uninterrupted internet facility.
- c) Total number of class rooms: 03+02 (Drawing Hall)+01=06 Infrastructure
- d) Class rooms with ICT facility: Two (equipped with LCD and internet facility)
- e) Students' Laboratories: 08 + 06 Workshop
- f) Research Laboratories: 01

39. List of doctoral, post-doctoral students and Research Associates:

- a) From the host institution/university: 05
- b) From other institutions/universities: 05

<b>Name of Research Scholar</b>	<b>Year of joining Ph.D Programme</b>
Pankaj Khatak	2009
Pritpal	2012
Sanjeev	2013
Kaushal Kumar	2013
Rakesh Bisla	2013
Himanshu Manchande	2013
Sonu	2013
Yujvinder Kumar	2013
Ajay Kumar	2013

40. Number of post graduate students getting financial assistance from the university: 75% From GATE/ AICTE/ World Bank and SC Scholarship
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology:
- The national level institutes like NIT's/IIT's are benchmark for designing new course curriculum.
  - The interaction with industrial person helps in designing new course.
  - Further Discussion with Alumni strengthens the designing of new programme.
42. Does the department obtain feedback from:
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
- The staff council meeting is held every month to evaluate/discuss the course curriculum.
- b) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback?
- Both formal and non formal channels are utilized to obtain the feedback on staff, curriculum and teaching-learning –evaluation. Internal assessment, classroom evaluation and alumni meet's of students also helps in getting feedback. The issues are discussed in the staff council meetings and helps in designing/modifying course curriculum.
- c) Alumni and employers on the programmes offered and how does the department utilize the feedback?
- Based upon the feedback (formal and non formal) from Alumni and employers the issues are discussed in the staff council meetings and helps in designing/modifying course curriculum.
43. List the distinguished alumni of the department (maximum 10) :
- As the department is just 8 years old, most of the students are at junior/middle level.

<b>Name of Student</b>	<b>Batch</b>	<b>Designation</b>	<b>Name of Company</b>
Binu	2004 (B.Tech)	Scientist-D	BARC,Mumbai
Kamal Kumar	2007 (M.Tech)	Assistant Professor	P.E.C,Chandigarh
Ravinder Sahdev	2009 (M.Tech)	Assistant Professor	MDU,Rohtak
Pankaj Moudgil	2004 (B.Tech)	Flying Officer	Indian Airforce
Rajesh Kumar	2007 (M.Tech)	Assistant Manager	BHEL
Pankaj Sharma	2004 (B.Tech)	Assistant Manager	Mahindra and Mahindra
Sandeep Dhankar	2004 (B.Tech)	Engineer	Merchant Navy
Ankur Rathi	2004 (B.Tech)	Manager	Gujrat Automobile, Gujrat

44. Give details of students enrichment programmes (special lectures/workshops/seminar) involving external experts:  
Well known experts from academia/Industry are invited to share their experiences with UG and PG students.

<b>Name of Expert</b>	<b>Programme</b>	<b>Date</b>
Prof K.S Kasana, NIT, Kurukshetra	RTET	18 March,2010
Prof Y Nath,IIT Delhi	RTET	18 March,2010
Prof N.P Mehta, Mullana University, Mullana	STC on Bearing Design	24 April,2013

45. List the teaching methods adopted by the faculty for different programmes:  
The Seminars, Group Discussions,Case studies along with teaching aids like blackboard/ ICT/ PP Presentations/ Tutorials



46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?  
By meeting the parents and students and students' placement.
47. Highlight the participation of students and faculty in extension activities:  
(iii) Earn while u learn  
(iv) M.Tech students are given teaching load in Labs
48. Give details of "beyond syllabus scholarly activities" of the department:  
1.Students are encouraged/ allowed to work with staff members in thrust research areas of the department/university.  
2.Participation in technical seminars/Quizes  
3.Mock Interviews/ Group Discussions are organized
49. State whether the programme/department is accredited/ graded by other agencies? If yes, give details:  
NBA Accreditation is to be applied by the Department.
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:
- The faculty members have recently completed Ph.D and few are near completion stage. The faculty members have submitted/in-process to submit projects and papers in SCI Journals.
  - One of the faculty members, Dr. Mahesh Kumar has published book entitled "Elements of Mechanical Engineering".
  - Research Project entitled "Development of Aerostatic Bearings for Ultra precision Machining (Duration: 3 years)" worth Rs 7, 55,000.00 from UGC has been granted to Prof. H.C Garg.
  - Minor Research Project entitled "Heat transfer enhancement using nanofluids in heat exchangers" worth Rs 40,000.00 from the University has been granted to Dr. Munish Gupta.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

**Strength**

1. Young and dynamic faculty members;
2. Good Lab and Infrastructural facilities;
3. A good No. of research papers are published by the faculty members.

4. Good number of Faculty members with Ph. D qualification grant under TEQIP-II

#### **Weakness**

1. Patents yet to be filed;
2. Insufficient placement in core companies;
3. Students' below par performance in competitive exams at national level;
4. Collaboration with major industrial houses yet to pick up;
5. Limited International exposure

#### **Opportunities**

1. Lab infrastructure for research and consultancy;
2. Flexible credit based system;
3. Industrial neighbourhood;
4. Larger number of internal contact hours with students for counselling and guidance of students by faculty; and
5. Campus fully residential for students and staff.

#### **Challenges**

1. Fluctuating demand in core Industry;
2. More specialized courses;
3. Inter – University MOUs; and
4. Consultancy works from industries
5. Campus placement of students.

52. Further plans of the department:
  - Industry tie-ups with reputed organization
  - Establishing centres of excellence through active socially relevant research
  - Involving students in socially relevant projects through non academic / club activitie
  - To provide Faculty members opportunity to visit other universities in India and abroad
  - Bringing awareness to students on maintaining high attendance percentage/observing basic discipline, good practices
  - Creating more free and conducive teaching-learning environment

---

**Faculty of Environmental and Bio Sciences & Technology**  
**The Departmental Profile**

---

## **Evaluative Report of the Department of Environmental Science & Engineering**

---

1. Name of the Department : Environmental Science & Engg.
2. Year of establishment : 1994
3. Is the Department part of a School/Faculty of the university? : Yes
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D. Sc., D.Litt., etc.)

<b>Programmes offered</b>	<b>Courses</b>
PG	M.Sc. (Env. Science)
	M.Tech. (Environmental Science & Engg.)
	M.Tech. (Geo-informatics)
	PG diploma in Env. Management (Distance mode)
PhD	Environmental Science & Engg.

5. Interdisciplinary programmes and departments involved: Radio-ecology centre, GJUS&T. Research is interdisciplinary.
6. Courses in collaboration with other universities, industries, foreign institutions, etc.: M.Tech. (Geo-informatics) with HARSC, Hisar, Haryana
7. Details of programmes discontinued, if any, with reasons: NA
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System: Semester with credit based system
9. Participation of the department in the courses offered by other departments : Environmental Studies in UG classes (B. tech. Mechanical, Computer, IT, Printing, Packaging, Food technology, ECE, B. Pharmaceuticals and BPT)
10. Number of teaching posts sanctioned, filled and actual

(Professors/Associate Professors/Asst. Professors/others):

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	02	00	06
Associate Professors	04	03	01
Asstt. Professors	08	06	02
Others *		04*	

\* Contractual faculty: Designated as Teaching Associate appointed against vacant posts

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance :

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ M.Phil. students guided for the last 4 years
Prof. C. P. Kaushik	M.Sc. Ph.D	Professor	Pollution Management	35	01
Prof. Anubha Kaushik	M.Sc., M.Phil, Ph.D	Professor	EIA and Bioremediation	29	04
Prof. Narsi R. Bishnoi	M.Sc. Ph.D	Professor	Bioremediation	24	05
Dr. V. K. Garg	M.Sc. Ph.D	Reader	Pollution Monitoring and Abatement	22	03
Prof. Parveen Sharma	M.Sc. Ph.D	Professor	Environmental Biotechnology	20	02
Prof. R. Bhaskar	M.Sc. Ph.D	Professor	Environmental Geology	18	--

Prof. Asha Gupta	M.Sc. Ph.D	Professor	Bioremediation	17	--
Prof. Mukul Bishnoi	M.Sc., M.Phil, Ph.D	Professor	Ecology	17	01
Prof. Rajesh Kumar	M.Sc. Ph.D	Asstt. Professor	Industrial Pollution and Management EIA	12	--
Er. Jitender Pal	B.Tech., M.Tech.	Asstt. Professor	Pollution Management and Control	12	--

12. List of Sr.Visiting Fellows, adjunct faculty, emeritus professors :  
No such appointment is made, but following visited the department on request:  
Prof. M. H. Fulekar, Central University Gujarat.
13. Percentage of classes taken by temporary faculty – programme-wise information:  
In MSc (Environmental Science):- 20%  
In Mtech (Environmental Science & Engg.):- 20%
14. Programme-wise Student Teacher Ratio:  
In M Sc (Environmental Science):- 10:1  
In M. tech (Environmental Science & Engg.):- 4: 1  
Overall: - 7:1
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

Name of the post	Sanctioned	Filled	Actual
Lab Tech. (Instr.)	1	0	0
Tech. Asstt. Gr.I	0	1*	1
Attendant-cum-DEO	0	1*	1
Store Keeper	1	0	1
Tech. Asstt. Gr.II	1	0	1
Lab Attendant	5	4	4
Clerk-cum-JDEO	1	1	0
Steno-typist	1	0	1

Peon	2	1**	1
------	---	-----	---

\*Working against vacant post

\*\*Working on contract through contractor

16. Research thrust areas as recognized by major funding agencies:
  - a. Environmental Pollution Management and abatement
  - b. Resource conservation and management
17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise:

Name of Faculty	Title	Duration	Year of allotment	Amount
Deptt. of ESE	DST-FIST Programme	2011-2015	2011	75,00,000.00
Dr. V. K. Garg	Establishment of Radio-ecology Centre in Guru Jambheshwar University, Hisar funded by Department of Atomic Energy, Board of Research in Nuclear Science, Mumbai (DAE-BRNS)	2009 to 2014	2009	5,11,00,000.00
Dr. R Baskar	Awarded UGC Geomicrobiology processes in the subsurface Ecosystems: A study of speleothems from Garo Hills, Meghalaya	2011-2014	2011	8,93,800.00
Prof. C.P. Kaushik	SAP-DRS-II UGC: Pollution Abatement	2008-13	2008	37,00,000.00

Coord- inator	& Bioremediation			
Prof. C.P. Kaushik & Prof. A. Kaushik	Degradation of PAHs utilizing catabolic genes of bacterial strain isolated from contaminated soil of Haryana	2009-11	2009	6,92,000.00
Prof. Narsi R. Bishnoi & Dr. Namita Singh	Development of Biofuel production technology from agro waste by using indigenous microbes	2008-11	2008	10,24,000.00
Dr. Parveen Sharma	Biomass mediated removal of textile dyes from waste effluents and characterization of microbial consortia using 16S-rRNA as molecular markers”	2007-10	2007	10,50,100.00
Dr. R Baskar	Awarded UGC major research project “Geomicrobiology of speleothems, Meghalaya caves, Meghalaya, India”.	2006-2009	2006	7,01,600.00
Dr. R Baskar	Awarded University minor project Geomicrobiological investigations on speleothems from Dharamshala caves, HP, India.	1.1.2010 to 31.12.2010	2010	30,000.00
Dr. V. K Garg and Dr. Mukul Bishnoi	DAE/BRNS sponsored project Ecological risk assessment for Narora Atomic	2009-2012	2009	31,00,000.00



	Power Station, Narora			
Dr. Mukul Bishnoi and Jitender pal	DAE/BRNS sponsored project, Air and water Quality monitoring at a proposed Nuclear Power Plant Project site in Haryana	2009-2012	2009	34,00,000.00
Dr. M.L. Batra and Prof. C.P. Kaushik	Ground water quality near industrial area of Gurgaon and Faridabad district and environmental impacts of industrial effluent irrigation	2010-2013	2010	12,50,000.00
Prof. Narsi R Bishnoi	UGC sponsored "Potential of thermophilic lignolytic bacterial enzymes for biomass conversion to biofuel"	2013-16	2013	14, 10,800.00
Prof. Narsi R Bishnoi	HSCST, Panchkula , Bioremediation of heavy metals contaminated waste water	2007-2009	2007	4,44,360.00
Dr. Asha Gupta	Application of microbial biomaterials for heavy metal detoxification of waste water	2011-14	2011	11,26,300.00
Dr. Rajesh K. Lohchab	Anaerobic treatment of municipal solid waste in leachate recirculation bioreactor	2011-2014	2011	10,69,800/-

Dr. Rajesh K Lohchab	Low Cost Technology Development for Treatment of Rural Areas Household Wastewater/Sewage	2012-2015	2012	24,70,000.00
Prof. Anubha Kaushik	Photobioreactor based sustained hydrogen production integrated with heavy metal removal from wastewater using cyanobacterial system	2011-2014	2011	10,00,000.00
Total Rs				8,19,62,760.00

18. Inter-institutional collaborative projects and associated grants received:
- National collaboration BRNS, BARC & NPCIL India (Aprox. Rs 5 Crores)
  - International collaboration
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received:- 8,19,62,760.00
20. Research facility / centre with :
- State recognition: Haryana State Pollution Control Board (HSPCB) has approved the Deptt under water (1974) and Air act (1981).
  - national recognition- FIST, SAP programme
- International recognition- Science Olympiad by Prof. R. Baskar
21. Special research laboratories sponsored by / created by industry or corporate bodies : Nil
22. Publications: List attached:
- Citation and H Index as per Scopus database
  - Number of papers published in peer reviewed journals (national / international) International- 436; National:- 35
  - Monographs Nil
  - Chapters in Book/Edited Books: 15

- Books with ISBN with details of publishers: 6
  - Number listed in International Database
  - (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
  - Citation Index – range /average : Up to 363
  - SNIP
  - SJR
  - Impact Factor – range Up to 5
  - h-index : Up to 37
23. Details of patents and income generated: Nil
24. Areas of consultancy and income generated: Pollution Monitoring :  
To be furnished by BDG / Prof. Neeraj Dilbagi
25. Faculty selected nationally / internationally to visit other laboratories /institutions/industries in India and abroad :
- Dr. R. Baskar:
- Academic Guest (5.08.2008-9.4.2009), Norwegian Centre for Excellence, Centre for Geobiology, Bergen, Norway.
  - Academic Guest (1.07.2009-23.8.2009), Department of Geology and Geochemistry, Stockholm University, Sweden.
  - VTT, Finland
- Dr Asha Gupta
- Attended a training program on “Basic Course in Molecular Biology” from 2-20 Feb, 2009 at University of Bergen, Norway.
26. Faculty serving in:
- a) National committees      b) International committees  
c) Editorial Boards      d) any other (please specify)
- Dr. R. Baskar:
- International
- Corresponding member, Commission on Geoscience for Environmental Management (GEM), (IUGS), The Netherlands.
  - Member of the Association of Geoscientists for International development (AGID)
  - Dy Counsellor in India, IGEO (International Geoscience Education Organization)
- National
- Life Member, Indian Science Congress Association, Calcutta.

- Fellow, GSI, Bangalore
- Fellow, Society of Earth Scientists, India
- Member, Editorial Board, Journal Nature and Environment, Society Green Cover.
- Life Member, Society for Promotion of Science and Technology in India (SPSTI)
- Regional Co-ordinator, Hisar district for Society for Promotion of Science and Technology in India (SPSTI).

#### Reviewer/Expert

- Reviewer of Journal of Environmental Science and Engineering, National Environmental Engineering Research Institute, Nagpur
- Reviewer of National Geographic Society Grant applications
- Reviewer of DST projects
- Reviewer of Hungarian Scientific Research Fund projects
- Reviewer of Quaternary International
- Expert panel member, PG Diploma in EIAM course, IGNOU, New Delhi
- Examiner (paper setting, evaluation and practicals) KUK, CDLU, MDU

#### Prof. Anubha Kaushik

- Subject Expert/Member of various National and State level academic and professional bodies and committees like Appellate Authority, Haryana (Water, Air Acts),
- Resource Person, US Education Foundation in India- Fulbright, State Steering Committee of National Biodiversity Strategy & Action Plan, State Environmental Protection Agency, Haryana , National Committee of Technical Education for Women,UGC,
- Chairperson, Advisory Committee of TERI university
- Member, National Committee, North East Indian Diversity Centre at NEHU, Shillong.
- Member, Expert Committee for award of funds to Colleges for organizing Conferences, Seminars, workshops, UGC, Eastern regional office, Kolkata.
- Member, Expert Committee for award of Dr. Kothari Fellowships (UGC), Pune

Dr. V.K. Garg

- Guest-Editor for the special issues ( Six issues) on “Solid Waste Management” for International Journal of Environment and Waste Management published by Inderscience Publishers, USA.
- Guest editor for special issue on “Solid Waste Management” for World Reviews in Science, Technology and Sustainable Development published by Inderscience Publishers, USA.
- Member “Editorial Board” of Journal of Scientific and Industrial Research Published by NISCAIR (CSIR), New Delhi from 2008-2010, 2010-2012, 2012-2014.
- Member “Editorial Board” of Indian Science Abstracts Published by NISCAIR (CSIR), New Delhi from 2010-2012, 2012-2014.
- Member “Editorial Board” of Journal Water Research and Development (<http://www.waterrnd.com/editorial-board.html>)
- Member “Editorial Board” of International Journal of Environmental Science and Ecotechnology ([http://ispjournals.com/editorial-board.php?journals\\_id=101](http://ispjournals.com/editorial-board.php?journals_id=101))
- Editor-in-Chief “Journal of Environmental Science and sustainability” ( online journal: [www.jessresearch.com](http://www.jessresearch.com))

Prof. Parveen Sharma

- i. Asstt. Editor of Indian Journal of Environment and Ecoplanning
- ii. Convenor, Ozone Week-Programmes/Workshop from September 16-23, 2013

Prof. Narsi Ram Bishnoi

- i) Chairman Faculty of Non Conventional Energy Resources and Environmental Sciences w.e.f .March 2008 to March 2011.
- ii) Chairman of Post-graduate Board of Studies, Department of Environmental Science & Engineering, Guru Jambheshwar University of Science & Technology, Hisar-125001 w.e.f. August 2008 to August 2011.
- iii) Member of Executive Council Guru Jambheshwar University of Sci & Technology, Hisar-125001 (2011)
- iv) Member of Academic Council, Guru Jambheshwar University of Sci & Technology, Hisar
- v) Currently Member of Post-Graduate Board of Studies, Deptt. Of Environmental Science & Engineering, Guru Jambheshwar University of Sci & Technology, Hisar-125001.

- vi) Served as member of Department of Science & Technology, Govt. of Haryana, and Chandigarh. (2010-2011)
- vii) Member of Haryana State Advisory Group For Preparation of State Action Plan on Climate Change (2011)
- viii) Expert Member of Steering Committee on Science & Technology for Preparation of Vision Document Haryana State Council for Science & Technology for XII th Five year Plan (2012-2017) 2010.
- ix) Member of Subject Expert Committee for UGC Major Research Project Evaluation.
- x) Member of NAAC Accreditation Committee.
- xi) Life membership of Indian National Science Congress, India.
- xii) Life membership of National Environmental Science Academy.
- xiii) Life membership of Indian Society of Plant Physiology, India.

Prof. C.P. Kaushik

- Presented progress of Technical Education Quality Improvement Programme of GJ University of Science & Technology at Joint Review Mission before the World Bank Team on 22-23 Jan., 2009 at NIT Warangal, A.P.
- Participated and contributed in the conference “Governance of Technical and Engineering Education in India Learning Forum-Logistics” organized by the World Bank under Technical Education Quality Improvement Programme at Hyderabad from 23-26 September, 2009.
- Member, National Advisory Committee, National Seminar on, “Response of Eco-biological components to the phenomenon of global warming (NSREG-2009) being organized by Kumaun University Nainital, from 26-27, September, 2009.
- Member, Advisory Committee, Workshop on Health Effects of Particulate Air Pollution being organized by Thapar University, Patiala from 17-18 September, 2009.
- Member, State Expert Appraisal Committee of the State Environmental Impact Assessment Authority, Govt. of Haryana for giving environmental clearance to the developmental projects in Haryana state.

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs):
1. Public Awareness Programme on ‘Atom for Peace’ (by Dr. V. K.

- Garg)
2. National Workshop on Awareness to Save Mother Earth (by Dr. R Baskar)
  3. Technical programme discussion meeting of BRNS, Mumbai (by Dr. V. K. Garg)
28. Student projects :
- percentage of students who have done in-house projects including inter-departmental projects: 100%
  - percentage of students doing projects in collaboration with other universities/industry / institute: 100% students go for in plant summer training
29. Awards / recognitions received at the national and international level by Faculty :

Prof. R Baskar

Fellow Geological Society of India;  
Deputy Coordinator International Geoscience Education Organization;  
Team leader, Earth System Sciences, The Indian Science Congress.

Dr. V.K. Garg

Fellow Biotech research Society of India, 2011;  
Outstanding reviewer award Elsevier, 2010;  
Selected for Netherland Fellowship to attend a short course in 2009 at UNESCO-IHE, The Netherlands;  
Nominated as Visiting Scholar to Mauritius under 5TH UGC-TEC Consortium for the year 2011;  
Thomson Reuter Citation Award, 2012 for maximum citation in India;  
Outstanding reviewer award Elsevier, 2013;  
International Project Reviewer for Poland 2013;  
International Project Reviewer for Chile 2013;  
Undergone training programme at Deakin University Jan 2014

Prof. Parveen Sharma

- i) Attended TEQIP Sponsored two week training at University of Teeside, UK in the month of Dec. 2013.

Dr. Asha Gupta

Life membership of ISCA, Kolkata and Academy of Env. Biology

Prof. C.P. Kaushik

Guest of Honour at National Conference on solid waste management organized by IIT Delhi and SEARCH Foundation in association with Ministry of Environment and Forests, GoI at India Habitat Center, New Delhi, 10-11 Sept., 2009

- Doctoral / post doctoral fellows: Post Doctoral fellow (Pdf) from UGC (Dr. Anju and Dr. Kavita Sharma)
  - Students: JRF/SRF/RA ships to students from different Funding Agencies.
30. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:

S.No	Event
1	Strategies for Mitigation of Environmental Degradation and Climate change from 2nd to 3rd March 2012, Funded from Ministry of Earth Sciences
2	Multidisciplinary approach in frontier areas of environmental science and engineering (MAFAESE) from 4th to 5th March 2011, Funded from Ministry of Earth Sciences, University funds for publishing and UGC
3	International Conference on Changing Environmental Trends and Sustainable developments (CETAS-2009), Feb 2009. Funded from World bank grant of GJUST (TEQIP-I Programme)
4	Sixteenth National Symposium on Environment, from 16-18 July, 2008. Funded from BRNS, Mumbai

31. Code of ethics for research followed by the departments:  
University policy and rules in this regard are followed.



32. Student profile programme-wise:

In session 2009-2010

Name of the Programme (refer to question no.4)	Applications Received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc. Env. Sc.	64	13	24	35	65
M.Tech. Env. Sc.	47	06	15	28	72
M.Tech. Geo. Inf.	48	18	12	60	40
Ph.D	44	3	5	37	63

In session 2010-2011

Name of the Programme (refer to question no.4)	Applications Received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc. Env. Sc.	71	20	21	49	51
M.Tech. Env. Sc.	43	08	12	40	60
M.Tech. Geo. Inf.	50	17	09	65	35
Ph.D	42	3	6	33	67

In session 2011-2012

Name of the Programme (refer to question no.4)	Applications Received	Selected		Pass percentage	
		Male	Female	Male	Female

M.Sc. Env. Sc.	Common entrance test for all PG subjects	8	8	50	50
M.Tech. Env. Sc.	34	7	11	42	58
M.Tech. Geo. Inf.	55	14	06	70	30
Ph.D	46	3	6	33	67

In session 2012 – 2013

Name of the Programme (refer to question no.4)	Applications Received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc. Env. Sc.	23	5	7	23	77
M.Tech. Env. Sc.	38	16	4	80	20
M.Tech. Geo. Inf.	28	5	3	62	38
Ph.D	41	5	5	39	61

### 33. Diversity of Students:

In session 2009-2010

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc En Sc.	-	89	11	-
M.Tech. Env. Sc.	67	24	10	-
M.Tech. Geo. Inf.	-	67	33	-
Ph.D	38	12	50	-

In session 2010-2011

<b>Name of the Programme</b> (refer to question no. 4)	<b>% of students from the same university</b>	<b>% of students from other universities within the State</b>	<b>% of students from universities outside the State</b>	<b>% of students from other countries</b>
M.Sc En Sc.	-	83	17	-
M.Tech. Env. Sc.	53	31	16	-
M.Tech. Geo. Inf.	8	54	38	
Ph.D	34	55	11	-

In session 2011-2012

<b>Name of the Programme</b> (refer to question no. 4)	<b>% of students from the same university</b>	<b>% of students from other universities within the State</b>	<b>% of students from universities outside the State</b>	<b>% of students from other countries</b>
M.Sc En Sc.	-	94	06	-
M.Tech. Env. Sc.	44	33	23	
M.Tech. Geo. Inf.	-	70	30	-
Ph.D	67	33	-	-

In session 2012-2013

<b>Name of the Programme</b> (refer to question no. 4)	<b>% of students from the same university</b>	<b>% of students from other universities within the State</b>	<b>% of students from universities outside the State</b>	<b>% of students from other countries</b>
M.Sc En Sc.	-	59	41	-

M.Tech. Env. Sc.	50	20	30	-
M.Tech. Geo. Inf.	-	75	25	-
Ph.D	85	15	-	-

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise:

<b>Examinataions</b>	<b>SC</b>	<b>ST</b>	<b>OBC</b>	<b>GENERAL</b>
NET	08	00	09	07
JRF	05	00	02	03
GATE	02	00	01	01

35. Student progression :

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	NIL
PG to M.Phil.	NIL
PG to Ph.D.	Given in S.No 33
Ph.D. to Post-Doctoral	NIL
Employed <ul style="list-style-type: none"> <li>▪ Campus selection</li> <li>▪ Other than campus recruitment</li> </ul>	NIL
Entrepreneurs	

36. Diversity of staff:

<b>Percentage of faculty who are graduates</b>	
of the same university	20%
from other universities within the State	60%
from universities from other state	20%

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period :

Dr. Rajesh Lohchab (PhD)

Er. Jiternder Pal (Submitted PhD)

38. Present details of departmental infrastructural facilities with regard to :

a) Library : Central Library

b) Internet facilities for staff and students: Internet facilities for staff and students: Department has its own Computer Lab with Internet facility. Separate PCs/laptops and internet connection are given to each faculty members.

c) Total number of class rooms : 03

d) Class rooms with ICT facility

e) Students' laboratories : 05

f) Research laboratories : 10

39. List of doctoral, post-doctoral students and Research Associates :

a) from the host institution/university

Doctoral:

Post-doctoral: -

Research Associate: -

b) from other institutions/universities

Doctoral:

Post-doctoral: 02

Research Associate: -

40. Number of post graduate students getting financial assistance from the university:  
No Assistance from university but getting fellowship through GATE and TEQIP-II programme)  
GATE: 04  
TEQIP: 12
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. :  
Regular inputs have been taken
42. Does the department obtain feedback from :
- a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? :  
As per university rules
  - b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? :  
As per university rules
  - c. Alumni and employers on the programmes offered and how does the department utilize the feedback? :  
As per university rules
43. List the distinguished alumni of the department (maximum 10) :
- i. Dr. S. D. Attri, IMD, New Delhi
  - ii. Dr. Sudhir Dahiya, NTPC, India
  - iii. Dr. Ravindra Khaiwal, PGIMR, Cgandigarh, India
  - iv. Dr. Tony Sarvinder Singh, Research scientist, USA
  - v. Dr. Meenakshi Pahwa, University of Melbourne
  - vi. Dr. Sanjeev Singh, NHPC, India
  - vii. Dr. Vikarnt Tyagi, University of Adis Abbaba, Euthopia
  - viii. Dr. Pritam Sangwam, DRDR, New Delhi
  - ix. Dr. Dr. Sandeep Jain, NTPC
  - x. Dr. Aarti Chaudhary, Calgary university Canada

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts:

Invited Lectures

- Prof. Santosh Satya IIT, Delhi
- Prof. K.P Sharma , University of Rajasthan, Jaipur
- Prof. Baldev Satiya, NIT Kurukshetra
- Dr. R S Hooda, HARSAC, Hisar
- Dr. S. D. Attri, IMD, Delhi

Workshop

- Workshop on Ozone
- Workshop on Water Day
- Workshop on Earth Day

Seminars

- It is a part of course curriculum to deliver a seminar of M.Sc as well as M.tech
- All students deliver seminar on in-plant training which is compulsory part of course curriculum

45. List the teaching methods adopted by the faculty for different programmes:

Regular assignments, field visits, industrial training, class discussion, industrial visits, seminars & group discussion. Use of LCD, OHP & DLP, in teaching and seminars.

- a) Blackboard method
- b) Audiovisual method (power point, TV, DVD/CD, movies and interactive class room board )
- c) Class room seminars
- d) Class room quiz
- e) Field visits to give real life examples of environmental pollution, environmental management, waste management technologies, resource conservation etc.

- f) Industrial visits to demonstrate waste management and their control as according to Water Act (1974) and Air Act (1981)
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?  
As per standards being followed in university as per norms
47. Highlight the participation of students and faculty in extension activities:
- Field visits to educate people on solid waste management, water pollution monitoring, vermicomposting, medicinal plants, agro-forestry, organic farming etc.
  - Water quality of drinking and other water samples of people are tested by the department.
  - Lectures are delivered by faculty members in academic staff college as resource person.
  - Workshops are organised for community people.
48. Give details of “beyond syllabus scholarly activities” of the department:
- Field visits to educate the students about real environmental problems
  - Assignments on various current environmental issues to the students
  - Industrial visits to know real waste management practices at industrial level
  - Group discussions
  - Celebration of various environmental days, such as; water day, earth day, world environment day, ozone day etc.
  - Departmental and interdepartmental quiz
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details:
- Department is approved by HSPCB under water (1974) and Air act (1981)
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:

The Faculty members of the department are actively involved in running



research projects in various areas of Environmental Sciences particularly in Bio-remediation, vermicomposting, Environmental Bio-technology, Geomicrobiology and Energy & Environment. The department has been recommended as consultancy/testing laboratory by Haryana State Pollution Control Board (HSPCB) under the Air & Water Act. The Faculty members generated grants for various agencies. In addition several students have qualified NET, GATE, JRF, SRF, RA due to active mentoring by the faculty members. Most of our students are placed in different industries, universities, colleges and R&D institutes. Many students have pursued/are pursuing specialized education in various foreign countries like Sweden, Belgium, USA, France, UK, Ethiopia etc. The faculty members regularly upgrade the curriculum depending on the changing demands of the field. The department has been supported by UGC-SAP, TEQIP-I, TEQIP-II & DST-FIST with development infrastructure and training of faculty members. All faculty members are trained abroad due to generous grants from TEQIP-I and TEQIP-II, funds from universities and other agencies. The department regularly organizes outreach programmes like World Water Day, World Earth Day, Ozone week and field visits of the students. Department has a state-of-the-art facilities in most of the laboratories like air pollution, Environmental Bio-technology, Bio-remediation & Solid Waste Management.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

Strengths

- Strength of department is structured course curriculum
- Permanent faculty appointed
- Air conditioned class rooms
- Excellent laboratories for PG Research students
- Faculty have R&D projects different agencies like UGC, FIST, BRNS, BARC.

Weaknesses

- Need of departmental library.
- Need of regular appointment against vacant teaching posts

52. Future plans of the department:

Department has the potential to develop as a National Centre for excellence

for teaching and research in the field of Environmental Sciences. The department aims to be a Centre for Excellence in the field of Environmental Sciences and Technology. It could be achieved by supporting the existing faculty by providing them more opportunity for training programme, striking purpose full linkages with industries. The department aims to invest on the student community more vigorously to promote holistic human development with a strong conviction on ethic Sciences and Environmental issues.

## **Evaluative Report of the Department of Bio & Nano Technology**

---

1. Name of Department        Bio & Nano Technology
2. Year of establishment        1998
3. Is the Department part of a School/Faculty of the University?    Yes  
   Faculty of Environmental and Bio Sciences & Technology
4. Names of programmes offered (UG, PG, M.Phil., Ph. D., Integrated Masters; Integrated Ph. D, D.Sc., D.Litt., etc.)
  - M.Tech. (Nano Science & Technology)
  - M.Sc (Biotechnology)
  - M.Sc. (Microbiology)
  - Ph.D. (Biotechnology)
  - Ph.D. (Nano Science & Technology)
5. Interdisciplinary programmes and departments involved:  
Ph.D and M. Tech students are pursuing their research work under joint supervision of faculty of our department as well as other departments like Pharmaceutical sciences, NRCE, CCSHAU Hisar, Environmental Sciences, etc
6. Courses in collaboration with other universities, industries, foreign institutions, etc. : NIL
7. Details of programmes discontinued, if any, with reasons:  
  
Yes, M.Sc (Nano Science & Technology) an innovative programme was initiated in 2009 but due to duplication of courses with M. Tech (Nano Science and Technology), it was discontinued w.e.f 2011 after restructuring exercise in which a specialization was offered to M.Sc Biotechnology students.
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System-  
  
Semester system with Choice Based Credit System where students have choice to opt for the electives depending upon their interest.

9. Participation of the department in the courses offered by other departments:

The Open elective course was offered from department to the students of other departments viz. Department of Physics, Chemistry, Mechanical Engineering, Biomedical Engineering

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others):

	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual (including CAS &amp; MPS)</b>
Professors	1	1	2
Associate Professors	3	1	2
Asst. Professors	8	6	4
Others	-	6*	-

\*Teaching associates appointed on contract against vacant posts.

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

<b>Name</b>	<b>Quali- fication</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Expe- rience</b>	<b>No. of Ph.D./ M. Phil. students guided for the last 4 years</b>
Dr. Ashok Chaudhury	PhD, PDF	Professor	Plant Biotechnology	20 years	10
Dr. Neeraj Dilbaghi	PhD	Professor & Chairperson	Nanobiotechno- logy, Molecular Microbiology	18 years	05
Dr. Namita	PhD,	Associate	Microbial	13	07

Singh	PDF	Professor	biotechnology, Industrial biotechnology	years	
Dr. Vinod Kumar Chhokar	PhD, PDF (Boys- cast fellow)	Associate Professor	Biochemistry, Molecular Biology	13 years	06
Dr. Anil Kumar	PhD	Assistant Professor (Sr scale)	Animal Biotechnology	08 years	-
Dr.Sandeep Kumar	PhD	Assistant Professor (Sr scale)	Material Science & Nanotechnology	07 years	01
Dr. Santosh Kumari	PhD	Assistant Professor (Sr scale)	Genetics, Bionano technology	07 years	-
Dr. Rajesh Thakur	PhD	Assistant Professor (Sr scale)	Bionano technology	09 years	01

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors:

No such appointment is made, but following visited the department on request:

- Prof. K.K. Kapoor, Emeritus Fellow UGC (Microbiology), w. e. f. 1-7- 2013 till date.
- Professor G. C. Chaturvedi, Visiting Fellow, UGC, worked from 19-9-11 to 31-10-11.

13. Percentage of classes taken by temporary faculty-programme-wise information:

- M.Tech. (Nano-Science & Technology) -Nil
- M.Sc (Biotechnology) -20%
- M.Sc. (Microbiology) -60%

14. Programme-wise Student Teacher Ratio:

- M.Tech. (Nano-Science & Technology) -10:1
- M.Sc (Biotechnology) – 12:1
- M.Sc. (Microbiology) - 12:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual</b>
Clerk- cum JDEO	01	01	01
Tech Asstt Grade-I	01	01	03
Lab Technician	01	01	01
Lab Attendant	04	01	01 + 01*
Peon	01	01	01
Steno typist	01	01	01*

\*On Contract

16. Research thrust areas as recognized by major funding agencies:

Biosensor Technology:

- To develop cost effective bionanosensor for animal disease diagnosis, urea sensor etc.

Nanomedicine and Drug Delivery:

- Development of nanoformulation for drug delivery in human and animal healthcare applications

Bionanotechnology:

- Synthesis of nanomaterials using physical, chemical and biological routes
- Development of nanocarrier based formulations for agricultural application

Nanotoxicology:

- Safety and Toxicological evaluation of nanoformulations/ nanomaterials
- Antimicrobial activities of Nanoparticles/ nanomaterials

Functional Genomics of Plant Secondary metabolism:

- Elucidating the metabolic pathways of plant secondary metabolites
- Metabolic engineering of medicinal plants for enhanced secondary metabolite production

Molecular Microbiology:

- Genetic diversity among medicinal plants, bacterial and fungal pathogens.
- Development of SCAR based diagnostic kit for bacterial/Fungal pathogens.

Microbial Biotechnology:

- Production of bioactive compounds from cyanobacteria, Isolation, Purification and Characterization of industrial enzymes from microbial source.

17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise:

- a) National- 12
- b) International -1
- c) Total grants received-Rs 1 crore 60 lakhs

PI	Title	Amount	Funding Agency
Dr. Vinod Chhokar	Identification and molecular characterization of genes encoding enzymes of anthraquinones biosynthesis pathway in Aloe vera (Three Years)	Rs 15.55 Lakhs	UGC
Dr. Rajesh Thakur Dr. Rakesh Dhar	To Evaluate the various Thin Film Formulations for application in control of Biofouling.	Rs 13.90 Lakhs	UGC
Dr. Ashok Chaudhury	Cataloguing the Genetic Diversity of Trigonella using DNA based Molecular Markers	11.72 Lakhs	UGC
Dr. Namita Singh	Cellulase production from indigenous fungal strains using Agro- Industrial wastes and its characterization.	9.95 Lakhs	UGC
Dr. Santosh Kumari	Ecofriendly biosynthesis, characterization and antimicrobial activity of silver nanoparticles synthesized from leaf extract of Ocimum basilicum (marua plant). (06 months)	Rs 40,000	UGC
Dr. Neeraj Dilbaghi	Design and Synthesis of Fungicide Loaded Polymer Nanocapsules for Agriculture use	1.00 Lakhs	General Development Assistance Scheme of UGC
Dr. Sandeep Kumar	Synthesis, Characterization and Evaluation of nanomaterials for removal of Cadmium and Lead	15. Lakhs	DST Fast Track Scheme
Dr. Namita Singh	Elucidation of Phenanthrene degradation Potential of the bacterial consortium	Rs 40,000	UGC
Dr. Rajesh	Studies on microbial adhesion on	Rs	UGC

Thakur	surfaces leading to biofouling of Engineered structures	40,000	
--------	---	--------	--

18. Inter-institutional collaborative projects and associated grants received:

a) National collaborations -3

PI	Title	Amount	Funding Agency
Dr. Neeraj Dilbaghi & Dr. Sandeep Kumar ( Co-investigators) Dr. Anju Manuja, NRCE, Hisar (PI)	Synthesis, Characterization and evaluation of drug- loaded nanoformulations against Trypanosoma evansi in animal model	Rs. 35.21 Lakhs	DST
Dr. Neeraj Dilbaghi (PI) Dr. D. Kumar, Department of Chemistry ( Co-PI) Principal Collaborators: Sh. Ajay kumar, HPD, BARC, Mumbai. Co-PC: Mr. C.X.Rao, HP Group, NPCIL, Mumbai	Transfer Factor of Radionuclides (Natural and Fallout) in Flora around the proposed Nuclear Power Plant Site in Haryana	21.7 Lakhs	(BARC-BRNS)
Dr. Neeraj Dilbaghi (PI) & Dr. Sandeep Kumar Dr. S.C. Yadav, Co- Investigator, NRCE, Hisar	Development of Nano gold based immunochromatography/ immuno dot blot assay for detection of Trypanosoma evansi infection in animals	23.7 Lakhs	DST

b) International collaboration- 1

Dr. Sandeep Kumar (PI) & Dr. Neeraj Dilbaghi (Co-PI) Dr. Mousa M. Nazhad, Pulp & Paper Technology Division, Asian Institute of Technology, Thailand	Development of Filter Paper for Production of Safe Drinking Water (Indo- Thailand International Project)	8.87 Lakhs	DST, Govt of India and Ministry of Science & Technology, Thailand.
--	---	------------	--

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received:

Title	Supporting Agency	Grants Received
HRD Program in M. Tech. (Nano	DST Nanomission,	3.48



Science & Technology)	New Delhi	crore
HRD Program in M. Sc. (Biotechnology)	Department of Biotechnology, Government of India	20-30 lakhs per year
Bioinformatics Infrastructure Facility	Department of Biotechnology, Government of India	20 lakhs
Special Assistance Program (SAP-DRS)	University Grants Commission	85 lakhs
Funds for Improvement of Science & Technology Infrastructure level-I (FIST)	Department of Science & Technology Government of India	75 lakhs
TEQIP-II (M.Tech Program)	World Bank	1.25 crores

20. Research facility/centre with:

- State recognition –
- The department is recognized by DST, Government of Haryana and the facility created here is used by faculty and students of other institutes and universities of Haryana for meeting their research demands in relevant areas of their research.
- National recognition –
- Department is recognized by DBT, Govt of India, DST, Nano Mission, Govt of India, DST-FIST (Phase I and II), UGC-SAP, DRS and world Bank (TEQIP-II)
- International recognition – Nano Synthesis & Characterization Lab is recognized by Asian Institute of Technology, Bangkok, Thailand and MOST, Thailand and one joint international project is underway.

21. Special research Laboratories sponsored by/ created by industry or corporate bodies : Nil

22. Publications:

- Number of papers published in peer reviewed journals (national/international)- 99

- Monographs- Nil
- Chapters in Books – 06
  1. Rajesh Thakur (2012) Biogenic synthesis of metals nanoparticles using plants. Chapter 27 in Book Chapter in Plant Tissue Culture: Totipotency to Transgenic, Published by Agrobios Publisher, India, Edited by HP Sharma. ISBN No.: 978-81-7754-467-1.
  2. Sunita Sharma, Vandana, S. K. Ghoshal, Pooja Arora, Neeraj Dilbaghi and Ashok Chaudhury (2007). Optimisation of bio-sensor parameters in *Macrophomina phaseolina* impregnated sol-gel derived silica. ICMO2007. In: Microwaves & Optoelectronics. Ed M.D. Shirshat, Ananya Publications, New Delhi.
  3. Namita Singh & R. Chanan (2013) Third Generation Green Energy: Cyanobacteria- Key to production of sustainable Energy through Metabolic Engineering. In- Biotechnology: Prospects & Applications, Springer (R.K. Salar et. al. (Eds).
  4. “Food spoilage, food infections and intoxications caused by microorganisms and methods for their detection” for e-Book Food and Industrial Microbiology, developed by National Science Digital Library (NSDL) network project, National Institute of Science Communication and Information Resources (NISCAIR), CSIR .
  5. “Introduction and Scope of Microbiology” in e-Book General Microbiology developed by National Science Digital Library (NSDL) network project, NISCAIR
  6. Purkayastha Sharmishtha, Arora Pooja, Kaur Bhavneet, Dilbaghi Neeraj and Chaudhury Ashok. Characterization of isolates of *Macrophomina phaseolina*, causal agent of charcoal rot of cluster bean, based on PCR amplified rDNA spacer polymorphisms. In: Sustainable Agriculture for Food, Bio-Energy and Livelihood Security Edited by R.K. Behl, D.P. Singh, V.S. Tomar, M.S. Bhale, D. Khare and S.D. Upadhyaya, Agrobios, 2009, xxx, 630 p, ISBN : 81-904309-6-3.
- Edited Books - 2
- Books with ISBN with details of publishers:
  - Kumar A. and Chhokar V. (2010). Basic Concepts of Immunology. Arihant Publishers, New Delhi ISBN no-978-93-80872-16-2.
  - Priyanka Siwach and Singh Namita “Molecular Biology Principles and Practices ” Luxmi Publications, New Delhi (2007 & 2011 IInd Revised Edition). ISBN No: 978-81-318-0270-0.

- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc -88
  - Citation Index-range/average: up to 103
  - SNIP: -
  - SJR -
  - Impact Factor-range/average: upto 5.36
  - h-index: Up to 11
23. Details of patents and income generated: 3 + 1 published
1. Ashok Chaudhury and Minakshi Pal. Method of Direct Regeneration and Shikonin Induction in Callus of *Arnebia hispidissima*. Patent Application 2066/DEL/2004 dated 21-10-2004. Indian Patent Application. (Under Process)
  2. Ashok Chaudhury and Minakshi Pal. Method for Enhanced Shikonin Production in *Arnebia* species through Induction of Hairy Root Cultures. Patent Application 2483/DEL/2004 dated 14-12-2004. (Indian Patent granted)
  3. Ashok Chaudhury and Minakshi Pal. Method of Direct Regeneration, Shikonin Induction in Callus and Agrobacterium-mediated genetic transformation of *Arnebia hispidissima*. Patent Application 05256545 dated 21-10-05. European Patent Granted.
  4. Anju Manuja, Gaurav Bhanjana, Sandeep Kumar, Harmanmeet Kaur, Neeraj Dilbaghi "Nano drug delivery for Quinapyramine sulphate" Indian Patent Application No.2560/DEL/2011 A Publication Date: 08/03/2013.
24. Areas of consultancy and income generated :
- The faculty members have expertise in the area of Nanobiotechnology, Microbial Technology, Genomics and Proteomics, Biosensors, Animal Biotechnology, Plant Tissue Culture.  
Income generated: Nil
25. Faculty selected nationally/internationally to visit other laboratories / institutions / industries in India and abroad:

- a) Awarded Fulbright Nehru Senior Research Fellowship 2011-2012 at Crop Science Department, N C State University, Raleigh, NC, USA (Prof Ashok Chaudhary).
- b) Awarded BOYSCAST( Better Opportunities for Young Scientists in Chosen Areas of Science and Technology) Fellowship by Department of Science & Technology, Govt of India from August 31,2010 to August 30,2011 at Purdue university, West Lafayette, USA (Dr Vinod Chhokar)
- c) Awarded International Travel by DST for attending International Conference (ICEAN 2012) at Brisbane, Australia DURING October 22-26, 2012 (Dr Sandeep Kumar)
- d) Visited Asian Institute of Technology (AIT), Bangkok, Thailand from November 8-22, 2013 for execution of joint research work under DST, Govt of India and MOST, Thailand grant (Dr Sandeep Kumar).
- e) Gordon Research Conference on “Plant Metabolic Engineering”, July 24-29,2011 Waterville Valley , NH,USA(Dr Vinod Chhokar)
- f) International Conference on Environment and Bio Science (ICEBS-2013), Nov 23-24, 2013, Phuket, Thailand (Dr Vinod Chhokar).

26. Faculty serving in :

- a) National committees b) International committees c) Editorial Boards d) any other (please specify)

Others:

Member of Expert Committee

- Dr Vinod Chhokar acted as Member of the Expert Committee for the selection of Scientist C at Bio Processing Unit, Mohali on December 3, 2013

Member of Academic Bodies of other Institutions

- Dr Neeraj Dilbaghi: Outside Expert – PG Board of Studies, Deptt. of Biotechnology, MM University, Mullana.
- Life Member of Association of Microbiologists of India
- Dr Ashok Chaudhury: Outside Expert – PG Board of Studies, Department of Biotechnology, CDLU, Sirsa
- Faculty members acted as reviewers of large number of national and international journals.

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs).

Prof. Ashok Chaudhary

- Seven days Training on “MHRD’s National Mission for Teachers Management Capacity Enhancement Program” from 24<sup>th</sup> to 30<sup>th</sup> November, 2013 at Indian Institute of Management, Indore, MP.
- International Symposium on “Frontier Discoveries and Innovations in Microbiology and its Interdisciplinary Relevance” (FDMIR-2013) from 17<sup>th</sup> to 20<sup>th</sup> November, 2013 held at Department of Microbiology, Maharshi Dayanand University, Rohtak-124001, Haryana. Judged as Best Award

Dr. Neeraj Dilbaghi

- National Workshop on “Emergence of Nanotechnology (WKNANO-13)” organized by School of Basic Applied Sciences, IILM, Greater Noida on October 18, 2013.
- National Symposium on “Emerging trends in Agri-Bioinformatics”, December 16-17, 2013, DWR, Karnal.
- National Symposium on ‘Emerging Trends in Nano-Biotechnology’ organized by JNU, Jaipur from November 29- 30, 2013.
- National Symposium on “Emerging trends in Agri-Bioinformatics”, on December 16, 2013, DWR, Karnal.
- Attended one week professional development programme at UGC,ASC at GJUS&T Hisar from 14-01-2011 to 20-01-2011.
- Attended International Seminar on Renewable Energy for institutes and communities in urban and rural settings at Manav Institute of Technology and Management, Jevra held from April 27-29, 2012.
- Attended International Conference on Frontiers in Nano Science, Nanotechnology & their applications NanoSciTech-2012 Organized by Panjab University, Chandigarh from February 16-18, 2012.
- Attended One day National Seminar on “Nano Science, Technology and Their Societal Impact” on 7<sup>th</sup> April, 2012 organized by Babu Banarsi Das Institute of Technology, Delhi Meerut Road, Duhai, Ghaziabad.
- Attended National Seminar on “Strategies for Mitigation of Environmental Degradation and Climate Change” organised by Dept of Environmental Sciences & Engineering, GJUST, Hisar on March 2-3, 2012.
- Attended a National Workshop on “Recent Trends in Engineering and Technology” organised by Faculty of Engineering and Technology, GJUST, Hisar on March 15, 2012.
- Attended 5<sup>th</sup> International Multiconference on Intelligent Systems, Sustainable, New and Renewable Energy Technology & Nanotechnology (IISN-2011)” from Feb 18-20, 2011 organized by Institute of Science & Technology, Klawad, Distt. Yamunagar and also Chaired Two Technical Sessions.

- Attended International Conference on Emerging Trends in Chemistry Organized by Department of Chemistry, Panjab University, Chandigarh from February 11-12, 2011.
- Attended National Workshop on Chemistry in our Lives held on March 14, 2011 organized by Department of Chemistry, GJUS&T, Hisar.
- Attended One day Symposium on ' Nanoscience: Contemporary Trends in Biotechnology' on 24-4-2010 organized by Dept of Biotechnology, IILM-Academy of Higher Learning, Greater Noida
- Attended National Workshop on “Recent Trends in Printing Technology” from March 13-14, 2009, organized by Faculty of Engineering & Technology, GJUS&T, Hisar.
- Attended National Workshop on “Recent Trends in Engineering & Technology” on March 17, 2009, organized by Faculty of Engineering & Technology, GJUS&T, Hisar.
- Attended International Conference on Microbial Biotechnology, “ MICROCON 2009: Microbes for sustainability of mankind” organized by Microbial Biotechnology, CEAST, Punjab University, Chandigarh from March 3-4, 2009 and Presented Poster presentation of Paper entitled, “ Rapid Identification of Rhizobium by restriction fragment analysis of PCR amplified 16s rRNA genes” By N. Dilbaghi and P.Arora.
- Attended Public Awareness programme on “ATOM FOR PEACE” from 15-17 April, 2008 organised by the Dept of Env. Sc & Engg, GJUST, Hisar in association with IRP Trombay

#### Dr. Namita Singh

- National workshop on Intellectual Property rights and Technology Commercialization 18<sup>th</sup> March 2013. Held at Guru Jambheshwar University of Science and Technology, Hisar, Haryana, India.
- Workshop on Disaster Management Held at ASC GJU&T, Hisar From 14/2/2013 to 17/2/2013
- National Seminar On “Recent trends of Nano Technology in Pharmaceuticals” Held at Guru Jambheshwar University of Science and Technology Hisar organized by Department of Pharmaceutical Sciences sponsored by UGC NewDelhi on 2<sup>nd</sup> March 2013.
- National Workshop Recent Trends in Engineering and Technology( RTET 2012) Organized by Faculty of Engineering and Technology GJUS&T, Hisar Haryana India On 15<sup>th</sup> March 2012
- DBT Sponsored National Symposium on Bioinformatics: Challenges in the Post Genomic ERA Organised by Bioinformatics Center, University of Jammu. On 2<sup>nd</sup> Feb. 2012.
- The Biotechnology Information System Network in India XXIII Annual Bioinformatics Coordinators Meeting Sponsored by DBT New Delhi, Organized by Bioinformatics Infrastructural Facility Shri Mata Vaishno Devi University, Katara-182320 (J&K), India On February 3<sup>rd</sup>-4<sup>th</sup> , 2012

- National Workshop on 'In Silico Approaches for Designing Bioactive Peptides' held from 18-21st October, 2011 at Bioinformatics Center IMTECH, Chandigarh, India.
- National workshop” Patent Awareness vis-à-vis Intellectual Property Rights” organized by IPR & TC Cell GJUS&T, Hisar, in collaboration with Patent Information Center, Hisar Haryana HSCST, TIFAC,DST, Government of India, New Delhi on 9<sup>th</sup> August , 2011.
- A Workshop on the occasion of world Earth Day organised by Department of Environmental Science & Engineering Guru Jambheshwar University of Science & Technology, Hisar & Society for Promotion of Science & Technology in India on 22-04-2011.
- Workshop on Bioinformatics: Knowledge Discovery in Biology 2011 Held at Department of Microbiology Bundelkhand University, Kanpur road, Jhansi-284128 (U.P.). from 24-25th march 2011( Deliver a Lecture)
- UGC Sponsored Inter disciplinary Refresher Course in Information Technology held at UGC Academic Staff College, Guru Jambheshwar University of Science & Technology, Hisar, Haryana, India. From 21<sup>st</sup> January to 10<sup>th</sup> February 2011.
- One Day Seminar on World food day organized by department of food technology, Guru Jambheshwar university of Science and Technology, hisar-125001, India. 6<sup>th</sup> October 2010.
- Colloquium on “Microbial Technology for Human benefits’ Held at MDU, Rohtak Haryana, Sponsored by AMI , India August 7<sup>th</sup> 2010.
- National workshop on “ Biotechnology and IPR issues” organized by PIC, centre for Plant Biotechnology, Hisar, Haryana India, sponsored by Haryana State council for science and Technology, Chandigarh, March 18, 2010.
- National workshop on “Methodological issues in Business Research” organized by Haryana School of Business Guru Jambheshwar University of Science and Technology, Hisar. Sponsored by UGC, New Delhi inder the aegis of special Assistance Programme (SAP), DRS-II. On 7-8 March, 2009.
- National workshop on “Intellectual Property Rights and its Commercialization Process” Organised by Intellectual Property Rights and Technology Commercialization Cell (IPR & TCC), GJUS&T, Hisar-125001, Haryana, December 04<sup>th</sup> , 2008.
- International Symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics” held at Department of Zoology, North Campus, Delhi University, Delhi, India Nov. 18<sup>th</sup> to 20<sup>th</sup> , 2008
- Workshop on capacity building for outreach of Right to information Sponsored by GJUS&T and Search state resource center Rohotak Vanprast, Hisar, at. GJUS&T, Hisar-125001, Haryana on 02 and 03 Feb. 2008.
- Workshop on Radiation hazard, sponsored by BARC, Mumbai, at Department of Environmental Sciences, GJUS&T, Hisar-125001 Haryana on 28 &29 May, 2008,

- Short Term Course on “Biotechnology and Biochemical Engineering” Organized by Applied Sciences department National Institute of Technical Teachers Training and Research , Ministry of Human

**Dr. Santosh kumari**

- Participated in UGC sponsored orientation program (14.10.2009-10.10.2009) conducted by ASC, GJUS&T, Hisar.
- Participated in Bioinformatics Workshop on Genomics, Proteomics, Drug design and High Performance Computing” from 10.08.2010-16.08.2010 conducted by SCFBIO IIT DELHI.
- Participated in one day National workshop on “Patent awareness vis- a- vis intellectual property rights” held at GJUS&T, Hisar on 9 August 2011.
- Participated in a 3 week sponsored refresher course in Life Sciences from 09.12.2011 to 29.12.11 at UGC ASC, GJUS&T, Hisar and obtained grade “A”.
- Participated in ICAR sponsored short training course on “Applications of Nanotechnology in Animal Sciences”, organized by NRCE, Hisar in collaboration with Department of Bio& Nanotechnology, GJUS&T, Hisar from Feb01-10, 2012.
- Attended the National Workshop on “Recent Trends in Engineering & Technology”(RTET 2012) organized by Faculty of Engineering & Technology, GJUS&T , Hisar on March 15, 2012 .
- Attended the AICTE sponsored International Conference on current & future scenarios in drug development and delivery” at JCD college of pharmacy, Sirsa from 11-12 August 2012.
- Dept of Animal Biotechnology, COVS, Participated in a training course entitled“RecombinantDNA tools and cell culture techniques”organized by Dept of Animal Biotechnology, COVS, LLRUVAS, Hisar from 10.10.2012 to 30.10.2012.
- Attended a one day National Seminar on “Recent Trends of Nanotechnology in Pharmaceuticals” organized by Department of Pharmaceutical Sciences,GJUS&T,Hisar held on 2 March 2013.
- Attended a one day national workshop on “Intellectual Property Rights and Technology Commercialization” organized by IPR & TC cell at GJUS&T, Hisar on 18 March 2013.
- Faculty Development Programme on “Recent Advances in Engineering & Technology”, Jointly organized by TEQUIP-II Cell and Academic Staff College, GJUS&T, Hisar from 20-09-2013 to 28-09-2013.

**Dr. Rajesh Thakur**

- UGC Sponsored Refresher Course in Environmental Studies at Academic Staff College, Guru Nanak Dev University, Amritsar from 28-2-2013 to 20-3-2013.
- “Application of nanotechnology in agriculture” held at CIRCOT, Mumbai from 2<sup>nd</sup> to 12<sup>th</sup> January, 2012



- UGC sponsored Orientation Programme held at Academic Staff College, Guru Jambheshwar University of Science & Technology, Hisar from 20-5-2011 to 16-6-2011.
- UGC sponsored Refresher Course in Biotechnology held at Academic Staff College, Jawaharlal Nehru University, New Delhi from 25-7-2011 to 19-8-2011.
- ‘National Workshop on Advanced Analytical Instrumentation and Applications’ held at Advanced Instrumentation Facility, University Science Instrumentation Centre, Jawaharlal Nehru University, New Delhi from 5<sup>th</sup> to 7<sup>th</sup> January, 2009.
- ‘Recent trends in Engineering & Technology’ held at Guru Jambheshwar University of Science & Technology, Hisar on 17<sup>th</sup> March, 2009.
- ‘Recent trends in printing technology’ held at Guru Jambheshwar University of Science & Technology, Hisar from 13<sup>th</sup> to 14<sup>th</sup> March, 2009.
- ‘4th Indo-Japan International Symposium on Nanotechnology and Healthcare in the developing world’ held at Biyani Girl’s College, Jaipur, India from Sep 21-22, 2009.
- “One day IUAC acquaintance programme on Accelerator Based Science and Technology” on Oct 23, 2009, at GJUS&T, Hisar in collaboration with IUAC, New Delhi.
- ‘Intellectual Property Rights and Patent System in India’ held at NITTTR, Chandigarh. (15-19 September, 2008)
- ‘Intellectual property rights and its commercialization process’ held at Guru Jambheshwar University of Science & Technology, Hisar on 4<sup>th</sup> Dec, 2008.

Dr. Vinod Chhokar

- Refresher course in Life Science at UGC-Academic Staff College of the University from Dec 9-29,2011
- One Week Workshop on “Modern Methods in Pharmaceutical Research”, from April 28 – May 4,2012, Department of Pharmaceutical Sciences , G.J.U.S&T, Hisar
- Refresher course on “Cell Culture and Molecular Diagnostic Techniques” in the Department of Animal Biotechnology, CCS Haryana Agriculture University, Hisar from July 15,2010 to August 4,2010
- Faculty Development Programme on “Recent Advances in Engineering & Technology”, Jointly organized by TEQUIP-II Cell and Academic Staff College, GJUS&T, Hisar from 20-09-2013 to 28-09-2013

Dr. Anil Kumar

- Faculty Development Programme on “Recent Advances in Engineering & Technology”, Jointly organized by TEQUIP-II Cell and Academic Staff College, GJUS&T, Hisar from 20-09-2013 to 28-09-2013.

Dr. Sandeep Kumar

- National Workshop on Nanoscience and Technology (NST 2013) at Centre For Material Science and EngineeringNIT, Hamirpur from June 03-07, 2013

- Advanced School on Biomedical Nanotechnology at SastraUniversity, Thanjavour from March 25-29, 2013
  - Refresher course on “Environmental Awareness” at AcademicStaffCollege, PU, Chandigarh from 03.03.12 to 23.03.12
  - Refresher Course on Research Methodology in sciences at AcademicStaffCollege, PU, Chandigarh from 02.03.10 to 22.03.10
  - Intellectual Property Rights and patent System in India at NITTTR, Chandigarh from September 7-11, 2009
  - Advanced Analytical Instrumentation and Applications at Advanced Instrumentation Facility, University Science Instrumentation Centre, Jawaharlal Nehru University, New Delhi. from January 5-7, 2009
  - Orientation course at Academic Staff College, PU, Chandigarh from 02.09.08 to 29.09.08
  - Electron Microscopy with special emphasis on nanomaterials at SAIF, PU Chandigarh from January 8 to 20, 2007
28. Student projects:
- Percentage of students who have done in-house projects including inter-departmental projects : 85 %
  - Percentage of students doing projects in collaboration with other universities/industry/institute : 15 %
29. Awards/recognitions received at the national and international level by Faculty:
- Awarded Fulbright Nehru Senior Research Fellowship 2011-2012 at Crop Science Department, N C State University, Raleigh, NC, USA (Prof Ashok Chaudhary)
  - Awarded BOYSCAST( Better Opportunities for Young Scientists in Chosen Areas of Science and Technology) Fellowship by Department of Science & Technology, Govt of India ( 2009-10) (Dr Vinod Chhokar)
  - Best Presentation Award: In International conference on Molecular Biology and Biotechnology held at Department of Biosciences and Biotechnology, Banasthali University, Banasthali Vidhyapith, Dist. Tonk, Rajasthan-304022, India. From October 19-21, 2008. (Dr Namita Singh)
  - EP Odum Gold Medal: International Society for ecological communication June 2009. (Dr Namita Singh)
  - First , Second and Third Prizes in Poster Presentation Award National Conference on Multidisciplinary Approach in Frontier Areas of Environmental Science & Engineering (MAFAESE 2011), held at Department of Environmental Science & Engineering, Guru Jambheshwar University of Science & Technology, Hisar, Haryana , India 04-05 March 2011(Dr Namita Singh)

30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:

- Organized two days Hands on Training on “Tools and Techniques in Bioinformatics for Genes and Protein Analysis” at Department of Bio and Nano Technology GJUS&T, Hisar sponsored by Department of Biotechnology under BIF program on 6-7<sup>th</sup> March 2014.
- Organized ten days short training course on “Application of Nanotechnology in Animal Sciences” at National Research Centre on Equines, Hisar in collaboration with Department of Bio and Nano Technology GJUS&T, Hisar sponsored by Department of Biotechnology sponsored by Indian Council of Agricultural Research, Krishi Anusandhan Bhawan-II, New Delhi on 1-10 February, 2012.
- Organized Hand on Training on “Application of Bioinformatics in Environment and Biodiversity” at Department of Bio and Nano Technology, Bioinformatics Centre GJUS&T, Hisar-125001, Haryana, 3 – 7 November, 2008.

31. Code of ethics for research followed by the departments:

The department completely adheres to the guidelines of Institutional Animal Ethics Committee, Institutional Biosafety Committee, waste management and handling of nanomaterials and hazardous materials while performing experiments.

32. Student profile program-wise (2009-2013):

Name of the Programme (refer to question no.4)	Session	Applications received	Selected		Pass percentage	
			Male	Female	Male	Female
M.Tech (Nano Sc & Tech)	2009-11	130	13	7	100%	100%
	2010-12	117	11	7	100%	100%
	2011-13	117	15	5	99%	99%
	2012-14	65	11	9	On going	
	2013-15	Combined Test conducted by Murthal	7	5	On going	

M.Sc. (Biotechnology)	2009-11	274	15	25	99%	100%
	2010-12	260	10	26	100%	100%
	2011-13	260	5	22	100%	100%
	2012-14	Combined Test	9	21	On going	
	2013-15	Combined Test	5	18	On going	
M.Sc. (Microbiology)	2009-11	45	12	8	100%	100%
	2010-12	88	5	14	100%	100%
	2011-13	87	6	22	100%	100%
	2012-14	Combined Test(112)	8	15	On going	
	2013-15	Combined Test(116)	6	17	On going	
M.Sc. Nano Science	2009-11	21	9	11	100%	100%
	2010-12	24	2	10	100%	100%
Ph.D (Nano Nano Sc & Tech)	2009-11	28	-	03	On going	
	2010-12	22	01	-	On going	
	2011-13	24	-	02	On going	
	2012-14	21	02	01	On going	
	2013-15	22	-	3	On going	
Ph.D Biotechnology	2009-11	68	03	05	On going	
	2010-12	54	04	07	On going	
	2011-13	66	06	08	On going	
	2012-14	80	02	06	On going	
	2013-15	72	4	11	On going	

33. Diversity of students (2009-2013):

Name of the Program (refer to question no.4)	Year	% of students from the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Tech (Nano Sc & Tech)	2009-11	55.00%	25.00%	20%	-
	2010-12	61.11%	38.89%	-	-
	2011-13	55.00%	40.00%	5.00%	-
	2012-14	55.00%	26.08%	13.04%	-
	2013-15	41.66%	58.33%	-	-
M.Sc. (Biotechnology)	2009-11	-	47.50%	42.50%	10.00%
	2010-12	-	80.55%	19.45%	-
	2011-13	-	74.08%	25.92%	-
	2012-14	3.33%	76.66%	20.01%	-
	2013-15	-	60.86%	39.13%	-
M.Sc. (Microbiology)	2009-11	8.69%	60.86%	30.45%	-
	2010-12	-	73.68%	26.32%	-
	2011-13	-	60.71%	39.28%	-
	2012-14	-	69.56%	30.43%	-
	2013-15	13.04%	73.91%	13.04%	-
Ph.D (Nano Sc & Tech)	2009-11	100%	-	-	-
	2010-12	100%	-	-	-
	2011-13	100%	-	-	-
	2012-14	100%	-	-	-
	2013-15	75%	-	25%	-
Ph.D Biotechnology	2009-11	37.50%	62.50%	-	-
	2010-12	27.27%	54.55%	18.18%	-
	2011-13	7.14%	57.14%	35.71 %	-
	2012-14	37.50%	37.50%	25.00%	-
	2013-15	46.7%	13.3%	33.3%	-

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise:

Year	No students who qualified NET	No students who qualified GATE	No students who qualified DBT-JRF	No students who qualified ICMR-JRF
2008-09	1	12	3	2
2009-10	6	17	4	1
2010-11	28	15	2	5
2011-12	11	10	1	0
2012-13	17	5	0	1

Eight students of the department have also cleared and joined as Probationary Officer.

35. Student progression:

Student progression	Percentage against enrolled
UG to PG	-
PG to M.Phil.	-
PG to Ph.D.	30%
Ph.D. to Post-Doctoral	3-5%
Employed <ul style="list-style-type: none"> <li>• Campus selection</li> <li>• Other than campus recruitment</li> </ul>	40%
Entrepreneurs	2%

36. Diversity of staff:

Percentage of faculty who are graduates	
Of the same university	12.5%

From other universities within the State	62.5%
From universities from other States	25%
From universities outside the country	NIL

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt. During the assessment period :

Two faculty members Dr. Anil Kumar and Dr. Santosh Kaushik were awarded Ph.D during the assessment period.

38. Present details of departmental infrastructural facilities with regard to:

- a) Library : Central facilities are available, 2366 Titles, > 6000 Journals, 17 Publishers, UGC Infonet Journals, IEEE Journals and Open access journals.
- b) Internet facilities for staff and students:

No of Computer terminals	57 computers + 12laptops + 1 Work station + 2 server	
Hardware Specification	45-P-IV with Latest configuration, 8-with Intel 5 processor	
No of terminals of LAN/WAN	75 (old building) and Wifi connectivity in new building	
Relevant Legal Software	Application	System
	10	14
Peripheral(s)/ Printers	Laser Printer-16, Dot Matrix-1, Inkjet-4, Scanners- 7, Photocopier -2, Color Laserjet :1	
Internet Accessibility (in kbps & hrs)	256 Kbps VSAT connectivity through ERNET *2 Mbps lease line Internet connectivity from BSNL through campus wide networking	

- c) Total number of class rooms- 05
- d) Conference Hall: 01

- e) Class rooms with ICT facility-05
- f) Students' Laboratories—06
- Bioinformatics & Simulation Lab
  - Fermentation & Immuno-Technology Lab
  - Nanomaterial Synthesis & Characterization Lab
  - Biosensors & Thin Film Lab
  - Applied Microbiology & Nanotoxicology Lab
  - Plant Tissue Culture & Inoculation Facility
- g) Research Laboratories -05
- Plant molecular biology lab.
  - Nanobiotechnology & Drug Delivery Lab
  - Microbial Biotechnology Lab
  - Genomics & Proteomics Lab
  - Cyanobacterial Culture & Inoculation Facility

39. List of doctoral, post-doctoral students and Research Associates:

- a) From the host institution/university:  
Post doctoral:

Sr. No.	Name of Candidate	Title	Supervisor	Year of Award
1	Dr. Priyanka Gaurva, UGC Post-Doctoral Fellowship for Women	Genetic Diversity Analysis of Fennel ( <i>Foeniculum vulgare</i> ) in India using DNA Based molecular markers	Prof. Ashok Chaudhury	2008-09 for 5 years

Ph.D. Completed				
Sr. No.	Name of Candidate	Title	Supervisor	Year of Award
1	Ms. Monika Bansal	"Genetic Transformation of Tomato for Introduction of Salinity Tolerance	Prof. Ashok Chaudhury & Prof. Parthasarthy	2008
2	Ms. Priyanka Gaurav	"Genetic Transformation of Local Variety of Rice in Haryana for Enhancing Its Salinity Tolerance	Prof. Ashok Chaudhury & Prof. Parthasarthy	2008



3	Ms. Praveen Dahiya	Studies on Microbial Lipases- Isolation & Screening of cultures, enzyme production & characterization	Dr. Neeraj Dilbaghi & Prof. Subhash Chand	2008
4	Mr. Tirumala Bharani Kumar S.	Characterization of myostatin gene in Indigenous chicken Breeds	Dr. Neeraj Dilbaghi, Dr. S.P.S. Ahlawat & Dr. R. K. Vijn	2008
5	Mr. Yogesh Kumar	Marker assisted gene pyramiding to enhance rust resistance in wheat	Dr. Vinod Chhokar & Dr. Jag Sheoran	2009
6	Mr. Umesh Kumar Goutam	Biochemical and Molecular marker studies for bread Quality Improvement in Wheat	Prof. Ashok Chaudhury & Dr R Tewari	2009
7	Ms. Priyamvada	Molecular mapping of leaf rust resistance gene Lr34 in wheat.	Dr. Priyanka Siwach	2009
8.	Mr. Alok Pandey	Studies on the gene expression in buffalo in vitro matured oocytes and SCNT produced cloned embryos	Dr. Namita Singh & Dr. Neelam Gupta	2010
9.	Ms. Geetu	Identification of SNP markers for wool genes indigenous sheep breeds.	Prof. J.S. Rana and Dr. Neelam Gupta	2010
10	Ms. Uma Gaur.	Genetic Characterization of Indian Duck Populations ( <i>Anas platyrhynchos</i> ) Using Molecular Markers	Prof. Ashok Chaudhury & Dr R K Vijn	2010
11	Mr. Raman Kumar	Bioremediation of waste water for heavy metal through Microbe	Dr. Namita Singh & Dr. P.K. Joshi	2011
12	Ms. Sulekha	Invitro regeneration and quantification Tylophorin and other secondary metabolites in <i>Tylophora indica</i>	Prof. J.S.Rana	2011
13	Ms. Sonia Kuhad	Production purification and characterization of microbial Phytase and its applications in animal feed	Dr. Namita Singh	2011
14	Mr. Vikas	Purification, characterization	Dr. Vinod	2012

	Beniwal	molecular gene cloning, sequencing of tannase from bacteria.	Chhokar	
15	Mr. Mahesh Kumar	Molecular characterization and genetic divergence in Asparagus.	Dr. Vinod Chhokar	2012
16	Mr. Anil Kumar	Molecular characterization of major candidate genes associated with milk fat % in Indian buffaloes	Dr. Vinod Chhokar & Dr. Aswani Ashok Raut	2012
17	Mr. Sundeep	DNA fingerprinting of some important lines of Isabgo	Dr. PriyankaSiwach & Dr. Namita Singh	2013
18	Ms. Sarika Punia	Low temperature acclimatization and its regulation in the cyanobacterium Spirulina platensis	Dr. Namita Singh	2013
19	Ms. Manju Yadav	Molecular characterization of mustard (Brassicajuncea) genotypes for their resistance against mustard aphid	Prof. J.S. Rana	2012
20	Ms. Pooja Arora	Molecular approaches for the development of SCAR assay as a diagnostic tool for the detection and distribution of dsRNA among isolates of Macrophominaphaseolina	Prof. Ashok Chaudhury & Prof. Neeraj Dilbaghi	2014
21	Mr. Rakesh Yadav	Studies on Genetic Modification of Lignin Biosynthesis Pathway in Poplars for Low Lignin Content	Prof. Ashok Chaudhury	2013
22	Ms. Anita Ruhel (Nano Science & Technology)	Development of carbon nanotubes based biosensor for testing maturity in fruits	Prof. J.S. Rana & Dr. Sandeep Kumar	2013
23	Ms. Harmanmeet Kaur (Nano	Design and evolution of polymeric drug nanoparticles for ophthalmic delivery	Prof. Neeraj Dilbaghi & Dr. Munish Ahuja	2014

	Science & Technology)			
24	Ms. Pawan Kaur (Nano Science & Technology)	Synthesis of nanoparticles & application in plant disease control	Dr. Rajesh Thakur & Prof. A.Chaudhury	2014
25	Ms. Santosh Kaushik (Nano Science & Technology)	“Interaction of Sanguinarine with nucleic acids to exploit its anticancer potential”	Prof. J.S.Rana	2014
26	Ms. Manju Rani	Characterization of Helicoverpa armigera for their insecticidal resistance in semi and cotton eco system	Prof. J.S. Rana & Dr. K K Dahiya	2014
27.	Annu Sindhu	Molecular characterization of elite genotypes of Trigonella using DNA based molecular markers	Prof. Ashok Chaudhury	2014

<b>Ph.D. On Going</b>				
<b>Sr No</b>	<b>Name of Candidate</b>	<b>Title</b>	<b>Supervisor</b>	<b>Date of Registration</b>
1	Mr. Narender Kumar	Isolation, purification, characterization and molecular identification of potent microbe for bioactive compound	Dr Namita Singh	2008
2	Ms. Sarla Rani	Molecular Characterization of Major Candidate Genes Associated with Reproductive Traits in Buffaloes (BUBALUS BUBALIS)	Dr. Vinod Chhokar	2009
3	Suman Verma (Nano Science & Technology)	Studies on the development of urea sensor using different Nanobiocomposites	Dr. Neeraj Dilbaghi & Dr Sandeep Kumar	2009
4	Neetu	Development of polymer	Dr. Sandeep	2009

	Chauhan (Nano Science & Technology)	nanocapsules for controlled release of pesticides	Kumar	
5	Alpana Kulhari	Characterization of germplasm of <i>Commiphora</i> <i>wightii</i> (Arnot.) Bhamdari using DNA based molecular markers and on the basis of guggulsterones content	Prof. Ashok Chaudhury	2011
6	Poonam	Micropropagation of <i>Lawsonia inermis</i> L. and in vitro manipulations for induction of Lawsonia content	Prof. Ashok Chaudhury	2011
7	Manisha Gupta	Micropropagation of <i>Glycyrrhiza</i> Linn. & induction of Glycyrrhizin through in- vitro manipulations	Prof. Ashok Chaudhury	2011
8	Arun Sheorayan	Characterization of <i>Tinospora cordifolia</i> (wild.) Miers germplasm using molecular marker and berberin content	Prof. Ashok Chaudhury	2011
9	Vipin Kumar	<i>Trypanosoma evansi</i> secretome: Identification of diagnostic antigens and its applications in diagnosis of trypanosomiasis	Prof. Ashok Chaudhury	2011
10	Ajay Kumar Bhankher	Studies on Shatavarin production in hairy root culture of <i>Asparagus</i> <i>racemosus</i>	Prof. Ashok Chaudhury & Dr. Subhash Kajla	2011
11	Kanupriya	Identification and characterization of oxidative stress gene induced gene	Dr. Namita	2011

		Artyhospira spp	Singh	
12	Ms. Apoorva Arora	Marker assisted diversity analysis and creation of spring wheat genotypic panel for association mapping	Dr. Neeraj Dilbaghi & Dr. Ratan Tiwari	2012
13	Ms. Bhawana Gupta	Shikonin: Comparative study of signaling pathways in multiple therapeutic areas	Prof Ashok Chaudhury and Dr. Sabyasachi Chakraborty	2012
14	Mr. Inderjit Singh Yadav	Identification of Epidermal Growth Factor Receptor inhibitors using structure based screening approach	Prof. Ashok Chaudhury & Dr. Subhash M. Agarwal	2012
15	Mr. Virender Singh	Identification of genomic regions associated with spot blotch resistance in wheat ( <i>Triticum aestivum</i> L.)	Prof. Ashok Chaudhury & Dr. Gyanendra Singh	2012
16	Ms. Anita Devi	Cellulase production from indigenous fungal strains using agro-industrial waste and its characterization	Dr. Namita Singh	2012
17	Ms. Punita Sharma	Molecular analysis of salivary gland specific genes in malaria vector <i>Anopheles culicifacies</i>	Dr. Namita Singh & Dr. Rajni Kant Dixit	2012
18	Ms. Anita Kumari	Modulation of scion through graft transmissible signals from rootstock, using <i>Arabidopsis</i> as a model system	Prof Ashok Chaudhury & Dr. Rakesh Tuli	2012
19	Ms. Shilpa Gill	Isolation, screening and characterization of phytases produced by fungal isolates	Prof. Ashok Chaudhury & Dr. Namita Singh	2012
20	Mr. Vikas	Fabrication and Characterization of Amperometric biosensors based on Nafion/AChE-SWNT/MWNT-Au for determination of Organophosphorous compounds	Prof. Neeraj Dilbaghi & Dr. Vikas Hooda	2013

21	Ms. Shashikala	Production & Characterization of Bioactive Compounds from Bacteria Isolated from Rhizosphere Soil	Dr. Namita Singh	2013
22	Ms. Ritika Chanan	Studies on Production of Bioactive Compounds by Cynobacterial Species	Dr. Namita Singh	2013
23	Mr. Ritesh Kumar (Nano Science & Technology)	Studies on Development of Gold Nanoparticles based diagnostic method for Trypanosoma evansi infection in animals	Prof. Neeraj Dilbaghi & Dr. S.C Yadav	2013
24	Mr. Jaideep	Identification and characterization of infection specific antigen from proteome of Trypanosoma evansi and its application in sero-diagnosis	Prof. Ashok Chaudhury and Dr. S.C. Yadav	2013
25	Mr. Neeraj Sethi	Preparation and evaluation of anticancer drug-loaded ursolic acid nanoparticulate formulation	Prof. Neeraj Dilbaghi & Dr. Sandeep Kumar	2013
26	Ms. Ruma Rani	Preparation and evaluation of nanoformulation(s) of some bioactive compounds for the treatment of diabetes	Dr. Sandeep Kumar & Dr. Dinesh Dhingra	2013
27	Ms. Nayan Tara	Studies on Regulation of CCA1 Gene Expression in Transgenic Rice	Prof. Ashok Chaudhury	2013
28	Ms. Nidhi Jindal	Micropropagation of Andrographis paniculata and in vitro manipulations for the induction of its secondary metabolites	Prof Ashok Chaudhury & Dr. Subhash Kajla	2013
29	Ms. Anuradha Singh	Expression analysis of starch biosynthesis pathway genes and their effects on starch quality in wheat	Prof Ashok Chaudhury & Dr. Rakesh Tuli	2013
30	Mr. Sandeep Singh	Synthesis, Characterization and Toxicological Evaluation of Isometamidium- loaded nanoparticles	Prof. Neeraj Dilbaghi & Dr. Anju Manuja	2013
31	Ms. Kapila	“Isolation, Screening,	Prof. Neeraj	2014

	Taneja	Purification, Characterization and Immobilization of Fibrinolytic enzyme(s) from microbial sources”	Dilbaghi & Dr. B.K.Bajaj	
32	Ms. Shakti	“Preparation, characterization and pharmacological evaluation of polyphenolic nanoformulations from <i>Camellia sinensis</i> ”	Prof. Neeraj Dilbaghi & Dr. Dinesh Dhingra	2014
33	Mr. Sudhanshu Dwivedi	“Understanding steps towards an integrated view of shatavarin biosynthesis pathway in <i>Asparagus racemosus</i> ”	Dr. Vinod Chhokar	2014
34	Ms. Niharika Chauhan	“Identification and functional characterization of PAL and 4CL genes involved in gingerol biosynthesis pathway in ginger ( <i>Zingiber officinale</i> )”	Dr. Vinod Chhokar	2014
35	Ms. Annapurna Katara	“Elucidating the biological roles of polyketide synthase and keto reductase genes in aloin biosynthesis pathway in <i>Aloe vera</i> ”	Dr. Vinod Chhokar	2014
36.	Ms. Hemlata	“Molecular characterization of chlorpyrifos degradation genes in bacterial isolates”	Dr. Anil Kumar	2014
37.	Ms. Wandit Ahlawat	“Utilization of nanomaterials for removal of Harmful dyes”	Dr. Sandeep Kumar	2014
38.	Mr. Santlal	“Preparation and Pharmacological evaluation of nanoformulations of Procyanidolic Oligomers (PCOs) and its mixed ligand complex(s)”	Prof. Neeraj Dilbaghi	2014
39.	Mr. Munesh Kumar	“Analyzing the effects of <i>Syzygium cumini</i> seed extract on arsenic induced blood cells genotoxicity & hepatotoxicity in rats using SCGE & marker enzymes”	Dr. Rajesh Thakur	2014
40.	Ms. Jyoti	“Evaluation of thin films of	Dr. Rajesh	2014

		different nanoformulations for application in Biofouling”	Thakur	
41.	Mr. Rajneesh Jaryal	“Antagonistic potential of bioactive compound isolated from Bacillus cereus NSD 10072”	Dr. Namita Singh	2014
42.	Mr. Rahul Jangra	“Synthesis and characterization of polymeric nanoformulation(s) from Aloe vera secondary metabolites and evaluation of its biological activity”	Prof. Neeraj Dilbaghi & Dr. Vinod Chhokar	2014
43.	Ms. Manju Bernela	“Formulation and evaluation of nanoparticulate delivery systems of bioactive phytopharmaceuticals”	Dr. Rajesh Thakur & Dr. Munish Ahuja	2014
44.	Mr. Gaurav Bhanjana	“ Studies on utilization of nanoparticles for removal and sensing of heavy metals”	Dr. Sandeep Kumar & Prof. Neeraj Dilbaghi	2014
45.	Ms. Tanvi Kalia	“Functional genomics for understanding the molecular mechanism governing cytoplasmic male sterility in Pigeonpea ”	Prof. Ashok Chaudhury & Dr. Kishor Gaikwad	2014
46.	Ms. Pooja Bangar	“Identification and characterization of SNP markers in mungbean [Vigna radiata (L.) Wilczek] for cultivar identification”	Prof. Ashok Chaudhury & Dr. K.V. Bhat	2014

ii) From other institutions/universities

- Himanshu Aggarwal-PhD-Kurukshetra University, Kurukshetra: Completed
- Ravinder Kumar-PhD –Chaudhary Devi Lal University , Sirsa
- Suman Jangra – PhD-DCRUST, Murthal
- Sandhya- Ph.D- KU, Kurukshetra.

40. Number of post graduate students getting financial assistance from the university:

Year	Number of students
2009	33
2010	34
2011	32



2012	29
2013	35

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology:

Assessment exercise was done before introduction of new courses. DBT model syllabus for M.Sc Biotechnology and DST model syllabus for M.Tech Nano Science & Technology was followed with modifications. In addition feedback from students, alumni and faculty members was also taken into consideration and finalized by the Staff council, PGBOS. The curriculum was designed according to the cutting edge research and job opportunities in different sectors to provide skilled manpower.

42. Does the department obtain feedback from:

- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes. The feedback is taken regularly from the faculty on curriculum as well as teaching learning evaluation. The contents of the syllabi are modified from time to time depending upon the recent advances in the subjects and latest requirements from the industry.

- b) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback?

Yes, the student interacts with staff and gives their feedback for improvement. The suggestions are implemented by the staff after approval by the Staff Council, PG Board of Studies and Academic Council of the University.

- c) Alumni and employers on the programmes offered and how does the department utilize the feedback?

Alumni meet is organized wherein the alumni interact among themselves and staff and current students of the department and share their experiences. This is very helpful for students to find new avenues for their career options as well as for department to hit the right areas of research and Curriculum development.

43. List the distinguished alumni of the department (maximum 10):

- Neha Kothari- Associate Research scientist-International vaccine Institute, Seoul, Korea. (M.Sc 2001-03)

- Dr. Hansraj Bangar- Research Scientist-Cincinnati Children Hospital medical center, Cincinnati. (M.Sc 2000-2002)
- Dr. Taruna Anand-Scientist-VTCC, NRCE. (M.Sc 2002-04)
- Dr. Sundeep Jaglan-Scientist- CSIR-IIIM, Jammu. (M.Sc 2001-2003; Ph.D: 2013)
- Dr. Tirumala Bharani Kumar S - Consultant-Molecular Biologist-FAO. ( Ph.D: 2008)
- Dr. Bhavneet Kaur-Associate Investigator-DuPont. (M.Sc 1998-2000; Ph.D: 2007)
- Dr. Pradeep Kumar Bhardwaj-Scientist- Plant Resources Division, Regional Centre of Institute of Bioresources and Sustainable Development, Sikkim. (M.Sc: 1999-2001)
- Dr Anil Kumar, Assistant Professor, GJUS&T Hisar. ( Ph.D 2012 ; M.Sc : 2001-03)
- Dr Sharmishtha Pukayastha- Assistant Professor- Amity University, Noida. (M.Sc 1998-2000; Ph.D: 2007)
- Dr. Praveen Sangwan- Assistant Professor, Amity University, Noida. (M.Sc 1998-2000; Ph.D: 2008)
- Dr. Sandeep Deswal, Director, Universal Institute of Technology, Garhi ( M.Sc 2000-2002)

44. Give details of students enrichment programmes (special lectures / workshops / seminar) involving external experts:

<b>Sr. No</b>	<b>Name of Guest faculty/ Resource Person</b>	<b>Duration/ Date</b>	<b>Topic of Lecture</b>
1	Mr. Kapil Kumar, Regional Manager & Coordinator, Monsanto India Ltd.	26.02-14	Role of Biotechnology in Agriculture.
2	Professor Ravi Chibber, Canada Research Chair in Crop Quality, University of Saskatchewan, Canada	20-2-14, 2 Hr	Genomic strategies for cold tolerance in wheat.
3	Professor Ravi Chibber, Canada Research Chair in Crop Quality, University of Saskatchewan, Canada	26-4-12, 2 Hr	Starch modification by Biotechnology
4	Dr. Pavneesh Madan, Associate Professor, Ontario Veterinary College, University of Guelph, Canada	10 AM -12 Noon 27-3-14	Deducing Markers of Embryonic Health and Viability
5	Dr. Mahesh Kulharia, Astd Prof., CUP, Bhatinda	10-12:00 Noon and 2:30 to 4:30 PM 26-3-14	Bioinformatics-SNIPS, Phylogentic Tree

6	Dr. B.R. Gulati, Principal Scientist, NRCE, Hisar	10:00 – 12:00 Noon	Biosafety Rules
7	Dr. Meenakshi, Prof. & Head, Animal Biotechnology, LUVAS, Hisar	12:30 to 2:30 PM 24-3-14	Diagnostic Tools in Animal health
8	Dr. Leetalawati, Professor, Department of Microbiology, CCS HAU, Hisar.	3.00 PM 27-3-14	Biofuels
9	Dr. Vijender Bhalla, Scientist, IMTECH, Chandigarh	3 Hrs, March 2013 and Feb 2014	Nanomaterials for Biosensing applications
10	Dr. Manish Ahuja, Pharmaceutical Sciences	21.03.13	Nanoformulations for Ophthalmic Drug Delivery
11	Dr. Anju Manuja, Sr. Scientist, NRCE, Hisar	20.03.13	Nanotechnology in Animal Sciences
12	Prof. Yogesh Chhaba, CSE, GJUST, Hisar	20.03.13	Network Niche
13	Dr. Mukesh Arora, Head UCIC, GJUST Hisar.	19.03.13	HTML Programming
14	Prof. Ashish Aggarwal, Deptt of Applied Physics, GJUST, Hisar	29.03.13	Spectroscopic Techniques
15	Prof. Devender Kumar, Deptt of Chemistry, GJUST, Hisar	28.03.13 2 Hours	NMR
16	Mr Praveen, PDCPA, Hisar	20-09-2013	Personality Development
17	Mr Nitin Kulkarni, Business manager, labindia instruments pvt ltd.	08-08-2013	Microwave synthesis of nanoparticles.
18	Dr J Castrop, General Manager, Kinetic Evaluation Instruments, Netherlands	23-10-2013	SPR
19	Dr R K Garg, TAS, New Delhi	2010, 2011	For one week, equipped with full thin film lab set up for practical demonstration of students at our department.
20	M L Sharma, SAIF, PU Chandigarh	2009, 2010, 2011	One week training at SAIF, PU Chandigarh on Electron Microscopy and other techniques for sample analysis.

45. List the teaching methods adopted by the faculty for different programmes:
- Use of ICT's, Multimedia tools, presentations, tutorial assignments, demonstrations in Teaching.
  - Laboratory rotational exercise followed to involve all students.
  - New practical's incorporated from time to time.
  - Resource material provided to supplement teaching
  - Industrial and other Educational Tours are organized regularly.
  - Industrial Nominee in PGBOS.
  - Conduct of Expert Lecture series/ Trainings is a routine affair.
  - Oral presentations and Assignments are mandatory in all courses.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
- Staff council of the department is held regularly to monitor progress.
  - Progress is monitored by University IQAC.
  - The staff council and PG Board of studies and research of the department reviews the progress of PG teaching programs from time to time.
  - Academic Council of the university monitors the progress of the department every year.
  - The DBT Advisory committee, DST Nanomission meeting is held from time to time to monitor the progress of PG Teaching programs.
47. Highlight the participation of students and faculty in extension activities: Students and faculty take active part in NSS campaigns, Inter-university cultural fests, Sports tournaments, Van Mahotsava and other activities etc. Recently Science Conclave was organized by university supported by DST, Govt Of Haryana to promote Science education and research among High school and senior secondary school students in the university. International women's day was celebrated.
48. Give details of "beyond syllabus scholarly activities" of the department:
- a) Organized Students Visit to Centre of Plant Biotechnology and Associated Distilleries, Hisar during Jan- May session 2011-12.

- b) Organized Students Visit to Centre Institute of Research on Buffaloes and National Research of Research on Equines, Hisar during December, 2011.
  - c) Organized Students Visit to GB pant Agriculture University, Pantnagar and Jim Corbett National park, Nanital during April, 2012.
  - d) Interaction with students to inculcate moral values and making them responsible for society.
  - e) Participation in tree plantation drive and conservation of natural resources
  - f) Organized Students Visit to Centre of Plant Biotechnology, Hisar on 25-2-14
  - g) Organized M.Sc Biotechnology Students Visit to HPKV, IHBT, Palampur & Milk Time Chandigarh from 12-4-14 to 16-4-14.
  - h) Organized M. Tech Nano Science & Tech Students Visit to IHBT, Palampur & J.P Industries, Chandigarh from 18-4-14 to 22-4-14.
49. State whether the programme/department is accredited/graded by other agencies? If yes, give details:
- M. Sc (Biotechnology)- UGC approved and DBT sponsored.
  - M. Sc (Microbiology) –UGC approved
  - M. Tech (Nano Science & Technology)-DST Nano Mission sponsored and AICTE approved.
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:  
The faculty members of the department are involved in executing research projects in the areas of water purifications, biosensors and nanoformulations for healthcare and agricultural applications which are of direct relevance to the society. Four patents has also been filed and helped in generation of new ideas and technology that can be highly beneficial for the society on the longer run. The faculty members guide and motivate students to qualify NET/GATE. Majority of students passing out from our department are absorbed in different industries, academic and R&D institutes, pursuing higher studies etc The up gradation of curriculum from time to time as per the changing demands of the industry as well as

practical courses from time to time so as to generate globally competitive manpower in this modern technology driven world is a regular feature of the department. This helps in continuous improvement of the faculty as well as students.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

Strengths

- Excellent Response to all programs
- Permanent faculty recruitment
- Centrally air conditioned 4 story ultra-modern Building
- Excellent labs established for practicals and research
- Faculty members have R& D projects from different agencies like DBT, UGC, DST, BARC etc.
- MoU with National Research Centre on Equines (NRCE), Hisar, Centre for Plant Biotechnology, CCS HAU, Hisar and National Agri-Food Biotechnology Institute (NABI), Mohali, Center of Innovative & Applied Bioprocessing, Mohali, Directorate of Wheat Research, Karnal, TCG Lifescience Ltd , Kolkata.

Weakness

- Lack of biotechnology industry in the region limits the industrial training and industrial linkages.

Opportunities

- To develop the Department as a Centre of Excellence for quality teaching, research and extension services to produce dynamic and knowledgeable human resources and act as a knowledge power-house capable of contributing to the national development and welfare of the society.

Challenges

- Mushrooming of private universities in every nook and corner is leading to decline in student admission.

52. Further plans of the department:

The department aspires to be a globally recognized Centre of Excellence in the field of nano science & technology, biotechnology and microbiology. It strives to achieve this by employing competent and motivated faculty, developing state-of-the-art infrastructure, striking purposeful linkages with industry and professional bodies, and promoting

quality of work life on campus. The department focuses on the student community to imbue them with passion for knowledge and creativity and to promote sustainable growth in academic resources, student placements, holistic human development with a strong conviction for professional ethics, social and environmental issues.

## **Evaluative Report of the Department of Food Technology**

---

1. Name of Department : Food Technology
2. Year of establishment : 1996
3. Is the Department part of a School/Faculty of the University?  
Yes, the Department is a part of Faculty of Environmental Biosciences and Technology (FEBT), GJUST, Hisar
4. Names of programmes offered (UG, PG, and M.Phil. Ph. D., Integrated Masters; Integrated Ph. D, D.Sc., D.Litt. etc.)
  - B.Tech (Food Engineering)
  - M.Tech (Food Engineering)
  - M.Sc (Food Technology)
  - Ph.D (Food Technology)
  - Post graduate Diploma in Bakery Science and Technology (via Distance mode)
5. Interdisciplinary programmes and departments involved :  
Yes, students of Food Technology department have studied courses of other departments as open elective subjects in various degree programs
6. Courses in collaboration with other universities, industries, foreign institutions, etc:  
Yes, some of our students visited various universities/labs. to complete their part of research projects
7. Details of programmes discontinued, if any, with reasons : Not any
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System:  
Semester system (credit based)
9. Participation of the department in the courses offered by other departments:



Yes, during this period department's students have participated in open Elective courses offered by other departments

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/ Asst.Professors /others):

	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual (including CAS &amp; MPS)</b>
Professors	01	01	03
Associate Professors	02	---	---
Asst. Professors	04	03	01
Others, Teaching Associates	---	11	11

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No. of Ph.D./M. Phil. students guided for the last 4 years</b>
Prof. B.S. Khatkar	Ph.D	Prof.	Cereal Technology	27	13
Prof. Alka Sharma	Ph.D	Prof.	Food Sc. & Nutrition	17	03+01
Prof. Aradhita Ray	Ph.D	Prof.	Post Harvest Technology of Fruits and Vegetables	17	04
Mr. Manish Kumar	M.Sc., M.Tech	Asstt. Prof.	Food Engineering	07	Nil

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors  
No such appointment is made, but following visited the department on request:  
(01) Prof. D.R. Sood (Retired Professor, Dept of Bio Chemistry CCSHAU, Hisar) as visiting Professor
13. Percentage of classes taken by temporary faculty-programme-wise information :
- |                           |     |
|---------------------------|-----|
| B.Tech (Food Engineering) | 80% |
| M.Tech (Food Engineering) | 50% |
| M.Sc (Food Technology)    | 30% |
| Ph.D (Food Technology)    | 0%  |
14. Programme-wise Student Teacher Ratio:  
B.Tech.(FE), 20 : 1 M.Tech. (FE) 10: 1, M.Sc. (FT) 17: 1, Ph.D (FT) 4:3
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:
- | Position          | Sanctioned | Filled | Actual |
|-------------------|------------|--------|--------|
| Assistant-cum-DEO | 01         | 01     | 01     |
| Lab. Technician   | 01         | 01     | 01     |
| Lab. Attendant    | 03         | 06     | 06     |
| J.L.A             | 01         | Nil    | Nil    |
| Steno             | 01         | Nil    | Nil    |
| Peon              | 01         | 01     | 01     |
| On Contract       | --         | --     | 01     |
16. Research thrust areas as recognized by major funding agencies : Cereal Technology, Fruits and vegetable Processing and Dairy Processing
17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise:

Ongoing Projects (2009-2014)

Name of Faculty	Title of project	Amount sanctioned	Name of the funding agency	Duration
Prof. B.S khatkar	Identification of Gluten Proteins as molecular markers of wheat quality	13,80,800 (INR)	UGC (Major project)	Three years 23 July 2012-july, 2015
Prof. Alka Sharma	Design and construction of Laboratory scale Solar Dehydrator	40000 (INR)	UGC (Minor Project)	One Year
Prof. Aradhita Ray	Extraction of phyto chemicals from fruit and vegetable wastes	35000 (INR)	UGC (Minor Project)	One Year
Manish Kumar	Development of ohmic heating assembly and standardization of its operating condition for various fruit	40000 (INR)	UGC (Minor Project)	One Year

Projects completed (2009-2014)

Name of Faculty	Title of project	Amount sanctioned	Name of funding agency	Duration
Prof B.S. Khatkar	Up-gradation of food testing laboratories	1.0 crore (MOFPI)	MFPI, New Delhi	2004-2011
		1.0 crore (Matching grant from University)		Completed on 30th September 2011
Prof BS Khatkar	Separation, characterization and food applications of wheat gluten	Total budget: 50.00 lakhs:	MFPI, New Delhi	2012
Prof BS Khatkar	Establishment of quality control lab. and pilot plant facilities	Total budget: 50.00 lakhs	Funding agency – MFPI, New Delhi:	2012

18. Inter-institutional collaborative projects and associated grants received:  
 a) National collaboration- Not Yet      b) International collaboration- Not Yet
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received:  
 Total grants received from UGC: 15 lakhs (approx.) and from MFPI, One crore for Up gradation of Food Quality testing of wheat & wheat products
20. Research facility/centre with
- state recognition : Food Analysis Research centre (FARC)
  - national recognition : If FARC facility is extended
  - international recognition : Not yet built
21. Special research Laboratories sponsored by/ created by industry or corporate bodies:  
 Not yet established
22. Publications:
- Number of papers published in peer reviewed journals (national/international): 70
  - Monographs: Nil
  - Book Chapters/Monographs: 04

Edited Books:

Year	Author	Title of Book	Publisher	Year of Publication	ISBN No.
2009	--	--	--	--	--
2010	--	--	--	--	--
2011	BS Khatkar	Baking Science and Technology	Arihant Prakashan Pvt. Ltd. New Delhi	2011	978-93-80872-30-8
2012					
2013	BS Khatkar	Wheat Quality and Product Testing Manual	CBS Publishers and Distributor Pvt. Ltd. New Delhi	2013	978-81-239-2321-5
2014	--	--	--	--	--

- Books with ISBN with details of publishers :02 (Dr. B.S. Khatkar)
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.
- Citation Index-range/average: upto 390
- SNIP : --
- SJR : --
- Impact Factor-range/average : Up to 4.50
- h-index : upto 12

23. Details of patents and income generated:

Filed 02 patents (Dr. B.S. Khatkar)

Patents

Sr. No.	Patent Title	Patent Application No.	Status
Patent 1	A Novel Comprehensive Test/kit for detection of urea adulteration in milk	558/DEL/2010	Patent filed on 10.09.2010
Patent 2	An innovative chemically stabilized product for use in baking industry and method of preparation for same	2167/DEL/2010	Patent filed on 13.03.2011

24. Areas of consultancy and income generated : Not yet finalized

25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad:

1. Prof. Aradhita Ray visited Ryerson University Toronto, Canada for oral presentation of her Research paper and chaired an academic session in the American Canadian International Conference for Academic Disciplines in Toronto, Canada on 21<sup>st</sup> to 24th May, 2012. It was a multi disciplinary conference hosted by The

International Journal of Arts and Sciences (IJAS), Rhode Island, USA.

2. Prof BS Khatkar presented research paper in 1st International Conference on Food Properties held at University of PUTRA, Kuala Lumpur, Malaysia in January, 2014.

26. Faculty serving in:

- a) National committees b) International committees c) Editorial Boards d) any other (please specify) :
- a) National committees: Prof Alka Sharma acted as referee to evaluate research papers in Journal of Dairy Science, Journal of Food Science and Technology and New product development.
- b) International committees: Prof Aradhita Ray acted as referee to evaluate research paper in International Food Research Journal published from Malaysia in 2013.

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs):

1. Prof. Alka Sharma and Prof. Aradhita Ray attended and participated in Faculty Development Program organized by Academic Staff College GJUST, Hisar in Jan 2011.
2. Prof Alka Sharma, Prof Aradhita Ray and Manish Kumar attended and participated in Refresher Course organized by Academic Staff College GJUST Hisar in Jan 2011.
3. Manish Kumar attended and participated in Refresher Course organized by Academic Staff College GJUST Hisar in Jan 2012.
4. Manish Kumar attended and participated in Staff Development Program organized by SLIET, Longowal, Punjab in 2012.
5. Dr. Alka Sharma has attended Management Capacity Enhancement Programme in IIM, Indore from April 29 to May 08 2013 under TEQIP- II World Bank project.
6. Dr. B.S. Khatkar has attended Management Capacity Enhancement Programme in IIM, Indore in October 2013 under TEQIP- II World Bank project.
7. Dr. Aradhita Ray has attended Management Capacity Enhancement Programme in IIM, Indore from November 23 to November 30, 2013 under TEQIP- II World bank project.

28. Students projects: Percentage of students who have done in-house projects including inter-departmental projects :

- All M.Tech. (Food Engg.)Final Year students (100%) undergo Major Research Project in their final year
- Percentage of students doing projects in collaboration with other universities/industry/institute : 5-10 % each year

29. Awards/recognitions received at the national and international level by Faculty:

Name of Teacher	Award	year
Prof BS khatkar	Best Paper award in 1st International Conference on Food Properties held at Kuala Lumpur, Malaysia	Jan .2014
Prof Alka Sharma	2 <sup>nd</sup> prize in Poster Presentation (Mamta Bhatia and Alka Sharma) in “International Conference on Food Technology : Impact on Nutrition and Health (ICFIN) -2013 held at JNU, New Delhi	23-24 Dec’2013
Manish Kumar	Third Prize in oral Paper presentation in International Conference On Food Technology For Health Promotion ICFTHP-2012.	Dec’2012
Manish Kumar	Third Prize in oral presentation in “International Conference on Food Technology: Impact on Nutrition and Health (ICFIN) -2013 held at JNU, New Delhi from 23-24.	23-24 Dec’2013

30 Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:

1. National Workshop on Recent Trends in Engineering and Technology (RTET-2012) on March 15<sup>th</sup>, 2012 collaborating with the Dean (Dr. Dharminder Kumar),Faculty of Engineering and Technology, GJUS&T, Hisar. Organizing Secretary: Dr.Alka Sharma
2. World Health Day (07.04.2012) celebration

Organised “TBHB Show with in collaboration with T & P Cell Head: Prof R.K.Gupta and Nestle team on 18.04.2012 (Morning). In the Afternoon organised an Aptitude Test with TIME Institute team in collaboration with T & P Cell Head: Prof R.K.Gupta on 18.04.2012, for all registered students of GJUS&T, Hisar.

31 Code of ethics for research followed by the departments:  
As per Univ. Rules

32. Student profile programme-wise: 2012-13

Name of the Programme (refer to question no.4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B.Tech.	on the basis of result of AIEEE/JEE	20	Nil	43.35	NA
M.Tech.	2014-DCRUST conducted counseling	05	15	97.75	98.55
M.Sc. FT	83	11	25	96.50	95.90
Ph.D. FT	30	Nil	04	NA	NA

33. Diversity of students:

Name of the Programme (refer to question no.4)	% of students from the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
B.Tech. (FE)	N.A.			
M.Tech. (FE)	50%	20%	30%	0%
M.Sc. (FT)		75%	25%	0%
Ph.D. (FT)	75%	25%	0%	0%

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise:



One in Indian Army from B.Tech. 2009 to 2013 batch  
 GATE qualified: around 20 students  
 ASRB/UGC/CSIR NET qualified: 30 students

35. Student progression:

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	20%
PG to M.Phil.	Not Applicable
PG to Ph.D.	10-15%
Ph.D. to Post-Doctoral	Not Applicable
Employed <ul style="list-style-type: none"> <li>▪ Campus selection</li> <li>▪ Other than campus recruitment</li> </ul>	02+02=04 More than 30
Entrepreneurs	NIL

36. Diversity of staff:

<b>Percentage of faculty who are graduates</b>	
of the same university	NIL
From other universities within the State	100%
From universities from other States	NIL
From universities outside the country	NIL

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt. During the assessment period : NIL

38. Present details of departmental infrastructural facilities with regard to:

- a) Library : UCIC, One computer lab in the Department
- b) Internet facilities for staff and students : YES
- c) Total number of class rooms :06
- d) Class rooms with ICT facility : Not any
- e) Students' Laboratories : 06
- f) Research Laboratories j: 05

39. List of doctoral, post-doctoral students and Research Associates:
- a) From the host institution/university :14 (Enrolled), 02 (Completed)
  - b) From other institutions/universities : 04 (Enrolled),  
04 (Completed)
40. Number of post graduate students getting financial assistance from the university:  
28 M.Tech. and 05 PhD from TEQIP World Bank Project  
08 GATE scholarship holders
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology:  
No new program was introduced during this period
42. Does the department obtain feedback from:
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?  
Yes, incorporate the suggestions in curriculum.
  - b) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback?  
Yes, incorporate the suggestions in curriculum.
  - c) Alumni and employers on the programmes offered and how does the department utilize the feedback?  
Yes, to a limited extent
43. List the distinguished alumni of the department (maximum 10):  
Vikas Dutta (Nestle) Gurgoan, Sushant (P&G) Bhopal, Vinay Bishnoi, (Wall mart) Delhi, Veena Sharma & Shikha Khanna (GSK Regulatory Arrairs), Gurgoan, Kirti Sharma,(ITC) Bangalore) Neelam Gulia,(R&D SECTION OF Nestle,Gurgaon Maneshar and Anil Panghal, Narender Yadav,QE(GSK), Sonipat, Sunil Yadav, QE (AMWAY Delhi), Sumit Gupta, Scientist (BARC, Bombay), Lt. Laxmi Mohan, Indian Army, Dharma Saikia (TATA) Calcutta, Onkar Bhartiya, Arun Sharma (Heinz) Aligarh, Santosh Bhakhar (ITC) Haridwar, Ramneek Parihar(ITC,Bangalore).

44. Give details of student's enrichment programmes (special lectures/workshops/seminar) involving external experts:  
 Induction/orientation programmes/lectures organized for new entrants in the month of July/August.  
 For soft skill development expert lectures were delivered by Experts Including: Mr. Parveen kumar (Director PDCPA Academy), Prof: Harbhajan Bansal, Dr. Kishana Ram Religious study centre, GJUST , Mr. Vedpal GP Adampur, Mr. Vikram Kaushik, Dr Umesh Arya(Dept Advertising Management, GJUST), Dr Vinod Sharma (GJUST Library), Dr Umesh Kapil (Department of Business Mgmt, CDLU SIRSA)
45. List the teaching methods adopted by the faculty for different programmes:  
 Black board teaching, over head projector, power point presentations, field trips and industry visits etc.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?  
 By regular staff interaction and meetings.
47. Highlight the participation of students and faculty in extension activities:  
 Prof.Alka Sharma was actively engaged in extension activities in a village in collaboration with department of Mass Communication (Development communication).
48. Give details of "beyond syllabus scholarly activities" of the department:  
 Orientation functions of M.Tech. M.sc. and B.Tech. programmes was organized by Food Technology Department on 3<sup>rd</sup> September, 2<sup>nd</sup> September and 11<sup>th</sup> September 2013 respectively.  
 A number of educational tours were organized by Food Tech Department in & around Hisar and other states like Himachal Pradesh and Rajasthan for B. Tech., M.Tech. and M.sc. classes.  
 Food Technology students organized and actively participated in university level orientation programme and youth festival 2013 on 9<sup>th</sup> September 2013 and 10-11 October 2013.  
 Organised an Aptitude Test with TIME Institute team in collaboration with T & P Cell Head: on 18.04.2012.  
 Organised "TBHB: Show inviting Nestle team in collaboration with T & P Cell Head: Prof R.K.Gupta on 18.04.2012 (Morning).

National Workshop on Recent Trends in Engineering and Technology (RTET-2012) “on March 15th, 2012 under the umbrella of Dean (Dr. Dharminder Kumar), Faculty of Engineering and Technology, GJUS&T, Hisar. Organising Secretary: Dr.Alka Sharma

49. State whether the programme/department is accredited/ graded by other agencies? If yes, give details: No
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:  
The recommendations of Ph.D and M.Tech research work contribute to the growth and development of industries and generate knowledge in the scientific areas:
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

**Strengths**

- Research Publications of faculty and scholars in refereed journals of high rating
- Food Research Analysis Center (FARC) for wheat quality testing
- Qualified and dedicated Faculty members
- Supervision and successful completion of research projects of M.Tech(F.E) & Ph.D(F.T) despite of excess workload
- Alumni of the Department are well employed in organizations of National and International repute

**Weakness**

- Department is in need of experienced and permanent faculty member since long
- Need space more for laboratory and classrooms.
- Industry-Institute linkage needs to be strengthened
- A proportionate Student/Teacher ratio is required to achieve

**Challenges**

- Mushrooming of private colleges & institutions may lead to shortage of employment in future
- Permanent faculty positions for B.Tech(F.E) & M.Tech(F.E) teaching are yet to be sanctioned

52. Further plans of the department:
- To establish pilot plant facility to help and promote food industries especially fruits and vegetable processing.
  - To organize an international conference /seminar.
  - To strengthen with industry linkage

**Faculty of Physical Sciences  
The Departmental Profile**

## Evaluative Report of the Department of Chemistry

---

1. Name of Department : Chemistry
2. Year of establishment : 1994
3. Is the Department part of a School/ Faculty?: Yes, Faculty of Physical Sciences
4. Names of programmes offered : M.Sc. Chemistry  
(UG, PG, M.Phil., Ph. D., Integrated and Ph.D. Masters; Integrated Ph. D, D.Sc., D.Litt., etc.)
5. Interdisciplinary programmes and departments involved : No
6. Courses in collaboration with other universities, industries, foreign institutions, etc. : No
7. Details of programmes discontinued, if any, with reasons : NA
8. Examination System: Annual/ Semester/Trimester/Choice Based Credit System : Semester
9. Participation of the department in : Yes (B.Tech. courses)  
The courses offered by other departments
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst.Professors/others):

	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual (including CAS &amp; MPS)</b>
Professors	01	--	05
Associate Professors/Reader	04	03	01
Asst. Professors/Lecturers	08	07	04

Others(contract faculty)	--	04	--
--------------------------	----	----	----

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./M. Phil. students guided for the last 4 years
R.K. Gupta	M.Sc., Ph.D.	Professor	Physical Chemistry	24 years	4 completed 4 pursuing
R. Malhotra	M.Sc., Ph.D.	Professor	Inorganic Chemistry	24 years	4 pursuing
J.B. Dahiya	M.Sc., M.Phil, Ph.D.	Professor	Physical Chemistry	22 years	3 completed 6 pursuing
D. Kumar	M.Sc., M.Phil, Ph.D.	Professor	Organic Chemistry	20 years	2 completed 2 pursuing
Sonika	M.Sc., M.Phil, Ph.D.	Professor	Inorganic Chemistry	17 years	3 completed 4 pursuing
Satbir Mor	M.Sc., M.Phil, Ph.D.	Associate Professor	Organic Chemistry	20 years	1 completed 2 pursuing
Jai Devi	M.Sc., Ph.D.	Assistant Professor	Inorganic Chemistry	9 years	3 pursuing
C.P. Kaushik	M.Sc., M.Phil, Ph.D.	Assistant Professor	Organic Chemistry	9 years	1 completed 1 pursuing
Kashmiri Lal	M.Sc., Ph.D.	Assistant Professor	Organic Chemistry	8 years	
Vikas Verma	M.Sc., Ph.D.	Assistant Professor	Organic Chemistry	8 years	

12. List of Sr Visiting Fellows, adjunct faculty, emeritus professors : Nil
13. Percentage of classes by temporary faculty-programme-wise  
Information : M.Sc. Chemistry 10% Ph.D. 10%
14. Programme-wise Student Teacher Ratio M.Sc. Chemistry  
Sanctioned, filled and actual: 10:1
15. Number of academic support staff (technical) and administrative staff:  
sanctioned, filled and actual:

Position/Designation	Sanctioned	Filled	Actual
Store Keeper	1	Nil	Nil
Technical Assistant G-II	1	Nil	Nil
Assistant-cum-DEO	Nil	1	1
Steno-typist	1	1	1
Clerk-cum-JDEO	1	Nil	Nil
Lab Attendant	5	6	6
Peon	1	1	1

16. Research thrust areas as recognized by major funding agencies:  
Organic Synthesis and Medicinal Chemistry  
Organometallics and Material Science  
Flame retardant polymer and Surface Chemistry
17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise:

Dr. J.B. Dahiya	Development of flame retarded fibre forming polymer nanocomposites	2008-11	UGC	Rs. 5,64,800/-
Dr. Ashok K. Sharma	Synthesis and characterization of polymer carbon nano composites for supercapacitor Application	2008-11	UGC	Rs. 9,51,800/-
Dr. Vikas Verma	Hypervalent Iodine Compounds in Organic	2008-10	UGC	Rs. 1,00,000/-



	Chemistry			
Dr. Jai Devi	Eco-friendly methods of synthesis, Characterization, electron transfer properties applications of organo-silicon complexes with oxygen, nitrogen and sulphur donor ligands	2008-11	UGC	Rs. 5,39,800/-
Dr. Devinder kumar	Synthesis and biological activities of 2-aminoimidazoles and related compounds.	2009-12	UGC	Rs. 7,16,545/-
Dr. Kashmiri Lal	Synthesis & biological studies of Trizade based compounds using click chemistry	2010-11	UGC	Rs. 1,90,000/-
Dr. Vikas Verma	Synthesis of New imidazates derivative	2013	GJUS&T, Hisar	Rs. 40,000/-
Dr. C.P. Kaushik	Studies on Synthesis Characterization and Biological Activities of 1,4-distributed 1,2,3-triazoles: A click chemistry approach	2010-13	UGC	Rs. 9,90,800/-
Dr. Satbir Mor	Synthesis and characterization of plazole and thiazine derivatives	2012-14	UGC	Rs. 1,40,000/-
Dr. Vikas	Synthesis &	2014	GJUS&T,	Rs.



24. Areas of consultancy and income generated: Nil
25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad:  
 Prof. J.B. Dahiya, Commonwealth Academic Staff Fellowship (2010-11), UK  
 Prof. A.K. Sharma, Swaran Jayanti Fellowship IISc, Bangalore
26. Faculty serving in :  
 a) National committees b) International committees c) Editorial Boards d) any other (please specify)
- Prof. R.K.Gupta
- Life member, Indian chemical Society, Kolkata.
  - Life Member council of Surface science & Catalysis, Indore.
  - Member of society for Polymer Science, Pune.
  - Member Board of Studies & M.D.U. Rohtak and K. U. Kurukshetra.
  - Head (T&P), GJUS&T, Hisar.
  - Dean, Faculty of Physical Sciences GJUS&T, Hisar.
- Prof. R Malhotra
- Associate Editor of International Journal of Agric. Bio. Research.
- Prof. J.B. Dahiya
- Life member, Indian Chemical Society, Kolkata
  - Life member, Chemical Research Society of India, Bangalore
  - Life member, Indian Thermal Analytical Society, Mumbai
  - Member of Board of Studies of Chemical Sciences Central University, Mahendergarh
  - DAAD (Germani) Alumni
  - Commonwealth Scholarship Commission (UK) Alumni
- Prof. Devinder Kumar
- Life Member, Indian Chemical Society, Kolkata
  - Life Member, Chemical Research Society of India, Bangalore
  - Coordinator, Central instrumentation Laboratory, GJUS&T, Hisar.
- Prof. Sonika
- Life member of Indian Chemical Society, Kolkata

- Member, Faculty of Physical Sciences, GJUS&T, Hisar
- Deputy Chief Warden, GJUS&T, Hisar
- Expert member of selection of Lady Warden, GJUS&T, Hisar

Dr. Satbir Mor

- Life Member, Indian Chemical Society, Kolkatta, India (No. SF / 6948).
- Member, Editorial Board of Referees (EBR), ARKIVOC-U.S.A. (Organic Chemistry Journal).

Dr. Jai Devi

- Life Member of Indian chemical society, Kolkata
- Life Member of Chemical Research Society of India, Bangalore
- Member of organizing committee, GJUS&T, in Science Quiz held on 27th Feb 2013.

Dr. C. P. Kaushik

- Member of Indian Chemical Society, Kolkatta, India
- Member of Academic Council of G J U S&T, Hisar
- Member of Cultural Advisory Committee of G J U S&T, Hisar
- Member of Standing Purchase Committee-I of G J U S&T, Hisar

Dr. Kashmiri Lal

- Member of Indian Chemical Society, Kolkatta, India
- Member of Departmental Research Committee (GJUS&T, Hisar)

Dr. Vikas Verma

- Member of Chemical Research Society of India (CRSI)
- Deputy co-ordinator of Central Instrumentation Laboratory
- Warden of Boys Hostel-II
- Member of sports committee of the department
- Co-ordinator of Kalpna Chawala Memorial Science Quiz-2013

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs):

- i) Workshop- 'Chemistry in our life' March, 2012
- ii) Refresher Course on pharmaceutical, Chemical and Health Sciences (Chemistry) 07.05.2010 to 27.05.2010 at UGC-Academic Staff College, GJUS&T, Hisar
- iii) Science Conclave
- iv) National Conference

28. Student projects:
- Percentage of students who have done in-house projects including inter-departmental projects
  - Percentage of students doing projects in collaboration with other universities/industry/institute NIL
29. Awards/recognitions received at the national and international level by:
- Faculty  
Prof. J.B. Dahiya, Common Wealth Academic Staff Fellowship, UK  
Prof. Devinder Kumar-Best Teacher Award by Chemical Research Society of India (CRSI)
  - Doctoral/post doctoral fellows:-
  - Students:-
30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:
- i) Workshop- 'Chemistry in our life' March, 2011 funded by GJUS&T, Hisar
  - ii) National Conference on Recent Developments in Chemical Sciences-February, 2014, funded by GJUS&T, Hisar
31. Code of ethics for research followed by the departments:  
Ethics are followed as per university rules. Quality Research for the generation of the knowledge, benefit of the society and development of the economy of the country.
32. Student profile programme-wise:

Name of the Programme (refer to question no.4)	Applications Received	Selected		Pass percentage	
		Male	Female	Male	Female
Ph.D.					
2009-10	72	6	4		
2010-11	96	1	3		
2011-12	42	4	15		
2012-13	47	6	3		

2013-14	39	2	4		
M.Sc.					
2009-10	385	20	25		
2010-11	482	14	31		
2011-12	Common application for all M.Sc. courses	12	38		
2012-13	712	20	35		
2013-14	1045	21	32		

33. Diversity of students:

Name of the Programme (refer to question no.4)	% of students form the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc.	NA	98.13	1.87	NIL
Ph.D.	45	45	10	--

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise:

Defense service and other Examination:-03 (DRDO/BARC)

JRF/NET/SLET/GATE: 30

35. Student progression:

Student progression	Percentage against enrolled
UG to PG	
PG to M.Phil.	5%
PG to Ph.D.	-20%
Ph.D. to Post-Doctoral	Nil
Employed	

<ul style="list-style-type: none"> <li>▪ Campus selection</li> <li>▪ Other than campus recruitment</li> </ul>	
Entrepreneurs	Nil

36. Diversity of staff:

<b>Percentage of faculty who are graduates</b>	
of the same university	<b>NIL</b>
From other universities within the State	70% (7)
From universities from other States	30% (3)
From universities outside the country	Nil

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt. During the assessment period : Two

38. Present details of departmental infrastructural facilities with regard to:

- |   |   |
|---|---|
| a) Library                                    | All books are placed in central library |
| b) Internet facilities for staff and students | Yes                                     |
| c) Total number of class rooms                | Three                                   |
| d) Class rooms with ICT facility              | Nil                                     |
| e) Students' Laboratories                     | Three                                   |
| f) Research Laboratories                      | Six                                     |

39. List of doctoral, post-doctoral students and Research Associates:

- |   |    |
|---|----|
| a) From the host institution/university | 18 |
| b) From other institutions/universities | 25 |
- List of Scholars

<b>Completed Ph.D.</b>					
Sr. No.	Regn. No.	Name of Scholar	Name of Supervisor	Degree awarded	Remarks

1.	0405905	Ms. Hemlata	Dr. R.K. Gupta	24.3.2009	
2.	0505902	Mr. Ashok Kumar	Dr. J.B. Dahiya	24.3.2009	
3.	0305902	Ms. Deepa Malhotra	Dr. J. B. Dahiya	29.7.2009	
4.	0205902	Ms. Namrata Kaushik	Prof. J.K. Sharma	26.3.2010	
5.	0405903	Mr. Krishan Kumar	Dr. J.B. Dahiya	1.4.2010	
6.	0305905	Mr. Ravinder Tuteja	Prof. J.K. Sharma	20.4.2010	
7.	0505901	Ms. Meenakshi	Dr. Sonika	2.12.2010	
8	0205903	Mr. Surander Kumar	Dr. R.K. Gupta	12.2010	
9	0405901	Mr. Pawan Siwach	Dr. R.K. Gupta	21.12.2011	
10	0605901	Ms. Nidhi	Dr. Sonika	21.11.2012	
11	0905906	Mr. Yashpal Sharma	Dr. A.K. Sharma	6.6.2013	
12.	0705904	Ms. Rajni Mohil	Dr. Satbir Mor	23.12.2013	
13	0905902	Mrs. Sudesh	Dr. J.B. Dahiya	23.12.2013	
14	0705901	Mr. Vikas Verma	Dr. D. Kumar	6.6.2013	
15	0905905	Mr. Kashmiri Lal	Dr. C.P. Kaushik	12.2.2014	
16	1005901	Mr. Rajib Ghosh	Dr. Sonika	12.2.2014	

**Ph.D. on going**

1.	0705903	Mr. Mahavir	Dr. D. Kumar		
----	---------	-------------	--------------	--	--



2.	0905901	Ms. Preeti	Dr. Satbir Mor		
3.	0905902	Mrs. Sudesh	Dr. J.B. Dahiya	Thesis Submitted	
4.	0905903	Ms. Suman	Dr. Jai Devi		
5.	0905904	Ms. Saroj Nehra	Dr. J.B. Dahiya	Thesis Submitted	
6.	0905907	Mr. Narender Kumar	Dr. J.B. Dahiya		
7.	1005902	Mr. Sagar Chakrabarti	Prof. Rajesh Malhotra		
8.	1005903	Mr. Amit Ghosh	Prof. Rajesh Malhotra		
9	11059001	Ms. Nisha Batra	Dr. Jai Devi	Thesis Submitted	
10	11059002	Ms. Sweety Monga	Prof. J.B. Dahiya		
11	11059003	Ms. Parveen Kumari	Dr. D. Kumar		
12	11059004	Mr. Tushar Kanti Dey	Prof. R. Malhotra		
13	12059001	Mr. Krishan Kumar	Dr. C.P. Kaushi		
14	12059002	Ms. Malvika	Prof. R.K. Gupta		
15	12059003	Ms. Monika Rani	Dr. D. Kumar		
16	12059004	Ms. Piniki	Prof. J.B. Dahiya		
17	12059005	Ms. Vanita Goel	Prof. R. Malhotra		

18	12059006	Ms. Suman Devi	Dr. Jai Devi		
19.	12059007	Ms. Savita	Dr. Satbir Mor		
20	12059008	Ms. Priyanka	Prof. Sonika		
21	12059009	Ms. Hemlata	Prof. Sonika		
22	12059012	Ms. Chhanda Rarhi	Prof. R. Malhotra		
23	12059010	Mr. Naseeb Singh	Prof. R.K. Gupta		
24	12059011	Ms. Alka Rani	Prof. R.K. Gupta		
25	13059001	Mr. Vinod Kumar	Prof. R.K. Gupta		
26	13059002	Ms. Aarti	Prof. Sonika		
27	13059003	Ms. Priyanka	Prof. J.B. Dahiya		

40. Number of post graduate students getting financial assistance from the university office:

Year	No. of Students
2009-10	18
2010-11	25
2011-12	17
2012-13	15
2013-14	5

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology: NA
42. Does the department obtain feedback from?
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? Yes

Faculty discusses the revision of curriculum in Staff Council, and presents it in PGBOS and Faculty for consideration for further approval by Academic Council.

- b) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback?

There is no formal system for this. However, Chairman on its own gets feedback on teaching–learning, curriculum etc. and apprise the same in staff council. The same is incorporated where ever possible.

- c) Alumni and employers on the programmes offered and how does the department utilize the feedback?

There is no formal system for this. However, feedback where ever possible from alumni forms a part of the discussion in staff council and incorporated as far as possible.

43. List the distinguished alumni of the department (maximum 10):

1. Dr. Pyare Lal Scientist, IIM, Jammu
2. Dr. Ashok Kumar Scientist, Ranbaxy
3. Dr. Bhanu Nandan Asstt. Professor, IIT, Delhi
4. Ms. Ravita Scientist, IGCAR, Kalpakkam
5. Mr. Krishan Scientist, IGCAR, Kalpakkam
6. Ms Kavita Kundu Scientist, DRDO Scientist
7. Dr. Sunil Kumar Scientist, Avantha Centre for Industrial Research & Development
8. Dr. Anil Kumar Scientist, Ministry of Water Resources, Faridabad
9. Dr. Jagvir Scientist, CSIO, Chandigarh
10. Dr. Sonia Nain Asstt. Professor, DCRUST,

44. Give details of students enrichment programmes (special lectures/workshops/seminar) involving external experts:

- i) Workshop- ‘Chemistry in our life’ March, 2011 funded by GJUS&T, Hisar
- ii) Science Conclave February 18-19, 2014 sponsored by DST Govt . of Haryana
- iii) National Conference on Recent Developments in Chemical Sciences- February, 2014, funded by GJUS&T, Hisar

45. List the teaching methods adopted by the faculty for different Programmes:  
 Black Board Teaching, Power point presentations, e-learning, seminar by the students, surprise test, assignments, Discussion etc.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?  
 Based on  
 i) Placement of students  
 ii) Clearance of JRF/NET/GATE/SET examinations  
 iii) Number of quality publications in reputed journals  
 iv) Subject-wise result of the students
47. Highlight the participation of students and faculty in extension Activities:  
 1. Participation in sports and games  
 2. Participation in quiz contest  
 3. Cultural activities  
 4. Volunteer and Proctorial duties
48. Give details of “beyond syllabus scholarly activities” of the department:  
 Quiz contest, Scientific posters, Education tours, Science day Celebration, Workshop and conferences, orientation of the students for appropriate choice of the career
49. State whether the programme/department is accredited/graded by other agencies? If yes, give details: No
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:  
 Faculty members are publishing quality research papers in reputed journals in the area of medicinal chemistry, organic synthesis, organometalics, Surface Chemistry and material science.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:  
 Strength  
 i) Well qualified faculty members  
 ii) Published good numbers of research papers in international journals

- iii) Most of the faculty have research projects
- iv) Regular participation of faculty members in workshops/seminars/conferences
- v) A good number of students are qualifying NET/JRF/GATE and other competitive examinations
- vi) Faculty members have received national/international awards/fellowship

#### Weakness

- i) More sophisticated instruments are required.
- ii) More infrastructure /laboratories/space is required
- iii) More linkages with industry is required
- iv) More access to reputed journals of Elsevier and Science direct etc. required.

#### Opportunities and Challenges

- i) There are many opportunities for the department to be part of the growth of the chemical industry through indigenous technologies such as pharmaceuticals, petrochemicals, polymers, paints & pigments, textiles, fertilizers, etc.
- ii) There are challenges to develop and transfer the indigenous technologies for the growing Indian chemical industries
- iii) There are challenges for the chemists to be innovative in scientific research and become good entrepreneur for the growth of the economy of the country and well being of the society
- iv) There are challenges for the development of the methods/process/technologies which are ecofriendly, sustainable and socio economically viable.
- v) There are challenges for the innovative research area of energy generation, clean water, health and safety.

#### 52. Further plans of the department:

- To seek the funding through FIST-II (DST), SAP(UGC), Modrob (AICTE), etc.
- To start the M.Tech. programme in Chemical Technology /Polymer Technology/instrumental methods of analysis.
- Improve the course curriculum of M. Sc. and pre Ph. D. course in time with UGC-helpful in clearing NET.

- Develop infrastructure of the Deptt. particularly research Lab facilities.
- Introduce latest e-learning programmes in time with others.
- To fulfil some of the above, possibility of getting fund from DST-(FIST-II) and UGC (SAP), DRDO, etc. will be explored.
- To run innovative programmes-M. Tech.

## Evaluative Report of the Department of Mathematics

---

1. Name of Department : Mathematics
2. Year of establishment : 1994
3. Is the Department part of a School/Faculty of the University?  
Yes, Faculty of Physical Sciences
4. Names of programmes offered (UG, PG, M.Phil., Ph. D., Integrated Masters; Integrated Ph. D, D.Sc., D.Litt., etc.)
  - i) M.Sc.(Mathematics): Intake 50
  - ii) Ph.D.(Mathematics): Intake As per rules
5. Interdisciplinary programmes and departments involved. NA
6. Courses in collaboration with other universities, industries, foreign institutions, etc. NA
7. Details of programmes discontinued, if any, with reasons: Nil
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System
9. Participation of the department in the courses offered by other departments : Yes  
B.Tech. (CSE, IT, ECE, Mech., Food Tech., BME, Ptg. & Pkg.)  
M.Tech.(Mech.)  
B.Pharmacy
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst.Professors/others):

	Sanctioned	Filled	Actual (including CAS & MPS)
Professors	01	01	04
Associate Professors	02	01	-
Asst. Professors	08	04	02
Others Guest faculty	--	03	03

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./M. Phil. students guided for the last 5 years
Dr. Kuldip Singh	Ph.D.	Professor	Mechanics of Solids	24½	Ph.D. 3 (Completed) 5 (Pursuing as supervisor/ Co-supervisor)
Dr. (Mrs.) Sunita Rani	Ph.D.	Professor	Theoretical Seismology	18½	Ph.D. 2 (Completed) 2 (Pursuing as supervisor)
Dr.(Mrs.) Sunita Pannu	Ph.D.	Professor	Wave Propagation	21	Ph.D. 1 (Completed) 4 (Pursuing as supervisor)
Dr. M.K. Sharma	Ph.D.	Professor	Fluid Dynamics	18	Ph.D. 5 (Pursuing as supervisor/ Co-supervisor)
Mr. Kapil Kumar	M.Sc. M.Phil	Assistant Professor	Wave Propagation	10	-
Dr. Pankaj Kumar	Ph.D.	Assistant Professor	Coding Theory	09	Ph.D. 4 (Pursuing as supervisor/ Co-supervisor)

Ph.D. Awarded = 06

Ph.D. Students pursuing = 18



**List of Ph.D. Completed Research Scholars**

<b>Sr. No.</b>	<b>Name of Research Scholar</b>	<b>Father's Name</b>	<b>Regn. No.</b>	<b>Supervisor/ Co-supervisor (if any)</b>	<b>Topic</b>	<b>Date of Award of Degree</b>	<b>Date of Thesis Submission</b>
1	Mr. Vinay Kumar	Sh. Krishan Kumar	0306901	Prof. Kuldip Bansal	Deformation of two Welded Half-Spaces by Axially Symmetric Sources	09.03.2009	06.10.2008
2	Mr. Ravinder Kumar Saharawat	Sh. Ram Phal Singh Saharawat	0506901	Prof. Kuldip Bansal	Deformation of Layered Half-Space Due to Dipolar Sources	06.08.2010	16.03.2010
3	Ms. Neeru Bala	Sh. Shiv Kumar	0306902	Prof. (Mrs.) Sunita Rani	Crustal Deformation of the earth Due to Two-Dimensional Seismic Faulting	27.06.2011	05.10.2010

4	Ms. Shamta Chugh	Sh. Puran Chand Nanda	0706902	Prof. Kuldip Bansal/ Dr. Dinesh Kumar Madan	Two-dimensional deformation of an anisotropic medium	27.09.2011	30.06.2011
5	Mr. Raman Kumar	Sh. Amar Nath	0706901	Prof. (Mrs.) Sunita Rani	Deformation of a layered poroelastic half-space with anisotropic permeability due to surface loads and buried sources	02.11.2011	04.07.2011
6	Mr. Lakhbir Singh	Sh. Chander Bhan	0706903	Prof. (Mrs.) Sunita Pannu/ Dr. Baljeet Singh	Propagation of waves in a Generalized thermo-elastic medium	19.02.2013	26.07.2012

List of Ph.D. On Going Research Scholars

Sr. No.	Name of Candidate	Title	Supervisor/ Co-supervisor (if any)	Date of Registration
---------	-------------------	-------	--	----------------------

1	Mr. Kapil Kumar	Thermo-mechanical interactions in generalized dynamic thermoelasticity.	Prof. (Mrs.) Sunita Pannu	06.10.2008
2	Ms. Seema Bansal	Numerical Simulation of Mathematical Models of Viscous Fluid Flow through Circular tube	Prof. Mukesh Kumar Sharma/ Prof. Kuldip Singh	06.10.2008
3	Mr. Ashok Kumar	Study of Viscous Incompressible MHD Flow Head and Mass Transfer through Porous Medium	Prof. Mukesh Kumar Sharma/ Prof. Kuldip Singh	06.10.2008
4	Mr. Ram Chander Verma	Plane Strain deformation of a layered media due to faulting	Prof. (Mrs.) Sunita Rani	15.02.2010
5	Mr. Vinay Nasha	A study of Convection diffusion problems of Newtonian/ Non Newtonian Viscous fluid through Stenosed vessel	Prof. Mukesh Kumar Sharma	15.02.2010
6	Ms. Neelam	Wave Spectrum in Non-Classical Dynamical Thermo Elasticity	Prof. (Mrs.) Sunita Pannu	15.02.2010
7	Ms. Renu Yadav	Transient Responses in Thermoelastic Medium	Prof. (Mrs.) Sunita Pannu	06.10.2010
8	Ms. Seema Rani	Minimal Cyclic and Abelian Codes	Dr. Pankaj Kumar	06.10.2010
9	Mr. Amit Kumar	Deformation of a Poroelastic Medium due to point forces and Fluid Point Sources	Prof. Kuldip Singh/ Prof. Mukesh Kumar Sharma	05.03.2011

10	Ms. Monika	Minimum Distance of some Minimal Cyclic Codes	Dr. Pankaj Kumar	05.03.2011
11	Ms. Amita Sarova	Soft Mathematical Techniques in Data Compression	Prof. Kuldip Singh/ Dr. Vinay Kumar (Jind)	05.03.2011
12	Mr. Manoj Kumar	Existence of Common fixed point for self mappings in various spaces	Dr. Pankaj Kumar/ Dr. Sanjay Mugal	05.03.2011
13	Mr. Pardeep Kumar	Coupled Fixed Point Theorems in G-Metric, Menger and Fuzzy Metric Spaces	Dr. Pankaj Kumar/ Dr. Nawneet Hooda	05.03.2011
14	Mr. Manoj Puri	Quasi-static deformation of a layered poroelastic medium due to surpace loading	Prof. (Mrs.) Sunita Rani	05.03.2011
15	Mr. Sandeep Singh	A Study of Plane Thermoelastic Waves with Second Sound Effect.	Prof. (Mrs.) Sunita Pannu	06.09.2012
16	Ms. Renu	Deformation of a thermoelastic medium due to dipolar sources	Prof. Kuldip Bansal	06.09.2012
17	Ms. Manjeet	A study of flow and heat convection problems in particle suspended fluid: specific reference to nanofluid	Prof. Mukesh Kumar Sharma	06.09.2012
18	Ms Sunita Rani	In-Plane Deformation of a Stratified Media due to Surface Loads and Buried Sources	Prof.(Mrs.) Sunita Rani	24.01.2014

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors: **NA**
13. Percentage of classes taken by temporary faculty - programme-wise information:
- |                    |     |
|--------------------|-----|
| Ph.D.              | 00% |
| M.Sc./ M.Tech      | 22% |
| B.Tech./ B.Pharma. | 76% |
14. Programme-wise Student Teacher Ratio:
- |          |                                    |
|----------|------------------------------------|
| Ph.D.    | = 3 : 1                            |
| M.Sc.    | = 10 : 1                           |
| M.Tech   | = 20 : 1 (Only Mathematics Course) |
| B.Tech.  | = 60 : 1 (Only Mathematics Course) |
| B.Pharma | = 60 : 1 (Only Mathematics)        |
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

Position	Sanctioned	In Position
Steno Typist	01	01
Clerk-cum-JDEO	01	--
Lab Attendant	01	01
Peon	01	01

16. Research thrust areas as recognized by major funding agencies:  
Continuum Mechanics (Recognized by UGC-SAP)
17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise:
1. Prof. Sunita Pannu:  
UGC Minor Research Project (completed in 2012), Grant received= Rs. 1.7 lacs, Funded by UGC. Title: Disturbance in a generalized thermoelastic medium.
  2. Prof. Sunita Rani:  
UGC Major Research Project (completed in 2013), Grant received= Rs. 763600/- Funded by UGC. Title: Quasi-static deformation of a layered poroelastic media.



26. Faculty serving in :
- National committees b) International committees c) Editorial Boards  
d) any other (please specify)
  - a) Association with Nat. & State Level Bodies.

### Association with National and State level Bodies

Prof. Kuldip Singh

- i. Life member, Indian Mathematical Society (IMS), New Delhi.
- ii. Member, University Court, GJUS&T, Hisar.
- iii. Member, Academic Council, Ch. Devi Lal University, Sirsa.
- iv. Member, Academic Council, Indira Gandhi University, Meerpur (Rewari).
- v. Member, Executive Council, TMU, Moradabad (U.P.).
- vi. Member, PG BOS in Mathematics, GJUS&T, Hisar.
- vii. Member, PGBOS in Mathematics, Ch. Devi Lal University, Sirsa.
- viii. Member, UGBOS in Mathematics, Kurukshetra University, Kurukshetra.
- ix. Member, Departmental Research Committee in Mathematics, Ch. Devi Lal University, Sirsa.
- x. Member, Departmental Research Committee in Mathematics, M.D. University, Rohtak.
- xi. Member, Advisory Committee, Directorate of Distance Education, Kurukshetra University, Kurukshetra.

Subject expert in Mathematics on various Selection Committees In: Ch. Devi Lal University, Sirsa; M.D. University, Rohtak; KU, Kurukshetra, JNV University Jodhpur, MNIT, Jaipur, DCRUST, Murthal, Pbi. University, Patiala.

Prof. Sunita Rani

- i. Life member, Indian Mathematical Society (IMS), New Delhi
- ii. Life member, Indian Society of Earthquake Technology (ISET), Roorkee

- iii. Life member, Indian Science Congress Association. (ISCA)
- iv. Member, PGBOS in Mathematics, GJUS&T, Hisar.
- v. Member, UGBOS in Mathematics, GJUS&T, Hisar.
- vi. Member, High Power Standing Purchase Committee, GJUS&T, Hisar.
- vii. Chairperson, Women Cell, GJUS&T, Hisar.

Prof. Sunita Pannu

- i. Life member, Indian Mathematical Society (IMS), New Delhi.
- ii. Life member, Indian Academy of Mathematics, Indore.
- iii. Co-ordinator of M. Sc. Mathematics (Distance Learning Programme).
- iv. Chairperson, PGBOS in Mathematics, GJUS&T, Hisar.
- v. Chairperson, UGBOS in Mathematics, GJUS&T, Hisar.

Subject expert in Mathematics on various Selection Committees viz.;;  
CCS HAU, Hisar; Ch. Devi Lal University, Sirsa; PPIMT, Hisar.

Prof. M. K. Sharma

- i. Life member, International Academy Physical Sciences (IAPS), India,
- ii. Life member, Indian Society of Theoretical and Applied Mechanics (ISTAM), IIT Kharangpur.
- iii. Life member, Rajasthan Ganita Parishad
- iv. Member, Faculty of Physical Science, GJUS&T, Hisar.
- v. Member, PGBOS in Mathematics, GJUS&T, Hisar.
- vi. Member, UGBOS in Mathematics, GJUS&T, Hisar.

Mr. Kapil Kumar

- i. Member, UGBOS in Mathematics, GJUS&T, Hisar.
- ii. Member, PGBOS in Mathematics, GJUS&T, Hisar.

Dr. Pankaj Kumar

- i. Member, UGBOS in Mathematics, GJUS&T, Hisar.



ii. Member, PGBOS in Mathematics, GJUS&T, Hisar.

- a) International Committees --
- b) Members Editorial Board

Prof. Kuldip Singh, Member Editorial Board, Mathematical Journal of Interdisciplinary Sciences ISSN: 2278-9561

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs):
- I. National Workshop on “Computational Mathematics” on March 26, 2011.
  - II. Refresher Course in Mathematics & Statistics - 02-11-2012 to 22-11-2012
  - III. Refresher Course in Mathematics & Statistics - 11.12.2013 to 31.12.2013.
28. Student projects: NA
- Percentage of students who have done in-house projects including inter-departmental projects
  - Percentage of students doing projects in collaboration with other universities/industry/institute
29. Awards/recognitions received at the national and international level by:
- Faculty
  - Prof. Kuldip Singh has been conferred “Award of Excellence” by the MD University, Rohtak on February 12, 2012 during 2<sup>nd</sup> Alumni Meet.
  - Doctoral/post doctoral fellows --
  - Students --
30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:
- 1. The Department has organized a two days National Conference on Mathematical Modelling and Simulation (MMSim2010) during March 20-21, 2010.
- Source of funding UGC-SAP (DRS-I) and GJUS&T, Hisar.
- Resource Persons:
- Prof. Sarvajit Singh, New Delhi
  - Prof. J.N. Sharma, NIT Hamirpur

Prof. P.R.Sharma, Univ. of Rajasthan Jaipur.  
 Prof. C.B. Gupta, BITS, Pilani  
 Prof. V.P. Kaushik, KU, Kurukshetra  
 Prof. M.D. Sharma, KU, Kurukshetra  
 Prof. A.K. Vashishtha, KU, Kurukshetra

No. of participants: 155

2. The Department has organized a one day National Workshop on “Computational Mathematics” on March 26, 2011.

Source of funding – GJUS&T, Hisar.

Resource Persons:

Prof. R.K.Sharma, IIT Delhi  
 Prof. B.K. Hooda, CCSHAU, Hisar  
 Prof. Renu Chugh, MDU, Rohtak  
 Prof. Aseem Miglani, CDLU, Sirsa

No. of participants: 60

31. Code of ethics for research followed by the departments:

Quality Research for the betterment of the Society

32. Student profile programme-wise:

Name of the Programme (refer to question no.4)	Appli- cations Received	Selected		Pass percentage	
		Male	Female	Male	Female
Ph.D.				NA	
2009	62	5	5		
2010	28	2	2		
2011	32	1	2		
2012	15	-	1		
2013	22	2	-		
M.Sc.					
2009 (2009-11)	431	11	39	100% (2007-2009)	100% (2007-2009)
2010 (2010-2012)	518	12	38	79% (2008-2010)	100% (2008-2010)

2011 (2011-2013)	Common Entrance	15	35	100% (2009-2011)	98.5% (2009-2011)
2012 (2012-2014)	683	19	35	77% (2010-2012)	97.1% (2010-2012)
2013 (2013-2015)	792	26	30	15.38% (2011-2013)	73.52% (2011-2013)

33. Diversity of students:

<b>Name of the Programme</b> (refer to question no.4)	<b>% of students form the same University</b>	<b>% of students from other universities within the State</b>	<b>% of students from universities outside the State</b>	<b>% of students from other countries</b>
Ph.D.				
2009	20%	80%	-	-
2010	50%	50%	-	-
2011	67%	33%		
2012	100%	-	-	-
2013	50%	50%	-	-
M.Sc.				
2009	-	100%	-	-
2010	-	100%	-	-
2011	-	100%	-	-
2012	-	100%	-	-
2013	-	100%	-	-

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations?  
Give details category-wise:

JRF=15

NET=11

35. Student progression:

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	NA
PG to M.Phil.	20%
PG to Ph.D.	6.13%
Ph.D. to Post-Doctoral	--
Employed <ul style="list-style-type: none"> <li>▪ Campus selection</li> <li>▪ Other than campus recruitment</li> </ul>	80%

36. Diversity of staff:

<b>Percentage of faculty who are graduates</b>	
of the same university	N.A.
From other universities within the State	05
From universities from other States	01
From universities outside the country	Nil

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt. During the assessment period:

One (Dr. Pankaj Kumar was awarded Ph.D. in April 2009, by M.D. University, Rohtak).

38. Present details of departmental infrastructural facilities with regard to:

- a) Library: The majority of books are housed in central library.
- b) Internet facilities for staff and students Yes
- c) Total number of class rooms Two
- d) Class rooms with ICT facility Nil
- e) Students' Laboratories/ Research One  
Laboratories

39. List of doctoral, post-doctoral students and Research Associates:

- a) From the host Institution/University 07
- b) From other institutions/universities 10

40. Number of post graduate students getting financial assistance from the university:

Year	No. of Students
2009-10	18
2010-11	24
2011-12	31
2012-13	22
2013-14	44

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology: NA

42. Does the department obtain feedback from :

- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? Yes  
The Curriculum is designed by faculty members and plead before BOS & Faculty for consideration and approval by Academic Council.
- b) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback? Yes  
At the end of each semester, feedback about staff, curriculum taught/syllabus covered and learning by the students is obtained from five to ten students selected randomly from each class. The feedback received from the students is discussed in staff council and the weaknesses pointed out are conveyed to faculty members for improvement.
- c) Alumni and employers on the programmes offered and how does the department utilize the feedback? Yes

Feedback is also taken from the alumni of the department during the alumni meet. The feedback on the programs offered by the department is discussed in the meeting of PGBOS and implemented for the improvement of the program.

43. List the distinguished alumni of the department (maximum 10):

Distinguished Alumni of the Department

<b>Sr. No.</b>	<b>Name of Students</b>	<b>Year of Passing M. Sc.</b>	<b>Designation</b>
1.	Ms. Neetu Gupta	2003	Asstt. Prof., YMCA, Fridabad
2.	Dr. Raman Kumar	2004	Asstt. Prof. Govt. College, Hisar
3.	Ms. Shruti Rani	2005	Asstt. Prof., Vaish College, Bhiwani
4.	Ms. Bharti	2005	Asstt. Prof., Sham Lal College, Delhi
5.	Ms. Manjeet	2005	Asstt. Prof., M.P. College for Women, Dabawali
6.	Ms. Suman Panwar	2007	Assistant Prof., DCRUST, Murthal
7.	Ms. Kavita Rani	2007	Asstt. Prof., Govt. College, Hisar
8.	Ms. Seetu Rana	2007	Asstt. Prof., Govt. College Adampur, Hisar
9.	Mr. Vijay Kumar	2007	Asstt. Prof., M.M. College, Fetehabad
10.	Mr. Renu Yadav	2008	Asstt. Prof., Govt. College, Hansi

44. Give details of students enrichment programmes (special lectures/workshops/seminar) involving external experts:

- i) The Department organized a two days National Conference on Mathematical Modelling and Simulation (MMSim2010) during March 20-21, 2010.
- ii) The Department organized a one day National Workshop on “Computational Mathematics” on March 26, 2011.

- iii) An essay writing competition is conducted every year on Science Day.
45. List the teaching methods adopted by the faculty for different programmes:
- Computer aided instruction method
  - Interactive teaching
  - Seminar by individual student
  - Surprise test
  - Open discussion in class on the completion of topic
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
- Based on
- No. of M. Sc. and Ph.D. Students produced.
  - Placement of Students
  - No. of Publications produced
  - Subject wise result
47. Highlight the participation of students and faculty in extension activities:
- National Service Scheme  
 National Science Day celebration  
 Celebration of the National Women Day  
 World Environment Day celebration  
 Participation in Independence day and Republic Day
48. Give details of “beyond syllabus scholarly activities” of the department:
- Participation in the National/International Conferences : 25
  - Invited Talks in the Conferences/ Workshops/ Seminars:13
  - Lectures delivered in Refreshers/Orientation Courses and extension lectures: 23
  - Participation in Workshops/ Seminars/ Refresher/ Orientation Courses: 32
49. State whether the programme/department is accredited/graded by other agencies? If yes, give details: NA
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:

Faculty members are engaged in the interdisciplinary research work.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

### **Strengths**

- Well qualified and devoted faculty members
- Good number of publications in National and International journals.
- Faculty members are associated with various academic/professional bodies
- Regular participation of faculty members in the National and International seminars/conferences and workshops
- Students from the department are qualifying NET/JRF exams are in commendable number.

### **Weaknesses**

- More space is required.
- Lack of international exposure of faculty members.
- Some more journals should be accessed online.
- Separate lab for research scholars is required.
- Latest computer softwares are required.

### **Opportunities**

- The theoretical work in Solid Mechanics and Fluid Mechanics can be extended to experimental work for practical problems.
- Collaboration with National Laboratories working in Earth science can be established.

### **Challenges**

- In the modern era of information and technology with the fast development of the communication and transportation, now the world has turned into a global village. The pace of technology development is also very fast. Similarly in mathematics, new developments are taking place throughout the globe. So to keep the syllabus and our graduates up-to date is a big challenge.
- The drastic development in different branches of mathematics needs inclusion in the curriculum. The completion of Master Degree in 2 years time to include all the aspects is another big challenge.



- The role of mathematicians should be emphasized in development of new technology by different research and development wings of different institutes and universities.
- Mathematics is an ancient science and its applications are in every walk of life. Hence the role of mathematic should be highlighted.
- In the era of specialization and super-specialization, more regular faculty should be provided in the department to improve the teaching and to provide the pace to the research on different fields.

52. Further plans of the department:

In the coming years, the Discipline will expand both in size and variety of expertise.

1. The department plans to start an integrated Master's Program in Mathematics, which will comprise number of basic compulsory courses and elective courses catering to the needs and interests of the students.
2. The Discipline also envisages M. Phil course in Mathematics in near future.
3. Future plans of the discipline include organizing Conferences/ Workshops/ Seminars aimed at the application of Mathematics in Engineering and Technology. It also endeavors to hold exhibitions, Quiz/ puzzle competitions, Mathematics Olympiad, etc.
4. The department also plans to have a departmental library for ease of consulting books and for a quick ready reference.

## Evaluative Report of the Department of Applied Physics

---

1. Name of Department : Applied Physics
2. Year of establishment : 1996
3. Is the Department part of a School/Faculty of the University? Yes, Faculty of Physical Sciences
4. Names of programmes offered (UG, PG, M.Phil., Ph. D., Integrated Masters; Integrated Ph. D, D.Sc., D.Litt., etc.)
5. Interdisciplinary programmes and departments involved : All B.Tech and M Tech Programmes of the University
6. Courses in collaboration with other universities, industries, foreign institutions, etc. : NA
7. Details of programmes discontinued, if any, with reasons : Nil
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System: Semester System
9. Participation of the department in the courses offered by other departments:  
B.Tech. (CSE, IT, ECE, Mech., Food Tech., BME, Ptg. Tech.)
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst.Professors/others):

	Sanctioned	Filled	Actual (including CAS & MPS)
Professors	02	01	06
Associate Professors	04	02	Nil
Asst. Professors	13	05	05
Others	--	--	--

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No. of Ph.D./M. Phil. students guided for the last 5 years</b>
Nawal Kishore	Ph.D	Professor	Materials Sciences	33	Completed:06 Pursuing: 04
Devendra Mohan	Ph.D	Professor	Lasers & Photonics	22	Completed:07 Pursuing: 03
Snen Lata Goyal	Ph.D	Professor	Nuclear Physics	26	Completed:- Pursuing: 03
Sujata Sanghi	Ph.D	Professor	Lasers & Materials Sciences	17	Completed:04 Pursuing: 01
Ashish Agarwal	Ph.D	Professor	Materials Sciences & Optoelectronics	22	Completed:02 Pursuing: 01
Rakesh Dhar	Ph.D	Professor	Microelectronic & Instrumentation	26	Pursuing: 03
Neetu Ahlawat	Ph.D	Assistant Professor	Materials Sciences	08	Pursuing :02
Rajender Singh Kundu	Ph.D	Assistant Professor	Materials Sciences	08	Pursuing :02
Rajesh Punia	Ph.D	Assistant Professor	Materials Sciences	08	-
David	Ph.D	Assistant	Lasers	25	-

Joseph		Professor			
Ajay Shankar	Ph.D., M.Tech	Assistant Professor	Optical Metrology	09	Pursuing : 02

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors : NIL
13. Percentage of classes taken by temporary faculty- programme -wise information:  
 B.Tech.(Physics) - 80%
14. Programme-wise Student Teacher Ratio :
- Ph.D.  $\approx 3 : 1$   
 M.Sc.  $\approx 12 : 1$   
 M.Tech  $\approx 10 : 1$
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual :

Position	Sanctioned	In Position
T.A.Grade-I	01	01
Steno Typist/Stenographer	01	01
Clerk-cum-JDEO	01	01 (on contract basis)
Lab Attendant	05	05
Peon	01	01
Store Keeper	-	01

16. Research thrust areas as recognized by major funding agencies :
- i) Materials Science
  - ii) Lasers & Photonics
  - iii) Optical Engineering
17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. :

Sr. No.	Title of Project	Name of Faculty	Grant Received	Name of Fund- ing Agency	Whether ongoing/ completed during the year
(YEAR-2009- 2013)					
1.	Synthesis & Characterization of Nano Composite/Micro-crystallites based Glass Ceremics	Prof. Nawal Kishore Dr. Rajender Kundu &	11.78 lacs	DRDO, New Delhi	Completed
2.	Development & Characterization of Optical Materials for Photonics System and Devices (DRDO Project) (Rs.5.93crores)	Prof. Nawal Kishore-Coordinator and all other teachers –Co-P.Is		DRDO Through IRDE Dehra-dun	Completed
3.	DST-FIST	Prof. Nawal Kishore-Coordinator and all other teachers –Co-P.Is		DST	Completed
4.	Studies on base line radioactivity in environment matrices around nuclear power plant site in Haryana. (DAE-BRNS, Rs. 16.05 lacs)	Prof. Nawal Kishore & Dr. Rajender Kundu		DAE-BRNS	Ongoing
5.	Study of Optical Power Limiting and Bistability in Optical Materials	Prof. Devendra Mohan	8,52,920/-	UGC, Delhi	Completed 30 Dec., 2008 – July 2012

6.	Optical Limiting and Degenerate four Mixing in Nonlinear Optical Materials using Lasers, Sponsored by BRNS-DAE(Oct. 2011)	Prof. Devendra Mohan	19,03,750/-	DAE	Oct. 2011 – March 2014
7.	Ion Beam Modifications of Dye Sensitized Solar Cells, Sponsored by IUAC, Delhi (Nov. 2011)	Prof. Devendra Mohan	9,51,000/-	IUAC New Delhi	Ongoing Nov. 2011, Nov. 2014
8.	UGC-SAP	Prof. Devendra Mohan	20,62,625/-	UGC	Completed: 2007-2012
9.	Theoretical Simulation of Induced Activity and Production Cross section of Radio nuclides in neutron and Charged Particle Induced Reactions	Prof. Sneha Lata Goyal	14,93,500/-	DAE-BRNS Mumbai	Ongoing
10.	Synthesis & characterization of conducting polymers	Prof. Sneha Lata Goyal	30,000/-	GJUS &T, Hisar	Completed : Jan. 2010 – Dec., 2010
11.	Study of Thermal, Electrical & Structural Properties of Conducting Polymers” From UGC New Delhi	Prof. Sneha Lata Goyal	12,59,600/-	UGC, New Delhi	Ongoing

12.	Structure, dielectric behaviour and impedance spectroscopy of mixed transition metal/alkali oxide glasses	Prof. Sujata Sanghi & Prof. Ashish Agarwal	10 lacs	UGC, New Delhi	Completed
14.	Development and characterization of heavy metal oxide glasses as photonic materials	Prof. Sujata Sanghi & Prof. Ashish Agarwal	10 lacs	CSIR, New Delhi	Completed
15.	Investigation of Crystal Structure, Dielectric and Magnetic Properties of Rare Earth/ Transition Metal Doped BiFeO <sub>3</sub> Multiferroics	Prof. Sujata Sanghi & Prof. Ashish Agarwal	13.4 lacs	DST, New Delhi	Ongoing
16.	Study of Phase Transition and Magneto-Electric Coupling Properties of Modified Multiferroics.	Prof. A. Agarwal	11 lacs	UGC, New Delhi	Ongoing
17.	Synthesis & Characterization of TCO Based Thin Film	Prof. Rakesh Dhar	30,000/-	UGC Though GJUS &T, Hisar	Completed
	To Evaluate the various Thin Film Formulations for application in control of	Prof. Rakesh Dhar	12 lacs	UGC, New Delhi	Ongoing

	Biofouling.				
18.	Synthesis & Characterization of Bi/Pb Based Oxide Glasses	Dr. Neetu Ahlawat	30,000/-	GJUS& T, Hisar	Completed
19.	Microwave Synthesis of Ferroelectric Ceramics and their Structural Characterization	Dr. Neetu Ahlawat	14.28 lacs	UGC, New Delhi	Ongoing
20.	Ferroelectric and Dielectric Properties of Lead Free Ceramics	Dr. Neetu Ahlawat	9 lacs	AICTE, New Delhi	Completed
21.	Study of Structural, Optical and Electrical Properties of Heavy Metal Oxide Glasses	Dr. R.S. Kundu	14.28 lacs	UGC, New Delhi	Ongoing
22.	Non-Linear Optical Properties of Rare Earth Doped Glass	Dr. David Joseph	5,71,800/- 30,000/- 40,000/-	UGC, New Delhi GJUS &T, Hisar GJUS &T, Hisar	Ongoing Completed Ongoing

18. Inter-institutional collaborative projects and associated grants received:
- a) National collaboration b) International collaboration:
- National Collaboration with IRDE, DRDO, Dehradun for the following project :
- Development & Characterization of Optical Materials for Photonics System and Devices (DRDO Project) ( Rs.5.93 crores) Prof. Nawal Kishore- Coordinator and all other teachers –Co-P.Is



19. Departmental projects funded by DST-FIST; UGC-SAP/CAS,DPE; DBT, ICSSR, AICTE, etc.; total grants received:  
 DST-FIST - Rs. 35 lacs  
 UGC-SAP - Rs. 75 lacs  
 Total Grants Received :110 lacs
20. Research facility/centre with :  
 ▪ State recognition-----Nil  
 ▪ National recognition : Raman Optical Coating Centre  
 ▪ International recognition -----Nil
21. Special research Laboratories sponsored by/ created by industry or corporate bodies : None
22. Publications :  
 ▪ Number of papers published in peer reviewed journals (national/international) : 124  
 ▪ Monographs : 01  
 ▪ Chapters in Books : 01  
 ▪ Edited Books : -  
 ▪ Books with ISBN with details of publishers : 04  
 ▪ Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc. -  
 ▪ Citation Index-range/average - Up to 283  
 ▪ SNIP -  
 ▪ SJR -  
 ▪ Impact Factor-range/average - Upto 1.5  
 ▪ h-index-range - Upto 12
23. Details of patents and income generated : None
24. Areas of consultancy and income generated : None
25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad:
- |                     |  |
|---------------------|--|
| Prof. Nawal Kishore | VST Israel                               |
| Dr. Ajay Shankar    | ICTP,Italy, VST Israel                   |
| Dr. Rajender Kundu  | Germany, BARC Mumbai                     |
| Dr. Rajesh Punia    | Germany, BARC Mumbai,                    |
|                     | University of Pune, University of Mumbai |

26. Faculty serving in :  
 a) National committees b) International committees c) Editorial Boards d)  
 any other (please specify)

Association with National & State Level Bodies.

Year : 2009

Member of Professional bodies

- Prof. Devendra Mohan : Optical Society of America  
 Member of SPIE, UK  
 Member of Materials Society of Singapore  
 Member of Indian Laser Association  
 Dr. Sujata Sanghi : Member of Indian Laser Association  
 Dr. Rajender Kundu : Member of Int. Society of Chalcogenides

Year : 2010

Member of Professional bodies :

- Prof. Nawal Kishore : Academic Committee, Haryana State  
 Counselling Society,  
 Technical Education Department, Govt. of  
 Haryana, Panchkula.  
 Prof. Devendra Mohan : Indian Laser Association (Indore) (Life  
 Member)  
 Member of Materials Research Science,  
 Singapore  
 Dr. Sneha Lata Goyal : Member Current Science Association,  
 Bangalore  
 Indian Thermal Analysis Society, BARC,  
 Mumbai  
 Dr. Rakesh Dhar : Indian Vacuum Society (Life Member)  
 Member of Expert Committee:  
 Prof. Nawal Kishore: Member Expert Committee (UGC, New Delhi)  
 for Evaluation of fresh Research Proposals  
 and Mid Term Review.  
 Member Selection Committee of Govt. PS  
 Mahila  
 Vishwavidyala Khanpur  
 Member Selection Committee, CDLU, Sirsa  
 Member of Academic Bodies of various other Institutions :  
 Prof. Nawal Kishore : Outside Member, BOS (Physics)  
 DCSUS&T Murthal, Sonapat,  
 Board of P.G. Studies & Research, Punjabi  
 University Patiala, (Punjab)

Outside Member, CDLU, Sirsa

Outside Member NIT Kurukshetra

Year : 2011

Member of Professional bodies :

- Prof. Nawal Kishore : Life Membership of Material Research Society of India
- Prof. Devendra Mohan : Life Member of Indian Laser Association  
Member, Optical Society of America
- Dr. Sneh Lata Goyal : Member Current Science Association, Bangalore  
Indian Thermal Analysis Society, BARC,  
Mumbai
- Dr. Sujata Sanghi : Member, Materials Research Society of India  
Member, Indian Laser Association
- Dr. Ashish Agarwal : Member, Materials Research Society of India
- Dr. Rakesh Dhar : Indian Vacuum Society (Life Member)
- Dr. Neetu Ahlawat : Member, Materials Research Society of India
- Dr. Ajay Shankar : Member Optical Society of America
- Dr. Rajender Kundu : Life Membership of Material Research Society of India  
Life Member Society of Chalcogeniders
- Member of Expert Committee :  
Prof. Nawal Kishore : Member Expert in selection committees for various committees in CDLU Sirsa, BPS Mahila Vishwavidyalaya, Khanpur Kalan (Sonapat), MDU Rohtak Engg. College Israna, Om Engg. College Hisar, Govt. Polytechnics-DTE Panchkula, Punjabi University Patiala.
- Member of Academic Bodies of various other Institutions :  
Prof. Nawal Kishore : Member BOS(Physics) at NIT Kurukshetra  
Member UG BOS(Physics) at BPS Mahila Vishwavidyalaya Khanpur Kalan Sonapat  
Member UG BOS(Physics) K.U. Kurukshetra  
Member UG BOS (Instrumentation) K.U. Kurukshetra  
Member UG BOS(Physics) CDLU Sirsa  
Member Academic Council CDLU Sirsa

Prof. Devendra Mohan : Member UG & PGBOS of GJUS&T,  
Hisar

Year 2012

Member of Professional Bodies:

Nawal Kishore : Member Materials Research Society of  
India.  
Devendra Mohan : Life member Indian Laser Association of  
India.  
Sneh Lata Goyal : Member Current Science Association,  
Bangalore  
Member Indian Thermal Analysis Society, BARC,  
Mumbai  
Sujata Sanghi : Member, Materials Research Society of India and  
Indian  
Laser Association  
Ashish Agarwal : Member, Materials Research Society of  
India  
Rakesh dhar : Life member Indian Vacuum Society of  
India  
Neetu Ahlawat : Member, Materials Research Society of  
India  
R.S.Kundu : Member, Materials Research Society of  
India & International Society of  
Chalcogeniders  
Rajesh Punia : Member, Materials Research Society of  
India & International Society of  
Chalcogeniders  
Dr. Ajay Shankar : Life Member OSI, ILA

Member of Expert Committee:

Nawal Kishore : Convener Inspection Committee for Manav  
Institution, Hisar  
: Convener, Inspection Committee for PPIMT Hisar

Member of Academic Bodies of various other Institutions:

Nawal Kishore : Member UGBOS (Physics) K.U.  
Kurukshetra  
: Member PGBOS (Instrumentation)  
K.U.Kurukshetra  
: Member AC, CDLU, Sirsa

YEAR 2013

Member of Professional Bodies:

Devendra Mohan	:	Life member Indian Laser Association of India (2013)
Sneh Lata Goyal	:	Member Current Science Association, Bangalore Indian Thermal Analysis Society, BARC, Mumbai
Sujata Sanghi	:	Member of Indian Laser Association and MRSI India
Ashish Agarwal	:	Member of MRSI India
Neetu Ahlawat	:	Member, Materials Research Society of India

Member of Academic Bodies of various other Institutions:

Ashish Agarwal	:	Member of PGBOS, N.C. College of Engg. Israna
----------------	---	---

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs):

Refresher Course in Physics, Staff Development Programme, Training in International & National Institutions

28. Student projects :
- Percentage of students who have done in-house projects including inter-departmental projects : 100% for M.Sc.(Physics)  
75% for M.Tech. (Optical Engg.)
  - Percentage of students doing projects in collaboration with other universities/industry/institute : 25% for M.Tech. (Optical Engg.)

29. Awards/recognitions received at the national and international level by:  
None

▪ Faculty	:	--
▪ Doctoral/post doctoral fellows	:	--
▪ Students	:	--

30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:

One day Acquaintance Programme for IAUC, New Delhi  
One Day Workshop on Optical thin Films

2nd National Conference on Photonics & Materials Science on March 20-21, 2014

31. Code of ethics for research followed by the departments:

As per University norms

32. Student profile programme-wise:

Name of the Programme (refer to question no.4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc. (Physics)					
2009	344	28	17	75%	81%
2010	375	30	15	78%	80%
2011	-	21	27	82%	84%
2012	754	15	43	-	-
2013	1214	34	20	-	-
M.Tech. (Optical Engineering)					
2009	35	09	11	76%	79%
2010	31	10	09	79%	81%
2011	30	12	07	78%	83%
2012	24	09	09	-	-
2013	-	03	01	-	-
Ph.D.					
2009	63	01	04	NA	-
2010	68	06	13	NA	-
2011	58	-	01	NA	-
2012	87	03	07	NA	-
2013	92	07	06	NA	-

33. Diversity of students:

Name of the Programme (refer to question no.4)	% of students from the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc. (Physics)				
2009	-	92%	08%	-
2010	-	100%	-	-
2011	-	100%	-	-
2012	-	96%	04%	-
2013	-	100%	-	-
M.Tech. (Optical Engineering)				
2009	30%	45%	25%	-
2010	42%	32%	26%	-
2011	-	76%	24%	-
2012	40%	45%	15%	-
2013	-	75%	25%	-
Ph.D.				
2009	65% %	35%	-	-
2010	57% %	43%	-	-
2011	55%	45%	-	-
2012	62%	38%	-	-
2013	60%	40%	-	-

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise: 15-20

35. Student progression:

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	10%
PG to M.Phil.	-
PG to Ph.D.	10%
Ph.D. to Post-Doctoral	-
Employed	
• Campus selection	20%
• Other than campus recruitment	30%
Entrepreneurs	05%

36. Diversity of staff:

<b>Percentage of faculty who are graduates</b>	
of the same university	-
From other universities within the State	70%
From universities from other States	30%
From universities outside the country	-

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt.  
During the assessment period : 02

38. Present details of departmental infrastructural facilities with regard to:

- a) Library : Central Library
- b) Internet facilities for staff and students : Yes
- c) Total number of class rooms : 04
- d) Class rooms with ICT facility : 01
- e) Students' Laboratories : 05
- f) Research Laboratories : 06

39. List of doctoral, post-doctoral students and Research Associates:

- a) From the host institution/university :



<b>Sr. No.</b>	<b>Name of the Candidate</b>	<b>Date of Registration</b>
1	Rajni Bala	2009
2	Monika	2011
3	Anil Kumar	2011
4	Divya Jyoti	2011
5	Ms. Deepika	2012
6	Ms. Smrita Sharma	2012
7	Ms. Meenakshi	2012
8	Mr. Karmvir Singh	2012
9	Ms. Sarita Sharma	2012
10	Ms. Saroj Rani	2012
11	Ms. Priyanka	2012
12	Ms. Rekha Kumari	2012
13	Mr. Balvinder Singh	2012
14	Mr. Sunil Kumar	2012
15	Mr. Parveen Kumar	2013

c) From other institutions/universities :

<b>Sr. No.</b>	<b>Name of the Candidate</b>	<b>Date of Registration</b>
1	Narender Kumar	2009
2	Ashima	2009
3	Sunil Dhankhar	2011
4	Sunita Rani	2011
5	Ms. Meenakshi	2012
6	Ms. Kirti	2012
7	Mr. Prabhat Kumar Saran	2012
8	Ms. Babita Ball	2012
9	Ms. Neelam	2013
10	Ms. Suman Rani	2013
11	Ms. Komal	2013
12	Ms. Kavita	2013
13	Ms. Bulkesh	2013
14	Ms. Preeti	2013
15	Manisha	2013

40. Number of post graduate students getting financial assistance from the university:

Year	No. of Students
2009-10	06
2010-11	05
2011-12	05
2012-13	04
2013-14	06

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology: NA

42. Does the department obtain feedback from:

- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? Yes

The Curriculum is designed by faculty members and is presented before BOS & Faculty for consideration and approval by Academic Council.

- b) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback? Yes

At the end of each semester, feedback about staff, curriculum taught/syllabus covered and learning by the students is obtained from five to ten students selected randomly from each class. The feedback received from the students is discussed in staff council and the weaknesses pointed out are conveyed to faculty members for improvement.

- c) Alumni and employers on the programmes offered and how does the department utilize the feedback? Yes

Feedback is also taken from the alumni of the department during the alumni meet. The feedback on the programs offered by the department is discussed in the meeting of PGBOS and implemented for the improvement of the program.

43. List the distinguished alumni of the department (maximum 10):

- a) Ms Jyoti Sharma, Scientist-C, BARC, Mumbai

- b) Mr. Ramesh Kumar, Asstt. Professor, IIT, Delhi
  - c) Dr. Aashima, Asstt. Professor, DCRS&T, Murthal
  - d) Dr. Ritu, Asstt. Hindu Girls College, Sonapat
  - e) Dr. Anil Bansal, Scientist, IRDE DRDO, Dehradun
  - f) Ms Babita Bahal, Forensic Scientist, Madhuban, Karnal
  - g) Dr. Razni Bala, Asstt. Professor, MDU, Rohtak
  - h) Ms Manisha, Asstt. Professor, Vaish College Rohtak
  - i) Dr. Raj Kumar, Scientist, CSIO, Chandigarh
  - j) Dr. Karan S Gill, Asstt. Professor, Govt College, Hansi
44. Give details of students enrichment programmes (special lectures/workshops/seminar) involving external experts:
- i) The Department organized a workshop on Thin Films in year 2012.
  - ii) The Department organized a number of extension lecture by the experts during the year 2009-2013.
  - iii) An essay writing competition is conducted every year on Science Day.
  - iv) The department organized a 2nd National Conference on Photonics and Materials Science on March 20-21, 2014.
45. List the teaching methods adopted by the faculty for different programmes:
- i. Computer aided instruction method
  - ii. Interactive teaching
  - iii. Seminar by individual student
  - iv. Surprise test
  - v. Open discussion in class on the completion of topic
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
- No. of M. Sc./M.Tech. and Ph.D. Students produced with good marks.
  - Placement of Students
  - No. of Publications produced
  - Subject wise result
47. Highlight the participation of students and faculty in extension activities:

- National Service Scheme
  - National Science Day celebration
  - Celebration of the National Women Day
  - World Environment Day celebration
  - National Integration Day celebration
  - Participation in Independence day and Republic Day
  - Celebration of Teacher's Day
  - Education Tours
  - Sadbhawana Divas
48. Give details of "beyond syllabus scholarly activities" of the department:
- Participation in the National/International Conferences : 48
  - Participation in Workshops/ Seminars/Refresher/ Orientation Courses : 12
  - Invited Talks in the Conferences/Workshops/Seminars : 07
  - Extension Lectures in Refreshers/Orientation Courses : 34
49. State whether the programme/department is accredited/graded by other agencies? If yes, give details: NA
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:
- Faculty members are engaged in the interdisciplinary research work.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:
- Strengths**
- i) Well qualified and competent faculty members to teach science and technology courses
  - ii) Regular participation of faculty members in the National and International seminars/conferences and workshops
  - iii) Students from the department are encouraged to qualify NET/JRF exams are in commendable number
  - iv) Good number of publications in National and International journals.
  - v) Faculty members are associated with various academic/professional bodies
  - vi) Maintain the zero tolerance ragging environment

### **Weaknesses**

- i) Lack of Industries in nearby area to employ our students
- ii) Lot more equipments are required for the laboratories.
- iii) More space is required particular in one building.
- iv) Foreign collaboration is needed in research
- v) Extension activities need more focus.

### **Opportunities**

- i) Scientific and technical knowledge generated due to both kind of courses (M.Sc. & M.Tech.) is likely to give an edge in translating our experimental work for practical problems.
- ii) Collaboration with National Laboratories working in the field of Materials Science, Photonics and Nuclear Physics are being established.
- iii) Students can be motivated to start their own industries by way of inculcating entrepreneurship amongst them.
- iv) Through research, the department may create space in global competition.
- v) The advance research in material science may benefit the department if collective efforts continue.

### **Challenges**

- i. The role of physics should be emphasized in development of new technology by different research and development wings of different departments of our own universities as well as that of other institutes and universities
- ii. In the era of specialization and super-specialization, more regular faculty should be provided in the department to improve the teaching and to provide the pace to the research on different fields and encourage interdisciplinary research aim at industrial needs and social upliftment.
- iii. In the modern era of information and technology with the fast development of the communication and transportation, now the world has turned into a global village. The pace of technology development is also very fast. Similarly in physics, new developments are taking place throughout the globe. So to keep the syllabus and our graduates up-to date is a big challenge.
- iv. The drastic development in different branches of physics needs inclusion in the curriculum. The completion of Master Degree

in 2 years time to include all the aspects is another big challenge.

- v. Physics is an ancient science and its applications are in every walk of life. Hence the role of computational physics and related technology should be highlighted.

52. Further plans of the department:

In the coming years, the Discipline will expand both in size and variety of expertise.

1. The department plans to start an integrated M.Sc.-Ph.D. Program in Physics and a Ph.D. programme in Optical Engineering. which will comprise number of basic compulsory courses and elective courses catering to the needs and interests of the students and will give M.Tech.(Optical Engineering) students to pursue their research work.
2. Future plans of the discipline include organizing Conferences/ Workshops/Seminars aimed at the application of Physics in Engineering and Technology. It also endeavors to hold exhibitions, Quiz/puzzle competitions, Physics Olympiad, etc.
3. The department also plans to have a department library for ease of consulting books and for a quick ready references and some online journals available in the departmental library.

---

**Faculty of Media Studies  
The Departmental Profile**

---

## **Evaluative Report of the Department of Communication Management and Technology**

---

1. Name of Department : Communication Mgt and Technology
2. Year of establishment: 1993
3. Is the Department part of a School/Faculty of the University?  
Faculty of the Media Studies
4. Names of programmes offered (UG, PG, M.Phil., Ph. D., Integrated Masters; Integrated Ph. D, D.Sc., D.Litt., etc.)
  - i) M.Sc. Mass Communication
  - ii) Ph.D Mass communication
5. Interdisciplinary programmes and departments involved: Nil
6. Courses in collaboration with other universities, industries, foreign institutions, etc.:  
The runs courses in its own under the aegis of the university.
7. Details of programmes discontinued, if any, with reasons:
  1. M.Sc. Development Communication
  2. P. G. Diploma in Defence Journalism

The M. Sc. Development Communication programme was initiated after a lot of fact finding, planning and deliberations. The programme did not get the required publicity it should have got. For lack of awareness there was no good response. Hence this programme was discontinued.

The P. G. Diploma in Defence Journalism programme had attracted many takers. In the first session all the seats were filled up. But as Defence Journalism is a highly specialized field and there is very less scope for placement, the programme was discontinued.



8. Examination System: Annual/Semester/Trimester/Choice Based Credit System:

Credit Based Semester System.

9. Participation of the department in the courses offered by other departments: Nil

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asstt. Professors/others):

	Sanctioned	Filled	Actual (including CAS & MPS)
Professors	01	-----	Two
Associate Professors	02	01	02
Asst. Professors	04	04	01
Others	00	04*+2**	04

**\*Teaching Associates working on contract basis against vacant posts.**

**\*\* Teaching Associates for teaching English.**

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./M. Phil. students guided for the last 4 years
Dr. Manoj Dayal	Ph. D.	Professor	Print Journalism, Research	23	Completed: 08 Pursuing: 08

Dr. P. K. Jena	Ph. D.	Professor and Chairman	Development Communication	19	Completed: 02 Pursuing: 07
Dr. Vikram Kaushik	Ph. D.	Associate Professor	Public Relations and Corporate Communication	17	Completed: 01 Pursuing: 03
Dr. N. Sushil K. Singh	Ph. D.	Associate Professor	Electronic Media & Communication Research	17	Pursuing: 07
Mr. Mihir Ranjan Patra	MJMC, LLB	Assistant Professor	Advertising Management	19	

12. List of senior Visiting Fellows, adjunct faculty, emeritus professor: Nil
13. Percentage of classes taken by temporary faculty-programme-wise information:  
M.Sc Mass Communication 30%
14. Programme-wise Student Teacher Ratio:

Course	2009	2010	2011	2012	2013
M. Sc. Mass Communication	8:1	8:1	8:1	8:1	8:1
Pre PhD	-	-	-	-	-

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

<b>Position</b>	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual</b>
Asstt. Technical Officer	1	-	-
TA Grade (I)	1	-	-
Asstt.-cum-DEO	1	1	1
Storekeeper	1	-	-
JLA	-	1	1
Cameraman-cum-studio Attendant	1	-	-
Steno typist	1	-	-
Clerk-cum-JDEO	2	1	1
Lab. Attendant	3	1	1
Peon	2	1	1

16. Research thrust areas as recognized by major funding agencies:

The following Funding Agencies have recognized the following Thrust Areas:

UGC: Internet Journalism

ICSSR: New Media Technologies in Journalism Education

Department of Atomic Energy, Government of India:

Demographic Survey.

17. Number of faculty with ongoing projects from a) national, b) International funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise:

	<b>Title</b>	<b>Funding agency</b>	<b>Amount</b>	<b>Year</b>
1	Studies on Demographic Surveillance Around Proposed Nuclar Power Plant Site in Haryana Covering a distance of 30km from the site  (CO -PI) 2008/36/12- BRNS3219-18-02-10	Government of India Department of Atomic Energy, Board of Research In Nuclear Science	Rs. 23 Lacs	2010-12

18. Inter-institutional collaborative projects and associated grants received.

The dept has not entered into such collaborations yet.

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received: Nil
- Received under UGC SAP Rs 40 lakhs
20. Research facility/centre with:
- State recognition --Yes
  - National recognition ----
  - International recognition.-----
21. Special research Laboratories sponsored by created by industry or corporate bodies: Nil
22. No. of publications- Research papers : 32
- Citation Up to 80
- H-Index Up to 04
23. Details of patents and income generated: Nil
24. Areas of consultancy and income generated: Nil
25. Faculty selected nationally/internationally to visit other Laboratories/institutions/industries in India and abroad: Nil
26. Faculty serving in:
- National committees:
- Prof. Manoj Dayal
- Member of Professional bodies:
- Life Member, Indian, Economic Associate Kolkatta, Life Member Indian Council of Journalisms & Communication Education, Bangalore.
  - Member of Academic Bodies of various other Institutions:
  - Academic Council, MDU, Rohtak, Faculty of Arts, MDU, Rohtak, PGBOS, MDU, Rohtak., PGBOS

P K Jena

Member P G B O S Punjab Technical University, Hosiarpur Jalandhar

- a) International Committee Nil
- b) Any other (please specify) Nil
27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs):
- Refresher Course - 05  
Workshops - 08  
Training programme - 03
28. Student projects:
- Percentage of students who have done in-house projects including inter-departmental projects -100% M. Sc Mass Communication
  - Research Project is a part of the curriculum and each and every students does it
  - Percentage of students doing projects in collaboration with other universities/industry/institute -Nil
29. Awards/recognitions received at the national and international level by:
- Faculty Prof. Manoj Dayal
  - Felicitated by Dept. of JMC, Kashividyapeeth, Varanasi for outstanding contribution to Journalism education.
30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:
- National Seminar on 'Values in Journalism' on 7&8 March, 2014 funded by the seminar grants of the university.
- National Seminar on emerging trends in Media on 17 & 18 Feb, 2009 funded by the seminar grants of the university.
31. Code of ethics for research followed by the departments :
- The Ph.D. research ordinance as stated in the prospectus is strictly followed and the research students are specifically instructed about the holocaust of plagiarism and other bad practices. All the students and teachers follow national and international guidelines for ethics in all research and publishing activities.

Presentations are held regularly twice in a year. The scholars make presentations before the department research committee. Suggestions are offered and progress is monitored.

32. Student profile programme-wise:

Name of the Programme (refer to question no.4)	Applications Received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc. Mass Communication	100	56%	44%	92%	98%
Ph.D.	60	60%	40%	-	-

33. Diversity of students:

Name of the Programme (refer to question no.4)	% of students form the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc. Mass Communication	70%	20%	10%	Nil
Ph. D	20%	60%	20%	Nil

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise:

- NET
- JRF: (2009-13):
- Divya- Session: (2010-2012)
- NET: (2009-13):
- Mona- Session (2011-2013)
- Divya- Session: (2010-2012)
- Ajay Yadav (2009-2011)
- Komal- Session (2009-2011)
- Sunil Yadav- Session (2008-2010)
- Mandev- Session (2008-2010)

- Kavita- Session (2007-2009)
- Pulkit- Session (2006-2008) cleared NET in 2013
- Pawan Malik- Session (2004-2006) cleared NET in 2011

35. Student progression :

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	10% Graduation from Distance Mode (approx.)
PG to M. Phil.	3-6% (approx.) M.Phil in other Universities.
PG to Ph.D.	7-11% (approx.)
Ph.D. to Post-Doctoral	Nil
Employed <ul style="list-style-type: none"> <li>▪ Campus selection</li> <li>▪ Other than campus recruitment</li> </ul>	<p>There is no regular campus selection process. However, majority of the students are placed in various media organizations through personal interactions and interventions by the faculty members.</p> <p>Many students are also placed in media organizations directly on the recommendations/invitations of the various examiners/experts who hold higher posts in various media organizations. During the last five years, twenty one students of the department have been offered jobs during practical examinations and productions.</p>
Entrepreneurs	2% (approx.)

36. Diversity of staff:

<b>Percentage of faculty who are graduates</b>	
of the same university	40%
From other universities within the State	Nil
From universities from other States	60%
From universities outside the country	Nil

37. Number of faculty who were awarded M. Phil, Ph.D., D.Sc. and D. Litt. During the assessment period: 01

38. Present details of departmental infrastructural facilities with regard to:
- a) Library: Central Library
  - b) Internet facilities for staff and students: All the students and Staff avail campus-wide networking facilities that are available in every faculty members' rooms, class rooms, labs, etc.  
Wi-fi connections are available to all the faculty members staying in the campus and also in the hostels for the hostellites.
  - c) Total number of class rooms: 03
  - d) Class rooms with ICT facility: 02
  - e) Students' Laboratories: 02  
(Multi Media Lab, Still Imagery Lab)
  - f) TV Production Studio 01

39. List of doctoral, post-doctoral students and Research Associates:

- b) From the host institution/university 20
- c) From other institutions/universities 10

40. Number of post graduate students getting financial assistance from the university:

M.Sc. Mass Communication: Post-Matric Scholarship

	<b>2009-2010</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>
SC	07	11	23	12	03
BC	07 (5 Mass Comm, 1 DC, 1 DJ)	--	02	04	02



Every year, Post-Matric Scholarship is awarded to the student who tops in both the first and second semesters put together and in the second year the topper of the third and fourth semesters put together.

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology:

During the last five years the department started two new programmes, namely, M. Sc. in Development Communication and PG Diploma in Defence Journalism. For both the programmes, the department consulted a wide range of people

i) experts from the field, ii) academicians, iii) alumni members For this the following means and methods were used.

The suggestions and recommendations were put through a process of refinement and polishing through Staff Council of the department, Board of Studies, and finally Academic Council and Executive Councils of the university.

42. Does the department obtain feedback from?

- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? Yes.

The faculty members meet every Friday to get feedback with regard to teaching, training, production, research related activities. This helps identifying strengths and weaknesses of all faculty members. Also these activities help in identifying opportunities for the department as a whole. The teaching-learning evaluation related feedback is specifically used for:

- Learning from each other's experience
- Sharing and adopting better practices

- b) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback?

- The class room itself has the mechanism of feedback.
- Every Friday intra class quiz is conducted to assess the level of understanding of the students on the particular subject.
- Academic and Communication Meet is organized every Saturday where students and teachers interact in an

informal atmosphere where free exchange of the ideas are encouraged.

- As a policy matter of the University students are permitted to see their internal examination answer sheets and students are made to realize their mistakes and prompted to improve upon.
- Suggestions and inputs are ploughed back for syllabus up-gradation and refining teaching methodology.

c) Alumni and employers on the programmes offered and how does the department utilize the feedback?

- The department conducts Alumni Meet on a regular basis and collects feedback from the alumni members with regard to latest practices in the media field.
- Feedback is also collected from alumni members working as faculty members in various Media Institutions. The department also makes efforts to get feedback from employers/ top management of media organizations with regard to the requirements of the field.
- Such suggestions and recommendations from the alumni members and employers are incorporated in to teaching-training programmes and syllabus as and when deemed fit.

43. List the distinguished alumni of the department (maximum 10):

1. Dr. Ranbir Singh Head, Dept. of Mass Communication, Punjab Technical University, Hosiarpur, Jalandhar, Punjab(1995 Passout)
2. Ravi Dhiman, Senior News Producer,D D News, Newdelhi.(1996 Passout)
3. Mrs Sabeena Chowdhury , senior Corporate Officer, Indian Oil Corporation, Dibrugarh, Assam.(1997 Passout)
4. Mimansa Mallick Zee News(1997 Passout)
5. Neeraj Gupta IBN-7(1997 Passout)
6. Abhisekh A N I(!999 Passout)
7. Sanjay Kaushik Communication Strategist, Unicef , Thailand(2003 Passout)
8. Rajesh Nain, Resident editor, Rajasthan Pathrika, Raipur, Chhatishgarh(2007 Passout)
9. Amit Bhardwaj, Assistant Professor , Government College, Jhajjar(2001 Passout)
10. Rohit Sardana Zee News(2002 Passout)

44. Give details of student's enrichment programmes (special lectures/workshops/seminar) involving external experts:

(A) Special Lectures

2009-2010

- Dr. Shivaji Sarkar, IIMC, New Delhi
- Dr. G.R. Syed, JMI, New Delhi
- Prof. Vir Bala Aggarwal, H.P U. Shimla
- Prof. H.P.S. Walia, P.U. Patiala
- Sh. Charan Jeet Singh, President PRSI, Chandigarh
- Prof. Sanjay Wadwalkar, P.U. Chandigarh
- Dr. Harish Arya, M.D.U. , Rohtak
- Mr Ajit Singh, Retd. Director Door Darshan Kendra, Hisar

2010-2011

- Dr. Sarojni Nandal, M.D.U. , Rohtak
- Prof. Hemant Joshi, J.M.I., New Delhi
- Smt. Manjari Joshi
- Prof. H.P.S. Walia, P.U. Patiala
- Sh. Charan Jeet Singh, President PRSI, Chandigarh
- Dr. Harish Arya, M.D.U. , Rohtak
- Mr Ajit Singh, Retd. Director Door Darshan Kendra, Hisar
- Mr.Rajesh Chugh, Senior Sub editor Dainik Jagarana, Hisar

2011-2012

- Dr. Anuj Dayal, PRO, Delhi Metro, Delhi
- Prof. Gurmeet Singh Maan, P.U. Patiala
- Prof. H.P.S. Walia, P.U. Patiala
- Sh. Charan Jeet Singh, President PRSI, Chandigarh
- Prof. Navjoth singh Johl, P.U., :Patiala
- Dr. Harish Arya, M.D.U. , Rohtak

2012-2013

- Prof. N. Usha Rani, Mysore U. , Karnataka
- Prof. G.P. Shiv Ram, Mangalore U., Karnataka
- Prof. Ashutosh Mishra, Chhitkara U., Chandigarh
- Prof. H.P.S. Walia, P.U. Patiala
- Sh. Charan Jeet Singh, President PRSI, Chandigarh

- Prof. B K Kuthiala, Vice Chancellor, Makhanlal university of Journalism

(Workshops)

2009-2010

- Puppetry Workshop
- Journalism Workshop

2010-2011

- Communication skills workshop.
- Workshop on Video Production

2011-2012

- Workshop on film production
- Workshop on writing on Radio

2012-2013

- Workshop on RJ Skills
- Seminar on emerging career opportunity in collaboration with Danik Bhaskar, Hisar

45. List the teaching methods adopted by the faculty for different programmes:

Syllabus of M. Sc. Mass Communication is judicious blend of theory and practical as per the industrial and academic needs

Faculty members are adopting the following teaching methods to teach the students of the department:

- Production work (practicals)
- Presentations
- Assignments
- Class level Quiz Competitions
- Literary Competitions
- Cultural events
- Normal Class room teaching
- Field tours
- Study tours

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

As per the university examinations ordinance the department organizes periodical minor and major tests to keep monitoring the student's progress.

Regular assignments are given to the students besides occasional surprise tests. Participatory teaching methods are adopted while taking the classes wherein the students are regularly asked about concept clarity.

During the internship students feedback is constantly sought from the media organizations wherein the students are undergoing internship training. At the end of the internship, viva is conducted as a part of evaluation. Most of the students have learnt the art and craft of the profession while doing the internship.

47. Highlight the participation of students and faculty in extension activities:

Department adopts villages around which serve as laboratories for the students to put their class room to test. Students organize

i) social marketing campaigns, ii) plan development projects, iii) conduct literary competitions for the village school children, iv) organize women empowerment programmes like rural sports for women, folk song competition, ethnic food cooking competition and also for rural women V) vocational training for the rural women.

48. Give details of "beyond syllabus scholarly activities" of the department:

The department organizes academic based cultural programmes to sharpen the communication skills of the students. The department, as a routine exercise, meets every Saturday for discussions, debates, declamation contests, poem symposium etc. on various current issues and other cultural activities. Students organise street plays (Nukad), plays highlighting the social, economic and political circumstances on or off media coverage.

Field trips are also organised regularly as part of the department holistic teaching approach. The department regularly takes up educational tours to media houses and other places from time to time.

49. State whether the programme/department is accredited/graded by other agencies? If yes, give details: No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:

The department offer Ph. D. in Mass Communication and encourages the scholars to take up research areas in newer fronts of media and society but at the same time, strengthen the need for research in traditional media by looking and identifying the voids in this sphere. The Departmental Research Committee guides the proposal and work of the scholars to see that their works generated new knowledge and contribute to the society in general.

The extension work of the department has generated a new communication concept Alternative Development Communication Media.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

**Strength**

- i) Qualified faculty with distinct expertise.
- ii) Infrastructure: i)T V production Studio ii)Multimedia lab iii)Still imagery lab
- iii) Comprehensive Course Curriculum: the syllabus of the department is prepared keeping in view the competitive examinations like JRF/NET etc
- iv) Strong and responsive alumni: to this date the department has maintained strong bonding with alumni through social websites and personal efforts.
- v) Research: DRC of the department keeps generating innovative research topics which are pro-social and knowledge contributing

**Weaknesses**

- i) Location: Due to its geographical location form Delhi and Chandigarh where most of the media centers are concentrated the

department is deprived off frequent resource persons and jobs opportunities

- ii) Language: The proficiency in Hindi or English Language is very low amongst the students due to which students have to face tough competition from pure Hindi or Metropolitan students.
- iii) Exposure: Lack of proper exposure of the students. Most of the students are from rural background.
- iv) Personality: Lack of requisite media personality
- v) Faculty exposure: Lack of international exposure.

### **Opportunities**

- Opportunities for a professional course is directly related to the market. In India the entertainment and media industry has registered an impressive growth of 18 percent.
- The unique in media today is while there is a dearth of skilled media persons students of media schools go out of job. If media school can tune them self with the market trends for opportunities sky is the limit.
- Department of Communication Management & Technology is making a sincere effort in this direction. Two major fields in which CM&T department is exploring opportunities are media research and development communication and social marketing.

### **Challenges**

- The biggest challenge of the department is to get placement which has declined in recent times. The problem is the hiatus between the market trend and the media personality the department develops.
- The challenges before the department is to develop media personality develop language proficiency, improve communication skills both writing and speaking and above all imparting art of journalism within two years. However there is a solution to every problem and department is working on that.

- 52 Further plans of the department; the department is committed towards growth and development. Recently two experiments were experienced by the department which couldn't be sustained. Presently the department focuses on maintaining the interest of the students, and educates them

towards career in Media sector and provides the Nation with responsible journalism.

Any P G Department has three components.

a) Education/Training

Department has the highest potential to be the finest centre for Mass Communication education. Department has the faculty who have made a mark in their respective field. Department has also a battery of talented alumni who can supplement the department efforts. Department will explore that and will turn it to be the ultimate destination for the media trainees.

b) Research

Research is the area which is the concern of all the departments. Department will do all that possible to control quality in research and the research will also be linked and guided by the trend in media. Department is planning to offer one more specialization in communication research, so that students can explore the fastest growing job opportunities.

d) Extension

Extension is our biggest strength. Department has done a lot of work which has not been properly documented. Department plans to carry out more applied research and plans to demonstrate the real strength of communication and its potentiality of being a part of the development process.



## **Evaluative Report of the Department of Advertising Management & Public Relations**

---

1. Name of Department : Advertising Mgt. & PR
2. Year of establishment : 1995
3. Is the Department part of a School/Faculty of the University?  
Yes/Faculty
4. Names of programmes offered (UG, PG, M.Phil., Ph. D., Integrated Masters; Integrated Ph. D, D.Sc., D.Litt., etc.)  
Ph.D (Advt. Mgt. & PR )  
M.Sc. in Advt.Mgt.&PR
5. Interdisciplinary programmes and departments involved:  
The M.Sc. in Advertising Management & Public Relations Programme is interdisciplinary in the sense that diverse courses in the subjects like Hindi , English Literature, Commerce, Fine Arts and Management students and scholars preferred to join this course.
6. Courses in collaboration with other universities, industries, foreign institutions, etc.: Nil
7. Details of programmes discontinued, if any, with reasons: Nil
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System: Credit Based System (Semester System)
9. Participation of the department in the courses offered by other departments:

Courses based on fundamental of Advertising and Public Relations such as copy writing, transcreation and creativity are offered by the department as a open elective paper for the students of the other departments of the university.

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst.Professors/others):

	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual (including CAS &amp; MPS)</b>
Professors	01	--	01
Associate Professors	02	01	01
Asst. Professors	02	01	---
Full Time contractual (Teaching Associates)	Nil	04	04*

\*Teaching Associates appointed against the vacant sanctioned posts.

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ M. Phil. students guided for the last 4 years
Prof. Bandana Pandey	Ph.D	Prof.& Chairperson	Advertising & PR: Copy Writing and Media Planning, PR& Media Research	25 yrs	16
Dr. Umesh Arya	Ph.D	Associate Prof.	New Media	15yrs	04

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors: Number of Media Experts and academicians from renowned media organizations and institutions have delivered the extension lectures in the department.

13. Percentage of classes taken by temporary faculty-programme-wise information:  
About 60%

14. Programme-wise Student Teacher Ratio:

M.Sc. Advertising Management & Public Relations : 15:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

Position	Sanctioned	Filled	Actual
JLA	01	NII	--
Steno-typist	01	01	01

Lab Technician	01	01	01
Peon	01	Nil	01*

\*On Contract Basis

16. Research thrust areas as recognized by major funding agencies:  
Advertising Mgt. & PR, New Media and Mass Media.
17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise:

	National	Funding Agency	Grants received	Project Title	Duration
Dr. Umesh Arya	National	UGC	2.25 lacs	Linguistic Construction in News Paper Headline	02yrs

18. Inter-institutional collaborative projects and associated grants received:

a) National collaboration :

Worked on the project “ON AIR – A Study of Three Operational Radio Stations in Uttar Pradesh” funded by UNICEF and executed by the UNESCO chair on community radio at University of Hyderabad with a total funding of 18 lacs. Dr. Umesh Arya acted as the external researcher and the data analyst.

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS,DPE; DBT, ICSSR, AICTE, etc.; total grants received: NO

20. Research facility/centre with:

- National recognition With NACO (National AIDS Control Organization).
- The Department Collaborated with centre for management foundation to undertake the assessment of Radio Programmes implemented by the department of AIDS control (NACO), Ministry

of Health & Family Welfare , Govt. of India. The study provided the road map for further improvement of Media Programmes of NACO.

21. Special research Laboratories sponsored by/ created by industry or corporate bodies: NIL

22. Publications:

- Number of papers published in peer reviewed journals (national/international) (2009-2014)

Sr. No.	Name	Total International Journal	Total National Journal	Total National Seminar/ Conference	Total International Seminar/ Conference
1.	Prof. (Dr.) Bandana Pandey	04	20	30	05
2	Prof. Umesh Arya	--	16	30	02

- Monographs NIL
- Books with ISBN with details of publishers
- Citation NIL
- H-Index NIL

Author name	Title	Year of publication	Type of Book	ISBN Number	Publishers
Prof. (Dr.) Bandana Pandey	Advertising Ethics and Laws	2012	Specialized book	978-93-80872-66-7	Arihant Prakashan Pvt. Ltd. , New Delhi
	Visheshikrit Jan samprak	2013	Specialized book	---	Haryana Granth Academy, Panchkula, Haryana

23. Details of patents and income generated: NIL
24. Areas of consultancy and income generated: NIL
25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad:

Sr. No.	Faculty Name	National/ International	Lab./inst./ industries name	India/ Abroad
1.	Prof.(Dr.) Bandana Pandey Nominated by UGC in inspection Team for the evaluation of various colleges ,Delhi	National	Shyamlal College, Delhi	India
	Expert Member in Rajasthan Public Service Commission	National	Rajasthan Public Service Commission, Ajmer.	India
	UGC Observer in NET Exam from 2009 to 2014 (twice in a Year)	National	Centre of NET Exam in various University of India assigned by UGC	India

26. Faculty serving in:  
 a) National committees b) International committees c) Editorial Boards d) any other (please specify) (2009-2014)

Sr. No.	Name of Teacher	Professional Bodies/National Bodies	Detail of Expert Committee	Academic Bodies of other institutes/ Editorial Board
1.	Prof. (Dr.) Bandana Pandey	#Life member of Academy of Social Science # Life	# Expert Member in Rajasthan Public Service	Member of Editorial Board of Global Media Research Journal,

	member of International Youth Hostel # Member of Public Relations Society of India (PRSI) # Member of National Council of Development Communication (NCDC) # Member of Red Cross Society, Hisar # Member of Akhil Bhartiya Sahitya Parishad HISAR	Commission # Expert in selection Committee in VIPS, New Delhi # Expert in Selection Committee of Project Fellow in I.P. University, Delhi #Member of Selection Committee of Teaching Associate in KUK	University of Kolkatta.
--	---	--	-------------------------

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programmes, workshops, training programmes and similar programmes):

Refresher/orientation programmes, workshops

<b>Name of Faculty</b>	<b>Refresher course</b>	<b>Orientation Programme</b>	<b>Workshop, Training programmes</b>
Prof. Bandana Pandey	Research & Project 2013 Academic Staff College in GJU&ST, Hisar	---	07 days (confidential) workshop setting twice in a year (2010-13)
Dr. Umesh Arya	coordinated total 14 Orientation and Refresher Courses		(2010-2013)

28. Student projects:

- Percentage of students who have done in-house projects including inter-departmental projects 90%
- Percentage of students doing projects in collaboration with other universities/industry/institute

Industry with NACO in 2011---10%

29. Awards/recognitions received at the national and international level by:

- Faculty

Sr. No.	Name	Awards Name	National/ International
1.	Prof. (Dr.) Bandana Pandey	Rashriya Gaurav Award 2009 Best Citizen Of India Award,2010 Best Professor Teaching Advertising Management Award by ABP News Channel in 2013. Nominated for Shiksha Rattana Award,2013	National

30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:

Name of Teachers	Name of Workshop/ Conference	Date and Year	Funding Agency and Amount (in lac)
Prof.(Dr.)B andana Pandey	Workshop on Creativity in Advertising	10 <sup>th</sup> Feb,2010	UGC
	Seminar on Paid News Vs Advertorial	5 March,2010	UGC
	Seven Days workshop on Photography Techniques	23rd-30 <sup>th</sup> March, 2010	University budget
	Workshop- 'One Day workshop on Trends in Media Writing'	March, 2011	UGC

	One Day National Seminar on Media Aur Sahitya:Shodh Aur Sambhawanayen	31 <sup>st</sup> January, 2012	Haryana Sahitya Academy, Panchkula, Haryana
	Five Days workshop on the topic "Practice of e-PR" for the officers of their department	6.02.12 to 10.2.12.	Directorate of Cultural Affairs & Public Relations Govt. of Haryana
	MAMPAC:2012- Two days National Seminar on "Media Alteration: Mission, Profession and Corporatization",	16-17th March 2012	UGC

31. Code of ethics for research followed by the departments:

As per university norms

32. Student profile programme-wise:

Name of the Programme (refer to question no.4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc.2010	87	29	18	95%	100%
2011-12	20	11	09	97%	100%
2012-13	52	25	10	94%	100%
2013-14	27	13	01	98%	100%
Ph.D. 2010	27	---	--	---	---
2011-12	46	---	---	---	---
2012-13	49	04	05	94%	97%
2013-14	29	01	03	95%	100%



33. Diversity of students:

Name of the Programme (refer to question no.4)	% of students from the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
2010-11	NIL	97%	3%	NIL
2011-12	NIL	98%	2%	NIL
2012-13	NIL	100%	NIL	NIL
2013-14	NIL	100%	NIL	NIL

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise:

Competitive examinations name	No. of student	Category				
		GEN	SC	OBC	ST	other
Civil Services	Nil	-	-	-	-	-
Defense services	Nil	-	-	-	-	-
NET,SET,GATE	04	03	01	-	-	-
Others(Banking Services)	03	01	02	-	-	-

35. Student progression:

Student progression	Percentage against enrolled
UG to PG	----
PG to M.Phil.	5%
PG to Ph.D.	10%
Ph.D. to Post-Doctoral	NIL
Employed <ul style="list-style-type: none"> <li>▪ Campus selection</li> <li>▪ Other than campus recruitment</li> </ul>	Both self efforts with the help of the Department 60%
Entrepreneurs	2%

36. Diversity of staff:

<b>Percentage of faculty who are graduates</b>	
of the same university	<b>04</b>
From other universities within the State	-----
From universities from other States	02
From universities outside the country	---

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D.Litt. During the assessment period:

<b>S. No.</b>	<b>Degree awarded</b>	<b>No. of faculty</b>
1.	Ph. D.	01

38. Present details of departmental infrastructural facilities with regard to:

<b>Infrastructural Name</b>	<b>Detail</b>
Library	<b>(Central Library)</b>
Internet facility for staff and student	To all at speed of 150 Mbps
Total number of class rooms	03
Class room with ICT facility	01
Student laboratory	01
Research laboratory	01

39. List of doctoral, post-doctoral students and Research Associates:

<b>Course</b>	<b>From the host institution/ University</b>	<b>From other institutions/ Universities</b>
Doctoral 22 (22 Registered) 06 awarded+ + 11 Completed Pre-Phd + 5 Pursuing Pre-Phd)	17	05
Post-Doctoral	NA	NA
Research Associates	NA	NA

40. Number of post graduate students getting financial assistance from the university: 4 Students of MSc. (Advt.Mgt &PR) and 1 Ph.D. Scholar.
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.
- Through staff council meetings and Feedback system from all stakeholders i.e. alumni, employer, teachers, and students
42. Does the department obtain feedback from:
- Faculty on curriculum as well as teaching – learning –evaluation?  
If yes, how does the department utilize the feedback:  
  
Feedback from faculty is taken and discussed in BOS under Chairman and faculty under Dean.
  - Student on staff, curriculum and teaching – learning –evaluation?  
If yes, how does the department utilize the feedback:  
  
Yes, once in a semester.
  - Alumni and employer on the programs offered and how does the department utilize the feedback:  
  
Yes, through alumni meet and at the time of campus recruitment and involvement in BOS and faculty meetings.
43. List the distinguished alumni of the department (maximum 10):

<b>Name of Alumni</b>	<b>Course</b>	<b>Designation</b>
Roshan	M.Sc. (Advt.Mgt.&PR)	P.O. in SBI, Mount Abu, Rajasthan
Pushplata	M.Sc. (Advt.Mgt.&PR)	BUZZ Communication
Rishi Bammi	M.Sc. (Advt.Mgt.&PR)	PR Executive in National Book Trust Vasant Kunj, N. Delhi
Nivedita Sharma	M.Sc.(Advt.Mgt.&PR)	PR Agency, Delhi
Rajesh Rana	Ph.D	Deputy Director, NACO Ministry of Family Welfare & Health, Central Govt. N.Delhi
Vaishali	Ph.D	Assistant Professor in VIPS N.Delhi
Himanshu Grover	M.Sc.(Advt.Mgt.&PR)	Consultant IEC(Information

		Education & Communication , State Health Society, National Health Mission, Deptt. Of Health,U.T, Chandigarh
Gaurav Goyal	M.Sc.(Advt.Mgt.&PR)	Assistant Account Planner in Kent Communication ,N.Delhi
Devanshu Tandon	M.Sc.(Advt.Mgt.&PR)	PR Personnel in BUZZ Communication
Sandeep Kumar	M.Sc.(Advt.Mgt.&PR)	As a Assistant in Anupam Kher Production House (Film Industries) Mumbai

44. Give details of students enrichment programmes (special lectures/workshops/seminar) involving external experts:

<b>Enrichment Program Name</b>	<b>Detail</b>
Special Lecture	<ul style="list-style-type: none"> <li>▪ Prof. N.S Johal</li> <li>▪ Punjabi University Patiala, Punjab</li> <li>▪ Dr. Ajit Pathak Director, Public Relations Indian Oil, New Delhi,President, Public Relations Society of India.</li> <li>▪ Dr. Sarojini Nandal,</li> <li>▪ Associate Prof., Dept. of Journalism &amp; Mass Communication,M D University, Rohtak</li> <li>▪ Dr. Sunit Mukherji,</li> <li>▪ Asstt Prof., Deptt. of Journalism and Mass Communication,MDU,Rohtak</li> <li>▪ Dr. Harish Arya</li> <li>▪ Chairperson, Dept. of Journalism &amp; Mass Communication,M D University, Rohtak.</li> <li>▪ Prof. Sanjeev Bhanawat</li> <li>▪ Director, Centre for Mass Communication, University of Rajasthan, Jaipur.</li> <li>▪ Prof. Gurmeet Singh Maan</li> <li>▪ Centre of Advanced Media Studies, Punjabi University, Patiala.</li> <li>▪ Prof. Veerbala</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Head, Dept. of journalism &amp; Mass Communication</li> <li>▪ H.P University, Shimla</li> <li>▪ Sutapa Ray</li> <li>▪ C.E.O</li> <li>▪ NICHE COMMUNICATION,</li> <li>▪ Nehru Place, New Delhi</li> <li>▪ Rakesh Nigam</li> <li>▪ Documentary &amp; Film Production specialist, Lucknow University Lucknow</li> </ul>
Seminar	<ul style="list-style-type: none"> <li>▪ Film Festival Organised by KUK, Haryana</li> </ul>
Workshop	<ul style="list-style-type: none"> <li>▪ Workshop on Ad. Campaign organized by Dr. Rajesh Rana, NACO.</li> <li>▪ Workshop on Live Reporting by Mahesh Kumar, Total TV, Hisar</li> <li>▪ Workshop on sports coverage by Vimal Mohan, NDTV.</li> </ul>
Any Other	<ul style="list-style-type: none"> <li>▪ Organized Literacy Mission Campaign</li> <li>▪ Seven Days Campaign on Save Oil</li> <li>▪ Road Safety Awareness Campaign</li> </ul>
IT Fest & PTM	<ul style="list-style-type: none"> <li>• PTM held twice in a year(2009-2014)</li> </ul>

45. List the teaching methods adopted by the faculty for different programmes.

Sr. No.	Method Used
1.	White Board
2.	Tutorials
3.	Assignments
4.	e-learning
5.	Power Point Presentations and Seminars
6.	Interactive board

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

Through Group discussions, quizzes, seminars, Poster Making & Essay, copy & Press Release writing competition & continuous evaluation and feedback system from various stakeholders.

47. Highlight the participation of students and faculty in extension activities:

Students and faculty are being regularly participating in Press Day, PR Day, National Education Day, NSS, Blood donation, literacy camps specially in rural areas, cultural activates like youth festivals, international women day celebration, Science conclave for school students etc. students Visit various Media organization time to time.

48. Give details of “beyond syllabus scholarly activities” of the department:

Mass Media Technological enhancement workshops, Seminars on current trends, promoting the students to participate in National level Media Fest & Invited talks in specialized areas of Mass Media.

49. State whether the programme/department is accredited/ graded by other agencies? If yes, give details: No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:

Six faculty members along with Teaching Associates having Ph.D. degree. The Department has published about 40 research papers in International/ National Journals and Conferences. Teachers of the department are involved in research based projects funded by UGC. The department has organized number of national conferences and workshops. Deptt. has also organized various social awareness campaign for the upliftment of the students & society.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

**Major Strength:**

- Highly Market Driven, Qualified Faculty, High quality Infra-structure, UGC funded Projects, Research Environment

**Major Weaknesses:**

- Inadequate regular faculty, (Absence of inhouse) research Journal, Moderate quality of Students admitted and limited International exposure of the Faculty, Lacks of awareness about the course among the students of Urban & Rural Areas.

**Opportunities:**

- To get more funding from the UGC/ICSSR in the form of projects.
- Motivating students for their skill up gradation

- Motivating students to appear in competitive examinations such as NET, Defence & Public Service Commission.

Motivating students for National and International fellowships.

**Challenges:**

- To improve the academic merit of the students joining various programmes
- Getting campus placements to students
- To interact with Industries
- To interact with international universities
- To Prepare the students according to the fast changing global scenarios of Mass Media(Advertising &PR)

52. Further plans of the department:

- Media Technology Up-gradation.
- Organization of Faculty Development Programmes.
- New Research projects from funding agencies.
- Joint research work with institutes of national importance.
- Enhancement of Placement activities.
- Quality research publications in the referred journals
- Syllabus will be revised in the light of the latest advances and requirement of the industry.
- Develop an Advertising and PR consultancy fully controlled and managed by the students of the department.
- Start half yearly Research Journal of the Department.

---

**Faculty of Medical Sciences  
The Departmental Profile**

---



## **Evaluative Report of the Department of Pharmaceutical Sciences**

---

1. Name of Department : Pharmaceutical Sciences
2. Year of establishment : 1995
3. Is the Department part of a School/Faculty of the University?  
Yes, Faculty of Medical Sciences
4. Names of programmes offered :
  - i) B. Pharm.
  - ii) M. Pharm. (Pharmaceutics, Pharmacology, Pharmacognosy, Pharmaceutical Chemistry)
  - iii) PhD
5. Interdisciplinary programmes and departments involved:

The interdisciplinary research projects are designed and executed. The research work is carried out in collaboration with other departments of the university and the pharmaceutical industry under the joint supervisors.
6. Courses in collaboration with other universities, industries, foreign institutions, etc.:

Every year our students carry out the research projects at the well known pharmaceutical industries such as Ranbaxy, Cipla, Jubilant, Torrent and Dr Reddy's Labs. The R & D scientist of the industry works as the joint supervisor of the project.
7. Details of programmes discontinued, if any, with reasons: Nil
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System:

The credit base semester system of examination which involves continuous and comprehensive evaluation through Minor Tests and viva-voce in each practical class.

9. Participation of the department in the courses offered by other departments: The department participates in some basic courses being run by the Dept of Physiotherapy:
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others):

	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual (including CAS &amp; MPS)</b>
Professors	4	2	8
Associate Professors	7	3	2
Asst. Professors	13	5	5
Others	----	5 <sup>#</sup>	5 <sup>#</sup>

# Teaching Associates on contract basis for academic year ending 31.5.2014

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>Teaching Experience (Yrs)</b>	<b>No. of Ph.D. students guided for the last 4 years</b>
Dr D N Mishra	M. Pharm, PhD	Professor	Pharmaceutics	27	10 awarded 01 ongoing
Dr Milind Parle	M. Pharm, PhD	Professor	Pharmacology	29	03 ongoing 03 awarded
Dr S K Sharma	M. Pharm,	Professor	Pharmacognosy	30	05 ongoing

	PhD				
Dr D C Bhatt	M. Pharm, PhD	Professor	Pharmaceutics	24	05 ongoing
Dr S K Singh	M. Pharm, PhD	Professor	Pharmaceutics	17	01 awarded 05 ongoing
Dr N Vasu-deva	M. Pharm, PhD	Professor	Pharmacognosy	23	02 awarded 03 ongoing
Dr Sunil Sharma	M. Pharm, PhD	Professor	Pharmacology	16	02 ongoing 02 awarded
Dr Sumitra Dahya	M. Pharm, PhD	Professor	Pharmacognosy	14	02 submitted
Dr Dinesh Dhingra	M. Pharm, PhD	Associate Professor	Pharmacology	19	01 awarded 04 ongoing
Dr. Munish Ahuja	M. Pharm, PhD	Associate Professor	Pharmaceutics	15	01 awarded 05 ongoing
Dr Sandeep Jain	M. Pharm, PhD	Assistant Professor	Pharmaceutical Chemistry	17	03 ongoing
Archana Kapoor	M. Pharm	Assistant Professor	Pharmaceutical Chemistry	08	--
Ashwini Jangra	M. Pharm	Assistant Professor	Pharmaceutical Chemistry	08	--
Sunil	M.	Assistant	Pharmaceutical	08	--

Kumar	Pharm	Professor	Chemistry		
Minakshi Bhatia	M. Pharm	Assistant Professor	Pharmaceutics	06	--

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors:  
Under the SAP there is a provision of inviting senior scientific experts for lectures and project review. The department has recently received the SAP grant from the UGC (2012-2017) and the appointment of invited speakers and experts is in process.
13. Percentage of classes taken by temporary faculty; programme-wise information:  
B.Pharma : 25% ; M.Pharma : Nil
14. Programme-wise Student Teacher Ratio:  
B Pharm : 20:1 ; M Pharm : 10:1
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

Post	Sanctioned	Filled	Actual
<b>Technical Staff:</b>			
Store keeper	01	01	01
Lab. technician	03	03	03
Lab. attendants	07	07	07
Animal attendant	01	01	01
<b>Administrative staff:</b>			
Asstt.-cum-JDEO	01	Vacant	--
clerk-cum-JDEO	01	01	01
Steno	01	Vacant	--

16. Research thrust areas as recognized by major funding agencies:
- Nanoparticulate Drug Delivery Systems
  - CNS active drugs
  - Chemical Modifications of active molecules
  - Standardization of Plant Drugs

17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise:

**Research Projects**

<b>Name of the Investigator</b>	<b>Title of the project</b>	<b>Duration</b>	<b>Funding Agency</b>	<b>Amount</b>
Prof S.K. Sharma	Diagnostic Characterization and Phytopharmacological Evaluation of Some Traditional Anti-Fertility Plants	2007-2010	AICTE	Rs. 7.85 Lacs.
Prof. Milind Parle	Psychopharmacological Investigations for the effective management of Neuropsychiatric Disorders	2008-2011	AICTE	Rs. 15 Lacs
Dr. Sumitra Singh	Standarization and formulation of same anti-psoriatic plant drugs	2009-2012	UGC	Rs. 7.88 Lacs
Dr. Munish Ahuja	Modification of national polysaccharides and their evaluation for pharmaceutical applications	2012-2015	UGC	Rs. 8.88 Lacs
Prof. D.C. Bhatt	Optimization of Technological aspects of antitubercular drugs for targetting to lungs	2012-2015	UGC	Rs. 5.75 Lacs

18. Inter-institutional collaborative projects and associated grants received:  
 a) National collaboration :

There is collaboration with the pharmaceutical industries such as Ranbaxy, Cipla, Jubilant, Torrent and Dr Reddy's Labs for the PhD level research

work. Our students also undertake the MPharm research projects in the pharmaceutical industries under the joint supervision of the scientists working in the R & D labs of the industries.

b) International collaboration : Nil

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS,DPE; DBT, ICSSR, AICTE, etc.; total grants received:

Departmental projects	Duration	Funding agency	Amount sanctioned
SAP	2012-17	UGC	55.50 lacs + project fellow
FIST	2012	DST	31.5 Lacs

20. Research facility/centre with:

- State recognition--- The research facilities of the department are well recognized by the universities and other institutions of Haryana. Our teachers provide technical assistance and know-how in terms of formulation development, particle size analysis, animal experimentation etc.
- National recognition—The teaching , research and innovation potential of the department is well recognized by the funding agencies like FIST, AICTE and UGC. The faculty has many funded ongoing research projects.
- International recognition Nil

21. Special research Laboratories sponsored by/ created by industry or corporate bodies: Nil

22. Publications:

- Number of papers published in peer reviewed journals (national/international)  
Total=281 (International=272; National=09)
- Monographs= Nil
- Chapters in Books= 01

- Edited Books= 08
- Books with ISBN with details of publishers :

<b>Author (s)</b>	<b>Title</b>	<b>Year of Publication</b>	<b>Type of Books</b>
Prof. Surendra Kumar Sharma	Dictionary of Pharmaceutical Sciences	2013 Piyush Publications, Delhi (ISBN No.:81-86848-84-X)	Reference Book
Suresh Kumar, Suman, Sunil Sharma and Neeru Vasudeva.	Chapter Title: Discovery of new antidepressants by using animal models along with various aspects of depression. Recent Developments in Biotechnology.	Vol. 7: Drug Discovery, Studium press LLC, Houston, USA.	Reference Chapter
Suresh Kumar, Sunil Sharma and Neeru Vasudeva.	Various aspects of diabetes mellitus: an overview	ISBN: 978-3-8484-8957-2. Lambert Academic Publishing; Germany	Reference Book
Veni Bharti, Neeru Vasudeva	Natural Product Based Therapies: A Threat to Antibiotic Resistance.	ISBN 978-3-42373-4 Lambert Academic Publishing, Deutschland, Germany	Reference Book
Munish Ahuja, Surendera H Bodakhe, Sanjay Gupta, Vijay Juyal	Piyush's Synopsis for GPAT, 2011	ISBN: 81-86548-44-0 Piyush Publications, New Delhi	
Sanjay Gupta,	Careers in Pharmacy	ISBN NO: 81-	

Munish Ahuja, Vijay Juyal, Surendera H Bodakhe		256-0004-3 Birla Publications, New Delhi	
Munish Ahuja and Dipak K. Majumdar	Book Chapter- "Conjunctivitis: Symptoms, Treatment and Prevention" In: Conjunctivitis: Symptoms, Treatment and Prevention (Book)	978-1-61668- 443-3 Nova Science Publishers Inc, New York, US	
Dr. A. Dash, Dr. S. Singh & Dr. J. Tolman,	"Pharmaceutics: Basic Principles and Application to Pharmacy Practice"	2013, ISBN: 978-0-12- 386890	Edited
Dr. Mario Francisco Juruena	"Clinical, Research and Treatment Approaches to Affective Disorders"	2013 ISBN: 979-953- 307-077-2	Edited

- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.

95

- Citation Index-range/average:  
Total citations range: Up to 353
- Impact Factor-range/average = upto 4.21
- h-index = upto 16

23. Details of patents and income generated(Total 07):

Prof S K Sharma (03)

Name of the Faculty	Title of the Patent	Appl. No.	Date
1. Prof Surendra Kumar Sharma and Mr Naresh Kumar	A Novel Bio-derived Extract based Anti-malarial Composition and Method of	1839/DEL/ 2013	21.06.2013



2. Prof Surendra Kumar Sharma and Mr Harneet Singh	preparation of same. Composition comprising Herbal extract of Jatropha integerrima Jacq and uses thereof	2398/DEL/2013	13.08.2013
3. Prof Surendra Kumar Sharma and Mr Harneet Singh	Anti-Diabetic comprising Herbal Extract of Jatropha integerrima Jacq and uses thereof	3744/DEL/2013	24.12.2013

Prof Milind Parle (04)

Patent No.	Filing Date	Publication Date	Title	Scientists
775/DEL/2012	16 <sup>th</sup> March 2012	08/06/2012	Device for inducing Depression in Rodents	Dr.Milind Parle, Mr. Sameer Dhingra
3087/DEL/2012	2 <sup>nd</sup> October 2012	07/12/2012	Device for inducing Obsessive-Compulsive Disorder in Laboratory Animals	Dr. Milind Parle, Mr. Sameer Dhingra Mr. Uday Gaikwad
2516/DEL/2013	26 <sup>th</sup> August 2013	15/11/2013	Device for measuring Pain of Laboratory Animals	Dr. Milind Parle, Ms. Monu Mr. Sandeep Kumar
1421/DEL/2013	4 <sup>th</sup> March 2013	–	Device for inducing	Dr. Milind Parle,

2013			Anxiety- Disorder in Laboratory Animals	Mr. Isha Dhamija
------	--	--	--	---------------------

24. Areas of consultancy and income generated:  
The department is making efforts to generate income through consultancy in the areas such as Novel drug delivery systems, synthesis/modification of active pharmaceutical ingredients, pre-clinical testing and extraction/isolation of plant based drugs.
25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad:  
  
The majority of senior faculty members visit other laboratories/institutions and industries in India as the inspectors appointed by the bodies like Pharmacy Council of India, AICTE, UGC, ICMR etc.
26. Faculty serving in various National committees b) International committees c) Editorial Boards:  
  
Faculty members of this department. are on  
i) the editorial board of national and international journals,  
ii) Inspection committees of AICTE and Pharmacy council of India.  
iii) Expert/review committee of various funding agencies like ICMR.AICTE and UGC.
27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs):  
  
The department has organized four refresher courses through Academic Staff College of the university.
28. Student projects:
- The student projects are a mandatory part of the learning programme. These projects constitute the final year of each of the M Pharm programmes. The faculty supervises the research projects. In case the projects are undertaken in collaboration with the pharmaceutical industry and other departments of the university, the

external expert/ faculty acts as the joint supervisor. The year wise details of the student projects are given below:

<b>Year</b>	<b>Number of programmes Executed within the university</b>	<b>Number of programmes Executed outside the university</b>
2009-10	44	06
2010-11	43	07
2011-12	44	06
2012-13	42	05
2013-14	40	Nil

29. Awards/recognitions received at the national and international level by:

- Faculty = 13
- Doctoral/Post Doctoral/Fellows = Nil
- Students = Nil

30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:

Following workshops/seminars have been conducted by the department, as below:

- Workshop on “Handling and care of Laboratory Animals” Oct. 20-22, 2011.
- National workshop on “Modern methods in Pharmaceutical Research” April 28-May 4, 2012.
- National Seminar on “Recent trends of nanotechnology in pharmaceuticals” 2<sup>nd</sup> March, 2013 (sponsored by UGC)

31. Code of ethics for research followed by the departments:

Institutional Animal Ethics Committee (IAEC) is constituted as per the guidelines of CPCSEA, Ministry of Environments and Forests, Govt. of India, which monitors the ethical use of laboratory animals in research.

32. Student profile programme-wise: (for current year, 2013-14):

Name of the Programme (refer to question no.4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B. Pharm.	419	50	10	40	70
M. Pharm.	147	14	20	100	90
PhD	95	6	7	100	100

33. Diversity of students:

Name of the Programme (refer to question no.4)	% of students from the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
B. Pharm.	Not applicable	Not applicable	Not applicable	Not applicable
M. Pharm.	20	70	10	Nil
PhD	40	35	25	Nil

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations?

GPAT qualified candidates = 105

35. Student progression :

Student progression	Percentage against enrolled
UG to PG	20
PG to M. Phil.	Not applicable
PG to Ph.D.	40
Ph.D. to Post-Doctoral	Nil
Employed <ul style="list-style-type: none"> <li>Campus selection</li> </ul>	33

• Other than campus recruitment	
Entrepreneurs	---

36. Diversity of staff :

<b>Percentage of faculty who are graduates</b>	
of the same university	6.67%
From other universities within the State	20%
From universities from other States	73.33%
From universities outside the country	---

37. Number of faculty who were awarded M. Phil, Ph.D., D.Sc. and D. Litt. During the assessment period: 02 PhD

38. Present details of departmental infrastructural facilities with regard to:

- a) Library: Central Library of the university
- b) Internet facilities for staff and students: All teaching staff
- c) Total number of class rooms: 04
- d) Class rooms with ICT facility: Nil
- e) Students' Laboratories: 07 UG labs. + 08 PG labs.
- f) Research Laboratories: 07 labs.

39. List of doctoral, post-doctoral students and Research Associates:

- a) From the host institution/university: 13 students have been registered for PhD who have obtained postgraduate degree from this university.
- b) From other institutions/universities: 05 students have been registered for PhD who have obtained postgraduate degree from other universities.

40. Number of post graduate students getting financial assistance from the university: Nil

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology:

Yes, the programmes were started after careful survey of market and discussion with experts and faculty as per the PCI and AICTE norms.

42. Does the department obtain feedback from:
- Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?  
Meetings of Board of Studies are conducted for updating the syllabus, as and when required.
  - Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?  
Feedback related to teaching-learning is taken by the concerned faculty member from the students in the class only.
  - Alumni and employers on the programmes offered and how does the department utilize the feedback?  
The alumni working in the pharmaceutical industry provide the industry related problems which often serve as the basis for the research projects at the masters and doctoral levels, depending on the feasibility.
43. List the distinguished alumni of the dept (maximum 10):

<b>Name</b>	<b>Industry/ Institution</b>
Virender Beriwal	University of Nebraska Medical Center, Omaha
Dhirendra Chowhan	University of Nebraska Medical Center, Omaha
Perjesh Mohan	Ranbaxy-Daichii Sankyo, Gurgaon
Ajay Behal	Ranbaxy-Daichii Sankyo, Gurgaon
Sonia Sehra	Ranbaxy-Daichii Sankyo, Gurgaon
Vineet Munzal	Ranbaxy-Daichii Sankyo, Gurgaon
Rakesh Kumar	Ranbaxy-Daichii Sankyo, Gurgaon
Vikas Batra	Ranbaxy-Daichii Sankyo, Gurgaon
Vaibhav Garg	Bioinformatics consultant, CII, New Delhi
Anurag Tyagi	Assistant Professor, Panjab University, Chandigarh

44. Give details of students' enrichment programmes (special lectures/workshops/seminar) involving external experts:

Following workshops/seminars have been conducted by the department:

- i) Workshop on "Handling and care of Laboratory Animals" Oct. 20-22, 2011.
  - ii) National workshop on "Modern methods in Pharmaceutical Research" April 28-May 4, 2012.
  - iii) National Seminar on "Recent trends of nanotechnology in pharmaceuticals" 2<sup>nd</sup> March, 2013.
45. List the teaching methods adopted by the faculty for different programmes:

Lectures, Seminars, Hands- on training, class quizzes etc. All activities are supported by LCD and over head projectors are being used for UG and PG teaching.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

Department research committee and Board of studies meetings are held in the department to monitor the research work of doctoral candidates.

47. Highlight the participation of students and faculty in extension activities:  
-Nil

48. Give details of "beyond syllabus scholarly activities" of the department:

Students of this department participate in the NSS activities organized by the NSS wing of the university.

49. State whether the programme/department is accredited/graded by other agencies? If yes, give details:

The B. Pharm. program, a four year (i.e., eight semesters) degree course is approved by Pharmacy Council of India (PCI), New Delhi and All India Council of Technical Education (AICTE).

M. Pharm. programmes with specialization in Pharmaceutical Chemistry, Pharmaceutics, Pharmacology and Pharmacognosy with intake of 15, 15, 10 and 10 respectively is approved by AICTE, New Delhi.

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:

The faculty and students of this department has published research/review papers in various national and international journals of repute in the various areas of Pharmaceutical research and have also obtained/applied for patents.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

#### Strengths

- Producing quality pharmacists so as to cater the needs of pharmaceutical industry, academics and the society.
- Organize seminars/symposia/ workshops for better exposure of faculty and the students towards the recent advancements in Pharmaceutical Sciences.
- Serving as a valuable resource for Industry and Society.

#### Weakness

- The space constraint for the PG and research activities.

#### Opportunities

- The growth of Clinical research organizations providing the job opportunities.
- Almost entire faculty is doctorate and trying for funding for research activities.
- Drug regulatory affairs is an emerging area of the pharmaceutical industry.

#### Challenges

- The mushrooming growth of private institutions.
- Declining interest of students towards the science stream in schools.
- The ever expanding and variable need of the pharmaceutical industry

52. Future plans of the department:



- I. To promote academic growth by offering state-of-the-art Undergraduate, Postgraduate and Doctoral programs.
- II. To undertake collaborative projects with pharmaceutical Industries for long term interaction with academia and industry.
- III. To develop intellectual capabilities of pharmacy students as to emerge as a leader in pharmacy profession.

## **Evaluative Report of the Department of Physiotherapy**

---

1. Name of Department : Physiotherapy
2. Year of establishment : 2002
3. Is the Department part of a School/Faculty of the University?  
Yes, Faculty of Medical Sciences
4. Names of programmes offered (UG, PG, M.Phil., Ph. D., Integrated Masters; Integrated Ph. D, D.Sc., D.Litt., etc.)
  - Bachelor of Physiotherapy
  - Master of Physiotherapy
  - Musculoskeletal Disorders
  - Neurological Disorder
  - Sports Physiotherapy
  - Paediatric Physiotherapy
  - Cardiopulmonary Disorders)
  - PhD in Physiotherapy
5. Interdisciplinary programmes and departments involved:

Physiotherapy course itself is of an interdisciplinary nature, which needs involvement of many departments with interdisciplinary subjects like Pharmacology, Psychology etc. Therefore, the department shares the expertise of faculty of other departments like Department of Pharmaceutical Sciences, Department of Psychology etc.
6. Courses in collaboration with other universities, industries, foreign institutions, etc:

Department had M.O.U. with Maharaja Agarsen Medical College, Agroha for theory and practical classes.
7. Details of programmes discontinued, if any, with reasons: NIL
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System: Semester System with credit Based System:

9. Participation of the department in the courses offered by other departments:  
NIL

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asstt.Professors/others):

	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual (including CAS &amp; MPS)</b>
Professors	01	NIL	NIL
Associate Professors	03	NIL	NIL
Asstt. Professors	05	05	05
Others	-	09*	-

\* **Teaching Associates on contract basis.**

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No. of Ph.D./M. Phil. students guided for the last 4 years</b>
Prof. S.K. Singh	Ph.D, M. Pharm	Chairman & Professor	Pharmaceutics	18 years	01 awarded, 01 Submitted and four under progress
Dr. Shabnam Joshi	M.P.T.	Assistant Professor	Orthopedics	08	Nil
Dr. Jaspreet Kaur	M.P.T.	Assistant Professor	Neuro-Physiotherapy	08	Nil

Dr. Kuland- aivelan	MSPT, PhD	Assistant Professor	Sports Physioth- erapy	8 years 5 months	Nil
Dr. Manoj Malik	M.P.T.	Assistant Professor	Neuro- Physioth- erapy	08 years 6 months	Nil
Dr. Kalindi	M.P.T.	Assistant Professor	Cardiopul- monary	2.5	Nil

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors:

No such appointment is made, but following visited the Deptt. on request:

Name	Qualific- ation	Designation	No. of Years of Experience	Department
Prof. Sunil Sharma	PhD,, M Pharm	Professor	14 years	Pharmaceutical Sciences
Dr. Dinesh Dhingra	PhD,, M Pharm	Associate Professor	15 years	Pharmaceutical Sciences
Dr. Ashok Arora	MBBS, MS	Orthopedician	20 years	Arora Hospital, Hisar

13. Percentage of classes taken by temporary faculty-programme-wise information: BPT = 70% and MPT = 70%

14. Programme-wise Student Teacher Ratio: BPT = 7:1 & MPT = 3:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

<b>Position</b>	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual</b>
Sr. Technical Asstt. (Sr. Physiotherapist)	01	01	01
Jr. Technical Assistant (Jr. Physiotherapist)	01	NIL	NIL
Technical Asstt. Gr-1/S. Keeper	01	NIL	NIL
Asstt-cum-DEO	01	NIL	NIL
Clerk-cum-JDEO	01	NIL	NIL
Steno	01	NIL	NIL
Lab Attendant-cum Cleaner	04	05	04 (01 at CCL)
Peon	01	01	01

16. Research thrust areas as recognized by major funding agencies: NIL
17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise: NIL
18. Inter-institutional collaborative projects and associated grants received:
  - a) National collaboration: NIL
  - b) International collaboration: NIL
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS,DPE; DBT, ICSSR, AICTE, etc.; total grants received: NIL
20. Research facility/centre with: NIL
  - State recognition
  - National recognition
  - International recognition
21. Special research Laboratories sponsored by/ created by industry or corporate bodies: NIL
22. Publications:
  - No. of papers published : 18

- Monographs Nil
  - Chapters in Books: Prof. S.K.Singh
- 1) Chapter-11: Semi-solid dosage forms in Book entitled "Pharmaceutics: Basic Principles and Application to Pharmacy Practice" edited by Dr. A. Dash, Dr. S. Singh & Dr. J. Tolman, published by Elsevier Inc. USA (ISBN: 978-0-12-386890-9)
  - 2) Chapter 14: Recent Therapies in Depression in book entitled "Clinical, Research and Treatment Approaches to Affective Disorders" Edited by Mario Francisco Juruena. Published by InTech. Croatia (ISBN 979-953-307-077-2)
    - Edited Books Nil
    - Books with ISBN with details of publishers Nil
    - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc. Nil
    - Citation Index-range/average Up to 97
    - SNIP: Nil
    - SJR: Nil
    - Impact Factor-range/average Up to 1.5
    - h-index Up to 06
23. Details of patents and income generated: Nil
  24. Areas of consultancy and income generated:  
The teachers of the deptt are providing free services in physiotherapy O.P.D. to the employees and students of university as well as patients from neighboring areas.
  25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad: NIL
  26. Faculty serving in :
    - a) National committees
    - b) International committees
    - c) Editorial Boards
    - d) any other (please specify):

Prof.S.K.Singh

- (a) Associate Editor, International Journal of Drug Delivery Technology (www.ijddt.com)
- (b) Member, Advisory Board, International Journal of Pharmaceutical and Clinical Research (www.ijpcr.com)
- (c) Member, Advisory Board, International Journal of Pharmaceutical Sciences and Drug Research (www.ijpsdr.com)
- (d) Member, Editorial Board, International Journal of Pharma Professional's Research (IJPPR)

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs):-

<b>Workshops/ Conferences/ Seminars</b>	<b>Attended by</b>
Workshop on basis of Manipulation and Approaches in Neuromusculoskeletal disorders, GJUS&T, Hisar.	Dr. Shabnam Joshi Dr. Jaspreet Kaur Malik Dr. K.V Dr. Manoj Malik
Workshop on Recent Trends in Functional Rehabilitation of Spinal Cord Injury, GJUS&T, Hisar.	Dr. Shabnam Joshi Dr. Jaspreet Kaur Malik Dr. Kulandaivelan Dr. Manoj Malik
Workshop on Mobilization of LumboSacral Joint in clinical conditions, GJUS&T, Hisar.	Dr. Shabnam Joshi Dr. Jaspreet Kaur Malik Dr. Kulandaivelan Dr. Manoj Malik Dr. Kalindi
Workshop on Research Databases Awareness, GJUS&T, Hisar.	Dr. Kulandaivelan
Workshop on Application on Statistical software in Medical Research, New Delhi.	Dr. Kulandaivelan
National Workshop on Emerging Trends in Quality Education: The Road Ahead, GJUS&T, Hisar.	Dr. Kulandaivelan
National Level Workshop on Recent Trends in Functional rehabilitation of Spinal cord Injury, GJUS&T, Hisar.	Dr. Jaspreet Kaur Malik Dr. Manoj Malik (PT)
Workshop on Assessment and Mobilization	Dr. Shabnam Joshi (PT)

of Cervical Spine in clinical conditions, GJUS&T, Hisar.	Dr. Jaspreet Kaur Malik Dr. Kulandaivelan Dr. Manoj Malik
Orientation Course	Dr. Shabnam Joshi Dr. Jaspreet Kaur Malik Dr. Kulandaivelan
Refresher Course	Dr. Shabnam Joshi Dr. Jaspreet Kaur Malik Dr. Kulandaivelan

28. Student projects:
- Percentage of students who have done in-house projects including inter-departmental projects: 100 %
  - Percentage of students doing projects in collaboration with other universities/industry/institute: students do their projects in collaboration with leading hospitals like PGIMS Rohtak, Artemis Hospital Gurgaon, Jindal Hospital Hisar etc during their BPT internship as well as in MPT Dissertation.
29. Awards/recognitions received at the national and international level by:
- Faculty: Nil
  - Doctoral/post doctoral fellows: Nil
  - Students: Nil
30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:

Title	Duration and Date	Funding
Workshop on Manipulation and its approaches in neuro-musculoskeletal disorders	One Day, 17 January 2009	University
Workshop on Recent Trends in Functional Rehabilitation of Spinal Cord	One Day, 6 February 2009	University
Workshop on Mobilization of Lumbosacral Joint in Clinical Conditions,	One Day, 20 March 2013	University
Workshop on recent Trends in Spinal Cord Injury Rehabilitation	Two Days, 11 and 12 November 2013	University



Workshop on Assessment and Mobilization of Cervical Spine in Clinical Conditions	28 Feb and 1 March 2014	University
--	-------------------------	------------

31. Code of ethics for research followed by the departments: Code of Ethics as Laid down by Indian Association of Physiotherapists is Followed by Department. Moreover, There is Institutional Animal Ethics Committee (IAEC) duly approved by CPCSEA for scientific experimentation on animals as well as Institutional Ethics Committee to regulate Clinical Trials.
32. Student profile programme-wise:

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
(B.P.T.)					
2012-13	69	10	20	80	90
2011-12	37	02	09	100	90
2010-11	29	07	07	60	70
2009-10	55	06	12	100	100
(M.P.T.)					
2012-13	22	01	05	100	100
2011-12	20	02	07	50	85
2010-11	33	02	23	100	100
2009-10	32	05	18	100	100

33. Diversity of students:

Name of the Programme (refer to question no.4)	% of students from the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
B.P.T..	Nil	90	10	Nil
M.P.T	60	30	10	Nil
Ph D	Nil	50	50	Nil

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise: One alumni Mr. Vikas Sheoran (2004 Batch) is now Commandant with BSF.

35. Student progression:

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	60%
PG to M.Phil.	NA
PG to Ph.D.	05%
Ph.D. to Post-Doctoral	NA
Employed <ul style="list-style-type: none"> <li>• Campus selection</li> <li>• Other than campus recruitment</li> </ul>	Nil
Entrepreneurs	Many students have their own clinics.

36. Diversity of staff:

<b>Percentage of faculty who are graduates</b>	
of the same university	20%
From other universities within the State	40%
From universities from other States	40%
From universities outside the country	NIL

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt. During the assessment period:

- a. One Faculty Member Dr Kulandaivelan has been awarded PhD Degree on the topic “Effects of different types of recovery intervention on various physiological parameters in active sportsman” in 2011 from Punjabi University, Patiala.
- b. Four Faculty members are Pursuing Pre PhD Course (2013-14) from Deptt of Physiotherapy, G.J.U.S.& T.,Hisar

38. Present details of departmental infrastructural facilities with regard to:

- a) Library: Central library
- b) Internet facilities for staff and students: internet facility is available to staff and students through campus wide networking
- c) Total number of class rooms:

<b>Particulars</b>	<b>Number of rooms Available in the institution</b>
Class Rooms	03
Tutorial Hall/Audio Visual room	01

d) Class rooms with ICT facility: 01

e) Students' Laboratories

Electro Therapy lab	01
Exercise Therapy lab	01
OPD	05

f) Research Laboratories: 01

39. List of doctoral, post-doctoral students and Research Associates:

a) From the host institution/university : Nil

b) From other institutions/universities : Nil

40. Number of post graduate students getting financial assistance from the university: Four students are getting Post Matric Scholarship

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology:

Based on Informal feedback from Hospitals, Medical Professional and Alumni Department introduced Master in Physiotherapy Program in 2008 IN two Specializations. namely Musculoskeletal Disorders and Sports Physiotherapy. Two New Specializations. namely Neurological Disorders and Pediatrics Physiotherapy. Department started Master's in Cardiopulmonary Physiotherapy and PhD Programme from session 2013-14.

42. Does the department obtain feedback from:

- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? Faculty meetings are organized on routine Basis and Deptt takes regular feedback from faculty on curriculum as well as teaching learning evaluation which is utilized in curriculum revision and improvements in evaluation process.
- b) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback? Regular feedback from students is taken and is utilized to improve teaching learning process and curriculum.
- c) Alumni and employers on the programmes offered and how does the department utilize the feedback? Alumni are invited in workshops and seminars organized by the deptt as well as in alumni meet. They are requested to provide their valuable feedback regarding curriculum revisions, teaching learning process and placements.

43. List the distinguished alumni of the department (maximum 10):

<b>S. No</b>	<b>Name</b>	<b>Batch</b>	<b>Presently working</b>
1.	Swati Kuthiala	2003	In USA
2.	Bhawna Verma	2003	Pt. B.D.Sharma University of Health Sciences, Rohtak
3.	Minaxi Saini	2003	Mother Teresa Saket College of Physiotherapy, Panchkula
4.	Sonia Pawaria	2003	Dashmesh College of Physiotherapy, SGT University, Gurgaon
5.	Dimple	2004	Mother Teresa Saket College of Physiotherapy, Panchkula
6.	Neerja Thukral	2004	Department of Physiotherapy, GJUS&T, Hisar
7.	Pawan	2004	Running his own clinics
8.	Arun Sanduja	2005	Jindal Hospital Hisar
9.	Aamir Khan	2006	Jindal Hospital Hisar
10.	Shalini Gaur	2006	Qi Spine Care Clinic, Delhi

44. Give details of student's enrichment programmes (special lectures/workshops/seminar) involving external experts:
- Dr. Narkeesh Arumugam, Reader, Punjabi University, Patiala delivered lecture during Workshop on Manipulation and its approaches in neuro-musculoskeletal disorders, 17 January 2009
  - Dr. Parveen Kumar, Associate Professor, DAV Institute of Physiotherapy and Rehabilitation, Jalandhar delivered lecture during Workshop on Recent Trends in Functional Rehabilitation of Spinal Cord, 6 February 2009.
  - Dr. Narkeesh Arumugam, Associate Professor, Punjabi University, Patiala delivered lecture during workshop on Mobilization of Lumbosacral Joint in Clinical Conditions, 20<sup>th</sup> March 2013
  - Dr. Narkeesh Arumugam, Professor, Punjabi University, Patiala and Dr. Parveen Kumar, Associate Professor, DAV Institute of Physiotherapy and Rehabilitation, Jalandhar, delivered lecture during National workshop on recent Trends in Spinal Cord Injury Rehabilitation, 11<sup>th</sup> & 12<sup>th</sup> Nov 2013
  - Dr. Arun Sandhuja, PT, Jindal Hospital Hisar delivered lecture on Assessment and Mobilization of Cervical Spine in Clinical Conditions, 28<sup>th</sup> Feb & 1<sup>st</sup> March, 2014
45. List the teaching methods adopted by the faculty for different programmes:
- Lecture method
  - Seminars
  - Case presentations
  - Study tours
  - OPD demonstration
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?  
Learning outcomes are monitored by regular evaluation process. Deptt conducts minor examinations in each semester, class room interaction between teachers and students to monitor the learning process in conducted time to time. Further class tests students participation in group discussion, one to one problem solving session is taken and proactive efforts are made to ensure that learning outcomes and programme objectives are met.

47. Highlight the participation of students and faculty in extension activities:  
Students and faculty members participate in many extension activities like
- Senior students assist in OPD of the Department.
  - Providing physiotherapy services during sports meet
  - Participation in free physiotherapy camps.
  - Participation in NSS camps
48. Give details of “beyond syllabus scholarly activities” of the department  
Following beyond syllabus scholarly activities are regularly conducted by the deptt:
- Workshops & Seminars
  - Free Physiotherapy Camps was organized in the Deptt. of Physiotherapy on 8<sup>th</sup> September, 2013 on the eve of World Physiotherapy Day. Model making and poster completion were also held.
  - Free Physiotherapy Camps was organized in on 25<sup>th</sup> Feb, 2014 in Primary Health Centre, New Police Line Area, Hisar.
  - Organized Healthcare Awareness Program for school going children and deliver scientific lecture on Postural Awareness & Prevention of Sports Injuries in Oxford International School, Uklana Mandi, Hisar.
  - Extra Curricular activities Including
  - Poster Competition
  - Rangoli Competition
  - Model Making
49. State whether the programme/department is accredited/graded by other agencies? If yes, give details: No
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:  
Deptt regularly organizes seminars and workshops and invites renowned speakers to impart knowledge on recent aspects of physiotherapy; research work is conducted on basic as well as applied physiotherapy topics. Deptt also organizes health awareness programs to impart knowledge about positive health and need of physiotherapy to the community

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

**Major strengths**

- Well qualified & experienced faculty
- Tie-up with hospitals for clinical training and internship.
- Teacher-students relationship
- Excellent & well equipped O.P.D. facility.
- Participation of students as physiotherapists in sports events.

**Major Weaknesses**

- Non availability of senior faculty.
- Dependence on other hospitals for internship.

**Major opportunities**

- Ph.D. Course
- Research work
- Organization of workshops
- Health awareness camps for school going students
- Placements

**Major Challenges**

- Growth of students
- Growth of Department
- Improving the skills
- Encouragement for Research work.

52. Further plans of the department:

- To arrange for quarterly hands on workshops for students and faculty.
- To provide for educational tours for its students (National, International level workshops, conferences Hospital visits, old age homes, orphanages, special schools etc.).
- To arrange for free physiotherapy camps in near towns for creating awareness about our profession and its growth along with educating people about various musculoskeletal problems in ADL's and their prevention.
- To publish a yearly/half yearly magazine related to various recent advances in physiotherapy along with any special case discussion by faculty of students etc.

- To provide students with recent Audio visual teaching facilities so that the whole process of teaching and learning is more enriching and exciting.
- Encouraging students and staff for taking up research projects in physiotherapy from various funding agencies for academic growth of self and department.



## Evaluative Report of the Department of Applied Psychology

---

1. Name of the Department : Applied Psychology
2. Year of Establishment : 1996
3. Is the Department part of a School/ Faculty of the university? Yes,  
Faculty of Medical Sciences
4. Names of programmes offered (UG, PG, M.Phil, Ph.D., Integrated  
Masters; Integrated Ph.D.D.Sc., D.Litt.,etc. M.Sc. Psychology, Ph.D  
Psychology
5. Interdisciplinary programmes and departments involved: Nil
6. Courses in collaboration with other universities, industries, foreign  
institutions, etc.: Nil
7. Details of programmes discontinued if any, with reasons: Nil
8. Examination System: Annual/ Semester/Trimester/Choice based Credit  
System: Credit Based Semester System
9. Participation of the department in the courses offered by other  
departments: Nil
10. Number of teaching posts sanctioned, filled and actual  
(Professors/Associate Professors/ Asstt.Professors/ others):

	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual (including CAS &amp; MPS)</b>
Professor	01	02	1-CAS (2012) and 1-MPS(2013)
Associate Professors	02	01 (2013)	---
Assistant Professors	04	02	02
Others , Teaching Associate/ Guest Faculty	--	01	01

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of yrs of experience	No. of Ph.D students guided
Jyotsana	M.A, M.Phil, Ph.D- Psychology	Professor	Counseling, Health, Personality Psychology, Environmental Psychology	17 yrs & 4 months	6 Rest in process
Sandeep	M.A, M.Phil, Ph.D- Psychology	Professor	Health psychology	12 yrs & 7 months	3 Rest in process
Rakesh	M.A, Ph.D- Psychology	Asst. Professor	Clinical psychology	12 yrs & 7 months	1 Rest in process
Manju	M.A, Ph.D- Psychology	Asst. Professor	Neuro Psychology	8yrs	Nil In process

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors:  
No such appointment is made, but following visited the department on request :  
Prof. A.K. SEN- Professor Emeritus, Prof. S.C Dhamija, Prof. V.V. Upmanyu, Prof N.Hasnain,
13. Percentage of classes taken by temporary faculty-programme-wise information :  
M.Sc. 32 %
14. Programme-wise student teacher ratio: M.Sc : 50 : 1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

<b>Position</b>	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual</b>
Lab-technician	01	01	01
Lab-attendant	01	01	01
Clerk-cum-JDEO	01	01	01
Steno-typist	01	01	01
Peon	01	01	01 (on contract basis)

16. Research thrust areas as recognized by major funding agencies:

Environmental Psychology, Health Psychology

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) total grants received. Give the names of the funding agencies, project title and grants received project-wise:

One: Prof. Jyotsana:

- Studies on Demographic Surveillance around proposed nuclear power plant site in Haryana covering a distance of 30 km from the site. (Sponsored by Bhaba Atomic Research Centre). (2010). Sanctioned amount : 23.40 Lakhs Continuing(In Radio Ecology Centre, GJUS&T, Hisar)
- A study of ecological attitude, attitude towards nuclear power, risk acceptance, stress and general well be
- ing of people residing in the vicinity of proposed nuclear power plant site. (sanctioned by UGC, New Delhi). 2012). Sanctioned amount: 9,36,800 Lakhs. Continuing
- Prof. Sandeep Singh
- Title of the project:Psychological Influences in Crime: A Comparative Study of High and low Crime Profile Villages of District Hisar(Haryana)
- Principal Investigator: Sandeep Singh
- Funding agency:  
BPR&D, Ministry of Home Affairs, and New Delhi.  
Grant received: Rs.80,000/-  
Status: completed in 2009

- Title of the project: Behaviour Modification in HIV/AIDS among Adolescents  
Principal Investigator Sandeep singh  
Funding Agency University Grants Commission, New Delhi.  
Grant received: Rs.5,28,600/-  
Status: completed in 2010.
18. Inter-institutional collaborative projects and associated grants received :
- a) National collaboration : No
  - b) International collaboration : No
19. Departmental projects funded by DST-FIST , UGC-SAP, CAS, DPE, DBT, ICSSR, AICTE, etc. total grants received: Nil
20. Research facility/centre with:
- State recognition --
  - National recognition --
  - International recognition --
21. Special research laboratories sponsored by/created by industry or corporate bodies: Nil
22. Publications:
- Number of papers published in peer reviewed journals (national/international) 51
  - Monographs Nil
  - Chapters in Books 01
  - Edited Books Nil
  - Books with ISBN with details of publishers Nil
  - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.: Nil
  - Citation Index-range/average Up to 65
  - SNIP Nil
  - SJR Nil
  - Impact Factor-range/average Nil
  - h-index Up to 04

23. Details of patents and income generated: Nil
24. Areas of consultancy and income generated:
- Psychological counseling: Free consultancy
  - Consultant in Chief: Dr.Sandeep Singh
- Title: Conducting Survey and Evaluatory Study of District Jind on Bonded Labor under the Centrally Sponsored Scheme.  
 Funded by Ministry of labor, Govt.of Haryana.  
 Amount : Rs.2,00,000/-  
 Status: completed in 2011.
25. Faculty selected nationally/internationally to visit other laboratories/ institutions/industries in India and abroad: Nil
26. Faculty serving in:
- a) National Committees b) International committees c) Editorial Boards d) any other Nil
27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs).  
 Refresher courses attended by faculty members:  
 Dr. Sandeep Singh

1.	Completed the training orientation course for NSS programme officers held from 26.09.2011 to 01.10.2011 organized by ETI/IDC Chandigarh, at GJUS&T, Hisar.
2.	Participated in a 3-week refresher course in “Social Sciences: Psychology”from 28.12.2009 to 16.01.2010 with “A”grade at UGC-ASC,GJUS&T, Hisar.
3.	Participated in a 3 week refresher course in “Information Technology Interdisciplinary for all Streams”from 21.01.2011 to 10.02.2011 with “A” grade at UGC-ASC.
Dr. Rakesh	
4.	A refresher course on Emerging Issues in Educational Technology(Interdisciplinary for all Courses) was attended from 15.12.2011 to 04.01.2012 at Academic Staff College. Guru Jambheshwar University of Science and Technology.

5.	A refresher course on Research Methodology for social sciences(Interdisciplinary for) was attended from 19.08.2013 to 07.09.2013 at Academic Staff College. Guru Jambheshwar University of Science and Technology.
Dr. Manju	
6.	Orientation Course from 17.06.09 to 14.07.09 conducted by ASC GJUS&T, Hisar
7.	Refresher course from 06.05.13 to 25.05.13 conducted by ASC GJUS&T, Hisar

28. Students projects :  
80 percent –in-house projects
29. Awards/ recognitions received at the national and international level by Faculty:-
- Received the award from Govt.of Haryana on republic day(26.01.2010) for contributing in the field of blood donation. (Dr. Sandeep Singh)
  - Bharat Jyoti award on May 04, 2012 for linking education to social development. (Dr. Sandeep Singh)
30. Seminars/Conference/Workshops organized and the source of funding (national /international) with details of outstanding participants, if any:
- (a) National Workshop organized on 21 Jan., 2014- funded by university.
- (b) National conference organized on 20-21 Feb., 2014- funded by university
31. Code of ethics for research followed by the departments:  
APA code of ethics followed in psychological researches.
32. Student Profile Programme-Wise:

Name of the Programme (refer to question no. 4)	Application Received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc.	2009-119	05	48	01 student	28 students

	2010-141	16	34	06 students	24 students
	2011-combined entrance	30	20	06 students	27 students
	2012- 95	20	30	Continuing	
	2013- 91	27	22	Continuing	
Ph.D	2009-32	03	06		
	2010-29	01	03		
	2011-25	-	04		
	2012-25	01	01		
	2013 - 41	01	01		

33. Diversity of students:

Name of the Programme (refer to question noo.4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc.	2009 -	52 students	01 student	-
	2010-01 student	48 students	01 student	-
	2011-01 student	46 students	03 students	-
	2012-01 student	44 students	05 students	-
	2013-02 students	41 students	06 students	-
Ph.D	2009-06 students	02 students	01student	-

	2010-04 students	-	-	-
	2011-01 students	03 students	-	-
	2012-01 students	01 students	-	-
	2013-01 students	01 student	-	-

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.: NET-04

35. Student progression:

Student progression	Percentage against enrolled
UG to PG	-
PG to M.Phil	-
PG to Ph.D	21 students
PG to Post-Doctoral	-
Employed	
▪ Campus Selection	
▪ Other than campus recruitment	75%
Entrepreneurs	05%

36. Diversity of staff:

Percentage of faculty who are graduates	
of the same university	-
From other universities within the state	100%
From universities from other states	-
From universities outside the country	-



37. Number of faculty who were awarded M.Phil, Ph.D, D.Sc., and D.Litt.during the assessment period: No
38. Present details of departmental infrastructural facilities with regard to:
- Library- Central Library in university.
  - Internet facility for staff is available- in the department.
  - Total number of class rooms - 03 class room
  - Students' laboratories - 02 labs
39. List of doctoral, post doctoral students and Research Associates:
- from the host institution /university- Doctoral Students  
Tanu Kukreja, Sujata, Mansi Pahuja, Soamya, Renu Sodhi, Randhir Singh, Sarla Devi, Sunita, Anil Kumar, Neelam, Isha Khanna, Gurpreet kaur, Shobahna
  - from other institutions/universities  
Pushpa, Promila, Bhawna Sharma, Ranjeet Singh, Suresh Kumar, Devender
  - Pre-Ph.D students- RamNath, Radhika
40. Number of post graduate students getting financial assistance from the university:
- 2009 : 08  
2010 : 03  
2011 : 21  
2012 : 22  
2013 : 29
41. Was any need assessment exercise undertaken before the development of new programme(s)? if so, highlight the methodology: N.A.
42. Does the department obtain feedback from:
- faculty on curriculum as well as teaching-learning evaluation? If Yes how does the department utilize the feedback.  
The academic matters are discussed in meetings of staff council, departmental research committee, post-graduate board of studies, faculty of medical sciences
  - Students on staff, curriculum and teaching learning evaluation and how does the department utilize the feedback.

Discussion in classroom and feedback through minor and major exams.

43. List the distinguished alumni of the department(Maximum 10):  
Students of the department have been selected in DRDO, New Delhi, in armed forces and in education departments at college and school level.
44. Give details of student enrichment programmes (special lectures/workshops/ seminar) involving external experts:
  - (a) National Workshop organized on 21 Jan., 2014- funded by university.
  - (b) National conference organized on 20-21 Feb., 2014- funded by university
45. List the teaching methods adopted by the faculty for different programmes:  
Lecture, discussion, seminars, presentations.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?  
During meetings of academic bodies of the department and through continuous inquiries from the students, through group discussions with the students.
47. Highlight the participation of students and faculty in extension activities:  
NSS
48. Give details of “beyond syllabus scholarly activities” of the department:  
Class seminars
49. State whether the programme/department is accredited/graded by other agencies? If yes, give details: No
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:
  - Research, consultancy to the needy segments of the society free of cost.
  - Through Ph.D work of research scholars.
51. Detail five major strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:

### **Strengths**

- Emphasis on quality teaching
- Applied nature of course
- Applied nature of research activities
- Psychological Counseling to needy segments.
- Qualified faculty

### **Weakness**

- Infrastructural Lack
- Lack of faculty
- Lack of class rooms with modern technical facilities.

### **Opportunities & Challenges:**

- Widening the knowledge sphere for broader applicability to the society and high quality research.

52. Future plans of the department:

- Establishing specialty laboratories, increasing quality of research.
- Plans to establish a Neuro-Psychology and Bio-Feed Back lab.
- Plans to strengthen the Councelling Centre.
- Plans to strengthen the inter-disciplinary research.
- Plans to conduct policy researches in the area of mental health.

---

**Faculty of Religious Studies  
The Departmental Profile**

---

## Evaluative Report of the Department of Religious Studies

---

1. Name of Department: Guru Jambheshwar Ji Maharaj Institute of Religious Studies
2. Year of establishment: 1994
3. Is the Department part of a School/Faculty of the University? Faculty  
Yes, Faculty of Religious Studies
4. Names of programmes offered (UG, PG, M.Phil. Ph. D., Integrated Masters; Integrated Ph. D, D.Sc., D.Litt., etc.) Ph. D.  
Ph.D
5. Interdisciplinary programmes and departments involved: NA
6. Courses in collaboration with other universities, industries, foreign institutions, etc.: NA
7. Details of programmes discontinued, if any, with reasons: NA
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System: NA
9. Participation of the department in the courses offered by other departments: NA
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst.Professors/others):

	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual (including CAS &amp; MPS)</b>
Professors	01	---	----
Associate Professors	01	---	01
Asst. Professors	01	01	---
Others	---	---	---

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./M. Phil. students guided for the last 4 years
Dr. Kishna Ram Bishnoi	M.Phil, Ph.D.	Chairman, Associate Professor	Comparative Study on different religious besides delivering lectures on environment and moral ethics.	20 years	Ph. D. (07) Completed-01 On going-06

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors: No
13. Percentage of classes taken by temporary faculty-programme-wise information: No
14. Programme-wise Student Teacher Ratio: NA
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual: The department is provided with the supporting facilities in terms of Office Steno and Peon.
16. Research thrust areas as recognized by major funding agencies: NA
17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.: NA
18. Inter-institutional collaborative projects and associated grants received :  
NA  
a) National collaboration      b) International collaboration

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS,DPE; DBT, ICSSR, AICTE, etc.; total grants received.: NA
20. Research facility/centre with:
  - state recognition: Comparative Study of different Religious
  - national recognition: Comparative Study of different Religious
  - international recognition: Comparative Study of different Religious
21. Special research Laboratories sponsored by/ created by industry or corporate bodies : No
22. Publications:
  - Number of papers published in peer reviewed journals (national/international) : Nil
  - Monographs
  - Chapters in Books: 20
  - Edited Books: 04
  - Books with ISBN with details of publishers: No
  - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.: NA
  - Citation Index-range/average: NA
  - SNIP - NA
  - SJR - NA
  - Impact Factor-range/average - NA
  - h-index - NA
23. Details of patents and income generated: NA
24. Areas of consultancy and income generated: NA
25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad: NA
26. Faculty serving in :
  - a) National committees
  - b) International committees
  - c) Editorial Boards
  - d) any other (please specify) Nil
27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs): NA

28. Student projects: NA
- Percentage of students who have done in-house projects including inter-departmental projects
  - Percentage of students doing projects in collaboration with other universities/industry/institute
29. Awards/recognitions received at the national and international level by: NA
- Faculty
  - Doctoral/post doctoral fellows
  - Students
30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.: NA
31. Code of ethics for research followed by the departments:  
As per University Policy
32. Student profile programme-wise: NA

Name of the Programme (refer to question no.4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female

33. Diversity of students: NA

Name of the Programme (refer to question no.4)	% of students form the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.: No



35. Student progression : No

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	----
PG to M.Phil.	----
PG to Ph.D.	----
Ph.D. to Post-Doctoral	----
Employed	----
▪ Campus selection	
▪ Other than campus recruitment	
Entrepreneurs	----

36. Diversity of staff :

<b>Percentage of faculty who are graduates</b>	
of the same university	----
From other universities within the State	01
From universities from other States	----
From universities outside the country	----

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt. During the assessment period: NA

38. Present details of departmental infrastructural facilities with regard to:

- a) Library: Yes
- b) Internet facilities for staff and students : Yes
- c) Total number of class rooms: 04
- d) Class rooms with ICT facility : NA
- e) Students' Laboratories: NA
- f) Research Laboratories: NA

39. List of doctoral, post-doctoral students and Research Associates:

- a) From the host institution/university --- Nil
- b) From other institutions/universities --- Nil

40. Number of post graduate students getting financial assistance from the university: NA

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. Recently a proposal to start Master Programme in Religious Studies was discussed in P.G. Board of Studies:

42. Does the department obtain feedback from: NA
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
- b) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback? NA
- c) Alumni and employers on the programmes offered and how does the department utilize the feedback? No
43. List the distinguished alumni of the department (maximum 10): NA
44. Give details of students enrichment programmes (special lectures/workshops/seminar) involving external experts.: NA
45. List the teaching methods adopted by the faculty for different programmes.: NA
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?: NA
47. Highlight the participation of students and faculty in extension activities.: NA
48. Give details of “beyond syllabus scholarly activities” of the department: NA
49. State whether the programme/department is accredited/graded by other agencies? If yes, give details.: NA
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:

The department of Guru Jambheshwar Ji Maharaj Institute of Religious Studies was established in 1994. This was established to spread the philosophy of Guru Jambheshwar Ji Maharaj who was a great pioneer and eminent environmentalist of 15<sup>th</sup> century. He evolved the Vedic traditions and spiritualism in the society. The department’s primary thrust is to spread his principles which were based on Upnishads and practical assumptions which were prevailing in the then society. The applicability of those assumptions have become more valuable for which the necessary input of research is required because in today’s world of materialism, the education related to human values and ethics is of utmost necessity and the department has been established for the same very purpose. In a short span of establishment of this department, it has published more than 125 research papers, 10 books and approximately 30 working papers. Dr. Kishna Ram Bishnoi, who is the sole researcher

and Chairman of the department, has attended more than seminars/conferences in the various parts of the country during last five years. For collection of Manuscripts and other research materials, he has also visited many religious places which are somewhere connected to the teachings of Guru Ji. The department is being involved in the comparative studies of various religions like Hindu, Buddhism, Jainism, Sikhism and Islam to bring out the possible solution for the environment which is in dire straits as per the modern day scientists. In this connection, books namely "Religion and Environment" Volume I, II and III have already been published. A comparative study related to Jambhvanī and Guru Garanth Sahib is being carried to extract the similarities and dissimilarities between the two philosophies which were preached by the two great saints of the Medieval India. The department is actively engrossed in imparting the teachings of Guru Jambheshwar Ji to inculcate the moral values and principles amongst the students.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.: NA
52. Further plans of the department:
  - The department plans to start M.A. in Religion and Diploma in Religion.
  - The department plans to start inter-disciplinary research.
  - The department plans to start short-term courses.

---

**Haryana School of Business  
The Departmental Profile**

---

## **Evaluative Report of the Haryana School of Business**

---

1. Name of Department : Haryana School of Business
2. Year of establishment : 1995 (Restructured in 2007)
3. Is the Department part of a School/Faculty of the University?  
Yes, Haryana School of Business is Faculty of the University
4. Names of programmes offered (UG, PG, M.Phil, Ph. D., Integrated Masters; Integrated Ph. D, D.Sc., D.Litt., etc.)  
Programmes offered – 07 (seven)  
Name of Course Offered:
  - a) Master of Business Administration (MBA)- General
  - b) Master of Business Administration (MBA)- Finance
  - c) Master of Business Administration (MBA)-Marketing
  - d) Master of Business Administration (MBA)- International Business
  - e) Master of Commerce (M.COM)
  - f) M.B.A- Part-time (Evening)
  - g) Doctorate of Philosophy (Ph.D)
5. Interdisciplinary programmes and departments involved Name of Department: Haryana School of Business faculty take classes in all Engineering Departments for Humanities & Applied Sciences.
6. Courses in collaboration with other universities, industries, foreign institutions, etc. - NIL
7. Details of programmes discontinued, if any, with reasons : NIL
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System: Semester System with Credit based evaluation System
9. Participation of the department in the courses offered by other departments:
  - a) Name of Department- B.Tech Computer Science and Engineering, IT, Printing Technology, Electronics and communication, Mechanical Engineering, Bio-Medical, Food Technology.
  - b) The following papers are taught in B.Tech programmes of the University:

- a) Economics for Managers;
- b) Fundamentals of Management; and
- c) Entrepreneurship Development.

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asstt.Professors/others):

	Sanctioned	Filled	Actual (including CAS & MPS)
Professors	6	1	15*
Associate Professors	12	10	2*
Asst. Professors	23	21	15
Teaching Associates	-	6	-

\*Fourteen Professors have been promoted under CAS and 02 Associate Professors are also promoted under CAS.

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ M.Phil. students guided for the last 4 years
Prof. M. S. Turan	Ph.D	Professor	Finance	32	5
Prof. H. Bansal	Ph.D	Professor	Marketing	24	3
Prof. Usha Arora	Ph.D	Professor	Marketing	29	3
Prof. S. C. Kundu	Ph.D	Professor	HRM	28	3
Prof. B. K. Punia	Ph.D	Professor	HRM	23	5

Prof. N. S. Malik	Ph.D	Professor	Inter-national Business	24	1
Prof. Karam Pal Narwal	Ph.D	Professor	Finance	21	7
Prof. M.C. Garg	Ph.D	Professor	Finance	21	4
Dr. V. K. Bishnoi	Ph.D	Professor	Marketing	17	7
Prof. P. K. Gupta	Ph.D	Professor	Inter-national Business	20	2
Prof. N.K. Bishnoi	Ph.D	Professor	Economic Analysis	21	2
Prof. Ved Pal Sheera	Ph.D	Professor	Econometrics and Financial Modeling	16	2
Prof. Anil Kumar	Ph.D	Professor	HRM	16	1
Prof. Shabnam Saxena	Ph.D	Professor	HRM	26	4
Prof. Sanjeev Kumar	Ph.D	Professor	Marketing	20	1
Dr. Tilak Sethi	Ph.D	Associate Professor	Inter-national Business	18	1
Dr. Tika Ram	Ph.D	Associate Professor	Marketing	14	-
Dr. Khujan Singh	Ph.D	Asst. Professor	Economics	14	-
Dr. Anju Verma	Ph.D	Asst. Professor	Marketing	12	2
Dr. Deepa	Ph.D	Asst.	Finance and	13	5

Mangla		Professor	Accounting		
Dr. Savita Ubba	Ph.D	Asst. Professor	Marketing	7	-
Dr. Dalbir Singh	Ph.D	Asst. Professor	Marketing	12	-
Dr. Suresh Mittal	Ph.D	Asst. Professor	Finance	14	-
Dr. Shveta Singh	Ph.D	Asst. Professor	Finance	7	-
Dr. Rajiv Kumar	Ph.D	Asst. Professor	Marketing	13	2
Dr. Himani Sharma	Ph.D	Asst. Professor	HRM	6	-
Dr. Mani Shreshtha	Ph.D	Asst. Professor	Marketing	11	-
Dr. Vanita Ahlawat	Ph.D	Asst. Professor	Economics and Bus. Analysis	3	-
Dr. Sangeeta Mittal	Ph.D	Asst. Professor	Marketing and Finance	14	-
Dr. Vijender Pal Saini	Ph.D	Asst. Professor	Marketing and International Business	5	-
Dr. Vandana Singh Gahlan	Ph.D	Asst. Professor	HRM and Marketing	3	-
Dr. Suresh Kumar Bhaker	Ph.D	Asst. Professor	HRM	1	-
Sanjay Singh	M.Com, MBA	Training & Placement Officer	Training & Development	15	-



12. List of senior Visiting Fellows, adjunct faculty, emeritus professors:  
No such appointment is made, but following visited on request:-

<b>Name</b>	<b>Designation</b>
Prof. Jagdeep S Chhokar	Former Director, IIM, Ahmadabad
Dr. Anil Wali	MD, FITT, Indian Institute of Technology, Delhi
Prof. B. K. Mohanty	IIM, Lucknow
Prof. N. P. Singh	MDI, Gurgaon
Dr. Sachin S Vernekar	Director, Bharti, Vidyapeeth University Institute of Management and Entrepreneurship, Pune
Sh. Milind Kamole	President, DICCI, Pune
Sh. Randeep S Jauhar	CEO, Jamuna Auto Industries Ltd, Yamna Nagar
Sh. H. S. Narula	CMD, D. S. Construction Ltd., Delhi
Prof. Kuldeep Dhindsa	Former, Director General, Jan Nayak Ch. Devi Lal Vidyapeeth, Sirsa
Prof. Sujit K Basu	Former Director, MDI, Gurgaon
Sh. Tej K Magazine	Director, Tram Services Pvt. Ltd., Chandigarh
Prof. Yogender Verma	Institute of Management Studies, H. P. University, Shimla
Prof. J.A. Khan	Dean of Colleges, Punjabi University, Patiala
Sh. Suman Jolly	CMD-RMS Pvt Ltd. Chandigarh
Sh. Pawan Munjal	CEO, Hero MotoCorp Ltd., Delhi
Sh. P. K. Tripathi	Chief Executive Officer, UnitechSai Limited, Gurgaon
Sh. Rakesh Goyal	Executive Director, DCM Textiles, Hisar
Mr. D. R. Dutta	V.P., Tecumseh Products Company

13. Percentage of classes taken by temporary faculty-programme-wise information:

<b>Name of programme</b>	<b>Percentage of classes taken</b>
a) Master of Business Administration (MBA)- General	Less than 15 percent
b) Master of Business Administration (MBA)- Finance	
c) Master of Business Administration (MBA)-Marketing	
d) Master of Business Administration (MBA)- International Business	
e) Master of Business Administration (MBA) Part Time- Evening	Nil
f) Master of Commerce (MCOM)	Less than 10 percent
g) Doctorate of Philosophy (PhD)	Nil

14. Programme-wise Student Teacher Ratio: 11:1
- I. Master of Business Administration (MBA)
  - II. Master of Business Administration (MBA)- Finance
  - III. Master of Business Administration (MBA)-Marketing
  - IV. Master of Business Administration (MBA)- International Business
  - V. Master of Commerce (M.COM)
  - VI. M.B.A- Part time (Evening)
  - VII. Doctorate of Philosophy (Ph.D)

15. Number of academic support staff (technical) and administrative staff:

<b>Position</b>	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual</b>
Technical Assistant GR-1	1	1	0
Supdt.	-	-	1

Deputy Supdt.	2	2	0
Assistant Cum DEO	4	4	1*
Storekeeper	1	1	0
Clerk-cum-JDEO	4	4	2+1*
Lab Technician	-	-	1
Dafitri	1	1	-
Steno Typist	4	4	1
Asst. Registrar	1	1	0
T&PO	1	1	1
Lab Attendant	1	1	1
Peon	3	3	2+1*
Total	23+1 = 24	23	9

\*One Assistant Cum DEO, one clerk, and one cleaner are through contractor

16. Research thrust areas as recognized by major funding agencies:  
Special Assistance Project (SAP-III) at DRS-II level / Rs. 40,20,000/-  
by UGC during 2007-2012 vide UGC letter no. F5/82/2007 (SAP-III)  
dated 18 Oct., 2007  
Major thrust Areas-Human Resource Planning, Rural Marketing  
Financial Planning and Control  
Major Funding Agencies- UGC, AICTE, Haryana State Finance  
Commission, Chd,GJU S&T, Hisar
17. Number of faculty with ongoing Projects from a) national b) international  
funding agencies and c) Total grants received. Give the names of the  
funding agencies, project title and grants received project-wise:

Name of the teacher	Title of the project	Duration	Funding Agency	Amount
Prof. B.K.Punia	Performance Appraisal of Academia in Indian University system : A Diagnostic Analysis	April 2007 – March 2010	UGC	Rs. 5,06,000/-

Prof. Vinod Bishnoi	Understanding Rural Consumers & impact of Marketers Efforts on their mindset A case study of select consumer products in Haryana	April 2007 – March 2010	UGC	Rs. 4,37,400/-
Dr. Tika Ram & Dr. Dalbir Singh	A Study of Social Marketing Programme on HIV/AIDS in Haryana	2011-2013	UGC	Rs. 6,11,600/-
Prof. Karampal Narwal	An Empirical Investigation of relationship between corporate Intellectual capital and Financial performance reporting system	2010-12	UGC	Rs. 6,80,000/-
Prof. Pardeep Gupta	A Study of Business Forecasting in Indian Corporate Sector	2012-14	UGC	Rs. 4,53,000/-
Dr. Deepa Mangala	The Influence of Personality and Risk Tolerance on Behavioural Biases of Individual Equity Investors in Northern India	2 Years (Apr 2013 – Mar 2015)	UGC	Rs. 6,29,600/-
Dr. Anju Verma & Dr. Ubba Savita (Minor research project)	Perception & expectation of the Stakeholders towards retailing as a career option	2009-10	GJU S&T, Hisar	Rs. 30,000/-
Dr. Suresh Mittal	A Study of Investment Pattern of Households in Haryana	2012-13	GJUS&T, Hisar	Rs. 40,000/-
Dr. Khujan Singh	Farmer's Participation towards FDI in Retail in	2012-13	GJU S&T	Rs. 40,000/ -

	India			
Prof. N. K. Bishnoi	A Study on Economic Analysis and Normative Assessment of State Resources.	2011-12 to 2015-16	4 <sup>th</sup> State Finance Commission, Haryana	Rs. 1,20,000/-
Prof. N. K. Bishnoi, Prof. V. K. Bishnoi	Performance Appraisal of Implementation of SarvShikshaAbhiyan in Haryana	2013-14	Haryana School Shiksha Pariyojana Parishad	Rs. 5,50,000/-
Prof. N. K. Bishnoi	Assessment of Competitiveness of Hisar using Porter's Diamond Framework Approach	Feb 2014	UGC Innovative Research Project	Rs. 1,00,000/-
Dr. N. K. Bishnoi	Impact Assessment of IGDWS in Hisar	2011-12	Engineer in Chief, Public Health Haryana	Rs. 2,93,000 /-
Prof. Ved Pal Sheera	A Study of Productivity and Efficiency of Commercial Banks in India during Pre and Post-liberalization Environment"	April 01, 2007 to March 31, 2010	Major UGC Research Project	Rs. 4,50,000/-
Prof. Ved Pal Sheera	A Study of State Finances of Haryana	April 01, 2007 to March 31, 2010	Major UGC Research Project	Rs. 2,73,000/-

18. Inter-institutional collaborative projects and associated grants received:

- a) National collaboration – NIL
- b) International collaboration– NIL

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received:

<b>Coordinator, SAP, HSB</b>	<b>Special assistance project (SAP) at DRS-II level</b>	<b>April 2007- March 2012</b>	<b>UGC</b>	<b>Rs. 40,20,000/-</b>
------------------------------	---	-------------------------------	------------	------------------------

20. Research facility/centre with:
- State recognition –Yes, for data basis and learning resources
  - National recognition –Yes, for data basis and learning resources
  - International recognition - No
21. Special research Laboratories sponsored by/ created by industry or corporate bodies : NIL
22. Publications:
- Number of papers published in peer reviewed journals (national/international)
  - National: 487
  - International: 23
  - Monographs- NIL
  - Chapters in Books – 12
  - Edited Books- 9
  - Books with ISBN with details of publishers - 7

#### Books Published

Dr. Usha Arora

- Banking in India – Marketing Practices and strategies, ISBN NO 978-81-8484-263-0, 2013
- Management of Credit Schemes in Banks, Regal Publications, New Delhi.(2012) ISBN- 978-81-8484-100-8

Dr. Karam Pal Narwal

- Text book on ‘Business Management and Organizational Behaviour’, published by I K International Publishers, New Delhi, published in June 2011. ISBN NO 978-93-80578-99-6

- Text Book on ‘The Management Teacher’ published by Vayu Education of India Pvt Ltd, New Delhi, published in August 2009, ISBN NO 978-93-80097-51-0

Anil Kumar

- Micro and Macro Economics, Vayu Education of India, 2009 , New Delhi, ISBN NO 978-93-80097-18-3

Dr. Dalbir Singh

- Book published with title “ CRM in Service Organizations-CRM at Infancy in INDIA” LAP Lambert Academic Publishing Gmbh Company- Heinrich Saarbrueken Germany), ISBN NO 978-3-8484-0138-3

Dr. Sangeeta Mittal

- Cost Accounting by Thakur Publisher, ISBN: 978-93-82249-57-3
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.
- Citation Index-range/average : upto 255
- SNIP -
- SJR -
- Impact Factor-range/average – upto 1.75
- h-index – upto 10

23. Details of patents and income generated: NIL

24. Areas of consultancy and income generated:

<b>Name</b>	<b>Area of Consultancy</b>	<b>Income generated</b>
Prof. S.C.Kundu Prof. N K Bishonoi	Readership Survey	2,40,000/-
Prof. V. K. Bishonoi, Prof. Karam Pal	Stake Holder’s Perception and Services Quality Perception of Bharat Heart Institute,	55,000/-

Narwal	Dehradun in progress during current Five Year Plan	
--------	--	--

25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad:

Senior faculties of HSB are selected to visit institutions and industries in India and abroad to act as keynote speakers in the conferences, seminars chair-technical sessions, acted as resource persons in the refresher courses and orientations. Faculty invited as members of various academic boards and bodies, committees and delivered lecturers in the universities.

26. Faculty serving in :

- a) National committees
- b) International committees
- c) Editorial Boards
- d) any other (please specify) -

Senior faculties of HSB are members of boards and committees constituted at national level for different academic purpose.

Faculty	National committees	International committees	Editorial boards	Any other
Prof. M.S. Turan	Life Member of All India Commerce Association  Life Member of the Society for Management Education (TSNE).  Member of PG Board of Studies, Department of Business Administration, CDLU, Sirsa, Haryana (Dec. 2007 to 23 Dec. 2011).  Member of Board of	Member of the Institute of Financial Consultants (U.S.A.) and Certified Financial Consultant (CFC)	Member Editorial Advisory Panel of the Journal of Banking, Information Technology and Management, Jaipur (India)  Member of Editorial Advisory Board of KAIM Journal of Management and Research	



	<p>Post-Graduate Studies and Research in Business Management, GJUS&amp;T, Hisar (4 June 2009 to till date).</p> <p>Member of Board of Studies of the Department of Accounting &amp; Finance, Central University of Himachal Pradesh, Dharamsala (H. P) for a period of three years w.e.f. 4<sup>th</sup> July, 2012.</p> <p>Member of PG Board of Post-Graduate Studies &amp; Research in Commerce, Ch.DeviLal University, Sirsa (11 June 2012 to 10 June 2014).</p> <p>Member Faculty of Business Studies, Punjabi University, Patiala (27<sup>th</sup> Oct. 2012 to 26.10.2014).</p> <p>Member of PG Board of Post-Graduate Board of Studies in Management Studies, M.D.University, Rohtak (14<sup>th</sup> July 2013 to 13<sup>th</sup> July 2015).</p>		<p>(Bi-annual Journal of KAIM – Charkhi Dadri)</p> <p>Member of Editorial Board of Management Vista Journal published by GGS Institute of Management, Yamunanagar.</p> <p>Member of Editorial Advisory Board, HSB Research Review, A Bi-annual Refereed Journal of Haryana School of Business, GJUS&amp;T, Hissar.</p> <p>Member, Editorial Advisory Board on “PARBANDHAN” Journal published by Modi Institute of Management, Modi Nagar.</p> <p>Member of Referee Board, GYAN Management: An International Bi-Annual Refereed Journal of Management &amp;</p>	
--	--	--	--	--

			Technology, Mohali (Punjab).  Member Editorial Board of Iqra Inter- national Management Journal	
Prof. S.C. Kundu	Life Member of All India Commerce Association, India.	Member of EMERALD Group Publishing Ltd. (Electronic Management Research Library Database), U.K.		Currently Member of Post- Graduate Board of Studies in Management Studies, M.D. University, Rohtak.  Currently Member of Under- Graduate Board of Studies, Deptt. of Commerce MDU, Rohtak.  Currently Member of Under- Graduate Board of Studies, Deptt. of Management, KUK, Kuruksh-etra.
Prof. Usha Arora				Member of P.G.B.O.S in Management Deptt. , BPSM Vishwav- idyala Khanpur

				<p>kalan, Sonipat</p> <p>Member of U.G.B.O.S in Management Deptt., BPSM Vishwav- idyala Khanpur kalan ,Sonipat</p>
<p>Prof. B. K. Punia</p>	<p>Member, Expert Committee, University Grants Commission (UGC), New Delhi.</p> <p>Member,Expert Committee, All India Council for Technical Education, New Delhi.</p> <p>Member, Expert Committee, Distance Education Council (DEC), New Delhi.</p> <p>Member, Selection Committee in different Universities and Institutes. 3-03-2012).</p> <p>Member, 1<sup>st</sup> Academic Council, Central University of Gujrat, Gandhinagar (Gujrat)</p> <p>Member, Advisory Committee, SAP, Tejpur University (Central University), Napaam, Assam.</p> <p>Member, Advisory Committee,</p>			

<p>Academic Staff College (ASC), Punjabi Uni., Patiala.</p> <p>Member, Advisory Committee, Academic Staff College, Uni. of Jammu, Jammu.</p> <p>Member, Advisory Committee, Academic Staff College, Kumaun Uni., Nainital.</p> <p>Member, Advisory Committee, Academic Staff College, J.N.V. Uni., Jodhpur.</p> <p>Member, Advisory Committee, Academic Staff College, M. D. S. Uni., Ajmer.</p> <p>Member, Advisory Committee, Academic Staff College, K. U. Kurukshetra.</p> <p>Member, Advisory Committee, ASC, BPS Women Uni., Khanpur Kalan, Sonapat.</p> <p>Member, Faculty of Business Studies, Punjabi University, Patiala.</p> <p>Member, Board of Studies in Management Studies, University of Rajasthan, Jaipur.</p> <p>Member, Committee</p>			
--	--	--	--

	<p>of Courses in Business Administration, M.L.S. Uni., Udaipur.</p> <p>Member, Under-Graduate Board of Studies in Commerce, K.U. Kurukshetra.</p> <p>Member, Board of Studies in Management, G.H. Rasoni College of Engineering (An Autonomous College), Nagpur, Maharashtra.</p> <p>Member, Indian Society for Training and Development, New Delhi.</p> <p>Member, Bhabha Institute of Management and Sciences, Udaipur.</p> <p>Fellow, Management Studies Promotion Institute, New Delhi.</p> <p>Fellow, United Writers Association, Chennai.</p>			
Prof. Karam Pal Narwal	<p>Member of All India Commerce Association, India.</p> <p>Member of All India Management Association, India.</p> <p>Member, Haryana Economic Association</p>			
Prof. M.C.	Presently, Member, PG Board of Studies,			

Garg	Dept. of Commerce, Punjabi University, Patiala. Presently, Member, DRC, Dept. of Management, The IIS University, Jaipur.			
Prof. Anil Kumar	Indian Society of Labour Economics  Haryana Economic Association  Indian Economic Association			

27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs):

HSB organized several activities and workshops to refresh faculty and research scholars, students time to time in which senior faculties delivered lectures. Except this all faculty members have attended oriented and refresher courses in the Academic Staff College, GJUS&T, Hisar as well as outside universities.

28. Student projects:
- Percentage of students who have done in-house projects including inter-departmental projects– more than 10% of the students have done in-house projects
  - Percentage of students doing projects in collaboration with other universities/industry/institute-100% as all the students done Summer Training projects in collaboration with the University.
29. Awards/recognitions received at the national and international level by:
- Faculty -
  - Doctoral/post doctoral fellows
  - Students
30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:

Seminars/Conferences/	Source	of	outstanding
-----------------------	--------	----	-------------

<b>Workshops</b>	<b>funding (national/ international)</b>	<b>participants</b>
2 <sup>nd</sup> National Conference on Business and Management organized on March 26-27 2010.	GJUS&T, Hisar	Prof. Sultan Singh, CDLU, Sirsa Dr. Tika Ram, HSB,
One Week Workshop on “Research Methods in Business Management” Organized by HSB, GJUS&T from March 3-8, 2010.	UGC –SAP	Dr. Suresh Mittal, Assistant Professor, GJUS&T, Hisar, Dr. Khuzan Singh
3 <sup>rd</sup> Annual National Conference on “Business and Management” on March 10-11, 2011.	GJUS&T, Hisar	Prof. B. S. Bodla, KUK, Prof. Manjeet Singh, PU, Patiala
National Seminar on “Management of Higher Technical Education: Quality Challenges and Ethical Dilemmas” organized on March 22, 2011 at HSB.	ICSSR	Prof. H. L. Verma, HSB, GJUS&T, Hisar Prof. B. C. Sharma, Jammu University
4 <sup>th</sup> National Conference on “Business and Management” on Feb 9-10, 2012.	GJUS&T, Hisar	Prof. Jagdish S. Chhokar, Prof. B. S. Bodla, Prof. Kuldeep Singh, Prof. M. K. Garg.
One week in-house Workshop on “Research Methods in Business Management” organized at HSB, GJUS&T from 20 March to 26 March, 2012	UGC -SAP	Dr. Deepa Mangla, Assistant Professor, GJUS&T, Hisar
5 <sup>th</sup> Annual Conference on “Business and Management” on February 7-8, 2013.	GJUS&T, Hisar	Sharmila Gunpal, Assistant Professor, Department of Psychology, Dayananad P.G. College, Hisar Seema Singh, Institute of Mgt. Studies and Mgt. Research, IMSAR, MDU, Rohtak

6 <sup>th</sup> Annual Conference on “Business and Management” on February 6-7, 2014.	GJUS&T, Hisar	Meena Sharma, Prof., University Business School, Panjab University, Chandigarh S. C. Davar, Prof., Department of Commerce, KUK
---	---------------	---

31. Code of ethics for research followed by the departments:
- Department comply with all kind of protections regarding all intellectual property rights and literary work. Besides Ph.D level scholars abide by the code of ethics provided in Ph.D. ordinance and other regulatory bodies.
32. Student profile programme-wise:

Name of the Programme (refer to question no.4)		Applica- tions Received	Selected		Pass percentage		
			Male	Female	Male	Female	
MBA General	2009	270	166	79	88%	86%	
	2010	273	162	75	87%	87.5%	
	2011	220	117	71	87%	86%	
	2012	240	102	80	86.7%	87%	
	2013	250	112	50	81.70%		
M.COM	2011	57	8	17	88%	88.5%	
	2012	70	13	24	88.5%	88%	
	2013	59	15	25	83.25%		
MBA Evening	2009	13	11	2	89%	90%	
	2010	Zero Year					
	2011	13	12	1	85%	90%	
	2012	Zero Year					
	2013	Zero Year					
Ph.D	2009	274	9	15			
	2010	295	18	23			
	2011	346	15	25			
	2012	320	28	36			
	2013	221	Pursuing				



33. Diversity of Students :

Name of the Programme (refer to question no.4)		% of students from the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
MBA General	2009	Nil	100*	Nil	Nil
	2010	1	98	Nil	2%
	2011	Nil	98	Nil	2%
	2012	Nil	97	Nil	3%
	2013	Nil	100	Nil	Nil
M. COM	2011	Nil	100	Nil	Nil
	2012	Nil	100	Nil	Nil
	2013	Nil	100	Nil	Nil
MBA Evening	2009	Nil	100	Nil	Nil
	2010	Nil	100	Nil	Nil
	2011	Nil	100	Nil	Nil
	2012	Nil	100	Nil	Nil
	2013	Nil	100	Nil	Nil
Ph.D	2009	Nil	100	Nil	Nil
	2010	5	95	Nil	Nil
	2011	9	91	Nil	Nil
	2012	2	98	Nil	Nil
	2013	10	90	Nil	Nil

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise:

<b>Name of Examination</b>	<b>Students clear examination</b>
Civil Services and Defense Services	More than 15
NET	More than 80

35. Student progression:

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	N.A.
PG to M.Phil	N.A.
PG to Ph.D.	5%
Ph.D. to Post-Doctoral	N. A.
Employed <ul style="list-style-type: none"> <li>▪ Campus selection</li> <li>▪ Other than campus recruitment</li> </ul>	65% 15%
Entrepreneurs	20%

36. Diversity of staff:

<b>Percentage of faculty who are graduates</b>	
of the same university	6.25 (2/32)
From other universities within the State	71.8 (23/32)
From universities from other States	21.8 (7/32)
From universities outside the country	0 (0/32)

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt. During the assessment period: Ph.D-08

38. Present details of departmental infrastructural facilities with regard to:

a) Library

<b>Books</b>	
<b>Title</b>	<b>Total Books</b>
10966	14341

Journals : 34

- b) Internet facilities for staff and students – Yes, Internet facilities for faculty, students and staff for research.
- c) Total number of class rooms – 18
- d) Class rooms with ICT facility - 11
- e) Students’ Laboratories - 4
- f) Research Laboratories -3

39. List of doctoral, post-doctoral students and Research Associates:

- a) From the host institution/university : 158 Research Scholars

<b>Reg. No.</b>	<b>Name of Research Scholar</b>	<b>Name of Proposed Supervisor</b>	<b>Ph.D. title</b>
0910901/JRF	Renu Bala	Dr. Anju Verma	Growth, Efficiency and Productivity of Life Insurance in India: A Comparative Study in Pre and Post Liberalization

14.05.2010

<b>Reg.No.</b>	<b>Name of Research Scholar</b>	<b>Name of Proposed Supervisor</b>	<b>Ph.D. title</b>
10109001	Priyanka	Dr. Shabnam Saxena	Organisational Stress Among IT Sector Employees: Causes, Effects and Coping Strategies
101090	Neetu Choudhary	Prof. B.K. Punia	A Study of Organisational Citizenship Behaviour and Organisational Justice in Indian Service Sector
10109002	Meenakshi Dahiya	Prof. H.L. Verma	Consumers Perception towards Apparel Store Brands: A Study of Organized Retailers in National Capital Region
10109003	Vandana Lohia	Dr. Deepa Mangala	Stock Market Calendar Anomalies- A Study of Emerging Stock Markets
10109004	Dimple	Prof. M.S. Turan	Convergence with International Financial Reporting Standards: Challenges and Opportunities
101090	Rajni	Dr. Karam Pal	Sectoral Comparison of TQM Practices in Indian Banking Industry
10109006	Sushila Kumari Soriya	Dr. Karam Pal	Intellectual Capital Reporting System in Indian Corporate Sector
10109005	Parul	Dr. Anil Kumar	Women Entrepreneurship in Small Enterprises : A Study of Motivation and Business Problems

18.11.2010

<b>Sr.No.</b>	<b>Name of Research Scholar</b>	<b>Name of Proposed Supervisor</b>	<b>Ph.D. Title</b>
10109007	Rashmi Jain	Dr. N.K. Bishnoi	Impact of Corporate Reputation on Financial Performance in India
10109008	Yogesh Kumar	Dr. Anil Kumar	Relationship of Social Security Measures with Job Satisfaction in Textile Industry in Northern India
10109009	Sucheta	Prof. M.S. Turan	Impact of Working Capital on Profitability of Indian Manufacturing Sector
10109010	Babita	Prof. M.S. Turan	Shareholders' Perspective on Corporate Governance Practices in India
10109011	Rina	Prof. S.C. Kundu	Management of Work-Life Conflicts among Working Couples
10109012	Ruhee Mittal	Dr. Karam Pal	Association between Volatility Index (VIX) and S&P CNX Nifty in India
10109013	Jyoti	Dr. N.K. Bishnoi	Impact of Corporate Governance on Performance of Indian firms
10109014	Pooja Sharma	Dr. H.L. Verma	Job Satisfaction, Motivation and Commitment Among Teachers: A Study of Technical Education in Haryana
10109015	Brij	Dr. Anju	Implications of Self and Organizational Efficacy for

	Sharma	Verma	Employee Attrition: A Study of Indian pharmaceutical Industry
10109016	Ajay Kumar	Dr. Vinod Kumar Bishnoi	Exploration of Brand Personality Dimensions and its relationship with Human Personality- A Study with reference to Motor Bikes
10109017	Rajat Singla	Dr. N.S. Malik	Technical Approach to Equity Prices: A Study of Leading Stock Markets Worldwide
10109018	Monika Dhawan	Dr. Deepa Mangala	Stock Market Volatility: An Empirical Study of Indian Stock Market
10109019	Ashima Chawla	Dr. Shabnam Saxena	Knowledge Management Practices in Higher Education in India
10109020	Shiyaz Gulati	Dr. Shabnam Saxena	Role of Mentoring in Employee Development : A Study of IT Sector
10109021	Hanika Wadhwa	Dr. Ved Pal	Asset Pricing Models : Evidence from Indian Stock Market
10109022	Shweta	Dr. N.S. Malik	International Portfolio Diversification and its Impact on Portfolio Performance
10109023	Deepak Singh	Dr. Harbhajan Bansal	Impact of Retail Servicescape on Consumer Behaviour
10109024	Punkaj Kumar	Dr. Harbhajan Bansal	Impact of Point-of-Purchase Display on buying behaviour

10109025	Charu Bharti	Dr. Harbhajan Bansal	Opportunities and Challenges in Marketing through Social Networking Sites
10109026	Ashu Jain	Dr. Harbhajan Bansal	Study of Marketing efficacy of Pulse Polio programme In India
10109027	Swati Chawla	Prof. M.S. Turan	Performance Evaluation of Indian Banks: A Sectoral Comparison
10109028	Monika Rani	Dr. Savita Ubba	Role of Environmental awareness in Green Purchasing Behaviour : A Study of Northern India
10109029	Naval Garg	Dr. B.K. Punia	Exploration of High Performance work Practices in Indian Organisations

03.03.2012

<b>Sr.No.</b>	<b>Name of Scholar</b>	<b>Name of Research Supervisor</b>	<b>Ph. D. Tittle</b>
12109001/ JRF	Neha Goyal	Dr. Suresh Mittal	Fundamental Pricing Of Equity Shares In India
12109002	Sapna Gupta	Dr. Vinod Kumar Bishnoi	Consumers' Perception Towards Environmental Issues With Special Reference To Recycling Of Products

12109003	Radha Garg	Dr. Sanjeev Kumar	Adoption Of Internet Banking: A Study Of Haryana And National Capital Region (Ncr)
12109004/ JRF	Bindia Jain	Prof. M.S. Turan	Credit Management In Micro, Small And Medium Enterprises; A Study Of Industrial Hubs Of Haryana
12109005	Virender Kumar Dahiya	Dr. Sanjeev Kumar	Role Of Self-Image In Brand Choices: A Study With Reference To Cosmetics
12109006	Manoj Kumar	Dr. Rajiv Kumar	Service Quality Gaps In Retail Outlets In Haryana
12109007	Ashwani Deswal	Dr. Narendra Kuamr Bishnoi	“ Impact Of Micro- Credit On Economic Well- Being Of Borrowers; A Study Of Haryana “
12109008	Vijeta Kukreja	Prof. M. S. Turan	Role Of Citizen Charter In Service Delivery And Organisational Competency: A Study Of Indians Banks
12109009/ JRF	Anita Makkar	Dr. Shveta Singh	Financial Viability And Distress Analysis Of Indian Commercial Banks
12109010	Neelam Boora	Prof. Usha Arora  Dr. Shabnam Saxena	Satisfaction Of Management Students And Academicians In Universities Of Haryana
12109011	Suljhan	Dr. Pardeep Gupta	Soft Tqm Practices In Indian Pharmaceutical



			Sector
12109012	Sandeep Mann	Dr. Vinod Kumar Bishnoi	Influence Of Reference Group On Purchasing Behaviour Of Mobile Phone Consumers In Rural Haryana
12109013	Mahender	Prof. H. L. Verma	Trading Volume And Stock Return Volatility In Indian Stock Market
12109014	Anil Kumar	Dr. Ved Pal Sheera	Socio- Economic Dynamics Of Women In Rural Haryana
12109015	Satbir Singh	Dr. Ved Pad Sheera	Socio – Economic Performance Of Indian States
12109016	Suman	Dr. Rajiv Kumar	Consumer Buying Behaviour Towards Fmcg In Organized Retail Outlets- A Case Study Of Households In Haryana
12109017	Pardeep Singh	Dr. Anju Verma	Employees’ Potential Mapping Practices In Indian It Sector
12109018	Shweta	Dr. Karam Pal Narwal	Effect Of Mergers And Acquisitions Productivity Of Banks: A Study Of Voluntary And Compulsory Mergers In India
12109019	Dinesh Humar	Prof. Harbhajan Bansal	Influence Of Cause Related Marketing On Consumers’ Buying Behaviour
12109020	Usha Rani	Dr. Ubba	Consumer Satisfaction

		Savita	Towards Catering Services In Indian Railways
12109021/JRF	Pooja Rani	Dr. Shabnam Saxena	Employee Engagement And Job Satisfaction In Indian Financial Sector
12109022/JRF	Neha Gahlawat	Prof. S. C. Kundu	Innovative Hr Practices And Firm Performance: A Study Of Indian Organizations
12109023	Sumita Chahal	Prof. B. K. Punia	Relational Analysis Of Employee Empowerment And Visioning Effectiveness In Indian Organisations
12109024	Ankita Bhardwaj	Prof. B. K. Punia	Cultural And Personality Variations In Non-Belt And Belt Holder Employees Of Six Sigma Certified Companies
12109025	Sandeep Kumar	Dr. Vinod Kumar Bishnoi	Consumer Attitude Towards Online Retailing: A Study Of National Capital Region
12109026	Arpan Yadav	Dr. Rajiv Kumar	Comparative Study Of User And Non Users Of Online Shopping: A Case Study Of Haryana
12109027	Mukesh Malik	Dr. Usha Savita	Influence Of Atmospherics On Retail Store Attractiveness And Purchasing Behaviour: A Study Of Select Organized Retail Outlets
12109028	Deepti Dabas	Prof. Usha	Tourist Destination Image Of Delhi: An Analysis Of

	Hazarika	Arora	Perceptions Across Three Tiers
12109029	Anand Bhardwaj	Prof. B.K. Punia	Assessment Of Managerial Competencies Across Working And Aspiring Managers.
12109030	Ankur	Dr. Sanjeev Kumar	Consumer Perception Regarding Healthcare Facility; A Comparative Study Of Government And Private Hospitals In Haryana
12109031	Himanshi Rana	Prof.B. K. Punia	Deviant Workplace Behaviour And Organizational Role Stress In The Corporate Sector

**29.08.2012**

<b>Regd. No.</b>	<b>Name of Student</b>	<b>Name of Supervisor</b>	<b>Title of Synopsis</b>
121090030	Shruti Sharma	Dr. Ubba Savita	Cooperation, Loyalty and Relationship Quality in Franchised Indian Education Sector
2121090033	Mamta Sharma	Dr. Deepa Mangla	Influence of Behavioural and Fundamental factors on Individual Equity Investors' Decision Making in India
12109034	Anushuya	Dr. Karam Pal Narwal	Tax Reforms in India: A Study with Reference to Goods and Services Tax and Direct

			Tax Code
121090035	Dalbir	Dr. M.C. Garg	Corporate Governance and Firm Performance in Indian Companies
121090036	Vikas Bhargaw	Dr. M.C. Garg	Determinants of Dividend Policies in Indian Corporate Sector
6121090037	Annu Dahiya	Dr. Rajiv Kumar	Advertising Effectiveness in Indian Tourism Sector
121090038	Sapna	Dr. Anil Kumar	Labour Welfare Measures in the Industrial Sector of Northern India
121090039	Ritu Singla	Dr. Khujan Singh	Growth and Performance of Select Capital Market Intermediaries in India
121090040	Amit Kumar	Prof. B.K. Punia	A Study of Industrial Health and Safety Climate in Automobile Sector
121090041	Lovika	Dr. S.C. Kundu	Effects of Socially Responsible HRM Practices on Employees' Outcomes: A Comparative Study of Indian and Multinational Companies
121090042	Nisha	Dr. Shabnam Saxena	Employer Branding as HR Strategy: A Study of Existing and Potential Employees in

			Indian Organisations
121090043	Sangeeta	Dr. Rajiv Kumar	Marketing Practices Over Cyclical Variations: A Strategic Approach for Medical Tourism in India
121090044	Sheetal	Dr. Rajiv Kumar	Export Competitiveness of Indian Sugar Industry
121090045	Pooja	Dr. Anju Verma	A Study of Hidden Competencies and Academic Achievement of Aspiring Professionals
121090046	Neelam Rani	Dr. Tilak Sethi	Promotional Strategies of Organized Retail: A Study of National Capital Region
121090047	Vikas Kumar	Dr. Khujan Singh	Accessibility and Impact of Financial Inclusion on Rural and Semi Urban Households in Haryana
121090048	Prof. B.K. Punia	Effectiveness of Training and Development Programmes Organized by Academic Staff Colleges in India	
121090049	Manju Devi	Dr. Shabnam Saxena	Employees' Participation in Management: A Study of Automobile Sector in Haryana
121090050	Vandana Sabharwal	Dr. Sanjeev Kumar	Role of Women in Purchase Decision Making of Consumer

			Durables
121090051	Sandeep Kumar	Dr. Mahesh Chand Garg	Corporate Social Reporting Practices: A Study of Select Indian Companies
121090052	Vakil Singh	Dr. Sanjeev Kumar	Role of Teenagers in Family Purchase Decision Making: A Comparative Study of Rural and Urban Haryana
121090053	Praveen Kumar	Dr. Vinod Kumar Bishnoi	Consumers' Perception and Purchase Intention towards Organic Food Products
121090054	Raman Deep	Dr. Karam Pal Narwal	Intellectual Capital and Financial Performance: A Comparative Study of Service and Manufacturing Industries in India
121090055	Laxmi	Dr. Tika Ram	Influence of Self Efficacy and Work life Balance on Health Promoting lifestyle of Female Employees
121090056	Rajbala	Dr. Pardeep Gupta	A Study of Marketing Strategies in Technical Educational Institutions
121090057	Archana Mor	Dr. S.C. Kundu	Effects of HR Practices on Firm Performance: A Study of Firms Operating in India

121090058	Pooja	Prof. M.S. Turan	An Appraisal of Non-Performing Asset Management Strategies of Banks Operating in India
121090059	Kavitri	Prof. B.K. Punia	Career Orientation and Cultural Attitude of Aspiring Managers
121090060	Amreek Singh	Dr. Sanjeev Kumar	Brand Aspirations of Rural Consumers: A Study of Perception and Attitude towards Select Branded Products
121090061	Rinku	Dr. Tika Ram	Pro-Environmental Purchase Behaviour: A Study of Selected Products
121090062	Pratistha	Dr. Pardeep Gupta	An Analysis of Distributors' Perception Regarding Network Marketing Organizations in India
121090063	Suman Devi	Dr. Shabnam Saxena	A Study of Relationship Between Job Satisfaction and Emotional Intelligence In Indian Automobile Sector
121090064	Parveen Kumar	Dr. Pardeep Gupta	A Study of Performance and Financial Problems Faced by Micro, Small and Medium Enterprises in Haryana
121090065	Khem	Dr. Tika	A Study of Road Safety

	Chand	Ram	Behaviour in Haryana
121090066	Mohan Thakral	Dr. Suresh Mittal	Study of Price Discovery and Risk Management in Indian Commodity Derivative Market

02.09.2013

<b>Name of student</b>	<b>PH.D. Regn No.</b>	<b>Name of Supervisor</b>	<b>Title of Synopsis</b>
Anju Kumari	12108001	Dr. M.C. Garg	A Study of Gender Diversity and Employees' Attitude towards Working Women in Indian Organizations
Parul Yadav	12108002	Dr. Vinod Kumar Bishnoi	Demographic and Lifestyle Characteristics Associated with Dietary Supplement Use.
Neetu Munjal	12108004	Dr. vinod Kumar Bishnoi	Food Related Lifestyle-A Segmentation Approach Towards Convenience Food.
Inderpreet Kaur	12108006	Dr. Ved Pal Sheera	An Assessment of the use of information Technology among Employees and Customers of Banking Sector
Savita Gupta	12108007	Dr. Khujan Singh	Growth and Performance of Microfinance Institutions of SAARC



			Countries
Tanvi Rana	12108009	Dr. S. C. Kundu	Human Resource Management Practices in Foreign Collaborates in India
Vinod Kumar	12108010	Dr. Rajiv Kumar	Indian Exhibition Industry- A Study of Constraints for Visitors towards attending Exhibitions in NCR
Nidhi Gaba	12108011	Dr. S. C. Kundu	Determinants and Outcomes of Employees' Intention to Quit: A Study of Service Industry in India
Surbhi Goyal	12108012	Dr. Tilak Sethi	Export Opportunities and Challenges: A Study of Indian Firms of National Capital Region
Shikha Brar	12108013	Dr. Anil Kumar	A comparative Study of HRM Practices in Service and Manufacturing Sectors of Northern India
Naveen Kumar	12108014	Dr. Tilak Sethi	Promotional Mix and Delivery Mechanism of State Sponsored Social Welfare Schemes: A Study of Beneficiaries of Haryana
Mahender Pal	12108015	Dr. Shabnam Saxena	Effect of Reward Management on Employee Performance in Public and Private Organizations of North

			India
Urmila	12108016	Dr. Shveta Singh	A Study of Income, Consumption and Investment Pattern of Households in Rural Haryana
Manoj Kr. Yadav	12108017	Dr. Karam Pal Narwal	Performance Appraisal of Indian Microfinance Institutions
Monika	12108018	Dr. M.S. Turan	Diversification of Banking Business : A Study with Special Reference to Non Fund Business in India
Preeti Mittal	12108019	Dr. Harbhajan Bansal	The Influence of Sun Signs on Consumer Behaviour- A study of Apparels
Sunil Kumar	12108020	Dr. N.K. Bishnoi	Competitiveness, Productivity and Prospects of Textile Industry of India
Navjyoti Dahiya	12108021	Dr. Harbhajan Bansal	Service Quality Management in Haryana Tourism Complexes
Priyanka Yadav	12108022	Dr. B.K. Punia	A Study of Organisational Citizenship Behaviour in relation to Emotional and Spiritual Intelligence in Indian Organisations
Isha	12108023	Dr. Deepa Mangala	Disclosure Quality in Annual Reports of Companies Listed in

			India
Sandeep Muwal	12108024	Dr. Vinod Kumar Bishnoi	A Study of Marketing Practices of Milk in India
Bhawana Yadav	12108025	Dr. S. C. Kundu	Occupational Health and Safety Practices in Indian Corporate Sector
Sunita Godara	12108026	Dr. N.K. Bishnoi	A Comparartive Study of Corporate Governance Practices with Reference to IT and Real Estate Firms in India
Astha Jain	12108027	Dr. M.S. Turan	Impact of Demographic Factors on Saving and Investment Behaviour of Urban Households: A Study of Haryana
Suman Kumari	12108028	Dr. Usha Arora	Users' Perception Towards Effectiveness Of Online Promotional Tools
Narender Singh	12108029	Dr. Usha Arora	Image of New Retail Formats in Haryana: A Study of Consumers' Perception
Anand Kr.Dahiya	12108031	Dr. N.K. Bishnoi	Competitiveness of Agro Food Industries in Haryana: A Diamond Framework Analysis
Pavitra Yadav	12108032	Dr. Shabnam Saxena	Effect of Retention Strategies on Job Hopping Practices of Employees in Indian Corporate Sector
Sanjula	12108033	Dr. Anju	Effect of Talent Management Practices on

		Verma	Organasational Commitment of Healthcare Employees in Haryana & NCR
Meenakshi	12108034	Dr. Anil Kumar	A Study of Occupational Stress among Working Women in the National Capital Region
Nirmal	12108035	Dr. Harbhajan Bansal	A Study of Consumer Engagaement Drivers in Online Brand Communities and their Outcomes
Poonam	12108036	Dr. Khujan Singh	Financial Literacy among Working Class in National Capital Region
Parmjot Singh	12108037	Dr. Vinod Kumar Bishnoi	Vendor-Buyer Realtionship in Indian Automobile Sector: A Study of Supply Chain Management
Sandeep	12108038	Dr. Vinod Kumar Bishnoi	Demographic and Psychological Factors Influencing The Selection of Ready-to-Eat Foods
Rupa	12108039	Dr. Rajiv Kumar	Dairy Industry in Haryana : A Study of Branding Strategies and Positioning
Tanu	12108040	Dr. N.K. Bishnoi	A Study to Evaluate the Sustainability of Sub National Public Debt
Sunil	12108041	Dr. B.K. Punia	Role and Efficacy of Social Networking Sites as a Tool of Corporate

			Hiring Practices
Raj Kumar	12108044	Dr. Ved Pal Sheera	Factors Influencing Life Insurance Purchasing Decision : A case study of Haryana
Samta Chaudhary	12108045	Dr. Dalbir Singh	Adoption of HRM Practices in SMEs:A Study of SMEs in Haryana.
Inu Kumari	12108046	Dr. N.S. Malik	A Study of Momentum in Equity Prices in India
Sadhna	12108047	Dr. B.K. Punia	A Study of Employees' Knowledge Sharing Behaviour and Knowledge Management Practices in Indian Service Sector
Surya Kant	12108048	Dr. M.S. Turan	A Study of Post-Merger Performance in Indian Non- Financial Sector
Savita Mann	12108049	Dr. Sanjeev Kumar	Profile of Indian Online Shoppers: A study of their Perception, Motives and Decision Making Styles
Anju Duhan	12108050	Dr. Ved Pal Sheera	A Critical Study on Various Dimensions of Crop Insurance In Haryana
Anoop Goriya	12108051	Dr Tilak Sethi	Integrated Marketing Communication: A Study of Buyers' Perspective of Haryana
Jasbeer	12108052	Dr Tilak	Consumers' Perspective

Kumar		Sethi	on Online Advertising: A Study of Internet Users of Haryana
Komal Bhardwaj	12108053	Dr. N.S. Malik	Dimensions of Option Pricing in India
Rakesh Kumar	12108054	Dr. Suresh Mittal	Dynamics of Equity Investment Styles in India
Pooja	12108055	Dr. Shabnam Saxena	Effect of Conflict Management Styles on Employee Satisfaction-A Study of Textile Sector in India.
Anita	12108056	Dr. Deepa Mangala	Influence of Economic, Industry and Company Specific Factors on Stock Prices in India
Rupika	12108057	Dr. Ved Pal Sheera	Co-movement of Stock Markets in Asian and Emerging Economies

23.11.2013

<b>Registration No.</b>	<b>Name Student</b>	<b>Supervisor's/ Co-supervisor's name</b>	<b>Title of Ph.D. thesis</b>
13109001	Arshinder Singh Chawla	Prof.S.C. Kundu	Line and HR Executives' Perceptions of HR Effectiveness : A Study of Firms Operating in India
13109002	Ashok	Prof.Karam	Infrastructure Financing in

	Ahlawat	Pal Narwal	India: A Study with Special Reference to Public Private Partnership Model in Haryana
13109003	Sanjeev Kumar Gautam	Prof.Harbhajan Bansal	Packaging Industry in India – Challenges and Opportunities
13109004	Suskhpal Singh Arya	Prof.S.C. Kundu Prof.Narsi R.Bishnoi (Co-supervisor)*	Management of Solid Waste of Thermal Power Plants and its Social Impact
13109005	Sushil Kumar Sharma	Prof.Vinod Kumar Bishnoi	Patients' Perceptions towards Selection and Satisfaction Regarding Super Speciality Heart Hospitals in India
13109006	Sanjay Singh	Prof.M.S. Turan Prof.Karam Pal Narwal (Co-supervisor)*	Impact of RTI Act on Responsiveness and Efficiency of Administration: A Case Study of Haryana State
13109007	Aditya Vir Singh	Prof.Vinod Kumar Bishnoi	Training and Placement of Engineering and Management Students in Haryana: Challenges and Avenues

13109008	Mudit Chaturvedi	Prof.N.K. Bishnoi	Business Environment for MSME (Micro, Small & Medium Enterprises) in India
----------	------------------	-------------------	--

b) From other institutions/universities: 5

Some of research students have opted for research supervisors as co-guide from other Universities also.

40. Number of post graduate students getting financial assistance from the university :

Post Metric Scholarship to all eligible SC/ST given is 20 approximately.

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.:

During the last five years, HSB introduced the M.Com programme. First of all HSB conducted need assessment for M.Com in the city and Hisar region. It was found that the course was not provided at University level in the region. Then HSB took the decision and evaluated the course curriculum of the surrounding benchmark universities. Then it was discussed in the Staff Council and approved by the Board of Studies and Academic council for finalizing the course curriculum.

42. Does the department obtain feedback from:

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

There is a system of self-appraisal at University level which is already followed by Haryana School of Business. Each teacher is asked to fill up Self Appraisal Report at the end of the year in which the teaching-learning evaluation methods are mentioned. These issues are discussed in the meetings of faculty councils and board of studies.

b) Students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback?



Informal as well as formal evaluation system is followed in HSB. Informal interaction of director and dean and faculty members with students regarding curriculum teaching, learning, evaluation. Feedback form is filled up by students and important issues are discussed in staff council meeting.

- c) Alumni and employers on the programmes offered and how does the department utilize the feedback?

43. List the distinguished alumni of the department (maximum 10):

Name	Designation
Komal Smiriti	Relocation Manager, Steruling Relocation Company, Gurgaon
Prof. Devender Narang	Prof. and Director, Jaipuria Institute of Management, Vasundhra, Gaziabad, email: <a href="mailto:nardav@gmail.com">nardav@gmail.com</a>
Mr. Satdev Kataria	Additional M.D., Budget Logistics, Gurgaon
Mr. Vikas Daryal	Director, TIMT, Yamuna Nagar
Ms. Neetu Jaglan	Senior Manager AIS Glass Group, Gurgaon
Ms. Shalini Bakshi	Entrepreneur, Bangalore
Ms. Aditi Sharma	HR Manager, CRONOOS, Noida
Ms. Sumedha Goyal	Management Trainee, KIP Financial Consultancy Pv. Ltd., Hisar
Mr. Rajiv Sahai	Deputy Manager, Gas Marketing, Bhopal
Ms. Anju Bala	Manager, GAIL, Delhi

44. Give details of student's enrichment programmes (special lectures/workshops/seminar) involving external experts:

Programme	External expert	Date
DELVE In (Innovative Learning)	Experts from University Departments	26 March 2014
Supply Chain Management	Dr. Pawan Aggarwal (CEO, Dabbawala)	March 2013

Personality Development	Mr. Parveen Kumar (Director, PDCPA)	March 2013
INNOWAVE	Experts from University Departments	27 November 2013
Extension Lecture on Cross Cultural Communication	Ms. Yonne Marshal, France	March 2014
Business Quiz	Internal, HSB	27 November 2013
Ad-Mad Show	Internal, HSB	27 November 2013

45. List the teaching methods adopted by the faculty for different programmes:

Haryana School of Business adopted modern teaching methods for delivering lecturer, Quiz, Case Study, Group Discussion, Brainstorming. Besides all these, modern techniques students interaction and lecturing method are the widely used aids to maintain benchmark. These methods supported by PowerPoint presentations.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

The core objectives of the programmes are constantly consistently monitored and evaluated in terms of examination results, student progression, rate of placement, quality of research work, organizational skills of students reflected through their activities and general behavior. Besides ethics and values observed in different activities organized by students, alumni meet is the source of observation of the character building and overall inherent values of human being.

47. Highlight the participation of students and faculty in extension activities:

Students and faculty have standardized some extension activities which are carried out through summer training which is compulsory part of curriculum design for MBAs. These students learn on the job corporate skills during training and submitted their reports of the conduct and projects executed with the companies. Students have another opportunity of carrying specialized projects under supervision of faculty optionally. Except

internship, extension activities based on expertise invited from outside to deliver lecturers on emerging issues of business and management.

48. Give details of “beyond syllabus scholarly activities” of the department:  
Haryana School of Business organized INNOWAVE - an innovative students activities, DELVE-IN for art, Ad-Mad Show, Quiz –for business annually. These are regular features of the management club of students and faculty of HSB which is formalized.
49. State whether the programme/department is accredited/graded by other agencies? If yes, give details:  
MBA programmes were accredited for three years by National Board of Accreditation (NBA)
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied:  
In research, 10 % of the total research work is basic conceptual framework, however, 90% research work is applied which helps in industry knowledge base and designing innovative strategies for the business. Recommendations of the research conducted in HSB used by different research agencies working at national level and government agencies working for policy framework. Some of the research also got recognition at international level which standardized the research work of the school. HSB started its owned journal named ‘Research Review’ which issues are already released from last few years.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOT) of the department;

**Strengths**

- Well Qualified faculty.
- State of the art infrastructure.
- Latest and updated curriculum
- Strong research culture
- Exposure of ICT among teachers and students.

**Weaknesses**

- Limited industry interaction due to geographical location
- Need more Alumni Programs.
- Lack of Industry/network partners
- Need to organize more MDP/EDP programmes

- Need MOUs with professional bodies

### **Opportunities**

- Hisar emerging as counter-magnetic city and business centre
- Emerging opportunities for consultancy to local entrepreneurs
- Technology development and innovation
- Scope of Research in niche areas
- Need to optimally utilize the human and available physical infrastructure

### **Challenges**

- Mushrooming of management institutions
- Demographic profile of the students
- Economic Slowdown
- Declining quality of students
- Access of new ideas and access to fast changing technology

### 52. Further plans of the department:

- Haryana School of Business develops quality parameters for research for qualitative research carried out in future by the students and faculty and implementing resources to come out with a brand name.
- To enhance institution and industry relationship which reduces the gap with corporate and helps in designing the need based course curriculum of the contemporary business.
- To strengthen our alumni.
- To develop in-house learning resources for the students.
- To organize international conference and to publish journal quarterly.

**Directorate of Distance Education  
The Departmental Profile**

## **Evaluative Report of the Directorate of Distance Education**

---

1. Name of Department : Directorate of Distance Education
2. Year of establishment : 1997
3. Is the Department part of a School/Faculty of the University? - Yes  
Directorate of Distance Education
4. Names of programmes offered :  
  
Semester Courses  
  
P.G. Diploma in Computer Applications (PGDCA)  
M.Sc. (Computer Science)  
Master of Computer Applications (MCA)  
M.Sc. (Mathematics)  
Mater of Business Administration (MBA)  
  
Annual Courses  
  
M.A. (Mass Communication)  
Master of Commerce (M.Com.)  
MCA (5 years. Integrated course after 10+2)  
P.G. Diploma in Advertising & Public Relations (PGDA&PR)  
P.G. Diploma in Taxation (PGDT)  
P.G. Diploma in Environmental Management (PGDEM)  
P.G. Diploma in Bakery Science & Technology (PGDBST)  
P.G. Diploma in Counseling Behaviour & Modification (PGDCBM)  
P.G. Diploma in Industrial Safety Management (PGDISM)  
Bachelor of Business Administration (BBA)  
B.A.(Mass Communication)  
MIB (Master of Insurance Business)
5. Interdisciplinary programmes and departments involved: NIL
6. Courses in collaboration with other universities, industries, foreign institutions, etc.: NIL

7. Details of programmes discontinued, if any, with reasons: NIL
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System

#### Semester Courses

P.G. Diploma in Computer Applications (PGDCA)  
 M.Sc. (Computer Science)  
 Master of Computer Applications (MCA)  
 M.Sc. (Mathematics)  
 Mater of Business Administration (MBA)

#### Annual Courses

M.A. (Mass Communication)  
 Master of Commerce (M.Com.)  
 MCA (5 years. Integrated course after 10+2)  
 P.G. Diploma in Advertising & Public Relations (PGDA&PR)  
 P.G. Diploma in Taxation (PGDT)  
 P.G. Diploma in Environmental Management (PGDEM)  
 P.G. Diploma in Bakery Science & Technology (PGDBST)  
 P.G. Diploma in Counseling Behaviour & Modification (PGDCBM)  
 P.G. Diploma in Industrial Safety Management (PGDISM)  
 Bachelor of Business Administration (BBA)  
 B.A.(Mass Communication  
 MIB (Master of Insurance Business)

9. Participation of the department in the courses offered by other departments:

NA

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst.Professors/others):

Assistant Professor	Hindi Officer	
Sanctioned	02	01
Filled	01	-

Besides, eight course Co-ordinators from the University Teaching Departments for each programme have been appointed. Further, two Teaching Associates on contract basis for computer and management courses have been engaged.

List of Course Co-Ordinators:

Sr. No.	Name of the Programme	Name of Course Co-Ordinators	Qualifications
	Master of Commerce (M.Com.)	Dr. Mahesh Garg	Ph.D.
1	PG Diploma in Bakery Science & Technology (PGDBST)	Prof. B.S. Khatkar	Ph.D.
2	PG Diploma in Environmental Management (PGDEM)	Prof. Parveen Sharma	Ph.D.
3.	M.Sc. (Mathematics)	Prof. Sunita Panu	Ph.D.
4	PG Diploma in Counseling & Behaviour Modification (PGDCBM)	Prof. Jyotsana	Ph.D.
5.	PG Diploma in Advertising & Public Relations (PGDA&PR)	Prof. Bandana Pandey	Ph.D.
6.	M.A.(Mass.Comm.) B.A.(Mass.Comm.)	Dr. Vikram Kaushik	Ph.D.
7	PG Diploma in Industrial Safety Management (PGDISM)	Dr. Anju Verma	Ph.D.
8	PG Diploma in Taxation (PGDT)	Dr. Anju Verma	Ph.D.
9	Master of Business Administration (MBA)	Dr. Suresh Mittal	Ph.D.
10	Bachelor Business Administration (BBA)	Dr.Rajiv Kumar	Ph.D.

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance :

\*Two Teaching Associates on contract basis for computer and management programmes have been engaged.

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors: NIL



13. Percentage of classes taken by temporary faculty-programme-wise information :
- PCPs are arranged at Study Centre by Director of respective Study Centre.
  - PCP for direct students are arranged at University by Course Coordinator.
14. Programme-wise Student Teacher Ratio: NA
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

Number of Administrative Staff:

Sr. No.	Post	No. of Posts sanctioned	Filled
1	Director	1	1*
2	Dy.Director	1	1
3	Deputy Registrar	-	-
4	Asstt.Director	1	-
5	Asstt. Registrar	-	-
6	Superintendent	1	2
7	Dy.Superintendent	-	1
8	Asstt-Cum-DEO	4	5+6**
9	Sr.Scale Stenographer	1	-
10	Steno-Typist	1	-
11	Clerk-cu-JDEO	8	3+6**
12	Peon	3	3+1**

\*Additional Charge.

\*\*Through Contractor

No.of Technical Staff:

Post	No. of Posts Sanctioned	Filled
Junior Programmer	01	-

16. Research thrust areas as recognized by major funding agencies –N.A.

17. Number of faculty with ongoing Projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. –NA (as there are no research programmes in DDE)
18. Inter-institutional collaborative projects and associated grants received:  
a) National collaboration b) International collaboration : NIL
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS,DPE; DBT, ICSSR, AICTE, etc.; total grants received: NIL
20. Research facility/centre with:
- state recognition
  - national recognition
  - international recognition NIL
21. Special research Laboratories sponsored by/ created by industry or corporate bodies: NIL
22. Publications: NIL
- Number of papers published in peer reviewed journals (national/international)
  - Monographs
  - Chapters in Books
  - Edited Books
  - Books with ISBN with details of publishers
  - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.
  - Citation Index-range/average
  - SNIP
  - SJR
  - Impact Factor-range/average
  - h-index
23. Details of patents and income generated – NA (No Research programme offered):

24. Areas of consultancy and income generated: NA (No Research programme offered)
25. Faculty selected nationally/ internationally to visit other laboratories/institutions/industries in India and abroad: NIL
26. Faculty serving in :  
 a) National committees b) International committees c) Editorial Boards d) any other (please specify) NIL
27. Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs): NIL
28. Student projects: NIL
- Percentage of students who have done in-house projects including inter-departmental projects
  - Percentage of students doing projects in collaboration with other universities/industry/institute
29. Awards/recognitions received at the national and international level by:
- Faculty
  - Doctoral/post doctoral fellows
  - Students
- NIL
30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any:  
 NIL
31. Code of ethics for research followed by the departments: NIL
32. Student profile programme-wise 2012-13 :

Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
MA(MC)	582	324	258	81	86
MA(MC)[LE]	423	240	183	87	92
MCA	43	26	17	30	50
M.Sc(CS)	66	44	22	25	45

MBA	1365	1008	357	40	86
MBA(LE)	109	48	61	34	31
MBA Addn.Spl.	21	14	07	29	43
MCA (5 yrs. Integrated)	1835	1382	453	41	46
M.Com.	334	121	213	83	86
M.Sc.(Maths)	219	91	128	65	75
PGDCA	881	602	279	45	50
PGDT	25	20	05	40	40
PGDEM	22	20	02	50	100
PGDA&PR	52	23	29	78	72
PGDBS&T	05	02	03	50	-
PGDCBM	56	18	38	61	81
PGDISM	127	107	10	40	90
BA(MC)	635	493	142	83.5	90
BBA	215	166	49	41	46

33. Diversity of students:

Name of the Programme (refer to question no. 4)	% of students form the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
MA(MC) MA(MC)[LE]	3	5	92	Nil
MCA	20	30	50	Nil
M.Sc(CS)	15	77	8	Nil
MBA	8	80	12	Nil

MBA(LE)				
MBA Addn.Spl.				
MCA (5 yrs. Integrated)	-	80	20	Nil
M.Com.	-	80	20	Nil
M.Sc.(Maths)	-	85	15	Nil
PGDCA	2	91	7	Nil
PGDT	1	88	11	Nil
PGDEM	2	85	13	Nil
PGDA&PR	-	83	17	Nil
PGDBS&T	-	90	10	Nil
PGDCBM	2	78	20	Nil
PGDISM	2	80	18	Nil
BA(MC)	6	12	82	Nil
BBA	-	40	60	Nil

34. How many, students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise: Nil

35. Student progression : Not available in Distance Education Courses

Student progression	Percentage against enrolled
UG to PG	2%
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed • Campus selection	Data not available

• Other than campus recruitment	
Entrepreneurs	Data not available

36. Diversity of staff: NA

<b>Percentage of faculty who are graduates</b>	
of the same university	-
From other universities within the State	-
From universities from other States	-
From universities outside the country	-

37. Number of faculty who were awarded M.Phil, Ph.D., D.Sc. and D. Litt. During the assessment period: NIL

38. Present details of departmental infrastructural facilities with regard to:

- a) Library – Books are available in Central Library
- b) Internet facilities for staff and students –

<b>Items</b>	<b>Specifications</b>	<b>Quantity</b>
Computers	Pentium-IV	35
Printers	Laser Jet	04
Printer	HP Laserjet P 3010	02
Photostate copier	-	02
Fax Machine	-	01

- c) Total number of class rooms – NIL -
- d) Class rooms with ICT facility – Using class room of respective department as and when required.
- e) Students' Laboratories - One
- f) Research Laboratories-No

39. List of doctoral, post-doctoral students and Research Associates: NIL

- a) From the host institution/university
- b) From other institutions/universities

40. Number of post graduate students getting financial assistance from the university: NIL
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. : Yes as per the need of market.
42. Does the department obtain feedback from : No
- faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
  - students on staff, curriculum and teaching-learning –evaluation and how does the department utilize the feedback?
  - Alumni and employers on the programmes offered and how does the department utilize the feedback?
43. List the distinguished alumni of the department (maximum 10) : Not available for Distance Education Courses.
44. Give details of students enrichment programmes (special lectures/workshops/seminar) involving external experts.: NIL
45. List the teaching methods adopted by the faculty for different programmes:
- PCPs are arranged at Study Centre by Director of respective Study Centre.
  - PCPs for direct students are arranged at University by Course Coordinator.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? : Through periodic inspections of Study Centre.
47. Highlight the participation of students and faculty in extension activities. : NA
48. Give details of “beyond syllabus scholarly activities” of the department : NA
49. State whether the programme/department is accredited/graded by other agencies? If yes, give details. : NA

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied: NA
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department:
- Strengths:**
- Excellent Response to all programs
  - Permanent faculty recruitment
  - Excellent labs established for practicals.
- .Weakness**
- Lack of software industry in the region limits the industrial training and industrial linkages.
- Opportunities**
- To develop the Directorate as a Centre of Excellence for quality teaching and extension services to produce dynamic and knowledgeable human resources.
- Challenges**
- Mushrooming of private universities in every nook and corner is leading to decline in student admission.
52. Further plans of the department:  
The Directorate aspires to be a globally recognized Centre of Excellence in the distance education.



## **Annexures I to VII**

ANNEXURE-I

UNIVERSITY GRANTS COMMISSION  
BHAHADUR SHAH ZAFAR MARG  
NEW DELHI - 110 002

19

NO.F.9-4/94(CPP-1)

February, 1997  
- 7 FEB 1997

OFFICE MEMORANDUM

A university named as GURU JAMBHESWAR UNIVERSITY, HISAR (Haryana) was established by an Act of Haryana State Legislature vide Haryana Vidhan Sabha Bill No.22-HGA of 1995 dated 22nd September, 1995. The name of the said university was included in the list of Universities maintained by the Commission under Section 2 (f) of the UGC Act, 1956.

The said University is hereby declared as fit to receive Central assistance in terms of the Rules framed under Section 12-B of the UGC Act, 1956.

12/509  
12/1197

*(Signature)*  
(Dr. G.G. Pandapat)  
Additional Secretary

Copy to :-

1. The Registrar, Guru Jambheshwar University, Hisar (Haryana)
2. The Secretary, Govt. of India, Ministry of Human Resource Development, Deptt. of Education, New Delhi.
3. The Secretary, Govt. of Haryana, Deptt. of Higher Education Civil Secretariat, Chandigarh.
4. The Association of Indian Universities, 16, Kotla Marg, New Delhi - 110 002.
5. All Officers/Sections, UGC office.
6. The Section Officer (Meeting Cell), UGC, New Delhi.
7. S.O., FD-III/SU-1, UGC office.
8. SSO-I Stat, UGC, 35, Ferozshah Road, New Delhi.
9. Guard File.
10. Incharge, Computer Cell, UGC office.

*(Signature)*  
(Gurcharan Singh)  
Deputy Secretary

*(Handwritten notes)*  
S.M. 11/11/97

Annexure - II



All India Council for Technical Education  
(A Statutory body under Ministry of HRD, Govt. of India)  
7th Floor, Chandralok Building, Janpath, New Delhi- 110 001  
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

F.No. North-West/1-1432874584/2013/EOA

Date: 19-Mar-2013

To,  
The Financial Commissioner & Principal Secretary  
(Technical) Govt. of Haryana,  
Room No. 503/5,  
Sector -17 New Secretariat,  
Chandigarh-160017

Sub: Extension of approval for the academic year 2013-14

Ref: Application of the Institution for Extension of approval for the academic year 2013-14

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F-No.37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	North-West	Application Id	1-1432874584
		Permanent Id	1-441580791
Name of the Institute	GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY	Institute Address	DELHI-SIRSA ROAD, HISAR, HISAR, Haryana, 125001
Name of the Society/Trust	GURU JAMBHESHWAR UNIVERSITY OF SCIENCE AND TECHNOLOGY	Society/Trust Address	DELHI-SIRSA ROAD, HISAR, HISAR, HISAR, Haryana, 125001
Institute Type	Government		

Opted for change from Women to Co-ed	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

to conduct following courses with the intake indicated below for the academic year 2013-14

Application Number: 1-1432874584\*

Page 1 of 5

Note: This is a Computer generated Extension of Approval Letter. No signature is required.

Letter Printed On: 5 April 2013.

Printed By : AIC002146



**All India Council for Technical Education**  
 (A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001  
 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

Application Id: 1-1432874584			Course	Affiliating Body	Intake 2012-13	Intake Approved for 13-14	NRI	PIO	Foreign Collaboration	
Program	Shift	Level		Full/Part Time						
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	30	30	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	ELECTRONICS & COMMUNICATION ENGG	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	20	20	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	ENVIRONMENTAL SCIENCE AND ENGINEERING	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	20	20	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	FOOD TECHNOLOGY	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	20	20	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	GEO INFORMATICS	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	30	30	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	MECHANICAL ENGINEERING	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	20	20	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	NANO TECHNOLOGY	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	20	20	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	OPTICAL ENGINEERING	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	20	20	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	PRINTING TECHNOLOGY	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	20	20	No	No	No

Application Number: 1-1432874584\*

Page 2 of 5

Note: This is a Computer generated Extension of Approval Letter. No signature is required.

Letter Printed On: 5 April 2013.

Printed By : AIC002146



*All India Council for Technical Education*  
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001  
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

Application Id: 1-1432874584			Course	Affiliating Body	Intake 2012-13	Intake Approved for 13-14	NRI	PIO	Foreign Collaboration	
Program	Shift	Level		Full/Part Time						
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	BIOMEDICAL ENGINEERING	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	60	60	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	120	120	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRONICS & COMMUNICATION ENGG	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	60	60	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	FOOD TECHNOLOGY	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	60	60	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	INFORMATION TECHNOLOGY	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	60	60	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	60	60	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	PACKAGING TECHNOLOGY	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	60	60	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	PACKAGING TECHNOLOGY	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	60	60	No	No	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	PRINTING TECHNOLOGY	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	60	60	No	No	No

Application Number: 1-1432874584\*

Page 3 of 5

Note: This is a Computer generated Extension of Approval Letter. No signature is required.

Letter Printed On: 5 April 2013.

Printed By : AIC002146



All India Council for Technical Education  
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001  
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

Application Id: 1-1432874584			Course	Affiliating Body	Intake 2012-13	Intake Approved for 13-14	NRI	PIO	Foreign Collaboration	
Program	Shift	Level		Full/Part Time						
MANAGEMENT	1st Shift	POST GRADUATE	MASTERS IN BUSINESS ADMINISTRATI ON	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	250	250	No	No	No
MANAGEMENT	1st Shift	POST GRADUATE	MASTERS IN BUSINESS ADMINISTRATI ON	PART TIME	Guru Jambheshwar University of Science and Technology, Hisar	40	40	No	No	No
MCA	1st Shift	POST GRADUATE	MASTERS IN COMPUTER APPLICATIONS	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	60	60	No	No	No
PHARMACY	1st Shift	POST GRADUATE	PHARMACEUTI CAL CHEMISTRY	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	15	15	No	No	No
PHARMACY	1st Shift	POST GRADUATE	PHARMACEUTI CS	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	15	15	No	No	No
PHARMACY	1st Shift	POST GRADUATE	PHARMACOGN OSY	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	10	10	No	No	No
PHARMACY	1st Shift	POST GRADUATE	PHARMACOLOGY	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	10	10	No	No	No
PHARMACY	1st Shift	UNDER GRADUATE	PHARMACY	FULL TIME	Guru Jambheshwar University of Science and Technology, Hisar	60	60	No	No	No

- Validity of the course details may be verified at [www.aicte-india.org/departments/approvals](http://www.aicte-india.org/departments/approvals)

The above mentioned approval is subject to the condition that GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit

Application Number: 1-1432874584\*

Page 4 of 5

Note: This is a Computer generated Extension of Approval Letter. No signature is required.

Letter Printed On: 5 April 2013.

Printed By : AIC002146



All India Council for Technical Education  
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001  
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

(Dr. Kuncheria P. Isaac)

Member Secretary, AICTE

Copy to:

1. **The Regional Officer,**  
All India Council for Technical Education  
Plot No. 1310, Sector 42-B  
Chandigarh-160 036
2. **The Director Of Technical Education,**  
Haryana
3. **The Registrar,**  
Guru Jambheshwar University of Science and Technology, Hisar
4. **The Principal / Director,**  
GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY  
DELHI-SIRSA ROAD,  
HISAR, HISAR,  
Haryana.125001
5. **The Secretary / Chairman,**  
GURU JAMBHESHWAR UNIVERSITY OF SCIENCE AND TECHNOLOGY  
DELHI-SIRSA ROAD, HISAR,  
HISAR, HISAR,  
Haryana.125001
6. **Guard File(AICTE)**

Application Number: 1-1432874584\*

Page 5 of 5

Note: This is a Computer generated Extension of Approval Letter. No signature is required.

Letter Printed On:5 April 2013.

Printed By : AIC002146

Annexure - III

( मेसजी अधिनियम, 1948 के अंतर्गत स्थापित )

# PHARMACY COUNCIL OF INDIA

( CONSTITUTED UNDER THE PHARMACY ACT, 1948 )

Telegram : 'फार्मकाउंसिल' 'FARMCOUNCIL'  
Telephone : 23239184, 23231348  
Fax : 011-23239184  
E-Mail : pci@ndb.vsnl.net.in  
Website : www.pci.nic.in

संयुक्त परिषद् भवन  
कोटला रोड  
ऐवान-ए-ग़ालिब मार्ग  
पोस्ट बॉक्स नं. 7020  
नई दिल्ली - 110002

Combined Councils' Building  
Kotla Road  
Aiwan-E-Ghalib Marg  
Post Box No. 7020  
New Delhi - 110002

Ref. No. 17-1/2013-PCI

3394-3567

Regd

10 MAY 2013

The Controller of Publications  
Govt. of India  
Deptt. of Publications  
Civil Lines, Behind Old Sectt.  
Delhi- 110 054

Sub: Pharmacy Council of India- Publication of resolutions passed under section 12 of the Pharmacy Act, 1948 by the -

Sir,

I am directed to forward herewith a Notification (English & Hindi) of resolutions passed by the Pharmacy Council of India in its -

- 86<sup>th</sup> Central Council meeting held on 11<sup>th</sup> July, 2010.
- 90<sup>th</sup> Central Council meeting held on 30<sup>th</sup> & 31<sup>st</sup> August, 2012.
- 92<sup>nd</sup> Central Council meeting held on 29<sup>th</sup> & 30<sup>th</sup> March, 2013 are published hereunder as required under section 15 of the Pharmacy Act, 1948 (8 of 1948).

for publication in Part-III, Section 4 of Gazette of India.

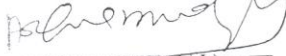
It is requested that careful proof reading to be done before printing. It is further informed that-

- Resolution No.86/PCI/1421 pertains to Diploma & Degree in Pharmacy (both in English & Hindi).
- Resolution No.90/PCI/1422 pertains to Diploma & Degree in Pharmacy (both in English & Hindi).
- Resolution No.92/PCI/1423 pertains to Diploma, Degree & Pharm.D & Pharm.D (Post Baccalaureate) in Pharmacy (both in English & Hindi)

A copy of the notification when published, together with the bill, in duplicate may please be forwarded to this office for payment.

Kindly acknowledge its receipt.

Yours faithfully

  
(ARCHANA MUDGAL)  
Registrar-cum-Secretary

SAC  
29/5/13  
Ac-II

...2



	State/Course/ File No. Name of institutions	For adms. Limited to	Approved upto Academic Session	Name of the Examining Authority
	<b>MAHARASHTRA</b>			
	<b>Diploma</b>			
408.	17-869/2010-PCI S.D. Patil Institute of Pharmacy, S.D. Patil Nagar, Urun-Islampur, Tal-Walwa, Distt.Sangli - 415 409	60	2014-2015	The Secretary, Maharashtra State Board of Technical Education Govt. Polytechnic Building, III Floor, 49, Kherwadi, Ali Yawar Jung Marg Bandra (E), Mumbai - 400 051
	<b>ANDHRA PRADESH</b>			
	<b>Degree</b>			
411.	32-547/2011-PCI Bhaskara Pharmacy College, Yenkapally, Moinabad, RR (Distt.)	100 (Raise in admissions from 60 to 100 from 2013-2014 a.s.)	Already approved upto 2013-2014	The Registrar Jawaharlal Nehru Technological University Kukatpally, Hyderabad- 500 085
	<b>ANDHRA PRADESH</b>			
	<b>Degree</b>			
412.	32-718/2011-PCI MLR Institute of Pharmacy, Dundigal (V), Qthubullapur (Mandel) R.R. (Distt)- 500 043	100 (Raise in admissions from 60 to 100 from 2013-2014 a.s.)	Already approved upto 2013-2014	The Registrar Jawaharlal Nehru Technological University Kukatpally, Hyderabad- 500 085
	<b>CHHATTISGARH</b>			
	<b>Degree</b>			
415.	32-519/2010-PCI Columbia Institute of Pharmacy Tekari, Raipur - 493 111	100	2014-2015	The Registrar Chhattisgarh Swami Vivekanand Technical University North Park Avenue, Sector - 8 Bhilai - 490 009.
	<b>HARYANA</b>			
	<b>Degree</b>			
416.	32-187/2010-PCI Deptt. of Pharmaceutical Sciences, Guru Jambheshwar University, Hisar - 125 001	60	2015-2016	The Registrar Guru Jambheshwar University, Hisar - 125 001
	<b>HARYANA</b>			
	<b>Degree</b>			
417.	32-520/2010-PCI Ram Gopal College of Pharmacy, Village Sultanpur, teh. Farrukhnagar, Distt. Gurgaon	60	2015-2016	The Registrar Maharishi Dayanand Univeristy Rahtak - 124 001 (From 2005-2006 to 2008-2009)  The Registrar Pt. B.D. Sharma University of Health Sciecnes Rohtak (From 2009-2010)
	<b>MAHARASHTRA</b>			
	<b>Degree</b>			
418.	32-853/2010-PCI St. John Technical Education Complex, Village Vevoor, Manor Road, Palghar (E), Thane Distt. - 401 404	60	2014-2015	The Registrar Controller of Examinations, University of Mumbai, Examination House, M.J. Phule Bhavan Vidyanagari Campus, Kalina, Santacruz (E) - 400 098

*Acharya*

**ANNEXURE-IV**



**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE &  
TECHNOLOGY, HISAR**

**(Established by State Legislature Act 17 of 1995)**

**'A' Grade, NAAC Accredited**

**LIST OF REGULAR PROGRAMMES**

Sr. No.	Name of Programme
1.	M.Tech. (Computer Science & Engineering)
2.	M.Tech. (Environmental Science & Engineering)
3.	M.Tech. (Electronics & Communication Engineering)
4.	M.Tech. (Mechanical Engineering)
5.	M.Tech. (Printing Technology)
6.	M.Tech. (Nano Science and Technology)
7.	M.Tech. (Optical Engineering)
8.	M.Tech. (Food Engineering)
9.	M.Tech. (Geo-Informatics)
10.	M.Tech. (Biomedical Engineering)
11.	M.Pharm. (Pharmaceutical Chemistry)
12.	M.Pharm. (Pharmaceutics)
13.	M.Pharm. (Pharmacology)
14.	M.Pharm. (Pharmacognosy)
15.	Master of Physiotherapy (Musculoskeletal Disorders)
16.	Master of Physiotherapy (Sports Physiotherapy)
17.	Master of Physiotherapy (Neurological Disorders)
18.	Master of Physiotherapy (Pediatric Physiotherapy)
19.	Master of Physiotherapy (Cardiothoracic & Pulmonary Disorders)
20.	Master of Computer Applications
21.	Master of Business Administration (MBA)
22.	MBA- Finance
23.	MBA-Marketing
24.	MBA-International Business
25.	MBA-Part Time (Evening)
26.	M.Com.
27.	M.Sc. (Psychology)
28.	M.Sc. (Biotechnology)
29.	M.Sc. (Microbiology)
30.	M.Sc. (Chemistry)
31.	M.Sc. (Environmental Sciences)
32.	M.Sc. (Food Technology)
33.	M.Sc. (Mass Communication)
34.	M.Sc. (Mathematics)
35.	M.Sc. (Physics)
36.	M.Sc. (Advertising Management & PR)

### Under Graduate Programmes

37.	Bachelor of Pharmacy
38.	Bachelor of Physiotherapy
39.	B.Tech. (Biomedical Engineering)
40.	B.Tech. (Computer Science & Engineering)
41.	B.Tech. (Electronics & Communication Engineering)
42.	B.Tech. (Information Technology)
43.	B.Tech. (Mechanical Engineering)
44.	B.Tech. (Printing Technology)
45.	B.Tech. (Food Engineering)



GURU JAMBHESHWAR UNIVERSITY OF SCIENCE &  
TECHNOLOGY, HISAR  
(Established by State Legislature Act 17 of 1995)  
'A' Grade, NAAC Accredited

LIST OF DISTANCE MODE PROGRAMMES

Sr. No.	Name of Programme
1.	M.A. Mass Communication
2.	Master of Computer Applications (MCA)
3.	Master of Insurance Business (MIB)
4.	M.Sc. (Computer Science)
5.	Master of Business Administration (MBA)
6.	Master of Computer Applications (5 Years Integrated courses)
7.	Master of Commerce (M.Com.)
8.	M.Sc. Mathematics
9.	P.G. Diploma in Computer Applications (PGDCA)
10.	P.G. Diploma in Taxation (PGDT)
11.	P.G. Diploma in Environmental Management (PGDEM)
12.	P.G. Diploma in Advertising & Public Relations (PGDA & PR)
13.	P.G. Diploma in Bakery Science and Technology (PGDBS)
14.	P.G. Diploma in Counseling & Behaviour Modification (PGDCBM)
15.	P.G. Diploma in Industrial Safety Management (PGDISM)
16.	B.A. Mass Communication
17.	Bachelor of Business Administration (BBA)

Annexure VI



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्  
विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान  
**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**  
An Autonomous Institution of the University Grants Commission

## *Certificate of Accreditation*

*The Executive Committee of the  
National Assessment and Accreditation Council  
on the recommendation of the duly appointed  
Peer Team is pleased to declare the  
Guru Jambheshwar University  
Hisar, Haryana as  
Accredited<sup>1</sup>  
at the A level<sup>2</sup>.  
(among the Universities)*

Date : October 01, 2002



*Malvika*  
Director

1. This certification is valid for a period of 5 (five) years with effect from the academic year 2002 - 2003.
2. An institutional score (%) in the range of 55-60 denotes C grade, 60-65 - C<sup>+</sup> grade, 65-70 - C<sup>++</sup> grade, 70-75 - B grade, 75-80 - B<sup>+</sup> grade, 80-85 - B<sup>++</sup> grade, 85-90 - A grade, 90-95 - A<sup>+</sup> grade, 95-100 - A<sup>++</sup> grade.

## Quality Profile

Name of the Institution: Guru Jambheshwar University  
Place: Hisar, Haryana

Criterion	Criterion Score (Ci)	Weightage (Wi)	Criterion X Weightage (Ci x Wi)
I. Curricular Aspects	85	15	1275
II. Teaching-learning and Evaluation	87	25	2175
III. Research, Consultancy and Extension	80	15	1200
IV. Infrastructure and Learning Resources	90	15	1350
V. Student Support and Progression	85	10	850
VI. Organisation and Management	80	10	800
VII. Healthy Practices	85	10	850
		100	$\Sigma C_i W_i = 8500$

$$\text{Institutional Score} = \frac{\Sigma C_i W_i}{\Sigma W_i} = \frac{8500}{100} = 85.00$$

*Indu Kaur*  
Director

Annexure -VII



**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

An Autonomous Institution of the University Grants Commission  
Ministry of Human Resource Development, Government of India  
P. O. Box 1075, Nagarbhavi, Bangalore-560 072, India.  
Phone: +91-80-23005100, 23210261 - 65, Fax: +91-80-23210268/23210270

*Provisional Certificate of Accreditation*

*The Executive Committee of the  
National Assessment and Accreditation Council  
on the recommendation of the duly appointed  
Peer Team is pleased to declare the  
Guru Jambheshwar University of Science and Technology  
Hisar, Haryana as  
Accredited  
with CGPA of 3.26 on four point scale  
at A grade*

EC Date : June 15, 2009

*H. Ramesh*  
Director

EC/PCR/KAK/49/1/22



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद  
विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान  
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL  
An Autonomous Institution of the University Grants Commission

## Quality Profile

Name of the Institution : Guru Jambheshwar University of Science and Technology

Place : Hisar, Haryana

Criteria	Weightage ( $W_i$ )	Criterion-Wise Grade Point Averages ( $Cr_i$ GPA)	$W_i \times Cr_i$ GPA
I. Curricular Aspects	150	3.87	581
II. Teaching-Learning and Evaluation	250	3.08	770
III. Research, Consultancy and Extension	200	2.95	590
IV. Infrastructure and Learning Resources	100	3.30	330
V. Student Support and Progression	100	3.30	330
VI. Governance and Leadership	150	3.30	495
VII. Innovative Practices	050	3.30	165
Total	$\sum_{i=1}^7 W_i = 1000$		$\sum_{i=1}^7 (W_i \times Cr_i \text{ GPA}) = 3261$

$$\text{Institutional Score} = \frac{\sum_{i=1}^7 (W_i \times Cr_i \text{ GPA})}{\sum_{i=1}^7 W_i} = \frac{3261}{1000} = \boxed{3.26}$$

Grade =

Descriptor =

Date : June 15, 2009



  
Director



**PEER TEAM REPORT ON**  
*Institutional Accreditation of*  
**GURU JAMBHESWAR UNIVERSITY OF SCIENCE & TECHNOLOGY**  
**HARAYANA**

<b>Section I: GENERAL INFORMATION</b>	
1.1 Name & Address of the Institution:	GURU JAMBHESWAR UNIVERSITY OF SCIENCE & TECHNOLOGY HISAR- 125 001, HARAYANA
1.2 Year of Establishment:	20.10.1995
1.3 Current Academic Activities at the Institution (Numbers):	
1. Faculties/ Schools:	8
2. Departments/ Centres:	18
3. Programmes/ Courses offered:	51
4. Permanent Faculty Members:	162
5. Permanent Support Staff:	496
6. Students:	3850, Distance Education: 30588*
1.4 Three major features in the institutional Context (As perceived by the Peer Team):	<ul style="list-style-type: none"> <li>• Continuous expansion of infrastructural facilities and academic activities</li> <li>• Young university with a preponderance of young faculty (avg. age: 37)</li> <li>• NBA accreditation for all engineering courses</li> </ul>
1.5 Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure):	22 - 24, April 2009
1.6 Composition of the Peer Team which undertook the on- site visit:	
Chairperson	Prof. R. Natarajan Former Chairman, AICTE Bangalore
Member	Prof. Dr. N. Jayasankaran Director General Bharathidasan Institute of Management Tiruchirappalli
Member	Dr. Latha Pillai Pro- Vice Chancellor IGNOU, New Delhi.
Member	Prof. D.T. Khating Vice Chancellor, Central University of Jharkand
Member	Prof. Anand Mohan Department of Electronics Engineering Banaras Hindu University Varanasi, UP
Member	Prof. K. S. Rangappa Department of Chemistry University of Mysore, Mysore
NAAC Officer:	Mr. B S Madhukar

\*Distance Education programmes are not under the preview of NAAC Assessment Process.

Section II: CRITERION WISE ANALYSIS	Observations (Strengths and/or Weaknesses) on Key-Aspects
<i>2.1 Curricular Aspects:</i>	
2.1.1 Curricular Design & Development:	<ul style="list-style-type: none"> <li>Programmes offered encompass the emerging areas of technical education in tune with the objectives of the University and focusing on employability and national development.</li> <li>Courses are designed/ restructured based on the models prescribed by UGC/ AICTE.</li> <li>Training in soft skills is provided for enhancing employability.</li> </ul>
2.1.2 Academic Flexibility:	<ul style="list-style-type: none"> <li>Choice-Based Credit System is implemented.</li> <li>Elective options are provided.</li> </ul>
2.1.3 Feedback on Curriculum	<ul style="list-style-type: none"> <li>Systems are in place for getting feedback from students.</li> <li>The feedback is used to update and revise the course curricula.</li> </ul>
2.1.4 Curriculum update	<ul style="list-style-type: none"> <li>Periodic revision and updation of curricula are carried out based on UGC/AICTE guidelines and globally emerging trends.</li> </ul>
2.1.5 Best Practices in Curricular Aspects (If any):	<ul style="list-style-type: none"> <li>UGC/AICTE curricular models are implemented.</li> <li>Industry-training is an integral part of the curricula.</li> <li>Academic flexibility is in-built through choice-based credit system and open electives.</li> </ul>
<i>2.2 Teaching-Learning &amp; Evaluation:</i>	
2.2.1 Admission Process and Student Profile	<ul style="list-style-type: none"> <li>Prospectus, University website etc. make the admission process public and transparent.</li> <li>Admissions are made based on the score in national and state-level entrance tests, and following the reservation rules of the state government.</li> </ul>
2.2.2 Catering to the Diverse Needs:	<ul style="list-style-type: none"> <li>University organises need-based remedial courses to academically weak students.</li> <li>Coaching for NET and competitive exams to socially disadvantaged students is organised.</li> </ul>
2.2.3 Teaching-Learning Process:	<ul style="list-style-type: none"> <li>Teaching aids are used in teaching-learning process.</li> <li>Students are exposed to latest and emerging areas through invited talks by experts.</li> <li>Student feed back needs to be analysed and utilized for improving teaching-learning effectiveness.</li> <li>Tutorials should be used for more interactive and directed learning.</li> </ul>

2.2.4 Teacher Quality:	<ul style="list-style-type: none"> <li>All permanent faculty are recruited as per UGC guidelines for qualifications.</li> <li>Approx. one-third of the total faculty are on contractual basis. Steps have been initiated for recruitment of 80 permanent faculty.</li> <li>About 50% of the permanent faculty have good-quality research publications.</li> <li>UGC has sanctioned an Academic Staff College for improvement of teaching quality.</li> <li>Faculty Development programmes are periodically organised.</li> </ul>
2.2.5 Evaluation Process and Reforms:	<ul style="list-style-type: none"> <li>Evaluation of students comprises 3 minor tests, co-curricular activities and a major test; and, in some departments, quizzes and seminars.</li> <li>Grievances relating to evaluation are being addressed.</li> </ul>
2.2.6 Best Practices in Teaching-Learning and Evaluation (If any):	<ul style="list-style-type: none"> <li>Industry Training is a part of all the programmes offered.</li> <li>ICT enabled teaching-learning.</li> <li>Overall personality development of students is ensured through inculcation of ethics and values, and extra-curricular activities</li> </ul>
<b>2.3 Research, Consultancy &amp; Extension:</b>	
2.3.1 Promotion of Research:	<ul style="list-style-type: none"> <li>Major research projects sanctioned by UGC, AICTE, DST, CSIR, Ministries of Defence, Home affairs and Health, MFPI are being undertaken by the faculty.</li> <li>University has received TEQIP, DRDO and BARC project grants.</li> <li>UGC has sanctioned 66 research projects, out of which 44 have been completed, over the past 5 years.</li> <li>University earmarks a budget of Rs. 15 Lakhs for minor research projects for the faculty.</li> </ul>
2.3.2 Research and Publications Output:	<ul style="list-style-type: none"> <li>Most of the faculty have published research papers in international and national journals of reasonable impact factors.</li> <li>Several papers have been presented in international and national conferences.</li> <li>Over the past 5 years, 114 Ph.D.s have been awarded, and currently 239 scholars are pursuing Ph.D. research.</li> </ul>
2.3.2 Consultancy:	<ul style="list-style-type: none"> <li>Consultancy activities by faculty require to be improved.</li> <li>University has put in place consultancy norms for revenue share.</li> </ul>
2.3.4 Extension Activities:	<ul style="list-style-type: none"> <li>Extension activities are carried out with the participation of faculty and NSS students.</li> <li>Extension activities include training programmes for various sections of the society, village adoption, awareness campaigns, Blood Donation camps for rural people, etc.</li> </ul>
2.3.5 Collaborations:	<ul style="list-style-type: none"> <li>University has signed MOU for collaborative research with TCG Life Sciences, BARC and other institutions.</li> <li>University has MOU for research with 3 foreign Universities.</li> </ul>

2.3.6 Best Practices in Research, Consultancy & Extension (If any):	<ul style="list-style-type: none"> <li>• Faculty members have taken up major research projects with funding agencies like UGC, AICTE, CSIR, Ministries of Defence, Home Affairs and Health.</li> <li>• University organises extension programmes for various sections of the society.</li> <li>• Applied Psychology department organises psycho-clinics for faculty, students, staff and others.</li> </ul>
<b>2.4 Infrastructure and Learning Resources:</b>	
2.4.1 Physical Facilities for Learning:	<ul style="list-style-type: none"> <li>• Teaching Blocks, Laboratories, Computer Centre, 7 hostels, Central Library, Health Centre, VIP Guest House, Cafeteria, Open Air Theatre, Shopping arcade, transport, Post Office, nationalised bank with ATM, residential quarters for employees, Multipurpose hall are available.</li> <li>• University Auditorium and Stadium are under construction.</li> <li>• Sports facilities such as sports grounds, Gym and indoor games are available.</li> </ul>
2.4.2. Maintenance of Infrastructure:	<ul style="list-style-type: none"> <li>• Equipment and Computers are under maintenance contract.</li> <li>• Land, building, furniture etc. are maintained by the University Works Department.</li> <li>• Necessary provisions are made in the budget for maintenance.</li> </ul>
2.4.3 Library as a Learning Resources	<ul style="list-style-type: none"> <li>• Carpet area of the Central Library : 30,080 sq. ft.</li> <li>• Air conditioned Reading Hall area : 9378 sq. ft. for 250 students.</li> <li>• Total collection : 70,860 books.</li> <li>• Journals: 37 international, and 153 national.</li> <li>• Library is fully computerised.</li> <li>• Book Bank facility available (1800) but needs enhancement.</li> <li>• Internet, online journals through INDEST, OPAC, photocopier are available.</li> <li>• Library usage to be enhanced.</li> </ul>
2.4.4 ICT as Learning Resources:	<ul style="list-style-type: none"> <li>• Internet connectivity through VSAT, ERNET and leased lines.</li> <li>• Part of the campus is covered with Wi-Fi.</li> </ul>
2.4.5 Other Facilities:	<ul style="list-style-type: none"> <li>• VIP Guest House, exclusive hostels for boys and girls.</li> <li>• Health Centre with necessary facilities is functioning.</li> <li>• A well-equipped Instrumentation Centre and Workshop have been developed.</li> <li>• Facilities for Sports and Games have been established.</li> <li>• Post office and a bank with ATM are available.</li> <li>• Auditorium is under construction.</li> </ul>
2.4.6 Best Practices in the development of Infrastructure and Learning Resources (If any):	<ul style="list-style-type: none"> <li>• The University has provided a satisfactory academic ambience for Teaching-Learning and Research.</li> <li>• Continuous and consistent efforts towards maintenance of the infrastructure.</li> </ul>

<b>Student Support and Progression:</b>	
2.1 Student Progression:	<ul style="list-style-type: none"> <li>• Examination results show consistent improvement.</li> <li>• Drop out rate is negligible.</li> <li>• A good number of students have qualified in NET/SLET/GATE.</li> </ul>
2.2 Student Support:	<ul style="list-style-type: none"> <li>• Prospectus and Handbook of information provide information regarding admission process, eligibility, fee structure, scholarships, academic calendar etc.</li> <li>• Various scholarships are available for meritorious and socially under-privileged students, awarded by the state government and the University, apart from loan facilities.</li> <li>• Merit-cum-means scholarships awarded by the University.</li> <li>• For toppers of B.Tech., MCA, MBA and R.Pharmacy courses, merit-based cash awards.</li> <li>• Grievance Redressal Cell has been established.</li> <li>• Co-curricular activities included in the evaluation scheme.</li> <li>• Health Centre supported by ambulance caters to the medical needs of students and staff.</li> <li>• In-company training and employment of students are taken care of by Placement Cell.</li> <li>• Steps are taken to provide coaching for SC/ST students for competitive exams.</li> </ul>
2.5.3 Student Activities:	<ul style="list-style-type: none"> <li>• Sports and Cultural activities are promoted.</li> <li>• SPIC MACAY CHAPTER is active in the campus.</li> <li>• Alumni Meets are organised.</li> </ul>
2.5.4 Best Practices in Student Support and Progression (If any):	<ul style="list-style-type: none"> <li>• No student unrest in the campus for more than a decade.</li> <li>• Poor students are provided with subsidised food in hostels.</li> <li>• Negligible drop out rate in UG/PG Programmes.</li> </ul>
<b>2.6 Governance and Leadership:</b>	
2.6.1 Institutional Vision and Leadership:	<ul style="list-style-type: none"> <li>• The Mission and Vision statements of the University are consistent with the expectations of national higher education policies and the needs of the society.</li> <li>• Effective leadership and governance have contributed to be growth of the institution.</li> <li>• A Quality Policy has been enunciated.</li> <li>• A Student Charter may be evolved.</li> </ul>
2.6.2 Organizational Arrangements:	<ul style="list-style-type: none"> <li>• The organisational structure enables decentralisation of activities relating to academics, administration, finance and student discipline.</li> <li>• The decisions of the Executive Council (apex body) are implemented by the Heads of various administrative branches, under the control of Registrar.</li> <li>• Systems are in place for monitoring Grievance Redressal and preventing sexual harassment.</li> </ul>

2.6.3 Strategy Development and Deployment:	<ul style="list-style-type: none"> <li>• A 10-year Perspective plan has been prepared.</li> <li>• The decision-making processes are participative at various levels.</li> <li>• The plans and proposals are initiated and executed by the integrated commitment of the authorities, faculty and non-teaching staff.</li> <li>• The academic calendar approved by the Executive Council is being followed.</li> </ul>
2.6.4 Human Resource Management:	<ul style="list-style-type: none"> <li>• The man-power requirements are approved by the state government and recruitments are made by the Selection Committees and Executive Council.</li> <li>• Teachers are evaluated using self-appraisal, feedback from students; non-teaching staff are evaluated using Annual Confidential Report.</li> <li>• Skill development programmes are conducted for all staff.</li> </ul>
2.6.5 Financial Management and Resource Mobilization:	<ul style="list-style-type: none"> <li>• Annual budget is prepared and approved by the Finance Committee, Executive Council and University Court.</li> <li>• Auditing of accounts is done by state government and A.G.'s office.</li> </ul>
2.6.6 Best Practices in Governance and Leadership (If any):	<ul style="list-style-type: none"> <li>• A Perspective Plan has been prepared.</li> <li>• Dynamic and responsive leadership.</li> <li>• Decision-making is participatory.</li> <li>• Leadership approach is student-centric.</li> </ul>
<b>2.7 Innovative Practices:</b>	
2.7.1 Internal Quality Assurance System:	<ul style="list-style-type: none"> <li>• Internal Quality Assurance Cell enables Quality Improvement.</li> <li>• University is able to impart good quality education by offering job-oriented programmes, providing good academic ambience, and creating excellent infrastructure</li> <li>• Quality improvement achieved through continuous updating of curricula, thrust on research, efficient evaluation system, good infrastructure, and good placements.</li> </ul>
2.7.2 Inclusive Practices:	<ul style="list-style-type: none"> <li>• All statutory norms are followed for reserved category students.</li> <li>• Hostel accommodation is available on priority basis for SC students.</li> <li>• Women students are given due importance in admission, hostel accommodation and sports.</li> </ul>
2.7.3 Stakeholder Relationships:	<ul style="list-style-type: none"> <li>• University enjoys excellent support and co-operation from government, teachers, alumni and industry.</li> <li>• Student survey indicates good student satisfaction.</li> <li>• Extension services provided by various departments to general public have resulted in image building</li> <li>• The fact that there was no student unrest and no strike by the staff in the past 10 years bears testimony to the excellent proactive relationship with stakeholders.</li> <li>• Good Placements bear ample proof of direct satisfaction of students and parents.</li> </ul>

Section III: OVERALL ANALYSIS	Observations
1 Institutional Strengths:	<ul style="list-style-type: none"> <li>• Enlightened and pro-active leadership and participative and decentralized administration have contributed to sustained growth of the institution.</li> <li>• Impressive academic ambience due to very good infrastructure and dedicated staff.</li> <li>• Student-centric support systems.</li> <li>• Drop out rate is negligible in both UG and PG programmes.</li> <li>• The Teaching-Learning processes are enriched with ICT and multi-media systems.</li> <li>• Most of the courses are job-oriented.</li> <li>• Regular updating of academic curricula.</li> <li>• In keeping with the philosophy of Guru Jambheshwar in whose name the University has been created, a green and environment-friendly campus has been developed.</li> </ul>
2 Institutional Weaknesses:	<ul style="list-style-type: none"> <li>• A large number of faculty (78) are on contract appointment. Steps have been initiated for recruitment of 80 permanent faculty.</li> <li>• Faculty lack higher level aspirations, such as for example, Fellowship of national Academics, competitive Awards, etc.</li> <li>• Poor consultancy record.</li> <li>• Ten permanent faculty, as well as a few contract faculty in Biomedical Engineering and Printing Technology departments, possess only Bachelor's qualifications.</li> <li>• Many Boards of Studies do not have experts from industry.</li> <li>• A few Departments do not have Professors.</li> <li>• Hardly any fume hoods in Chemistry department.</li> </ul>
3 Institutional Opportunities:	<ul style="list-style-type: none"> <li>• Research can be enhanced through collaborations with industry and institutions of higher learning, both national and international.</li> <li>• Expansion of the University may be achieved through satellite campuses.</li> <li>• Collaboration with the state Agricultural University and NDRI, Karnal.</li> <li>• Extension activities using EDUSAT infrastructure available in the University.</li> <li>• Revenue generation through self-funding programmes, and consultancy.</li> </ul>
4 Institutional Challenges:	<ul style="list-style-type: none"> <li>• Getting qualified faculty as permanent faculty, and senior faculty in departments where there are none.</li> <li>• Filling up the available admission capacity with good quality students.</li> <li>• The emergence of a large number of engineering colleges in the state.</li> <li>• To align the departmental activities in a few departments with the vision and mission of the university.</li> </ul>

Jambheshwar University of Science & Technoloav. Hisar

**Section IV: Recommendations for Quality Enhancement of the Institution**

(Please limit to *ten major ones* and use telegraphic language)

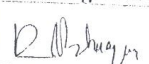
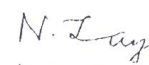
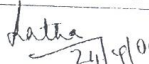
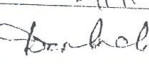



(It is not necessary to indicate all the ten bullets)

- Efforts may be made to increase international collaborations and networking with national institutions - Universities and R&D establishments.
- Make efforts to obtain recognition from UGC as a University with potential for excellence.
- Activities of IQAC should be strengthened.
- Faculty development for domain knowledge upgradation and pedagogical skills enhancement should cover all the faculty, and at regular intervals.
- A Humanities and Social Sciences Department should be established integrating academic activities relating to these areas prevalent in different departments.
- The University should create Intellectual Property through filing and exploitation of patents.
- The Industry-Institute Interaction Cell may be strengthened to enhance industry linkages.

I have gone through the report.

Signature of the Head of the Institution  
 Seal of the Institution  
 Gurukul Kangri Vishwavidyalaya  
 University of  
 Science & Technology  
 HISAR-125001 (Haryana)

Signatures of the Peer Team Members:

Name and Designation		Signature with date
Prof. R. Natarajan (Former Chairman, AICTE) Bangalore	Chairperson	 24/4/09
Prof. Dr. N. Jayasankaran Director General Bharathidasan Institute of Management Tiruchirappalli	Member	 24/4/09
Dr. Latha Pillai Pro- Vice Chancellor IGNOU, New Delhi	Member	 24/4/09
Prof. D.T. Khating Vice Chancellor, Central University of Jharkand	Member	 24/4/09
Prof. Anand Mohan Department of Electronics Engineering Banaras Hindu University Varanasi, UP	Member	 24.4.09
Prof. K. S. Rangaappa Department of Chemistry University of Mysore, Mysore	Member	 24.04.09
Mr. B S Madhukar	Deputy Adviser	

Place: HISAR.

Date: 24/4/09



---

### Statement of Compliance

---

This is to certify that Guru Jambheshwar University of Science and Technology, Hisar (Haryana) has complied with all the provisions of the following Regulations governing it:

1. UGC Regulations on Minimum Qualifications for Appointment of Teachers and other Academic Staff in Universities and Colleges and Measures for the Maintenance of Standards in Higher Education 2010 and further amendments, if any, notified by the UGC.
2. UGC Regulation on Minimum Standards and Procedure for the Award of M.Phil./Ph.D Degree, Regulations 2009 and further amendments, if any, notified by the UGC.
3. UGC (Affiliation of Colleges by Universities) Regulations, 2012 and further amendments, if any, notified by the UGC.

Any false or misleading information provided by the institution will be viewed seriously by NAAC and the accreditation given is liable to be withdrawn.

  
Name and signature with seal  
of the Vice-Chancellor


Place: Hisar  
Date: 28-04-2014

### **Declaration by the Head of the Institution**

I certify that the data included in this Re-accreditation Report (RAR) are true to the best of my knowledge.

This RAR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this RAR during the peer team visit.

  
Signature of the Head of the institution  
with seal:

Place: Hisar  
Date: 28-04-2014