

Self Study Report for NAAC

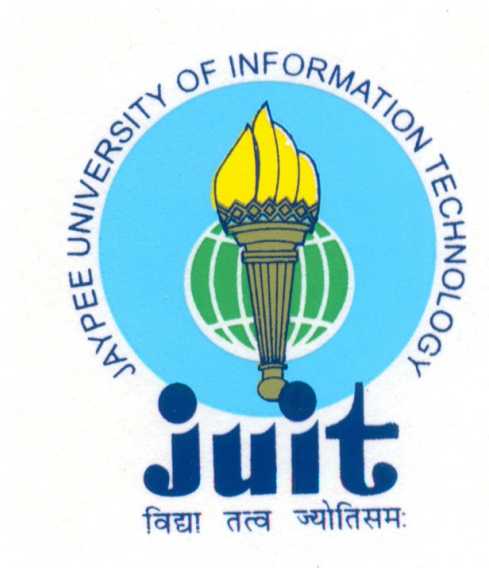
**Jaypee University of Information Technology
Waknaghat-173 234 (H.P.)**

Institution Track ID: HPUNGN10159

SELF STUDY REPORT

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

(LOI Acceptance Ref.: NAAC/NR-KR/HPUNGN10159/2017)



JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

WAKNAGHAT-173234, HIMACHAL PRADESH

2017

JUIT

Set up by Act No. 14 of 2002 vide Extraordinary Gazette notification of Government of Himachal Pradesh dated May 23, 2002. Approved by the University Grants Commission under section 2(f) of the UGC Act, vide letter no. F.9-10/2002(CPP-I) dated 09 Dec. 2002.

The University commenced academic activities from July 2002 with undergraduate B.Tech. degree programs in Electronics & Communication Engineering, Computer Science & Engineering, Information Technology, Bioinformatics, and Civil Engineering (from July 2003).

The University is offering M.Tech (Electronics & Communication Engineering), M.Tech (Computer Science & Engineering), M.Tech (Computer Science & Engineering with Specialization in Software System Security), M.Tech (Civil Engineering with Specialization in a)Structural Engineering, b)Construction Management and c)Environmental Engineering), M. Tech (Biotechnology) and M.Tech (Nanotechnology).

The University is offering Ph.D.in Bioinformatics, Biotechnology, Civil Engineering, Computer Science & Engineering, Electronics & Communication Engineering, Humanities & Social Sciences, Mathematics and Physics & Materials Science.

Vision

To become a Centre of Excellence in the field of IT and related emerging areas in education, training and research comparable to the best in the world for producing professionals who shall be leaders in innovation, entrepreneurship, creativity and management.

Mission

1. To develop as a benchmark University in emerging technologies.
2. To provide state of the art teaching-learning process and a stimulating R&D environment; and
3. To harness human capital for sustainable competitive edge and social relevance.

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PREFACE



Long before our first dam and years before our first cement plant, we built a free school and hospital. Today they tell us, what we did, is called Corporate Social Responsibility; CSR Spirit of Jaypee Group

The Jaypee Group has always been proud to participate in nation building right from its inception. We feel doubly responsible to make this Group become a bench mark of contribution to the upliftment of society. CSR has become an integral part of everything that we do and same is instilled in our vision, strategies and management goals.

JAIPRAKASH SEWA SANSTHAN (JSS), a not-for-profit trust was established in 1993, to bring many a not-for-profit activities of the Group under one common umbrella, in order to give them a unified focus and direction. The Sansthan today spearheads one of the largest altruistic CSR programmes run by any single-entity corporate anywhere in the country.

Firmly believing in the famous saying of Nelson Mandela "Education is the most powerful weapon which can be used to change the world" we at Jaypee fully subscribe to the view that Education is the cornerstone to economic development and the strength of Indian masses can be channelized by education alone. The real future of India lies in its thousands of faceless little towns and villages, where millions of boys and girls lie awake at night, dreaming of what could be. And we also believe that the key to unlock those dreams and help them soar is a good education.

Therefore, the Jaypee Group, through its trust, opened large number of schools, polytechnic colleges and institutes of higher learning, teaching over 35,000 student's under its wings. These institutions of learning host the best of faculty and educational infrastructure towards creation, generation, dissemination and application of knowledge through an innovative teaching - learning process to mould the leaders of tomorrow.

All the institutions of higher learning aim at building character, sharpen intellect and enable free thinking amongst the students and provide them opportunity to become innovative and enterprising professionals fully capable of meeting the challenges of modern India.

Executive Summary

The educational visionary of the Group founder, Shri Jaiprakash Gaur, started with establishing the Jaypee University/Institute (s) in the year 2001. The noble purpose was to provide quality education in Engineering, Sciences and Management. The Jaypee Group, ever since its inception fifty years ago, is known for its success in dedicated areas of Engineering & Construction, Cement, Power, Fertilizers, Real Estate, Expressways, Hospitality, Healthcare, Sports, Information Technology, and 'not-for-profit motto' - Education.

Since 2002, Jaypee University of Information Technology (JUIT) envisioned becoming a centre of excellence for education, training and research in the field of versatile emerging disciplines. It aimed at producing professionals who shall be leaders in innovation, entrepreneurship, and creativity.

The University has earned the recognition through its efforts, from UGC, NBA and various other governmental agencies. Recently, National Institutional Ranking Framework (NIRF) has placed the University at an All-India rank of 37 which is several notches above some reputed and well-established government institutions.

The University is situated in the lap of lush green Shimla hills, nearly 50 kms from the nearest broad gauge railway station 'Kalka'. It is being steered by an accomplished administrator-cum-academician Prof. Vinod Kumar, the vice-chancellor, who, before taking up this position in 2011, has served in various positions at IIT, Roorkee. Prof. Kumar apart from his 41 years of rich experience of teaching & research and technical education management, has taken more than 90 assignments as consultant in diverse fields which includes development of instruments, signal processing packages, residual life assessment of power plants and e-governance. He has about 180 research papers to his credit in the area of Medical Instrumentation and Signal Processing. He has guided 28 PhDs, more than 150 M.Tech dissertations and more than 150 B.Tech, projects in the area of medical instrumentation and digital signal & image processing.

Curricular Aspect

The University offers, Ph. D., M. Tech., and B. Tech. programmes emphasizing professional and leadership qualities through its courses that inherently have contents embedded into them to promote independent thinking, creativity and managerial skills. Presently the University is having 4 engineering departments and 3 science departments, which are jointly running B. Tech., M.Tech and Ph.D programs. Around 2100 students are currently enrolled in these programmes.

A semester system is followed for all programmes. The University has a strong faculty base, all having post-graduate qualifications. All core courses have corresponding laboratory courses to fulfil the criterion of "learning by actually doing". This is further supplemented by project work and adequate industrial exposure. The emphasis on hands-on experience through laboratory and project work ensures high employability of the students as evident from high rate of campus placement.

Teaching, Learning and Evaluation

The University ensures that all admissions to its programmes are merit-based. The admission process aims at complete fairness and transparency, offering admissions purely on the basis of merit at all-India competitive examinations. **SC/ ST students are admitted following relaxed criteria as per the reservation policy of government.** There is also provision of seats for Himachal Pradesh State Quota. For students finding difficulty in adjusting to the hilly environment, there is a process of need-based student mentoring and counselling.

The University adheres to its published academic schedule. Course outlines, lecture schedules, time table, study material, learning objectives and outcomes for each course are made available online to students and faculty through a central file server. Faculty is required to keep themselves updated, and facilities are extended for invited expert lectures, attending/ holding conferences, seminars, and workshops, faculty development programmes, PhD supervision, sponsored research projects, study leave etc.

The Learning Resource Centre of the University provides abundant support through its rich collection of e-resources along with print resources. The examination process is tuned for continuous evaluation, transparency, timeliness, objectivity and fairness. Question paper setting aims at promoting understanding of the subject rather than cramming. Results are declared as per schedule of the academic calendar. The results are recorded and maintained through ERP software. PhD evaluation follows a standard two-examiner system - one foreign and one Indian. The graduate attributes, adopted from the NBA document, form the guiding principles for the entire teaching-learning-evaluation structure across all academic programmes.

Research Consultancy and Extension

Research and innovation are integral components of academic activities of the University as articulated in the vision statement. Research committee such as DPMC has been framed for each research student to monitor his/her progress and provide course correction. Project Monitoring Committee is framed to ensure that the University is aware of various funding opportunities. Currently, there are different sponsored projects, which are in progress, and in recent past, many projects have been successfully completed.

Ph D fellowships, support for conferences and workshops, inviting experts, IT support and electricity etc., over the years have been provided and is still providing. Collaborative research is another direction adopted by the University for research promotion.

The departments of the University regularly organize National/International conferences, and workshops where eminent scientists and scholars from India and abroad are invited for keynote addresses. With the growth of research facilities, the number of Ph. D. research scholars is continuously increasing. The research scholars make regular use of all lab facilities, and wherever particular equipment is not available, the University arranges facilities at other nearby institution/organizations. Students and faculty of the University have published more than 700 research papers in peer-reviewed journals in the last five years. All Ph. D. scholars are required to have at least two publications in Scopus/SCI indexed journals.

No Ph. D. thesis, M. Tech. dissertation or B.Tech project report is accepted without a proper plagiarism check through turnitin for which facilities exists.

Infrastructure and Learning Resources

The University has adequate physical infrastructure to facilitate teaching, research, extracurricular activities, and residential facility for faculty, staff and students. With a built-up area of 73150 sqm., it has 3 lecture theatres, 8 classrooms, 7 tutorial rooms, 1 group discussion room, many laboratories, a well structured Library, a board room, an auditorium (capacity in 1000 s), residential hostels, faculty residences, and Annapurna (where one can have meals). The campus has 24 hour 100% power back-up through generators. To provide an efficient work-place, all hostels, academic area and offices have centrally controlled heating system to resist to bitter winter cold.

Some other facilities which make the campus life more comfortable, safe and hassle-free include gyms, laundry, medical dispensary, purified water supply, tuck shop, Bank ATM, guest house, CCTV cameras for safety. It has complete wi-fi availability. The campus has a full-fledged Information Technology Centre (IT Centre) which manages all IT services and develops the IT infrastructure in the University. All Faculty, Staff and students are allocated user id and password to avail these services. The centre has deployed all major network security tools such as Firewall, IDS, IPS and Antivirus software to safeguard University network. The computer and network resources may be accessed only by the authorized members.

All faculty members are provided with internet connected desktops in their office rooms. A unique feature of the University is provision of password protected space on a network drive to all faculty members. This drive is accessible from anywhere on the University LAN including class-rooms. Further, a Study Material folder is available to all students through a fileserver. For each subject, the course coordinator can upload necessary study material on the server which students can refer any time.

Student Mentoring and Support

Several programs are run that work towards personality development, career counselling, soft skills development, improving language skills, etc. Sufficient sports and gym facilities exist to keep the mind and body fit. Conferences, workshops, seminars, industrial visits, technical festivals, technical and cultural hubs, programming contests, publication of students magazine are the activities that engage the students at various levels and help them to explore their strengths.

Financially also, the University tries to help needy students as much as possible, via Jaypee India Scholars Fund. All full time PhD scholars, and GATE qualified PG students are given fellowships. Deserving students are given assistance for attending conferences.

The University has a dedicated placement cell comprising of inhouse faculty members and others. The efforts of faculty and the cell have made the placement scenario of the University highly praiseworthy. Many companies visit every year for selecting B. Tech and M.Tech students.

Governance, Leadership and Management

The University was set up by Jaiprakash Seva Sansthan (JSS) a not for profit trust. It believes that education is the cornerstone of economic development and only education can assist India to become a

developed nation. JSS has kept itself away from the administrative and academic decision making of the University. Several statutory bodies have been created for governance and management. These bodies are Board of Management (BoM), Academic Council (AC), Finance Committee (FC), **Planning and Monitoring Board (PMB)** and Board of Studies (BoS). The administrative positions are Chancellor, Vice-Chancellor, Directors, Deans and HoDs. All management policies are based on democratic principles of participative management.

The University has started conducting performance audit through IQAC from 2016-17. It has a grievance redressal mechanism in place. The University looks after the growth and development of its faculty and support staff. It is a member of IUCEE (Indo-US Collaboration for Engineering Education). JUIT has several welfare schemes in operation, some of which are study leave, sabbatical leave, maternity leave, medical leave, LTA, EPF, furnishing allowance, leave encashment, loan for medical emergency, book allowance, etc.

The University provides highly conducive academic atmosphere. It provides freedom to faculty to pursue academic pursuits of ones own choice. The University has highly sound financial footing. It has well established mechanism for monitoring effective and efficient, utilization of financial resources through various levels of controls, review and audit.

Innovations and Best Practices

The University has an eco-friendly campus. It uses recycled water for all its gardening needs. The buildings have been well designed to resist severe winters. They also have been designed to maximize utilization of natural light and natural cool air. Several best practices have been adopted at the University, some of which are (a) research as integral part of learning, (b) e-management – a tool for transparency and efficiency and (c) cross level peer mentoring. JUIT stresses on research based learning from early stages for undergraduate courses with an objective of enhancing technical competency, critical thinking and developing creativity and innovativeness at undergraduate level itself.

In order to have effective, transparent and efficient management of University affairs, a proactive approach has been adopted using ICT enabled environment (Webkiosk and file servers) ICT. As a result, the University has been able to successfully implement academic calendar without any deviation since its inception. Webkiosk and central file servers are being used for information creation and dissemination in several domains such as (i) Personal: Employee salary, benefits details, types of leave, attendance, details in case of emergency, help in tax information (ii) teaching: student attendance, information about student not attending, class room booking (iii) exam: marks entry, grade entry, result (iv) Counselling & Mentoring: to view student grades and performance (by parents and teacher), (v) provide feedback. In addition to above, University uses several innovative practices such as enhanced emphasis on student projects, algorithmic puzzle solving, large number of electives, etc. The overall training, experience and value system has seen a large number of students getting admission in reputed Institutions abroad, and getting placed in renowned multinational companies. Participative decision making, and transparent policies have enhanced faculty satisfaction and a feeling of ownership of the University.

1. Profile of the University

1. Name and Address of the University:

Name:	Jaypee University of Information Technology				
Address:	Waknaghat, Dist. Solan 173234 (Himachal Pradesh)				
City:	Solan	Pin:	173 234	State:	Himachal Pradesh
Website:	http://www.juit.ac.in				

2. For communication :

Designation	Name	Telephone with STD Code (01792)	Mobile	Fax STD Code (01792)	Email
Vice Chancellor	Dr. Vinod Kumar	O: 239201 R: 245361	9412074172	239365	vinod.kumar@juit.ac.in
Pro Vice Chancellor (s)	--	O:	--	--	--
Registrar	Brig. K. K. Marwah (Retd.)	O: 239203 R:	9816020501	245362	kk.marwah@juit.ac.in
Steering Committee Co-ordinator	Dr. Karanjeet Singh	O: 239207 R: 245417	9816054966	245362	karanjeet.singh@juit.ac.in
IQAC Co-ordinator	Dr. R.S. Chauhan	O: 239231 R:	9418405536	245362	rajinder.chauhan@juit.ac.in

3. Status of the University:

State University	<input type="checkbox"/>
State Private University	<input checked="" type="checkbox"/>
Central University	<input type="checkbox"/>
University under Section 3 of UGC (Deemed University)	<input type="checkbox"/>
Institution of National Importance	<input type="checkbox"/>
Any other (please specify)	<input type="checkbox"/>

4. Type of University:

Unitary	<input checked="" type="checkbox"/>
Affiliating	<input type="checkbox"/>

5. Source of funding

Central Government	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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State Government				
Self-financing				✓
Any other (please specify)				

6. a. **Date of establishment of the university:** 23/05/2002 (dd/mm/yyyy)
b. Prior to the establishment of the university, was it a/an

i.	PG Centre	Yes		No	✓
ii.	Affiliated College	Yes		No	✓
iii.	Constituent College	Yes		No	✓
iv.	Autonomous College	Yes		No	✓
v.	Any other (please specify)				
If yes, give the date of establishment (dd/mm/yyyy)					

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

	Under Section	dd	mm	yyyy	Remarks
i.	2f of UGC*	19	12	2002	UGC inspection done on June 2, 2004
ii.	12B of UGC *	--	--	--	--
iii.	3 of UGC #	--	--	--	--
iv.	Any other ^ (specify)	--	--	--	--

* 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.

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/yyyy)			
(b.) For its performance by any other governmental agency?			
Yes	✓	No	
If yes, Name of the agency <u>NIRF (MHRD)</u> and			
Year of recognition: ...2016...			

Department of Biotechnology and Bioinformatics has been recognized by DBT Programme Support in Centres of Excellence and Innovation in Biotechnology and DST-FIST Programme

9. Does the university have off-campus centres?

Yes		No	✓
If yes, date of establishment : (dd/mm/yyyy)			
date of recognition : (dd/mm/yyyy)			

10. Does the university have off-shore campuses?

Yes		No	✓
If yes, date of establishment : (dd/mm/yyyy)			
date of recognition: (dd/mm/yyyy)			

11. Location of the campus and area:

		Location *	Campus area in acres	Built up area (sq. mts)
i.	Main campus area	Rural & Hilly Area	25	73150
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: **Available**
- Sports facilities
 - Playground **Available**
 - swimming pool **Not Available**
 - gymnasium **Available**
 - Any other (please specify)
- Hostel
 - Boys' hostel
 - i. Number of hostels 13
 - ii. Number of inmates 1207
 - iii. Facilities: **Dining Hall, Canteen, Mess, Visitor's lounge, Common Room, Wi-Fi/LAN facility, indoor games, LCD TV and music system, medical, transport, 24 hour Electricity and water supply, Provision of hot water supply and heating in all hostel rooms in winter, etc.**
 - Girls' hostel
 - i. Number of hostels 1

- ii. Number of inmates 545
- iii. Facilities: **Dining Hall, Canteen, Mess, Visitor's lounge, Common Room, Wi-Fi/LAN facility, indoor games, LCD TV and music system, medical, transport, 24 hour Electricity and water supply, Provision of hot water supply and heating in all hostel rooms in winter, etc.**
 - o Working women's hostel
 - i. Number of hostels: **Not Available**
 - ii. Number of inmates
 - iii. Facilities
- Residential facilities for faculty and non-teaching **Available**
- Cafeteria **Available**
- Health centre – Nature of facilities available – inpatient, outpatient, ambulance, emergency care facility, etc.

Facilities available:

- o Inpatient, **Available (Male and Female wards with 2 beds each)**
- o Outpatient, **Available**
- o Ambulance, **Available**
- o Emergency care facility: **Liaison with IGMC Shimla and District Hospital Solan, etc.**
- Facilities like banking, post office, book shops, etc. **Available**
- Transport facilities to cater to the needs of the students and staff **Available**
- Facilities for persons with disabilities **Available (Lift in Academic Block and Hostel, Ramps available in residential area, rooms in hostels at ground level)**
- Animal house **Available**
- Incinerator for laboratories **Available**
- Power house **Available**
- Waste management facility **Available**

13. Number of institutions affiliated to the university : None

Type of colleges	Total	Permanent	Temporary
Arts, Science and Commerce	-	-	-
Law	-	-	-
Medicine	-	-	-
Engineering	-	-	-
Education	-	-	-
Management	-	-	-
Others (specify and provide details)	-	-	-

14. Does the University Act provide for conferment of autonomy (as recognized by the UGC) to its affiliated institutions?

Not applicable

If yes, give the number of autonomous colleges under the jurisdiction of the University

Yes		No		Number	
-----	--	----	--	--------	--

15. Furnish the following information:

Particulars	Number	Number of Students (As on September 2015)
a. University Departments		
Undergraduate	(4+1)	1832
Post graduate	(6+1)	255
Allied support Departments	3	-
Research centres on the campus	-	-
b. Constituent colleges	-	-
c. Affiliated colleges	-	-
d. Colleges under 2(f)	-	-
e. Colleges under 2(f) and 12B	-	-
f. NAAC accredited colleges	-	-
g. Colleges with Potential for Excellence (UGC)	-	-
h. Autonomous colleges	-	-
i. Colleges with Postgraduate Departments	-	-
j. Colleges with Research Departments	-	-
k. University recognized Research Institutes/Centres	-	-

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

Yes	✓	No	
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17. Academic programmes offered by the university departments at present, under the following categories: (Enclose the list of academic programmes offered)

Programmes	Number	Name of programme
UG	6	B. Tech in 1. Bioinformatics 2. Biotechnology 3. Civil Engineering 4. Computer Science and Engineering 5. Electronics and Communication Engineering 6. Information Technology

PG	8	M. Tech in 1. Biotechnology 2. Computer Science and Engineering 3. Construction Management 4. Electronics and Communication Engineering 5. Environmental Engineering 6. Structural Engineering 7. Applied and Computational Mathematics 8. Nanotechnology
Integrated Masters	-	
M.Phil.	-	
Ph.D.	8	Ph. D. in 1. Bioinformatics 2. Biotechnology 3. Civil engineering 4. Computer Science and Engineering 5. Electronics and Communication Engineering 6. Humanities and Social Sciences 7. Mathematics 8. Physics and Materials Science
Integrated Ph.D.	-	
Certificate	-	
Diploma	-	
PG Diploma	-	
Any other (please specify)	-	
Total	23	

18. Number of working days during the last academic year: **291**

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

Year	2015-16	2014-15	2013-14	2012-13
Days	197	192	195	189

('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,

- Year of establishment (dd/mm/yyyy)
- NCTE recognition details (if applicable)
Notification No.: Date: (dd/mm/yyyy)
- 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/yyyy)
- b. NCTE recognition details (if applicable)
Notification No.: Date: (dd/mm/yyyy)
- c. Is the department opting for assessment and accreditation separately?

Yes	No
-----	----

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

Yes	✓	No
-----	---	----

If yes, please enclose approval / recognition details issued by the statutory body governing the programme (*ANNEXURE-II*).

23. Has the university been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon.

- a) UGC (*ANNEXURE-I*).
- b) NAAC (*ANNEXURE-III*).
- c) NBA (*ANNEXURE-II*).
- d) HP Private Universities Regulatory Commission.

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	14	28	84	*	35
<i>Recruited</i>	(11+2)	14	76	*	35
<i>Yet to recruit</i>	01	14	8	*	*
Number of persons working on contract basis					

* There is no vacancy, however additional persons are employed as per requirements

25. Qualifications of the teaching staff

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt	00	00	00	00	00	00	00
Ph.D.	13	00	13	01	34	10	71
M.Phil.	00	00	00	00	00	01	01
PG	00	00	00	00	21	10	31

Temporary teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-
Part-time teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-

26. Emeritus, Adjunct and Visiting Professors

	Emeritus	Adjunct	Visiting
Number	--	--	--

27. Chairs instituted by the university

	Chairs
School / Department	--

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

Year: 2015-16						
Students	UG		PG		Ph.D.	
	*M	*F	*M	*F	*M	*F
From the state where the university is located	33	11	0	0	0	0
From other states of India	336	113	36	40	5	0
NRI students	10	1	0	0	0	0
Foreign Students	1	5	0	0	0	0
Total	380	130	36	40	5	0

*M - Male *F – Female

29. 'Unit cost' of education

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

- Including the salary component = Rs 2.07 Lac
- Excluding the salary component = Rs 1.12 Lac

30. Academic Staff College

ASC does not exist.

Departments organize in-house FDP programmes from time to time. Resource persons are invited from other Institutes.

- Year of establishment ... Not Applicable
- Number of programmes conducted (with duration)

- UGC Orientation
- UGC Refresher

University's own programmes: FDP June 2014

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

Yes		No	✓
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If yes, indicate the number of programmes offered.

Are they recognized by the Distance Education Council?

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

Yes		No	✓
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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	
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Re-Assessment:

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

Cycle	Accreditation date	CGPA	Grade
1	16/09/2011	2.63	B

* Copy of accreditation certificate(s) (ANNEXURE-III), peer team report(s) (ANNEXURE-IV) and post accreditation initiatives (ANNEXURE-XI)

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.

Not Applicable

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

IQAC 05/09/2016 ----- (dd/mm/yyyy)

AQAR 06/10/2016 ----- (dd/mm/yyyy)

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

None

2. Criteria - wise Inputs

1. CRITERION I: CURRICULAR ASPECTS

1.1. Curriculum Design and Development

1.1.1. How is the institutional vision and mission reflected in the academic programmes of the university?

In keeping with the vision and mission of the University, JUIT has been able to develop and offer academic programmes of extremely high quality in the domain of Bioinformatics, Biotechnology, Civil Engineering, Computer Science & Engineering, Electronics and Communication Engineering, and Information Technology, which are crucial to meet the specialized technical manpower need of the industry.

The University is also actively involved in research programmes for enrichment/development for supplementing the R&D efforts of the industry.

The University also provides a platform by organizing seminars/ workshops on emerging issues from time to time.

1.1.2. Does the university follow a systematic process in the design and development of the curriculum? If yes, give details of the process (need assessment, feedback, etc.)

The curricula are developed and reviewed by respective Boards of Studies of the different departments under the direction of the Academic Council. The role of the Academic Council has been clearly defined in the Act and Statutes of the University.

The concerned Boards recommend to the Academic Council the introduction of new Academic programs; prepare detailed curricula, syllabi, scheme of examination and evaluation for the courses; and review the syllabi from time to time and suggest modifications/ up-gradation. Feedbacks from faculty, students, alumni and the expert opinion is given due consideration.

The new programs/curricula are formally approved by the Academic Council after detailed deliberations and the minutes of the meetings are duly recorded.

1.1.3. How are the following aspects ensured through curriculum design and development?

* **Employability:**

JUIT endeavours to keep abreast with the Industry and latest technology trends. Accordingly, its academic programs and curricula are designed keeping in view the human resource requirements of the industries ensured by the experts on the Boards of Studies and Academic Council and the feedback collected by the placement cell from the employers. This is borne out by the placement record of the university which has shown 100% offers to the eligible students for the last five years.

* **Innovation:**

Some of the courses in the curriculum are administered in lecture cum project mode or field work and in a large number of courses, students are required/ encouraged to take up mini projects. These help in developing innovative and creative skills amongst the students.

* **Research:**

Since the UG and PG programmes offered by the university are confined to Engineering and Technology, projects, internships, term papers, dissertations etc form essential part of the curriculum. Students are motivated to publish their findings in various conferences/journals.

1.1.4. To what extent does the university use the guidelines of the regulatory bodies for developing and/or restructuring the curricula? Has the university been instrumental in leading any curricular reform which has created a national impact?

The guidelines of regulatory bodies such UGC and AICTE are given due consideration while developing and/or restructuring the curricula.

1.1.5. Does the university interact with industry, research bodies and the civil society in the curriculum revision process? If so, how has the university benefitted through interactions with the stakeholders?

Every Board of Studies has experts from industry and/or research bodies. Feed back is also collected from students at the end of each semester.

The interaction has made the curriculum rich and acceptable at international level. This is evident from the acceptability of students for higher studies in the universities abroad. Many students have also pursued their higher studies in India at IIMs, IITs etc. Few of the graduates have already completed Ph.D. at some of the highly reputed international universities.

1.1.6. Give details of how the university facilitates the introduction of new programmes of studies in its affiliated colleges.

Not applicable.

1.1.7. Does the university encourage its colleges to provide additional skill-oriented programmes relevant to regional needs? Cite instances (not applicable for unitary universities).

Not Applicable

1.2. Academic Flexibility

1.2.1. Furnish the inventory for the following:

- * Programmes taught on campus

S. No.	Level & Degree	Programme	Intake (2015 Admission)
1	UG (B. Tech)	Electronics and Communication Engineering (ECE)	120
2		Computer Science and Engineering (CSE)	240
3		Civil Engineering	90
4		Information Technology	30
5		Bio-Technology	60
6		Bio-Informatics	30
7		Pharmacy	--
8	PG (M. Tech)	Electronics and Communication Engineering (ECE)	18
9		Computer Science and Engineering (CSE)	18
10		Construction Management	18
11		Structural Engineering	18

12		Environmental Engineering	18
13		Bio-Technology	18
14		Pharmacy	--
15	Ph D	Electronics and Communication Engineering Computer Science and Engineering Civil Engineering Biotechnology Pharmacy Mathematics Physics and Materials Science, and Humanities and Social Sciences	Variable on year to year basis

- * **Overseas programmes offered on campus : NIL**
- * **Programmes available for colleges to choose from:** Not applicable.

1.2.2. Give details on the following provisions with reference to academic flexibility

- a) **Core / Elective options:** The core courses are fixed in all programs. The electives are offered in B Tech 4th year and M. Tech 2nd year, which can be opted by the students according to their individual interests.
- b) **Enrichment courses:** University offers few courses such as Nano Science & Technology, Optimization Techniques, Entrepreneurship Development, Strategic Management, International Business Management etc. to students as part of curriculum for enrichment of skills.
- c) **Courses offered in modular form :** Nil
- d) **Credit accumulation and transfer facility:** Not Available
- e) **Lateral and vertical mobility within and across programmes, courses and disciplines:** Not available

1.2.3. Does the university have an explicit policy and strategy for attracting international students?

No.

1.2.4. Have any courses been developed targeting international students? If so, how successful have they been? If 'no', explain the impediments.

No.

1.2.5. Does the university facilitate dual degree and twinning programmes? If yes, give details.

No dual degree and twinning programmes are offered at present.

1.2.6. Does the university offer self-financing programmes? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programmes?

JUIT is a self-financing private state university as such all programmes are self financing with

uniformity of admission criteria, fee structure, teacher qualification, salaries etc.

- 1.2.7. **Does the university provide the flexibility of bringing together the conventional face-to-face mode and the distance mode of education and allow students to choose and combine the courses they are interested in? If 'yes,' give operational details.**

No.

- 1.2.8. **Has the university adopted the Choice Based Credit System (CBCS)? If yes, for how many programmes? What efforts have been made by the university to encourage the introduction of CBCS in its affiliated colleges?**

No. Choice based credit system has not been adopted as envisaged by UGC/AICTE.

- 1.2.9. **What percentage of programmes offered by the university follow:**

- * Annual system
- * Semester system 100%
- * Trimester system

- 1.2.10. **How does the university promote inter- disciplinary programmes? Name a few programmes and comment on their outcome.**

No inter-disciplinary programmes are offered.

1.3. **Curriculum Enrichment**

- 1.3.1. **How often is the curriculum of the university reviewed and upgraded for making it socially relevant and/or job oriented / knowledge intensive and meeting the emerging needs of students and other stakeholders?**

Programme structure is reviewed every four years in case of Under-graduate programmes and two years in case of Post-graduate programmes. Revision of course contents is reviewed from time to time. Due consideration is given to the feedback from students, alumni and other stakeholders.

- 1.3.2. **During the last four years, how many new programmes at UG and PG levels were introduced? Give details.**

- * Inter-disciplinary : Nil
- * Programmes in emerging areas : M.Tech in Nano Technology (2011-13)

- 1.3.3. **What are the strategies adopted for the revision of the existing programmes? What percentage of courses underwent a syllabus revision?**

Minor adjustments/ alterations in course contents are taken up on yearly basis taking into account the feedback from students and faculty as well as contemporary developments. The BOS meetings are held periodically and the syllabi of various courses are reviewed and updated keeping in view the latest trends and developments.

- 1.3.4. **What are the value-added courses offered by the university and how does the university**

ensure that all students have access to them?

The students are offered some value added courses such as Social and Legal Issues, Total Quality Management, IPR and Patent Law, IPR and Bioethics etc. These courses are offered as core and elective uniformly accessible to all UG students of all programmes.

- 1.3.5. **Has the university introduced any higher order skill development programmes in consonance with the national requirements as outlined by the National Skills Development Corporation and other agencies?**

No

1.4. **Feedback System**

- 1.4.1. **Does the university have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?**

Feedback from the students is taken at the end of each semester in the specially designed format for theory and Lab courses (*ANNEXURE-V*). To ensure free and frank feedback students are not to disclose their identity and the feedback for particular course is collected by a nominated faculty (other than the teacher concerned). Data collected is fed into automated system. Based on the predesigned programme performance rate of the faculty and course is obtained.

All the feed backs obtained are analysed and the main/important points/ suggestions are conveyed to the teacher concerned.

- 1.4.2. **Does the university elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods such as conducting webinars, workshops, online discussions, etc. and its impact.**

The University elicits feedback on curriculum from national and international experts and industry through arranging workshops and inviting comments, suggestions and observations on current and proposed curriculum. All suggestions/comments received are considered and suitable amendments are made in the curriculum.

- 1.4.3. **Specify the mechanism through which affiliated institutions give feedback on curriculum enrichment and the extent to which it is made use of.**

Not applicable

- 1.4.4. **What are the quality sustenance and quality enhancement measures undertaken by the university in ensuring the effective development of the curricula?**

The measures taken are introduction of new elective courses, revision of syllabi on regular basis, up- gradation of courses and periodic review of curricula and academic processes. These are further strengthened through feedback from students and other stake holders.

Any other information regarding Curricular Aspects which the university would like to include.

CRITERION II: TEACHING-LEARNING AND EVALUATION

2.1. Student Enrolment and Profile

2.1.1. How does the university ensure publicity and transparency in the admission process?

The University carries out admissions to all its UG, PG, and Ph.D. programmes purely on the basis of merit in national level competitive examinations through a transparent and well administered mechanism. The admission related events, schedules and procedures are widely publicized through advertisements in national newspapers and magazines, and University website. A candidate has the option to apply online or submit an application as a hard copy. The details of such applicants are also maintained online and displayed on the website. All the candidates are provided a unique reference number which can be used to see the status of their application online.

To ensure transparency, complete details of academic programmes, seats available in each programme, admission process like meriting and counselling for the UG programmes are available on the University's website for information of the candidates. The complete admission process is software controlled; ensuring merit based counselling which is carried out in front of the shortlisted candidates and their parents. During counselling, the details of available and filled seats are projected live on the screens in the counselling halls. These details are also made available live on the University's website.

The results of the PG and Ph.D. programmes are also made available on the University's website.

2.1.2. Explain in detail the process of admission put in place by the university. List the criteria for admission: (e.g.: (i) merit, (ii) merit with entrance test, (iii) merit, entrance test and interview, (iv) common entrance test conducted by state agencies and national agencies (v) other criteria followed by the university (please specify).

B. Tech.

For the admission to the programmes in CSE, IT, CE and ECE, the candidates shortlisted strictly on the basis of All India Ranking of JEE Main examination conducted by the CBSE are called for counselling. The admission is offered on the basis of merit and choice of programme exercised by the candidates during the counseling.

For the programmes in Biotechnology and Bioinformatics, 50% seats are allotted on the basis of all India rank secured by the applicants in the JEE Main examination. Balance 50% seats are allocated to Biology based candidates as per merit drawn based on marks in 10+2 examination.

A candidate with Mathematics and Biology at 10+2 level can apply for both the options.

M. Tech. programmes

Admissions to M. Tech. programmes are made on the basis of merit drawn on the valid GATE score for the students who fulfil the minimum eligibility criteria. In addition, the University also conducts a Post Graduate Entrance Test (PGET) for the admission to the M. Tech. programmes.

Ph.D. Programmes

The admission to Ph.D. programmes is made through an all India entrance test conducted by the University in accordance with the UGC instructions and guidelines of 2009 on the subject. Candidates, who fulfil the minimum eligibility criteria, are required to take the written test. The shortlisted candidates are thereafter put through an interview. The candidates having qualified in NET/SLET or equivalent examinations and candidates in receipt of fellowship from the Govt agencies like CSIR, DST, etc., are allowed to take the interview directly. The final selection

is based on the recommendations of the selection committees.

2.1.3. Provide details of admission process in the affiliated colleges and the university's role in monitoring the same.

Not Applicable

2.1.4. Does the university have a mechanism to review its admission process and student profile annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?

The University compiles data of its students which include the profile of JEE ranks, percentage of marks in various qualifying examinations like 10+2, graduation/ post graduation, scores in competitive examinations like GATE/ NET/ SLET etc. In addition, the inputs are also collected at the time of application and registration to include details like category, gender, domicile/ background (rural/ urban), state, financial background etc. besides personal details. The data is analysed to know about the geographical diversity, merit/ academic profiles of the students and rate of attrition. The analysis helps the University to draw policies to improve the quality, quantity, diversity to include unrepresented strata of the students, changes in admission criteria, modifying the teaching learning processes or other procedures as may be necessary.

2.1.5. What are the strategies adopted to increase / improve access for students belonging to the following categories:

- * SC/ST
- * OBC
- * Women
- * Persons with varied disabilities
- * Economically weaker sections
- * Outstanding achievers in sports and other extracurricular activities

The University has adopted following strategies to increase access for the candidates belonging to different strata of the society:

- a) Reservation in admission for students belonging to SC/ST categories as per national policy on reservation. The admission criterion for such students is clearly defined in the admission procedure document.
- b) The provisions of (i) Fee concession; (ii) Merit scholarships; (iii) Jaypee India Scholars Fund, catering for free studies and repayment after graduation; and (iv) William Webster Scholarship which caters for reimbursement of fee up to one semester. These provisions are available for the students of all categories.

2.1.6. Number of students admitted in university departments in the last four academic years:

Categories	Year 2 2012-13		Year 3 2013-14		Year 4 2014-15		Year 5 2015-16	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	2	2	3	1	19	0	8	3
ST	0	0	0	1	8	1	1	1

OBC	-	-	-	-	-	-	-	-
General	301	121	289	128	304	127	370	121
Others	1	3	2	4	5	0	1	5

2.1.7. **Has the university conducted any analysis of demand ratio for the various programmes of the university departments and affiliated colleges? If so, highlight the significant trends explaining the reasons for increase / decrease.**

The University regularly conducts analysis of demand ratio of its various academic programmes. The University has been a popular destination for the students for admission to all its programmes. This is evident from the number of applications it receives for admission as given in the table below.

Programme	Year	Number of applications	Number of students admitted	Demand Ratio
UG	2012-13	23175	430	54:1
	2013-14	14076	428	33:1
	2014-15	11533	464	25:1
	2015-16	9579	510	19:1
PG	2012-13	801	75	11:1
	2013-14	597	86	7:1
	2014-15	558	61	9:1
	2015-16	186	76	3:1
Ph.D.	2012-13	775	49	16:1
	2013-14	449	57	8:1
	2014-15	390	20	20:1
	2015-16	81	5	16:1

2.1.8. **Were any programmes discontinued/staggered by the university in the last four years? If yes, please specify the reasons.**

B.Pharm and M.Pharm, M.Tech in Computational Biology : on account of poor admission.
Dual Degree in CSE, ECE and Biotechnology, on account of UGC directions.

2.2. Catering to Student Diversity

2.2.1. **Does the university organize orientation / induction programme for freshers? If yes, give details such as the duration, issues covered, experts involved and mechanism for using the feedback in subsequent years.**

At the beginning of each academic session, the University organizes a well structured orientation programme for the fresh students. Prior announcement of orientation schedule is made in the academic calendar of the University. It is organized at two levels - at the University level and the Departmental level. The programme at the University level is coordinated by the Registrar and is conducted in presence of Vice Chancellor, Director(s), Deans, Heads of academic departments, Training and Placement and IT support, Controller of Examination, Chairman of Timetable Committee, Librarian, and faculty/student coordinator of Jaypee Youth Club (JYC), who address the students on different issues. The normal duration of the orientation

programme is 1 day for UG, PG and Ph.D. programmes. The purpose of this programme is not only to welcome the students but also to make them aware of the facilities; rules and regulations, code of conduct, etc. The following topics are broadly covered in the University level orientation programme:

- Teaching – learning and assessment policies of the University;
- Rules and regulations of the University in academic and disciplinary matters;
- Foundation courses for weaker students so that they may be able to deal with the advanced level courses offered in the programme;
- Training and placement scenario;
- Help students familiarize themselves with each other so that they may be able to work together as learning teams;
- Learning Resource Centre;
- IT related facilities;
- Facilities like sports, medical, canteen;
- Timetable – how to read and identify their class schedules;
- Co-curricular and extra-curricular activities.

The University level orientation programme is followed by departmental orientation of UG, PG and Ph.D. students separately. The purpose of this orientation programme is to acquaint the students with the faculty members of the department, courses, laboratories, etc.

2.2.2. Does the university have a mechanism through which the “differential requirements of the student population” are analysed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?

Students of diverse background take admission in the academic programmes of the University, therefore, there are various issues/ differential requirements of the student population. One of the key issues observed by the University is the English language. Many students have been found to have poor English background, particularly those who have passed 10+2 examination from Hindi medium schools. Poor English background poses great difficulties to these students which results into their poor performance in various subjects. To address this issue, University offers an audit course in English in the first semester in addition to the compulsory Presentation and Communication Skills course. During orientation programme, students are informed about the audit course and are advised to assess their level and register in it.

Also, there are few courses which are in-built in the curriculum itself and are offered to address the differential requirements of the students. For example, a separate subject of mathematics is offered to the non-mathematics stream students of B. Tech. in Biotechnology/Bioinformatics programme in the first and second semesters to bridge the gap.

2.2.3. Does the university offer bridge / remedial / add-on courses? If yes, how are they structured into the time table? Give details of the courses offered, department-wise/faculty-wise?

Yes. English being the medium of instruction, an audit course in English course is given to the students identified as not so proficient in English. Basic mathematics is offered to the non-mathematics stream students of B. Tech. in Biotechnology/Bioinformatics programme. For students weak in other subjects, faculty helps them bridge the gaps in their competence during off periods.

2.2.4. Has the university conducted any study on the academic growth of students from

disadvantaged sections of society, economically disadvantaged, physically handicapped, slow learners, etc.? If yes, what are the main findings?

In B Tech program an ordinary student registers for 23-28 credits in a semester. The University rules and regulations allow a slow/disadvantaged learner to register for 15 or more credits in a semester.

2.2.5. How does the university identify and respond to the learning needs of advanced learners?

In B Tech program an ordinary student registers for 23-28 credits in a semester. An advanced learner student is allowed to take up some extra courses subject to maximum of 31 credits per semester. Duration of the program remains unaltered.

2.3. Teaching-Learning Process

2.3.1. How does the university plan and organise the teaching, learning and evaluation schedules (academic calendar, teaching plan, evaluation blue print, etc.)?

The teaching learning and evaluation schedule is jointly looked after by the Dean (A&R) and Registrar under the direct supervision of Vice Chancellor. All the activities during the semester/academic year are scheduled as per Academic Calendar. The Academic Calendar, prepared by Dean (A &R) and approved by VC, is announced in the month of April every year for the next Academic year.

2.3.2. Does the university provide course outlines and course schedules prior to the commencement of the academic session? If yes, how is the effectiveness of the process ensured?

Yes. The Course outlines, time table, study material, learning objectives and outcomes for each course are made available online to all students and faculty through a file server in a study material folder. The HODs ensure that all faculty members update study material folder on file server before start of the semester and the faculty teaching a particular course ensures that students make use of this facility to help organizing student- oriented skill based self-learning exercises.

2.3.3. Does the university face any challenges in completing the curriculum within the stipulated time frame and calendar? If yes, elaborate on the challenges encountered and the institutional measures to overcome these.

No. There has been no slippage in the academic calendar schedule.

2.3.4. How is learning made student-centric? Give a list of participatory learning activities adopted by the faculty that contributes to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.

The University lays emphasis to make the learning process to be student-specific. As a step towards this students are encouraged to do independent study in theory and tutorials. Apart from this laboratory work, project seminars, group discussions are the other activities which form the part of course work.

2.3.5. What is the university's policy on inviting experts / people of eminence to deliver lectures and/or organize seminars for students?

The University encourages its various Departments and faculty to identify and arrange experts/people of eminence, both from academia and industry, for delivering talks for the benefit of

students, research scholars and faculty. Such talks are regularly organized by the Departments.

2.3.6. Does the university formally encourage blended learning by using e-learning resources?
YES.

2.3.7. What are the technologies and facilities such as virtual laboratories, e-learning, open educational resources and mobile education used by the faculty for effective teaching?

All lecture rooms are equipped with internet connection and multi-media projection facilities. Faculty in its delivery of lectures liberally uses these facilities to provide visual contents. The university is in the process of procurement of courses from NPTEL and is already utilizing courses from other universities for open source facilities to enrich the learning exercise of students. Lecture PPTs are made available in a study material folder which can be accessed through Wi-Fi /LAN connection by students within the campus including hostels. This makes all reading material and lectures available on 24x7 basis.

The Learning Resource Centre (Library) of the University has rich collection of e-resources along with print resources. The budget allocation for e-resources is kept liberal.

2.3.8. Is there any designated group among the faculty to monitor the trends and issues regarding developments in Open Source Community and integrate its benefits in the university's educational processes?

The University has an Advisory Committee, consisting of Chairman-LRC, Deputy Librarian and a faculty representative from each department, to monitor the trends and issues related to developments in open source community. The Committee ensures the effective integration of open resources and advises accordingly to disseminate the same to faculty and students.

2.3.9. What steps has the university taken to orient traditional classrooms into 24x7 learning places?

Students on the campus have 24x7 accessibility of e-resources (e-books, e- journals, case studies, etc.), study materials on the university file server through Wi-Fi/ internet facilities of the University. The university is in the process of procurement of courses from NPTEL.

2.3.10. Is there a provision for the services of counsellors / mentors/ advisors for each class or group of students for academic, personal and psycho-social guidance? If yes, give details of the process and the number of students who have benefitted.

YES. A faculty member is appointed as Faculty Counsellor for a group of about 6 students at the time of admission to 1st semester of B Tech. He/She takes care of this group until it passes out.

The guide lines for the counsellor are as under:

- Act as local guardian of the students and therefore perform all such activities as a
- Local guardian should perform.
- Continuously monitor their academic performance including their attendance, marks
- in quizzes, minor tests, major tests and discipline,
- Teach at least one course to such students as far as possible.
- Discuss all issues with the students whether personal or official.
- Be in constant touch with their parents to inform of their progress.
- Meet every student at least once every fortnight.
- Apprise VC of the progress of the students once in a month.
- Seek the help of the administration or VC to resolve problems, if necessary.

2.3.11. Were any innovative teaching approaches/methods/practices adopted/put to use by the faculty during the last four years? If yes, did they improve learning? What were the methods used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?

From the very beginning the innovative techniques like projectors, charts and computers are being used. The study material is also uploaded on the server which students can access at their convenience.

Lecture method is predominantly used in theory courses. In teaching core theory courses tutorial method is also used. The tutorials are organized in batches of at the most 30 students. In tutorials students are encouraged to discuss the course related problems and helped in problem solving.

As per requirement of a particular course, following innovative methods are also adopted:

- a) Lab practical (for engineering courses)
- b) Group discussions
- c) Case analysis
- d) Simulation Games
- e) Seminars/special lectures
- f) Quizzes
- g) Industry visits/study visits
- h) Project work/dissertation

Yes. The students have improved their learning skills by these innovative methods of teaching and the impact of all these practices have been positive as evidenced from students feedback and acceptance with enthusiasm.

2.3.12. How does the university create a culture of instilling and nurturing creativity and scientific temper among the learners?

Creative and scientific temperament and skill development in students is nurtured through:

Activity clubs

Student Branches of various scientific and technical bodies like IEEE, ACM etc.

Departmental technical clubs such Synapse, CEC etc.

Project based learning

Minor and major projects

Seminar and term paper

Participation in Seminars, Conference and Workshops

Problem based learning

2.3.13. Does the university consider student projects mandatory in the learning programme? If yes, for how many programmes have they been (percentage of total) made mandatory?

* Number of projects executed within the university

* Names of external institutions associated with the university for student project work

* Role of faculty in facilitating such projects

Projects and Industrial Training/ Internship are mandatory part of all programmes. A mandatory 6 weeks' industrial training/internship programme is to be completed by each student after

his/her sixth semester so that they become industry ready before placement. Generally all projects are executed in the University. However, some projects are executed in Industry.

Training outside

1. Final semester project training of 16 weeks is offered by Infosys at their Mysore campus for B. Tech. CSE/IT every year.
2. Five day pre-joining programme by WIPRO at IIIT, a sister institute in 2014

Training on the JUIT campus

1. Three weeks' pre induction training by Accenture during June-July, 2012 has been conducted.

Role of faculty in facilitating projects:

The students register for projects in pre-final and final semesters as per guide lines of the curricula. Each student works on the project under a Supervisor (Faculty member). The student must maintain logbook of his day to day activity and get it signed by the supervisor twice a week. The components for judging the progress are as under:

- | | |
|--|-----|
| ○ Day to day work – judged by supervisor | 35% |
| ○ Mid-term seminar – judged by a panel | 15% |
| ○ Viva-Voce examination – judged by panel | 15% |
| ○ Project Report / Thesis – judged by supervisor | 15% |
| ○ Final Viva-Voce/ Defence of Dissertation – judged by a panel | 20% |

2.3.14. Does the university have a well qualified pool of human resource to meet the requirements of the curriculum? If there is a shortfall, how is it supplemented?

The University has a rich pool of well qualified human resources to meet all requirements of the Curriculum.

2.3.15. How are the faculty enabled to prepare computer-aided teaching/ learning materials? What are the facilities available in the university for such efforts?

Each faculty is provided with a dedicated networked computer with broadband internet connection and required software to prepare computer-aided teaching/ learning materials. All class rooms are equipped with networked computer, multimedia projector, internet facility, and PA system. Faculty members are individually provided a password protected network drive accessible from all class rooms/ university network.

2.3.16. Does the university have a mechanism for the evaluation of teachers by the students / alumni? If yes, how is the evaluation feedback used to improve the quality of the teaching-learning process?

At the end of every semester, students are required to give teacher-wise feedback on each subject studied by them in the semester. The feedback is obtained on various parameters. This feedback is consolidated and an index is calculated. The feedback is communicated to concerned teacher and is advised to take suitable corrective action, if required.

2.4. Teacher Quality

2.4.1. How does the university plan and manage its human resources to meet the changing requirements of the curriculum?

The Board of Management (Governing Body) allows that the faculty be recruited based on the assessed requirements. Flexibility has been allowed to cater for additional recruitment whenever needed without any restraint on the numbers. This ensures smooth conduct of programmes, and enables the University to meet the requirement due to changes in curriculum and additional courses. While doing so, the norms and parameters laid down by the UGC/AICTE for faculty are observed for compliance.

The University has been empowered to enrol adjunct faculty on its rolls. In addition, guest lectures by eminent people from industry/ academia greatly assist in enriching the contents in the advanced courses. The rich quality and strength of faculty enables the University to launch the best of the courses in its curricula as necessitated by the changing trends.

2.4.2. Furnish details of the faculty

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent Teachers							
D.Sc./D.Litt	00	00	00	00	00	00	00
Ph.D.	13	00	13	01	34	10	71
M.Phil.	00	00	00	00	00	01	01
PG	00	00	00	00	21	10	31
Temporary Teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-
Part-time teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-

2.4.3. Does the university encourage diversity in its faculty recruitment? Provide the following details (department / school-wise).

Department/ School	% of faculty from the same university	% of faculty from other universities within the State	% of faculty from universities outside the State	% of faculty from other countries
Electronics and Communication	36	00	64	00
Computer Science and Engineering & Information	27.3	4.54	68.18	00

Technology				
Biotechnology and Bioinformatics	5.9	17.6	76.5	00
Pharmacy	00	00	100	00
Civil Engineering	13.3	00	86.7	00
Humanities and Social Sciences	00	43	57	00
Mathematics	00	00	100	00
Physics and Materials Science	11	22	67	00

2.4.4. **How does the university ensure that qualified faculty are appointed for new programmes / emerging areas of study (Bio-technology, Bio-informatics, Material Science, Nanotechnology, Comparative Media Studies, Diaspora Studies, Forensic Computing, Educational Leadership, etc.)? How many faculty members were appointed to teach new programmes during the last four years?**

For starting new programmes/emerging areas of study, concerned Department carries out gap analysis in terms of required expertise and further steps are taken for the recruitment of new faculty. This process is carried out once in a year. During the last four years, no new programme was introduced.

2.4.5. **How many Emeritus/Adjunct Faculty/Visiting Professors are on the rolls of the university?**
Nil

2.4.6. **What policies/systems are in place to academically recharge and rejuvenate teachers (e.g. providing research grants, study leave, nomination to national/international conferences/seminars, in-service training, organizing national/international conferences etc.)?**

- a) Teachers are encouraged to carry out independent research work for their professional development.
- b) Teachers are encouraged to take up research projects sanctioned by various State and Central government organizations and sponsored by industry/research organizations.
- c) Teachers are also encouraged and financially supported for attending workshops, seminars, conferences, etc. and presenting papers.
- d) Financial support is also given to the faculty to organize national/international/seminars/conferences/workshops etc.
- e) For organizing specialized talks, all kind of support is extended by the university.
- f) University provides partially financed study leaves facility to the faculty for pursuing higher studies.
- g) Duty leaves for attending professional seminars/symposia/conferences.
An amount of Rs 1 Crore from Jaypee Research Fund (*Shodh Kosh*) is available annually for research projects by Faculty.

2.4.7. **How many faculty received awards / recognitions for excellence in teaching at the state, national and international level during the last four years?**
Nil

2.4.8. How many faculty underwent staff development programmes during the last four years (add any other programme if necessary)?

PMS: Physics & Materials Science; **Math:** Mathematics; **HSS:** Humanities & Social Sciences; **BT:** Biotechnology & Bioinformatics; **Ph:** Pharmacy; **ECE:** Electronics & Communication Engineering; **CSE:** Computer Science Engineering & Information Technology; **CE:** Civil Engineering.

Programmes		PMS	Math	HSS	BT+Ph	ECE	CSE	CE
		F. No.	F. No.	F. No.	F. No.	F. No.	F. No.	F. No.
Refresher courses	2012-13	0	0	0	0+0	10	0	0
	2013-14				1+0	12		
	2014-15				5+0	20		
	2015-16				5+0	20		
HRD programmes	2012-13	0	0	0	1+0	0	1	0
	2013-14				1+0		3	
	2014-15				0+0		0	
	2015-16				1+0		0	
Orientation programmes	2012-13	0	0	0	1+0	0	0	0
	2013-14				0+0			
	2014-15				1+0			
	2015-16				1+0			
Staff training conducted by the university	2012-13	0	0		0+0	0	5	0
	2013-14	0	0		1+0		0	0
	2014-15	9	5		9+3		29	15
	2015-16	0	0		9+3		19	0
Staff training conducted by other institutions	2012-13	0	0	0	0+0	0	2	0
	2013-14				1+0		0	
	2014-15				0+0		0	
	2015-16				0+0		3	
Summer / Winter schools, workshops, etc.	2012-13	9	0	0	1+0	12	31	15
	2013-14	9	0		3+0	20	7	16
	2014-15	0	0		4+0	20	21	15
	2015-16	0	5		5+0	20	0	0

2.4.9. What percentage of the faculty have

- * been invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies? 19.67
- * participated in external Workshops / Seminars / 24.5
- * Conferences recognized by national / international professional bodies? 51.48
- * presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies? 38.09
- * teaching experience in other universities / national institutions and other institutions? 31.13

- * **industrial engagement? 1.33**
- * **international experience in teaching? 2.52**

2.4.10. How often does the university organize academic development programmes (e.g.: curriculum development, teaching-learning methods, examination reforms, content / knowledge management, etc.) for its faculty aimed at enriching the teaching-learning process?

Curriculum Development: The University regularly organizes various academic development programmes as mentioned above wherein faculty members are mentored and educated on recent developments in science & technology by senior faculty of the University or subject experts from reputed institutions in India or even abroad invited via IUCEE program. We have had national and international experts on ABET accreditation of USA and NBA. The experts provided detailed know-how on outcome-based education and teaching-learning methods. The faculty are encouraged to regularly update course curricula, either for content or even by introducing new elective courses. Individual departments have board of study (BOS) meeting with external members from academia and industry.

Teaching-learning methods: The University organizes 1 week faculty development programmes aimed at enriching teaching-learning processes and recent developments in pedagogical methods.

Examination reforms: The University has implemented a continuous evaluation system for which faculty members are mentored to implement improvements in type of questions so as to assess learning outcome.

Content/knowledge management: The University has a learning resource centre which not only houses the books, periodicals and journals but also manages research publication database of all faculty members. The centre also keeps hard and digital copies of all B.Tech/MTech and PhD Theses, which are an important knowledge resource of the University.

Feedback: On regular basis, the feedback from stakeholders, exit surveys from outgoing classes, feedback from regular courses are collected and assessed for further improvement. Alumni feedback is also collected and assessed.

2.4.11. Does the university have a mechanism to encourage

- * **Mobility of faculty between universities for teaching?**
- * **Faculty exchange programmes with national and international bodies?**

If yes, how have these schemes helped in enriching the quality of the faculty?
No.

2.5. Evaluation Process and Reforms

2.5.1. How does the university ensure that all the stakeholders are aware of the evaluation processes that are in place?

The evaluation process followed at the University is widely publicized to all its stakeholders (students, parents and faculty) and it is ensured that they have complete knowledge of the process at all stages. Various measures taken for this are as follows:

- a) The soft copy of the Academic System and Standing Orders on Regulations of various programmes are placed on the website, which can be accessed by all.
- b) The soft copy is also available to all the students and faculty on intranet/study material folder.
- c) Important extracts and procedures are also displayed on the notice boards. The changes in the rules and regulations are regularly informed to all concerned through e-mails, notice boards and website.
- d) All students are put through the orientation programme at the time of joining, where evaluation methods are explained.
- e) All subject teachers are required to explain the evaluation methodology to the students in the first class of each course at the beginning of semester.
- f) Results of various examinations are made available to the students and their parents through web kiosk (ERP software) maintained on University website.

2.5.2. What are the important examination reforms initiated by the university and to what extent have they been implemented in the university departments and affiliated colleges? Cite a few examples which have positively impacted the examination management system.

- All marked answer books of written tests are shown to the students.
- Separate Laboratory courses have been introduced and evaluated from the admissions of 2007-08.
- An outside expert is included in the panel of examiners for judging the presentation/defence of project report/thesis both UG and PG students from the session 2009-10.

Since the inception of the University Internal Assessment and Moderation of results have been integral parts of the examination system. Open book examination is left to the discretion of the teacher.

2.5.3. What is the average time taken by the university for declaration of examination results? In case of delay, what measures have been taken to address them? Indicate the mode / media adopted by the university for the publication of examination results (e.g. website, SMS, email, etc.).

Results are declared after about two weeks of the last test day of end semester examination. The dates of end semester examination and declaration are prefixed by the Academic Calendar.

So far all results have been declared on schedule. Results are uploaded on the University's web kiosk (ERP software) which is accessible to all concerned.

2.5.4. How does the university ensure transparency in the evaluation process? What are the rigorous features introduced by the university to ensure confidentiality?

In case of theory courses the evaluation of two mid term tests, end term test and to large extent evaluation under internal assessment component is transparent as the marked answer books/sheets are shown to the students. In Laboratory courses 60% of evaluation is through continuous assessment, which is transparent.

After all the answer books of the end semester examination have been graded, teacher(s) teaching the course assign the letter grades. The result is moderated by a committee consisting of VC, Dean and HOD. Approved result is uploaded on Web Kiosk.

Question papers are prepared and printed in one specially allocated room to ensure confidentiality. Computers in this room are not on the University network or internet. All question papers are then handed over to the COE in sealed covers one week before the examination. The office of COE takes care of all confidentiality and security during and after the conduct of examination.

2.5.5. Does the university have an integrated examination platform for the following processes?

- * **Pre-examination processes – Time table generation, OMR, student list generation, invigilators, squads, attendance sheet, online payment gateway, etc.**
- * **Examination process – Examination material management, logistics, etc.**
- * **Post-examination process – Attendance capture, OMR-based exam result, auto processing, generic result processing, certification, etc.**

Pre-Examination Processes

The University has a well established automated examination process for preparing schedules, invigilation charts, flying squads, lists of students eligible for appearing at the examinations, detention lists, recording of attendance at the examinations, communicating about examination rules and guidelines to all concerned.

Examination Process

During the examination room-wise pre-packaged examination material (like answer books, attendance sheets etc.) are collected by the invigilators from the office of COE, 20 minutes before the commencement of examination. Similarly the sealed room-wise question paper bundles are delivered by the COE office in the respective rooms. Before commencement of examination, the students are verbally apprised of the Do's and Don'ts to avoid unfair means. The invigilators are required to check the identity of each student and also confirm that the student is sitting as per the seating plan. The invigilators are required to ensure that the number of copies collected back after the examination tally with the attendance sheet. The answer and attendance sheets are deposited by the invigilators in the office of COE.

Post examination processes

The post-examination process is also fully automated (except checking of answer books), and is time bound. The post examination processes are as follows:

- a. Course coordinators collect the answer books along with the absentee list from the office of COE.
- b. Course coordinators discuss detailed marking scheme with evaluators and distribute answer scripts to evaluators.
- c. After completion of evaluation, on or before the designated date, marked answer books are shown to students to maintain fairness, transparency and uniformity.
- d. Marks are entered and locked in the web-kiosk by evaluators. Tentative grades are allotted by the coordinator maintaining the parameters specified by the grade moderation committee appointed by the Vice Chancellor.
- e. The University Result Committee finalizes and approves the grades of each subject and these grades are locked. A duly signed copy of the result is submitted in the registry through HOD.
- f. Registrar declares the results and the same are made available on web- kiosk to all concerned.

- g. The system of collation of marks, grade calculation, printing of grade- sheets, transcripts, provisional degree and related documents are system controlled.

2.5.6. Has the university introduced any reforms in its Ph.D. evaluation process?

For the Ph.D. programmes, the University follows the evaluation process which is in compliance with the UGC Guidelines-2009.

Every PhD student has to clear the Comprehensive Test comprising three courses.

Each Ph.D. Scholar is assigned a doctoral programme monitoring committee (DPMC). All scholars are required to present their work in a seminar before DPMC at the end of each semester to be eligible for continuation in the Programme.

Before submission of the thesis, scholar puts a request to Dean (A &R) through DPMC for assessment of the fulfillment of the submission requirements (completion of course work; minimum two publications in reputed indexed journals) and request for synopsis presentation of the work before the DPMC.

On the basis of this synopsis presentation, DPMC makes suggestions for improvements and recommendation for formal submission of the synopsis.

On submission of the synopsis, the scholar is allowed to submit the thesis within the stipulated time period.

The university has included in its policy that each research paper, Ph.D. thesis, and M. Tech. dissertation report should undergo plagiarism check before submission. For this, university avails the services of its sister institute-JIIT Noida, which has subscribed to the —Turnitin software. The university is in process of acquiring its own plagiarism check software.

The examiners for Ph.D. theses comprise two experts: one from India and the other from abroad. These examiners are selected from two panels each consisting of four experts suggested by the supervisors. The final selection of examiners is done by the Vice Chancellor.

The recommendations of the examiners are reviewed by the Dean (A&R) and extracts from the same are communicated to the concerned scholar through supervisor(s).

The open defense of the Ph.D. thesis is made before Indian external examiner in presence of all members of DPMC, faculty and Ph.D. scholars.

The report of the open defense along with the examiners' reports is considered by the DPMC, Dean and Vice Chancellor for the award of Ph.D. degree.

2.5.7. Has the university created any provision for including the name of the college in the degree certificate?

Not Applicable

2.5.8. What is the mechanism for redressal of grievances with reference to examinations?

The University provides full opportunity to students to seek redress in examination related matters. As indicated above under examination reforms, the student is allowed to see all the marks and view the answer-books of all written examinations. Thus, a student is fully aware of the written performance. In case of any query or grievance the student may first take his/her appeal to individual faculty and further appeal to the HOD/Director. The appeal may further be taken up with the concerned Dean or finally the VC, whose decision is final.

2.5.9. What efforts have been made by the university to streamline the operations at the Office of the Controller of Examinations? Mention any significant efforts which have improved the process and functioning of the examination division/section.

The University has streamlined the examination system by implementing computerized system (ERP system) which takes care of all examination activities in a time bound manner while maintaining security and confidentiality. The system has greatly helped in strictly adhering to the academic schedule and timely declaration of results.

2.6. **Student Performance and Learning Outcomes**

2.6.1. **Has the university articulated its Graduate Attributes? If so, how does it facilitate and monitor its implementation and outcome?**

The University has adopted the graduate attributes across all its academic programmes after in-depth study of the same listed in the NBA document in the light of engineering competencies, emerging job requirement, emerging societal challenges, and feedback from industry. The emphasis on higher level cognitive skills like apply, formulate, analyze, design, evaluate, create, select, identify, interpret, experiment, etc. as well as considerations for environment, health, and ethics are the hallmarks of these attributes.

Knowledge: Awareness and understanding of concepts, Latest developments in the field of knowledge, Technology and society, Environment & Sustainability

Skills: Problem solving, Design & development of solutions, Technology usage, Project management, Values & ethics, Individual & team work, Communication, Self management

Attitudes: Self confidence, Initiative taking, Lifelong learning, Values & ethics.

2.6.2. **Does the university have clearly stated learning outcomes for its academic programmes? If yes, give details on how the students and staff are made aware of these?**

Yes. All the programmes and courses are developed with clearly defined learning objectives and outcomes. All faculty members across Departments are sensitized and encouraged to design, develop and conduct their courses in the context of specific learning outcomes. In the orientation of first year students the concerned HOD's articulate and highlight the Program objective and the learning outcome of the same.

2.6.3. **How are the university's teaching, learning and assessment strategies structured to facilitate the achievement of the intended learning outcomes?**

All assessments, both continuous and end-term/ semester, in each of the programme and courses are geared to evaluate the extent to which students have been able to acquire the pre-decided learning outcomes and competencies. The course outcomes are linked with the graduate attributes and the programme outcomes. These attributes are adequately reflected in the programme output, i.e., job placement, global acceptance for higher studies, student performance in various competitions and feedback from stakeholders.

Learning outcomes for all the academic programmes have been clearly articulated, documented and made available on the university website/ study material folder. The learning outcomes of each course are discussed among the faculty within the department and other university bodies such as BOS, Academic Council, etc., so that they are in-line with the programme outcomes. In order to make students aware of the learning outcomes of each course, mention of these outcomes is made mandatory in each course outline and every faculty member compulsorily mentions the learning outcomes of the course offered in the course content and schedule.

All programmes are designed and delivered in a manner to develop ability to apply knowledge besides learning the concepts and theory.

2.6.4. **How does the university collect and analyse data on student learning outcomes and use it to**

overcome the barriers to learning?

Students' progress and learning outcomes are monitored through continuous evaluations, tutorials and laboratory exercises, and live projects/assignments. The university conducts three tests in all courses and reviews the performance of students in the faculty meeting at departmental level and in the meeting of result committee under the chairmanship of the Vice Chancellor. At the end of each semester, student feedback is taken; course wise performance of students is discussed, analyzed and recorded in terms of grades. Based on discussion, feedback of student and faculty, course contents are improved. Weak students are encouraged for special meetings and interaction with the faculty to identify their problems and means to solve them.

2.6.5. What are the new technologies deployed by the university in enhancing student learning and evaluation and how does it seek to meet fresh/ future challenges?

The university pays special attention to be at the fore-front of integrating latest technology in its teaching-learning process. Thus, most of the new technologies with respect to computer software, hardware and other automated tools are employed in teaching, learning and research. All class rooms are equipped with multimedia projection and internet facilities.

The university encourages the usage of open source software. All course material is available on university network which is accessible from anywhere within the campus 24x7. The university uses IT for its data handling and procedures such as student and staff attendance, result preparation, student data- personal and academic. Dedicated IT staff is available for the maintenance of hardware, software and audio-visual aids.

Any other information regarding Teaching, Learning and Evaluation which the university would like to include.

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

3.1. Promotion of Research

3.1.1. Does the university have a Research Committee to monitor and address issues related to research? If yes, what is its composition? Mention a few recommendations which have been implemented and their impact.

YES. The Dean, Academic & Research is the Head of all academic and research programmes in the University and is responsible for the conduct and maintenance of the standards of teaching and research.

A Doctoral Program Monitoring Committee (DPMC) for every Ph D Research Scholar is constituted. The DPMC consists of:

- ✚ The Dean – Academic & Research (Chairman),
- ✚ Supervisor(s),
- ✚ Head of the Department, and
- ✚ Three Senior Faculty members (including one from an allied discipline) to be nominated by the Vice-Chancellor.

On the suggestion of the DPMC the following have been implemented:

- ✚ Presentation of complete work by research scholar before starting to prepare synopsis.
- ✚ Assessment of quality of papers published in journals prior to work presentation.
- ✚ A requirement of submission of plagiarism check report from Turnitin software, available in LRC, on all submissions of research reports, papers, theses, project reports.
- ✚ A system of midterm comprehensive review of progress of Ph.D. Scholars' work.

3.1.2. What is the policy of the university to promote research in its affiliated / constituent colleges?

Not Applicable

3.1.3. What are the proactive mechanisms adopted by the university to facilitate the smooth implementation of research schemes/projects?

- * **advancing funds for sanctioned projects:** Yes
- * **providing seed money:** Yes
- * **simplification of procedures related to sanctions / purchases to be made by the investigators:** Yes
- * **autonomy to the principal investigator/coordinator for utilizing overhead charges:** Yes
- * **timely release of grants:** Yes
- * **timely auditing:** Yes
- * **submission of utilization certificate to the funding authorities:** Yes

3.1.4. How is interdisciplinary research promoted?

- **between/among different departments /schools of the university**

The faculties of each department are encouraged to utilize the facilities of other departments for interdisciplinary research. The various efforts made so far are listed below:

- (a) Dr. Sudhir Syal (Faculty of BT Department) in association with Dr. Ashish Kumar (Faculty from Civil Engg. Dept.) have installed a cost-effective Biogas digester to convert food waste, vegetables, rotten fruits into energy and organic fertilizers.
- (b) Department of Mathematics organized workshop on “Statistical Techniques in Biological and Medical Sciences, STBMS – 16”, at JUIT Wahnaghat, Solan, during the period 13 - 18 June 2016, in collaboration with Department of Biotechnology.
- (c) Faculty member belonging to Computer Science & Engineering department have submitted research grant proposal to DBT in collaboration with faculty member from Department of Biotechnology.
- (d) University encourages joint guidance of thesis, and encourages faculty members from different disciplines to guide UG/PG or PhD thesis jointly via intra- and inter- departmental efforts.

➤ **Collaboration with national/international institutes/industries.**

- (a) Department of CSE has student exchange program with (i) department of CISC, University of Florida, Gainesville, FL 32611, USA, (ii) College of Information Science & Technology, The Peter Kiewit Institute of Information Science, Engineering & Technology, University of Nebraska, Omaha.
- (b) Department of ECE has student exchange program with University of Florida & University of Nebraska. ECE faculty also has joint research projects under Indo-Poland Collaboration.
- (c) Department of Biotechnology have set up active research collaborations with many National/International Institutes through joint research projects or workshops on areas of mutual interest as given below:

S. No.	Collaborators	Type of Collaborations
International Collaborations		
1	Dr. Sumeet Dua, Louisiana Tech University, LA, USA	Medical Informatics
2	Alla Nozhevnikova, Winogradsky Institute of Microbiology, Research Center of Biotechnology of the Russian Academy of Sciences, Moscow	Research Project, Publication
3	Dr. Hasham Ali, University of Nebraska, Omaha, USA	Computational Metabolic Networks
4	Dr. Nathan Hillson, Joint BioEnergy Institute, Fuels Synthesis Division, Emeryville, CA, USA	Synthetic Biology
National Collaborations		
5	Dr. Anil Kumar Puniya, GADVASU, Ludhiana	Research Project
6	Sumit Singh Dagar, Agarkhar Research Institute, Pune	Research Project
7	Prof. Harvinder Singh, GNDU Amritsar	Research Project
8	Dr. Vibha Gupta, IIIT Noida	Research Project
9	Dr. Lokendra Singh, DRDE Gwalior	Research Project
10	Dr. Devesh Chauhan, National Institute of Tuberculosis & Respiratory Diseases, New Delhi	Patent
11	Dr. M Sarkar, IGMC, Shimla	Publication
12	Dr. Swarjit cameotra, IMTECH Chandigarh	Research Project, Publication
13	Asmita Prabhune, National Chemical Lab, Pune	Publication
14	Dr N Grover, IGMC, Shimla	Publication
Industrial Collaborations		
15	Ravikanth K, Ayurvet Industry, Baddi, Solan	Project, Publication

3.1.5. Give details of workshops/ training programmes/ sensitization programmes conducted by the university to promote a research culture on campus.

S. No.	Workshops/training programmes/ sensitization programmes conducted
1.	Advanced Workshop on “Integral Equations – Solvability Analysis and Applications” under the auspices of National Program on Differential Equations: Theory, Computation and Applications (NPDE-TCA) sponsored by DST, Government of India held at Jaypee University of Information Technology, Wagnaghat, Solan, October, 19 th – 25 th 2015.
2.	Workshop on Combinatorics and Graph Theory in Science and Engineering (CGSE 2014) held at Jaypee University of Information Technology, Wagnaghat, Solan, INDIA, November 3-8, 2014
3.	Workshop on Business Process Simulation, JUIT Wagnaghat, Solan, 2 nd September, 2014
4.	Workshop on Statistical Techniques in Biological and Medical Sciences, STBMS - 16; JUIT Wagnaghat, Solan, 13 - 18 June 2016
5.	Two Day workshop on “Antenna Materials” 14 th -15 th December, 2012 at JUIT Wagnaghat.
6.	One week workshop on “Nanotechnology (Fabrication and Characterization)” December 11, 2013 at JUIT Wagnaghat.
7.	Annual workshop on “Tools and Techniques for Data Analysis in Management Research”, June 7-9, 2012, Dec 12-14, 2013, June 16-21, 2014, June 8-13, 2015, June 20-25, 2016.
8.	Three-days training program for the employees of “READ India”, during April 4-6, 2011.
9.	Faculty Development Programme on ‘Outcome-based education in Biotechnology’ at JUIT, Wagnaghat, 24 th - 30 th Dec, 2015.
10.	Faculty Development Programme at JUIT, Wagnaghat, 14 th - 19 th July, 2014.
11.	“IP Connects” Organized in association with IP cell, JUIT on 09 th August 2013.
12.	Big Data Opportunities in Clinical Informatics organized by Dept. of Biotechnology & Bioinformatics, Jaypee University of Information Technology, Wagnaghat, Solan, India in association with Louisiana Tech University, LA, USA from 22 nd – 24 th July 2013 at JUIT, Wagnaghat, Solan
13.	Summer Training Program being organized in June/July (since 2010) every year in different areas of Biotechnology & Bioinformatics for M.Tech./B.Tech/M.Sc. students from colleges/universities across India & other countries.
14.	“UNO Bioinformatics Workshop” organized by Dept. of Biotechnology & Bioinformatics, Jaypee University of Information Technology, Wagnaghat, Solan, India in association with University of Nebraska, Omaha, USA from 6 th – 12 th May 2013 at JUIT, Wagnaghat, Solan.
15.	“Paradigms of Synthetic Biology” organized in association with Joint BioEnergy Institute, Fuels Synthesis Division, Emeryville, CA, USA from 23 th – 30 th July 2011.
16.	“Computational Paradigms of Clinical Informatics” organized in association with Louisiana Tech University, LA, USA from 1 st – 3 rd Feb 2011.
17.	Faculty Development Program on “Signal Processing and Its Applications” January 13 – 18, 2016.
18.	Special session on “Routing And Wavelength Assignment” by Dr. Sant Sharan Pathak, eminent professor from IIT Kharagpur. Held on 25 th September 2015.

19	National workshop on “Technical Manuscript preparation with LaTeX”. Held on 29 November, 2015.
20	National Workshop on “Design and Implementation of Logics using FPGA”, November 16-23, 2015.
21	Students’ Activity: (i) IEEE Mock placement test, September 19, 2015. (ii) IEEE Robotics workshop, October 12 -14, 2015.
22	Special session, Dr. B.N. Basu, Sir JC Bose School of Engineering, Supreme Knowledge Foundation Group of Institutions, West Bengal on “ Electromagnetic theory and its scope in microwave tube research in India”, Nov. 8, 2014.
23	Special session, Dr R P Gupta, Central Electronics Engineering Research Institute Pilani, on topic “VLSI fabrication of Silicon chips”, Nov. 22, 2014.
24	Workshop on “VLSI Design using Verilog HDL & FPGA”, April 14th 2015.
25	Workshop on “Simulation capabilities of COMSOL Multiphysics”, May 30th 2014
26	Workshop on “VoIP”, April 14 th to 18 th 2014
27	Workshop on “LabView for Real time application”, April 24, 2014
28	Training on “FPGA Kit”, May 21, 2014
29	Workshop on “MATLAB in Engineering Education”, November 11-16, 2013
30	Workshop, Lecture Series, Dr. Veena B. Mendiratta, Bell Labs, Alcatel-Lucent , Naperville, USA, September 23 to October 5, 2012.
31	Summer School on Wireless Sensor Networks, Dr Subhalakshmi Kher, Arkansas State University, 5 th – 9 th July 2011
32	Workshop on LABVIEW, Experts from NI, 17-18, Feb., 2011.
33	Five days workshop in Wireless Sensor Networks as part of Indo-US Engineering Faculty Leadership Institute. 05-09 July, 2011 at Jaypee University of Information Technology, Wagnaghat, Solan, India.
34	Course work on “Data Mining and Parallel Computing”, jointly organized by Jaypee University of Information Technology Wagnaghat, Solan, Himachal Pradesh-India and University of Florida, August 2-5, 2011.
35	Two days workshop on antenna materials, 14-15 December, 2012 at Jaypee University of Information Technology, Wagnaghat
36	Two days workshop on Wireless Networks and Network Simulator (WNNS-2012), 09-10 July, 2012, JUIT, Wagnaghat.
37	Intelligent Transportation System, C-DAC, Trivandrum - 27 may 2013 to 5 Jun 2013
38	Workshop on Wireless Networks and Network Simulator (WNNS-2012) at Jaypee University of Information Technology, Wagnaghat, July 09-10, 2012 July 09-10, 2012.
39	Workshop on Antenna Materials at Jaypee University of Information Technology, Wagnaghat, 14-15 December, 2012
40	Excellence in Teaching, Research & Education - by Design, JUIT Wagnaghat, July 2014.
41	Virtualization & Cloud Computing - Fundamentals & Practical Approach JUIT, 24-30 Dec 2015.
42	Signal Processing and its Applications, 13 –18 January, JUIT, Wagnaghat.
43	High Performance and High Strength Concrete: Principles, Development and Applications, 16 –17 March, JUIT Wagnaghat.

44	A one-week Workshop on Primavera for Civil Engineers was organized by CADD Centre and Department of Civil Engineering during January 2015.
45	One-week Faculty Development Workshop on Outcome-based Education organized by JUIT Waknaghat during July 14-19, 2014. Eminent speakers included Prof. M.P. Gupta, Department of Management Studies, IIT Delhi and Veerendra K Jaitly, CEO, C-cube consultants.
46	Two-day Workshop on “Rock Mechanics and Dam Foundations”, 29-30 March, 2014 at JUIT Waknaghat
47	Workshop on Autocad 2013 by Kadkraft System Pvt Ltd Chandigarh 08-07-2013 & 09-07-2013.
48	Workshop on MxRoad Software organized by Bentley Systems India Pvt. Ltd. On 25/04/2013
49	One day Workshop on “Rock Engineering” by <u>Dr. Nick R. Bartan</u> organized by JUIT and Indian Society for Rock Mechanics and Tunnelling Technology dated 29 May 2013 held at JUIT
50	5 day IUCEE workshop on “Introduction to Finite Element Analysis for Civil Engineers” during July 30 - August 3, 2012. Prof. Subramaniam Rajan, Arizona State University, Tempe USA was the speaker for the workshop.
51	International invited lecture on “Application of Principles of Reliability to Bridges” on August 18, 2012. Prof. Chandrasekhar Putcha, California State University, Fullerton USA was the invited speaker
52	2-day workshop on Critical State Soil Mechanics during 30-31 May 2012. Invited lectures were presented by Dr. J.T. Shahu of IIT Delhi, Dr. R.G. Robinson of IIT Madras and Dr. Altaf Usmani of EIL New Delhi.
53	Student conference on Recent Technological Advancement in Civil Engineering (SCTACE-2012) on 31 March - 1 April 2012. A total of 23 papers were presented. First prize for presentation went jointly to Eshan Ganju and Karan Sadhwani of JUIT and second prize to Quresh Vasanwala, CEPT University, Ahmedabad.
54	One Week IUCEE workshop on “Project Management and Heavy Construction Equipments” from 8– 12 August 2011. The speaker, Dr. Vineet Kamat, Associate Professor, University of Michigan USA, was quite effective in creating an interest in the subject in the faculty and students of JUIT and external participants.

3.1.6. How does the university facilitate researchers of eminence to visit the campus as adjunct professors? What is the impact of such efforts on the research activities of the university?

The University has a policy to invite researchers of eminence as guest speakers to deliver lectures on current trends in science & technology. The researchers have visited from institutes/ industries of repute, though not as adjunct professors. Invitation is extended to keynote speakers in our conferences from various universities in India and abroad.

Foreign project investigators via program like DST-JSPS are invited to visit and deliver lectures. This strengthens the tie-up for further research. Also, the university via IUCEE program invites researchers from USA for lectures and initiates collaborative research by implementing visiting faculty schemes for the purpose of teaching and research. Department of Physics and Materials Science is one of the beneficiaries due to its collaboration with University of Dayton.

3.1.7. What percentage of the total budget is earmarked for research? Give details of heads of expenditure, financial allocation and actual utilization.

Item	2011-12	2012-13	2013-14	2014-15	2015-16
Total Budget (Lacs)	1220	1270	1140	895	760

Allocation for research (Lacs)	1230	1365	1337	882	691
Percentage	100.82%	107.48%	117.28%	98.55%	90.92%

Heads of Expenditure	Budgetary Allocation (BA)/ Actual Utilization (AE) (Rs in Lac)									
	2011-12		2012-13		2013-14		2014-15		2015-16	
	BA	AE	BA	AE	BA	AE	BA	AE	BA	AE
Research Equipment and Software	350	348	400	425	300	323	200	186	200	111
Consumables and Maintenance	400	465	450	533	400	503	250	323	150	209
Subscription of Research Journals	100	91	100	105	100	114	100	64	80	67
Ph. D. Fellowships	100	63	100	74	100	123	100	96	100	81
Support to students and Faculty for attending Conferences/ Seminars/ Workshops	100	97	50	41	50	54	50	10	25	3
Organization of Conferences, Seminars/ Workshops	---NIL---									
Expenses on Experts' visits	10	10	10	14	10	8	10	7	5	5
Internet and IT support	80	73	80	78	80	83	85	93	100	102
Electricity expenses	80	83	80	95	100	129	100	103	100	98

Research related miscellaneous expenses	---NIL---									
Institute contribution to Research Projects										15
Total	1220	1230	1270	1365	1140	1337	895	882	760	691

3.1.8. **In its budget, does the university earmark funds for promoting research in its affiliated colleges? If yes, provide details.**

Not Applicable

3.1.9. **Does the university encourage research by awarding Post Doctoral Fellowships/Research Associate ships? If yes, provide details like number of students registered, funding by the university and other sources.**

Yes, the university encourages post doctoral fellowship/Research associate ship. The details are listed below:

S. No.	Name of Student	Post, Doc/Research Associate	Duration	Department/Funding source
1	Dr. Rishi mahajan	Post Doc	2 June, 2014- till date	Biotechnology/ Project
2	Dr. Mamta Raghav	Post Doc	1 Nov, 2013- 30 Nov, 2014	Biotechnology/ Project
3	Dr. Ragini Raj Singh	Post Doc	Jan 2011-Dec 2011	Physics & Materials Science/ University

3.1.10. **What percentage of faculty have utilized the sabbatical leave for pursuit of higher research in premier institutions within the country and abroad? How does the university monitor the output of these scholars?**

Department	Faculty percentage that have utilized sabbatical leave
Physics & Materials Science	22.2
Mathematics	0.00
Humanities and Social Sciences	0.00
Computer Science & Engineering	4.54
Electronics and communication engineering	5.0
Civil Engineering	0.00
Biotechnology	17.6
Pharmacy	0.00

Monitoring of output of the Faculty:

1. Host institution feedback from the faculty advisor.

2. Presentation in front of department faculty after return or via online portal in between before return.

Future performance of the faculty in terms of project writing, teaching feedback, and research endeavour.

3.1.11. Provide details of national and international conferences organized by the university highlighting the names of eminent scientists/scholars who participated in these events.

S. No.	National and international conferences organized by the university	Names of participated eminent scientists/scholars
1.	“National Symposium on Computational Systems Biology” organized by Dept. of Biotechnology & Bioinformatics, Jaypee University of Information Technology , Wagnaghat, Solan, India in association with NNMCB (National Network for Mathematical and Computational Biology), Mohali node from 18 th -20 th Mar 2016 at JUIT, Wagnaghat, Solan	(1). Dr. Alok Bhattacharya , JNU, New Delhi (2). Dr. Debasis Mohanty , NII, New Delhi (3). Dr. G.P.S. Raghava , IMTECH, Chandigarh
2.	3 rd International Convention on Engineering & Management (iCEM) April 3-5, 2015,	Prof. Har Amrit Sandhu , PEC University, Chandigarh, delivered expert lecture on “Advanced Mapping in GIS”.
3.	IEEE International Conference on “Signal Processing, Computing and Control” (ISPPCC 2015); September 2015	(1) Prof. Ved Prakash Sandlas , Amity Institute of Space Science and Technology, and Amity Institute of Aerospace Engineering, Noida, India. (2) Prof. Laxmidhar Behera , Indian Institute of Technology, Kanpur, India. (3) Prof. S.S.Pathak , Indian Institute of Technology, Delhi, India. (4) Prof. Satyabrata Jit , Indian Institute of Technology, Banaras, India.
4.	International Conference on Image Information Processing (ICIIP), Dec 2015	(1) Prof. Nasser Kehtarnavaz , University of Texas, Dallas, USA. (2) Prof. Nasser Kehtarnavaz , University of Texas, Dallas, USA. (3) Prof. Shu-Ching Chen , Florida International University, Miami, USA (4) Prof. A G Ramakrishnan , Indian Institute of Science, Bangalore, India.
5.	2 nd International Convention on Engineering & Management (iCEM), April 26-27, 2014	Prof. Dimitris Kaskaoutis , Shiv Nadar University Noida, delivered guest lecture On April 26, 2014.

6.	Parallel Distributed, and Grid Computing (PDGC), Dec 2014	<p>(1). Prof. Sartaj Sahni, University of Florida, Gainesville, USA.</p> <p>(2). Prof. Philip Wadler, Professor of Theoretical Computer Science at the University of Edinburgh, UK</p> <p>(3). Prof. Hong Shen, Professor (Chair) of Computer Science in the School of Computer Science, University of Adelaide, Australia.</p>
7.	1 st International Convention on Engineering & Management (iCEM), April 27-28, 2013	---Participant data not available---
8.	Two day Fourth Indian Rock Conference “INDOROCK-2013”, 30-31 May 2013	Dr. Nick R. Bartan
9.	IEEE International Conference on “Signal Processing, Computing and Control” (ISPC 2013); 2013	<p>(1). Prof. John Soraghan, University of Strathclyde, Glasgow</p> <p>(2). Prof. Surendra Prasad, Indian Institute of Technology, Delhi, India</p> <p>(3). Prof. Andrea Conti, University of Ferrara, Italy & MIT, USA</p> <p>(4). Prof. Rajendar Bahl, Indian Institute of Technology, Delhi, India.</p>
10.	Second International Conference on Ecofriendly Computing and Communication Systems (ICECCS 2013) October 17-19, 2013.	<p>(1). Prof. Manish Parashar, Rutgers University, USA</p> <p>(2). Prof. Bhargab Bhattacharya, Indian Statistical Institute, Kolkata</p> <p>(3). Prof. Sanjay Ranka, University of Florida, Dr. Tricha Anjali, Indian Institute of Technology Mandi (IIT Mandi)</p> <p>(4). Prof. S. Sundar, Indian Institute of Technology Madras (IIT Madras)</p> <p>(5). Dr. K.Chandra Sekaran, National Institute of Technology, Karnataka, India</p> <p>(6). Parul Gupta, IBM Research – India</p> <p>(7). Florian Schatz, Christian-Albrechts-University, Germany</p>
11.	International Conference on Image Information Processing (ICIIP), Nov 2013	<p>(1) Dr. Theo Gevers, University of Amsterdam, The Netherlands</p> <p>(2) Prof. Bob Fisher, University of Edinburgh, Edinburgh, UK</p> <p>(3) Dr. Abdul Quaiyum Ansari, Jamia Millia Islamia, New Delhi, India.</p> <p>(4) Dr. David W. Jacobs, University of Maryland, USA</p> <p>(5) Dr. Filip Sroubek, Academy of Sciences, Czech Republic.</p>

12.	Conference on “Recent Technological Advancement in Civil Engineering” (SCTACE-2012), March 31, 2012	<ul style="list-style-type: none"> (1). Prof. Manoj Datta, Director PEC University of Technology, Chandigarh. (2). Dr. Rajbal Singh, Joint Director, CSMRS New Delhi. (3). Graham Morphett, Director, Uretek India Pvt.
13.	IEEE International Conference on “Signal Processing, Computing and Control” (ISPCC 2012); 2012	<ul style="list-style-type: none"> (1) Prof. C. Sidney Burrus, Rice University, Houston, Texas, USA (2) Prof. Shubhalaxmi Kher, Arkansas State University, USA (3) Prof. Arun Kumar, Indian Institute of Technology, Delhi, India
14.	Parallel Distributed, and Grid Computing (PDGC), Dec 2012	<ul style="list-style-type: none"> (1). Prof. Ivan Stojmenovic, University of Ottawa, Canada (2). Prof. Peter Widmayer, ETH Zürich Institute f. Theoretische Informatik Universitätstrasse, Switzerland (3). Prof. Assaf Schuster, Technion - Israel Institute of Technology, Israel (4). Prof. Nikil Dutt, University of California, USA (5). Prof. Eliezer Dekel, IBM Haifa Research Lab, Haifa, Israel (6). Prof. Sanjay Ranka, University of Florida, Gainesville USA
15.	Two days international conference on “Consultation and Experience Sharing on Role of Humanities and Social Sciences in Holistic Development of Future Technocrats-Looking Ahead” September 23-24, 2011	<ul style="list-style-type: none"> (1). Prof. L.K. Maheshwari, Former Vice Chancellor-Birla Institute of Technology & Science, Pilani (2). Dr. Radha K. Maheshwari, Professor of Pathology, Bethesda, Maryland 20814-4799, USA (3). Prof. Rajesh Gill, Department of Sociology & Department cum Centre for Women’s Studies & Development, Panjab, University, Chandigarh (4). Professor Sheila Bunwaree, University of Mauritius (5). Ms. Gloria Bouis, University of Maryland, USA (6). El-bieta Sawa-Czajka, College of International Relations and American Studies in Warsaw, Warsaw University.

16.	National Conference on “Recent Trends in Materials Science”, October 8-10, 2011	<ul style="list-style-type: none"> (1). Dr. R.P. Bajpai, Guru Jambheshwar University of Science & Technology, Hisar (2). Prof. S. Basu, Jadavpur University, Kolkata, India (3). Dr. Goutam De, CGCRI, Kolkata, India (4). Dr. Vijayamohanan K Pillai, Central Electrochemical Research Institute, Karaikudi, India. (5). Prof. Ravi Kumar, NIT, Hamirpur, H.P., India (6). Dr. Ajay Gupta, UGC-DAE Consortium for Scientific Research, Indore (7). Prof. M.M. Sinha, Sant Longowal Institute of Engg. & Technology, India (8). Prof. Mahavir Singh, HPU Shimla
17.	International Conference on Image Information Processing (ICIIP), Nov 2011	<ul style="list-style-type: none"> (1). Prof. Ioannis Pitas, University of Thessaloniki, Greece. (2). Prof. Amitabh Varshney, University of Maryland, USA. (3). Prof. Andres Bruhn, Saarland University, Germany (4). Prof. Gaurav Sharma, University of Rochester, USA. (5). Prof. R.K. Mittal, Director, BITS Pilani, Dubai. (6). Dr. Tinku Acharya, Videonetics Technology, India. (7). Prof. B.B. Chaudhuri, Indian Statistical Institute, Kolkata, India (8). Prof. K.K. Biswas, IIT Delhi, India. (9). Dr. D. Datta, BARC Mumbai, India.

3.2. **Resource Mobilization for Research**

3.2.1. **What are the financial provisions made in the university budget for supporting students’ research projects?**

University has made financial provision for the purchase of consumables and research supplies to support UG and PG research projects.

Laboratory facilities such as equipments are maintained from time to time to support UG/PG and PhD research project work.

3.2.2. **(I). Has the university taken any special efforts to encourage its faculty to file for patents? If so, how many have been registered and accepted? Provide the following details of ongoing research projects of faculty:**

Yes, the university encourages its faculty to file for patents. The details are:

Department of Biotechnology & Department of Pharmacy				
Sr. No	Application No	Date	Date granted/ Published	Patent No.
1.	1216/DEL/2007	06 th June 2007	20 th Mar 2012	251481
2.	1161/DEL/2014	30 th Apr 2014	6 th Nov 2015	-
3.	396/DEL/2013	12 th Feb 2013	29 th Aug 2014	-
4.	362/DEL/2013	8 th Feb 2013	29 th Aug 2014	-
5.	1631/DEL/2012	30 th May 2012	25 th July 2014	-
6.	2714/DEL/2012	31 th Aug 2012	7 th Mar 2014	-
7.	551/DEL/2012	28 th Feb 2012	14 th Feb 2014	-
8.	1940/DEL/2012	25 th Jun 2012	14 th Feb 2014	-
9.	2867/DEL/2011	04 th Oct 2011	5 th Apr 2013	-
10.	139/DEL/2011	20 th Jan 2011	15 th Mar 2013	-
11.	1865/DEL/2010	08 th Sept 2010	15 th Mar 2013	-
12.	2248/DEL/2011	10 th Aug 2011	15 th Feb 2013	-
13.	499/DEL/2010	05 th Mar 2010	02 nd Feb 2012	-
14.	2782/DEL/2010	23 rd Nov 2010	16 th Dec 2011	-
15.	292/DEL/2010	11 th Feb 2010	02 nd Sep 2011	-
16.	163/DEL/2009	29 th Jan 2009	06 th Aug 2010	-
17.	1922/DEL/2012	22 nd Jun 2012	-	-

Department of Electronics & Communication Engineering				
Sr. No	Application No	Date	Date granted	Patent No
1.	1632/DEL/2012A	30/05/2012	25/07/2014	Awaiting
2.	325/DEL/2015	25/03/2015	--	--

Department of Physics & Materials Science				
Sr. No	Application No	Date	Date granted	Patent No
1.	2867/DEL/2013	27/09/2013 11/07/2014	03/04/2015	Awaiting

(II) Provide the following details of **ongoing** research projects of faculty

A. University awarded projects

Minor projects: NIL Major projects: NIL

Other agencies - national and international (specify)

Year wise	Number	Name of the funding agency	Name of the project	Total grant received (Lakhs)
2015-16	MINOR PROJECTS (Less or equal to 10 lakhs)			

	DST/INT/POL/ P-04/2014	DST, India & Ministry of Sc. and Tech. Poland	Reliability Modeling and Optimized Planning of Risk-based Resilient Networks	9.04
MAJOR PROJECT (More than 10 lakhs)				
	ISRO/RES/4/61 9/14-15	ISRO, India	Mathematical Modeling of spectrum Sharing Techniques in cognitive radio networks.	11.10
	EMR/2014/001 108	SERB-DST, India	Semiconducting chalcogenides quantum dots for exploiting the power of solar energy	16.99
2014-15	UBINH15330 549127 / SAA1676307 18	DST	Identification of biofilm associated proteins of multidrug resistant <i>Acinetobacter baumannii</i> as potential drug target and inhibitors thereof.	23.3
	SP/YO/017/20 15	DST	Socio Economic upliftment of high altitude farmers of Himachal Pradesh through transfer of micro-propagation technologies for high value medicinal herbs	14.168
	102/IFD/SAN/ 3015/2015-16	DBT	Functional analysis and validation of picosides biosynthetic pathway and development of gene markers for elite chemotypes of <i>Picrorhizakurroa</i>	349.82
MINOR PROJECTS (Less or equal to 10 lakhs)				
	118/6/juit- 15/DIHAR	DRDO	Molecular Dissection of Biosynthesis of Pharmacologically Important Phenol Glycosides in a High Value Medicinal Plant (<i>Rhodiola imbricata</i>) from Trans- Himalayan Region of Ladakh	9.8
	118/6/JUIT- 115/DIHAR	DRDO	Transcriptome analysis of seabuckthorn male and female flowers	9.996
MAJOR PROJECTS (More than 10 lakhs)				
	SB/STP/PS- 032/2013	SERB-DST, India	Development, characterization & processing of quantum dots for imaging in near infrared (NIR) range	24.8
	5/13/81/2013- NCD-3	ICMR	Identification of circulating microRNAs as novel non-invasive biomarkers for early detection of lung cancer	32.7029
	BIC/12(33)/20 12	ICMR	A Bioinformatic and experimental approach to investigate the interaction between acetylcholinesterase (AChE) and angiotensin- converting-enzyme (ACE) along with Alzheimer's disease associated proteins.	25.66
	52/4/2013	ICMR	Synthesis of novel poly-N-substituted glycines (peptoids) based on cell selective antimicrobial peptides for Gram-negative bacterial infections	24

	BT/PR6784/G BD/27/466/20 12	DBT	Identification of Single Nucleotide Polymorphisms in the transcriptional regulatory region of autophagy gene, ULK1 and their role in susceptibility to chronic hepatitis B virus infection	17.8
	SERB/F/3940/ 2014-15	DST	Identification of Macrophage Invasion Protein(s) of Atypical Mycobacteria <i>M. fortuitum</i> as Potential Drug Target and Inhibitors Thereof	12
2013-14	SERB/F/2041/ 2014-15	DST	Investigating the role of thymus in mediating host immune modulation in visceral leishmaniasis	24.5
	BT/PR7478/B CE/8/951/201 3	DBT	Bioremediation of electronic waste (E-waste) for precious metal recovery and removal of polybrominated diphenyl ethers (PBDE's)	33.2
	SR/S2/RJN- 95/2011	DST	Ramanujan Fellowship (Cancer Biomarkers)	73
	SR/FST/LSI- 516/2011C	DST	DST-FIST	150
Total Amount				861.8769

B. Inter-institutional collaborative projects (ONGOING)

(i) All India collaboration

Sancti oned Year	Sanctioned No.	Name of the project	Collaboration with	Name of funding agency	Total grant received (In Lacs)
2015-16	102/IFD/SAN /3015/2015- 16	Functional Analysis & Validation of Picrosides Biosynthetic Pathway and Development of Gene Markers for Elite Chemotypes of <i>Picrorhiza kurroa</i>	Dr. J. Singh, Himalayan Forest Research Institute, Shimla	DBT	349.82
2014-15	---NIL---				
2013-14	BT/PR7478/B CE/8/951/201 3	Bioremediation of electronic waste (E-waste) for precious metal recovery and removal of polybrominated diphenyl ethers (PBDE's)"	Prof. Harvinder Singh, GNDU Amritsar	DBT	33.2
Total Amount					383.02

(ii) International collaboration

Department of Electronics & Communication Engineering					
Year wise	Number	Name of the project	Collaboration with	Name of the funding agency	Total grant received (Lakhs)

2015-16	DST/INJ/ POL/P- 04/2014	Reliability Modeling and Optimized Planning of Risk-based Resilient Networks	AGH Univ of Science & Tech, Krakov, Poland	DST, India & Ministry of Sc. and Tech. Poland	9.04
Total Amount					9.04

3.2.3. Does the university have any projects sponsored by the industry / corporate houses? If yes, give details such as the name of the project, funding agency and grants received.

Department of Biotechnology			
Year Completed	Name of project	Funding agency	Grants received
2011	Development of technologies for bioconversion of lignocellulosic waste from herbal industries into commercially viable products.	Ayurvet Industry, Baddi, Solan	5.0 Lacs

3.2.4. How many departments of the university have been recognized for their research activities by national / international agencies (UGC-SAP, CAS; Department with Potential for Excellence; DST-FIST; DBT, ICSSR, ICHR, ICPR, etc.) and what is the quantum of assistance received? Mention any two significant outcomes or breakthroughs achieved by this recognition.

Name of Department	Recognition	Grants received (Lakhs)	Significant Outcomes
Physics & Materials Science	DST	----	In General: (i) Increase in thrust areas of research (ii) State-of-the-art research facility (iii) Collaborative research work (iv) Industrial linkage (v) Patents (vi) Publications Specific: (vii) DST-FIST: 1. High end instrumentation facility as a QToF system has been set up, which can analyse whole metabolome and proteomes of any biological system with practical implications in biotechnology and bioinformatics. (viii) DBT-CoE: 1. Biosynthetic machineries for major phytopharmaceutical constituents of four high value endangered medicinal herbs, <i>Picrorhiza kurroa</i> , <i>Swertia</i>
Mathematics	NBHM	----	
Humanities and Social Sciences	-----	----	
Biotechnology	DST-FIST; DBT	600	
Electronics & communication Engineering	ISRO, DRDO, DST	----	

Computer science & engineering	-----	-----	<i>chirayita</i> , <i>Aconitum heterophyllum</i> and <i>Podophyllum hexandrum</i> have been discovered for the first time and utilised in the genetic improvement of these medicinal herbs.
Civil Engineering	DST	-----	

3.2.5. List details of Research projects completed and grants received during the last four years (funded by National/International agencies).

(a) University awarded projects: NIL

(b) Other agencies-national & international: Tabulated below:

Year completed	Sanctioned No.	Funding Agency	Project Title	Duration	Grant in Lakh
2015-16	No.22(0591)/12/EMR-II	CSIR	Design of Shared Aperture Microstrip Antenna Array for L and S Band	2012-2015	16.4
	Dy No. SERB/F/1873/2012-13	DST	Synthesis of Magnetite Nanoparticles on Substrates for Water Purification	2012-2015	11.8
	DST/INT/JSP S/P-175/2014	DST-JSPS	Development of spin-based semiconductor nano-electronic devices using ferromagnetic Silicide nanorods	2014-2016	7.2
	118/JUIT-3/DIHAR	DRDO	Fabrication of energy Harvesting Prototypes using Piezoelectric Materials	2012-2015	9.8
	No.SR/FTP/ETA-49/2011	DST	Effect of steam-wise spacing of circular Bridge piers on Flow characteristics and local scour	2013-2016	9.8
	INT/RFBR/P-175	Indo-Russian	Elucidating the linkage between key limiting processes and microorganisms during anaerobic degradation of lignocellulosic waste	2014-16	24
	BT/PR6119/GBD/27/370/2012	DBT	Development of an in vitro gut model to study the survival of probiotics in mixed microbial consortia	2013-16	34.5
	SERB/F/4955/2013-14	DST	Autophagy genes (Atg16L1 and IRGM) single nucleotide polymorphisms in the susceptibility of chronic hepatitis B virus infection	2013-16	21.6
	5/8-1(26)/2011-	ICMR	Identification, characterization of diarrhoeagenic pathogens in	2013-16	16.0

	12 ECD-II		Himachal Pradesh		
	SB/FT/LS-426/2012	DST	Novel quorum sensing modulators against biofilm forming Cronobacter sakazakii	2013-16	23.5
	SERB/F/1989/2013-14	DST	Identification of Macrophage Invasion Protein(s) of Atypical Mycobacteria M. fortuitum as Potential Drug Target and Inhibitors Thereof	2013-16	9
	SB/FT/LS-278/2012	DST	Comparative genomics of diarrheal pathogens to identify vaccine candidates and study of various antibiotic resistance mechanisms	2013-16	23.1
	102/IFD/SAN/1406/2013-14	DBT	Development of herbal product for urolithiasis from Tribulus terrestris	2013-16	52.2
	SB/FT/LS-278/2012	ICMR	Mass spectrometric identification of matrix protein(s) from calcium oxalate stones in nephrolithiasis and assessment of their activity on calcium oxalate crystal-mediated stress in renal epithelial cells	2013-16	17
	102/IFD/SAN/428/2013-2014	DBT	Establishment of an assay using human embryonic stem cell derived cardiac precursors from KIND2 cells for cytotoxicity testing	2013-16	45.6
	BIC/12(16)/2012	ICMR	Development of inhibitors to target glyoxylate and methylcitrate cycles essential for persistence of Mycobacterium tuberculosis	2013-16	36
	102/IFD/SAN/4992/2012-13	DBT	Development of Gene Markers for High Seed Oil Content and Dissecting Molecular Basis of Female Flower Development in J. curcas Towards its Genetic Improvement for High Seed Yield	2013-16	98.5
2014-15	BT/01/CEIB/09/V/02	DBT	Elucidating missing links in the biosynthetic pathways of major medicinal constituents for utilization in the development of gene markers	2010-15	198.7
	BT/01/CEIB/09/V/02	DBT	Identification and functional characterization of proteins as key/rate-limiting enzymes in the biosynthesis of desired chemical constituents of target plant species	2010-15	60.7
	BT/01/CEIB/09/V/02	DBT	Identification of intermediate metabolites for linking missing links in the biosynthetic pathways of desired chemical constituents in target	2010-15	68.6

			plant species		
	BT/01/CEIB/09/V/02	DBT	Identification of elite chemotypes and optimization of differential accumulation conditions for major & desired chemical constituents of three medicinal plants species	2010-15	60
	SR/FT/LS-026/2009	DST	Structural, functional and evolutionary analysis of repair pathways with special relevance to human disease	2012-15	12.4
	SR/FT/LS-046/2009	ICMR	Polyunsaturated fatty acids and Lantadene A conjugates as selective tumor targeting agents	2012-15	22
	SR/SO/HS/132/2010	DST	Characterization of the antilithiatic proteins from Tamarindusindica and Terminaliaarjuna and evaluation of their cytoprotective role on oxalate-induced renal tubular epithelial cell injury	2012-15	50
	SERB/F/5399/2015-2016	DST	Genetic analysis to avoid inbreeding of the endangered western tragopan in the aviaries of Himachal Pradesh	2012-15	11.2
	SR/FT/LS-117/2012	DST	Identification of Macrophage Invasion Protein(s) of Atypical Mycobacteria M. fortuitum as Potential Drug Target and Inhibitors Thereof	2012-15	17.4
	SR/FT/LS-07/2012	DST	Development of a polyherbal preparation to treat ethanol abstinence syndrome.	2012-15	24.8
	BT/BIO-CARE/07/605/2010	DBT	Probiotics to prevent infection of Cronobacter sakazakii in neonatal mouse model	2012-15	42.1
	BT/PR6119/GBD/27/370/2012	DBT	Development of a multicompartiment in vitro model of the human gastrointestinal tract	2012-15	45.4
	DIHAR/CAR S-6/2012	DRDO	Identification and validation of sex linked markers in seabuckthorn	2013-15	10
	102/IFD/SAN/428/2013-2014	DBT	Establishment of an assay using human embryonic stem cell derived cardiac precursors from KIND2 cells for cytotoxicity testing	2013-15	45.6
2013-14	SR/FT/CS-61/2010	DST	Design, synthesis and evaluation of antibacterial peptidomimetics	2011-14	18
	SERB/F/2197/2014-15	DST	Nucleotide diversity in granule bound starch synthase-I (GBSS-I) metabolic pathway genes and its association with starch quality in elite Indian rice	2011-14	16

			genotypes		
	118/6/JUIT/12-DIHAR	DRDO	Development of Business Intelligence Model of Army Personnel's at Higher Altitude	2012-14	9.9
	ERIP/ER/0905105/M/01/1212	Directorate of ER and IPR	Design of Ultralow Sidelobe Level Microstrip Antenna Array in X-Band	2010-2013	21.4
	E.33011/10/2011-V(Sec2)	Space Application Centre, ISRO, Ahmedabad	Design and Analysis of Frequency Selective Surface at Ka/Ku Band for Reflection and S Band for Transmission	2011-2014	15.9
2012-13	SR/FT/CS-059/2009	DST	Physico-chemical studies of drug-surfactant interactions in aqueous alcoholic solutions	2011-13	6.4
	BT/PR13123/GBD/27/191/2009	DBT	Antioxidants and Lantadene A Hybrid compounds as anticancer agents	2010-13	7.6
	BT/PR13123/GBD/27/191/2009	DST	Design, synthesis and evaluation of Lantadene polyphenol conjugates as anticancer agents.	2010-13	12
	---Not available---	DRDO	Toxicological evaluation of herbal formulations: (a) herbal performance enhancing capsules (PerfoMax), (b) herbal adaptogenic appetizer, (C) herbal tea and (D) seabuckthron oil based soft gel capsule	2012-13	8.5
2011-12	DL8/81/48222/LSRB-175/FSB/2008	DRDO	Formulation of an antidepressant/stress reliever drug based on St John's Wort (Hypericum perforatum)	2009-12	15
	DRDE/TC/05414/TASK-109/2009	DRDE	Computational Identification, Evaluation and in vivo Validation of Vaccine Candidates from Bioweapon Toxins, and Selected Potential Bacterial Bioweapons (PBBWs)	2010-12	9.4
	18017/187/P R.GO/HP-03/2008-2009	Ministry of Health, GOI	Identification of genetically superior strains of medicinal plants (P. kurroa and Valeriana jatamanshi) from North-Western Himalayas of India	2009-12	16.5
	118/6/JUIT/DIHAR	DRDO	Genetic characterization, chemical profiling and optimization of parameters for Artemisinin yield in Artemisia annua from the Ladakh region	2010-12	9.5
	102/IFD/SA	DBT	The potential of human embryonic	2010-12	17.2

	N/PR-20		stem cells in developmental toxicity testing		
	---Not available---	TRIFED	Production of Nutrabeverages from Mahua Flowers	2010-12	7
2010-11	BT/PR5136/AGR/16/435/2004	DBT	Bioprospecting of buckwheat (<i>Fagopyrum tataricum</i>) for novel genes & metabolites of medicinal and nutritional importance	2007-11	40.6
	BT/PR8861/PBD/26/99/2007	DBT	Development of candidate gene markers for <i>Jatropha</i> by utilizing genome resources of castor bean	2007-11	59.5
	DLS/81/48222/LSRB-150/FS/2008-2009	DRDO	Identification of low curcumin genotypes of <i>Jatropha</i> and their utilization in developing candidate gene markers	2008-11	19.2
	BT/PR9346/PBD/17/514/2007	DBT	Development of a standardized herbal product for urolithiasis from <i>Tribulus terrestris</i> and <i>Achyranthes aspera</i>	2009-11	26.2
	19/46/2007-RE	MoE	Development of a bioleaching strategy for sustainable disposal and recycling of electronics-waste	2008-11	19.7
	52/13/2008-BMS	ICMR	Exploring the role of matrix protein(s) from calcium oxalate stones in nephrolithiasis and assessment of their molecular interactions with calcium oxalate monohydrate (COM) crystals in silico	2009-11	8.4
Total Amount					1488.8

(c) Inter-institutional collaborative projects **completed** and grants received

i) All India collaboration

Department of Biotechnology					
Completed Year	Sanctioned No.	Project Title	Collaborators	Funding Agency	Grant in Lakh
2015-16	BIC/12(16)/2012	Development of inhibitors to target glyoxylate and methylcitrate cycles essential for persistence of <i>Mycobacterium tuberculosis</i>	Dr. Vibha Gupta, IIIT Noida	ICMR	36.0
	BT/PR6119/GBD/27/370/	Development of an in vitro gut model to study	Anil K Puniya, GADVASU, Ludhiana	DBT	34.5

	2012	the survival of probiotics in mixed microbial consortia			
	INT/RFBR/P-175	Elucidating the linkage between key limiting processes and microorganisms during anaerobic degradation of lignocellulosic waste	Sumit S Dagar, Agarkhar Research Institute, Pune; Anil K Puniya, GADVASU, Ludhiana	DST	24.0
	102/IFD/SAN/4992/2012-13	Development of Gene Markers for High Seed Oil Content and Dissecting Molecular Basis of Female Flower Development in <i>J. curcas</i> Towards its Genetic Improvement for High Seed Yield	Dr. S. Sharma Himalayan Forest Research Institute, Shimla	DBT	98.5
2014-15	---NIL---				
2013-14					
2012-13					
2011-12	18017/187/P R.GO/HP-03/2008-2009	Identification of genetically superior strains of medicinal plants (<i>P. kurroa</i> and <i>Valeriana jatamansi</i>) from North-Western Himalayas of India	Dr. J. Singh, Himalayan Forest Research Institute, Shimla	Ministry of Health, Govt. of India	16.5
Total					193

ii) International

Sanctioned Year	Sanctioned No.	Name of the project	Collaboration with	Name of funding agency	Total grant received (In Lacs)
2015-16	INT/RFBR/P-175	Elucidating the linkage between key limiting processes and microorganisms during anaerobic degradation of lignocellulosic waste	Alla Nozhevnikova, Winogradsky Institute of Microbiology, Research Center of Biotechnology of the Russian Academy of Sciences, Moscow	DST (Indo-Russian)	(24.0 +24.0)
2014-15	---NIL---				
2013-14					

2012-13	
2011-12	
Total Amount	
	48.0

Completed:

S. No.	Investigator(s)	Funding Agency	Project Title	Collaborators	Duration	Grant in Lakh
1	Dr. Rajesh Kumar	DST-JSPS	Development of spin-based semiconductor nano-electronic devices using ferromagnetic Silicide nanorods	Department of Physics, Kyushu University, Fukuoka, Japan	2014-16	7.20
TOTAL=						7.20

3.3. Research Facilities

3.3.1. What efforts have been made by the university to improve its infrastructure requirements to facilitate research? What strategies have been evolved to meet the needs of researchers in emerging disciplines?

- Research labs in the Department of Biotechnology & Bioinformatics and the Department of Physics
- Round the clock UPS and generator back up to protect equipments.
- Computer and internet facility round the clock.
- Subscription to 64 print journals and more than 8070 on line journals
- *Shodh Kosh* with Rs 1 crore seed money for financial support to research
- Liberal travel grant to attend conference in India and Abroad
- The University has set up a complete animal house facility for carrying out research on disease models such as diabetic-induced neuropathy.
- The University has set up a high end instrumentation facility wherein instruments such as QtoF, DNA sequencer, GC, preparative HPLC, gene gun, etc. have been installed for the common usage of all faculty members.

The University is continuously making efforts to improve the lab facilities for research and innovative activities including infrastructure. Every year, present and future needs for upgrading and creating research facilities in the emerging research areas are assessed through departmental faculty meetings and communicated to the concerned authorities. The requirements of all departments are discussed and provision is made in the budget accordingly.

The important strategies can be summarized as:

- Autonomy to the Principal Investigator (PI)
- Timely Availability or Release of Resources
- Adequate infrastructure and human resources
- Support in terms of technology and information needs

- Periodic monitoring is done during the course of the research project

3.3.2. Does the university have an Information Resource Centre to cater to the needs of researchers? If yes, provide details of the facility.

LRC manages Information Resource Centre as its sub-section and provides various services to cater for the needs of the research scholars, faculty members and students.

- Dedicated staff is assigned to interact with research scholars to understand their needs
- User orientation Programme to research scholars on e-resources
- Inter Library Loan through DELNET– to get specific research materials from other libraries
- Collecting/downloading demand based resources for research scholars
- Providing plagiarism software ‘Turnitin’ related services to research scholars (JIIT Noida)
- Document Scanning and printing facility
- Online Public Access Catalogue to search required materials
- Developed Institutional Repository to facilitate intellectual output of the University in the campus (all Ph.D. theses, dissertations, faculty research papers and project reports are uploaded into repository for smooth access of available resources)
- Encourage research scholars to make optimal use of ShodhGanga and ShodhGangotri research repository (established by INFLIBNET, UGC) for their research work
- Need based support to research scholars like visit to other institutional library, etc.

3.3.3. Does the university have a University Science Instrumentation Centre (USIC)? If yes, have the facilities been made available to research scholars? What is the funding allotted to USIC?

The University has no separate USIC as such, however, the university has established a Materials Characterization laboratory in the department of PMS. The major facilities available in this laboratory are UV-VIS –NIR spectrophotometer, and Luminescence spectrophotometer. These facilities are used by PMS and Biotechnology departments and different departments of JIIT NOIDA and JUET Guna. These facilities are also extended to the researchers of other organizations with whom faculty members of PMS department are engaged in joint research. Department is planning to make these facilities available to scientists working in other research organizations. Biotechnology department has Central Instrument Facility (CIF), well equipped with modern instruments/infrastructure for carrying out research. This facility is availed by faculty/researchers from Biotechnology and PMS Department.

3.3.4. Does the university provide residential facilities (with computer and internet facilities) for research scholars, post-doctoral fellows, research associates, summer fellows of various academies and visiting scientists (national/international)?

Yes, the University has ample hostel accommodation and guest house facilities for researchers. These facilities are equipped with all amenities including wi-fi connectivity.

3.3.5. Does the university have a specialized research centre/ workstation on-campus and off-campus to address the special challenges of research programmes?

Yes,

(a) Department of Civil Engineering:

Computational Research Lab (Work Station: Lenovo P500 workstation)
 Research laboratories - Fluvial Hydraulics Lab (Acoustic Doppler Velocimeter)

(b) Department Computer Science & Engineering:

High performance computer lab has been established which uses NVIDIA computing platform using CUDA.

An IOT lab has been established with sponsoring from Intel Galileo University Program to promote research activities in this domain.

3.3.6. Does the university have centres of national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories.

Yes. Department of Biotechnology and Bioinformatics has been recognized by DBT Programme Support in Centres of Excellence and Innovation in Biotechnology and DST-FIST Programme. The infrastructure developed through these facilities such as preparative HPLC system, DNA sequencer, QToF system, Real-Time PCR, etc. have been used by faculty and PhD scholars from other laboratories of the Department as well as our collaborators in the Himalayan Forest Research Institute, Panthaghati, Shimla.

3.4. Research Publications and Awards

3.4.1. Does the university publish any research journal(s)? If yes, indicate the composition of the editorial board, editorial policies and state whether it/they is/are listed in any international database.

No

3.4.2. Give details of publications by the faculty:

Department of Biotechnology	
* Number of papers published in peer reviewed journals:	255 (2011-15)
* (National / International)	30/225
* Monographs:	0
* Chapters in Books:	11 (2011-15)
* Books edited:	0
* Books with ISBN with details of publishers:	0
* Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.):	252
* Citation Index – range / average :	---
* SNIP:	0.101-8.652
* SJR:	0.004-14.747
* Impact Factor – range / average:	0-42.351
* h-index:	7.41
Department of Pharmacy	
* Number of papers published in peer reviewed journals:	49 (2011-15)
* (National / International)	8/41
* Monographs:	0
* Chapters in Books:	0 (2011-15)

- * Books edited: **0**
- * Books with ISBN with details of publishers: **0**
- * Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.): **49**
- * Citation Index – range / average : ---
- * SNIP: **0.0-3.09**
- * SJR: **0.0-4.36**
- * Impact Factor – range / average: **0-9.269**
- * h-index: **4.67**

Department of Civil Engineering

- * Number of papers published in peer reviewed journals: **36 (2011-2015)**
- * **(National / International) 0/36**
- * Monographs - **NIL**
- * Chapters in Books- **1**
- * Books edited - **2**
- * Books with ISBN with details of publishers - **2**
- * Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.): **41 (2011 – 2015)**
- * Citation Index – range / average - **(0-240) 37.41**
- * SNIP - **0-1.642**
- * SJR - **0-1.49**
- * Impact Factor – range / average - **0-3.05**
- * h-index – **1.7**

Department of Electronics and Telecommunication Engineering

- * Number of papers published in peer reviewed journals: **252 (2011-2015)**
- * **(National / International) 11/241**
- * Monographs - **01**
- * Chapters in Books- **03**
- * Books edited - **00**
- * Books with ISBN with details of publishers - **04**
- * Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.): **260 (2011 – 2015)**
- * Citation Index – range / average: **1-1257/153**
- * SNIP – **0.166-2.52**
- * SJR – **0.13-1.98**
- * Impact Factor – range / average – **0.512-4.0**
- * h-index – **4.16**

Department of Computer Science and Engineering

- * Number of papers published in peer reviewed journals: **93 (2011-2015)**
- * **(National / International): 0/93**
- * Monographs - **00**
- * Chapters in Books- **07**
- * Books edited - **05**
- * Books with ISBN with details of publishers - **00**
- * Number listed in International Database (For e.g. Web of Science, Scopus, Humanities

<p>International Complete, EBSCO host, etc.): 105 (2011 – 2015)</p> <ul style="list-style-type: none"> * Citation Index – range / average – 33-176 * SNIP – 0.85-14.9 * SJR – 0.0-5.0 * Impact Factor – range / average – 0.1-3.4 * h-index – 1.81
<p>Department of Physics & Materials Science</p>
<ul style="list-style-type: none"> * Number of papers published in peer reviewed journals: 106(2011-2015) * (National / International): 0/106 * Monographs - 00 * Chapters in Books- 00 * Books edited - 00 * Books with ISBN with details of publishers - 00 * Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.): 106 (2011 – 2015) * Citation Index – range / average – 0-340 /8.032 * SNIP – 0.682-1.399 * SJR – 0.387-0.992 * Impact Factor – range / average – 0-26.932 / 1.75 * h-index – 6.2
<p>Department of Mathematics</p>
<ul style="list-style-type: none"> * Number of papers published in peer reviewed journals: 55 (2011-2015) * (National / International): 9 / 46 * Monographs - 00 * Chapters in Books- 00 * Books edited - 01 * Books with ISBN with details of publishers - 01 * Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.): 57 (2011 – 2015) * Citation Index – range / average – 0-8 * SNIP – 0.166-1.998 * SJR –0.149-1.461 * Impact Factor – range / average – 0-2.5 * h-index – 1.33
<p>Department of Humanities & Social Sciences</p>
<ul style="list-style-type: none"> * Number of papers published in peer reviewed journals: 45 (2011-2015) * (National / International): 21/17 * Monographs - 00 * Chapters in Books- 05 * Books edited - 02 * Books with ISBN with details of publishers – 06 * Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.): 58 (2011 – 2015) * Citation Index – range / average – 0-7 * SNIP –: ---

- * SJR – : ---
- * Impact Factor – range / average – : **1.76-3.8**
- * h-index – **1.43**

3.4.3. Give details of

- * **faculty serving on the editorial boards of national and international journals**

Dr. Anil Sehrawat	Editorial Board Member in International Journal of Advanced Information in Arts Science and Management; ISSN:2454-7220
Dr. Tanu Sharma	Editorial Board Member in International Journal of Advanced Information in Arts Science and Management; ISSN:2454-7220
Dr. Pankaj Sharma	Editorial Board Member in International Journal of New Horizons in Physics (Natural science publishing) (2014); Universal Journal of Physics and Application (Horizon Research Publishing, USA) (2013-till date)
Dr. R.S. Raja Durai	Editorial Board Member in Mathematical Reviews (AMS), Horizon Research Publishing
Dr. Rakesh Kumar Bajaj	Member of the Editorial Board in American Journal of Mathematics and Sciences
Dr. Pradeep Kumar Pandey	Editorial Board Member in Mathematics and Statistics, Horizon Research Publishing Corporation, USA.
Dr. V. K. Garalapati	Editorial Board Member in i) African Journal of Biotechnology ii) Journal of Biotechnology, iii) Bioinformatics and Bioengineering iv) Bioengineering and Bioscience v) Trends in Biotechnological Research
Dr. Jitendraa Vashisht	Coordinator of Membrane biophysics paper under e-learning MHRD National project.
Dr. Gunjan Goel	Review Editor: Frontiers in Systematic Microbiology
Dr. Harish Changotra	Member Editorial Board of i) International Journal of Biology, ii) Pharmacy and Allied Sciences (ISSN: 2277-4998); iii) International Journal of Research in Biosciences (ISSN: 2319-2844); iv) Journal of Cell Science and Molecular Biology; v) Journal of Immunology and Vaccine Technology.
Prof. R. S. Chauhan	Member of editorial board: Journal of Plant Biochemistry and Biotechnology
Dr. Chittaranjan Rout	Associate Editor: Annals of Applied Chemistry
Dr. Saurabh Bansal	Member of Editorial Board: Journal of Biotechnology, Bioinformatics and Bioengineering
Dr. Udayabanu, M.	i. International Journal of Neuroscience and Behavioral Science ii. Research & reviews a journal of drug design & discovery

Prof. (Dr.) Satya Prakash Ghrera	<ul style="list-style-type: none"> • Member of Editorial Board for Special Issue on “Recent Developments in Parallel, Distributed and Grid Computing for Big Data” in International Journal of Grid and Utility Computing, Inderscience. • Member of Editorial Board for Special Issue on “Advanced Techniques in Multimedia Watermarking” in International Journal of Information and Computer Security, Inderscience.
Dr. Amit Kumar Singh	<ul style="list-style-type: none"> • Member of Editorial Board for Special Issue on “Recent Developments in Parallel, Distributed and Grid Computing for Big Data” in International Journal of Grid and Utility Computing, Inderscience. • Member of Editorial Board for Special Issue on “Advanced Techniques in Multimedia Watermarking” in International Journal of Information and Computer Security, Inderscience. • Member of Editorial Board for Special Issue on “Recent Developments in Multimedia Watermarking using Machine Learning” in Journal of Intelligent Systems, De Gruyter.
Dr. Hemraj Saini	<ul style="list-style-type: none"> • Member of Editorial Board for “COMPUSOFT-International Journal of Advanced Computer Technology (IJACT)”, UK, 6th Nov. 2012 to till date. • Member of Editorial Board for “Journal of Advances in Networks” a part of Science Publishing Group, USA, 14th Dec. 2012 to till date. • Member of Editorial Board for International Journal of Computer Networks and Communications Security (IJCNCS)”, Dubai, United Arab Emirates, 26th June 2013 to till date. Visit: http://www.ijcncs.org/editorial.php • Editorial Members of American Journal of Networks and Communications, 10th January, 2015 to till now. • International Editorial Board Member for “International Journal of Advancements in Mechanical and Aeronautical Engineering” 113, Barksdale Professional CTR, Newark, New Castle County, DE, United States of America. • Member of Editorial & Advisory Board of Journal of Theoretical and Applied Information Technology (JATIT). Visit: http://www.jatit.org/Editorial_Board.php
Dr. Pardeep Kumar	<ul style="list-style-type: none"> • Member of Editorial Board for Special Issue on “Recent Developments in Parallel, Distributed and Grid Computing for Big Data” in International Journal of Grid and Utility Computing, Inderscience. • Member of Editorial Board for Special Issue on “Advanced Techniques in Multimedia Watermarking” in International Journal of Information and Computer Security, Inderscience.
Dr. Ashok Kumar Gupta	<ol style="list-style-type: none"> 1. The Scientific World Journal (Civil Engineering) 2. American Journal of Remote Sensing 3. International Journal of Civil, Structural, Environmental and Infrastructure Engineering Research and Development - IJCSEIERD 4. Journal of Civil, Structural, Environmental, Water resources and Infrastructure Engineering Research (JCSEWIER) 5. Science PG Journal - Advances in Materials
Dr. Pradeep Kumar	<ol style="list-style-type: none"> 1. Member, Editorial Board, Maejo International Journal of Science and Technology. 2. Associate Editor, Research Journal of Applied Sciences, Engineering and Technology

	<ol style="list-style-type: none"> 3. Member, Program Committee, The 3rd International Conference on Data Mining and Intelligent Information Technology Applications (ICMIA 2011), Macau, 2011. 4. Member, Program Committee, 7th International Conference on Networking, South Korea 5. Member, BOS (ECE), Shoolini University, Solan, India
Dr. Rajiv Kumar	<ol style="list-style-type: none"> 1. Editor: Journal of Selected Areas in Telecommunications 2. SPIN: www.amity.edu/spin 2016 , (NGCT-2016) , University of Petroleum and Energy Studies, Dehradun (India)
Dr. Shruti Jain	<ol style="list-style-type: none"> 1. Editorial Board: Network Biology (ISSN 2220-8879), International Journal of Computer Science and Information Technology Research Excellence (ISSN 2250-2742), Journal of Harmonized Research Publication. 2. Society Board : International Society of Network Biology 3. Board Member : International Journal of Multidisciplinary Research and Modern Education, R&D Modern Research Publication, Perambalur, Tamilnadu, India.

*** faculty serving as members of steering committees of international conferences recognized by reputed organizations / societies**

Prof. (Dr.) Satya Prakash Ghreera (National)	<ul style="list-style-type: none"> • General Chair for IEEE International Conference on Image Information Processing, ICIIP, Jaypee University of Information Technology, Shimla, HP • General Chair for Second IEEE International Conference on Parallel, Distributed and Grid Computing, PDGC, Jaypee University of Information Technology, Shimla, HP
Prof. (Dr.) Satya Prakash Ghreera (International)	<ul style="list-style-type: none"> • Member , European Modelling Symposium • Member , International Conference on Computer Modelling and Simulation UKSim. • Member , EUROSIM Congress on Modelling and Simulation EUROSIM2013
Dr. Yashwant Singh (National)	<ul style="list-style-type: none"> • Member , IEEE International Conference on Signal Processing, Computing and Control (ISPCC), Wagnaghat India • Member, IEEE, International conference on parallel, distributed and grid computing (PDGC), Wagnaghat, INDIA. • Member , IEEE International Conference on Image Information Processing (ICIIP), Wagnaghat, India • Member, IEEE International Conference on Image Information Processing (ICIIP), Jaypee University of Information Technology, Wagnaghat, INDIA • Member, IEEE International Conference on Advances in Computing, Communications and Informatics.
Dr. Amit Kumar Singh	<ul style="list-style-type: none"> • Member, International Conference on First Image Information Processing, Jaypee University of Information Technology, Wagnaghat,

	<p>Solan, Himachal Pradesh-India.</p> <ul style="list-style-type: none"> Member, International Conference on Image Information Processing, Jaypee University of Information Technology, Waknaghat, Solan, Himachal Pradesh-India.
Dr. Hemraj Saini	<ul style="list-style-type: none"> Member, IEEE International Conference on Image Information Processing (ICIIP), JUIT, Waknaghat, Solan, India. Member, IEEE International Conference on Parallel, Distributed and Grid Computing - PDGC, JUIT, Waknaghat, Solan, India.
Dr. Pardeep Kumar	<ul style="list-style-type: none"> Member, The International Conference on Communication Systems and Network Technologies (CSNT) Member, IEEE International Conference on Parallel, Distributed and Grid Computing. Member, IEEE International Conference on Advances in Computing, Communication and Informatics (ICACCI)
Dr. Ashish Kumar	Member, Conference on Hydraulics and Water Resources, Coastal and Environmental Engg. -HYDRO 2015 International, IIT Roorkee, Roorkee, India.
Dr. G. Singh	<ol style="list-style-type: none"> Chairman Organizing Committee, IEEE ISPPC 2012, 2013, 2015, JUIT, India Member TPC, IEEE GCC-2011-15. Member TPC, CSNT-2011-15 Member TPC, PDGC-2012-15 Member TPC, APACE-2012-15 Member TPC, ISWTA-2012-15 Member TPC, CIGN-2011-15
Shruti Jain	<ol style="list-style-type: none"> Member, International Conference on Signal Processing, computing and control (ISPPC), JUIT, Solan, India. Member, International Conference on Computational Intelligence and Communication Networks (CIGN), Mathura, India. Member, International Conference on Machine Intelligence Research and Advancement (ICMIRA), Katra, India. Member, Machine Intelligence Research and Advancement (MIRA), MIR Labs, India. Member, The IEEE International Conference on Signal Processing, Computing and Control (IEEE ISPPC), JUIT, Solan, India Member, International Conference on Computational Intelligence and Communication Networks (CIGN), Bhopal, India. Member, International Conference on Electronics, Communications and Networks (CECNet), Beijing, China. Member, International Conference on Recent Cognizance in Wireless Communication & Image Processing (ICRCWIP), Poornima Institute of Engineering & Technology, Jaipur. Member, International Conference on Computer Vision & Image Analysis ICCVIA, Sousse, Tunisia. Member, International Conference on Industrial Instrumentation and Control (IIC), College of Engineering, Pune. Member, International Conferences on Advances in Computers, Communication and Electronics Engineering (COMMUNE), University of Kashmir, Srinagar, India. Member, International Conference on Computer Science and

	<p>Environmental Engineering (CSEE), Beijing, China .</p> <p>13. Member, IEEE International Conference on Signal Processing, Computing and Control (IEEE ISPCC), JUIT, Solan, India.</p> <p>14. Member, International Conference on Control Theory and Its Application (CNTIA), Melaka, Malaysia.</p> <p>15. Member, International e-conference on Engineering Science & Management (ICESM).</p> <p>16. Member, International Conference on Electronics, Communications and Networks (CECNet), Shanghai, China.</p> <p>17. Member, International Conference on Computational Techniques in Information and Communication Technologies (ICCTICT), New Delhi, India.</p> <p>18. Member, 10th INDIACom: International Conference on Computing for Sustainable Global Development, BVICAM, New Delhi, India, 2016.</p> <p>19. Member, International Conference on Electronic Design (ICED), Phuket, Thailand.</p>
Meenakshi Sood	<p>1. Member, International Conference on Signal Processing, computing and control (ISPCC), JUIT, Solan, India.</p> <p>2. Member, International Conference on Signal Processing and Integrated Networks (SPIN), Amity University, Noida, Delhi NCR India.</p> <p>3. Member, 10th INDIACom: International Conference on Computing for Sustainable Global Development, BVICAM, New Delhi, India.</p> <p>4. Member, International Conference on Parallel, Distributed and Grid Computing, JUIT, Solan, India.</p>
Pradeep Garg	<p>1. Member, International Conference on Signal Processing and Integrated Networks (SPIN), Amity University, Noida, Delhi NCR India.</p> <p>2. Member, 3rd International Conference on Electronic Design (ICED) , Phuket, Thailand.</p>

3.4.4. Provide details of

* Research awards received by the faculty and students

Faculty Awards			
S. No.	Award	Name of Faculty	Year
1	Post Doctoral Fellow at University Of Nebraska at Omaha	Dr. Nitin	2012-2013
2	Post Doctoral Fellow At University Of Pretoria South Africa	Dr. Pradeep Kumar Gupta	2014-2016
3	Indian Science Congress Association Young Scientist Award for the year 2010-11 (Plant sciences) was conferred by Dr. Venkataraman Ramakrishnan, 2009 Nobel Laureate in Chemistry, Cambridge.	Dr. Hemant Sood	2010-11
4	A4U Postdoctoral Fellowship, Spain	Dr. V. K. Garalapati	2011-13
5	Travel award from Department of Biotechnology, Govt. of India for an invited talk in 62nd annual meeting of Society of Industrial Microbiology and Biotechnology (SIMB) at Washington DC, USA, 2012.	Dr. Sudhir K Syal	2012
6	Best paper award (Oral Presentation) in 1 st HP Science Conference 2014 1 st Himachal Pradesh Science Congress "Role of Science & Technology in Sustainable	Dr. Anil Kant	Oct.15-16, 2014

	Development” Hotel Peterhoff, Shimla Oct.15-16, 2014 Authors: Aseem Chawla, Tsering Stobdan, Ravi B Srivastava, RS Chauhan, Anil Kant		
7	Scholarship Award for participate the conference from Advances Against Aspergillosis 3-5 March 2016, Manchester UK	Dr. Jata Shankar	3-5 March 2016
8	ISRM-TT 2014 Best Paper Award, Indian Society of Rock Mechanics and Tunneling Technology.	Dr. S K Jain	2014

Student Awards			
Department of Civil Engineering			
S. No.	Award	Name of Student	Year
1	Best paper award Paper title: “Design chart method of foundation design: A better way of geotechnical design of foundations”. Event: Students’ national conference- SCTACE 2012 at JUIT Waknaghat	Mr. Eshan Ganju	March 30-1 April, 2012
2.	First prize Event: STAAD.pro design event in SCTACE, 2012 at JUIT Waknaghat	Rohit Dua jointly with Mr. Eshan Ganju and Mr. Sumit Jain	March 30-1 April, 2012
3.	First prize Event: AutoCAD competition	Mr. Sumit Jain	Feb 18-20, 2011.
Department of ECE			
4.	“Deploying Pragmatic Techniques for Campus Network Design”, Proceedings of SARC-IRF International Conference New Delhi, India.	Aditya Ahuja, Nikita Gupta, Kamal Dewan, Meenakshi Sood	12th April- 2014
5.	“Texture Based Classification for Face Recognition”, Proceedings of 4 th SARC-IRF International Conference New Delhi, India.	Amandeep Goyal, Naina Singh, Meenakshi Sood	27 th April- 2014.
Department of Physics & Materials Science			
6.	First prize in Oral presentation in ICEM-2014, at JUIT	Hitanshu Kumar	2014
7.	First prize in Oral presentation in ICEM-2015, at JUIT	Hitanshu Kumar	2015

* **national and international recognition received by the faculty from reputed professional bodies and agencies**

S. No.	Award	Name of Faculty	Year
1.	Fellow of British Computer Society (FBCS)	Prof. (Dr) S.P. Ghrera	2012
2.	Senior Member of IEEE (SMIEEE)	Prof. (Dr) S.P. Ghrera	2013
3.	Indian Science Congress Association Young Scientist Award for the year 2010-11 (Plant	Dr. Hemant Sood	2010-11

	sciences) was conferred by Dr. Venkataraman Ramakrishnan, 2009 Nobel Laureate in Chemistry, Cambridge.		
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3.4.5. Indicate the average number of successful M.Phil. and Ph.D. scholars guided per faculty during the last four years. Does the university participate in *Shodhganga* by depositing the Ph.D. theses with INFLIBNET for electronic dissemination through open access?

There are total 60 Ph. D. and 247 M. Tech. scholars guided in the last four years. The table below presents average number of Ph. D. and M. Tech. projects guided.

Theses Average per faculty

Theses	Average per faculty
Average number of Ph.D. Theses Guided	0.84 (60/71*)
Average number of Ph.D. Theses in Progress	1.66 (118/71*)
Average number of M. Tech. Theses Guided	3.20 (247/77**)
Average number of M. Tech. Theses in Progress	0.98(76/77**)

*No. of faculty eligible for Ph.D. supervision

**No. of faculty of departments having M. Tech. programmes

The Institute participates in *ShodhGanga* and *ShodhGangotri* by depositing Ph.D. theses with INFLIBNET.

3.4.6. What is the official policy of the university to check malpractices and plagiarism in research? Mention the number of plagiarism cases reported and action taken.

The university has a well defined official policy to check malpractices and plagiarism in research. All student reports – B. Tech. project, M. Tech. Project and dissertation, Ph.D. theses, are accepted only after they have gone through a plagiarism check by Turnitin software available in the Learning Resource Centre. Faculty and students of the university are required to get their research papers checked for plagiarism by Turnitin software before submitting for publication in conferences / seminars/ journals etc. The guidelines for ethical conduct in research are:

1. Plagiarism:

Presentation or publication of research data, idea or text of someone else in any form without reference or citation and implying it as own is plagiarism. This research misconduct should be strictly avoided at all levels, whether research carried out as part of curriculum (under- and post graduate including Ph.D.), theses, project reports, sponsored research projects (Proposals/Reports) or in reviews, books, monographs, case studies, etc.

(i) Authors should cite/quote others' work whether published or unpublished in all communications. Others' work may be published in journal /proceedings of conference / seminar / workshop, available on website, orally presented in seminar or personally discussed

(ii) The plagiarism check must be done before submission of project proposals/reports, theses, research papers, review articles, books, monographs, case studies etc.

2. Forgery of Research Data:

Data forgery and misrepresentation are very serious transgression. These may include fabricated result, false statement, deliberate exclusion which present results in desired manner, and reporting anticipated results for which experiments have not been performed. Withholding results not anticipated or which do not confirm the hypothesis is also considered scientific misconduct. Complete and accurate record of experimental data from which final conclusion or theses is

being prepared should be maintained. Data Storage whether electronically or hand written should have dates. Publication should not be listed as submitted (in anticipation) or accepted unless author has received letter of acceptance from the editor handling manuscript. Author should not publish same research in two places including abstracts, even if publishing a portion for unavoidable reasons; citation must be included to avoid self-plagiarism. If plagiarism has been noticed, it is the authors' responsibility to correct or retract article as per journals specifications.

3. Misuse of Confidential Information:

Confidential information can be received as reviewer of grant application, peer reviewer of journal or as examiner of project viva/theses seminars/examinations. Misuse of privileged information in such cases deprives original thinker of prior publication benefit and subsequent credit, and is severe form of research misconduct.

Person contributing confidential information to unauthorized person, who indulges in plagiarism, will share responsibility of misconduct.

4. Research involving Human Subjects:

In case of research involving human subjects or human samples (body fluids or tissue), the work will only initiate after the approval from JUIT Institutional Ethical Committee (IEC) [which has been formed as per ICMR guidelines]. Faculty members may submit the application to IEC in prescribed format with details of protocol of the proposed research, ethical issues involved in the study and plans to address these issues. Social or behavioral projects involving confidentiality of patients/subjects also require clearance from IEC.

5. Bio-safety:

The research projects involving laboratory experiments in biotechnology should be brought to the notice of IBSC (Institutional Bio-safety Committee) which works under the guidance of DBT (Department of Biotechnology, Govt. of India). Prior permission from IBSC should be taken for projects involving genetic engineered organisms, human/animal cells, transgenic plants, known/unknown microorganisms, toxic and allergic compounds, human samples (project cleared by IEC). Any issue related to bio-safety should be brought to the notice of Chairman of IBSC.

As a policy all members (faculty, scholars, project/member and students) shall follow the above meticulously and (i) While communicating with JUIT administration regarding any of the items mentioned in 1.(iii) above will attach a plagiarism report from LRC using the software available there. (ii) In case of items (2) to (5) give a certificate categorically certifying that no such issue is involved and own full responsibility for issues, if any, which may arise at a later date.

In case of any serious scientific misconduct, a committee constituted by VC, comprising of a Dean, concerned HOD and three other members will investigate the charges and VC may take appropriate action based on the findings / recommendations.

3.4.7. Does the university promote interdisciplinary research? If yes, how many interdepartmental / interdisciplinary research projects have been undertaken and mention the number of departments involved in such endeavours?

The university promotes interdepartmental and interdisciplinary research.

Faculty members belonging to different departments work together on the topics of common interest and publish research papers.

Presently there are no interdepartmental funded projects in progress; however, faculty members work jointly on different topics of mutual interest. The university encourages interdisciplinary research. Ph.D. theses, M. Tech. projects and dissertations, and B. Tech. projects can be guided jointly by faculty of different departments. The research facilities created by the university for research may be used by all Departments jointly.

3.4.8. **Has the university instituted any research awards? If yes, list the awards.**

Nil

3.4.9. **What are the incentives given to the faculty for receiving state, national and international recognition for research contributions?**

Nil

3.5. **Consultancy**

3.5.1. **What is the official policy of the university for structured consultancy? List a few important consultancies undertaken by the university during the last four years.**

The university follows the consultancy policy of its sister institute IIIT Noida. The draft policy is as follows:

Rules for undertaking Industrial Consultancy/ Testing/Investigation Works

1. All faculty members of university are allowed to undertake industrial consultancy work with prior permission of competent authority.

2. No consultancy should be provided without prior permission of competent authority and receipt of consultancy fee by the university.

3. The consultancy fee shall be divided between university and consultant involved in the consultancy work as per the following :

(a) Works where university's laboratory facilities have to be used. The fee shall be shared between the university and the Consultant on 50%:50% basis.

(b) For works where laboratory equipments and other university facilities are not required for example, works requiring, design verification, design, consultation etc. The distribution between the university and the Consultant shall be on 30%:70% basis.

(c) Works requiring personal consultation only at the university shall be charged on hourly basis at the rate of Rs. 2,000/- per hour. Fee shall be shared as in 3(b) above.

(d) The minimum charges per day of consultation work outside the university shall be charged at a minimum rate of Rs. 5,000/- per day and shall be subject to a maximum of Rs. 10,000/- per day. The exact fee to be charged by the consultant shall be as decided by the consultant and approved by the competent authority. This fee shall be in addition to TA/DA and hospitality charges to be paid by the organization seeking the consultancy and it shall be shared as in 3(b) above.

4. The total earning of a faculty member from the consultancy job in a financial year will be limited to 50% of his/her annual salary and any amounts exceeding this will automatically become the university's share.

5. No consumable resources of the university or of another project like chemicals, stationery, spare parts and components etc. will be used for the consultancy work. Wherever such things are needed the same shall be purchased from the funds of the organization seeking consultancy following the university 's purchase rules.

6. All consultants will ensure that the university work always gets top priority and is not allowed to suffer on account of any consultancy work.

The consultant will submit to finance department the distribution of consultancy fee to all persons involved in the consultancy job, as per the specified share, in the prescribed format after deducting expenses in connection with the consultancy job, any such expenses be limited to about 15% of the total fee charged. This shall be done after having completed the consultancy

job and submitting the report of the same to the organization seeking consultancy. One copy of this report shall be attached with the distribution of the consultancy fee and shall be kept in records

3.5.2. Does the university have a university-industry cell? If yes, what is its scope and range of activities?

There is no separate University-Industry cell however the Training and Placement Cell and academic departments interact with industry on regular basis within following scope and range of activities:

- Expert talks
- Collaborative M. Tech. dissertation
- Training workshops
- Showcasing student projects

3.5.3. What is the mode of publicizing the expertise of the university for consultancy services? Which are the departments from whom consultancy has been sought?

Expertise of the faculty is available on the University website.

3.5.4. How does the university utilize the expertise of its faculty with regard to consultancy services?

The University encourages its faculty to take up consultancy and has a well laid and articulated policy in this regard.

3.5.5. List the broad areas of consultancy services provided by the university and the revenue generated during the last four years.

No major consultancy. Nothing substantial to report on revenue generated.

1. Free consultancy is provided for Installation of Portable Bio Gas plant
2. Material testing
3. Soil testing and load bearing investigations
4. Structural design
5. Transportation and Highway Engineering
6. Hydraulics Engineering

Free consultancy services provided by the university:

Biogas Plant -Location and year of establishment	Consultancy provided free of cost/ Funding agency	Dimensions (Litres)		Feedstock	Average Output (in terms of cooking time)	Current Status
		Digester	Gas holder			
Govt. Senior Secondary School, Burmana of Distt. Bilaspur HP. 2014	Local Gram Panchayat under Swachh Bharat Abhiyan	3000	2000	Left over mid-day meal (rice and pulses)	40-45 minutes/day	Cooking meals as alternative to LPG and demonstratio n project for school students

Eternal university, Baru Sahib, Sirmour, HP. 2014	Eternal University,	3000	2000	Left over mess food (2.5 kg with 15 liters of water)	40-45 minutes/day	Supply is with their Bakery
A village of Hamirpur, HP 2014	Local Gram Panchayat under Swachh Bharat Abhiyan	1000	750	Left over mid-day meal of school	No data provided	No update provided

Others (Project consultancy):

S. No.	Project investigator	Funding Agency	Title	Duration	Amount (In Lakhs)
1	Dr. Hemant Sood	DRDO	Molecular Dissection of Biosynthesis of Pharmacologically Important Phenol Glycosides in a High Value Medicinal Plant (<i>Rhodiola imbricata</i>) from Trans- Himalayan Region of Ladakh	2015-17	9.8
2	Dr. Anil Kant	DRDO	Transcriptome analysis of seabuckthorn male & female flowers	2015-17	9.996
3	Dr. Anil Kant	DRDO	Identification and validation of sex linked markers in seabuckthorn	2013-15	10
4	Dr. PK Naik	DRDO	Toxicological evaluation of herbal formulations: (a) herbal performance enhancing capsules (PerfoMax), (b) herbal adaptogenic appetizer, (C) herbal tea and (D) seabuckthorn oil based soft gel capsule	2012-13	8.5
5	Dr. C Rout	DRDE	Computational Identification, Evaluation and in vivo Validation of Vaccine Candidates from Bioweapon Toxins, and Selected Potential Bacterial Bioweapons (PBBWs)	2010-12	9.4
6	Mr. Dipankar Sengupta	DRDO	Development of Business Intelligence Model of Army Personnel's at Higher Altitude	2012-14	9.9
7	Dr. PK Naik	DRDO	Genetic characterization, chemical profiling and optimization of parameters for Artemisinin yield in <i>Artemisia annua</i> from the Ladakh region	2010-12	9.5

3.6. Extension Activities and Institutional Social Responsibility (ISR)

3.6.1. How does the university sensitize its faculty and students on its Institutional Social Responsibilities? List the social outreach programmes which have created an impact on students' campus experience during the last four years.

- As a part of the University's support and strengthening the neighbourhood community, JUIT provides free medical aid, drinking and irrigation water supply, approach roads etc.
- From time to time the University also organizes various health and family welfare camps. The students are involved in organizing these camps.
- 3-credit courses on Social and Legal issues are taught to student.
- Popularization of waste management practices and recycling of food and agri-waste material in nearby villages.
- Volunteer teaching in a neighbouring high school at Domahar on each Saturday.
- Organization of blood donation camps by the University along with ROTARACT club
- Inviting school children of 10+1 and 10+2 classes from Shimla and Solan for lab visits and interaction with faculty and PhD scholars so as to apprise them about our research activities.

3.6.2. How does the university promote university-neighbourhood network and student engagement, contributing to the holistic development of students and sustained community development?

- From time to time faculty and students are involved in arranging medical camps, polio, sanitation and cleanliness drives.
- Mentoring the students of local schools and solving their issues.

3.6.3. How does the university promote the participation of the students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International programmes?

- ROTARACT Waknaghat is a part of Rotary International present in over 163 countries around the world bringing the total to 7500 clubs.
- A large number of lives have been touched through the various events organised by this organisation since its establishment in 2009 ranging from underprivileged kids to educated youth and elderly of the society.
- These events were organised both on the campus of JUIT and outside the premises. Many of these events were covered by the leading newspapers and news channels. The huge response and success of these events exhibits the effort and sincerity of intensions of the members. ROTARACT Waknaghat thrives to keep up the spirit and performance.
- Blood donation camps in collaboration with IGMC Shimla are a regular feature.
- Faculty and students are working on environmental waste management in collaboration with Toxics Link – an environmental NGO. Students are encouraged to take projects on alternative energy resources

3.6.4. Give details of social surveys, research or extension work, if any, undertaken by the university to ensure social justice and empower the underprivileged and the most vulnerable sections of society?

- 🚩 YES, students are involved in helping the children of labourers.

Dr. Sudhir Kumar and Dr. Ashish Kumar fabricated and installed cost-effective biogas digesters in Himachal Pradesh. Local Panchyats of Himachal Pradesh are also coming forward to establish these digesters under Nirmal Bharat Abhiyan of Govt. of India.

Following Biogas digesters were fabricated and installed in Himachal Pradesh:-

1. Biogas Digester (1000 liter) - Jaypee University Campus, Wagnaghat, Solan, HP (year of establishment – 2008, sponsored by Ayurvet Industry, Baddi, Solan.) –
2. Biogas Digester (3000 liter) - Ayurvet Industry, Baddi, HP (year of establishment – 2009, sponsored by Ayurvet Industry.)
3. Biogas Digester (3000 liter) - Jaypee University Campus, Wagnaghat, Solan, HP (year of establishment – 2009, sponsored by Jaypee University.)
4. Biogas Digester (500 liters), Govt. School, Jabli, HP. (year of establishment – 2010, sponsored by Rural ministry, HP Govt.)
5. Biogas Digester (3000 liters) - Govt. Senior Secondary School, Burmana of Distt. Bilaspur (HP) under Nirmal Bharat Abhiyan. (Year of establishment – 2014, sponsored by Burmana Panchyat of Distt. Bilaspur. HP)
6. Biogas Digester (3000 liters) – Eternal University, Baru Sahib, Sirmour, HP., 2015. (sponsored by Eternal University, Baru Sahib)
7. Biogas Digester (1000 liters) – Remote consultancy to a village in Hamirpur.

3.6.5. Does the university have a mechanism to track the students' involvement in various social movements / activities which promote citizenship roles?

➤ No

3.6.6. Bearing in mind the objectives and expected outcomes of the extension activities organized by the university, how did they complement students' academic learning experience? Specify the values inculcated and skills learnt.

- ✚ The Department of Biotechnology and Bioinformatics has taken up the projects to popularize vermin-composting and household waste management in the neighbourhood.
- ✚ Students are encouraged to take projects on Alternate Energy Resources which gets well with their theory and hands-on experience.

3.6.7. How does the university ensure the involvement of the community in its outreach activities and contribute to community development? Give details of the initiatives of the university which have encouraged community participation in its activities. Give details of awards received by the institution for extension activities and/contributions to social/community development during the last four years.

Models of vermi-composting and generation of Biogas from organic waste is motivating surrounding rural folk.

3.7. Collaboration

3.7.1. How has the university's collaboration with other agencies impacted the visibility, identity and diversity of activities on campus? To what extent has the university benefitted academically and financially because of collaborations?

University has established collaboration with several educational institutions, industries and research organizations. While on one hand these collaborations have promoted visibility of university activities, on the other hand it has impacted positively on various research and academic activities. It has helped in bringing new ideas in research, improving the quality of research by sharing information/data, improving quality of publications, training and internship, placement, sharing of facilities, generation of extra mural grants and curriculum development.

3.7.2. Mention specific examples of how these linkages promote Curriculum development

- * **Internship**
- * **On-the-job training**
- * **Faculty exchange and development**
- * **Research**
- * **Publication**
- * **Consultancy**
- * **Extension**
- * **Student placement**
- * **Any other (please specify)**

Internship

Industry linkages help the students in taking summer internship in those industries with which the university has linkages.

On-the-job training

Some of our graduate students in the final semester go to Infosys for on-the-jobs training on live projects every year.

Faculty exchange and development

Under Faculty exchange Dr. Nitin of Computer Science & Engineering Department has gone on teaching assignment to University of Nebraska.

Research

Department of Biotechnology has sponsored R & D projects in collaboration with IIT Delhi.

Publication

Faculty members have published many good papers in collaboration with their collaborators.

Consultancy

Nil

Extension

Nil

Student Placement

Industry linkages have greatly promoted the placement of students in various industries with whom university has linkages. For placement of students some select IT companies like INFOSYS, HCL TECHNOLOGIES and ACCENTURE are our regular clients.

In addition, linkages have promoted the admission of students in MS for higher studies in University of Florida, USA, University of Nebraska, at Omaham USA, Georgia Institute of Technology, Atlanta, University of North Carolina, Charlotte and University of Bonn, Germany

3.7.3. Has the university signed any MoUs with institutions of national/international importance/other universities/ industries/corporate houses etc.? If yes, how have they

enhanced the research and development activities of the university?

The University signed MOUs with following institutions for exchange of faculty, researchers and students for teaching, research and training.

Sr. No.	Name of University	Exchange for Teaching, Research and Training, (Y/N)		
		Faculty	Researchers	Students
1	Arkansas State University, USA	Y	Y	Y
2	Center for Industrial Microbiology, Food Industries Research Institute, Nguyen, Trai, Thanh Xuan, Hanoi, Vietnam	Y	Y	Y
3	South Dakota School of Mines and Technology, USA	Y	Y	Y
4	University of Nebraska at Omaha, USA	Y	Y	Y
5	DRDO	Y	Y	Y
6	Youth Development Fund, Bhutan			Y
7	Cheng Shiu University Taiwan	Y	Y	Y

The University has MOU with the following Foreign Universities/Institutes for collaborating in research, joint courses, faculty exchange and student exchange:

- University of Florida, Gainesville, USA
- University of Nebraska at Omaha, USA
- University of Massachusetts at Boston, USA
- Universities of Applied Sciences, Finland
- Prof KD Entian's Group at University of Frankfurt, Germany
- DRDO
- The Alliance of 4 Universities (A-4U) of Spain
- Rinker school of Building Construction, University of Florida, Gainesville, Florida (From 2008-09).

3.7.4. Have the university-industry interactions resulted in the establishment / creation of highly specialized laboratories / facilities?

NIL

Any other information regarding Research, Consultancy and Extension, which the university would like to include.

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1. Collaboration

4.1.1. How does the university plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?

The campus area of the university is 25 acres with built up space of 73150 sq m. The distribution of campus area is as given below

Infrastructure	Approximate built up area
Academic Block	13034 sq m
Student Hostels	33279 sq m
Faculty Residences	13947 sq m
Other Facilities	12890 sq m

The academic block of the University includes 3 Lecture theatres, 8 Class Rooms, 7 Tutorial Rooms and 51 Laboratories.

Academic Block

Sr.No.	Description	No.	Capacity
1.	Class rooms	8	96,90, 6×84
2.	Tutorial Rooms	7	7 × 35
3.	Lecture Theatres	3	240, 260, 260
4.	Computer labs	8	392
5.	Computer Research Labs	1	08
6.	Electronics Labs	6	30 each
7.	Electronics Research labs	1	56
8.	Biotech Labs	8	30 each
9.	Biotech Research Labs	10	4-10
10.	CE Labs	9	30 each
11.	CE Research Labs	1	2
12.	HSS Lab	1	30
13.	Physics Lab	1	35
14.	Physics Research labs	5	32
15.	Faculty Offices	113	1 each
16.	GD Rooms	1	30
17.	Board Room	1	25

Master plan is enclosed. (ANNEXURE VI)

Student Hostels

All student hostels are centrally heated and provide accommodation to 1752 students (1207 Boys and 545 Girls).

Faculty Residences

Residential area consists of 88 Faculty Housings, 37 Staff Housings, 188 Workers Housing and a Guest House.

Other Facilities

Support services include Electrical Sub Station (1250 KVA DG Sets), Plant Room with Boilers (10600 Lac K Cal), 2 Bulk Oil tanks (40000 litres)

Library as learning Resource

Learning Resource Centre (LRC), the University Library is located in the Academic block. It has carpet area of 1231 sq m. spread over 3 levels. The reading area can accommodate about 295 users at any time where they can read/consult reference books, Journals (both print and electronic) using 55 odd internet connected computer terminals.

The LRC has over 33969 books, subscribes to 64 print Research Journals and 12078 e-Journals, magazines, transactions and conference proceedings. The LRC has 12709 Reference books, 21260 text books and 948 back volumes of Journals. The collection of LRC also includes books of general interest, Research Reports, Theses, Standards, Atlases, Patents and back volumes of Journals. **LRC also provides links to thousands of e-books available freely over the public domain through its website.** The LRC is also a member of DELNET for sharing resources. The LRC has an Institutional Repository based on DSpace – open source repository software.

LRC had also been member of INDEST-AICTE and INFLIBNET consortia which subscribes to ASCE, IEEE, ACM, Springer Link but MHRD wide their notification No. 16-23/2014-TEL dated 1st December 2015 has merged three of its major consortia namely UGC-Infonet Digital Library consortium, INDEST-AICTE consortium and N-LIST programme and formed a national consortium called e-Shodh Sindhu. The Associate model of this consortium is yet to form, LRC will participate in this consortium through Associate membership as and when it will evolve.

The LRC is fully automated including bar-coded membership cards, Online Public Access Catalogue (OPEC) and integrated electromagnetic security system (3M India).

ICT as learning Resource

The University provides round the clock Internet facility throughout the campus including hostels and faculty residences through 1Gbps Optical fibre and Wi-Fi in limited areas. All the Computers and audio-visual systems in Academic Block, Library are supported by UPS.

Other Facilities

Outdoor floodlit grounds are available for Basketball, Volleyball and Badminton. Indoor facility for Table Tennis, Carom and Chess is also provided. There are Two Gyms, one for boys and one for girls with Tread Mill, Cross trainer and Cycles.

There is a branch of **Punjab National Bank** in the academic Block which caters to all the banking needs of the University, Employees and students. ATM facility is also provided.

A **Convenience Shop** and a **Cafeteria** cater for the daily needs, refreshments, and snacks. All items are sold with nominal profit margin. For variety the menu in the Cafeteria is changed every day.

Medical Centre has two doctors (One Lady Doctor) along with all the supporting staff such as compounder, dresser, nurse and helpers etc. For indoor treatment two beds for boys and one for girls is also provided. A separate MI room is also provided in the Girls hostel. The Centre also has an Ambulance for emergency cases. All medical staff stays on campus.

The University has also created **laundry facility**. Each student can make use of this facility twice a week; the expenses are included in Hostel Charges. The staff can make use of this facility at nominal charges.

The University has 1 Innova, 3 cars, 1 Scorpio, 1 Omni Van, 1 pickup Van, 1 Ambulance, 2 Buses and 1 Tata 407 for its transport needs. The University runs a bus service for its employees staying out of the campus. The students can also make use of this service.

Besides the **BSNL Exchange** on the campus, the University has its own EPBX exchange with 30 lines capable of supporting 400 connections. All officers and faculty members, and important facilities are connected with this exchange.

The academic time table is made in such a way that Lecture Theatres, Class rooms, tutorial rooms, laboratories etc are fully utilized by staggering the classes. Researchers and Project fellows are utilizing the laboratory facilities after closure of the regular classes. Timings for mess, laundry and Gym Facilities are staggered to ensure full utilization with maximum comfort to students.

4.1.2. Does the university have a policy for the creation and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives.

The University reviews the requirements of infrastructure and identifies the enhancements needed from time to time. These are placed before the Finance Committee/Executive Committee/Governing Council and Board of Management for their feasibility and respective approvals.

Following were proposed and accepted for implementation in Department of Computer Science & Engineering:

- (1) PG lab for 30 users
- (2) Research lab for 15 users
- (3) One computer lab for undergraduate students for 100 users

4.1.3. How does the university create a conducive physical ambience for the faculty in terms of adequate research laboratories, computing facilities and allied services?

The University provides the faculty members with necessary facilities for teaching and research upon their joining. A furnished office space is made available having required office furniture, storage space etc., Desktop computer with internet connectivity, Printing and photocopying facilities, subscription to latest academic resources, Stationary, Intercom, Research laboratory spaces, Pantry for faculty and staff, Efficient round the clock maintenance support, Common rooms, Separate unisex rest rooms, Seating spaces with intercom and internet connectivity to all research scholars, and also the Hostel accommodation for research scholars.

All the lecture theatres, class rooms and tutorial rooms in the University are equipped with latest audio-visual equipments and internet connectivity with power back up. Adequate maintenance support for their smooth functioning is provided.

The UG and PG labs are having ample infrastructure as furniture, fixtures, instruments, equipments and manpower to provide an excellent laboratory experience to the students. To underline the significance of laboratory, the laboratory courses are considered as independent and important part of the curriculum. The University has sufficient allocation of funds in the planned budget for maintenance and up-gradation of lab facilities.

The University has essential infrastructure in laboratories for research and there is generous allocation of funding for high quality research work. There is internet facility and networking throughout the campus for all relevant academic, research and administrative activities.

4.1.4. Has the university provided all departments with facilities like office room, common room and separate rest rooms for women students and staff?

Yes

4.1.5. How does the university ensure that the infrastructure facilities are disabled-friendly?

The academic block and a hostel has lift to make it convenient for the disables and ramp is also provided at certain residential areas and hostels. The university has the policy to provide the residential and hostel accommodation at ground level to disables.

4.1.6. How does the university cater to the requirements of residential students? Give details of

➤ **Capacity of the hostels and occupancy (to be given separately for men and women)**

One Hostels for girls (Total seats = 545)

Thirteen Hostels for boys (Total seats = 1207)

➤ **Recreational facilities in hostel/s like gymnasium, yoga centre, etc.**

There are two Gyms, one for boys and one for girls with Tread Mill, Cross trainer and Cycles. Gymnasium, Common room with TV, Indoor games like Table tennis, Carom, Chess Board, Café, beauty parlour, Reading Room. The girls hostel has an in-door tuck shop to cater to their daily needs.

➤ **Broadband connectivity/wi-fi facility in hostels.**

The University provides round the clock Internet facility throughout the campus including hostels and faculty residences through 1 Gbps Optical fibre and Wi-Fi in limited areas.

The campus has various facilities for the requirements of residential students like central heating in rooms, Tuck shop, cafeteria, student clubs, round the clock Internet facility in all hostel rooms, sports facilities (indoor & outdoor), gyms, laundry, library (upto midnight), medical dispensary, auditorium, Park, Conveyance facility to nearest towns at weekends and holidays, Bank with an ATM, guest house, 24 hours power back-up and an exclusive building for dining space (Annapurna), Auditorium to watch movies every week and cultural functions, magazines and periodicals in library and hostel common rooms. The University has surveillance through CCTV cameras for creating a safe and secure campus. A strong maintenance system exists in the University for smooth functioning of these services.

4.1.7. Does the university offer medical facilities for its students and teaching and non-teaching staff living on campus?

YES, the university has a Medical Centre having two doctors (One Lady Doctor) along with all the supporting staff such as compounder, dresser, nurse and helpers etc. For indoor treatment two beds for boys and one for girls is also provided. A separate MI room is also provided in the Girls hostel. The Centre also has an Ambulance for emergency cases. All medical staff stays on campus.

4.1.8. What special facilities are available on campus to promote students' interest in sports and cultural events/activities?

SPORTS –

A sports coordinator coordinates the sports activities

Outdoor: Grounds for Basket ball, Volleyball, and Badminton.

Indoor: Table tennis, Gymnasium (separate for boys and Girls), Chess and Carom

A sports tournament PARAKRAM covering many sports is held in either of the four Jaypee Education System (JES) campuses every year.

CULTURAL EVENTS/ACTIVITIES

A fully equipped auditorium and three lecture theatres

- a) **Jaypee Youth Club (JYC)** - JYC organizes sports and cultural activities through different clubs like environment, art, movie, sports etc. on a regular basis which promotes students to engage in the extracurricular activities and organized the **Annual fest LeFiestus**
- b) **Technovertz**-Department of Electronics and Communications Engineering annually organizes technical events.
- c) **SYNAPSE**- Department of Bioinformatics and biotechnology department annually organizes various cultural and educational events.
- d) **CEC**- Department of Civil Engineering annually hosts various technical and cultural events in the University campus.
- e) **IEEE Student Branch**- JUIT Students of Electronics and Communications Engineering, Computer Science Engineering are members of IEEE SB JUIT that comes under IEEE Delhi Section. It involves active participation of students in various technical events and also participate in the technical fest or events held in various institutes under IEEE.

**** Co-curricular activities** – 3 Lecture theatres and 1 Auditorium fully equipped with audio visual facilities

4.2. **Library as a Learning Resource**

4.2.1. **Does the library have an Advisory Committee? Specify the composition of the committee. What significant initiatives have been taken by the committee to render the library student/user friendly?**

Yes, the JUIT University has a Library Committee, accommodating representation from all academic departments. The members of the committee are:

1. Prof. Karanjeet Singh, Department of Mathematics (Chairman)
2. Prof. Ghanshyam Singh, ECE Department
3. Dr. Pradeep Kumar, Asstt. Prof. (Sr. Grade), CSE/IT Department
4. Dr. Ashish Kumar, Assoc Prof., CE Department
5. Dr. Sudhir Kumar, Assoc Prof., BT/BI Department
6. Dr. Anupriya Kaur, Assoc Prof., HSS Department
7. Dr. Vineet Sharma, Assoc Prof., PMS Department
8. LRC In-charge – Member Secretary

The library committee advises on issues related to holistic development of the library system on the university. It also plays an important role between LRC and its users. It recommends actions on library policies, innovative services, infrastructure and collections in the LRC.

4.2.2. **Provide details of the following:**

- * Total area of the library (in Sq. Mts.) : **1231 (Sq. Mtrs)**
- * Total seating capacity : **295**
- * Working hours (on working days, on holidays, before examination, during examination, during vacation)

Working Days	Library Timings
Monday to Friday	08:45 AM – 12:00 (mid night)
Saturdays	08:45 AM – 05:00 PM
Sundays	09:00 AM – 01:00 PM

Before Examination	08:45 AM – 12:00 (mid night)
During Examination	08:45 AM – 12:00 (mid night)
During Vacation	09:00 AM – 05:00 PM
Holidays	09:00 AM – 01:00 PM
(National Holidays)	Closed

- * Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)
The whole library is spread over three floors in the academic block. It provides conducive reading environment for students, research scholars and faculty members. Each floor has stacks and seating provisions for readers. The LRC building offers ample space for browsing and relaxed reading. Over 55 computers are placed for users to access various online and other resources of the library.
- * Clear and prominent display of floor plan; adequate sign boards; fire alarm; access to differently-abled users and mode of access to collection
The proper signage system is on display to guide users about library services, notice boards, floor plan, etc. A well equipped fire-alarm system, and emergency exit signs have been displayed properly. LRC has made provision for serving differently-abled users by providing a dedicated terminal for accessing OPAC as well as online resources. Two floors are easily accessible to them and one staff member is assigned to help them for finding literature or other kind of assistance.
The LRC follows open access system

4.2.3. Give details of the library holdings:

a. Print (books, back volumes and theses)

Books	Back Volumes	Theses/Dissertations		
		Ph.D	M.Tech.	B.Tech
33,969	948	95	509	1600

- b. Average number of books added during the last three years: 2586
- c. Non Print (Microfiche, AV) : 2895
- d. Electronic (e-books, e-journals) :
E-Journals – 12078 (852 E-journals + 11226 Conf. Proceedings and Newsletters, etc.)
E-Books – 372 e-books from SIAM and LRC also provides links to thousands of e-books available freely over the public domain through LRC website.
- e. Special collections (e.g. text books, reference books, standards, patents)
Total book collection = **33,969**

Text books	Reference books	Standards	Patents
21260	12709	503	---

- f. Book Banks : No
- g. Question Banks : **Yes, Accessible on server**
(<http://172.16.73.104:8080/dspace/>)
Previous years question papers for all the courses are available.

4.2.4. What tools does the library deploy to provide access to the collection?

- * OPAC: **Yes**, Library is using LIBERTY – Integrated Library Management Software which has an exhaustive OPAC system for personalized search and details of library books. The URL is <http://172.16.73.16:8480/libraryHome.do>
- * Electronic Resource Management package for e-journals: **Yes**, Library has been subscribing to various e-resources and collecting usage statistics to assess utilization of e-resources on regular basis.
- * Federated searching tools to search articles in multiple databases : No
- * Library Website: **Yes**, Library has a dynamic website giving information on the library processes and services for making easy access to library collection and resources. It can be accessed from <http://www.juit.ac.in/lrc/home.php>
- * In-house/remote access to e-publications: **Yes** Library is maintaining institutional repository on DSpace which is an open source software. It is accessible within the campus which is openly accessible 24x7 over the intranet.

4.2.5. To what extent is ICT deployed in the library? Give details with regard to

- * Library automation: **Yes**, Library is fully automated by using LIBERTY – Web based library management software with bar coded technology and 3M security system. The books are processed for Barcode for easy retrieval and circulation. The URL to access the available details of library collections is <http://172.16.73.16:8480/libraryHome.do>
- * Total number of computers for general access: 55. Library also offers scanning facility to its users.
- * Total numbers of printers for general access: 2
- * Internet band width speed: **1GB**, Library has seamless access to Internet with internet ports as well as through Wi-Fi connectivity.
- * Institutional Repository : **Yes**, LRC is maintaining an institutional repository on Dspace an Open Source Software. It is accessible at <http://172.16.73.104:8080/dspace>
- * Content management system for e-learning: **Yes**, Library has initiated creating a content management system for e-learning (**CoEL@JUIT**) facility by using Moodle content management software. It is on its initial stage and can be accessed at <http://172.16.73.25/moodle>. Library has also initiated process of obtaining NPTEL web and Video contents to establish a NPTEL Lab.

Participation in resource sharing networks/consortia (like INFLIBNET): **Yes**, We have been a member of DELNET. We had also been member of INDEST-AICTE and INFLIBNET consortia. But MHRD wide their notification No. 16-23/2014-TEL dated 1st December 2015 has merged three of its major consortia namely UGC-Infonet Digital Library consortium, INDEST-AICTE consortium and N-LIST programme and formed a national consortium called e-Shodh Sindhu. The Associate model of this consortium is yet to form, LRC will participate in this consortium through Associate membership as and when it is evolved.

4.2.6. Provide details (per month) with regard to

* Average number of walk-ins	21000
* Average number of books issued/returned	2248/2152
* Ratio of library books to students enrolled	16:1
* Average number of books added during the last four years	975
* Average number of login to OPAC	1962

* Average number of login to e-resources	956 (Per month)
* Average number of e-resources downloaded/printed	956 (Per month)
* Number of IT (Information Technology) literacy trainings organized	Orientation for new students and whenever students need it.

4.2.7. Give details of specialized services provided by the library with regard to

- * Manuscripts: No
- * Reference: **Yes**, Library provides reference service to its users on demand through Help Desks available on each floor of the library.
- * Reprography/Scanning: **Yes**, Both of these facilities are available in the Library.
- * Inter-library Loan Service: **Yes**, Library is an old member of DELNET (Developing Library Network) and avails its Inter-Library Loan and Document Delivery Services on regular basis
- * Information Deployment and Notification: **Yes**, Library has an active information and notification alert system.
- * OPACS: **Yes**, The library has OPAC facility through <http://172.16.73.16:8480/libraryHome.do>
- * Internet Access: **Yes**, Library has Wi-fi connectivity with internet port facility for the users. They can also use their personal laptops.
- * Downloads: **Yes**, All subscribed resources are downloadable. Users are allowed to download documents/articles from subscribed resources without violating copyright issues.
- * Printouts: **Yes**, User can take printouts of important documents under computer lab facility
- * Reading list/ Bibliography compilation: **Yes**, Though these are being prepared on demand but are being compiled for various other in-house purposes as well.
- * In-house/remote access to e-resources: **Yes**, All resources are available on IP range of the university and accessible 24x7 to the users in campus.
- * User Orientation: **Yes**, Library provides orientation to new users as well on demand.
- * Assistance in searching Databases: **Yes**, Library staff helps the users in searching of electronic databases.

INFLIBNET/IUC facilities: **Yes**, University has signed an MOU with INFLIBNET for uploading Ph.D theses on Shodhganga project of INFLIBNET. As far as subscription of e-resources is concerned, MHRD wide their notification No. 16-23/2014-TEL dated 1st December 2015 has merged three of its major consortia namely UGC-Infonet Digital Library consortium, INDEST-AICTE consortium and N-LIST programme and formed a national consortium called e-Shodh Sindhu. The Associate model of this consortium is yet to develop, LRC will participate in this consortium through Associate membership as and when it is evolved.

4.2.8. Provide details of the annual library budget and the amount spent for purchasing new books and journals.

Years	Budget (Rs. in Lakhs)	Books (Rs. in Lakhs)	Print Journals/ Magazines (Rs. in Lakhs)	E-Resources (Rs. in Lakhs)	Others (Rs. in Lakhs)	Total Exp. (Rs. in Lakhs)
2012-13	100.00	34.90	38.85	25.36	2.05	101.16
2013-14	100.00	22.69	39.04	29.12	2.04	92.89
2014-15	100.00	9.54	40.68	27.19	2.39	79.80

2015-16	100.00	4.74	32.05	24.07	1.21	62.07
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4.2.9. What initiatives has the university taken to make the library a ‘happening place’ on campus?

1. Arranging book displays/exhibitions on regular basis.
2. Users can place their requests for purchasing their needed books which are not available in the library collection.
3. Conducive reading environment is being offered in the library.
4. Wi-Fi connectivity.
5. Increase in number of power points for charging laptops.
6. Extended library hours.

4.2.10. What are the strategies used by the library to collect feedback from its users? How is the feedback analysed and used for the improvement of the library services?

1. Suggestion box – users can drop their feedback/suggestions/complaints in the suggestion box placed in the library.
2. Email ID – Users can also provide feedback directly to the Librarian or on general email address provided for all kind of library related communication (library.juit@mail.juit.ac.in).
3. Library staff – Users can directly approach to library staff on duty for seeking immediate solution of their library related problems.
4. Student survey – Survey is being conducted to assess the use of library services by the students.
5. Sending auto generated alerts for overdue books

4.2.11. List the efforts made towards the infrastructural development of the library in the last four years.

1. Wi-fi installation
2. Up-gradation of Library Management Software.
3. Purchased a Printer/Scanner/Photocopier

4.3. IT Infrastructure

4.3.1. Does the university have a comprehensive IT policy with regard to

- * IT Service Management: IT service management is done by call lock system. All the records related to the IT service is maintained in server room.
- * Information Security: The policy for security of information and information systems in the University helps to maintain the integrity of the user. The information is checked and updated from time to time as required by the authorities. The information is available and care is taken that the security is not compromised.
- * Network Security: The University has deployed network security tools such as Firewall, IDS, IPS and Antivirus software to protect the network. The computers and Network Resources may be accessed only by persons having an account approved and issued by the University authority.
- * Risk Management: Proper risk management principles are followed in the University, as the academic and administrative activities in the University may be at risk. Maximum precaution and care is taken to protect the significant information of the University.
- * Software Asset Management: The University makes sure that there is correct use of Information Technology and its tools to carry the teaching, research, administrative and service functions. The University’s IT Acceptable Use Policy defines the acceptable behavior expected of users and intending users of the facilities, including the web facilities and systems. The users of the

IT services in the University are required to accept the IT policies and their allied requirements which is mandatory for the use of IT facilities. These are accessible on the University Policy Directory.

- * Open Source Resources: The University encourages the use of free available open educational resources which are shared for teaching, learning, and research activities. These resources are available under legally recognized open licenses—free for people to reuse, revise, remix, and redistribute. These help to increase and enhance knowledge domain of both the faculty and the students giving them valuable information and saving their time. An advisory committee for monitoring the trends and issues regarding developments in open source community and integrating its benefits in the university’s educational process is in place.
- * Green Computing: The University promotes Green computing adapting the best practices by using energy efficient CPUs, peripherals, projectors, UPS and Servers. This ensures less power consumption. The University shows its environmental responsibility by reducing the resource consumption when not required.

4.3.2. Give details of the university’s computing facilities i.e., hardware and software.

- * Number of systems with individual configurations

- * Servers

S. No.	Servers	System Configuration	Quantity
1	IBM X Series 235	Intel® XEON 2.4 GHz 4 GB RAM 73 GB SCIC HDD with RAID Support.	3
2	IBM X Series 226	Intel® XEON 3.0 GHz 4 GB RAM 140 GB SCIC HDD with RAID Support.	2
3	IBM System X 3400	Intel® XEON 2.0 GHz 4 GB RAM 956.32 GB SCIC HDD with RAID Support.	7
4	IBM X Series 200	Intel® P3 1.2 GHz 2 GB RAM 20 GB SCIC HDD with RAID Support.	2
5	IBM X Series 232	Intel® P3 1.2 GHz 1.2 GB RAM 204 GB SCIC HDD	2
6	Workstation	Lenovo workstation E5-1603	1
7	SUN Fire 280R	2 GB RAM ,502 GB HDD SUN OS 5.8	1
8	CR 1000ia	10 10/100/1000 Gigabit ports with 3.5 Gbps firewall throughput and 600 Mbps anti-virus throughput	2
9	IBM X Series 3500	Intel® XEON 2.26 GHz 6 GB DDR III RAM 1200 GB SCIC HDD with RAID 5 Support , 17 inch TFT monitor	3
10	IBM Server X3100	IBM Server intel XEON X3100 with 8 GB DDR3 ,500 GB HDD and TFT screen	3
11	IBM x-3400 M3	Server IBM Model x-3400 M3 with intel xeon quad core processor,8 GB RAM,300 GB X 4 HDD,18.5 inch TFT	1
12	HP	HP ML 110G6 Server Intel Xeon Quad Core X3430 Processor with 4 gb RAM ,250 GB Sata HDD and 18.5 TFT Screen	2
13	IBM X3300	IBM server x3300 m4 server 16 gb ram,1200 gb hdd with raid 5 card	1

Total Servers	30
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* Computer Systems

S.No.	Brand	Computer System Configuration	Quantity
1	IBM	P IV with 3 GHz, 80 GB HDD & 1 GB RAM	130
2	IBM	Core 2 due 2.4 Ghz, 160 GB HDD & 1 GB RAM 17 inch Monitor	60
3	IBM	P4 2.8 Ghz,40 GB HDD,256 MB RAM & 15 inch Monitor	35
4	IBM	P4 3.06 Ghz,80 GB HDD,512 MB RAM & 15 inch Monitor	20
5	IBM	Celeron 2.4 Ghz,40 GB HDD,1 GB RAM & 15 inch Monitor	15
6	Lenovo	Dule core 1.8 Ghz,80 GB HDD ,1 GB RAM & 17 inch Monitor	45
7	Lenovo	Dule core 1.8 Ghz,80 GB HDD ,512 MB RAM & 17 inch Monitor	15
8	Lenovo	INTEL CORE 2 DUO,160 GB HDD,4 GB RAM & 17 inch Monitor	2
9	Lenovo	INTEL CORE 2 DUO,160 GB HDD,2 GB RAM & 17 inch Monitor	50
10	Lenovo	INTEL CORE 2 DUO,160 GB HDD,2 GB RAM & 17 inch Monitor	135
11	Lenovo	core i3-530 (2.92 Ghz) with 2 GB RAM ,250 GB Sata HDD,18.5 inch TFT Monitor	90
12	Lenovo	Core I3- 2100 3.10 Ghz with 2 GB RAM ,320 GB Sata HDD,18.5 inch TFT Monitor	80
13	Lenovo	Core I3- 2100 3.10 Ghz with 4 GB RAM ,500 GB Sata HDD,dvd rom,18.5 inch TFT Monitor	120
14	Lenovo	M-72 core i3,4 gb ram,500 gb HDD,18.5 inch tft	90
15	Lenovo	M-73 core i5,4 gb ram,500 gb HDD,18.5 inch tft with wondows 8/10	45
Total Number of computers			932

* Printers

Sr.No	Printers	Quantity	Make
1	Laserjet 5200 Printer	7	HP
2	DMP printer FX 2190	2	Epson
3	HP Laserjet printer M1136	12	HP
4	Laserjet 1022	5	HP
5	HP Deskjet 2515	1	HP
6	Estudio 2505 H	2	Toshiba
7	HP M1005 Laserjet Printer	11	HP
8	DMP Printer Wep LQ 1050 Printer	1	Wipro
9	HP Laser Jet 1566 Printer	5	HP
10	HP Laser Jet 1505 Printer	7	HP
11	HP Deskjet K 209 Printer	4	HP
12	HP Laserjet M2727	1	HP
13	LBP 2900 Canon Laser Printer	4	Canon
14	Toshiba E Studio 306	1	Toshiba
16	HP 5610 Printer All in One	1	HP
17	Laserjet 5100 Printer	3	HP
18	Toshiba E Studio 356	1	Toshiba

19	HP Laserjet Pro M401N Printer	2	HP
Total Number of Printers		70	

* UPS

Sr. No.	UPS	Quantity	Make
1	10 KVA UPS	2	Emerson
2	40 KVA UPS	1	Emerson
3	Numaric 600 VA UPS	17	Numaric
4	6 kva UPS	2	Emerson
5	Liebert online UPS 3 KVA	1	Liebert
6	Liebert online UPS 20 KVA Super with 1 Hr Backup	10	Emerson
7	UPS Emerson 1 KVA	6	Liebert
Total UPS Capacity		291 KVA	

* Projectors

S.No	Location	Projectors Type/Model	Quantity
1	LT1	Sanyo PLC XD2600	1
2	LT2	Sony VPL-EX7	1
3	LT3	Mitsubishi xl 5950 u and Sanyo plc xd2600	1
4	CR1	Sony plc 120	1
5	CR2	Sanyo PLC XD2600	1
6	CR3	Sanyo vpl-ex7	1
7	CR4	Sanyo PLC XD2600	1
8	CR5	Sony plc 120	1
9	CR6	Panasonic	1
10	CR7	Sanyo PLC XD2600	1
11	CR8	Sony plc 120	1
12	TR1 to TR7	Sony VPL-EX7, Sony PLC 120 and Canon LV 7260	7
13	Bioinformatics Deptt	Panasonic	1
14	GD Room	Sony PLC-120	1
15	Board Room	Canon LV-7260	1
16	Server Room	Canon LV-7261	1
17	Civil Lab	Sony VPL-EX7	2
18	Civil deptt class room	Hitachi Projector Ex250	3
19	MP Theater	Sanyo XD 2600	1
20	CL9	Canon LV 7260	1
Total Number of Projectors			29

* Visualizers

S.No	Location	Visualizer Type/Model	Quantity
1	LT-1	ELMO Visual Presenter	1

2	LT-2	LUMENS Digital Visualizer	1
3	LT-3	SAMSUNG Digital Presenter	1
4	CR1	ELMO Visual Presenter	1
5	CR2	LUMENS Digital Visualizer	1
6	CR3	ELMO Visual Presenter	1
7	CR5	LUMENS Digital Visualizer	1
8	CR7	LUMENS Digital Visualizer	1
9	CR8	LUMENS Digital Visualizer	1

* Software

Sr. No.	Software Title	No. of Licenses
1	Hyperchem Release 7	10
2	Matlab ver 7.1	30
	Simulink	30
	CDMA Reference Blockset	5
	Communications Blockset	5
	Communications Toolbox	5
	Signal Processing Toolbox	5
	Wavelet Toolbox	5
3	Library Automation – Alice	Unlimited
4	MS Office Professional Plus 2007	100
5	Windows Server Enterprises 2003	3
6	Adobe Premier Pro Ver 7.0	20
7	Cold Fusion MVLP Ver 6.1	10
8	Flash MX 2004 MVLP	20
9	Micro Media Director Shockwave Studio for windows English AE	10
10	Symantec Anti virus	1000
11	SQL Server 2000 Standard Edtn	1
12	Windows Server CAL 2003 English OLP NL AE Device Cal	4
13	VStudio .Net Pro 2003 Win32 English OLP NL AE	15
14	Office XP Pro Win 32 English	20
15	VStudio .Net Pro 2002 Win32 English	9
16	ISA Server 2000 English	1
17	Windows Advanced Svr 2000 English.	1
	Windows CAL 2000 English OLP NL AE	23
18	DB2 UBD Enterprise Server Edition .	1
19	IBM Tivoli Storage Managed Processor	1
20	Cyberoam software for internet	1
21	Schrodinger For Biotech	1 user 25 Token
22	Lotus Domain	200
23	AutoCad 2005 Education	5
24	A'Desk 3 ds Max 6 (Edu)	20
25	Rational suit Enterprise Software	20

26	Mathematica Ver 5.0	10
27	Autocad 2004 Network User	10
28	Maple 9.5	1
29	Sun Solrix Ver 8	35
30	Window XP Proffesional	20
31	Oracle 9i	10
32	Visual Prolog ver 6.1	15
33	Soft image xsi Ver 4.0	20
34	Staad Pro	5
35	SPSS Base 16.0	15
36	Oracle 11g	1
37	Clarity Digital Multimedia Language Lab	31
	Clarity English Teaching Software from U.K	
	1. Sky Pronunciation Suite	5
	2. Connected Speech	5
	3. Tense Buster Compilation	5
38	NI Lab View Academic Site License 2010	50
39	Pasw Amos 18.0	3
40	Windows Server Enterprise 2008 with media	10
41	Antivirus Symantec Protection Suite enterprise edition 3.0	1000
42	Bentley Civil of perpetual network based software a.Mx Road V8 b.Power Civil c.Power Map	5
43	Ansys release 12.1	
44	HyperLynx 3d EM Super Structure Designer V 15.2	3
45	Auto CAD 2013	30
46	Matlab ver 10	50
	Simulink	10
	Filter Design Toolbox	10
	Communications Blockset	10
	Communications Toolbox	10
	Signal Processing Toolbox	10
	Video and Image processing Blockser	10
47	Window server standard 2012	4
48	Geo 5 suit of Software with various modules	50
49	Xilinx UEF-VIVADO_SYSTEM	25
	Base2 100	7
	Atlys Spartan-6 FPGA Development Board	1

- * Computer-student ratio: 1 : 3
- * Dedicated computing facilities:
The computing facilities are provided to all Faculty/Staff for their teaching and research, library, laboratories, lecture theatres, class rooms, tutorial rooms, and administrative offices.
- * LAN facility:
State of the art switched Local Area Network.
Fiber Optics and enhanced CAT5e/CAT6 UTP Backbone more than 3500 access points.

78- 3 com switches, 44 Cisco switches, 3 Cisco Routers, 20 Cisco AP and 16 VLANs.
Cyberoam Suite to manage internet bandwidth and mailing services. And consists of software firewall, anti spam controller, content filtering and antivirus protection at gateway level.
Lotus Domino for official mailing services

- * Proprietary software: Printout management software.
- * Number of nodes/ computers with internet facility: The University has provided 932 computers with internet facilities for faculty, laboratories and offices, and. There are facilities of dedicated and secured Data centre and video conferencing for academic and other purposes.
- * Any other (please specify)

4.3.3. What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

The University deploys and upgrades the IT infrastructure and associated facilities whenever required. The server room officials in the University asks for requirements from Heads of Departments and considering the corresponding budgetary allocations, the financial provisions for the same are made. After getting the financial approval, quotations are invited followed by their scrutiny based on the configurations, cost, service etc.. The order for procurement is finalized and approved.

Routine maintenance of computers, peripherals, network devices, servers, etc. is carried out by Server room staff.

4.3.4. Give 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.

The faculty prepares the teaching material using computers provided in their office and use them for delivering their lectures and put these lectures, study material, assignments and tutorials etc. on the server to be used by the teachers in class and by the students to refer to them whenever required. All Lecture theatres, class rooms and tutorial rooms are equipped with a Desktop Computer connected to LAN and multimedia projector.

In addition to this, faculty and students can access e-journals, e-books and resources from the LRC and through the internet facilities available on the campus. The quality of teaching-learning process is enhanced through the utilization of online resources by faculty and students. Access to various online resources is being made available to all students and faculty of the university. The access is through IP Range of the university which offers an open access to online resources within the campus. The LRC is also a member of DELNET for sharing resources. The LRC has Repository using DSpace – open source repository software. The following resources are being subscribed and made available to users:

Subscribed E-resources

1. ACM digital Library (<http://dl.acm.org/>)
 2. ASCE Journals (<http://ascelibrary.org/journals>)
 3. IEEE – ASPP + APP (<http://ieeexplore.ieee.org/Xplore/home.jsp>)
 4. Springer Journals (<http://link.springer.com/>)
 5. SIAM Books : (<http://portal.igpublish.com/iglibrary/search/main?2>)
- Compilation of list for free available books
6. <http://172.16.73.16:8480/liberty/cataloguing/biblios/search.do>

Other Open Access Journals:

7. Sodhganga a reservoir of Indian Theses - (<http://shodhganga.inflibnet.ac.in/>)
8. Directory of Open Access Journals(<https://doaj.org/search>)
9. Directory of Open Access Books (<http://www.doabooks.org/>)
Oxford Journals(<http://www.oxfordjournals.org/en/oxford-open/index.html>)

4.3.5. What are the new technologies deployed by the university in enhancing student learning and evaluation during the last four years and how do they meet new / future challenges?

To keep the students and faculty updated about the new developments in technology, the University uses the latest computer software, hardware and other automated tools. The university has an emphasis on using and exposing the faculty and students to latest technology so that they can make its efficient use in teaching-learning, evaluation, and research. The access to latest databases and web based resources is provided to them by the University. The use of open source software in addition to proprietary software is encouraged. This helps the students to remain in line with the recent developments in technology so that they are able to take up new challenges.

4.3.6. What are the IT facilities available to individual teachers for effective teaching and quality research?

Each faculty member is provided with a computer with internet connectivity in his/her office cabin. The computers are installed with the required software and IT tools for their use in teaching and research. The computers also have access to online resources of LRC and those subscribed by LRC. All computers of the faculty members are connected to network printer installed in each faculty cluster. The faculty can also use the DELNET facility made available by LRC for the resources that are not accessible to them. Free round the clock Internet facility is provided in the research laboratories and faculty residences also.

4.3.7. Give details of ICT-enabled classrooms/learning spaces available within the university? How are they utilized for enhancing the quality of teaching and learning?

There are 18 ICT enabled lecture theatres/class rooms/tutorial rooms in the University for teaching and learning. Multimedia projectors are available in all Lecture theatres, class rooms and tutorial rooms along with visualizers in classrooms and lecture theatres for interactive teaching. All teaching and research facilities like computer systems, projectors, visualizers in lecture theatres/class rooms/tutorial rooms, laboratories, research laboratories, faculty desktops, printers, scanners and academic block is provided with full time power back up to facilitate uninterrupted activities.

S. No.	Class Room	Projector & screen	PA system	LAN	PC	Visualizer	Emergency lights	No. of seats	White Board
1	LT-1	Y	Y	Y	Y	Y	Y	240	Y
2	LT-2	Y	Y	Y	Y	Y	Y	260	Y
3	LT-3	Y	Y	Y	Y	Y	Y	260	Y
4	CR-1	Y	Y	Y	Y	Y	Y	96	Y
5	CR-2	Y	N	Y	Y	Y	Y	90	Y
6	CR-3	Y	N	Y	Y	N	Y	84	Y
7	CR-4	Y	N	Y	Y	Y	Y	84	Y
8	CR-5	Y	N	Y	Y	Y	Y	84	Y

9	CR-6	Y	N	Y	Y	N	Y	84	Y
10	CR-7	Y	N	Y	Y	Y	Y	84	Y
11	CR-8	Y	N	Y	Y	Y	Y	84	Y
12	TR-1	Y	N	Y	Y	N	Y	35	Y
13	TR-2	Y	N	Y	Y	N	Y	35	Y
14	TR-3	Y	N	Y	Y	N	Y	35	Y
15	TR-4	Y	N	Y	Y	N	Y	35	Y
16	TR-5	Y	N	Y	Y	N	Y	35	Y
17	TR-6	Y	N	Y	Y	N	Y	35	Y
18	TR-7	Y	N	Y	Y	N	Y	35	Y
19	GD room	Y	N	Y	Y	N	Y	35	Y
20	Board Room	Y	N	Y	Y	N	Y	25	Y

*Y: Yes; N: No

Laboratory details

S. No.	Department	Laboratory	LAN	No. of PCs	Capacity	White board
	Computer Science	CL-3, Digital Signal Processing Lab Computer Programming Lab Computer Graphics and Image Processing Lab Java Programming Lab	Y	61	61	1
		CL-4, Operating System Lab Compiler Design Lab Microprocessor and Controller Lab Software Engineering Lab	Y	49	49	1
		CL-5, Network Programming Lab Software System Lab Multimedia Development Lab	Y	62	62	1
		CL-6, Object Oriented Programming Lab Software Testing and Debugging Lab Algorithm Lab	Y	48	48	1
		CL-7, Data Mining Lab Information System Lab Computer Organization Lab	Y	35	35	1
		CL-8, Database System Lab Unix Programming Lab Web Technology Lab	Y	73	73	1
		CL-9, University Computer Centre Research Lab Project Lab	Y	59	59	1
		Research Lab :High Performance Computing and CUDA Lab	Y	5	5	0
		2	Electronics & Communication	ECE Lab 1 (Basic Electronics lab)	7	1
ECE Lab 2 (Electrical and Electronics lab)	7			1	30	1
ECE Lab 3 (Digital And Analog Electronics Lab)	6			1	30	1
ECE Lab4 (EMFT Lab)	6			0	30	1

		ECE Lab 5 (Communication Lab)	7	1	30	1
		ECE Lab 6 (Project Lab)	28	19	30	1
		CL Lab 1 (Research Lab)	56	56	56	1
3	Biotechnology & Bioinformatics	UG1 Lab	Y	3	30	1
		UG2 Lab	Y	1	30	1
		Biochemistry Lab	N	-	30	1
		Microbe Lab	Y	1	30	1
		Bioprocess Engineering Lab	Y	1	30	1
		Diagnostics Lab	Y	1	30	1
		Plant Tissue Culture Lab	Y	1	30	1
		Bioinformatics Lab	Y	31	30	1
		Environment Biotechnology Lab	Y	1	10	1
		Peptide Lab	Y	4	10	
		Human Genomics Lab	Y	1	12	-
		Probiotics and Gut Simulation Lab	N	-	8	-
		Instrumentation Lab	Y	4	10	-
		Bioinformatics Project Lab	Y	13	15	1
		Functional Genomics Lab	Y	3	30	-
		Animal Cell Culture Lab	Y	1	4	1
		Research Lab with Animal House	Y	1	10	-
Pathogen Culture Lab	N	-	4	-		
4	Physics & Materials Science	Physics	Y	01	35	1
		Characterization	Y	04	05	-
		Materials Science	Y	01	05	-
		Chemical Vapour Deposition	Y	02	02	-
		Electromagnetic Analysis	Y	09	10	-
		Nanotechnology	Y	02	10	1
5	Civil Engineering	Chemistry Laboratory	Y	1	30	1
		CAD/software lab	Y	26	30	1
		Engineering Graphics lab	Y	1	40	1
		Workshop Practices Lab	Y	1	35	1
		Fluid Mechanics Lab	Y	1	30	1
		Concrete Lab	Y	-	30	1
		Highway Engineering Lab	Y	-	30	1
		Environmental Engineering Lab (shared with Chemistry Laboratory)	Y	1	30	1
		Geotechnical Lab	Y	1	35	1
		Structural Mechanics Lab	Y	1	40	1
		Survey lab (storage only)	Y	1	-	-

		Research laboratories Fluvial Hydraulics Lab	Y	1	2	-
6	Humanities and Social Sciences	Group Discussion room	Y	01	30	1
		Language Lab	Y	31	30	1

*Y: Yes; N: No

4.3.8. How are the faculty assisted in preparing computer- aided teaching-learning materials? What are the facilities available in the university for such initiatives?

Each faculty member is provided with a computer with appropriate software on them and having internet connectivity in his/her office cabin. Faculty prepares computer aided course content, lectures and update their knowledge in their office using books, online resources and e-resources provided by LRC. They place it on the server to be used by them in the class and by the students thereafter. All Lecture theatres, class rooms and tutorial rooms are equipped with a Desk top Computer connected to campus network and multimedia projector. Internet facility is also provided in faculty residences.

Students have open access to all computers in the Labs and Library and have LAN connection in every room of the hostel rooms to provide seamless connectivity to the network.

4.3.9. How are the computers and their accessories maintained?

Servers, UPS and Printers are under AMC and repairing of other hardware like computers is done by well trained server room staff.

4.3.10. Does the university avail of the National Knowledge Network connectivity? If so, what are the services availed of?

Yes, One Gbps (1Gbps) of Internet connectivity is being availed from the National Knowledge Network.

The NKN connectivity is offering to our students an additional opportunities to explore new dimensions of online learning process. Users are using NPTEL web and video contents with various e-content repositories available at Sakshat portal being maintained by NMEICT, MHRD.

4.3.11. Does the university avail of web resources such as Wikipedia, dictionary and other education enhancing resources? What are its policies in this regard?

Yes, user can access all educational resources available over the Internet. All these resources are open to all users of the library and users are encouraged to make extensive and quality use of all available resources to the optimum level.

The resources of Wikipedia, dictionary, e-books, google search, video tutorials and PPTs are used extensively by the students and faculty. The university provides access to websites, e-books, e-tutorials, PPTs, course material, webinars, virtual class room lectures, e-mail, and other services.

4.3.12. Provide details on the provision made in the annual budget for the update, deployment and maintenance of computers in the university.

Item	2011-12 Rs in lacs	2012-13 Rs in lacs	2013-14 Rs in lacs	2014-15 Rs in lacs	2015-16 Rs in lacs
Non-Recurring Expenditure (New Servers, computers, networking)	66	49	51	28	1

components, computer peripherals including printers scanners, New softwares, hardwares and packages, Audio video systems, projectors etc.)					
Recurring Expenditure (Internet Lease link, software AMCs, maintenance of computers, servers, printers, scanners, switches, projectors etc., renewal and annual subscription of antivirus, softwares, institutional mail lotus server, cyberoam firewall etc.)	44	85	88	64	74
Total Rs. (Lacs)	110	134	139	92	75

4.3.13. What plans have been envisioned for the gradual transfer of teaching and learning from closed university information network to open environment?

The faculty members are encouraged to prepare their course and teaching content in electronic format on their computers and upload the same on server for access by the students from anywhere and anytime in the University. The University provides an ready access to websites, e-books, e-tutorials, PPTs, course material, webinars, virtual class room lectures, e-resources of LRC etc.

4.4. Maintenance of Campus Facilities

4.4.1. Does the university have an estate office / designated officer for overseeing the maintenance of buildings, class-rooms and laboratories? If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.

Yes, the University has a designated officer and staff to look after the maintenance of infrastructure like buildings, class rooms, laboratories, hostels and faculty residences. Many initiatives have been undertaken to improve the physical ambience in the University. There has been tree plantation drives in the University to enhance its green cover. There is a well maintained plant nursery. The University has well maintained lawns and gardens to improve the ambience in the campus. The University has an efficient management to dispose the food waste so that it could be used as feed for animals. The University has a sewerage treatment plant where the treated water could be used for irrigation purposes. In addition to this the University has treatment plants for fresh water and waste water also.

4.4.2. How are the infrastructure facilities, services and equipments maintained? Give details.

The infrastructure facilities, services and equipments are maintained by the Construction Unit of Jaiprakash Associates Ltd. deployed in the campus of the University. Their maintenance staff is available to take care of entire maintenance of land, buildings, water supply, stores, electrical and mechanical equipments etc. University is to meet only the direct expenses but the entire expenditure related to identification of the requirement, award of work, supervision, monitoring, execution etc. is taken care by the employees of the Jaiprakash Associates Ltd.

Any other information regarding Infrastructure and Learning Resources which the university would like to include.

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1. Student Mentoring and Support

5.1.1. Does the university have a system for student support and mentoring? If yes, what are its structural and functional characteristics?

Yes. Each faculty member acts as a counsellor for a group of about 6 students

The University provides support to mentor the students in all their activities and the system for this is as given:

- (i) Vice-Chancellor
- (ii) Director & Academic Head: Overall academic activities
- (ii) Dean of Student Welfare: support to students for their well being on campus including hostel, complete support in terms of admission, registration, documentation, attendance, monitoring of programmes.
- (iii) HODs: Overall mentoring and monitoring of students of the Department
- (iv) Faculty: Small groups of students (6) have been assigned to designated faculty for their mentoring and guidance
- (v) Chief Warden & Wardens: Hostel related issues of students
- (vi) Faculty in-charge of extra-curricular and co-curricular clubs: Club activities

5.1.2. Apart from classroom interaction, what are the provisions available for academic mentoring?

- (i) Students are arranged in groups of 30 each and assigned to faculty members for guidance & support on academic issues
- (ii) Students are encouraged to participate in Workshops/seminars organized in the University and outside the University
- (iii) Technical events are conducted regularly by the departments
- (iv) Technical competitions are held by departmental clubs regularly to encourage students to enhance their technical skills such as Murious, Technovatorz, Ted-X, Synapse, activities of IEEE student branch, Civil Engineering Consortium (CEC), and ACM student branch of JUIT etc.

5.1.3. Does the university have any personal enhancement and development schemes such as career counseling, soft skill development, career-path-identification, and orientation to well-being for its students? Give details of such schemes.

Yes, the University has personal enhancement and development schemes and encourages the students to take part in career counseling, soft skill development, career-path-identification and orientation schemes to their well-being. Soft skill development and personal enhancement is an integral part of the curricula and a special attention about this is paid by Humanities and Social Science department in its various courses and activities. The department has group discussions as an integral part of the curriculum and a group discussion room is earmarked for the same. The department also has a presentation and communication skill & language courses and language laboratory. The students are encouraged to participate in both technical & cultural activities to enhance their skills, qualities of leadership and team spirit. Formal sessions for the students in career counseling, career identification are also held. Individual guidance is also provided by Training and Placement Cell. Students are also guided to plan their strategies to succeed in Campus placement.

5.1.4. Does the university provide assistance to students for obtaining educational loans from

banks and other financial institutions?

Yes, the University helps the students to avail educational loan facility from Punjab National Bank (PNB) a branch of which is in the University campus. The bank officials set up their counter alongside admission desk during the counseling process to help, guide and facilitate the educational loan to the interested students.

5.1.5. Does the university publish its updated prospectus and handbook annually? If yes, what are the main issues / activities / information included / provided to students through these documents? Is there a provision for online access?

YES.

Prospectus: The prospectus contains general information about the University, Courses offered, criteria and process of admission.

Handbook: Each student is given Handbook at the time of registration. The hand book contains the syllabus outline, details of examination system, rules and regulation. It also contains the rules to be observed by the student during his/her stay in the University.

Yes, there is provision for online access and the University website provides the required information. The faculty and students have access to webkiosk within and from outside the University 24 x 7 where they can have any information regarding academic grades, marks, attendance, discipline, standing orders etc.

5.1.6. Specify the type and number of university scholarships / freeships given to the students during the last four years. Was financial aid given to them on time? Give details (in a tabular form) for the following categories: UG/PG/M.Phil/Ph.D./ Diploma/others (please specify).

(A) For UG Students

(i) The Jaypee India Scholars Fund

The Jaypee India Scholars Fund provides financial assistance to meritorious students with poor financial background for pursuing the technical education w.e.f. 2008. The financial assistance involves the annual total fee (Tuition Fee and Development Fee as applicable to the batch of their entry) for pursuing the programme starting from the admission year. The students have to repay back the total scholarship amount over a period of 3 years, after graduating from the University.

The numbers of students and total financial assistance provided to them during last five years is as below:

Financial Year	2011-12	2012-13	2013-14	2014-15	2015-16
No. of students	10	8	8	0	0
Amount (Rs. In Lacs)	11	3	6	0	0

(ii) William Webster Merit-Cum-Means Scholarship

The managing trust has setup an initial corpus of Rs. 20 Lac for the Merit- Cum-Means Scholarship. The scholarship is provided to students from the Academic Year 2004-05 onwards. A tuition fee waiver for the year up to a maximum of one semester is provided to the selected students.

The numbers of students and total amount of scholarship provided during last five years are as follows:

Financial Year	2011-12	2012-13	2013-14	2014-15	2015-16
No. of students	1	1	1	1	3
Amount (Rs. In Lacs)	0.30	0.40	0.40	0.40	1.45

(B) For PG Students**Teaching Assistantship:**

The students admitted to M. Tech. based on their GATE score are provided a Teaching Assistantship of Rs. 8,000/- per month. In addition to this some students admitted through PGET Programme to the M. Tech courses in the University are also considered depending on their performance in first year.

The numbers of students and total amount of scholarship provided during last five years are as follows:

Financial Year	2011-12	2012-13	2013-14	2014-15	2015-16
No. of students	66	62	59	41	21
Amount (Rs. In Lacs)	30	30	26	16	8

(C) For Ph.D. Students**Research Fellowship:**

Ph.D. scholars registered in fulltime category are provided Research Assistantship of Rs. 18,000/- per month if they are not receiving any assistance/ scholarship/fellowship/ salary, etc., from any other organization/ Institution/ source, etc. The numbers of students and total amount of scholarship provided during last four years are as follows:

Financial Year	2011-12	2012-13	2013-14	2014-15	2015-16
No. of students	48	60	89	73	55
Amount (Rs. In Lacs)	63	74	123	96	81

UG Students**Freeship**

Type	2011-12	2012-13	2013-2014	2014-15	2015-16
Amount in lacs (Jaypee Employees Assistance in fee for Employee's ward Jaypee Employees Assistance in fee for Employee's ward)	19	15	19	22	13
Amount in lacs (Bhutan Nationals)	27	32	36	36	40
No of students benefited (Employee's ward+Bhutan Nationals)	(9+20)	(17+20)	(18+21)	(16+18)	(18+16)
Total Amount in lacs	46	47	55	58	53

PG and Ph.D Teaching Assistant ship Amount:

	Total Rs. (in Lacs)	
Financial year	PG (□)	Ph.D (□)

2011-12	30	63
2012-13	30	74
2013-14	26	123
2014-15	16	96
2015-16	8	81
Total	110	437

5.1.7. What percentage of students receive financial assistance from state government, central government and other national agencies (Kishore Vaigyanik Protsahan Yojana (KVPY), SN Bose Fellow, etc.)?

Type	2011-12	2012-13	2013-2014	2014-15	2015-16
State Government	-	-	-	2	-
Central government	-	-	-	-	-
Others, if any	-	-	-	-	-

5.1.8. Does the university have an International Student Cell to attract foreign students and cater to their needs?

No.

The number of students who take admission in various courses in the University is limited. Therefore, the need of these limited number of students are taken care of on one to one basis by the Registrar assisted by other staff members. The details of International students who attended various courses /Programmes in JUIT are as below:

Year	Bhutan National admitted	Total Bhutan Nationals
2012-13	04	20
2013-14	05	21
2014-15	05	18
2015-16	06	16

5.1.1. Does the university provide assistance to students for obtaining educational loans from banks and other financial institutions?

Yes, the University helps the students to avail educational loan facility from Punjab National Bank (PNB) a branch of which is in the University campus. The bank officials set up their counter alongside the admission desk during the counseling process to help, guide and facilitate the educational loan to the interested students.

5.1.9. What types of support services are available for

*** overseas students:**

At the time of admission they are not required to appear in entrance test (AIEEE). The support if required is given on individual basis by the Registrar and his staff members. No other special support services are offered.

*** physically challenged / differently-abled students:**

The University has a lift in the Academic block and in one hostel having Annapurna to make it convenient for the physically challenged/differently-abled students. Ramps are provided at certain places to help them. In addition to this they are dealt with individually by the academic and administrative authorities to help and take care of them.

* **SC/ST, OBC and economically weaker sections:**

The University provides help and support to the students to claim and receive the benefits under different Government schemes. The University provides Merit-cum-means scholarships and also helps to facilitate the bank loans for needy students.

* **students participating in various competitions/conferences in India and abroad:**

The University encourages and provides financial support to attend and present their work in various competitions/conferences. A relaxation in attendance is provided to these students. The guides and mentors encourage the students to participate in the competitions, events, technical fests and conferences.

* **health centre, health insurance etc.:**

The University has two doctors (One Lady Doctor) along with all the supporting staff such as compounder, dresser, nurse and helpers etc. For indoor treatment two beds for boys and one for girls are also provided. A separate MI room is also provided in the Girls hostel. The Centre has an ambulance for emergency cases. All medical staff stays in the campus. All basic medicines are provided free of cost to the students. Refund of entire fee paid by the student in case of death during the study.

* **skill development (spoken English, computer literacy, etc.):**

All programmes have computer skills as part of their basic curricula amply supported by laboratory courses. The students use the computer labs for their assignments, projects and other associated academic activities. To enhance the soft skills of the students there is an audit course in English, and presentation and communication course and a language lab to develop the skills of the students. There are many cultural and technical events throughout the academic session to encourage the students to participate and develop their skills.

* **performance enhancement for slow learners:**

The departments in the University conduct extra classes for the students who are weak and lag behind in the classes. In addition to this the University has short summer semester for students who are not able to cope and clear the load of their subjects in the regular semester (limited to three courses at a time). The University also accommodates the slow learners by giving them an option to register for lesser number of course credits in a semester. The head of the department, the course coordinators and the mentors help, counsel and motivate these students from time to time by encouraging them to improve and perform better. The course coordinators devote extra time with these students in their cabins to solve and make them understand the problems faced in the courses.

* **exposure of students to other institutions of higher learning/ corporates/business houses, etc.:**

The University helps and encourages the students to apply for and avail internship in corporate and social sectors. The University supports the students to undergo industrial training during their programmes. The departments in the University arrange for the visits to industries and research laboratories to give students the relevant exposure and updates in technology. The University organizes regular competitions and technical fests also inviting participants from other universities and institutions. Many expert and invited talks from experts in industry,

business, research laboratories and institutions are held regularly in the University for the academic and intellectual growth of students and faculty.

* **publication of student magazines:**

A magazine Alvida giving the brief details of the outgoing batch students along with some expressive columns and group photographs of the faculty of various departments is also published by the University annually.

An annual magazine titled “REVERIE” is published by JUIT Youth Club under the Reverie Committee. Additionally we post event related activities on Social Network.

5.1.10. Does the university provide guidance and/or conduct coaching classes for students appearing for Civil Services, Defence Services, NET/SET and any other competitive examinations? If yes, what is the outcome?

Some of the departments depending upon the requirement of students arrange extra classes like Department of Civil Engineering arranges classes for GATE. However, department of BT/BI faculty provide time-to-time guidance to the students for the national and international level competitive examinations. University also provides extra classes to the students on their request on the particular important topics. Approximately 20% students have qualified such kind of competitive exams.

5.1.11. Mention the policies of the university for enhancing student participation in sports and extracurricular activities through strategies / schemes such as

- * **additional academic support and academic flexibility in examinations**
- * **special dietary requirements, sports uniform and materials**
- * **any other (please specify)**

Sports festival named as “PARAKRAM” is organized annually in the month of November. Students from various other institutes also participate in this sports meet. We also encourage our students to participate in sports festival of other institutes. Class attendance and flexibility in examinations to such students participating in these activities is provided with prior approval of the Dean (Academics & Research).

The cultural programmes and various arts activities are organized under the university Cultural and Arts Clubs. The annual technical fest of the university called Murious is organized by the Technical Club of JYC.

5.1.12. Does the university have an institutionalized mechanism for students’ placement? What are the services provided to help students identify job opportunities, prepare themselves for interview, and develop entrepreneurship skills?

Yes, The Training and Placement Cell handles campus placement of the students. The Cell provides complete support to the visiting companies at every stage of placement process. Arrangements for Pre-Placement Talks, Written Tests, Interviews and Group Discussions are made as per the requirement of the visiting companies. Our students graduating in 2016 have received offers from national and multi-national companies with CTC varying from 3.4 lac to 20 lac.

In order to meet the manpower requirements of the Industry, we put great value in collaborating with Industry in ensuring that our students acquire the right knowledge, skill and aptitude through practical training in Industry. As per our academic programme, the students, on

completion of their 6th semester of B.Tech have to undergo Summer Training in Industry during summer break. This training is an integral part of the curriculum and is aimed at making the students getting acquainted with the processes, practices, as well as rigor and complexities of the industrial world. For the fourth year students summer training programme is being held in the months June and August of every year.

The T&P cell of JUIT plays a key role in counselling, guiding and training the students of the University for their successful Career. The Cell maintains symbiotic, vibrant and synergetic relationship with various Industries across the country and even across the globe. While the mandate of the T&P Cell is to empower every student to become proficient and attain all the necessary skills, knowledge & attitude while studying in the University, it also provides various interfaces with industry professionals & self made entrepreneurs to motivate the students to take up entrepreneurship as an important option for career growth.

The cell considers the grooming of the students with various skills & emotional & attitudinal training of the students as a mandatory and important aspect in the entire placement procedure. For imparting such skills & training, the University ensures that the course content and knowledge delivery are tuned to the global competency requirements and also conducts special in house training programs for students to make them Industry ready. The training modules are prepared in consultation with the Industry veterans in a way which helps the students to get transformed into competent professionals with analytical ability and ethical perspective.

BT/BI-Alumni regularly visit department and provide feedback on the quality of degree programme for strengths and weaknesses. Alumni feedback is also obtained through e-mail. The suggestions are incorporated in the curricula. We have regular interactions with the industry on the performance of our graduates during placement or during internships. The feedback from industry are considered during the revision of curricula, either by modifying contents of existing courses or introducing new electives or even changing the core curriculum.

5.1.13. Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus during the last four years).

Item	2012-13	2013-14	2014-15	2015-16
Number of eligible students	179	319	297	310
Number of offers	147	293	527	353

List of employers/companies and Number of students selected - 2014-15

S.No	Name of Organizations Visited	No. of Students Placed
1	Cognizant	174
2	Infosys	148
3	Wipro	114
4	Aricent Technologies	15
5	IBM	11
6	Novozymes	9
7	HCL Technologies	5
8	NTT Data	5

9	Grofers	4
10	Om careers	4
11	Dilip Buildcon	3
12	CSC	3
13	Polaris	3
14	Infinity Offshore IT Solutions Pvt. Ltd.	2
15	EY	2
16	Rudra BuildWell	2
17	Nestle India Limited	2
18	Indiamart	2
19	SAP Labs	2
20	Triphase Pharmaceuticals Pvt. Ltd	1
21	BioXcel	1
22	Minocha Industries (Minchy's Food Products)	1
23	Steria	1
24	Continental	1
25	LOCODEL SOLUTIONS PVT. LTD.	1
26	Naukri.Com	1
27	New Gen Software	1
28	Verizon	1
29	Minjar	1
30	Paytm	1
31	Zycus Infotech	1
32	Amazon	1
33	Era group	1

List of employers/companies and Number of students selected - 2015-16

S.No	Name of Organizations Visited	No. of Students Placed
1	Cognizant	125
2	Infosys	124
3	Ericsson	22
4	Aricent	13
5	Think & Learn	5
6	SAP Labs	4
7	Polaris	4
8	NTT Data	4
9	Hashedin	3

10	Press Play	2
11	NovoInvent	2
12	Vinsol	2
13	Ernst & Young	2
14	Rohde & Schwarz	2
15	Continental Automotive	2
16	Amazon	1
17	KRITIKAL SECURESCAN	1
18	Zycus	1
19	IndiaMART	1
20	XL Catlin	1
21	Newgen Software Technologies	1
22	Naukri.com	1
23	Pinkerton	1
24	Energy Infratech Pvt	1
25	Yamaha Moto	1
26	Phronesis Partners	1
27	Aarkem	1
28	Appinventiv Technologies	2
29	Cisco	1
30	Kips Publishing World	1
31	NKG Infra Limited	4
32	Paradigm Business Ventures	1
33	Parity Infotech Solutions	1
34	Roots Analysis	3
35	TT Consultants Pvt. Ltd.	6
36	Symmetrix Biotech Pvt Ltd	1
37	RNA Life Sciences	1

5.1.14. Does the university have a registered Alumni Association? If yes, what are its activities and contributions to the development of the university?

No, but, there is Jaypee Alumni Association (JAA) present in the University coordinated by faculty member Dr. Pradeep Kumar Pandey as Faculty Coordinator, Alumni Affairs Committee and student coordinators Shobhit Srivastava and Sadhika Behl. The University has dedicated Alumni website (<http://www.juit.ac.in/alumni/>) through which regular interaction with the Alumni is ensured. JAA promotes and encourages the Alumni to exchange professional knowledge by undertaking and facilitating conferences, seminars, lectures and meetings amongst Alumni, students, faculty and others. It will also honour and facilitate distinguished alumni.

5.1.15. Does the university have a student grievance redressal cell? Give details of the nature of grievances reported. How were they redressed?

YES, the University has a grievance redressal committee wherein any student can address the grievances. There is also a grievance cell headed by a Professor. The committee comprises:

- | | |
|---|----------|
| 1. Brig. K.K. Marwah (Retd.) (Registrar & DSW) | Chairman |
| 2. Prof. Sunil Kumar Khah, Dept. of P & MS | Member |
| 3. Dr. Rakesh Kumar Bajaj, Dept. of Mathematics | Member |
| 4. Dr. Anupriya Kaur, Dept. of HSS | Member |
| 5. Dr. Rajni Mohana, Dept. of CSE | Member |
| 6. Ms. Neena Jindal, Dept. of HSS | Member |

No significant grievances have been reported so far.

5.1.16. Does the university promote a gender-sensitive environment by (i) conducting gender related programmes (ii) establishing a cell and mechanism to deal with issues related to sexual harassment? Give details.

YES

A lady Psychological counsellor is available.

A committee looks after the gender related issues and sexual harassment cases. The committee comprises of:

- | | |
|--|-----------------|
| 1. Dr. Anupriya Kaur Dept. of HSS | Chairperson |
| 2. Sh. B. C. Negi Sr. Advocate at Shimla | External Member |
| 3. Dr. Shruti Jain Dept. of ECE | Member |
| 4. Dr. Hemraj Saini Dept. of CSE | Member |
| 5. Ms. Neha Arora Finance and Accounts | Member |
| 6. Mrs. Som Lata Sharma Dept. of BT and BI | Member |

No case of sexual harassment has been reported so far.

5.1.17. Is there an anti-ragging committee? How many instances, if any, have been reported during the last four years and what action has been taken in these cases?

Yes there is an anti ragging committee the details of which are displayed on the University website also. The members of the anti ragging committee are

- | | | |
|-------------------------------|----------------------|----------|
| 1. Prof. S.P. Ghrrera, HOD | Dept. of CSE | Chairman |
| 2. Prof. Karanjeet Singh, HOD | Dept. of Mathematics | Member |
| 3. Prof Ghanshyam Singh | Dept. of ECE | Member |
| 4. Dr. Ashish Kumar | Dept. of CE | Member |
| 5. Dr. Anupriya Kaur | Dept. of HSS | Member |
| 6. Dr. Hemant Sood | Dept. of BT & BI | Member |

The Dean (Student Welfare) helps to prevent ragging and take necessary steps to ensure that there is no ragging.

No case of ragging has been reported during last 4 years.

In the beginning of first semester, an extensive campaign is carried out to sensitize the students about ragging and its consequences. Flying squads and faculty are put on special duty to monitor students to prevent ragging in any form. Details of wardens including their mobile numbers are displayed on all notice boards for reporting any untoward incidents.

5.1.18. How does the university elicit the cooperation of all its stakeholders to ensure the overall development of its students?

JUIT Youth Club (JYC) is Official governing body of all student activities at Jaypee University

of Information Technology, Waknaghat. JYC is known for enthusiasm, development, consistency and effort made by the students. It is the body which widens student's view from academics to various fields such as sports, literary, cultural and technical and provides opportunity to explore them. It encourages in student's expression, celebration, recognition and integration. It helps students acquire qualities like team work, sportsmanship and leadership. Not only this, it retreats students from academics load by organizing events, fests and other extra-curricular activities. There are 9 clubs and 5 committees under the JUIT Youth club for the overall development of student's activities. The list is as follows:

Alumni Committee
Arts Club
Cultural Club
Disciplinary Committee
Environment Club
Event Management Club
Hospitality Committee
Media and Publicity
Sports Club
Literary Club
Reverie
Technical Club
Photography Club
Movie Club

- Special lectures are arranged from industry/academia visitors at regular intervals
- The BTech curriculum mandate 6 weeks onsite training in industry/academic institutions of repute
- Students are also taken to industry site visits so as to demonstrate how product processes are implemented at an industrial scale
- UG/PG students are encouraged to participate in workshops/seminars/symposia organized by the Department or other Departments in the campus or even sent to attend national/international conferences within India

S. No.	Industry interactions/visits	Type	Year
1	Central Potato Research Institute, Shimla	Students visit to research institute	2015-16
2.	Novozymes South Asia Pvt. Ltd., Bangalore	Industrial personal visits, presentations	2015-16
3.	Minchy's Food Products, Shimla	Students visit to Industry	2014-15
4.	Mohan Meakin Brewery, Solan	Students visit to Industry	2014-15
5.	Novozymes South Asia Pvt. Ltd., Bangalore	Industrial personal visits, presentations	2013-14
6.	Dabur Research Foundation	Interactive session by Dr. Anu T. Singh, Director (R&D)	2013-14
7.	Novozymes South Asia Pvt. Ltd., Bangalore	Industrial personal visits, presentations	2012-13
8.	Jubilant Chemsys, Noida	Interactive session by Dr. Koushik Das Sarma, Associate Director	2012-13
9.	Fermenta Biotech, Kullu	Students visit to Industry	2012-13

10.	IMTECH, Chandigarh	Student visit to Research Institute	2012-13
11.	Panacea Biotech, Lalru	Students visit to Industry	2011-12
12.	Central Research Institute, Kasauli	Students visit to vaccine research and production institute	2010-11

5.1.19. How does the university ensure the participation of women students in intra- and inter-institutional sports competitions and cultural activities? Provide details of sports and cultural activities where such efforts were made.

Boys and girls participate actively in all academic, co-curricular and sports events. There are girls' teams in Basket Ball, Volleyball, Badminton, Table tennis, etc., taking active part in participating in various sports events. Girls take part and make an important contribution in various academic, cultural and sports bodies. They are active members of Jaypee Youth Club (JYC), Murious, Synapse, Sanrachna and different clubs looking after environmental, literary, sports, movie, art, media & publicity, cultural activities etc.

5.2. Student Progression

5.2.1. What is the student strength of the university for the current academic year? Analyse the Programme-wise data and provide the trends for the last four years.

CURRENT STUDENT STRENGTH=2087 (ALL STREAMS & ALL YEARS) (As on September 2015)

Students on roll					
Programme		2012-13	2013-14	2014-15	2015-16
B. Tech	CSE	131	128	167	227
	IT	21	21	46	27
	ECE	119	99	93	102
	CE	99	115	95	95
	BT/BI/B. Ph.	24/19/04	30/25/00	48/13/00	49/10/00
Dual Degree	CSE	03	00	--Nil--	--Nil--
	IT	00	00		
	ECE	01	00		
	CE	00	00		
	BT/BI	09/00	10/00		
Int. Degree	BT	-	-	02	-
M. Tech	BT	05	09	06	04
	CSE	17	23	10	16
	ECE	11	14	10	16
	CE1 (SE)	01	12	17	15
	CE2 (CM)	01	00	09	14
	CE3 (EE)	00	00	09	11
M. Pharm.	BT	40	28	-	-
Ph.D.	PMS	03	03	06	01
	Mathematics	00	01	00	00
	HSS	04	03	03	00
	ECE	04	04	01	02

CSE	07	17	03	00
CE	04	00	01	00
BT/BI/Ph.	21/02/04	17/06/06	04/00/02	01/01/00

The University does not have a systematic data on the progression of students after graduating from the Institute like proceeding for higher studies or joining the companies after placements, etc. However, the details of alumni available with the Institute indicate following trends:

Student Progression	Department	2011-12	2012-13	2013-14	2014-15	2015-16
UG to PG*	PMS	Not applicable				
	Mathematics	Not applicable				
	HSS	Not applicable				
	ECE	---Not available---				
	BT	40	45	45	67	50
	Pharmacy	--	77	45	--	--
	CSE	5 (%)	5 (%)	6 (%)	5 (%)	10 (%)
	Civil	---Not available---				
PG to M.Phil.*	PMS	Not applicable				
	Mathematics	Not applicable				
	HSS	Not applicable				
	ECE	---Not available---				
	BT	0	0	0	0	0
	CSE	0	0	0	0	0
	Civil	---Not available---				
	PG to Ph.D.	PMS	Not applicable			
Mathematics		Not applicable				
HSS		Not applicable				
ECE		---Not available---				
BT		15	20	17	17	0
CSE		5 (%)	6 (%)	6 (%)	5 (%)	12 (%)
Civil		---Not available---			1	--
Ph.D. to Post-Doctoral		PMS	---Not available---			
	Mathematics	---Not available---				
	HSS	---Not available---				
	ECE	---Not available---				
	BT	25	33	20	20	17
	CSE	0	0	4 (%)	0	4 (%)
	Civil	---Not available---				
	Employed					
Campus selection	PMS	Not applicable				
	Mathematics	Not applicable				
	HSS	Not applicable				
	ECE	---Not available---				
	BT	91	78	76	100	72
	CSE	80 (%)	80 (%)	85 (%)	82 (%)	80 (%)
	Civil	---Not available---				

	Civil	---Not available---			15	
Other than campus recruitment	PMS	--	--	--	--	--
	Mathematics	--	--	--	--	--
	HSS	--	--	--	--	--
	ECE	---Not available---				
	BT	--	--	--	--	--
	CSE	10 (%)	10 (%)	7 (%)	10 (%)	5 (%)
	Civil	---Not available---				

5.2.2. What is the programme-wise completion rate during the time span stipulated by the university?

The University provides all opportunities including additional classes, counseling, fee assistance, etc. to ensure that the dropout rate is minimized.

Completion rate = Students passing/students admitted

Programme		2012	2013	2014	2015
B.Tech in	Bioinformatics	1.0	0.875	0.909	1.0
	Biotechnology	0.85	0.95	0.93	0.89
	Civil Engineering	1.0	0.868	0.933	1.0
	Computer Science and Engineering	0.94	0.94	0.88	0.95
	Information Technology	0.91	0.92	0.97	1.0
	Electronics and Communication Engineering	1.0	0.953	0.95	1.0
M.Tech in	Biotechnology	1.0	1.0	1.0	1.0
	Computer Science and Engineering	1.0	1.0	1.0	1.0
	Electronics and Communication Engineering	1.0	1.0	1.0	1.0
	Construction Management	1.0	1.0	1.0	1.0
	Environmental Engineering	-	-	-	-
	Structural Engineering	-	-	-	-

5.2.3. What is the number and percentage of students who appeared/ qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central / State services, Defense, Civil Services, etc.?

Appeared: --Data not available--					
Qualified					
Examination	2012	2013	2014	2015	2016
Civil Services	--Data not available--				
Defence Service	--Data not available--				
NET	1	--Data not available--			
SET	--Data not available--				
GATE	16	24	21	25	13
TOEFL	--Data not available--			1	1
GRE	--Data not available--		1	2	1
CAT	0	40	30	62	0
MAT	0	55	50	80	0

5.2.4. Provide category-wise details regarding the number of Ph.D./ D.Litt./D.Sc. theses submitted/ accepted/ resubmitted/ rejected in the last four years.

Academic Year	Ph.D. Submitted	Ph.D. Awarded	Ph.D. Re-submitted	Ph.D. Rejected
2015-16	11	11	NIL	NIL
2014-15	16	16		
2013-14	24	24		
2012-13	9	9		
Average	15	15	Not applicable	

5.3. Student Participation and Activities

5.3.1. List the range of sports, cultural and extracurricular activities available to students. Furnish the programme calendar and provide details of students' participation.

Programme Calendar 2015-16

Day	Club	Event
Fresher's party	Cultural Club	Diksha 2015
Youth Parliament	Literary Club	JUIT Youth Parliament
Model United Nations	Literary Club	JUIT-MUN
Unplugged musical night	Arts Club	Dhun
Performing Arts function	Arts and Cultural Clubs	Goonj
Awareness and cleanliness drives	Environment Club	Environment Week
Technical Bonanza	Technical Club	Murious
Sports Fest	Sports Club	PARAKRAM
Annual Socio Cultural fest	All the Clubs/Committees	Le Fiestus 2016

5.3.2. Give details of the achievements of students in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. during the last four years.

Year: 2011-12			
Student/Team	Activity	Level	Winners
Sanya Bakshi and her Team (Biotechnology)	Poster Presentation on Large-scale <i>in vitro</i> multiplication of critically endangered herb <i>Swertia chirayita</i> in suspension cultures	National	1 st Prize (National Seminar on Plant Cell Tissue and Organ Culture: Emerging Trends, Deptt. Of Botany, Aligarh Muslim University, Aligarh, India, March 10-11, 2012)

Year: 2012-13			
Student/Team	Activity	Level	Winners
B.Tech. Biotechnology Team	Synthetic Biology competition	International	Participated (IGEM held at HongKong on 05-07 th Oct 2012)
Vasu Walia	JAM	National	1 st Prize (DBT sponsored biofest (Biorhythm) organized at Chandigarh on 2 nd Feb 2013)

Kritika Khurana & Parul Sharma	Face painting	National	2 nd Prize (DBT sponsored biofest (Biorhythm))
Garima Thakur	Still Photography	National	2 nd Prize (DBT sponsored biofest (Biorhythm))
Sahil, Aditya, Vinayak, Aarushi Tushar, Radhika, Arsh, Sunandini,	MIME	National	2 nd Prize (DBT sponsored biofest (Biorhythm))
Vinod	Poster Making	National	3 rd Prize (DBT sponsored biofest (Biorhythm))
Medhavi	Still Photography	National	3 rd Prize (DBT sponsored biofest (Biorhythm))

Year: 2013-14			
Student/Team	Activity	Level	Winners
Akriti Singh	Voice for BT	North Region	Participated ("Voice for BT" organized by Novozymes in association with, ABLE and Biospectrum on 23 rd Aug 2013)

Year: 2015-16			
Student/Team	Activity	Level	Winners
Aditya Sahni (Biotechnology)	Voice for BT	North Region	Participated ("Voice for BT" organized by Novozymes in association with, ABLE and Biospectrum on 25 th Sept 2015)

Organized every year several Intra-University Biotech event such as Cidering, Forensic idols, Mad Scientists, Declamation contest etc., by the bioclub "Synapse"

5.3.3. Does the university conduct special drives / campaigns for students to promote heritage consciousness?

We organize nukkad natak, environment week, tree plantation drive, anti tobacco drives, Stage Play/Rally on drug abuse time to time.

5.3.4. How does the university involve and encourage its students to publish materials like catalogues, wall magazines, college magazine, and other material? List the major publications/ materials brought out by the students during the last four academic sessions.

Caravan/Indigo: Monthly newsletters.

Biochrome: Annual e-Magazine published by students (Bioclub 'Synapse').

Stomata: Two e-Newsletters published per year by students (Bioclub 'Synapse').

Reverie: Published yearly

5.3.5. Does the university have a Student Council or any other similar body? Give details on its constitution, activities and funding.

Yes. A team of students selected club-wise to organize all the activities of JYC round the year.

Constitution Hierarchy-

- President
- Secretary

- Treasurer
- Sponsorship In-charge
- Co-ordinators of clubs/committees

Funding: (1) University contribution (2) Faculty contribution, (3) Student contribution, and (4) Various sponsoring agency contributions.

Activities: To manage events (*Refer next section*)

5.3.6. Give details of various academic and administrative bodies that have student representatives on them. Also provide details of their activities.

Various clubs and committees have student representatives. The list is:

- JUIT Youth Club

Activity:

JUIT Youth Club (JYC) is official governing body of all student activities at Jaypee University of Information Technology, Wakanaghat. JYC is known for enthusiasm, development, consistency and effort made by the students. It is the body which widens student's view from academics to various fields such as sports, literary, cultural and technical and provides opportunity to explore them. There are 9 clubs and 5 committees under the JUIT Youth club for the overall development of student's activities. The list is as follows:

(1)	Alumni Committee
(2)	Arts Club
(3)	Cultural Club
(4)	Disciplinary Committee
(5)	Environment Club
(6)	Event Management Club
(7)	Hospitality Committee
(8)	Media and Publicity
(9)	Sports Club
(10)	Literary Club
(11)	Reverie
(12)	Technical Club
(13)	Photography Club
(14)	Movie Club

- Student Mess Committee
- Synapse- Bio Club

Activities:

- (1) To organize events like: Cidering (Wine making Competition), Declamation Contest (Debate competition), Forensic Idol, and Mad Scientist
- (2) To organize Industrial visits.
- (3) To organize webinar interactions through Skype with Department Alumni.

- Disciplinary action committee
- IQAC
- IT committee
- Civil Engineering Consortium (CEC)

Activities:

- (1) To organize national/international conferences like iCEM, etc.
- (2) To organize Sanrachna (Techno-cultural Fest)
- (3) To organize student conference on Technological Advancement in Civil Engineering (SCTACE)
- (4) To organize special invited talks during events

Any other information regarding Student Support and Progression which the university would like to include.

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1. Institutional Vision and Leadership

6.1.1. State the vision and the mission of the university.

Vision of University

To become a Centre of Excellence in the field of IT and related emerging areas in education, training and research comparable to the best in the world for producing professionals who shall be leaders in innovation, entrepreneurship, creativity and management.

Mission of University

- To develop as a benchmark University in emerging technologies;
- To provide state of the art teaching-learning process and a stimulating R&D environment; and
- To harness human capital for sustainable competitive edge and social relevance.

6.1.2. Does the mission statement define the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, the institution's tradition and value orientations, its vision for the future, etc.?

Yes

6.1.3. How is the leadership involved

- * **in ensuring the organization's management system development, implementation and continuous improvement?**
- * **in interacting with its stakeholders?**
- * **in reinforcing a culture of excellence?**
- * **in identifying organizational needs and striving to fulfill them?**

The Goal of the University is to become a Centre of Excellence in the field of IT and related emerging areas in education, training and research comparable to the best in the world for producing professionals who shall be leaders in innovation, entrepreneurship, creativity and management.

The objectives of the University, as defined in the Jaypee University of Information Technology Act, 2002, are to disseminate, create and advance knowledge, wisdom and understanding, and to offer technical education of the high standards by teaching, research, training, and extension activities.

The Stake holders and their involvement in the working of the University is as under:

a) Jaiprakash Sewa Sansthan (JSS) Trust New Delhi

The Managing Trustee of the trust is the Pro-Chancellor of the University by virtue of office. Two members of the Trust are nominated by the Pro-Chancellor as members of the Governing Council, the supreme body of the University. The Pro-Chancellor is also the Chairman of the Governing Council.

b) Government of Himachal Pradesh

The Governor of Himachal Pradesh is Chancellor of the University who is kept abreast of every important decision taken by the Governing Council of the University. The annual report of the University is laid on the table of Himachal Pradesh Legislative Assembly.

c) UGC

The University is approved under section 2f of UGC Act. All the obligations are complied by the University.

d) AICTE/NBA

Our UG programmes in Computer Science & Engineering, Electronics & Communication Engineering, Bio-informatics, Civil Engineering, and Information Technology are accredited for five years with effect from 2009-2014, and subsequently again accredited for two years from 2014-2016.

e) Industry

All decision making bodies have representatives from Industry.

f) Students and Parents

Feed back is taken from students and their parents

The leadership makes sure that the university provides the excellent infrastructural facilities and congenial learning environment with domain specific specialized programs generally not available at other universities/institutions. The curricula of the university be benchmarked with that of renowned universities/IITs, appropriately designed with Indian Industry needs in mind. The faculty is encourage to use the latest teaching/learning methodology and evaluation techniques. The university witnesses excellent Placement record since inception. The University makes all out efforts to elicit the cooperation from stakeholders in whatever form it is available to achieve excellence in overall development of students

New programmes are introduced based and developed continuously on the National as well as International requirements. They are primarily for serving the needs of the Industry and the Society at large. The course contents of the programme are regularly updated to keep them timely, relevant and useful.

6.1.4. Were any of the top leadership positions of the university vacant for more than a year? If so, state the reasons.

No.

6.1.5. Does the university ensure that all positions in its various statutory bodies are filled and meetings conducted regularly?

Yes

6.1.6. Does the university promote a culture of participative management? If yes, indicate the levels of participative management.

The faculty meetings in the departments are regularly held for allocation of courses in the beginning of semester, to assess academic progress, resolve problems, discuss issues pertaining to elective courses, lab management and its development, etc. Additionally, HODs interact with students and faculty informally. The issues arising thereof are also discussed in these meetings.

Regular HOD meetings with Deans, Directors and Vice Chancellor are organized to discuss the department and university level issues, planning of new programmes, results, attendance, extra and co-curricular activities, etc. The issues proposed to be taken to Academic Council are also deliberated.

In the overall structure, participatory decision making and accountability are emphasized. The university ensures timely filling of vacancies in statutory bodies and leaderships positions. It also ensures regular meetings of statutory bodies.

Faculty is represented on the Boards of Studies and Academic Council. The opinion of the faculty is also sought through departmental and general faculty meetings

6.1.7. **Give details of the academic and administrative leadership provided by the university to its affiliated colleges and the support and encouragement given to them to become autonomous.**

Not Applicable

6.1.8. **Have any provisions been incorporated / introduced in the University Act and Statutes to provide for conferment of degrees by autonomous colleges?**

Not Applicable

6.1.9. **How does the university groom leadership at various levels? Give details.**

Most of faculty members are given responsibility of coordinating some activity at department and/or university level. Jaypee Youth Club (JYC) coordination, Departmental technical and non-technical clubs' coordination, coordination of student branches for different scientific bodies such as IEEE, ACM etc., Training & Placement coordination, Hostel management, Course coordination, Laboratory coordination, Project coordination, M. Tech. coordination, Time Table coordination are few examples.

These and other similar participations provide an ample opportunity and ensure systematic and sustained development of leadership and management skills by practice.

Similarly, all major activities/ events like conferences, workshops, fests, sports events, cultural and literary events etc., have multiple faculty coordinators with active student participation. The initiatives, dynamism, overall performance, contributions to department and /or university are recognized and duly reflected in the annual appraisal of the faculty.

6.1.10. **Has the university evolved a knowledge management strategy? If yes, give details.**

Knowledge creation, acquisition and dissemination are three arms of Knowledge Management. The university maintains all the academic rules, academic calendar, course details, faculty profile, student attendance, grades, etc. on its website.

The University's endeavour is to be a highly professional set up with strong focus on efficiency, quality and excellence, for which it has taken following measures:

- Assiduously built a team of qualified and committed academic staff who understand and subscribe to the vision and mission of the University.
- Skill up-gradation of the faculty through regular induction and in-service training programmes, seminars/workshops, etc.
- Global benchmarking of curricula and instructional methodology.

Quality assurance measures for attaining academic excellence like annual appraisals and Reward and Recognition Policy to encourage & promote best performers

6.1.11. **How are the following values reflected the functioning of the university?**

- * **Contributing to national development**
- * **Fostering global competencies among students**
- * **Inculcating a sound value system among students**
- * **Promoting use of technology**
- * **Quest for excellence**

The students are trained as technical manpower of international standards for serving in various Government/Semi-Government/PSU and Private Sector. The faculty and research scholars are engaged in active research on diverse scientific and technical fronts leading to research publications and a few patents. Some of the faculty members are also involved in research projects related to problems of national importance funded by various government agencies such as DBT, DST, DRDO, etc.

The curricula and academic activities are planned and focussed as per the global requirements so that students are able to compete at various platforms. Many of our students are placed in MNC's and some of them have also been able to take up higher studies/jobs in various well known institutes/organizations of repute abroad.

To inculcate sound value system the Department of HSS offers the courses on Presentation and Communication Skills, Group and Cooperative Processes, Social and Legal Issues and Leadership in Organization etc.

Students actively participate in social issues like environment pollution, cleanliness drives, Blood donation etc.

Each faculty member is provided with a computer with appropriate software on them and having internet connectivity. Faculty prepares computer aided course content, lectures and update their knowledge using books, online resources and e-resources provided by LRC. They place it on the server to be used by them in the class and by the students thereafter. All Lecture theatres, class rooms and tutorial rooms are equipped with a Desk top Computer connected to campus network and multimedia projector. Internet facility is also provided in faculty residences. Students have open access to all computers in the Labs and Library and have LAN connection in every room of the hostel rooms to provide seamless connectivity to the network.

The university ensures global quality and acceptance of its academic programs. The curricula contents are updated periodically to keep abreast of latest developments in education and technology. The teaching learning environment is Learner-Centric and the requisite exposure of the environment to be faced by students after completing studies is made an integral part of curricula. For all round personality development of the students the university takes various measures through its academic courses offered by the department of HSS and also through sports and co-curricular activities

6.2. Strategy Development and Deployment

6.2.1. Does the university have a perspective plan for development? If yes, what aspects are considered in the development of policies and strategies?

- * **Vision and mission**
- * **Teaching and learning**
- * **Research and development**
- * **Community engagement**
- * **Human resource planning and development**
- * **Industry interaction**
- * **Internationalisation**

Yes.

The Goal of the University is to become a Centre of Excellence in the field of IT and related emerging areas in education, training and research comparable to the best in the world for producing professionals who shall be leaders in innovation, entrepreneurship creativity and management.

The objectives of the University are to disseminate, create and advance knowledge, wisdom and understanding, and to offer technical education of the high standards by teaching, research, training, and extension activities

The university has a formal perspective plan in place. This plan was framed keeping in view the vision and mission of the university and the following aspects were considered:

Strengthening and modernization of existing courses and introduction of new PG programs.

Strengthening research through increase in strength of research scholars, identification and strengthening of research centers, enhancement of research facilities, and facilitation of research through collaborations and funded research and development projects.

The University has already brought in community orientation as one of its activities. Location of the University being rural area, Department of Biotechnology is offering the technique of composting and obtaining Biogas from organic waste, specially the kitchen waste. As a part of the University's support and strengthening the neighbourhood community, JUIT provides free medical aid, drinking and irrigation water supply, approach roads etc. From time to time the University also organizes various health and family welfare camps. The students are involved in organizing these camps.

Growth of human resources in accordance with above and development of existing human resources through conferences, workshops, faculty development programs, both in-house as well as of other institutions, and interaction with outside experts. Concerted efforts for recruitment of quality faculty and to review standards for recruitment.

Develop and improve physical infrastructure commensurate with growth plans.

The university is engaged in seeking regular feedback from industry and other stakeholders to improve its academic programmes.

Enhance international interaction through MOU's of the university with some institutes of global repute for academic and research pursuits.

6.2.2. Describe the university's internal organizational structure and decision making processes and their effectiveness.

Chancellor	HE the Governor of Himachal Pradesh
Pro Chancellor	Managing trustee of JSS
Vice Chancellor	
Dean Academics and Research	
Registrar	
Finance Officer	

Statutory bodies and their Constitution:

Governing Council:

The Governing Council is the supreme body of the University and its powers and functions are such as may be prescribed by the Statutes.

(1) The Governing Council has the following members, namely:-

- | | |
|---|----------|
| a) The Pro-Chancellor | Chairman |
| b) Two members of the Trust to be nominated by the Pro-Chancellor | Members |
| c) Two representatives of the collaborating Universities | Members |

- d) Three distinguished academicians/professionals to be nominated by the
 - e) Chancellor in consultation with the Pro-Chancellor Members
 - f) Two experts representing other disciplines such as finance, law and management
etc. to be nominated by the Pro-Chancellor Members
 - g) Vice-Chancellor of the University Member
 - h) One Head of another University/Institute of the Trust Member
 - i) Two Deans of the University by rotation Members
 - j) Secretary (Information Technology), Secretary (Education) and Secretary
k) (Technical Education) to the Govt. of Himachal Pradesh Members
 - l) Three representatives of the industry to be nominated by the Pro-Chancellor Members
- (2) The Registrar of the University is Non-Member Secretary of the Governing Council.

Executive Council:

The Executive Council is the executive body of the University and its powers and functions, the constitution and the terms of the office of its members, other than ex-officio members, are such as it may be prescribed by the Statutes.

The Executive Council is responsible for the general management and administration of the University.

(1) The Executive Council consists of the following members, namely:–

- a) The Vice-Chancellor of the University Chairman
- b) Two members of Governing Council nominated by the Pro-Chancellor Members
- c) One Dean of the University Member
- d) One Academician of repute nominated by the Pro-Chancellor Member

(2) The Registrar shall be non-Member Secretary of the Executive Council.

Academic Council:

The Academic Council is the academic body of the University and its constitution and the term of office of its members, other than ex-officio members, are such as may be prescribed by the Statutes.

(1) The Academic Council consists of the following members, namely:–

- a) The Vice-Chancellor of the University Chairman
- b) Two Professors other than Heads of Departments by rotation and by seniority Members
- c) Two distinguished academicians to be nominated by the Pro-Chancellor Members
- d) Two Industry Professionals to be nominated by the Pro Chancellor Members
- e) One member from amongst the Heads of other institutions of the Trust Member
- f) The Deans of all faculty of the University; and Members
- g) Heads of Departments/Centres of the University; Members

(2) The Registrar is non-Member Secretary of the Executive Council.

The Academic Council, subject to the provisions of the Act, the Statutes and the Ordinances of the University, has the power of control and general regulation or, and is responsible for the maintenance of standards of instruction, education and examination within the University and exercises such other powers and performs such other duties as may be conferred or imposed upon it by the Act or the Statutes and it has the right to advise the Executive Council on all academic matters.

The Finance Committee:

(1) The Finance Committee consists of the following members, namely:

- a) The Vice-Chancellor of the University Chairman

- b) One nominee of the Pro-Chancellor Member
 - c) One nominee of the Governing Council Member
 - d) One Dean (by rotation) on the basis of seniority Member
- (2) The Finance Officer of the University is non-member Secretary.
- (3) Three members of the Finance Committee form the quorum.
- (4) All members of the finance Committee other than ex-officio members hold office for a term of three years.
- (5) The Finance Committee meets at least twice every year to examine account and scrutinize proposals for expenditure provided that a period not exceeding 180 days shall elapse between two consecutive meetings.
- (6) The annual accounts and financial estimates of the University prepared by the Finance Officer shall be laid before the Finance Committee for consideration and comments and thereafter submitted to the Governing Council for approval with or without amendments.

Council of Institution-Industry Linkages

- (1) The Council of Institution-Industry Linkages consists of the following members, namely:-
- a) A person to be nominated by the Pro-Chancellor Chairman
 - b) Two persons to be nominated by the Trust Members
 - c) Vice-Chancellor of the University Member
 - d) Two persons from the Industry to be nominated by the Pro-Chancellor Members
- (2) The Registrar is non-Member Secretary of the Executive Council

6.2.3. Does the university have a formal policy to ensure quality? How is it designed, driven, deployed and reviewed?

The university has a formal policy to ensure quality of academic and administrative processes through the Internal Quality Assurance Cell (IQAC) established in September 2016. The system takes feedback from various stakeholders with participation of faculty and staff.

6.2.4. Does the university encourage its academic departments to function independently and autonomously and how does it ensure accountability?

The decisions regarding academic and administrative activities of the department are taken by the respective HOD based on the inputs provided by the course coordinators, faculty and students. Major suggestions emanating from these interactions are taken up in the Board of Studies meetings. Accountability of academic processes and department's performance is exercised by IQAC and Academic Council.

6.2.5. During the last four years, have there been any instances of court cases filed by and against the institute? What were the critical issues and verdicts of the courts on these issues?

There is only one case of notice period recovery from Ms. Deepti Sadashiv Muley (Assistant Professor- Civil). She joined the university on 03.01.2011 as a Senior Lecturer, later promoted as Assistant Professor and resigned on 27.01.2012. She had left university without serving 3 months notice period and also notice amount. Therefore, university filed a case against her in 2012 for recovery of notice amount. The case is pending in the Honourable Court of Civil Judge Kandaghat.

6.2.6. How does the university ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyse the nature of grievances for

promoting better stakeholder-relationship?

The complaints are promptly attended and resolved. The complaints can be received by the Heads of the Departments, Dean (A & R) and DSW depending on the nature of the complaint. In most of the cases the complaint is resolved by these officers.

6.2.7. Does the university have a mechanism for analyzing student feedback on institutional performance? If yes, what was the institutional response?

Yes. The university has a formal mechanism for taking feedback from students regarding the teaching-learning process, LRC, and facilities. The student feedback is regularly analyzed and necessary measures are taken. Student satisfaction is assessed through feedback obtained at the end of each semester and feedback from alumni. Student's educational needs (present and future) are addressed by periodically undertaking revision/up gradation of curricula/scheme of teaching and evaluation.

6.2.8. Does the university conduct performance audit of the various departments?

Performance of the departments is regularly reviewed by university Academic Council. In 2016, university has established IQAC which will audit the departmental performance and its recommendations will be reported to Academic Council

6.2.9. What mechanisms have been evolved by the university to identify the developmental needs of its affiliated institutions?

Not applicable.

6.2.10. Does the university have a vibrant College Development Council (CDC) / Board of College and University Development (BCUD)? If yes, detail its structure, functions and achievements.

Not applicable.

6.3. Faculty Empowerment Strategies

6.3.1. What efforts have been made to enhance the professional development of teaching and non-teaching staff?

FDP programmes are organized as and when required. These programmes are usually conducted in first half of July. The Faculty is also encouraged to attend the workshops etc. organized by other Universities/Institutes.

6.3.2. What is the outcome of the review of various appraisal methods used by the university? List the important decisions.

The university follows API (PBAS) as prescribed by UGC for faculty appraisal. It has been effective in motivating the teachers to be involved in research as it is one of the components for consideration of faculty for internal promotions. This is clearly reflected in the large number of publications by the faculty.

6.3.3. What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have benefitted from these schemes in the last four years? Give details.

Welfare Schemes	Percentage
Study Leave (a) with full pay (b) with reduced pay and (c) without pay.	2012-13 = 02, 2014-15= 01, 2015-16 = 01

Sabbatical Leave	2012-13 = 02, 2014-15=01, 2015-16 = 01
Paid Maternity Leave	4
Registration Charges in full and 50% TA/DA for attending Conferences	2012-13 = 27, 2013-14 = 23, 2014-15 = 16, 2015-16 = 12
Paid Leave for visits in connection with research work	2012=68, 2013 = 58, 2014=66, 2015=15
Paid Leave for meetings of statutory bodies/government regulatory bodies, agencies etc.	2012=4, 2013 = 4, 2014=4, 2015=4
Partial Financial Support for Research	Fee concession is given to internal candidates for Ph.D. work 2012-13 = 32, 2013-14 =25, 2014-15 = 16, 2015-16 = 10
Medical Facilities	100%
Medical Insurance	2012-13 = 13, 2013-14 =14, 2014-15=16, 2015-16 = 14
EPF & Gratuity	100%
Advance Increments for exemplary Work	Increment was given to 6 employees in 2013
Leave Travel Allowance	100%
Conveyance Allowance	100%
Furnishing Allowance	100%
Book Allowance	100%
Medical Allowance	100%
Leave Encashment	100%
Loan for Medical Emergency	Nil but permissible

6.3.4. What are the measures taken by the University for attracting and retaining eminent faculty?

Following are the measures taken by the university to attract and retain faculty:

- Highly conducive academic and research environment
- Freedom to pursue Academic and Research interest of one's own choice area
- Significant emphasis on research orientation and the facilities for the same
- Freedom to organize workshops/conferences with logistic, administrative and financial support
- Freedom to organize and participate in FDP
- Sponsorship to workshops/ conferences
- Opportunity to revise course content and introduce new electives
- Augmenting funds of sponsored research projects
- Facilitating and encouraging in securing sponsored research projects
- Timely promotions under fully transparent policy
- Higher compensation package along with facilities

6.3.5. Has the university conducted a gender audit during the last four years? If yes, mention a few salient findings.

No.

6.3.6. Does the university conduct any gender sensitization programmes for its faculty?

No.

6.3.7. **What is the impact of the University's Academic Staff College Programmes in enhancing the competencies of the university faculty?**
Not Applicable.

6.4. **Financial Management and Resource Mobilization**

6.4.1. **What is the institutional mechanism available to monitor the effective and efficient use of financial resources?**

The Finance Committee:

(1) The Finance Committee consists of the following members, namely:

- | | |
|---|----------|
| a) The Vice-Chancellor of the University | Chairman |
| b) One nominee of the Pro-Chancellor | Member |
| c) One nominee of the Governing Council | Member |
| d) One Dean (by rotation) on the basis of seniority | Member |

(2) The Finance Officer of the University is non-member Secretary.

(3) Three members of the Finance Committee form the quorum.

(4) All members of the finance Committee other than ex-officio members hold office for a term of three years.

(5) The Finance Committee meets at least twice every year to examine account and scrutinize proposals for expenditure provided that a period not exceeding 180 days shall elapse between two consecutive meetings.

(6) The annual accounts and financial estimates of the University prepared by the Finance Officer shall be laid before the Finance Committee for consideration and comments and thereafter submitted to the Governing Council for approval with or without amendments.

6.4.2. **Does the university have a mechanism for internal and external audit? Give details.**

Yes, Internal audit conducted by M/s Ravi Rajan & Co, Chartered Accountants, and External audit conducted by Dass Gupta & Associates

Internal record keeping system has been devised in a manner which keeps internal checks for the financial transactions. In addition the Finance Committee reviews the financial transactions at regular intervals.

6.4.3. **Are the institution's accounts audited regularly? Have there been any major audit objections, if so, how were they addressed?**

Yes. Accounts of the University are audited by Chartered Accountant firm every year regularly. There is no major audit objection so far.

6.4.4. **Provide the audited income and expenditure statement of academic and administrative activities of the last four years.**

ANNEXURE VII

6.4.5. **Narrate the efforts taken by the university for resource mobilization.**

Faculty is encouraged to submit research projects for getting the grant and to enhance the research facilities in the labs.

6.4.6. **Is there any provision for the university to create a corpus fund? If yes, give details**

Yes, University has corpus fund as under:-

1. For University	Rs.5,00,00,000
2. For Research Promotion	Rs.1,01,55,000
Total	Rs.6,01,55,000

6.5. Internal Quality Assurance System

6.5.1. Does the university conduct an academic audit of its departments? If yes, give details.

Yes. The Heads of Departments hold regular review meetings with their faculty and staff to analyze the academic performance of the department. The feedback is obtained on various parameters. This feedback is consolidated and an index is calculated. The Board of Studies of various departments also hold periodic meetings to review the course structure.

6.5.2. Based on the recommendations of the academic audit, what specific measures have been taken by the university to improve teaching, learning and evaluation?

The feedback is communicated to concerned teacher and is advised to take suitable corrective action, if required. The recommendations of the Board of Studies are taken over to the Academic Council meetings for approval before implementation.

6.5.3. Is there a central body within the university to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

Yes. Academic Council and the Board of Studies of various Departments, the DPMC's and the Departmental Programme Evaluation Committee. Committees are the bodies to review the teaching-learning process.

Structure of Academic Council: Chairperson: Vice Chancellor

Members: All Deans, All HODs, Two Professors other than HODs, Two distinguished academicians nominated by Pro-Chancellor, Two industry professionals nominated by Pro-Chancellor, One member from amongst the heads of other institutions of the trust.

Member Secretary: Registrar

Structure of Departmental Programme Evaluation Committee:

Chairperson: HOD

Members: One Professor, one Associate Professor, Two Assistant Professor on rotation.

Structure of Board of Studies Chairperson: HOD

Members: All Professors of Department, Two Associate Professors of the Department by rotation of seniority, Two Assistant Professors of the Department by rotation of seniority, Not more than 2 persons to be co-opted for their expert knowledge including those belonging to the profession or industry concerned.

Structure of DPMC:

Chairperson: Dean (A&R)

Members: Research Supervisor(s), HOD, Two faculty members from the Department and one faculty from outside Department.

6.5.4. How has IQAC contributed to institutionalizing quality assurance strategies and processes?

IQAC has been formed in September 2016 and meetings are being held to formulate various committees from faculty/staff/alumni/stakeholders. Action plan has been made for monitoring the quality. The activities of the committees have been planned and the faculty and staff has already been sensitized by quality assurance.

6.5.5. How many decisions of the IQAC have been placed before the statutory authorities of the university for implementation?

The IQAC is in the process of evaluation on various quality parameters and shall communicate its decision in due course of time.

6.5.6. Does the IQAC have external members on its committees? If so, mention any significant contribution made by such members.

Yes.

6.5.7. Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?

The IQAC is in the process of acquiring and analyzing the information required for the study on incremental growth of the said students.

6.5.8. What policies are in place for the periodic review of administrative and academic departments, subject areas, research centres, etc.?

The University conducts regular academic review of its academic departments and other units. It collects feedback from the students, faculty, alumni and employers. The regular interaction of students with faculty, HODs, Deans, Director as well as Vice Chancellor also provide input for these review processes.

JUIT has established the Internal Quality Assurance Cell in 2016 to take feedback from all stake holders and audit the performance of programmes, departments, centers and administration.

The University Academic Management Committee is responsible for Quality Assurance, its implementation and administration. It considers the report of the IQAC.

Any other information regarding Governance, Leadership and Management which the university would like to include.

CRITERIA VII: INNOVATIONS AND BEST PRACTICES

7.1. Environment Consciousness

7.1.1. Does the university conduct a Green Audit of its campus?

No.

7.1.2. What are the initiatives taken by the university to make the campus eco-friendly?

- * **Energy conservation**
- * **Use of renewable energy**
- * **Water harvesting**
- * **Check dam construction**
- * **Efforts for Carbon neutrality**
- * **Plantation**
- * **Hazardous waste management**
- * **e-waste management**
- * **any other (please specify)**

University campus buildings are designed to harness maximum solar energy. Most of the buildings and windows are south facing making the buildings warm during winter with ample sun shine.

A prototype biogas plant of 1000 liters is installed in campus for demonstration projects on renewable energy.

University recycles waste water through its sewage treatment plant (STP) and use it for horticulture purpose.

University campus is one of the green campuses of Himachal Pradesh. Most of the open spaces are full with local trees and plantation leading to carbon neutrality. Forests in and around are intact which further leads to aesthetic value. In its 25 acres campus, there is minimum use of fossil fuels through vehicles leading to clean air minimizing green house gas emissions.

Hazardous waste management:

1. Waste water from laundry and household is treated separately and then final treatment is done at Sewage Treatment Plant of JUIT. The STP is well maintained and operational since 2002.

2. Hazardous waste of Laboratories and dispensary is collected as per EPA guidelines and then send to Biohazard Treatment facility outside of the campus.

3. Mess waste and other house hold waste is sent to a treatment plant outside the campus and a part of it is composed inside. Also, plastic items are sent for recycling, where as other contaminated items like cotton etc are incinerated in the incineration facility of JUIT.

Obsolete computers and other electronic gadgets are sold and discarded to recyclers

7.2. Innovations

7.2.1. Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the university.

- Global benchmarking of curricula and instructional methodology with periodic up-gradation of course contents.
- Learner-centric curriculum and Congenial learning environment
- Classroom instruction supplemented by industry visits, summer training, internships, project work/dissertation, etc to prepare students for the corporate world;
- State-of-the-art infrastructure and facilities

- Continuous and transparent evaluation
- Reviewing of results by Departmental and University examination Committees
- Computerized record of the student
- Students feed back

The innovations introduced are paying back in the shape of (i) acceptance of our students in Universities/Institutes in India and abroad (ii) Better placements

7.3. Best Practices

7.3.1. Give details of any two best practices which have contributed to better academic and administrative functioning of the university.

The two best practices which have contributed to better academic and administrative functioning of the university are:

1. Curricular Aspects
2. Development of Infrastructure and Learning Resources

The presentation of these two best practices in the requisite format is as follows:

Best Practice-1

1. Title of the Practice

Curricular Aspects

2. Objectives of the Practice

The objective of the Practice is to ensure the quality sustenance and quality enhancement. To accomplish this, various measures are undertaken by the University as and when required, keeping in view the curriculum perspective

3. The Context

The best practice was initiated in the context of providing to students an environment of Sustained Disciplined Work, Self Learning, Flexibility in Pace of Learning, to give design orientation while remaining quality conscious and inculcate the skills of cooperative working.

4. The Practice

Sustained Disciplined Work

A typical semester is designed in an intensive manner with an emphasis on regular and continuous work. The Evaluation System is designed to encourage this concept.

Self Learning

In its attempt to move away from teacher-cantered learning to student-specific learning, the curriculum actively encourages self learning. For this purpose 15% of the time allotted to theory and tutorial classes is earmarked for independent study.

Flexibility in Pace of Learning

The evaluation system makes special provision for different paces of learning for different students. Thus, while specifying a time limit within which tutorial/practical work must be completed, there is scope to submit such work beyond the deadline.

Design Orientation

The curriculum is structured so that basic implementation skills and design skills are interwoven together. Thus, for example, a student of Programming Systems learns not only how to program but also how to design programmes.

Quality Consciousness

Students should be aware of the importance of continuous improvement, building zero-defect products and doing quality work. All courses will emphasize on quality as an integral part of teaching.

Co-operative Working

Given the complexity of technological problems of today large teams must work together to provide solutions. Thus, it is very important to learn group dynamics and to work in teams.

Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced (in about 400 words)?

5. Evidence of Success

As a result of adoption of this best practice, university has been able to produce technical manpower conforming to global standards, which is reflected by university's placement record showing increase in placement offers with better packages. The students are able to acquire skills of life-long learning and cooperative work culture. Besides, the curriculum of the university has witnessed global acceptance as evident by many of our students getting admitted in various foreign universities of repute for higher studies.

6. Problems Encountered and Resources Required

As such the university did not encounter any major problem in adopting and implementing this best practice. The resources turned out to be well within the availability of the university.

Best Practice-2

1. Title of the Practice

Development of Infrastructure and Learning Resources

2. Objectives of the Practice

To create learning ambience with respect to physical infrastructure and learning resources LRC & ICT.

3. The Context

The context for the best practice has been the aim of the university to provide modern construction and infrastructure of international standards, excellent academic facilities and congenial learning environment. Also, to create stock of learning resources to facilitate academic and research pursuits of the university supported by latest IT resources and technology.

4. The Practice

The university has provided the best possible facilities in terms of infrastructure required for teaching-learning process and also for administrative purposes. The lecture theatres, classrooms, laboratories and tutorial rooms, office spaces are built keeping in mind the limitations posed by hilly terrain and space restrictions, yet making it highly conducive for overall academic environment of global standards. Besides offering the best hostel facilities to students, residential facilities to faculty and staff, university also boasts of its sports grounds and world class auditorium.

The university has a spacious and well stocked LRC with e-journals, databases and fully automated functioning. The LRC users are provided open access to the resources available. At any time about 300 users can sit and work in the library. The circulation of Books is fully automated. The security system i.e. the 3M anti-theft electromagnetic security has been installed at the main gate of LRC to check any pilferage.

The ICT support services include well equipped technology/science labs and workshops, computer labs with latest hardware/software, science/Technology/

Computer labs equipped with latest equipment/machines/ hardware, etc. and a collection of licensed software. The whole university campus is network and wi-fi enabled. The lecture theatres, classrooms, laboratories and tutorial rooms, office spaces are fitted with latest ICT facilities for supplementing teaching-learning process.

In addition to this the university uses an integrated software 'campus connect' for all functions such as financial accounting/controlling, materials management, human capital management,

campus management, student life cycle management including admissions, registration, evaluation activities, etc. The university also has a dedicated power backup to avoid disruption of teaching/learning.

5. Evidence of Success

The excellent infrastructure has been able to attract students from almost all corners of the country. The LRC has witnessed about 21000 walk ins per month, which is quite inspiring. The average number of login to e-resources exclusively through LRC is about 1000 per month. Easy dissemination of knowledge/information through ICT starting from lecture room experience to exams has greatly helped students and concerned parents.

6. Problems Encountered and Resources Required

The greatest problem encountered has been in infrastructure development due to hilly terrain, rural surroundings and limitation of space available. In spite of limited space the university has managed efficiently all its academic infrastructure.

Any other information regarding Innovations and Best Practices which the university would like to include.

B1. Evaluative Report of Department of Humanities and Social Sciences

1. **Name of the Department:** Department of Humanities of Social Sciences
2. **Year of establishment:** 2002
3. **Is the Department part of a School/Faculty of the university?**
As such we do not have any school/faculty. But all departments are part of the university.
4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)**
Ph.D.
5. **Interdisciplinary programmes and departments involved**
NA
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
9. **Participation of the department in the courses offered by other departments**

Course Title	Offered to students of:
Presentation and Communication Skills (I Sem)	All departments
Group and Cooperative Processes (II Sem)	All departments
Managerial Economics (III Sem)	All departments
Financial Management (IV Sem)	All departments
Social and Legal Issues (V Sem)	All departments
Project Management (VI Sem)	All departments
Different Electives (VII and VIII Sem)	All departments
Research Methodology (PhD students)	All departments

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

Positions	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	1	0	0
Associate Professors	2	2	2
Asst. Professors	8	6	6
Others Teaching Assistants	0	0	0

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

Name	Qualification	Designation	Specialization	Experience (in Years)	No of Ph.D./M.Tech. students guided for the last 4 years
Dr. Anil Sehrawat	PhD	Associate Professor	English as a Second Language, Emotional Intelligence	13	Awarded=01/00 Ongoing=00/00
Dr. Anupriya Kaur	PhD	Associate Professor	Marketing	19	Awarded =01/00 Ongoing =01/00
Dr. Amit Srivastava	PhD, M.Phil (IB)	Assistant Professor (Sr. Grade)	International Business, Finance, Economics	16.5	Awarded = 01/00 Ongoing = 03/00
Dr. Tanu Sharma	Ph.D, , MBA, MJMC	Assistant Professor	Human Resource Management	12.5	Awarded = 00/00 Ongoing = 04/00
Dr. Puneet Bhushan Sood	Ph.D	Asstt. Professor	Finance	15	Awarded = 00/00 Ongoing = 00/00
Triambica Gautam	NET, MBA	Asst. Prof.(Gr. II)	Finance	18.5	Awarded = 00/00 Ongoing = 00/00
Neena Jindal	M.Phil	Lecturer	Political Science	15.5	Awarded = 00/00 Ongoing = 00/00

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

Nil

13. Percentage of classes taken by temporary faculty – programme-wise information

Nil

14. Programme-wise Student Teacher Ratio

UG: NA

PG: NA

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

Support Staff	Sanctioned	Filled	Actual
Technical Staff	1	1	1
Administrative Staff	Central pool shared by all departments.		

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.

- a) National Funding Agencies: Nil
- b) International Funding agencies: Nil
- c) Total Grants received: 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: Nil
- national recognition: Nil
- international recognition: Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies

We have created a Language Lab with the support of the University. The lab is equipped with the computers and Audio/Video study materials which are used to improve the Communication Skills of our students.

22. Publications:

	2011	2012	2013	2014	2015
Number of papers published*	3	5	12	19	6
	national / international/Online: 21/17/06				
Monographs	--	--	--	--	--
Chapters in Books	01	01	--	03	--
Edited Books	--	--	--	02	--
Books with ISBN with details of publishers	--	--	--	06	--
Number listed in International Database**	58				
Citation Index – range / average	0-7				
SNIP	--	--	--	--	--
SJR	--	--	--	--	--
Impact Factor – range / average	1.76-3.8				
h-index	--	--	--	--	1.43
* in peer reviewed journals					
**For e.g., Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.					

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

a) **National committees:** Nil

b) **International committees:** Nil

c) **Editorial Boards**

i. Dr. Anil Sehrawat: Editorial Board Member in International Journal of Advanced Information in Arts Science and Management; ISSN:2454-7220

ii. Dr. Tanu Sharma: Editorial Board Member in International Journal of Advanced Information in Arts Science and Management; ISSN: 2454-7220

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

- percentage of students who have done in-house projects including inter-departmental projects: NA

- percentage of students doing projects in collaboration with other universities industry / institute: NA

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

S. No.	Award	Name of Recipient	Year
Faculty			
Nil			
Doctoral / Post doctoral fellows			
1	Best Paper award in International Research Conference 2013, Jammalal Bajaj Institute of Management Studies, Mumbai	Ms. Sakshi Khanna	2013
Students			
NA			

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

S. No.	Title	Year	Source of Funding	Outstanding Participants
Seminars				
Nil				

Conferences				
1.	Consultation and Experience Sharing on Role of Humanities and Social Sciences in Holistic Development of Future Technocrats-Looking Ahead	2011	Internal: Rs 27,18,500/-	1. Prof. Radha K. Maheshwari, USA 2. Prof. Sheila Bunwaree, Mauritius
2.	International Conference on Empowering Women in Developing Countries through Information and Communication Technologies	2013	Internal: Rs 8,54,000/- External: Rs 26,96,000/-	1. Prof. Arun Kulshreshtha, NAM 2. Shireen Kamal Assem Abdel-Halim Assem, Egypt
Workshops				
1.	Three-days training program for the employees of "READ India"	2011	READ India	Ms. Geeta Malhotra, Director, READ India
2.	Tools and Techniques for Data Analysis in Management Research (three days)	2012	Self-financed	Internal participation
3.	Tools and Techniques for Data Analysis in Management Research (three days)	2013	Self-financed	Internal participation
4.	Tools and Techniques for Data Analysis in Management Research (one week)	2014	Self-financed	Internal participation
5.	Tools and Techniques for Data Analysis in Management Research (one week)	2015	Self Financed	Internal participation

31. Code of ethics for research followed by the departments

The department is committed to promote high quality, original research which are beneficial not only for adding the knowledge base but also for society. While doing any research, the department takes proper care of acknowledging the source of data/information used in the research, giving proper recognition to all those who helped, and the credit is also give to the use of copyright/paten materials.

32. Student profile programme-wise:

Year / Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Ph. D.					
2012-2013	8	--	--	--	--
2013-2014	9	1	2	--	--
2014-2015	9	0	3	--	--
2015-2016	0	0	0	--	--

33. Diversity of students:

Year / Name of the Programme	% 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

Ph.D.				
2012-2013	0	0	0	0
2013-2014	0	33	67	0
2014-2015	0	67	33	0
2015-2016	0	0	0	0

The data on diversity is also listed in the main report.

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

Nil

35. Student progression

Student progression	Percentage against enrolled
UG to PG	--
PG to M.Phil.	--
PG to Ph.D.	--
Ph.D. to Post-Doctoral	--
Employed	
• Campus selection	--
• Other than campus recruitment	2 (after submission); 2 (during)
Entrepreneurs	--

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	Ph.D: 57 PG: 00
from other universities within the State	Ph.D: 0 PG: 43
from universities from other States from	Ph.D: 14 PG: 57
universities outside the country	Ph.D: 00 PG: 00

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

- i. Dr. Neha Aggarwal (PhD, March 2014)
- ii. Dr. Puneet Bhushan Sood (PhD, June 2014)

38. Present details of departmental infrastructural facilities with regard to

- a) Library: The department do not have a separate library, however, we use the same central library facility provided by the University.
- b) Internet facilities for staff and students: The University has provided a separate office for all the faculty member which is equipped with computer, LAN facility, internet facility and a land-line phone. The University has also provided the seating place for all the research scholars of the department at one place, which is equipped with the computer facility with LAN and internet.

c) Total number of class rooms 19 (Shared with other Departments)

<i>Type of Room</i>	<i>Number</i>	<i>Minimum Capacity of each</i>
Lecture Theatres	3	240
Class Rooms	8	84
Tutorial Rooms	7	35
Group discussion Rooms	1	35

d) Class rooms with ICT facility

All rooms used for teaching are provided with

e) Students' laboratories

The department has a Language Lab for the students.

f) Research laboratories

NA

39. List of doctoral, post-doctoral students and Research Associates

a) from the host institution/university

S. No.	Name of Student	Doctoral/Post Doc/Research Associate	Supervisor
1	Ms. Sakshi Khanna	Doctoral	Dr. Amit Srivastava & Dr. Y. Medury
2	Ms. Abhilasha Chauhan	Doctoral	Dr. Anupriya Kaur & Dr. Y. Medury
3	Ms. Triambica Gautam	Doctoral	Dr. Amit Srivastava & Dr. Y. Medury
4	Ms. Neena Jindal	Doctoral	Dr. Anil Sehrawat & Dr. Y. Medury
5	Ms. Priyam Dhani	Doctoral	Dr. Tanu Sharma

b) from other institutions/universities

S. No.	Name of Student	Doctoral/Post, Doc/Research Associate	Supervisor
1	Ms. Preeti Thakur	Doctoral	Dr. Anupriya Kaur
2	Ms. Madhavi	Doctoral	Dr. Amit Srivastava
3	Mr. Vivek Niranjana	Doctoral	Dr. Tanu Sharma
4	Ms. Santosh Kumari	Doctoral	Dr. Tanu Sharma & Dr. Anil Sehrawat

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.

All the faculty members of the department discuss before offering a new course to the students. We take feedback from students and some industry experts also that whether the subject or its contents are relevant or not,; or how it can be improved further. Once the course is approved by the department, then only it can be offered to the students.

42. Does the department obtain feedback from

- i. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

The department takes feedback from all the faculty members and discuss the contents and the utility of the subject. Any improvement suggested and if approved, incorporated in the pedagogy.

- ii. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Taking feedback from all the students, at the end of the semester, is the regular feature of the department. Depending on the feedback given by the students, necessary actions are taken, whether it is improvement of the content or teaching-learning process or the pedagogy is concerned.

- iii. alumni and employers on the programmes offered and how does the department utilize the feedback?

The department is in touch with the alumni also and try to know their view now about the subject. Suggestions given by them are taken seriously and if possible, incorporated also.

43. List the distinguished alumni of the department (maximum 10)

NA

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

The department conducts the workshops not only for external research scholars/faculty but also for internal participants.

45. List the teaching methods adopted by the faculty for different programmes.

- a) Computer aided audio/visual
- b) Whiteboard
- c) Case studies
- d) Analysis of contemporary issues – social, economical, political etc.

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

The department has clear understanding about what is offered to the students and what is its objective. We have different component of evaluation schemes which help us to meet our objectives like – written examinations, case studies, group presentations and individual presentations, group discussions, quizzes and assignments etc.

47. Highlight the participation of students and faculty in extension activities.

Nil

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

- a) The department conducts Pre-Placement Workshop for the final year students appearing for an interview.
- b) The department conducts special programme the students who are weak in oral and written

English.

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.**

Nil

51. **Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

Strengths:

- a) Diverse specialization of Faculty members.
- b) Elective subjects of diverse areas
- c) Well qualified and experienced faculty
- d) Active students' counselling
- e) Organizing workshops and conferences for academia and industry

Weaknesses:

- a) Do not have any funded projects
- b) Organizing Conference is not a regular feature
- c) No international/national collaborations
- d) No Certificate/Short-term courses for Industry
- e) No PG programme

Opportunities:

- a) Offering new courses matching industry requirements
- b) Inter-department/inter-institution researches
- c) Community work
- d) Conducting more FDPs
- e) Organizing more conferences

Challenges:

- a) Getting funded projects
- b) Starting-up an industry oriented consultancy
- c) Less interaction with industry
- d) Difficult terrain for doing any academic/community work
- e) Getting sponsorship

52. **Future plans of the department.**

- a) Redesign of core courses
- b) New industry oriented electives
- c) Creation of new knowledge
- d) Short term courses for academia and industry
- e) Collaborative community welfare initiative

B2. Evaluative Report of Department of Mathematics

1. **Name of the Department:** Department of Mathematics
2. **Year of establishment:** July 2002
3. **Is the Department part of a School/Faculty of the university?**
As such we do not have any school/faculty. But all departments are part of the university.
4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)**
Ph.D., M. Tech. (Applied and Computational Mathematics)
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**
None
8. **Examination System: Annual/Semester/Trimester/Choice Based Credit System**
Semester
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)**

Positions	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	1	2	2
Associate Professors	2	2	2
Asst. Professors	4	3	3
Others Teaching Assistants	0	0	0

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

Name	Qualification	Designation	Specialization	Experience (in Years)	No of Ph.D./M.Tech. students guided for the last 4 years
Karanjeet Singh	Ph.D.	Professor	Nonlinear partial differential equations	15	Awarded=02/00 Ongoing=01/00
R S Raja Durai	Ph.D.	Associate Professor	Algebraic Coding Theory	11	Awarded =01/00 Ongoing =00/00

Rakesh Kumar Bajaj	Ph.D.	Associate Professor	Fuzzy Information Measures, Intuitionistic Fuzzy Information	7	Awarded = 04/00 Ongoing = 00/00
Neel Kanth	Ph.D.	Assistant Professor	Mathematical modelling and simulation	6	Awarded = 00/00 Ongoing = 00/00
Pradeep Kumar Pandey	Ph.D.	Assistant Professor	Differential Geometry	6	Awarded = 00/00 Ongoing = 00/00
Narendra Kumar	Ph.D.	Assistant Professor	Multiple comparisons inference procedures	2	Awarded = 00/00 Ongoing = 00/00
Harinder Singh	Ph.D.	Professor	Mechanics of Continuous Media, Elasticity, Thermoelasticity	41	Awarded = 02/00 Ongoing = 01/00

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

Nil

13. Percentage of classes taken by temporary faculty – programme-wise information

Nil

14. Programme-wise Student Teacher Ratio

NA

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

Support Staff	Sanctioned	Filled	Actual
Technical Staff	0	0	0
Administrative Staff	Central pool shared by all departments.		

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.

- a) National Funding Agencies : NIL
- b) International Funding agencies: NIL
- c) Total Grants received: NA

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: None
- national recognition: None
- international recognition: None

21. Special research laboratories sponsored by / created by industry or corporate bodies

None

22. Publications:

	2011	2012	2013	2014	2015
Number of papers published*	55				
	national / international: 09/46				
Monographs	00				
Chapters in Books	00				
Edited Books	01				
Books with ISBN with details of publishers	01				
Number listed in International Database**	50				
Citation Index – range / average	0-8				
SNIP	0.166-1.998				
SJR	0.149-1.461				
Impact Factor – range / average	0-2.5				
h-index	1.33				
* in peer reviewed journals					
**For e.g., Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.					

23. Details of patents and income generated:

Nil

24. Areas of consultancy and income generated

NA

25. Faculty selected nationally / internationally to visit other laboratories / institutions/ industries in India and abroad

Nil

26. Faculty serving in

- a) National committees: None

b) International committees: None

c) Editorial Boards

Dr. R.S. Raja Durai: Mathematical Reviews (AMS), Horizon Research Publishing

Dr. Rakesh Kumar Bajaj: Member of the Editorial Board in American Journal of Mathematics and Sciences.

Dr. Pradeep Kumar Pandey: Mathematics and Statistics, Horizon Research Publishing Corporation, USA.

d) any other (please specify)

Dr. Rakesh Kumar Bajaj: Elected as Joint Secretary of Forum for Interdisciplinary Mathematics (FIM).

Dr. Pradeep Kumar Pandey: Member of American Mathematical Society.

Dr. Pradeep Kumar Pandey: Member of Indian Mathematical Society.

Dr. Neel Kanth: Life member of Punjab Academy of Sciences.

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

S. No.	Name of Faculty	Name of program/s	Venue	Dates
1	R.S. Raja Durai	IUCEE workshop on “Effective Teaching”	JUIT, Solan	1-6 June 2012
2	Neel Kanth	ISL in Differential Equations and Computations	JUIT, Solan	4-16 June, 2012
3	Neel Kanth, Pradeep Kumar Pandey	FDP on “Excellence in Teaching “Research & Education – by Design”.	JUIT, Solan	14-19 July, 2014
4	Neel Kanth	One week short term course on “MATLAB, A tool in research	MNIT, Jaipur	24-28 Dec, 2015
5	Pradeep Kumar Pandey	Workshop on “Combinatorics and Graph Theory in Science and Engineering (CGSE 2014)”	JUIT, Solan	3-8 Nov 2014

28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects
Nil
- percentage of students doing projects in collaboration with other universities industry / institute
Nil

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

Nil

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

S. No.	Title	Year	Source of Funding	Outstanding Participants
Seminars				
--Nil--				
Conferences				
1	Second International Conference on Eco-friendly Computing and Communication Systems (ICECCS 2013)	October 17-19, 2013	DST, DRDO, DIETY	Prof Sanjay Ranka, University of Florida, USA. Prof. Bhargab Bhattacharya, ISI Kolkata
Workshops				
1	Workshop on “Integral Equations – Solvability Analysis and Applications”	October, 19th – 25th 2015.	IIT Bombay, Mumbai	Prof. M. C. Joshi, IIT Gandhinagar.
2	Workshop on Combinatorics and Graph Theory in Science and Engineering (CGSE 2014)	November 3-8, 2014	Self Financed	Prof. Ashish Srivastav, St. Louis University, USA.
3	Workshop on Business Process Simulation	2 nd September, 2014	Self Financed	Prof D. S. Broca, XLRI Jamshedpur.
4	Advanced Training in Mathematics Workshop (ATMW) in PDE and Mechanics	June 3-15, 2013	NBHM	Prof . R Radha, University of Hyderabad. Prof Ranjit K. Upadhyay Indian School of Mines, Dhanbad.
5	NBHM ATM School for Lecturers “ISL Differential Equations and Computations”	June 04-16, 2012	NBHM	Prof. Mythily Ramaswamy, TIFR Bangalore.

31. Code of ethics for research followed by the departments

Our department follows the well defined code of ethics set by the university. We take care that the plagiarism and similarity index for research papers & departmental theses do not exceed 30%.

32. Student profile programme-wise:

Year / Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Ph. D.					
Consolidated figure as on academic session 2015-16.	4	3	1	100	100

33. Diversity of students:

Year / Name of the Programme	% 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

Ph.D.				
Consolidated figure as on academic session 2015-16.	25	50	50	0

The data on diversity is also listed in the main report.

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

Examination	2011	2012	2013	2014	2015
Civil Services	--	--	--	--	--
Defence Service	--	--	--	--	--
NET	--	01	--	--	--
SET	--	--	--	--	--
GATE	--	--	--	--	--
Other	--	--	--	--	--

35. Student progression

Student progression	Percentage against enrolled
UG to PG	Nil
PG to M.Phil.	Nil
PG to Ph.D.	25
Ph.D. to Post-Doctoral	Nil
Employed	
• Campus selection	Nil
• Other than campus recruitment	75
Entrepreneurs	--

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	20
from other universities within the State	0
from universities from other States from	80
universities outside the country	0

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

Ph.D degree was awarded to one faculty (Dr. Narendra Kumar)

38. Present details of departmental infrastructural facilities with regard to

- Library:** Department has access of the central library facility the LRC of the university.
- Internet facilities for staff and students: **Network computer with internet facility / Wi-Fi is available for all.**
- Total number of class rooms 19 (Shared with other Departments)

Type of Room	Number	Minimum Capacity of each
Lecture Theatres	3	240
Class Rooms	8	84
Tutorial Rooms	7	35
Group discussion Rooms	1	35

- d) Class rooms with ICT facility: Every class room is ICT enabled.
- e) Students' laboratories: Nil
- f) Research laboratories: Nil

39. List of doctoral, post-doctoral students and Research Associates

a) from the host institution/university

S. No.	Name of Student	Doctoral/Post Associate	Doc/Research	Supervisor
1	Meenakshi Devi	Ph.D.		Dr. R.S. Raja Durai.
2	Neeraj Gandotra	Ph.D.		Dr. R. K. Bajaj.
3	Tanuj Kumar	Ph.D.		Dr. R. K. Bajaj.
4	Manoj Gour	Ph.D.		Dr.Karanjeet Singh
5.	Madan Mohan Sati	Ph.D.		Dr.Harinder Singh & Dr.Nitin Gupta

b) from other institutions/universities

S. No.	Name of Student	Doctoral/Post, Associate	Doc/Research	Supervisor
1	Rajeev Kaushik	Ph.D.		Dr. R. K. Bajaj
2	Gaurav Kumar	Ph.D.		Dr. R. K. Bajaj

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.

Nil

42. Does the department obtain feedback from

- i. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
Yes. We take faculty feedback on curriculum as well as teaching-learning-evaluation and these suggestions are considered in our Board of Studies meetings.
- ii. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
Yes. University takes students feedback in each semester and the consolidated feedbacks are provided to the concerned faculty for implementing the corrective measures (if any).
- iii. alumni and employers on the programmes offered and how does the department utilize the

feedback?

Yes. University have dedicated alumni affairs committee that takes care of the feedback from alumni & implements corrective measures.

43. List the distinguished alumni of the department (maximum 10)

- i. Dr. Meenakshi Devi, HOD, Mathematics, Bahra University, Wahnaghat, Shimla, H.P.
- ii. Dr. Neeraj Gandotra, Assistant professor of Mathematics, Shoolini University, Solan, H.P.
- iii. Dr. Tanuj Kumar, Assistant professor of Mathematics, Lovely Professional University, Jalandhar, Punjab.

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

- i. Second International Conference on Ecofriendly Computing and Communication Systems (ICECCS 2013) held at Jaypee University of Information Technology, Wahnaghat, Solan, October 17-19, 2013.
- ii. One day workshop on Business Process Simulation, JUIT Wahnaghat, Solan, 2nd September, 2014.
- iii. One-week Workshop on Combinatorics and Graph Theory in Science and Engineering (CGSE 2014) held at Jaypee University of Information Technology, Wahnaghat, Solan, INDIA, November 3-8, 2014.
- iv. One-week Advanced Workshop on “Integral Equations – Solvability Analysis and Applications” under the auspices of National Program on Differential Equations : Theory, Computation and Applications (NPDE-TCA) sponsored by DST, Government of India held at Jaypee University of Information Technology, Wahnaghat, Solan, October, 19th – 25th 2015.
- v. Workshop on Statistical Techniques in Biological and Medical Sciences, STBMS - 16; JUIT Wahnaghat, Solan, 13 - 18 June 2016.

45. List the teaching methods adopted by the faculty for different programmes.

Lectures / Tutorials / Labs / Audio & Visual aid

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

Class tests, Quizzes, periodic assessment.

47. Highlight the participation of students and faculty in extension activities.

NA

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

In beyond syllabus activities students are given mini Projects and assignments.

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 contributes the knowledge generation in both basic and applied areas of Mathematics through research papers and producing doctoral students.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths:

- i. Well qualified Doctorate and Post-doctorate faculty members.
- ii. Quality teaching.
- iii. Research oriented environment.
- iv. Good work culture.
- v. Availability of good infrastructure.

Weaknesses:

- i. Interdisciplinary work.
- ii. Remote location of the place.
- iii. Enrollment of PG students.
- iv. Research projects with international collaboration.
- v. At present no departmental lab.

Opportunities:

- i. To teach and interact with students of all engineering disciplines in the university.
- ii. To have elective courses for specialized engineering disciplines.
- iii. To pursue collaborative research with other engineering departments.
- iv. To pursue computational mathematics research we have adequate software support.
- v. To guide students of various B.Tech programmes for mini projects.

Challenges:

- i. To get PG students.
- ii. To get Ph.D. students.
- iii. Addressing the need of individual students.
- iv. Disciplining students.
- v. Finding teaching faculty for the department is difficult in rural areas.

52. Future plans of the department.

- i. To organize Conferences, workshops etc.
- ii. To peruse new projects.

B3. Evaluative Report of Department of Physics and Materials Science

1. **Name of the Department:** Physics and Materials Science (PMS)
2. **Year of establishment:** 2002
3. **Is the Department part of a School/Faculty of the university?**
As such we do not have any school/faculty. But all departments are part of the university.
4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)**
M.Tech. (Nanotechnology) & Ph.D.
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 System
9. **Participation of the department in the courses offered by other departments**
We are offering courses to the following departments at UG (B.Tech.) level –
CSE & IT, ECE, CE, BT, & BI
10. **Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)**

Positions	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	1	2	2
Associate Professors	2	1	1
Asst. Professors	6	6	6
Others Teaching Assistants	0	0	0

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

Name	Qualification	Designation	Specialization	Experience (in Years)	No of Ph.D./M.Tech. students guided for the last 4 years
P.B. Barman	Ph.D.	Professor	Magnetic Materials, Compound semiconductors	21	Awarded=03/00 Ongoing=03/00

S.K. Khah	Ph.D.	Professor	Microstrip Antennas & Devices	20	Awarded =02/00 Ongoing =01/00
Vineet Sharma	Ph.D.	Associate Professor	Chalcogenides; II-VI nanofilms	11	Awarded = 03/00 Ongoing = 01/00
Pankaj Sharma	Ph.D.	Assistant Professor (Sr. Grade)	Chalcogenides; Polymers, Ferrites; II-VI nanofilms; DMS	11	Awarded = 03/00 Ongoing = 02/00
Dheeraj Sharma	Ph.D.	Assistant Professor (Sr. Grade)	Nanomaterials and Nanostructures, Polymer Nanocomposite, Chalcogenides	11	Awarded = 00/00 Ongoing = 01/00
Rajesh Kumar	Ph.D.	Assistant Professor (Sr. Grade)	Nanomaterials	11	Awarded = 02/00 Ongoing = 02/00
S.K. Hazra	Ph.D.	Assistant Professor (Grade-II)	Nanomaterials & Sensors	4	Awarded = 01/00 Ongoing = 00/00
R.R. Singh	Ph.D.	Assistant Professor (Grade-II)	Nanomaterials for biomedical & electronic applications	4	Awarded = 02/00 Ongoing = 02/00
S.K. Tiwari	Ph.D.	Assistant Professor (Grade-II)	Zinc oxide based materials	3	Awarded = 00/00 Ongoing = 01/00

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

NIL

13. Percentage of classes taken by temporary faculty – programme-wise information

NIL

14. Programme-wise Student Teacher Ratio

Not Applicable

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

Support Staff	Sanctioned	Filled	Actual
Technical Staff	3	3	3
Administrative Staff	Central pool shared by all departments.		

16. Research thrust areas as recognized by major funding agencies

Department has identified **three** thrust research areas as recognized by major funding agencies (DST, CSIR, DRDO etc.):

(A) Microstrip Antenna

(i) Ultralow Side lobe Level Microstrip Antenna Array in X-Band

(ii) Shared Aperture Microstrip Antenna Array for L and S Band

(B) Nanoscience and Nanomaterials

- (i) Quantum dots
- (ii) Functional bio-nanomaterials
- (iii) Polymer Nanocomposites

(C) Experimental Condensed Matter Physics

- (i) Chalcogenide Glasses
- (ii) Dilute Magnetic Semiconductors

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 Funding Agencies : 98.59 lakh

S. No.	Investigator(s)	Funding Agency	Project title	Duration	Grant in Lakh
ONGOING					
1.	Rajesh Kumar	DST	Development of spin-based semiconductor nano-electronic devices using ferromagnetic Silicide nanorods	2014-2016	7.20
2	Ragini Raj Singh	SERB-DST	Development, characterization & processing of quantum dots for imaging in near infrared (NIR) range	2014-2017	24.80
3	Pankaj Sharma	SERB-DST	Semiconducting Chalcogenide Quantum Dots for Exploiting the Power of Solar Energy	2015-2018	16.99
COMPLETED					
4	Sunil Kumar Khah	Directorate of ER and IPR	Design of Ultralow Sidelobe Level Microstrip Antenna Array in X-Band	2010-2013	21.4
5	Sunil Kumar Khah	CSIR	Shared Aperture Microstrip Antenna Array for L and S Band	2012-2015	16.4
6	Rajesh Kumar	DST	Synthesis of Magnetite Nanoparticles on Substrates for Water Purification	2012-2015	11.80
Total=					98.59

b) International Funding agencies: **NIL**

c) Total Grants received: 98.59 lakh

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration

NIL

b) International collaboration

Department of Physics, Kyushu University, Fukuoka, **Japan** (7.20 Lakh) (DST-JSPS)

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

21. Special research laboratories sponsored by / created by industry or corporate bodies

NIL

22. Publications:

	2011	2012	2013	2014	2015
Number of papers published*	14	22	31	22	17
	national / international: 00/106				
Monographs	00	00	00	00	00
Chapters in Books	00	00	00	00	00
Edited Books	00	00	00	00	00
Books with ISBN with details of publishers	00	00	00	00	00
Number listed in International Database**	SCI=12, Scopus=1, Google Scholar=1	SCI=19, Scopus=1, Google Scholar=2	SCI=27, Scopus=2, Google Scholar=2	SCI=17, Google Scholar=5	SCI=15, EBSCO=1, Google Scholar=1
Citation Index – range / average	0 – 51 / 11.93	0 – 30 / 7.23	0 – 340 / 16.45	0 – 25 / 3.14	0 – 5 / 1.41
SNIP	0.682	0.970	1.399	1.066	1.032
SJR	0.387	0.601	0.992	0.668	0.672
Impact Factor – range / average	0 – 2.183 / 0.875	0 – 2.259 / 1.576	0–26.932 / 2.593	0–4.097 / 1.781	0 – 4.197 / 1.949
h-index	6	8	7	7	3
* in peer reviewed journals					
**For e.g., Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.					

23. Details of patents and income generated:

The following patent has been filed and published. However, no income generated.

- a) Microstrip antennas planar arrays for ultra low side lobe level for X-band, Abhisekh Kandwal, Jaivardhan, **Sunil Kumar Khah**, JUIT Waknaghat; **No: 2867/DEL/2013.**

24. Areas of consultancy and income generated

NIL

25. Faculty selected nationally / internationally to visit other laboratories / institutions/ industries in India and abroad

(i) Prof. Sunil Kumar Khah

- a) Sept. 2012- to June 2013: Visiting Professor Department of Electrical and Computer Engineering, University of Dayton. Dayton. Ohio
- b) June 2015 to August 2015: Visiting Professor Department of Electrical and Computer Engineering, University of Dayton. Dayton. Ohio

(ii) Dr. Rajesh Kumar

- a) June-July 2015: Visiting Professor, Gwangju Institute of Science and Technology (GIST), South Korea
- b) June 2015: Visiting Scientist, Kyushu University, Japan
- c) January 2015: Visiting Scientist, Kyushu University, Japan
- d) December 2014: Visiting Professor, Gwangju Institute of Science and Technology (GIST), South Korea
- e) June: 2014: Visiting Professor, Gwangju Institute of Science and Technology (GIST), South Korea
- f) December 2013: Visiting Professor, Gwangju Institute of Science and Technology (GIST), South Korea
- g) June: 2013: Visiting Professor, Gwangju Institute of Science and Technology (GIST), South Korea
- h) March 2013: Visiting Professor, Gwangju Institute of Science and Technology (GIST), South Korea
- i) November 2012: Visiting Professor, Gwangju Institute of Science and Technology (GIST), South Korea
- j) September 2012: Visiting Professor, Gwangju Institute of Science and Technology (GIST), South Korea
- k) June 2012: Visiting Professor, Gwangju Institute of Science and Technology (GIST), South Korea
- l) March 2012: Visiting Professor, Gwangju Institute of Science and Technology (GIST), South Korea
- m) December 2011: Visiting Professor, Gwangju Institute of Science and Technology (GIST), South Korea

26. Faculty serving in

a) National committees

In MRSI-Himachal Pradesh Chapter:

- Prof. Sunil K. Khah (Chairman)
- Prof. P.B. Barman (General Secretary)
- Dr. Dheeraj Sharma (Joint Secretary)
- Dr. Pankaj Sharma (Joint Secretary)
- Dr. Surajit K. Hazra (Treasurer)

b) International committees

NIL

c) Editorial Boards

Dr. Pankaj Sharma as member of editorial board in

- i. Universal Journal of Physics and Application (Horizon Research Publishing, USA) (2013 —)
- ii. International Journal of New Horizons in Physics (Natural science publishing,

USA) (2014-)

d) any other (please specify)

All faculty members are assisting the editors of various peer reviewed journals in the reviewing process.

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

S. No.	Name of Faculty	Name of program/s	Venue	Dates
1	P.B. Barman, S.K. Khah, Vineet Sharma, P. Sharma, D. Sharma, R. Kumar, S.K. Hazra, R.R. Singh, S.K. Tiwari	IUCEE workshop on Opto-Electronic and Electronic Materials	JUIT	30 th May-03 rd June 2011
2	P.B. Barman, S.K. Khah, Vineet Sharma, P. Sharma, D. Sharma, R. Kumar, S.K. Hazra, R.R. Singh, S.K. Tiwari	Workshop on Antenna Materials	JUIT	14 – 15 Dec., 2012
3	P.B. Barman, S.K. Khah, Vineet Sharma, P. Sharma, D. Sharma, R. Kumar, S.K. Hazra, R.R. Singh, S.K. Tiwari	Workshop on Nanotechnology (Fabrication and Characterization)	JUIT	11–16 Dec., 2013
4	P.B. Barman, S.K. Khah, Vineet Sharma, P. Sharma, D. Sharma, R. Kumar, S.K. Hazra, R.R. Singh, S.K. Tiwari	Faculty development programme	JUIT	14 – 19 July, 2014

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
NIL

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

S. No.	Award	Name of Recipient	Year
Faculty			
	---NIL---		
Doctoral / Post doctoral fellows			
1	First prize in Oral presentation in ICEM-2014, at JUIT	Hitanshu Kumar	2014
2	First prize in Oral presentation in ICEM-2015, at JUIT	Hitanshu Kumar	2015
Students			
	---NIL---		

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

S. No.	Title	Year	Source of Funding	Outstanding Participants
Seminars				
	--Nil--			
Conferences				

1	National Conference on “Recent trends in materials science”	08-11 October, 2011	DST, CSIR, SSD	Prof. R. P. Bajpai, Prof. R.B. Mathur, Prof. Tarasankar Pal, Prof. Ravi Kumar, Prof. A. K. Pal, Prof. Bansi Malhotra, Prof. Vijayamohanan K. Pillai, Prof. S. Basu, Prof. Mahavir Singh, Prof. Ajay Gupta, Prof. C.H. Bhosale
Workshops				
1	IUCEE workshop on “Opto-Electronic and Electronic Materials”	2011	JUIT Waknaghat	Prof. Guru Balasubramanyam, University of Dayton, USA
2	Antenna Materials	2012	JUIT, MRSI, DRDO	Prof. Mahavir Singh, Prof. R.K. Pandey
3	Nanotechnology (Fabrication and Characterization)	2013	JUIT Waknaghat	Prof. O. P. Pandey, Dr. Praveen Kumar, Dr. Vimal C. Srivastva

31. Code of ethics for research followed by the departments

Department strictly follows the code of ethics as defined by the university. The ethics emphasize that research work/theses must be original. Manuscripts submitted by faculty/research scholars should be free from any plagiarism, falsification, fabrications, or omission of significant material. Faculty/ research scholars must avoid conflicts of interest or the appearance of conflicts of interest throughout the research process. All co-authors of a manuscript should have made substantial contribution and share accountability for the results. To enhance quality of research, anti-plagiarism software is used. Research scholars before submitting their research papers/theses for publications/award have to check for plagiarism and similarity index must be < 30%.

32. Student profile programme-wise:

Year / Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
PG					
2010-2012	-	-	-	-	-
2011-2013	5	2	1	100	100
2012-2014	-	-	-	-	-
2013-2015	-	-	-	-	-
2014-2016	-	-	-	-	-
Ph. D.					
2011-2012	37	1	1	--	--
2012-2013	42	--	2	--	--
2013-2014	31	3	1	--	--
2014-2015	10	3	2	4	2
2015-2016	--	--	1	1	1

33. Diversity of students:

Name of the Programme	% of students from the same	% of students from other universities	% of students from universities outside	% of students from other countries
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	university	within the State	the State	
PG (M.Tech.)				
2011-2013	NIL	33.3	66.7	NIL
2012-2014	NIL	NIL	NIL	NIL
Ph.D.				
2011-2012	NIL	50	50	NIL
2012-2013	NIL	50	50	NIL
2013-2014	NIL	40	60	NIL
2014-2015	NIL	38	62	NIL
2015-2016	NIL	40	60	NIL

The data on diversity is also listed in the main report.

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

Examination	2011	2012	2013	2014	2015
Civil Services	NIL	NIL	NIL	NIL	NIL
Defence Service	NIL	NIL	NIL	NIL	NIL
NET	NIL	NIL	NIL	NIL	NIL
SET	NIL	NIL	NIL	NIL	NIL
GATE	2	NIL	NIL	NIL	NIL
Other	NIL	NIL	NIL	NIL	NIL

35. Student progression

Student progression	Percentage against enrolled
UG to PG	NIL
PG to M.Phil.	NIL
PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL
Employed	
• Campus selection	NIL
• Other than campus recruitment	100
Entrepreneurs	NIL

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	11
from other universities within the State	22
from universities from other States from	67
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:** University Library, Learning Resource Centre (LRC), Caters to all Departments. The Departments and the library are housed in Academic Block.
- b) Internet facilities for staff and students
- All faculty members are provided with networked computer with internet connections in their offices. Each faculty has access to WebKiosk, internal webmail services.
 - All PhD scholars have been provided seating space with internet connections.
 - All labs of the Department are networked from where internet and all resources on the university's network can be accessed by students, staff and faculty.
 - Entire campus is Wi-Fi enabled which is available to faculty, staff and students.
 - Class rooms, lecture theatres and labs are also well equipped with multimedia and internet facilities for teaching and demonstration.
- c) Total number of class rooms 19 (Shared with other Departments)

<i>Type of Room</i>	<i>Number</i>	<i>Minimum Capacity of each</i>
Lecture Theatres	3	240
Class Rooms	8	84
Tutorial Rooms	7	35
Group discussion Rooms	1	35

- d) Class rooms with ICT facility
All rooms have ICT facility

- e) Students' laboratories

Laboratory	Location	LAN	PC	Power backup	Capacity	Display board	White board
Physics-I Laboratory	Floor I	Y	Y	Y	35	Y	Y
Physics-II Laboratory	Floor I	Y	Y	Y	35	Y	Y

- f) Research laboratories

Laboratory	Location	LAN	PC	Power backup	Capacity	Display board	White board
Materials Science	Floor III	Y	Y	Y	20	Y	Y
Electromagnetic Analysis Laboratory	Floor III	Y	Y	Y	10	Y	N
Chemical Vapour Deposition	Floor III	Y	Y	Y	2	Y	N
Characterization	Floor II	Y	Y	Y	4	N	N

Nanotechnology	Beside building	Main	Y	Y	Y	10	N	N
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39. List of doctoral, post-doctoral students and Research Associates

a) from the host institution/university

S. No.	Name of Student	Doctoral/Post Associate	Doc/Research	Supervisor
1	Ragini Raj Singh	Post Doc		P.B. Barman
2	Ankush Thakur	Doctoral		P.B. Barman & Ragini Raj Singh
3	Hitanshu Kumar	Doctoral		P.B. Barman & Ragini Raj Singh
4	Rajender Kumar	Doctoral		P.B. Barman & Ragini Raj Singh
5	Abhishek Kandwal	Doctoral		Sunil Kumar Khah
6	Rakesh Kumar	Doctoral		Sunil Kumar Khah
7	Johny Dhiman	Doctoral		Sunil Kumar Khah
8	Jaivardhan	Doctoral		Sunil Kumar Khah
9	Sonika Goyal	Doctoral		Sunil Kumar Khah
10	Suresh Kumar	Doctoral		Vineet Sharma & Pankaj Sharma
11	Sunanda	Doctoral		Vineet Sharma & Pankaj Sharma
12	Neha Sharma	Doctoral		Vineet Sharma & Pankaj Sharma
13	Pawan Kumar	Doctoral		Rajesh Kumar
14	Richa Khokhra	Doctoral		Rajesh Kumar
15	Sarita Kango	Doctoral		Rajesh Kumar
16	Bandana Bharti	Doctoral		Rajesh Kumar
17	Rohit Sharma	Doctoral		Vineet Sharma
18	Rajinder Singh	Doctoral		Dheeraj Sharma
19	Aasha Kumari	Doctoral		Ragini Raj Singh
20	Neha Koundal	Doctoral		Sanjiv Kumar Tiwari
21	Prashant Thakur	Doctoral		Pankaj Sharma
22	Subhash Chand	Doctoral		Pankaj Sharma

b) from other institutions/universities

S. No.	Name of Student	Doctoral/Post, Associate	Doc/Research	Supervisor
1	Anup Kumar	Doctoral		Prof. Raman Sharma (HPU Shimla) & Prof P.B. Barman (JUIT Waknaghat)

40. Number of post graduate students getting financial assistance from the university.

M.Tech. – 1 (2011-2013)

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

- i. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes. The feedback is taken through regular faculty meetings. Feedback from faculty is obtained during departmental meetings. On the basis of feedback, appropriate measures are taken for further improvement in the course content, teaching, learning and evaluation.

- ii. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Yes. The feedback from students is obtained through a formal procedure at the end of each semester in a customised form for theory and lab courses. The remarks are conveyed to the faculty for corrective steps.

- iii. alumni and employers on the programmes offered and how does the department utilize the feedback?

It is obtained at the university level

43. List the distinguished alumni of the department (maximum 10)

NIL

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

- i. IUCEE workshop on “Opto-Electronic and Electronic Materials” 30th May-03rd June 2011 at JUIT Waknaghat.
- ii. Two Day Workshop on “Antenna Materials” 14th – 15th December, 2012 at JUIT Waknaghat.
- iii. One week Workshop on “Nanotechnology (Fabrication and Characterization)” December 11, 2013 at JUIT Waknaghat.
- iv. Dr. Kazumasa Yamada, Department of Physics, Faculty of Sciences, Kyushu University, Hakozaki, Fukuoka, Japan (*Lecture title: Spintronic devices for modern device applications*) 9th September, 2015
- v. Prof. Kehar Singh, Senior Professor, NCU Gurgaon. Formerly Emeritus Professor at IIT Delhi (*Lecture Title: Photorefractive Materials and Their Applications: Some Glimpses*) 5th of February, 2015
- vi. Dr. Surender Sharma, Federal University of Maranhao, Sao Luis, Brazil (*Lecture Title: Complex Magnetic Nanostructures*)

45. List the teaching methods adopted by the faculty for different programmes.

Faculty members of the department adopt the following methods depending on the need of course

- Regular Chalk/Marker and Board
- Use of audio visual aids
- Educational videos
- Peer-reviewed research paper based learning
- Lab based hands-on training
- Tutorials and Assignments
- Projects and Seminars

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

Department follows the below mentioned methods to ensure that program objectives are constantly met and learning outcomes are monitored:

- (i) Through continuous teaching, learning and evaluation activities.
- (ii) Through the continuous feedback of the students taken by course teacher.
- (iii) Through the continuous monitoring and advice of the
 - (a) Internal Quality Assurance Cell (IQAC)
 - (b) Academic Management Committee
 - (c) Academic Council
 - (d) Board of Studies

Student progress and learning outcomes are monitored through continuous evaluations, tutorials and laboratory exercises/assignments. Three tests are conducted and the outcome is reviewed in departmental meetings. At the end of semester student feedback is taken for all courses. All faculty members encourage students to interact with faculty to describe their problems and means to solve them.

47. Highlight the participation of students and faculty in extension activities.

NIL

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

MRSI-Himachal Pradesh Chapter

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

N.A.

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

Contributions of the Department in generating new knowledge is evidenced by publications and ongoing projects as listed in this report. Some of the highlights of the current research work carried out in the Department are given below:

- a) The Department has strong research interests in microwaves, compound semiconductors, and nano-materials. The Department has recently established a laboratory for the fabrication of thin film devices and nano-materials. A microwave antenna laboratory has also been set up. Research is carried out with a number of doctoral students in the fields of nano-materials and semiconductor devices as well as micro strip antenna design.
- b) Faculty is engaged in synthesis of transition metal Nanostructures on Si substrates, Thin film formation of Magnetic Nanoparticles for Spintronic Device Application
- c) Research is also carried out with nanomaterials synthesis and characterization, for biological medical and electronic applications. Deposition and characterization of Nanomaterials thin films such of II-VI and IV-VI group semiconductor for devices is another area.
- d) Work is in progress with Quantum dots, which has a very promising future.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

A. Strengths:

1. Faculty members with doctoral/ post-doctoral experience from institutes of national and international repute
2. Ample experimental research expertise with faculty
3. Availability of good teaching infrastructure facilities
4. National and international collaborations
5. Active engagement in front-line research areas

B. Weaknesses:

1. Enrolment of students in M.Tech.
2. Sponsored research projects with international agencies
3. Research facility with state/ national/ international recognition particularly for characterization of samples
4. Conversion of research output into patents
5. Remote location of University

C. Opportunities

1. Inter-departmental research
2. Sponsored projects
3. Sponsored inter institutional collaborations
4. Masters programme in Physics
5. Organising national/international conferences

D. Challenges

1. Enrolment in PG and Ph.D. programs
2. Research laboratories with state/ national/ international recognition and to get funds for characterization
3. Industry collaborations and placement opportunity for PG students
4. Research funding from various agencies
5. To introduce new and challenging courses

52. Future plans of the department.

- i. Strengthen and start new PG programs
- ii. Enhance research facilities and research outcome
- iii. To join Govt. schemes like DST-FIST etc.
- iv. To establish joint funded collaborations with international research organizations
- v. To attract more talented students for department PhD program

B4. Evaluative Report of Department of Electronics and Communication Engineering

1. **Name of the Department:** Electronics & Communication Engineering
2. **Year of establishment:** 2002
3. **Is the Department part of a School/Faculty of the university?**
As such we do not have any school/faculty. But all departments are part of the university.
4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)**

B.Tech	Under Graduate Program
M.Tech (Electronics and Communication Engineering)	Post-Graduate Program
Ph.D.	Research Program

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**
Dual Degree in ECE was discontinued after two years because of UGC norms.
8. **Examination System: Annual/Semester/Trimester/Choice Based Credit System**
Semester
9. **Participation of the department in the courses offered by other departments**

S. No.	Course Code	Course Title	Offered to students from department(s) of
1	10B11EC401	Digital Electronics	CSE, IT
2	10B11EC301	Signal and Systems	CSE, IT
3	10B11EC514	Communication Systems	CSE, IT
4	10B11EC211	Basic Electronic Devices and Circuits	CSE, IT
5	15B11EC411	Basic Electronics	BT & BI
6	10B11EC111	Electrical Circuit Analysis	CSE, IT, Civil
7	10B11EC311	Electrical Machines & Instruments	Civil
8	--	Electives	CSE, IT

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

Positions	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	3	3	3
Associate Professors	6	2	2

Asst. Professors	18	15	15
Others Teaching Assistants	--	--	--

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

Name	Qualification	Designation	Specialization	Experience (in Years)	No of Ph.D./M.Tech. students guided for the last 4 years
T. S. Lamba	PhD	Professor	Speech processing, Information theory and coding	44	Awarded=00/02 Ongoing=00/00
S .V. Bhooshan	Ph D	Professor	RF and Microwave, Signal processing	30	Awarded =05/12 Ongoing =00/00
Ghanshyam Singh	PhD	Professor	Microwave Communication	19	Awarded = 05/12 Ongoing = 00/00
D.S.Saini	PhD	Associate Professor	Wireless Communication	16	Awarded = 05/10 Ongoing = 00/00
Pradeep Chauhan	PhD	Associate Professor	Antenna Design and Analysis	11	Awarded = 00/02 Ongoing = 00/00
Neeru Sharma	PhD	Assistant Professor	Wireless Communication	11	Awarded = 00/02 Ongoing = 00/00
Shruti Jain	PhD	Assistant Professor	VLSI / Biomedical Signal Processing	12	Awarded = 02/04 Ongoing = 02
Meenakshi Sood	PhD	Assistant Professor	Biomedical Signal Processing	15	Awarded = 00/00 Ongoing = 00/03
M. Wajid	M. Tech	Assistant Professor	Signal Processing	08	Awarded = 00/03 Ongoing = 00/00
Rajiv Kumar	PhD	Assistant Professor	Networks and Systems	18	Awarded = 00/02 Ongoing = 00/02
Tapan jain	M Tech	Assistant Professor	Wireless Sensor Networks	07	Awarded = 00/04 Ongoing = 00/00
Munish Sood	M. Tech.	Assistant Professor	Wireless and Mobile Communication	10	Awarded = 00/00 Ongoing = 00/00
Pradeep Garg	M. Tech	Assistant Professor	Signal Processing	10	Awarded = 00/00 Ongoing = 00/00
Pragya Gupta	M. Tech	Assistant Professor	Digital Image Processing, Semiconductor Devices	11.5	Awarded = 00/00 Ongoing = 00/00
Salman Raju Talluri	M.Tech	Assistant Professor	Microwave engineering, Electromagnetics	06	Awarded = 00/01 Ongoing = 00/01
Vanita Rana	M. E	Assistant Professor	Electronic Product Design and Technology.	10	Awarded = 00/00 Ongoing = 00/00
Ajay Kumar Aggarwal	M.Tech	Assistant Professor	Communication	02	Awarded = 00/00 Ongoing = 00/00

Sunil Datt Sharma	PhD	Assistant Professor	Time-Frequency Analysis and Its Applications	09	Awarded = 00/00 Ongoing = 00/02
Shweta Pandit	Ph D	Assistant Professor	Wireless Communication	0.75	Awarded = 00/00 Ongoing = 00/00
Alok Kumar	M. Tech	Assistant Professor	Communication system	04	Awarded = 00/00 Ongoing = 00/00

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

Nil

13. Percentage of classes taken by temporary faculty – programme-wise information

Nil

14. Programme-wise Student Teacher Ratio

UG: 17:1

PG: 8:1

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

Support Staff	Sanctioned	Filled	Actual
Technical Staff	10	10	10
Administrative Staff	Central pool shared by all departments.		

16. Research thrust areas as recognized by major funding agencies

To promote excellence in research in higher education ECE department of JUIT focuses on:

- Wireless and Mobile Communication
- Digital Signal processing
- Information Theory, Error Control Coding
- Networking and Performance Analysis of Communication Systems
- Biomedical Signal processing
- Terahertz region of the electromagnetic spectrum
- Cognitive Radio
- MIMO & OFDM

17. Number of faculty with ongoing/completed 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 Funding Agencies :

S. No.	Investigator(s)	Funding Agency	Project title	Duration	Grant in Lakh
ONGOING					

1.	Dr. Ghanshyam Singh	ISRO	Mathematical Modeling of spectrum Sharing Techniques in cognitive radio networks.	2015-2017	11.10
COMPLETED					
2	Dr. Ghanshyam Singh	Space Application Centre, ISRO, Ahmedabad	Design and Analysis of Frequency Selective Surface at Ka/Ku Band for Reflection and S Band for Transmission	2011-2014	15.96.
3.	Dr. Shruti Jain	DRDO	Fabrication of energy Harvesting Prototypes using Piezoelectric Materials	2012-2015	9.8.
Total=					36.86

b) International Funding agencies:

S. No.	Investigator(s)	Funding Agency	Project title	Duration	Grant in Lakh
ONGOING					
1.	Dr. Rajiv Kumar	DST Ministry of Sc and Tech Poland	Reliability Modeling and Optimized Planning of Risk-based Resilient Networks".	2015-2018	9.04
Total=					9.04

c) Total Grants received: 45.9 Lakhs

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration: No

b) International collaboration: AGH University of Science & Technology, Krakov, Poland

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: No
- national recognition: No
- international recognition: No

21. Special research laboratories sponsored by / created by industry or corporate bodies

No

22. Publications:

	2011	2012	2013	2014	2015
Number of papers published*	74	62	30	43	43

	national / international: 11/241				
Monographs	00	01	00	00	00
Chapters in Books	00	00	00	00	03
Edited Books	00	00	00	00	00
Books with ISBN with details of publishers	01	01	01	01	00
Number listed in International Database**	ALL	ALL	ALL	ALL	ALL
Citation Index – range / average	1-1257 / 153.53				
SNIP	0.17-2.52 / 1.31				
SJR	0.13-1.98 / 0.86				
Impact Factor – range / average	0.51-4.00 / 1.588				
h-index	4.17				
* in peer reviewed journals					
**For e.g., Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.					

23. Details of patents and income generated:

S. No.	Patent Application No.	Date Filled	Date Granted	Date Licensed	Income
1	1632/DEL/2012A	30/05/2012	--	--	NA
2	325/DEL/2015	25/03/2015	--	--	NA

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

Event	Faculty	Date and Place
(a) National committees		
Member of Technical Program Committee of ICSC-2015	Prof. T S Lamba	2015
Member of technical program committee of IEEE GCC	Prof. G Singh	2011-15
Member of technical program committee of CSNT	Prof. G Singh	2011-2015
Member of technical program committee of PDGC	Prof. G Singh, Dr. Meenakshi Sood	2012-2015. December 11- 13, 2014, JUIT, Solan.
Member of technical program committee of ISWTA	Prof. G Singh	2012-2015
Member of Technical program committee of CICN	Prof. G Singh, Dr. Shruti Jain	2011-2015 2013,14
Member of technical program committee of International	Dr. Shruti Jain	Dec 21- 23, 2013, Katra,

Conference on Machine Intelligence Research and Advancement (ICMIRA 2013).		India.
Member of technical program committee of Machine Intelligence Research and Advancement (MIRA-2013)	Dr. Shruti Jain	Dec 27- 29 2013, MIR Labs, India
Member of technical program committee of ISPPC.	Dr. Shruti Jain Dr. Meenakshi Sood	March 15-17, 2012, Sept 26-28, 2013, Sept 24-26, 2015. JUIT, Solan, India.
Member of technical program committee of International Conference on Electronics, Communications and Networks.	Dr. Shruti Jain	Beijing, China, Dec 12-15, 2014. Shanghai, China, Dec 12-15, 2015.
Member of technical program committee of International Conference on Recent Cognizance in Wireless Communication & Image Processing.	Dr. Shruti Jain	Poornima Institute of Engineering & Technology , Jaipur, Jan 16-17, 2015.
Member of technical program committee of International Conferences on Advances in Computers, Communication and Electronics Engineering (COMMUNE).	Dr. Shruti Jain	March 16-18, 2015. University of Kashmir, Srinagar, India.
Member of technical program committee of International Conference on Computer Vision & Image Analysis ICCVIA. January 18-20, 2015 Sousse, Tunisia	Dr. Shruti Jain	January 18-20, 2015, Sousse, Tunisia
Member of technical program committee of International Conference on Industrial Instrumentation and Control (ICIC).	Dr. Shruti Jain	May 28- 30, 2015. College of Engineering, Pune.
(b) International committees		
Member of technical program committee of International Conference on Computer Science and Environmental Engineering (CSEE).	Dr. Shruti Jain	May 17-18, 2015. Beijing, China.
IEEE International Conference on Signal Processing, Computing and Control (Chairman)	Prof. T S Lamba Prof. S.V.Bhooshan Prof. G Singh	March 15-17, 2012, JUIT, Solan. Sept 26-28, 2013, JUIT, Solan. Sept 24-26, 2015 , JUIT, Solan.
Member of technical program committee of International Conference on Control Theory and Its Application (CNTIA)	Dr. Shruti Jain	Dec 15-17, 2015, Melaka, Malaysia.
Member of technical program committee of Member of technical program committee of First International e-conference on Engineering Science & Management (ICESM).	Dr. Shruti Jain	Oct 18, 2015
Member of technical program committee of International Conference on Computational Techniques in Information and Communication Technologies (ICCTICT)	Dr. Shruti Jain	March 11-13, 2016. New Delhi, India.
Member of technical program committee of 10th INDIACom: 3rd 2016 International Conference on Computing for Sustainable Global Development.	Dr. Shruti Jain, Dr. Meenakshi Sood	March 16-18, 2016. BVICAM, New Delhi, India.

Member of technical program committee of 3rd International Conference on Electronic Design (ICED).	Dr. Shruti Jain, Pardeep Garg	August 1-12, 2016. Phuket, Thailand.
Member of technical program committee of 2nd International Conference on Signal Processing and Integrated Networks (SPIN).	Dr. Meenakshi Sood, Pardeep Garg	Feb. 19-20, 2015. Feb. 11-12, 2016. Amity University, Noida, Delhi India.
Member of technical program committee of International Conference on Parallel, Distributed and Grid Computing.	Dr. Meenakshi Sood	December 11- 13, 2014, JUIT, Solan.
Member, Program Committee, 7th International Conference on Networking	Dr. Pradeep Kumar	South Korea
(c) Editorial Boards		
Member, Editorial Board, Maejo International Journal of Science and Technology	Dr. Pradeep Kumar	
Associate Editor, Research Journal of Applied Sciences, and Engineering and Technology	Dr. Pradeep Kumar	
Editor, Journal of Selected Areas in Telecommunications	Dr. Rajiv Kumar	
SPIN: (NGCT-2016)	Dr. Rajiv Kumar	University of Petroleum and Energy Studies, Dehradun (India)
Editorial Board : Network Biology (ISSN 2220-8879)	Dr. Shruti Jain	
Editorial Board : International Journal of Computer Science and Information Technology Research Excellence (ISSN 2250-2742)	Dr. Shruti Jain	
Editorial Board : Journal of Harmonized Research Publication	Dr. Shruti Jain	
Society board: International Society of Network Biology	Dr. Shruti Jain	
Board member: International Journal of Multidisciplinary Research and Modern Education, R&D Modern Research Publication.	Dr. Shruti Jain	Perambalur, Tamilnadu, India
(d) any other (please specify): Nil		

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

Event	Faculty	Date and Place
Resource person: FDP on Signal Processing and its Applications	Prof. S V Bhooshan, Prof. T S Lamba, Prof. Ghanshyam Singh	January 13- 18, 2016 Jaypee University of Information Technology, Himachal Pradesh, India.
10th INDIACom: 3rd 2016 International Conference on Computing for Sustainable Global Development	Dr. Shruti Jain, Dr. Meenakshi Sood	March 16th – 18th, 2016, BVICAM, New Delhi, India
Workshop on Wireless Sensor Networks as part of Indo US Engineering Faculty Leadership Institute	Dr. Shruti Jain, Dr. Meenakshi Sood,	Jan 13-18, 2016. Jaypee University of Information Technology, Himachal Pradesh, India
FDP on Signal Processing and its	Dr. Pradeep Chauhan, Dr. Neeru	Jan 13- 18, 2016

Applications	Sharma, Dr.Rajiv Kumar, Dr. Meenakshi Sood, Dr. D. S. Saini, Mohammad Wajid, Vanita Rana, Pragya Gupta, Pardeep Garg, Munish Sood, Salman Raju, Alok Kumar, Sunil Datt, Dr. Shweta Pandit	
IEEE International Conference on signal processing and control (ISPPCC 2015)	Prof. S V Bhooshan, Prof. T S Lamba, Prof.Ghanshyam Singh, Dr. D. S. Saini, Dr.Pradeep Chauhan, Dr.Shruti Jain, Dr.Rajiv Kumar, Dr. Meenakshi Sood, Mohammad Wajid, Pragya Gupta, Pardeep Garg, Munish Sood, Salman Raju, Dr.Sunil Datt, Dr. Shweta Pandit.	September 24-26, 2015, JUIT, Solan.
Workshop on Artificial Neural Networks, Pattern Recognition Computer Vision and Multimedia Information Retrieval as part of Indo US Engineering Faculty Leadership Institute	Dr.Shruti Jain	Dec. 24-30, 2015. Jaypee University of Information Technology, Himachal Pradesh, India.
FDP on Virtualization & Cloud Computing - Fundamentals & Practical Approach	Dr. Neeru Sharma, Dr. Meenakshi Sood, Pardeep Garg, Alok Kumar, Dr. Shweta Pandit	Dec 24- 30, 2015, Jaypee University of Information Technology, Himachal Pradesh.
Control System and Power Electronics – CSPE 2015	Dr. Shruti Jain	Aug 1-2, 2015, Bangalore.
International Conference on Information and Communication Technology for Sustainable Development	Dr. Shruti Jain	July 3-4 2015, Ahmedabad, India
Workshop on ABET Accreditation by Professor Claire Komives, San Jose State University, San Jose, California USA	Dr. Meenakshi Sood	April 15, 2015, JUIT, Himachal Pradesh, India.
Resource person for the National workshop on Technical Manuscript preparation with LaTeX.	Mohammad Wajid	29 November, 2015, JUIT
Resource person for the Workshop on Design and Implementation of Logics using FPGA	Mohammad Wajid	Nov. 16- 23, 2015. JUIT.
Attended National workshop on Technical Manuscript preparation with LaTeX.	Alok Kumar, Dr. Shweta Pandit	November 29, 2015.
Workshop on Faculty Development Program	Prof. S V Bhooshan, Prof. T S Lamba, Prof.Ghanshyam Singh, Dr.Pradeep Chauhan, Dr.Rajiv Kumar, Dr. D. S. Saini, Dr. Neeru Sharma, Dr. Meenakshi Sood, Mohammad Wajid, Vanita Rana, Pragya Gupta, Pardeep	July 14-19, 2014, JUIT, Solan

	Garg, Munish Sood, Salman Raju	
National Seminar on Recent Trends in VLSI and Embedded Systems (RTVES-2014)	Dr. Shruti Jain	Oct 15-16, 2014, Jaipur National University, Jaipur, Rajasthan, India
International Conference on Advances in Computing, Electronics and Communication (ICACEC)	Dr. Shruti Jain	Nov. 30, 2014. Warangal
Attended workshop on Business Process Simulation	Pardeep Garg	September 2, 2014. JUIT Wagnaghat.
Attended International Conference on Computational Advancement in Communication Circuits and Systems	Vanita Rana	Oct. 30- Nov. 1, 2014, NIT, Agarpara, Kolkata
Workshop on LabView for Real time application	Dr. Meenakshi Sood	April 24, 2014, JUIT, Himachal Pradesh, India.
Attended PTU sponsored National conference on Recent Advances in Information Technology.	Vanita Rana	SUSET, Tangori, Nov. 25, 2014
Seminar on MATLAB & Simulink for Engineering Education	Vanita Rana	March 6, 2013. Chandigarh.
Attended workshop on Big Data Opportunities	Pardeep Garg	July 22-23, 2013, JUIT Wagnaghat.
Workshop on MATLAB in Engineering Education	Dr. Meenakshi Sood, Vanita Rana	November 11-16, 2013, Jaypee University of Information Technology, Himachal Pradesh, India
TEQIP-II National Workshop on Engineering Application for Sustainable Development.	Dr. Meenakshi Sood	Feb. 15-17, 2013. National Institute of Technology, Hamirpur.
IEEE International Conference on signal processing and control (ISPCC 2013)	Prof. S V Bhooshan, Prof. T S Lamba, Prof.Ghanshyam Singh, Dr. D. S. Saini Dr.Pradeep Chauhan, Dr.Shruti Jain, Dr.Rajiv Kumar, Dr. Meenakshi Sood, Mohammad Wajid, Vanita Rana, Pragya Gupta, Pardeep Garg, Munish Sood, Salman Raju	September 26-28, 2013, JUIT, Solan.
Organizing committee member of The International Conference on Signal Processing, computing and control (ISPCC 2012)	Dr. Shruti Jain, Dr. Meenakshi Sood	March 15-17, 2012, JUIT, Solan, India
Soft computing tools & practice on signal and image processing application.	Dr. Meenakshi Sood	July 9-14, 2012. National Institute of Technology, ROURKELA, ODISHA
Summer School on Springboard Women Development.	Dr. Meenakshi Sood	2012, Springboard and JUIT.
Workshop on Effective Teaching workshop	Dr.Rajiv Kumar	June 1-4, 2012, Organized by Indo-US Collaboration for

		Engineering Education (IUCEE) at Jaypee University of Information Technology, Wagnaghat
Attended Workshop on Antenna and RF Section Design for Low Power Applications	Pragya Gupta	Sept. 27-30, 2012. IIIT-A, Allahabad
Attended workshop on Wireless Networks and Network Simulator (NS-2) WNS 2012.	Pardeep Garg	July 9- 10, 2012. JUIT Wagnaghat.
2nd International Conference on Methods and Models in Science and Technology (ICM2ST-11).	Dr.Shruti Jain	Nov. 19-20, 2011. Jaipur, Rajasthan, India.
International Conference on Computational Intelligence and Communication Networks (CICN2011)	Dr.Shruti Jain	Oct. 7-9, 2011. Gwalior, India.
FDP on VLSI Tools and FPGA	Dr.Shruti Jain	4-8 July, 2011. JUIT in collaboration with
Workshop on Wireless Sensor Network workshop	Dr.Rajiv Kumar Dr. Meenakshi Sood	July 5-9, 2011 Organized by Indo-US Collaboration for Engineering Education (IUCEE) at Jaypee University of Information Technology, Wagnaghat
Summer School on Electronic and Electro-optic Materials	Dr. Meenakshi Sood	May 30 – June 3, 2011.

28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects 99% (Projects in final year is mandatory for all the students and it is the part of the curriculum).
- percentage of students doing projects in collaboration with other universities industry / institute
(10%) IEEE projects are done by students

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

S. No.	Award	Name of Recipient	Year
Faculty			
1.	Certificate of Appreciation for mentoring project submitted to Texas Instruments Innovation Challenge India Design Contest.	Shruti Jain	2015
2.	Best Paper Award in SARC-IRF International Conference, New Delhi, India.	Meenakshi Sood	12th April-2014,
Doctoral / Post-doctoral fellows			
	Nil		

Students			
1.	IEEE- Excellence in Branch Counselling	Student branch JP University	2012
2.	IEEE Best volunteers	Dilpreet Singh Anushka Gupta	2016
3.	TEXAS Innovation Challenge Contest	Astha, Rohit Kumar, Saumaya	2015

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

S. No.	Title	Year	Source of Funding	Outstanding Participants
Seminars				
	Nil			
Conferences				
1.	2015 IEEE International Conference on "Signal Processing, Computing and Control" (ISPCC 2015)	September 24-26, 2015	Jaypee University of Information Technology, IEEE	Prof. Ved Prakash Sandlas: ISRO & DRDO Prof. Laxmidhar Behera, IIT Kanpur Prof. Satyabrata Jit, IIT BHU
2.	IEEE International Conference on "Signal Processing, Computing and Control" (ISPCC 2013)	26-28 Sep 2013	Jaypee University of Information Technology, IEEE	Prof. Surendra Prasad, IIT Delhi Prof. Rajendar Bahl, IIT Delhi Prof. Andrea Conti, University of Ferrara, Italy
3.	IEEE International Conference on "Signal Processing, Computing and Control" (ISPCC 2012)	15-17 March 2012	Jaypee University of Information Technology, IEEE	Prof. C. Sidney Burrus, Rice University Prof. Arun Kumar, IIT Delhi Prof. Shubhalaxmi Kher, Arkansas State University
Workshops				
1.	Faculty development program On Signal Processing and its Applications	13 –18 January, 2016	Jaypee University of Information Technology	Prof. S. D. Joshi, IIT Delhi Prof. Omar Farooq, AMU Aligarh
2.	Technical Manuscript preparation with LaTeX	29 November, 2015	Jaypee University of Information Technology	Prof. T. S. Lamba, Prof. Sunil Bhooshan, Prof. Ghanshyam Singh, Dr. Rakesh Bajaj, Mr. Mohd. Wajid, Mr. Narendra.
3.	Design and Implementation of Logics using FPGA.	November 16-23, 2015.	Jaypee University of Information Technology	Mr. Mohd. Wajid
4.	VLSI Design using Verilog HDL & FPGA	April 14th 2015.		core EL Technology Pvt Ltd.
5.	Simulation capabilities of COMSOL Multiphysics	May 30th 2014		Mr. Akhil Ranjan
6.	VoIP	April	Jaypee University	Mr. Mohammed Wajid

		14th to April 18th 2014	of Information Technology	
7.	LabView for Real time application	April 24, 2014		Experts from NI
8	MATLAB in Engineering Education	November 11-16, 2013	Jaypee University of Information Technology	Dr Tapan Jain

31. Code of ethics for research followed by the departments

The department strictly adheres to plagiarism policy; there should be no copying of idea, material and written material. The research work should be innovative and original. Papers have to be properly peer reviewed.

32. Student profile programme-wise:

Year / Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG					
2012-2013		87	33	88.5	90.9
2013-2014		70	29	-	-
2014-2015		74	19	-	-
2015-2016		71	31	-	-
PG					
2012-2013		6	5		
2013-2014		7	7		
2014-2015		5	5		
2015-2016		3	13	-	-
Ph. D.					
2012-2013		1	3	-	-
2013-2014		3	1	-	-
2014-2015		0	1	-	-
2015-2016		2	0	-	-

33. Diversity of students:

Year / Name of the Programme	% 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.	0	80	20	0
Ph.D.	40	--	60	0

The data on diversity is also listed in the main report.

34. How many students have cleared Civil Services and Defence Services examinations, NET,

SET, GATE and other competitive examinations? Give details category-wise.

Examination	2011	2012	2013	2014	2015
Civil Services	--	--	01	--	--
Defence Service	--	--	02	02	--
NET	--	--	--	--	--
SET	--	--	--	--	--
GATE	--	09	11	10	12
Other	--	--	--	--	--

35. Student progression

Student progression	Percentage against enrolled
UG to PG	15-20
PG to M.Phil.	--
PG to Ph.D.	33
Ph.D. to Post-Doctoral	25
Employed	--
• Campus selection	70-80
• Other than campus recruitment	5-10
Entrepreneurs	--

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	47 (Ph.D) 12 (M.Tech)
from other universities within the State	0 (Ph.D) 6 (M.Tech)
from universities from other States from	24 (Ph.D) 28 (M.Tech)
universities outside the country	6 (Ph.D)

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

	Post Doctorate	Ph.D.	M. Tech
2011	--	02	--
2012	01	03	02
2013	01	05	--
2014	--	01	--
2015	--	01	--
2016	--	02	--

38. Present details of departmental infrastructural facilities with regard to

- a) Library: University Library, Learning Resource Centre (LRC), Caters to all Departments. The

Departments and the library are housed in Academic Block.

b) Internet facilities for staff and students

All the faculty rooms in the campus have personal computers with LAN based internet access. Internet access across the campus is managed and secured through cyberoam and provided through fiber and Wi-Fi., with 1Gbps network speed. The network is available 24 Hours/Day × 7 Days/Week.

c) Total number of class rooms 19 (Shared with other Departments)

<i>Type of Room</i>	<i>Number</i>	<i>Minimum Capacity of each</i>
Lecture Theatres	3	240
Class Rooms	8	84
Tutorial Rooms	7	35
Group discussion Rooms	1	35

d) Class rooms with ICT facility

All the classrooms, laboratories have personal computers with LAN based internet access. Internet access across the campus is managed and secured through Cyberoam and provided through fiber and Wi-Fi., with 1Gbps network speed. In library, points are provided for connecting students' laptops to local area networks (LANs). The network is available 24 Hours/Day × 7 Days/Week. The classrooms are provided with white boards, projectors and screen.

e) Students' laboratories

Department has fully equipped six labs as indicated in the table below:

Laboratory support for the lecture courses are provided by the following well equipped laboratories to the department. All the laboratories are equipped with state-of-the-art instruments and software tools to enable the students to perform design oriented experiments and test their designs.

The infrastructure and lab facilities are upgraded from time to time and provide adequate opportunities for students and researchers to learn and innovate. The various software(s) available in the department are MATLAB, LABVIEW, PSPICE, CST Microwave Studio, XILINX, and ORCAD.

Sr. no.	Laboratory
1	ECE Lab 1 (Basic Electronics lab)
2	ECE Lab 2 (Electrical and Electronics lab)
3	ECE Lab 3 (Digital And Analog Electronics Lab)
4	ECE Lab4 (EMFT Lab)
5	ECE Lab 5 (Communication Lab)
6	ECE Lab 6 (Research Lab)
7	CL Lab 1 (Project Lab)

f) Research laboratories

Sr. no.	Laboratory	Equipments
1	ECE Lab 6 (Research Lab)	PSPICE, ORCAD, ORACLE, Control System kits, Power Electronics lab, Telecommunication kit

2	CL Lab 1 (Project Lab)	MATLAB, LABVIEW, LABVIEW H/W, XILINX, PSPICE, JAVA, ORACLE
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39. List of doctoral, post-doctoral students and Research Associates

a) from the host institution/university

S. No.	Name of Student	Doctoral/Post Associate	Doc/Research	Supervisor
1	Salman Raju	Doctoral		Prof. Sunil Bhooshan
2	Keerti Tiwari	Doctoral		Prof. Sunil Bhooshan
3	Prabhat Thakur	Doctoral		Prof. Ghanshyam Singh
4	Alok Kumar	Doctoral		Prof. Ghanshyam Singh

b) from other institutions/universities

S. No.	Name of Student	Doctoral/Post, Associate	Doc/Research	Supervisor
1	Isha Verma	Doctoral		Prof. Ghanshyam Singh
2	Pallavi Joshi	Doctoral		Prof Sunil Bhooshan
3.	Ratinder Kumar	Doctoral		Dr Shruti Jain

c) List of faculty who have completed doctorate from the department

Shruti Jain, Kumud Ranjan Jha, Vivek Kumar Dwivedi, Viranjay Mohan Srivastava, Bhasker Gupta, S. V. R. Kondala Rao, Vipin Balyan, Neeru Sharma, Alok Joshi, Meenakshi Sood, Shweta Pandit, Tapan Kumar Jain

40. Number of post graduate students getting financial assistance from the university.

S. No.	Name of Student	Roll No.
1	Ankur Thakur	142001
2	Sahil Bhusri	142003
3.	Maneesh Kumar	152001
4	Neelam Gupta	152002
5	Keerti Tiwari	136001

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

No

42. Does the department obtain feedback from

i. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Vision and Mission of the Department are taken as a basis, and graduate attributes defined by NBA are also kept in view while designing the curriculum.

Feedback is obtained from faculties on the curriculum on a regular basis and discussed in departmental curriculum committee.

Suitable suggestions and feedbacks are implemented for refinement after putting it to BoS.

ii. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Student feedback is obtained for every course offered in a semester.

The Student feedback results are made available to the individual faculty member for his feedback. This feedback is generally for self-improvement of the faculty.

An exit survey is also conducted for outgoing students who provide the feedback covering many aspects of teaching-learning, curriculum, program objectives, program outcomes.

- iii. alumni and employers on the programmes offered and how does the department utilize the feedback?

After the students pass out from University, they are in a better position to provide more valuable and objective feedback for the undergraduate program. An alumni survey is conducted annually and their feedback is being processed by (Program Evaluation Committee) PEC and will be used for evaluating and modifying, if required, in the program to achieve the program educational objectives and program outcomes.

43. List the distinguished alumni of the department (maximum 10)

Abhineet Dhillon (Batch: 2012) [UPSC Civil Services]

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

Name of the external experts	Affiliation	Topic	Date
SPECIAL LECTURES			
Daman Dev Sood	CIO & Head Sustainability Practice, Continuity and Resilience, IEEE Ambassador,	Energy Management Systems	18 th August 2012 at JUIT Waknaghat
C. Sidney Burrus	Electrical Engineering and Computer Science Department at MIT.	Novel techniques in signal processing	March 15-17, 2012
Shubhalaxmi Kher	Arkansas State University.	Wireless Sensor Networks	March 15-17, 2012
Arun Kumar	Indian Institute of Technology, Delhi	Speech Processing	March 15-17, 2012
Prof John Shrogan,	Head of DSP Algorithms & Architectures Group & Texas Instruments, University of Strathclyde, Glasgow.	The Road to a World of Applied Researchers	26-28 Sep 2013
Prof Andrea Conti	University of Ferrara, Italy & MIT, USA	Network Localization	26-28 Sep 2013
Prof Surinder Prasad	Former Director IITD	Wired Access Technologies of Future: Turning Copper to Gold	26-28 Sep 2013
Prof Rajinder Bahl	IITD	Bio-Acoustics: Application of Passive Acoustic Monitoring Techniques for Observation of Marine Mammals	26-28 Sep 2013
Miroslav Skoric	IEEE Section, Austria, NIAR	Amateur Radio	26-28 Sep 2013

		Communications, Software and Computer Networks in Education	
Prof.(Dr.) Ved Prakash Sandlas	DRDO	Satellite Communications-Past, Present and Future	24-26 Sep 2015
Prof. (Dr.) Shankar Prakriya,	IIT Delhi		24-26 Sep 2015
Prof.(Dr.) S. S. Pathak,	IIT Kharagpur	Routing And Wavelength Assignment	25 Sep 2015
Prof. Satyabrata Jit	Professor, Electronics Engineering, Indian Institute of Technology, BHU, Varanasi.	Terahertz Technology	24-26 Sep 2015
Prof. Laxmidhar Behera	Dept. of Electrical Engineering, IIT Kanpur	Vision Based Robotic Systems: Control, Navigation and Formation	24-26 Sep 2015
WORKSHOPS / SEMINARS			
Year	Details		
2015-2016	<ul style="list-style-type: none"> • Faculty Development Programme on “Signal Processing and its Applications” (13th Jan-2016 – 18th Jan-2016) • One Day Workshop on Technical Manuscript Preparation with Latex 29 November 2015. • One Week Workshop Workshop on Design and Implementation of Logics using FPGA (16th – 23rd Nov, 2015) 		
2014-2015	<ul style="list-style-type: none"> ▪ Workshop on “VLSI Design using Verilog HDL & FPGA”, in LT3 on April 14th 2015. ▪ “Simulation capabilities of COMSOL Multiphysics”, on May 30th 2014, at JUIT, Solan. ▪ One day training on “FPGA Kit”, May 21, 2014 at Jaypee University of Information Technology, Himachal Pradesh, India. ▪ One day workshop on “LabView for Real time application” , April 24, 2014 at Jaypee University of Information Technology, Himachal Pradesh, India. ▪ 5 days VoIP workshop” from April 14th to April 18th 2014, at JUIT, Solan. 		
2013-2014	<ul style="list-style-type: none"> • Six day workshop on “MATLAB in Engineering Education”, November 11-16, 2013 at Jaypee University of Information Technology, Himachal Pradesh, India 		

45. List the teaching methods adopted by the faculty for different programmes.

Lecture Method: Teaching through lectures by using black board as well as over head projectors,

Computer assisted learning: Power point presentations

Project based learning: Analyzing, designing, implementing and documenting skills of the students are improved by assigning mini-projects.

Quizzes are conducted and assignments are given.

Experimental Learning: The students are given practical exposure through lab experiments.

Seminars: The students are encouraged to take technical seminars/ presentations which improve the presentation skills of the students.

All the class rooms are fixed with projectors and audio systems for conducting presentation sessions. Internet connection is provided in every class to enable presentation of online information

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

The department ensures that programme objectives are met through lectures, tutorials, quizzes, assignments, seminars and live projects.

The lab courses ensure that students have hands on exercises to practice and substantiate the topics covered in the lectures. The laboratory exercises help the students understand and appreciate the challenges involved in practical implementations. The tutorials emphasize on the use of mathematical and analytical tools to solve the problems related to the course.

The department ensures that program objectives are justified satisfactorily through

- (Exit Survey) Feedback survey from graduating students
- Percentage and quality placements of students
- Feedback survey from Alumni
- Involvement of students in various projects and their contribution in conferences, workshops.

47. Highlight the participation of students and faculty in extension activities.

For over all development of the students' personality, the University motivates them to participate in the following university and departmental activities.

(A) Blood camp (B) Nukkad natak/ Environment club (C) Waste Management (D) Tree plantation

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

Department has technical club “Technovatorz” which organises technical events for the students.

Department has got IEEE society which is very active and organises students related workshops/seminars regularly.

Add-on programs are conducted by the department as Seminars and workshops are arranged to improve the technical skills of the students

Students of department participate actively in various technical events of University IEEE, Tech fest, training programmes, Ted-X.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

Granted accreditation for 5 years by NBA for the period (2009-14)

Granted provisional accreditation by NBA for two years for the period 2014-16

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

Department organizes International Conferences, workshops and expert lectures to enhance research acumen of the students. Research scholars work in diversified areas of Electronics and Communication Engineering, publishing a large number of research papers in various indexed journals. Thrust is given on generating knowledge base in all the areas.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

- i. Well qualified, enthusiastic and competent faculty.
- ii. Well developed labs with modern software.
- iii. Excellent infrastructure.
- iv. Members actively engaged in research and are contributing in National & International Journals of high repute having good index factor.
- v. Implementation of academic and non academic reforms from time to time.

Weaknesses

- i. No consultancy
- ii. Little IPR
- iii. Few funded projects
- iv. Weak department-industry collaboration.
- v. MoU with industries

Opportunities

- i. Financial autonomy
- ii. Autonomy in curriculum development
- iii. Ease of organizing international conferences/ workshops/ seminars.
- iv. Encourages Research
- v. Facility of Shodh Kosh

Challenges

- i. Industry interaction
- ii. Location disadvantage
- iii. Interaction with outside world
- iv. Keeping pace with the rapid changes in higher education
- v. Getting qualified and experienced faculty

52. Future plans of the department.

- i. Centre of excellence
- ii. To have more regular PhD students in the department
- iii. Collaboration with industry

B5. Evaluative Report of Department of Computer Science and Engineering and Information Technology

1. **Name of the Department:** Computer Science & Engineering and Information Technology
2. **Year of establishment:**2002
3. **Is the Department part of a School/Faculty of the university?**
As such we do not have any school/faculty. But all departments are part of the university.
4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)**

B.Tech., in Computer Science & Engineering	Undergraduate programs
B.Tech., in Information Technology	
M.Tech., in Computer Science & Engineering	Post Graduate programs
M.Tech., in Software System Security (CSE)	
Ph.D., in Computer Science and Engineering	Research program

5. **Interdisciplinary programmes and departments involved**
Nil
6. **Courses in collaboration with other universities, industries, foreign institutions, etc.**
Few students do one semester, i.e. semester 8 of B.Tech. CSE and B. Tech. IT Degree programmes at the University of Florida, International Center, Gainesville, Florida, USA. The University has signed a MOU with University of Florida.
7. **Details of programmes discontinued, if any, with reasons**
Dual Degree B. Tech.- M.Tech Programme; As per notification of UGC.
8. **Examination System: Annual/Semester/Trimester/Choice Based Credit System**
Semester
9. **Participation of the department in the courses offered by other departments**

Department Name	Courses
Electronics and Communication Engineering	10B11CI111-Introduction to Computers and Programming in C 10B17CI171-Computer Programming Lab. 10B11CI211-Data Structures 10B17CI271-Data Structures & Computer Programming Lab. 10B11CI614-Object Oriented Systems and Programming 10B17CI674-Object Oriented Systems & Programming Lab 1011CI401- Microprocessors and Controllers 10B17CI407- Microprocessors and Controllers Lab 10B17CI307 -Unix Programming Lab 10B28CI408-Multimedia Development Lab
Civil Engineering	10B11CI111-Introduction to Computers and Programming in C 10B17CI171-Computer Programming Lab.

Biotechnology Bioinformatics	10B11CI111-Introduction to Computers and Programming in C 10B17CI171-Computer Programming Lab. 10B11CI211-Data Structures 10B17CI271-Data Structures & Computer Programming Lab. 10B11CI411-Fundamentals of Algorithms 10B17CI471-Algorithm Lab 13B21CI121-Introduction to Computer and Basic Programming 13B18CI281-Basic Computer programming lab.
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10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

Positions	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	4	1	1
Associate Professors	8	2	2
Asst. Professors	24	19	19
Others Teaching Assistants	0	0	0

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

Name	Qualification	Designation	Specialization	Experience (in Years)	No of Ph.D./M.Tech. students guided for the last 4 years
S.P. Ghreera	PhD	Professor & HOD	Computer and Network Security, Image Security, Integration of Computer Networks and Communication Systems	44	Awarded=00/06 Ongoing=10
Vivek Sehgal	PhD	Associate Professor	Embedded Systems, Advanced Computer Architecture, Networks on Chip (NoC), MEMS (Power Generating IP in SoC), On Chip Instrumentation. 3D Networks-on-Chip	14	Awarded =01/05 Ongoing =08
Yashwant Singh	PhD	Associate Professor	WSN: Clustering, Routing and Security Software Engineering	10	Awarded =00/04 Ongoing =06
Ravindara Bhatt	PhD	Assistant Professor	WMSN, VANET, IOT, Computer Networks	19	Awarded =00/02 Ongoing = 00/00
Hemraj Saini	PhD	Assistant Professor	Network Security, Wireless Mesh Networks, Networks protocols, Cell Planning	16	Awarded =00/04 Ongoing =07
Rajni Mohana	PhD	Assistant Professor	Cloud Computing , Natural language Processing	12	Awarded =00/01 Ongoing =06
Sakshi Babbar	PhD	Assistant Professor	Computer Networks	3	Awarded =00/00 Ongoing = 00/00

Pardeep Kumar	PhD	Assistant Professor	Machine Learning, KDD and Big Data Analytics	9	Awarded =00/05 Ongoing =03
Pradeep Kumar Singh	PhD	Assistant Professor	Software Engineering, Watermarking, IOT, Networking, Mining Techniques	9	Awarded =00/01 Ongoing =02
Pradeep Kumar Gupta	PhD	Assistant Professor	Computer Systems and Networks Cloud Computing, Storage Networks, Software Defined Networking, Wireless Sensor Networks, Network Protocols, Mobile Ad-hoc Networks.	14	Awarded =00/12 Ongoing =01
Shailender Shukla	PhD	Assistant Professor	IoT, Network Security, ICNs	3	Awarded =00/03 Ongoing =03
Amit Kumar Singh	PhD	Assistant Professor	Multimedia Security, Data Hiding	09	Awarded =00/04 Ongoing =03
Amol Vasudeva	M. Tech.	Assistant Professor	Security and Localization in Mobile Ad hoc Network and Sensor Network	15	Awarded =00/03 Ongoing =00/00
Suman saha	M. Tech.	Assistant Professor	Network science	12	Awarded =00/15 Ongoing =00/00
Ramanpreet kaur	M. Tech.	Assistant Professor	Information Security	5	Awarded =00/00 Ongoing =00/00
Ruchi Verma	M. Tech.	Assistant Professor	Social Media and Networking	10	Awarded =00/00 Ongoing =00/00
Arvind Kumar	M. Tech.	Assistant Professor	IoT, Network Security	7	Awarded =00/01 Ongoing =00/00
Punit Gupta	M. Tech.	Assistant Professor	Computer Systems and Networks, Cloud Computing, Software Defined Networking, Wireless Sensor Networks, Grid Computing, Ubiquitous Computing, Embedded systems, Internet of things.	4	Awarded =00/00 Ongoing =00/00
Sanjana Singh	M. Tech.	Assistant Professor	Natural Language Processing and Text Analysis	3	Awarded =00/00 Ongoing =00/00
Ruhi Mahajan	M.Tech	Assistant Professor	Natural Language Processing, Computer Networks	3	Awarded =00/00 Ongoing =00/00
Nishtha Ahuja	M. Tech.	Assistant Professor	Mobile Computing	2	Awarded =00/00 Ongoing =00/00
Annie Singla	M. Tech.	Assistant Professor	Computer networks & security	1	Awarded =00/00 Ongoing =00/00

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

Nil

13. Percentage of classes taken by temporary faculty – programme-wise information

Nil

14. Programme-wise Student Teacher Ratio

UG: 22:1 (CSE-IT)

PG: 18:1

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

Support Staff	Sanctioned	Filled	Actual
Technical Staff	9	9	9
Administrative Staff	Central pool shared by all departments.		

16. Research thrust areas as recognized by major funding agencies

Interconnection Networks

- Security and Privacy
- Social Networks
- Human Centered Computing
- Image Information Processing
- Wireless Sensor Networks

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 Funding Agencies :

S. No.	Investigator(s)	Funding Agency	Project title	Duration	Grant in Lakh
ONGOING					
1	Pradeep Kumar Singh	State Council for Science, Technology & Environment (SCSTE), HP	Early Forest Fire Detection System Using the Wireless Sensors and IOT for HP Mountains	2016-2018	6.17
COMPLETED					
Nil					
Total=					6.17

b) International Funding agencies: Nil

c) Total Grants received: 6.17 Lakh

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: Nil
- national recognition: Nil
- international recognition: Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies

- a) Parallel and Distributed Computing Lab.: CUDA Teaching Centre, NVIDIA Corporation, 2701 San Tomas Expressway Santa Clara, CA.
- b) IOT Research lab, Intel Galileo University program, Intel Corporation.

22. Publications:

	2011	2012	2013	2014	2015
Number of papers published*	9	13	27	20	24
	national / international: 00/93				
Monographs	00	00	00	00	00
Chapters in Books	00	00	00	01	06
Edited Books	01	01	01	01	01
Books with ISBN with details of publishers	00	00	00	00	00
Number listed in International Database**	10	14	28	22	31
Citation Index – range / average	33	48	68	114	176
SNIP	0.85	3.9	6.5	13.6	14.9
SJR	0	1.8	2	3.7	5
Impact Factor – range / average	0.1	1.35	1.65	2	3.4
h-index	0.14	0.19	0.42	4	4.3
* in peer reviewed journals					
**For e.g., Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.					

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

- a) Dr Nitin: College of Information Science and Technology, The Peter Kiewit Institute,

University of Nebraska at Omaha, USA, 2011.

b) Prof. Deepak Dahiya: Visiting Researcher to RMIT University, Australia, 2014.

c) Dr. Pradeep Kumar Gupta: Post Doctoral fellow University of Pretoria South Africa, 2015.

26. Faculty serving in

a) National committees: Nil

b) International committees: Nil

c) Editorial Boards:

S. No.	Name	
1	Prof. (Dr.) Satya Prakash Ghrera	<ul style="list-style-type: none"> Member of Editorial Board for Special Issue on “Recent Developments in Parallel, Distributed and Grid Computing for Big Data” in International Journal of Grid and Utility Computing, Inderscience. Member of Editorial Board for Special Issue on “Advanced Techniques in Multimedia Watermarking” in International Journal of Information and Computer Security, Inderscience.
3	Dr. Amit Kumar Singh	<ul style="list-style-type: none"> Member of Editorial Board for Special Issue on “Recent Developments in Parallel, Distributed and Grid Computing for Big Data” in International Journal of Grid and Utility Computing, Inderscience. Member of Editorial Board for Special Issue on “Advanced Techniques in Multimedia Watermarking” in International Journal of Information and Computer Security, Inderscience. Member of Editorial Board for Special Issue on “Recent Developments in Multimedia Watermarking using Machine Learning” in Journal of Intelligent Systems, De Gruyter.
4	Dr. Hemraj Saini	<ul style="list-style-type: none"> Member of Editorial Board for “COMPUSOFT-International Journal of Advanced Computer Technology (IJACT)”, UK, 6th Nov. 2012 to till date. Member of Editorial Board for “Journal of Advances in Networks” a part of Science Publishing Group, USA, 14th Dec. 2012 to till date. Member of Editorial Board for International Journal of Computer Networks and Communications Security (IJCNCS)”, Dubai, United Arab Emirates, 26th June 2013 to till date. Visit: http://www.ijcnscs.org/editorial.php Editorial Members of American Journal of Networks and Communications, 10th January, 2015 to till now. International Editorial Board Member for “International Journal of Advancements in Mechanical and Aeronautical Engineering” 113, Barksdale Professional CTR, Newark, New Castle County, DE, United States of America. Member of Editorial & Advisory Board of Journal of Theoretical and Applied Information Technology (JATIT). Visit: http://www.jatit.org/Editorial_Board.php
5	Dr. Pardeep Kumar	<ul style="list-style-type: none"> Member of Editorial Board for Special Issue on “Recent Developments in Parallel, Distributed and Grid Computing for Big Data” in International Journal of Grid and Utility Computing, Inderscience. Member of Editorial Board for Special Issue on “Advanced Techniques in Multimedia Watermarking” in International Journal of Information

		and Computer Security, Inderscience.
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d) any other (please specify)

None

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

S. No.	Name of Faculty	Name of program/s	Venue	Dates
1	S. P. Ghrera, Vivek Sehgal, Yashwant Singh, Ravindara Bhatt, Hemraj Saini, Rajni Mohana, Pardeep Kumar, Amit Kumar Singh, Suman saha, Ramanpreet kaur, Ruchi Verma, Arvind Kumar, Amol Vasudeva	2011 IEEE International Conference on Image Information Processing (ICIIP -2011)	JUIT, Waknaghat	3-5 Nov, 2011
2	S. P. Ghrera, Vivek Sehgal, Yashwant Singh, Ravindara Bhatt, Hemraj Saini, Rajni Mohana, Pardeep Kumar, Amit Kumar Singh	Five days workshop in Wireless Sensor Networks as part of Indo-US Engineering Faculty Leadership Institute.	JUIT, Waknaghat	5-9 July, 2011
3	Dr. Amit Kumar Singh	Course work on "Data Mining and Parallel Computing"	Jointly organized by JUIT, Waknaghat and University of Florida	2-5 Aug, 2011
4	Amol Vasudeva	One day national workshop on Network Simulator - NS2 organized by Department of Computer Engineering & Applications, GLA University.	GLA University, Mathura, India.	2 nd March, 2012
5	S. P. Ghrera, Vivek Sehgal, Yashwant Singh, Ravindara Bhatt, Hemraj Saini, Rajni Mohana, Sakshi Babbar, Pardeep Kumar, Amit Kumar Singh, Suman saha, Ramanpreet kaur, Ruchi Verma, Arvind Kumar, Amol Vasudev	International Conference on Parallel, Distributed and Grid Computing	JUIT, Waknaghat	6-8 Dec, 2012,
6	Dr. Hemraj Saini	1 st Bi-Annual Conference of Jharkhand Society of Mathematical Sciences	Ranchi University; Academic Staff College, Ranchi University, Morabadi Campus, Ranchi.	22-23 Nov, 2012
7	Dr. Hemraj Saini	Conference on Recent	Vinoba Bhawe	21-22

		Trends in Mathematics and their Applications	University; Vinoba Bhave University, Hazaribagh, Jharkhand	Dec, 2012
8	Amol Vasudeva	Two days workshop on Wireless Networks and Network Simulator (WNNS-2012)	JUIT, Wagnaghat.	09-10 July, 2012
9	Ramanpreet Kaur, Komal Mahajan, Ansuyia Makroo, Rajesh Siddavatam, Arvind Kumar, Kapil Dev, Rahul Dwivedi, Rajni Mohna, Deepak Dahiya, Pooja Jain, Pardeep, Suman Saha, Ravi Kant Verma, Amit Kumar Singh, Pradeep Kumar Gupta, Yashwant Singh, Nitin, Amol Vasudeva, Shipra Sharma, S.P. Ghrera, Ravindara Bhatt, Nitin Rakesh, Ravinder Ahuja	Workshop on Wireless Networks and Network Simulator (WNNS-2012)	JUIT, Wagnaghat.	09-10 July, 2012
10	Ramanpreet Kaur, Komal Mahajan, Ansuyia Makroo, Rajesh Siddavatam, Arvind Kumar, Kapil Dev, Rahul Dwivedi, Rajni Mohna, Deepak Dahiya, Pooja Jain, Pardeep, Suman Saha, Ravi Kant Verma, Amit Kumar Singh, Pradeep Kumar Gupta, Yashwant Singh, Nitin, Amol Vasudeva, Shipra Sharma, S.P. Ghrera, Ravindara Bhatt, Nitin Rakesh, Ravinder Ahuja	Workshop on “Antenna Materials”	JUIT, Wagnaghat.	14-15 Dec, 2012
11	Arvind Kumar	Contemporary Developments in Mathematical Sciences and Computing	Galgotias University, Gr. Noida	02-03 Feb, 2013
12	Dr. Hemraj Saini	FDP on Intelligent Transportation System	C-DAC, Govt. of India, Trivandrum.	27 May - 05 June, 2013
13	S.P. Ghrera, Vivek Sehgal, Yashwant Singh, Ravindara Bhatt, Hemraj Saini, Rajni Mohana, Pardeep Kumar, Pradeep Kumar Gupta, Amit Kumar Singh, Amol Vasudeva, Suman saha, Ramanpreet Kaur, Ruchi Verma, Arvind Kumar, Sanjana Singh, Arvind Kumar	2013 Third International Conference on Image Information Processing (ICIIP -2013)	JUIT, Wagnaghat	9-11 Dec, 2013
14	Dr. Hemraj Saini	2013 IEEE International Conference on Information Systems & Computer Networks (ISCON)	GLA University, Mathura	9-10 Mar, 2013

15	Arvind Kumar	International Workshop on Machine Learning and Text Analytics	South Asian University, New Delhi	15-24 Dec, 2013
16	Dr. Hemraj Saini	SCIENCE CAMP (under INSPIRE Internship by DST, Govt. of India)	DST, Govt. of India; Alwar Institute of Engineering & Technology, MIA, Alwar, Rajasthan	05-09 Aug, 2013
17	Yashwant Singh, Hemraj Saini	Computer Network, National Mission on Education through ICT (MHRD, Govt. of India) by IIT, Mumbai	LRIET, Solan	30 Jun-5 Jul, 2014
18	S. P. Ghrera, Vivek Sehgal, Yashwant Singh, Ravindara Bhatt, Hemraj Saini, Rajni Mohana, Sakshi Babbar, Pardeep Kumar, Pradeep Kumar Singh, Shailender Shukla, Amit Kumar Singh, Amol Vasudeva, Suman saha, Ramanpreet kaur, Ruchi Verma, Arvind Kumar, Sanjana Singh, Nishtha Ahuja, Pooja Jain, Nitin, D. Dhaiya, Dr. Hemraj Saini, Punit Gupta	International Conference on Parallel, Distributed and Grid Computing	JUIT, Wagnaghat	01-11 Dec, 2014
19	Dr. Hemraj Saini	4th IEEE International Advance Computing Conference (IEEE IACC-2014)	ITM University, Gurgaon,	21-22 Feb, 2014
20	Dr. Hemraj Saini	IEEE International Conference On Recent Advances and Innovations in Engineering (ICRAIE-2014)	Poornima University, Jaipur	09-11 May, 2014
21	S. P. Ghrera, Vivek Sehgal, Yashwant Singh, Ravindara Bhatt, Hemraj Saini, Rajni Mohana, Sakshi Babbar, Pardeep Kumar, Pradeep Kumar Singh, Shailender Shukla, Amit Kumar Singh, Amol Vasudeva, Suman saha, Ramanpreet Kaur, Ruchi Verma, Arvind Kumar, Sanjana Singh, Nishtha Ahuja, Pooja Jain, Nitin, D. Dhaiya, Dr. Hemraj Saini, Punit Gupta	Excellence in Teaching, Research & Education - by Design	JUIT, Wagnaghat	July 2014
22	S. P. Ghrera, Vivek Sehgal, Yashwant Singh, Ravindara Bhatt, Hemraj Saini, Rajni Mohana, Sakshi Babbar, Pardeep Kumar, Pradeep Kumar Singh, Shailender Shukla, Amit Kumar Singh,	2015 Third International Conference on Image Information Processing (ICIIP -2015)	JUIT, Wagnaghat	21-24 Dec, 2015

	Amol Vasudeva, Suman Saha, Ramanpreet Kaur, Ruchi Verma, Arvind Kumar, Sanjana Singh, Nishtha Ahuja, Pooja Jain, Nitin, D. Dhaiya, Dr. Hemraj Saini, Punit Gupta, Ruhi Mahajan Nishtha Ahuja, Annie Singla			
23	Sanjana Singh	12 th IEEE India International conference INDICON 2015	Delhi	17-20 Dec, 2015
24	Hemraj Saini, Punit Gupta	Building Your Own Smart Phone	NITTTR, Chandigarh	16-20 May, 2015
25	Rajni Mohana	Bid Data analytics	NITTTR, Chandigarh	15-19 Feb, 2015
26	S. P. Ghrrera, Vivek Sehgal, Yashwant Singh, Ravindara Bhatt, Hemraj Saini, Rajni Mohana, Sakshi Babbar, Pardeep Kumar, Pradeep Kumar Singh, Shailender Shukla, Amit Kumar Singh, Amol Vasudeva, Suman saha, Ramanpreet Kaur, Ruchi Verma, Arvind Kumar, Sanjana Singh, Nishtha Ahuja, Pooja Jain, Nitin, D. Dhaiya, Dr. Hemraj Saini, Punit Gupta, Ruhi Mahajan, Nishtha Ahuja, Annie Singla	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT, Wagnaghat	24-30 Dec 2015
27	Rajni Mohana, Sanjana Singh, Nishtha Ahuja, Hemraj Saini, Rajni Mohana, Punit Gupta	Signal Processing and its Applications	JUIT, Wagnaghat	13 –18 Jan, 2015
28	Sanjana Singh	High Performance and High Strength Concrete: Principles, Development and Applications	JUIT Wagnaghat	16 –17 Mar, 2015

28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects

S No.	Year	Percentage
1	2011-12	100
2	2012-13	77
3	2013-14	53
4	2014-15	77
5	2015-16	70

- percentage of students doing projects in collaboration with other universities industry/institute

S No.	Year	Percentage
1	2011-12	0
2	2012-13	23
3	2013-14	47

4	2014-15	23
5	2015-16	30

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

S. No.	Award	Name of Recipient	Year
Faculty			
1	Fellow of British Computer Society (FBCS)	Prof. (Dr) S.P. Ghrera	2012
2	Senior Member of IEEE (SMIEEE)	Prof. (Dr) S.P. Ghrera	2013
Doctoral / Post doctoral fellows			
1	Post Doctoral Fellow at University Of Nebraska at Omaha	Dr. Nitin	2012-2013
2	Post Doctoral Fellow at University of Pretoria, South Africa	Dr. Pradeep Kumar Gupta	2014-2016
Students			
Nil			

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

S. No.	Title	Year	Source of Funding	Outstanding Participants
Seminars				
Nil				
Conferences				
1	International Conference on Parallel Distributed and Grid Computing (PGDC-2010)	2010	JUIT, DST , DRDO and Deity	<p>Prof. Yale Patt Professor of Electrical and Computer Engineering, and Ernest Cockrell, Jr. Centennial Chair in Engineering The University of Texas at Austin USA</p> <p>Prof. Christian Scheideler Professor of Computer Science, and Director of the Research Group "Theory of Distributed Systems" Universität Paderborn Germany</p> <p>Prof. Rajkumar Buyya Director of CLOUDS Lab, The University of Melbourne, and CEO, Manjrasoft Pvt Ltd, Melbourne Australia</p> <p>Prof. Dietmar Tutsch Chair of Automation and Computer Science University of Wuppertal Germany</p>
2	International Conference on Image Information Processing	2011	JUIT	<p>Prof. Ioannis Pitas Fellow IEEE, University of Thessaloniki, GREECE</p> <p>Prof. Amitabh Varshney, Fellow</p>

	(ICIIP-2011)			<p>IEEE, University of Maryland, USA Prof. Andres Bruhn, Saarland University, Saarbruecken, GERMANY Prof. Gaurav Sharma, Sr. Member IEEE, University of Rochester, USA Prof. R.K.Mittal, Director, BITS Pilani, DUBAI Dr. Tinku Acharya, Fellow IEEE, Founder, Videonetics Technology, INDIA Prof. B.B. Chaudhuri, Fellow IEEE, Indian Statistical Institute, Kolkata, INDIA Prof. K.K.Biswas, IIT Delhi, INDIA Dr. D. Datta, BARC Mumbai, INDIA</p>
3	International Conference on Parallel Distributed and Grid Computing (PGDC-2012)	2012	JUIT	<p>Prof. Ivan Stojmenovic Fellow IEEE, SITE, University of Ottawa Prof. Peter Widmayer ETH Zürich Institut f. Theoretische Informatik Universitätstrasse 6 8092 Zürich Switzerland Prof. Assaf Schuster Department of Computer Science Technion - Israel Institute of Technology Technion City, Haifa 32000, Israel Prof. Nikil Dutt, Fellow IEEE and ACM Distinguished Scientist Chancellor's Professor Department of Computer Science, Zot Code 3435 Donald Bren School of Information and Computer Sciences University of California, Irvine Irvine, CA 92697-3435, USA Prof. Eliezer Dekel STSM, Manager, Distributed Middleware IBM Haifa Research Lab, Haifa, Israel Prof. Sanjay Ranka Fellow IEEE and AAAS E 301 CSE Bldg, Dept of CISE, University of Florida, Gainesville, FL 32611, USA</p>
4	International Conference on Image	2013	JUIT	<p>Prof. Theo Gevers , University of Amsterdam, The</p>

	Information Processing (ICIIP-2013)			Netherlands Prof.. Bob Fisher , University of Edinburgh, Edinburgh, UK Prof. David W. Jacobs , University of Maryland, USA Prof.. Filip Sroubek , Academy of Sciences, Czech Republic Prof. Abdul Quaiyum Ansari , Jamia Millia Islamia, New Delhi, INDIA
5	International Conference on Parallel Distributed and Grid Computing (PGDC-2014)	2014	JUIT	Prof. Sartaj Sahani University of Florida, CISE Dept., CSE 301, Gainesville, FL 32611, USA. Prof. Philip Wadler Philip Wadler is Professor of Theoretical Computer Science at the University of Edinburgh Prof. Hong Shen Professor (Chair) of Computer Science in the School of Computer Science, University of Adelaide.
6	International Conference on Image Information Processing (ICIIP-2015)	2015	JUIT	Prof. Shu-Ching Chen , Eminent Scholar Chaired Professor in Computer Science Florida International University School of Computing and Information Sciences 11200 SW 8 th Street, Miami, FL 33199, USA Prof. Nasser Kehtarnavaz , Department of Electrical Engineering, University of Texas, Dallas, USA Prof. A G Ramakrishnan , MILE Laboratory, Professor & Chairman, Department of Electrical Engineering, Indian Institute of Science, Bangalore 560 012, India
Workshops				
1	Workshop on Wireless Networks and Network Simulator (WNNS-2012) at Jaypee University of Information Technology, Wagnaghat, July 09-	2012	JUIT	Dr. Buddhadeb Sau Jadavpur University Dr. Gautam Kumar Das IIT Guwahati

	10, 2012			
2	Teaching Engineering using MATLAB and Simulink, JUIT AND IUCEE	2011	JUIT	Prof. T S Lamba Dean A & R JUIT Waknaghat
3	Excellence in Teaching, Research & Education - by Design, JUIT Waknaghat, July 2014	2014	JUIT	Prof. S. K. Kak Vice Chancellor JUIT Waknaghat
4	Virtualization & Cloud Computing - Fundamentals & Practical Approach	2016	JUIT	Dr Mukesh Negi Tech. Mahindra , India

31. Code of ethics for research followed by the departments

- All research activities are conducted in an honest, responsible and ethical manner.
- Academic misconduct in research is unacceptable and will be treated very seriously. Cases of academic misconduct includes; Plagiarism, Infringement, Falsification etc.
- Academic integrity means that university staff and students, in their teaching and learning, are expected to treat others honestly, fairly and with respect at all times. Lying, stealing and misusing others' academic work are not acceptable.
- Plagiarism undermines academic integrity simply because it is a form of lying, stealing and mistreating others. Plagiarism involves stealing other people's intellectual property and lying about whose work it is. This is why plagiarism is prohibited at department of CSE & IT, JUIT.

32. Student profile programme-wise:

Year / Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG (CSE+IT)					
2012-2013		(99+11)	(35+10)	(89.9+90.9)	(97.1+100)
2013-2014		(88+12)	(40+09)	-	-
2014-2015		(120+31)	(47+15)	-	-
2015-2016		(174+23)	(53+04)	-	-
PG					
2012-2013		8	9		
2013-2014		10	13		
2014-2015		4	6		

2015-2016		5	11	-	-
Ph. D.					
2012-2013		4	3	-	-
2013-2014		9	8	-	-
2014-2015		2	1	-	-
2015-2016		0	0	-	-

33. Diversity of students:

Year / Name of the Programme	% 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 (B.Tech.)				
CSE	--	--	--	1.6
IT	--	--	--	0
PG (M.Tech.)				
CSE	0	50	50	0
Ph.D.				
CSE	20	20	60	0

The data on diversity is available at university level. The same is listed in the main report.

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

Examination	2012	2013	2014	2015
Civil Services	0	0	0	0
Defence Service	0	1	1	0
NET	0	0	0	0
SET	0	0	0	0
GATE	0	4	6	5
Other (CAT/MAT)	40	55	50	35

35. Student progression

Student progression	Percentage against enrolled				
	2011	2012	2013	2014	2015
UG to PG	5	5	6	5	10
PG to M.Phil.	0	0	0	0	0
PG to Ph.D.	5	6	6	5	12
Ph.D. to Post-Doctoral	0	0	4	0	4
Employed	--	--	--	--	--
• Campus selection	80	80	85	82	80
• Other than campus recruitment	10	10	7	10	5
Entrepreneurs	--	--	--	--	--

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	18.18 [M.Tech] 13.63 [Ph.D]
from other universities within the State	9.09 [M.Tech] 4.54 [Ph.D]
from universities from other States from	68.18 [M.Tech] 77.29 [Ph.D]
universities outside the country	4.54 [M.Tech] 4.54 [Ph.D]

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

Ph.D=07

38. Present details of departmental infrastructural facilities with regard to

- Library: University Library, Learning Resource Centre (LRC), Caters to all Departments. The Departments and the library are housed in Academic Block.
- Internet facilities for staff and students: Provided to all students and faculty/staff. 1 GBPS leased line from BSNL under National Knowledge Network Scheme. 10 MBPS from Railtel
- Total number of class rooms 19 (Shared with other Departments)

<i>Type of Room</i>	<i>Number</i>	<i>Minimum Capacity of each</i>
Lecture Theatres	3	240
Class Rooms	8	84
Tutorial Rooms	7	35
Group discussion Rooms	1	35

- Class rooms with ICT facility: All 19 class rooms have ICT facility.
- Students' laboratories: 7 students Lab (at department level). [*Details tabulated below].
- Research laboratories: One Research Lab "High Performance Computing and CUDA Lab". [#Details tabulated below].

S No.	Room No.	Name of Lab.
*Students Laboratories		
1	CL-3	Digital Signal Processing Lab Computer Programming Lab Computer Graphics and Image Processing Lab Java Programming Lab
2	CL-4	Operating System Lab Compiler Design Lab Microprocessor and Controller Lab Software Engineering Lab
3	CL-5	Network Programming Lab Software System Lab Multimedia Development Lab
4	CL-6	Object Oriented Programming Lab Software Testing and Debugging Lab Algorithm Lab

5	CL-7	Data Mining Lab Information System Lab Computer Organization Lab
6	CL-8	Database System Lab Unix Programming Lab Web Technology Lab
7	CL-9	University Computer Centre Research Lab Project lab
#Research Laboratories		
1	Research Lab	High Performance Computing and CUDA Lab

39. List of doctoral, post-doctoral students and Research Associates

a) from the host institution/university

S. No.	Name of Student	Doctoral/Post Associate	Doc/Research	Supervisor
Completed				
1	Piyush chauhan	Doctoral [in 2014]		Dr. Nitin
2	Ved prakash bhardwaj			Dr. Nitin
3	Rashmi sharma			Dr. Nitin
Ongoing				
4	Dinesh Kumar	Doctoral		Dr. Vivek Sehgal
5	Mohd. Dilshad Ahmed Ansari			Prof. S.P. Ghrera
6	Jabir Ali			Prof. S.P. Ghrera
7	Ms. Ruchi Verma			Dr. Vivek Sehgal
8	Ashwani Kumar			Prof. S.P. Ghrera

b) from other institutions/universities

S. No.	Name of Student	Doctoral/Post Associate	Doc/Research	Supervisor
Completed/Submitted				
1	Satya Prakash Ghrera	Doctoral [2012]		Dr. Rajesh Siddavatam
2	Nitin Rakesh	Doctoral [2012]		Dr. Vipin Tyagi
3	Pooja Jain	Doctoral [2013]		Prof. Deepak Dahiya
4	Pradeep Kumar Gupta	Doctoral [2013]		Prof. Ghanshayam Singh
5	Rajni Mohana	Doctoral [2013]		Prof. Deepak Dahiya
6	Meenakshi S Arya	Doctoral [2014]		Dr. Rajesh Siddavatam
7	Shaily Mittal	Doctoral [2014]		Dr. Nitin
8	Urvashi Chugh	Doctoral (Thesis submitted in 2016)		Dr. Yashwant Singh
9	Neetu Faujdar	Doctoral (Thesis submitted in 2016)		Prof. S.P. Ghrera
10	Punit Gupta	Doctoral (Thesis submitted in 2016)		Prof. S.P. Ghrera
11	Suman Saha	Doctoral (Thesis submitted in 2016)		Prof. S.P. Ghrera
Ongoing				
12	Gautam Kumar	Doctoral		Dr. Hemraj Saini
13	Rajni Patel			Dr. Rajni Mohana
14	Pratiksha Gautam			Dr. Hemraj Saini

15	Vandana Mohindru		Dr. Yashwant Singh
16	Oshin Sharma		Dr. Hemraj Saini
17	Nagesh Kumar		Dr. Yashwant Singh
18	Sukhnandan kaur		Dr. Rajni Mohana
19	Amit Chaurasia		Dr. Vivek Sehgal
20	Aastha Modgil		Dr. Vivek Sehgal
21	Reema Aswani		Prof. S.P. Ghrera
22	Akash Punhani		Dr. Pardeep Kumar
23	Mayank Kumar Goyal		Prof. S.P. Ghrera

40. Number of post graduate students getting financial assistance from the university.

S No.	Year	Student Number
1	2009-11	10
2	2010-12	13
3	2011-13	10
4	2012-14	17
5	2013-15	11

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

No

42. Does the department obtain feedback from

- i. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

The course instructors complete performance evaluation of each registered student in the class through an ongoing performance review system. The evaluation is based on a pre-decided weightage for a variety of activities a student is expected to do for each course. Such activities include Tests (T-1, T-2), quizzes, assignments, laboratory and tutorial work or any other activity assigned by the course instructor and followed by an end semester examination (T-3). This evaluation is performance of the student relative to class performance. The University has a grading system based on relative performance that generally follows a normal distribution. For a student to meet the outcomes listed above, he must pass the course with a minimum grade of D. Input from faculty is taken periodically to review and improve the various dimensions of the program curriculum.

- ii. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Formal student feedback is obtained semester-by-semester for each course. The student reaction survey results are made available to the individual faculty member for his feedback. The detailed feedback report on each course is available to the department head, Dean and the Director. This feedback is generally for self-improvement of the faculty. However, in cases when there is an issue which has been repeated or some feedback needs immediate attention, action is taken as appropriate. Also faculty members also provide useful feedback as part of their annual appraisals or during promotion reviews. Summaries of the results are open information and available to the department head. Faculty may report more information from

the surveys to the department head, and often do as a part of annual reviews and tenure/promotion reviews.

- iii. alumni and employers on the programmes offered and how does the department utilize the feedback?

It is believed that the perception of students change from the time of graduation to some point in their respective careers as they get more matured and has learnt tricks of the trade on the job. At this point of time, they are in a better position to provide more valuable and objective feedback on the learning in their postgraduate program and also how much of the student outcomes (on some scale) have actually been possible. To obtain this information, a survey is conducted for practicing alumni who graduated during the last 1 to 5 years. This survey like the graduating student survey was targeted at the program outcomes achieved. Again, the respondents were asked to rate each outcome achievement in the level of “Excellent”, “Well Prepared”, “Prepared” and “Unprepared”. The findings of the survey are being processed and will be used for effecting improvements in the program to achieve the program educational objectives and program outcomes.

The frequency with which these assessment processes are carried out:

- The student feedback is taken every semester.
- Alumni feedback is taken once a year
- Industry feedback is taken during project semester/recruitment
- Faculty feedback is taken during various meetings of BOS, departmental Meetings, etc.,

43. List the distinguished alumni of the department (maximum 10)

Nil

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

List of Special Lectures (Keynote Lecture) delivered by various International experts:

Sr. No.	Name of the Expert with designation and Affiliation	Title of the Expert Lecture	Dated
1.	Prof. Yale Patt Professor of Electrical and Computer Engineering, and Ernest Cockrell, Jr. Centennial Chair in Engineering The University of Texas at Austin USA	The Microprocessor of 2020: Why you should care, and what you can do about it	28 th Oct, 2010
2.	Prof. Christian Scheideler Professor of Computer Science, and Director of the Research Group "Theory of Distributed Systems" Universität Paderborn Germany	Robust Open Internet Services	29 th Oct, 2010
3.	Prof. Rajkumar Buyya Director of CLOUDS Lab, The University of Melbourne, and CEO, Manjrasoft Pvt Ltd, Melbourne	Cloud Computing: The Next Revolution in Information Technology	28 th Oct, 2010

	Australia		
4.	Prof. Dietmar Tutsch Chair of Automation and Computer Science University of Wuppertal Germany	Reconfigurable Parallel Computing	30 th Oct, 2010
5.	Prof. Ioannis Pitas , Fellow IEEE, University of Thessaloniki, GREECE	Recent advances in Video Analysis For Film and Games Postproduction	3 rd Nov. 2011
6.	Prof. Amitabh Varshney , Fellow IEEE, University of Maryland, USA	Saliency-Guided Visualization of Very Large-Scale Datasets	3 rd Nov. 2011
7.	Prof. Andres Bruhn , Saarland University, Saarbruecken, GERMANY	Motion Estimation in Image and Stereo Sequences: Accurate Models, Efficient Algorithms, and Recent Application	4 th Nov, 2011
8.	Prof. Gaurav Sharma , Sr. Member IEEE, University of Rochester, USA	Digital Watermarking: A Feasible Signal Design Perspective	4 th Nov, 2011
9.	Prof. R.K.Mittal , Director, BITS Pilani, DUBAI		3 rd Nov. 2011
10.	Prof. Tinku Acharya , Fellow IEEE, Founder, Videonetics Technology, INDIA	Intelligent Video Analytics - A Visual Computing Tool	4 th Nov, 2011
11.	Prof. B.B. Chaudhuri , Fellow IEEE, Indian Statistical Institute, Kolkata, INDIA	OCR performance evaluation for Alpha-syllabary Indian Scripts.	4 th Nov, 2011
12.	Prof. K.K.Biswas , IIT Delhi, INDIA	Recognition of human actions in office environment.	5 th Nov, 2011
13.	Dr. D. Datta , BARC Mumbai, INDIA	Data Mining By Density Estimation Using Wavelet	5 th Nov, 2011
14.	Prof. Ivan Stojmenovic Fellow IEEE SITE, University of Ottawa, 800 King Edward, Ottawa, Ontario K1N 6N5, Canada	Mobile Cloud and Green Computing	6 th Dec, 2012
15.	Prof. Peter Widmayer ETH Zürich Institut f. Theoretische Informatik Universitätstrasse 6 8092 Zürich Switzerland	Rearranging Train Cars in Railroad Y ards	6 th Dec, 2012
16.	Prof. Assaf Schuster Department of Computer Science Technion - Israel Institute of Technology Technion City, Haifa 32000, Israel	On-the-Fly Processing of Big, Distributed, Stream ing Data	7 th Dec, 2012
17.	Prof. Nikil Dutt , Fellow IEEE and ACM Distinguished Scientist Chancellor's Professor	Memory Management for Scalable M any-Core Architectures	7 th Dec, 2012

	Department of Computer Science, Zot Code 3435 Donald Bren School of Information and Computer Sciences University of California, Irvine Irvine, CA 92697-3435, USA		
18.	Prof. Eliezer Dekel STSM, Manager, Distributed Middleware IBM Haifa Research Lab, Haifa, Israel	Compose – Internet of Things Market Place	8 th Dec, 2012
19.	Prof. Theo Gevers , University of Amsterdam, The Netherlands	Color in Computer Vision	9 th Dec, 2013
20.	Prof. Dr. Bob Fisher , University of Edinburgh, Edinburgh, UK	Applying Computer Vision Methods to Ecological Problems	9 th Dec, 2013
21.	Prof. Abdul Quaiyum Ansari , JamiaMilliaIslamia, New Delhi, INDIA	Biometric Recognition - Technology and Applications	10 th Dec, 2013
22.	Prof. David W. Jacobs , University of Maryland, USA	Using Computer Vision for Species Identification	10 th Dec, 2013
23.	Prof. Filip Sroubek , Academy of Sciences, Czech Republic	Advances in blind image restoration	11 th Dec, 2013
24.	Prof. SartajSahni Fellow IEEE, ACM, AAAS University of Florida, CISE Dept., CSE 301, Gainesville, USA.	Green Computing	11 th Dec, 2014
25.	Prof. Philip Wadler Philip Wadler is Professor of Theoretical Computer Science at the University of Edinburgh. He is an ACM Fellow and a Fellow of the Royal Society of Edinburgh,	Propositions as Sessions	12 th Dec, 2014
26.	Prof. Hong Shen Hong Shen is Professor (Chair) of Computer Science in the School of Computer Science, University of Adelaide.	Smart Computing over Networked Data Centres	13 th Dec, 2014
27.	Prof. Nasser Kehtarnavaz , Dept. of Electrical Engineering, University of Texas, Dallas, USA	Real-Time Image Processing: From Research to Reality	21 st Dec, 2015
28.	Prof. Nasser Kehtarnavaz , Dept. of Electrical Engineering, University of Texas, Dallas, USA	Smartphones as Implementation Platforms for Real-Time Signal & Image Processing	21 st Dec, 2015
29.	Prof. Shu-Ching Chen , Florida International University, Miami, USA	Multimedia Big Data: Challenges, Opportunities, and Applications	22 nd Dec, 2015

45. List the teaching methods adopted by the faculty for different programmes.

- a) Concept Lecturing through White Board and PPT.
- b) Case Studies, Quizzes and Assignments.
- c) Experimental Lab Work.
- d) Projects (individual/Group)
- e) Seminar Guest lectures

f) Tutorials

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

The department monitors the Programme Objectives and Learning Outcomes of each programmes through the following mechanism:

- i. Regular feedback by faculty
- ii. Through regular exam (T-1, T-2, T-3, Teacher Assessment (Quizzes, Assignments, Presentations))
- iii. The achievement of Programme Objectives is assessed through placement of graduates in industry/academia of repute.
- iv. The Programme Evaluation Committee of the department accesses the different feedbacks and ascertains the achievement of the Programme Objectives.

47. Highlight the participation of students and faculty in extension activities.

We have University wide student body Jaypee Youth Club (JYC). Our department students participate in all the societies of the JYC.

Students and faculty members of the department are also involved in following extension activities:

- Volunteer teaching in a neighboring Dumehar Sr. Sec School.
- Organization of Blood Donation Camps.
- Collection of donation for helping poor people in terms of old clothes and other items.

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

- Technical events held by ACM student chapter
- Technical events held by IEEE student Chapter
- Technical events held by CSI
- Technical events held by departmental technical club namely: Enkindle, Quoders, Torvalds.
- One workshop is held by department every semester
- One International Conference (IEEE) held in department every year.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

B. Tech CSE programme was accredited by NBA (2009-2014)

B. Tech CSE programme was accredited by NBA (2014-2016) Provisional

B. Tech IT programme was accredited by NBA (2009-2014)

B. Tech IT programme was accredited by NBA (2009-2014) Provisional

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

The faculty members of the department have contributed in the following areas through their research activities:

- Detection of Forest Fire through Wireless Sensor Networks.
- Medical Image Processing
- Cloud Computing, Data mining and IOT.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

- Good placement record
- Good student intake level.
- Periodic Curriculum review/updates
- Increasing ratio of PhD faculty
- We have implemented an outcome based model of education

Weaknesses

- Expansion desired in LAB SPACE for UG students/PG Students.
- Seminar facility for the department and better space for the faculty.
- Consultancy component to be improved further.
- Research lab facility to be improved.
- R&D Collaboration with industries to be improved.

Opportunities

- Faculty members are encouraged to present their research nationally and internationally.
- Faculty members are encouraged to attend FDPs in other Institutions.
- Faculty members are encouraged to attend and organize conferences/Workshops/Seminars.
- The research leads/outcomes can be implemented for social relevance and impact
- R&D setup can take up high priority research of national importance

Challenges

- Remote location of the University is challenge to attract good faculty/students.
- To improve the placement scenario for high package jobs
- Setup international collaborations
- Inculcate enthusiasm for entrepreneurship initiate among graduates.
- To cope up with new technologies and implement the new products through research and team work.

52. Future plans of the department.

- Department plans to match itself to the Computer Science & Engineering departments of some of the Top 100 institutions of the world.
- Department wishes to improve its current student teacher ratio and its cadre ratio in terms of the number of Senior Faculty in the department. Department wishes to increase the promotion avenues for the existing staff to keep their morale and drive to contribute significantly to the department.
- There is a scope to significantly enhance the innovation and research component of the department.
- Department has started specialized post graduate programs in M. Tech. Computer Science Engineering (Software System Security). We wish to make this program successful so that we are looked upon as the resource department in these skills.
- Department will need human resources, physical space and infrastructure apart from the combined zeal of the students and faculty

B6. Evaluative Report of Department of Biotechnology & Bioinformatics

1. **Name of the Department:** Biotechnology and Bioinformatics
2. **Year of establishment:** 2002
3. **Is the Department part of a School/Faculty of the university?**
As such we do not have any school/faculty. But all departments are part of the university.
4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)**

B.Tech., in Biotechnology	Undergraduate programs
B.Tech., in Bioinformatics	
M.Tech., in Biotechnology	Post Graduate program
Ph.D., in Biotechnology	Research program
Ph.D., in Bioinformatics	

5. **Interdisciplinary programmes and departments involved**
Nil
6. **Courses in collaboration with other universities, industries, foreign institutions, etc.**
Few students do one semester, i.e. the Sem. VIII of B.Tech Biotechnology and B.Tech Bioinformatics degree programmes at the University of Nebraska at Omaha, USA under an exchange programme. The University has signed a MoU with University of Nebraska at Omaha.
7. **Details of programmes discontinued, if any, with reasons**
 - a) Dual Degree (B.Tech-M.Tech.) programme: As per notification of the UGC
 - b) M.Tech Computational Biology: Due to less number of admissions
8. **Examination System: Annual/Semester/Trimester/Choice Based Credit System**
Semester
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)**

Positions	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	2	1	1
Associate Professors	5	3	3
Asst. Professors	12	13	13
Others Teaching Assistants	0	0	0

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

Name	Qualification	Designation	Specialization	Experience (in Years)	No of Ph.D./M.Tech. students guided for the last 4 years
Rajinder S Chauhan	Ph.D	Professor	Genomics	24	Awarded=06/08 Ongoing=07/01
Chittaranjan Rout	Ph.D	Associate Professor	Computational Biology	12	Awarded =02/01 Ongoing =03/00
Harish Changotra	Ph.D	Associate Professor	Molecular Virology /Immunology	12	Awarded = 03/00 Ongoing = 05/00
Sudhir Kumar	Ph.D	Associate Professor	Environmental Biotechnology	16	Awarded = 03/06 Ongoing = 02/01
Anil Kant Thakur	Ph.D	Assistant Professor	Plant Biotechnology	14	Awarded = 02/02 Ongoing = 02/00
Gunjan Goel	Ph.D	Assistant Professor	Food Biotechnology	10	Awarded = 02/02 Ongoing = 03/03
Harvinder Singh	Ph.D	Assistant Professor	Plant Biotechnology	6	Awarded = 02/04 Ongoing = 00/00
Hemant Sood	PhD	Assistant Professor	Plant Tissue Culture	12	Awarded = 02/16 Ongoing = 02/03
Jata Shankar	Ph.D	Assistant Professor	Genomics	10	Awarded = 00/00 Ongoing = 02/00
Jayashree Ramana	Ph.D	Assistant Professor	Bioinformatics	6	Awarded = 02/03 Ongoing = 01/00
Jitendraa Vashist	Ph.D	Assistant Professor	Medical Biotechnology	7	Awarded = 00/02 Ongoing = 01/01
Poonam Sharma	Ph.D	Assistant Professor	Chemistry	11	Awarded = 01/04 Ongoing = 00/00
Rahul Shrivastava	Ph.D	Assistant Professor	Pathogen Biology	8	Awarded = 00/08 Ongoing = 01/00
Tiratha Raj Singh	Ph.D	Assistant Professor	Bioinformatics, Systems Biology	11	Awarded = 02/03 Ongoing = 02/00
Garlapati Vijay Kumar	Ph.D	Assistant Professor	Industrial Biotechnology	5	Awarded = 01/04 Ongoing = 00/00
Ragothaman M. Yennamalli	Ph.D	Assistant Professor	Structural Bioinformatics	7	Awarded = 00/00 Ongoing = 00/00
Saurabh Bansal	Ph.D	Assistant Professor	Enzymology, Protein Engineering	4	Awarded = 00/05 Ongoing = 00/02

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

Nil

13. Percentage of classes taken by temporary faculty – programme-wise information

Nil

14. Programme-wise Student Teacher Ratio

UG: 13:1 (BT) & 8:1 (BI)

PG: 5:1

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

Support Staff	Sanctioned	Filled	Actual
Technical Staff	5	5	5
Administrative Staff	Central pool shared by all departments.		

16. Research thrust areas as recognized by major funding agencies

- Phytochemicals: Biosynthesis, production and utilization
- Antimicrobial resistance and infectious disease
- Nutrition Biology
- Industrial Biotechnology: Biofuel, Bio-remediation, herbal plant material and commercial products
- Computational genomics and medical informatics

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 Funding Agencies :

S. No.	Investigator(s)	Funding Agency	Project title	Duration	Grant in Lakh
ONGOING					
1	Aklank Jain	DST	Ramanujan Fellowship (Cancer Biomarkers)	2012-17	73.0
2	Rajinder S Chauhan	DST	DST-FIST	2012-17	150.0
3	Sudhir Kumar	DBT	Bioremediation of electronic waste (E-waste) for precious metal recovery and removal of polybrominated diphenyl ethers (PBDE's)"	2013-17	33.2
4	Manju Jain	DST	Investigating the role of thymus in mediating host immune modulation in visceral leishmaniasis	2014-17	24.5
5	Harish Changotra	DBT	Identification of Single Nucleotide Polymorphisms in the transcriptional regulatory region of autophagy gene, ULK1 and their role in susceptibility to chronic hepatitis B virus infection	2014-17	17.8
6	Rahul Shrivastava	DST	Identification of Macrophage Invasion Protein(s) of Atypical <i>Mycobacteria M. fortuitum</i> as	2014-17	12

			Potential Drug Target and Inhibitors Thereof		
7	Tiratha Raj Singh	ICMR	A Bioinformatic and experimental approach to investigate the interaction between acetylcholinesterase (AChE) and angiotensin-converting-enzyme (ACE) along with Alzheimer's disease associated proteins.	2015-18	25.6
8	Anil Kant	DRDO	Transcriptome analysis of seabuckthorn male and female flowers	2015-17	9.9
9	Hemant Sood	DRDO	Molecular Dissection of Biosynthesis of Pharmacologically Important Phenol Glycosides in a High Value Medicinal Plant (<i>Rhodiola imbricata</i>) from Trans-Himalayan Region of Ladakh	2015-17	9.8
10	Hemant Sood	DST	Socio Economic upliftment of high altitude farmers of Himachal Pradesh through transfer of micro-propagation technologies for high value medicinal herbs	2015-18	14.1
11	Jitendraa Vashistt	DST	Identification of biofilm associated proteins of multidrug resistant <i>Acinetobacter baumannii</i> as potential drug target and inhibitors thereof.	2015-18	23.3
12	Rahul Shrivastava	ICMR	Synthesis of novel poly-N-substituted glycines (peptoids) based on cell selective antimicrobial peptides for Gram-negative bacterial infections	2015-18	24.0
13	Rajinder S Chauhan	DBT	Functional analysis and validation of picrosides biosynthetic pathway and development of gene markers for elite chemotypes of <i>Picrorhiza kurroa</i>	2016-21	349.8
14	Aklank Jain	ICMR	Identification of circulating microRNAs as novel non-invasive biomarkers for early detection of lung cancer	2015-18	32.7
Total=					799.7

b) International Funding agencies: Nil

c) Total Grants received (For 14 Ongoing projects): 799.7 Lakh

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration

S. No.	Investigator(s)	Funding Agency	Project Title	Collaborators	Duration	Grant in Lakh
1	Rajinder S Chauhan	DBT	Functional Analysis & Validation of Picrosides Biosynthetic Pathway and Development of Gene Markers for Elite Chemotypes of <i>Picrorhiza kurroa</i>	Dr. J. Singh, Himalayan Forest Research Institute, Shimla	2015-20	349.8
2	Sudhir Kumar	DBT	Bioremediation of electronic waste (E-waste) for precious metal recovery and removal of polybrominated diphenyl ethers (PBDE's)	Prof. Harvinder Singh, GNDU Amritsar	2013-16	33.2
3	Chittaranjan Rout	ICMR	Development of inhibitors to target glyoxylate and methylcitrate cycles essential for persistence of <i>Mycobacterium tuberculosis</i>	Dr. Vibha Gupta, IIIT Noida	2013-16	36.0
4	Gunjan Goel	DBT	Development of a multi-compartment in vitro model of the human gastrointestinal tract	Anil K Puniya, GADVASU, Ludhiana	2013-16	34.5
5	Gunjan Goel	DST	Elucidating the linkage between key limiting processes and microorganisms during anaerobic degradation of lignocellulosic waste	Sumit S Dagar, Agarkhar Research Institute, Pune; Anil K Puniya, GADVASU, Ludhiana	2014-16	24.0
6	Rajinder S Chauhan	Ministry of Health, Govt. of India	Identification of genetically superior strains of medicinal plants (<i>P. kurroa</i> and <i>Valeriana jatamanshi</i>) from North-Western Himalayas of India	Dr. J. Singh, Himalayan Forest Research Institute, Shimla	2009-13	16.5
7	Rajinder S Chauhan	DBT	Development of Gene Markers for High Seed Oil Content and Dissecting Molecular Basis of Female Flower Development in <i>J. curcas</i> Towards its Genetic Improvement for High Seed Yield	Dr. S. Sharma Himalayan Forest Research Institute, Shimla	2013-17	115.0
8	Sudhir Kumar	Ayurved Industry, Baddi, Solan	Development of technologies for bioconversion of lignocellulosic waste from herbal industries into commercially viable	Ravikanth, K, Ayurved Industry, Baddi	2008-11	5.0

			products.			
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b) International collaboration

S. No.	Investigator(s)	Funding Agency	Project Title	Collaborators	Duration	Grant in Lakh
1	Gunjan Goel	DST	Elucidating the linkage between key limiting processes and microorganisms during anaerobic degradation of lignocellulosic waste	Alla Nozhevnikova, Winogradsky Institute of Microbiology, Research Center of Biotechnology of the Russian Academy of Sciences, Moscow	2014-16	24.0

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

S. No.	Programme	Funded Agency	Grant Received in Lakh	Duration
1.	DST-FIST	DST	150	2012-17
2.	Programme Support in Centres of Excellence & Innovation in Biotechnology	DBT	450	2010-15

20. Research facility / centre with

- state recognition: Nil
- national recognition:
DST-FIST: Fund for Improvement of S&T infrastructure in universities & higher educational institutions
- international recognition: Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies

Nil

22. Publications:

	2011	2012	2013	2014	2015
Number of papers published*	36	49	63	55	52
	national / international: 30/225				
Monographs	00	00	00	00	00
Chapters in Books	00	00	01	04	06
Edited Books	00	00	00	00	00
Books with ISBN with	00	00	00	00	00

details of publishers					
Number listed in International Database**	33	46	63	55	55
Citation Index – range / average	--	--	--	--	--
SNIP	0.221-1.162	0.327-8.652	0.101-5.291	0.359-1.611	0.45-1.586
SJR	0.257-1.004	0.154-14.747	0.004-2.495	0.131-6.271	0.18-1.97
Impact Factor – range / average	0-2.898	0-42.351	0-8.167	0-7.232	0-5.014
h-index	7.41				
* in peer reviewed journals					
**For e.g., Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.					

23. Details of patents and income generated:

Sr. No	Application No	Date	Date granted/ Published	Patent No.
1.	1216/DEL/2007	06 th June 2007	20 th Mar 2012	251481
2.	396/DEL/2013	12 th Feb 2013	29 th Aug 2014	-
3.	362/DEL/2013	8 th Feb 2013	29 th Aug 2014	-
4.	1631/DEL/2012	30 th May 2012	25 th July 2014	-
5.	2714/DEL/2012	31 th Aug 2012	07 th Mar 2014	-
6.	551/DEL/2012	28 th Feb 2012	14 th Feb 2014	-
7.	139/DEL/2011	20 th Jan 2011	15 th Mar 2013	-
8.	2248/DEL/2011	10 th Aug 2011	15 th Feb 2013	-
9.	1865/DEL/2010	08 th Sept 2010	15 th Mar 2013	-
10.	499/DEL/2010	05 th Mar 2010	02 nd Feb 2012	-
11.	292/DEL/2010	11 th Feb 2010	02 nd Sep 2011	-
12.	163/DEL/2009	29 th Jan 2009	06 th Aug 2010	-
13.	1922/DEL/2012	22 nd Jun 2012	-	-

24. Areas of consultancy and income generated

Nil

25. Faculty selected nationally / internationally to visit other laboratories / institutions/ industries in India and abroad

Dr. V. K. Garlapati: A4U Postdoctoral Fellowship, Spain, Dept de Enginyeria Quimica, Universitat Autònoma de Barcelona, Spain, 2011-2013.

26. Faculty serving in

a) National committees:

S. No.	Faculty Name	Committee Name
1.	Prof. R.S. Chauhan	National Coordinator of Jatropha Genetic Improvement of the Department of Biotechnology, Ministry of Science & Technology, Govt. of India.
		Member, Board of Studies, Biotechnology, HP University Shimla since 2009

		Member, Executive Board Review, XII Five Year Plan Program of Defence Institute of High Altitude Research, Leh (Since August 2009)
		External Member, Research Degree Committee (RDC) for Akal College of Agriculture, Eternal University, Baru Sahib (Since Sept. 2015)
		Nominated Expert Committee Member (2016-2019) for approval and review of Core Support proposals/ projects having a budget of over One Crore under SEED Division of Department of Science & Technology, Govt. of India
2.	Dr. Sudhir Kumar	DBT representative in the Institutional Biosafety Committee of an industry. M/s. Fermenta Biotech Ltd, Village Takoli, P.O Nagwain, Distt. Mandi – 175121, Himachal Pradesh. (2021-2014)

b) International committees: Nil

c) Editorial Boards:

S. No.	Faculty Name	Journals/Magazines' Name
1.	Dr. V. K. Garalapati	Editorial Board Member in: i) African Journal of Biotechnology ii) Journal of Biotechnology iii) Bioinformatics and Bioengineering iv) Bioengineering and Bioscience v) Trends in Biotechnological Research
2.	Dr. Gunjan Goel	Review Editor: Frontiers in Systematic Microbiology
3.	Dr. Jitendraa Vashisht	Coordinator of Membrane biophysics paper under e-learning MHRD National project.
4.	Dr. Harish Changotra	Member Editorial Board of i) International Journal of Biology ii) Pharmacy and Allied Sciences (ISSN: 2277-4998) iii) International Journal of Research in Biosciences (ISSN: 2319–2844) iv) Journal of Cell Science and Molecular Biology v) Journal of Immunology and Vaccine Technology
5.	Prof. R. S. Chauhan	Member of editorial board: Journal of Plant Biochemistry and Biotechnology
6.	Dr. Chittaranjan Rout	Associate Editor: Annals of Applied Chemistry
7.	Dr. Saurabh Bansal	Member of Editorial Board: Journal of Biotechnology, Bioinformatics and Bioengineering

d) any other (please specify)

Faculty members are assisting the editors of various peer reviewed journals in the reviewing process.

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

S. No.	Name of Faculty	Name of program/s	Venue	Dates
1.	Anil Kant (Participant)	Staff development program on Biotechnological interventions in food processing.	SLIET Longowal, Sangrur, Punjab	12-17 Mar, 2012
2.	Chittaranjan Rout (Participant)	Medical Imaging 2012	EECE, IIT, Kharagpur,	18 th Nov – 1 st Dec, 2012

3.	Gunjan Goel, Hemant Sood, R.S. Chauhan, Rahul Shrivastava, Saurabh Bansal (<i>Resource persons</i>)	Module Coordinator in Eight Weeks Summer Training Programme	JUIT, Wagnaghat	Jun-Jul, 2013
4.	Chittaranjan Rout (<i>Resource person</i>)	Big Data Opportunities - Biomedical Informatics	JUIT, Wagnaghat	22 nd - 24 th Jul, 2013
5.	Gunjan Goel, R.S. Chauhan, Rahul Shrivastava, Hemant Sood (<i>Resource persons</i>)	Summer Training Programme-2014	JUIT, Wagnaghat	Jun-Jul, 2014
6.	Saurabh Bansal (<i>Participant</i>)	One week QIP short term course on Bioinformatics	IIT Bombay, Mumbai	29 Dec – 02 Jan, 2014
		Summer Faculty Research Fellow programme-2014' under the mentorship of Dr. D. Sundar.	Department of Biochemical Engineering and Biotechnology, IIT Delhi.	02 Jun - 16 July, 2014
7.	Anil Kant, Chittaranjan Rout, Gunjan Goel, Harish Changotra, Hemant Sood, Jata Shankar, Jayashree Ramana, Jitendraa vashistt, R.S. Chauhan, Rahul Shrivastava, Sudhir Kumar, Tiratha Raj Singh (<i>Participants</i>)	Faculty Development Programme	JUIT, Wagnaghat,	14 th - 19 th Jul, 2014
8.	Chittaranjan Rout (<i>Resource person</i>)	Protein Structure Prediction and Molecular Docking	HPU, Shimla,	28 th Oct, 2014
9.	Gunjan Goel, Hemant Sood, Rahul Shrivastava (<i>Resource persons</i>)	Summer Training Programme-2015	JUIT, Wagnaghat	Jun-Jul, 2015
10.	Jitendraa Vashistt (<i>Participant</i>)	Workshop at Genotypic technology	Bangaluru, Karnataka	12 th -15 th Sept, 2014
11.	Poonam Sharma (<i>Participant</i>)	Workshop on Combinatorics and Graph Theory in Science and Engineering	JUIT, Wagnaghat	3 rd - 8 th Nov, 2014
12.	Sudhir Kumar (<i>Resource person</i>)	Anaerobic Microbial Processes for Energy and Environment (Indo-US - IUSSTF Short course)	GNDU, Amritsar, Punjab	16-26 Dec, 2014
13.	Anil Kant, Chittaranjan Rout,	Faculty Development Programme on 'Outcome-	JUIT, Wagnaghat	24 th - 30 th Dec, 2015

	Gunjan Goel, Harish Changotra, Hemant Sood, Jata Shankar, Jayashree Ramana, Jitendraa vashistt, Poonam Sharma, Raghu M. Yennamalli R.S. Chauhan, Rahul Shrivastava, Saurabh Bansal, Sudhir Kumar, Tiratha Raj Singh, V. K. Garalapati (Participants)	based education in Biotechnology'		
14.	V.K. Garalapati (Participant)	5 days Short Term Training Programme on "Advances on Industrial Biotechnology", sponsored by TEQIP-II	NIT, Jalandhar	30 th Nov - 04 th Dec, 2015

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
10%

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

S. No.	Award	Name of Recipient	Year
Faculty			
1.	Indian Science Congress Association Young Scientist Award for the year 2010-11 (plant sciences) was conferred by Dr. Venkataraman Ramakrishnan, 2009 Nobel Laureate in chemistry, Cambridge.	Dr. Hemant Sood	2010-11
2.	A4U Postdoctoral Fellowship, Spain	Dr. V. K. Garalapati	2011-13
3.	Travel award from Department of Biotechnology, Govt. of India for an invited talk in 62nd annual meeting of Society of Industrial Microbiology and Biotechnology (SIMB) at Washington DC, USA, 2012.	Dr. Sudhir K Syal	2012
4.	Best paper award (Oral Presentation) in 1 st HP Science Conference 2014 1 st Himachal Pradesh Science Congress "Role of Science & Technology in Sustainable Development" Hotel Peterhoff, Shimla Oct.15-16, 2014 Authors: Aseem Chawla, Tsering Stobdan, Ravi B Srivastava, RS Chauhan, Anil Kant	Dr. Anil Kant	15-16 Oct., 2014
5.	Scholarship Award for participate the conference from Advances Against Aspergillosis at Manchester UK, 3-5 March 2016	Dr. Jata Shankar	3-5 Mar., 2016

Doctoral / Post-doctoral fellows			
1.	Best Poster Award- 2 nd International Conference on Agricultural and Horticultural Sciences (Omics Group), Hyderabad, India	Pawan Kumar	03-05 Feb., 2014
2.	1 st Prize–Best Poster Award) – At National Conference on Prospectives and Trends in Plant sciences and Biotechnology (PTPB – 2014), Department of Botany, Panjab university, Chandigarh, 21-23 February 2014. Authors: Aseem Chawla, Tsering Stobdan, Ravi B Srivastava, RS Chauhan, Anil Kant	Aseem Chawla	21-23 Feb., 2014
3.	2nd Best Poster award- New insights into Pharmacogenomics, Drug Development and Personalized Medicine, Bhagwan Mahavir Medical Research Institute, Hyderabad, India) Title: A Novel Multiplex T-ARMS-PCR Assay to Genotype IL28B Single Nucleotide Polymorphisms rs12979860 and rs8099917 Simultaneously. Authors: Randhawa R and Changotra H	Rohit Randhawa	18-19 Jul., 2014
4.	2 nd Best Poster presentation award in International Conference on Life science Biotechnology & Bioinformatics, IIIT, Noida, India. Indo Global Journal of Pharmaceutical Sciences, 2014; 4(3): 169.	Nootan	Sept., 2014
5	Best Paper Award from Himachal State Council of Science and Technology for the work presented at 1 st Himachal Pradesh Science Congress on Role of Science & Technology in Sustainable Development, Shimla	Rishi	15-16 Oct., 2014
6.	2nd best Poster presentation award- National Conference on Emerging Trends in Host-Microb Interactions, DAV University Jalandhar, Punjab Title: Molecular analysis of G1 rotavirus strains isolated from Himachal Pradesh. Authors: Swapnil Jain, TR Singh, Jitendraa Vashistt, Harish Changotra	Swapnil Jain	17-18 Apr., 2015
7	Best Oral Award- 1st National Conference on Emerging Trends and Future Challenges in Chemical Sciences Organized at the Department of Chemistry, Kirori Mal College, University of Delhi Title: Synthesis of chromen-2-one derivatives as potential anti-alzheimeric agents Author: D. Mishra, Poonam, C. Rout and Ram Singh	Deepak Mishra	3-4 Feb., 2016
8	Best Oral Presentation Award in Proteomics Session- International Conference on Bioinformatics and Systems Biology (BSB2016), IIIT, Allahabad organized by IEEE Computer Society & IEEE Signal Processing Society Title: QSAR Model Development for Solubility Prediction of Paclitaxel Author: NS Munjal, M Sharma, Narendra Kumar & C Rout	Nupur Munjal	4-6 Mar., 2016
Students			
1.	Best poster award: Large-scale <i>in vitro</i> multiplication of critically endangered herb <i>Swertia chirayita</i> in suspension	Sanya Bakshi, Sneha Gulati, Bhupinder S	2012

	cultures, National Seminar on Plant Cell Tissue and Organ Culture: Emerging Trends, Dept. of Botany, Aligarh Muslim University, Aligarh	Sandhu, Pooja Tandon, Varun Kumar, R. S. Chauhan, Hemant Sood	
2.	1 st Prize in JAM at DBT sponsored biofest 'Biorhythm' Chandigarh	Vasu Walia	2013
3.	2 nd Prize in face painting at DBT sponsored biofest (Biorhythm) Chandigarh	Kritika Khurana & Parul Sharma	2013
4.	2 nd Prize in Still Photography at DBT sponsored biofest (Biorhythm) Chandigarh	Garima Thakur	2013
5.	3 rd Prize in Poster Making at DBT sponsored biofest (Biorhythm) Chandigarh	Vinod	2013
6.	3 rd Prize in Still Photography at DBT sponsored biofest (Biorhythm) Chandigarh	Medhavi	2013
7.	2 nd Prize in MIME at DBT sponsored biofest (Biorhythm) Chandigarh	Sahil, Aditya, Vinayak, Tushar, Radhika, Arsh, Sunandini, Aarushi	2013

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

S. No.	Title	Year	Source of Funding	Outstanding Participants
Seminars				
1.	Faculty Development Programme on 'Outcome-based education in Biotechnology' at JUIT, Wagnaghat,	24 th - 30 th Dec, 2015	National	Dr. OP Sharma Institute of Himalayan Bioresource Technology, CSIR, Palampur Dr. SK Sharma Institute of Himalayan Bioresource Technology, CSIR, Palampur
2.	"IP Connects"	2013	National	Dr. Mahalaxmi Andheria , Vice president, IP Cell, Panacea Biotech Ltd. Dr. Mandar Kodgule , Vice President, Global IP & Strategic Planning & Sr. Director, Wockhardt Ltd.
Conferences				
1.	"National Symposium on Computational Systems Biology" organized by Dept. of Biotechnology & Bioinformatics, Jaypee University of Information Technology, Wagnaghat, Solan, India in association with NNCMB (National Network for	18 th -20 th Mar 2016	National	Dr. Alok Bhattacharya , JNU, New Delhi Dr. Debasis Mohanty , NII, New Delhi Dr. G.P.S. Raghava , IMTECH, Chandigarh

	Mathematical and Computational Biology), Mohali node from 18th - 20th Mar 2016 at JUIT, Wagnagaht, Solan			
Workshops				
1.	Big Data Opportunities in Clinical Informatics in association with Louisiana Tech University, LA, USA	2013	National	Dr. Sumeet Dua Louisiana Tech University, LA, USA
2.	UNO Bioinformatics Workshop " organized by Dept. of Biotechnology & Bioinformatics, Jaypee University of Information Technology, Wagnaghat, Solan, India in association with University of Nebraska, Omaha, USA	6 th – 12 th May, 2013	National	Dr. Hesham Ali, University of Nebraska, Omaha, USA
3.	"Paradigms of Synthetic Biology" organized in association with Joint BioEnergy Institute, Fuels Synthesis Division, Emeryville, CA, USA	23 th – 30 th July 2011	National	Dr. Nathan Hillson, Joint BioEnergy Institute, Fuels Synthesis Division, Emeryville, CA, USA
4.	"Computational Paradigms of Clinical Informatics" organized in association with Louisiana Tech University, LA, USA.	1 st – 3 rd Feb, 2011	National	Dr. Sumeet Dua Louisiana Tech University, LA, USA

31. Code of ethics for research followed by the departments

- i) Check on plagiarism in faculty research publications and UG/PG Theses
- ii) Biosafety regulations and their stringent implementation

32. Student profile programme-wise:

Year / Name of the Programme (BT/BI/DD)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG					
2012-2013		05/05/05	19/14/04	100	100
2013-2014		06/07/04	24/18/06	--	--
2014-2015		16/04/00	32/09/02	--	--
2015-2016		14/07/00	35/03/00	--	--
PG					
2012-2013		00	00		
2013-2014		04	05		
2014-2015		01	05	--	--
2015-2016		00	04	--	--
Ph. D.					
2012-2013		11/02	10/00	--	--
2013-2014		08/02	09/04	--	--

2014-2015		04/00	00/00	--	--
2015-2016		01/01	00/00	--	--

33. Diversity of students:

Year / Name of the Programme	% 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. Biotechnology	-	20	80	0
B.Tech. Bioinformatics	-	20	80	0
M.Tech. Biotechnology	0	0	100	0
Ph.D. Biotechnology	10	20	70	0
Ph.D. Bioinformatics	10	30	60	0

The data on diversity is also listed in the main report.

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

Examination	2011	2012	2013	2014	2015
Civil Services	0	0	0	0	0
Defence Service	0	0	0	0	0
NET	0	0	0	0	2
SET	0	0	0	0	0
GATE	3	3	5	5	12
TOEFL	0	0	0	1	1
GRE	0	0	1	2	1

35. Student progression

Student progression	Percentage against enrolled				
	2008-12	2009-13	2010-14	2011-15	2012-16
UG to PG	40	45	45	67	50
PG to M.Phil.	0	0	0	0	0
PG to Ph.D.	15	20	17	17	0
Ph.D. to Post-Doctoral	25	33	20	20	17
Employed	--	--	--	--	--
• Campus selection	91	78	76	100	72
• Other than campus recruitment	--	--	--	--	--
Entrepreneurs	--	--	--	--	--

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	5.9
from other universities within the State	17.6
from universities from other States from	76.5
universities outside the country	0

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

- Library: University Library, Learning Resource Centre (LRC), Caters to all Departments. The Departments and the library are housed in Academic Block.
- Internet facilities for staff and students: High speed internet facility is available in the campus.
- Total number of class rooms 19 (Shared with other Departments)

<i>Type of Room</i>	<i>Number</i>	<i>Minimum Capacity of each</i>
Lecture Theatres	3	240
Class Rooms	8	84
Tutorial Rooms	7	35
Group discussion Rooms	1	35

- Class rooms with ICT facility: All class rooms and lecture theatres are well equipped with a projector, computer systems with high speed internet facility.
- Students' laboratories: 08
- Research laboratories: 08 (Core) and 02 (Shared for teaching)

List of 18 Laboratories		
S. No.	Laboratory Name	Details
1.	UG1 Lab	GLP & Instrumentation, Immunology, Genetics
2.	UG2 Lab	Fundamental Biology, Molecular Biology, Genetic Engineering
3.	Biochemistry Lab	Biochemistry, Cell and Developmental Biology
4.	Diagnostics Lab	High Throughput Lab, Diagnostic and Vaccine manufacture Technology Lab
5.	Bioprocess Engineering Lab	Bioprocess Engineering Lab, Downstream processing Lab, Food and Agricultural Biotechnology Lab
6.	Microbe Lab	Microbiology Lab
7.	Plant Tissue Culture Lab	Plant Tissue Culture Lab
8.	Bioinformatics Lab	Bioinformatics Lab
9.	Functional Genomics Lab	Comparative and Functional Genomics Lab
10.	Animal cell culture Lab	Animal Tissue culture Lab
11.	Human Genomics Lab	-
12.	Peptide Lab	-
13.	Environment Biotechnology Lab	-
14.	Probiotics and Gut Simulation Lab	-
15.	Instrumentation Lab	-
16.	Bioinformatics project Lab	-
17.	Research Lab with Animal House	-

18.	Pathogen Culture Lab	-
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39. List of doctoral, post-doctoral students and Research Associates

a) from the host institution/university

S. No.	Name of Student	Doctoral/Post Doc/Research Associate	Supervisor
1	Shivum Sharma	Doctoral	Dr. Hemant Sood
2	Ankush Bansal	Doctoral	Dr. Rajinder S Chauhan
3	Ashwani Kumar	Doctoral	Dr. Tiratha Raj Singh

b) from other institutions/universities

S. No.	Name of Student	Doctoral/Post, Doc/Research Associate	Supervisor
1	Dr. Mamta Raghav	Post Doc	Dr. Gunjan Goel
2	Dr. Rishi Mahajan	Post Doc	Dr. Gunjan Goel
3	Rakesh singh Gour	Doctoral	Dr. Anil Kant Thakur
4	Aseem Chawla	Doctoral	Dr. Anil Kant Thakur
5	Prabodh Kumar Bajpai	Doctoral	Dr. Anil Kant Thakur
6	Shipra Garg	Doctoral	Dr. Anil Kant Thakur
7	Mohd.Imran Shah	Doctoral	Dr. Chittaranjan Rout
8	Nupur	Doctoral	Dr. Chittaranjan Rout
9	Smriti Mishra	Doctoral	Dr. Chittaranjan Rout
10	Arun Chauhan	Doctoral	Dr. Chittaranjan Rout
11	Varun Jaiswal	Doctoral	Dr. Chittaranjan Rout
12	Mamta Chauhan	Doctoral	Dr. Garlapati Vijay Kumar
13	Deepika Sharma	Doctoral	Dr. Gunjan Goel
14	Kavita	Doctoral	Dr. Gunjan Goel
15	Niharika Singh	Doctoral	Dr. Gunjan Goel
16	Sampann	Doctoral	Dr. Gunjan Goel
17	Ambika Sharma	Doctoral	Dr. Harish Changotra
18	Avni Vij	Doctoral	Dr. Harish Changotra
19	Rohit Randhawa	Doctoral	Dr. Harish Changotra
20	Sanjay Singh	Doctoral	Dr. Harish Changotra
21	Swapnil Jain	Doctoral	Dr. Harish Changotra
22	Amisha Mittal	Doctoral	Dr. Hemant Sood
23	Amit Sud	Doctoral	Dr. Hemant Sood
24	Ashish Warghat	Doctoral	Dr. Hemant Sood
25	Kritika	Doctoral	Dr. Hemant Sood
26	Neha Sharma	Doctoral	Dr. Hemant Sood
27	Raman	Doctoral	Dr. Jata Shankar
28	Shraddha Tiwari	Doctoral	Dr. Jata Shankar
29	Tamanna	Doctoral	Dr. Jayashree Ramana
30	Kusum	Doctoral	Dr. Jayshree Ramanna
31	Nutan Thakur	Doctoral	Dr. Jitendra Vashisht
32	Varun Bhardwaj	Doctoral	Dr. Poonam Sharma

33	Poonam	Doctoral	Dr. Rahul Shrivastva
34	Shivani Sood	Doctoral	Dr. Rahul Shrivastva
35	Ira Vashisht	Doctoral	Dr. Rajinder S Chauhan
36	Manali Gangwar	Doctoral	Dr. Rajinder S Chauhan
37	Tamanna Sharma	Doctoral	Dr. Rajinder S Chauhan
38	Tarun Pal	Doctoral	Dr. Rajinder S Chauhan
39	Jibesh Kumar Pradhan	Doctoral	Dr. Rajinder S Chauhan
40	Varun Gupta	Doctoral	Dr. Rajinder S Chauhan
41	Archit Sood	Doctoral	Dr. Rajinder S Chauhan
42	Arti Sharma	Doctoral	Dr. Rajinder S Chauhan
43	Nidhi Gupta	Doctoral	Dr. Rajinder S Chauhan
44	Saurabh Pandit	Doctoral	Dr. Rajinder S Chauhan
45	Sree Krishna Chanumolu	Doctoral	Dr. Rajinder S Chauhan
46	Tamanna Anwar	Doctoral	Dr. Rajinder S Chauhan
47	Guru Charan	Doctoral	Dr. Sudhir Kumar
48	Jatindra Kumar Pradhan	Doctoral	Dr. Sudhir Kumar
49	Mamta Kumari	Doctoral	Dr. Sudhir Kumar
50	Anil Kumar	Doctoral	Dr. Sudhir Kumar
51	Ritika Verma	Doctoral	Dr. Sudhir Kumar
52	Ankita	Doctoral	Dr. Tiratha Raj Singh
53	Manika Sehgal	Doctoral	Dr. Tiratha Raj Singh
54	Priya P. Panigrahi	Doctoral	Dr. Tiratha Raj Singh

40. Number of post graduate students getting financial assistance from the university.

16 doctoral students of the Department are getting a financial assistance of Rs. 18000 pm.

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

No

42. Does the department obtain feedback from

- i. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

There are two different committees for the evaluation of curriculum and teaching-learning methodologies.

a) **Programme Evaluation Committee** assess the students' performance semester wise.

b) **Curriculum Design Committee** brainstorms on design and revision of course curricula as per advancements in science & technology and requirements of the industry and academia

The suggestions from both the committees are discussed in faculty meetings for their feedback and changes to be made are forwarded to the Board of Studies for approval.

- ii. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Yes, students give their feedback on teaching-learning practices in each course at the end of semester. A questionnaire has been designed by the University to evaluate teaching methods of teachers and the feedback is assessed on a scale of 1 to 10.0. Regular interaction with the students, particularly low performers is arranged by each course coordinator and appropriate

interventions are made to improve learning. The teachers are regularly counselled by the HoD on improving for deficiencies, if any in teaching practices. The Department also assigns one faculty member as an academic mentor for each year of the students to interact with students on their general academic issues.

- iii. alumni and employers on the programmes offered and how does the department utilize the feedback?

Alumni regularly visit department and provide feedback on the quality of degree programme for strengths and weaknesses. Alumni feedback is also obtained through e-mail. The suggestions are incorporated in the curricula. We have regular interactions with the industry on the performance of our graduates during placement or during internships. The feedback from industry are considered during the revision of curricula, either by modifying contents of existing courses or introducing new electives or even changing the core curriculum.

43. List the distinguished alumni of the department (maximum 10)

S. No.	Name	Current Position
1.	Ms. Vandita Aggarwal	Central Civil Services in Income Tax Department, Govt. of India.

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

- Special lectures are arranged from industry/academia visitors at regular intervals
- The BTech curricula mandate 6 weeks onsite training in industry/academic institutions of repute
- Students are also taken to industry site visits so as to demonstrate how product processes are implemented at an industrial scale
- UG/PG students are encouraged to participate in workshops/seminars/symposia organized by the Department or other Departments in the campus or even sent to attend national/international conferences within India

S. No.	Industry interactions/visits	Type	Year
1.	Central Potato Research Institute, Shimla	Students visit to research institute	2015-16
2.	Novozymes South Asia Pvt. Ltd., Bangalore	Industrial personal visits, presentations	2015-16
3.	Minchy's Food Products, Shimla	Students visit to Industry	2014-15
4.	Mohan Meakin Brewery, Solan	Students visit to Industry	2014-15
5.	Novozymes South Asia Pvt. Ltd., Bangalore	Industrial personal visits, presentations	2013-14
6.	Dabur Research Foundation	Interactive session by Dr. Anu T. Singh, Director (R&D)	2013-14
7.	Novozymes South Asia Pvt. Ltd., Bangalore	Industrial personal visits, presentations	2012-13
8.	Jubilant Chemsys, Noida	Interactive session by Dr. Koushik Das Sarma, Associate Director	2012-13
9.	Fermenta Biotech, Kullu	Students visit to Industry	2012-13
10.	IMTECH, Chandigarh	Student visit to Research Institute	2012-13
11.	Panacea Biotech, Lalru	Students visit to Industry	2011-12
12.	Central Research Institute, Kasauli	Students visit to vaccine research and production institute	2010-11

45. List the teaching methods adopted by the faculty for different programmes.

Course Delivery Methods	Justification
Concept Lecturing through White board and power point presentation	Information or teach students about a particular subject <ul style="list-style-type: none"> Lectures are used to convey critical information, history, background, theories and equations Lectures are used to relate engineering practice with ethical issues Lectures are also used to expose the students to contemporary issues and the need for life-long learning in the appropriate societal context In academia as a quick, cheap and efficient way of introducing large numbers of students to the above
Case Studies/ Quizzes/Assignments	Case studies and assignments are given to understand the real world problems related to interdisciplinary topics studied in courses <ul style="list-style-type: none"> Quizzes are a check to judge whether course content is imbibed by the students
Interactions/Audio/Video Presentations	Presentations are given to illustrate ideas and concepts in intricate graphics form. <ul style="list-style-type: none"> Presentations give information with data relating to an issue. Videos effectively communicate the working of actual engineering/technological solutions and their impact Presentations are always followed by discussions
Experimental Laboratory Work	Laboratory work demonstrates how theory can be verified by experiments through interpretation of results. <ul style="list-style-type: none"> Experiments are normally done in groups so that students learn to work in teams Experiments give a realization that technologies keep changing, thus a life-long learning is necessary so that knowledge can be translated into products/processes that is used in practice.
Individual/Group Tasks (Projects)	Projects are taken in groups of 2 students. <ul style="list-style-type: none"> Students are guided by faculty members Projects are taken on a large variety of problems and sometimes of multidisciplinary nature Projects are both theoretical and experimental Project reports are written and evaluated by a panel of internal faculty in the presence of an external examiner
Handouts	Handouts are given to supplement lectures. <ul style="list-style-type: none"> Handouts contain information for wider understanding of the philosophy of a subject and how it relates to contemporary world. Handouts give information on the history of courses and its impact on society.
Seminars/Guest lectures	Seminars and guest lectures connect students with the updated information related to subject areas studied. <ul style="list-style-type: none"> It helps them to connect their theory knowledge with the current research going on around the world.

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

The department monitors the programme objectives and learning outcomes of each programme

through the following mechanism:

- i) Regular feedback by faculty
- ii) Through regular exams Test-1 (15%), Test-2 (25%), Test-3 (35), and teacher assessment, which include quizzes, assignments and presentations (25%)
- iii) The achievement of programme objectives is assessed through placement of graduates in industry/academia of repute.

47. Highlight the participation of students and faculty in extension activities.

Students and faculty members of the department are involved in following extension activities

- Popularization of waste management practices and recycling of food and agri-waste material in nearby villages.
- Volunteer teaching in a neighbouring Dumehar Secondary school at Domahar on each Saturday.
- Organization of blood donation camps by the University along with ROTARACT club
- Inviting school children of 10+1 and 10+2 classes from Shimla and Solan for lab visits and interaction with faculty and PhD scholars so as to apprise them about our research activities

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

Department organized various beyond the syllabus scholarly activities under the umbrella of “Synapse”- a students’ club

- **Declamation Contest:** Debates on various topics of contemporary issues/interests including topics such as global warming and its solution, GMO foods, Waste management, etc.
- **Cidering:** Wine making competition by fermenting local fruit juices and packaging prepared wine in fancy bottles
- **Forensic idols:** Crime solution competition wherein students learn to solve a crime puzzle through clues and proved by lab-based evidences
- **Mad Scientists:** competition wherein students show their ability to carry out experiments with perfection (minimal errors).
- **Industrial visits:** On-site industry visits to provide exposure of industrial setting and environment

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

Yes

B.Tech Bioinformatics programme was accredited by the NBA (2009-2014)

B.Tech Biotechnology has provisionally accredited for 2 years by the NBA (2014-2016)

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

The faculty members of the Department have contributed in the following areas through their research activities:

New knowledge/Basic

- ✓ Elucidation of biosynthetic pathways for major chemical constituents of medicinal importance in high value herbs of North-Western Himalayas

Applied:

- ✓ Development of Henna Based Dye for SDS-PAGE Method (Patent granted)
- ✓ Development of process of enriching medicinal constituents in shoot cultures of *Swertia*

chirayita

- ✓ Development of process for production of cellulase and pectinase from herbal industry residue

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

- All faculty members are PhDs some with post-doctorates from reputed institutes in India and abroad
- All faculty members are engaged in active research, which has been funded by various funding agencies
- We have implemented an outcome-based model of education
- Project-based learning is an integral component of B.Tech and M.Tech curricula, providing wide coverage of different disciplines in biotechnology and bioinformatics
- Number of quality publications and patents filed from the department has increased in the last five years.

Weaknesses

- Consultancy component is minimal
- Less number of JEE-based admissions
- Less R&D collaboration with industries and international institutions
- Less number of interdisciplinary R&D projects
- Less number of admission of meritorious students

Opportunities

- R&D set up can take up high priority research of national importance
- Great opportunity for students and faculty to undertake entrepreneurial activities through various incentives of the Govt. of India
- Strong R&D set up can be expanded to engage with international institutes through several joint funding opportunities
- A beginning has been made in undertaking interdisciplinary or interdepartmental research activities and those can be expanded and strengthened to take full advantage of funding opportunities
- The research leads/ outcomes can be implemented for social relevance and impact

Challenges

- To improve the placement scenario, particularly for high package jobs
- Set up international collaborations
- Inculcate enthusiasm for entrepreneurship initiatives among graduates
- To encourage our students for participating in more numbers in National and International level competitive examinations
- To provide more exposure to our students to the real world

52. Future plans of the department.

- ✓ To raise the bar of Departmental research publications in high impact journals
- ✓ To develop R&D programmes for generating industrial consultancy
- ✓ To prioritize inhouse R&D activities for finding solutions to burning national problems

B7. Evaluative Report of Department of Pharmacy

1. **Name of the Department:** Department of Pharmacy
2. **Year of establishment:** 2008
3. **Is the Department part of a School/Faculty of the university?**
As such we do not have any school/faculty. But all departments are part of the university.
4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)**

Title	Programmes' Name
Under-Graduate Programmes	B.Pharm
Post-Graduate Programmes	M.Pharm
Research Programmes	Ph.D. Pharmaceutical Sciences

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**
B.Pharm-M.Pharm. programme: Due to less number of admissions
8. **Examination System: Annual/Semester/Trimester/Choice Based Credit System**
Semester
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)**

Positions	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	--	--	--
Associate Professors	--	0	0
Asst. Professors	--	3	3
Others Teaching Assistants	--	0	0

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

Name	Qualification	Designation	Specialization	Experience (in Years)	No of Ph.D./M.Tech. students guided for the last 4 years

Gopal Singh Bisht	M.Sc. PhD	Assistant Professor	Organic Chemistry	8	Awarded=01/08 Ongoing=01/00
M. Udayabanu	M.Pharm., Ph.D	Assistant Professor	Neuropharmacology	10	Awarded =01/13 Ongoing =06/00
Ahmed Nawaz Khan	M.Pharm., Ph.D	Assistant Professor	Analytical Chemistry	4	Awarded = 00/00 Ongoing = 00/00

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

None

13. Percentage of classes taken by temporary faculty – programme-wise information

Nil

14. Programme-wise Student Teacher Ratio

UG: NA

PG: NA

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

Support Staff	Sanctioned	Filled	Actual
Technical Staff	--	1	1
Administrative Staff	Central pool shared by all departments.		

16. Research thrust areas as recognized by major funding agencies

- Drug Delivery: Nanotechnology, Hydrogel and Novel drug delivery systems
- Pharmacology: Neuropharmacology
- Drug Discovery: Synthesis of small molecules and peptides, fractionation and screening of phytochemicals

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 Agencies: Nil
- International Funding agencies: Nil
- Total Grants received: Nil

18. Inter-institutional collaborative projects and associated grants received

- National collaboration: Nil
- 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: NA
- national recognition: NA
- international recognition: NA

21. Special research laboratories sponsored by / created by industry or corporate bodies

NA

22. Publications:

	2011	2012	2013	2014	2015
Number of papers published*	11	4	18	11	5
	national / international: 08/41				
Monographs	00	00	00	00	00
Chapters in Books	00	00	00	00	00
Edited Books	00	00	00	00	00
Books with ISBN with details of publishers	00	00	00	00	00
Number listed in International Database**	--	--	--	--	--
Citation Index – range / average	--	--	--	--	--
SNIP	0-0.703	0-1.595	0-3.182	0-1.432	0-1.186
SJR	0.13-4.36	0-2.6	0.32-4.36	0-1.39	0-3.09
Impact Factor – range / average	0.14 - 9.269	0 - 3.327	0.929 -9.269	1.612 – 3.902	0.5 - 8.7
h-index	4.67				
* in peer reviewed journals					
**For e.g., Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.					

23. Details of patents and income generated:

Sr. No	Application No	Date	Date granted/ Published	Patent No.
1.	1161/DEL/2014	30 th Apr 2014	6 th Nov 2015	-
2.	1940/DEL/2012	25 th Jun 2012	14 th Feb 2014	-
3.	2867/DEL/2011	04 th Oct 2011	05 th Apr 2013	-

24. Areas of consultancy and income generated

NA

25. Faculty selected nationally / internationally to visit other laboratories / institutions/ industries in India and abroad

Nil

26. Faculty serving in

- a) **National committees:** Nil
 b) **International committees:** Nil

c) Editorial Boards

S. No.	Faculty Name	Journals/Magazines' Name
1.	Dr. Udayabanu, M.	i. International Journal of Neuroscience and Behavioral Science ii. Research & reviews a journal of drug design & discovery

d) any other (please specify)

Nil

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

S. No.	Name of Faculty	Name of program/s	Venue	Dates
1	Ahmed Nawaz Khan, Udayabanu, M, Gopal Singh Bisht, G.L. Gupta	Faculty Development Programme	JUIT, Wagnaghat	14 th - 19 th July, 2014
2	Ahmed Nawaz Khan, Udayabanu, M, Gopal Singh Bisht	Faculty Development Programme on Outcome-based education in Biotechnology	JUIT, Wagnaghat	24 th - 30 th Dec, 2015

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 Nil

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

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

- Check on plagiarism in faculty research publications and UG/PG Theses
- Biosafety regulations and their stringent implementation

32. Student profile programme-wise:

Year / Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG					
2011-2012	--	3	0	100	--
2012-2013	--	3	1	100	100
PG					

2012-2013	--	23	17	100	100
2013-2014	--	11	17	100	100
Ph. D.					
2011-2012	--	4	0	--	--
2012-2013	--	3	1	--	--
2013-2014	--	4	2	--	--
2014-2015	--	1	1	--	--

33. Diversity of students:

Year / Name of the Programme	% 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. Pharrm	--	100	0	0
M. Pharm	35	--	65	0
Ph.D.	--	10	90	0

The data on diversity is also listed in the main report.

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

Nil

35. Student progression

Student progression	Percentage against enrolled
UG to PG	77.77 (2012-14) 45.45 (2013-15)
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

Percentage of faculty who are graduates	
of the same university	0
from other universities within the State	0
from universities from other States from	100
universities outside the country	0

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: University Library, Learning Resource Centre (LRC), Caters to all Departments. The Departments and the library are housed in Academic Block.
- b) Internet facilities for staff and students: High speed internet facility is available in the campus.
- c) Total number of class rooms 19 (Shared with other Departments)

<i>Type of Room</i>	<i>Number</i>	<i>Minimum Capacity of each</i>
Lecture Theatres	3	240
Class Rooms	8	84
Tutorial Rooms	7	35
Group discussion Rooms	1	35

- d) Class rooms with ICT facility: All class rooms and lecture theatres are well equipped with a projector, computer systems with high speed internet facility.
- e) Students' laboratories: 07
- f) Research laboratories

S. No.	Laboratory Name	Course Lab conducted
1.	Pharmaceutics Lab	Drug Formulation
2.	Analytical Chemistry Lab	Pharmaceutical analysis
3.	Biochemistry Lab	Biochemistry
4.	Medicinal Chemistry Lab	Synthesis of small molecules
5.	Pharmacology Lab	Pharmacology, Anatomy and Physiology
6.	Microbiology Lab	Microbiology Lab
7.	Research Lab with Animal House	Pharmacology

* All these labs now has been transferred to Department of Biotechnology and Bioinformatics.

39. List of doctoral, post-doctoral students and Research Associates

- a) from the host institution/university

S. No.	Name of Student	Doctoral/Post Doc/Research Associate	Supervisor
1	Jitender Monga	Doctoral	Dr. Manu Sharma
2	Navin Taylor	Doctoral	Dr. Manu Sharma
3	Sharad Kumar	Doctoral	Dr. Manu Sharma
4	Amol Bapurao Tayade	Doctoral	Dr. Manu Sharma
5	Varun Bhardwaj	Doctoral	Dr. Poonam Sharma
6	Silpi Chanda	Doctoral	Dr. Kuldeep Singh
7	Sandeep Lohan	Doctoral	Dr. Gopal Singh Bisht
8	Sita Sharan Patel	Doctoral	Dr. Udayabanu, M
9	Ahmed Nawaz Khan	Doctoral	Dr. Udayabanu, M
10	Arun Parashar	Doctoral	Dr. Udayabanu, M
11	Arun Sharma	Doctoral	Dr. Udayabanu, M
12	Vineet Mehta	Doctoral	Dr. Udayabanu, M

13	Deepika	Doctoral	Dr. Gopal Singh Bisht
14	Lalit Sharma	Doctoral	Dr. Udayabanu, M Dr. G.L. Gupta
15	Arun Dhiman	Doctoral	Dr. Udayabanu, M Dr. Maneesh Jaiswal
16	Kushal Kumar	Doctoral	Dr. Udayabanu, M
17	Raj Kumar Tiwari	Doctoral	Dr. Udayabanu, M

b) from other institutions/universities: Nil

40. Number of post graduate students getting financial assistance from the university.

02 doctoral students of the Department are getting a financial assistance of Rs. 18000 pm.

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

No

42. Does the department obtain feedback from

i. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

There are two different committees for the evaluation of curriculum and teaching-learning methodologies.

1) **Programme Evaluation Committee** assess the students' performance semester wise.

2) **Curriculum Design Committee** brainstorms on design and revision of course curricula as per advancements in science & technology and requirements of the industry and academia
The suggestions from both the committees are discussed in faculty meetings for their feedback and changes to be made are forwarded to the Board of Studies for approval.

ii. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Yes, students give their feedback on teaching-learning practices in each course at the end of semester. A questionnaire has been designed by the University to evaluate teaching methods of teachers and the feedback is assessed on a scale of 1 to 10.0. Regular interaction with the students, particularly low performers is arranged by each course coordinator and appropriate interventions are made to improve learning. The teachers are regularly counselled by the HoD on improving for deficiencies, if any in teaching practices. The Department also assigns one faculty member as an academic mentor for each year of the students to interact with students on their general academic issues.

iii. alumni and employers on the programmes offered and how does the department utilize the feedback?

Nil

43. List the distinguished alumni of the department (maximum 10)

Nil

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

- Special lectures are arranged from industry/academia visitors at regular intervals
- The B.Pharm curricula mandate 6 weeks onsite training in industry
- Students are also taken to industry site visits so as to demonstrate how product processes are implemented at an industrial scale
- UG/PG students are encouraged to participate in workshops/seminars/symposia organized by the Department or other Departments in the campus or even sent to attend national/international conferences within India

45. List the teaching methods adopted by the faculty for different programmes.

Course Delivery Methods	Justification
Concept Lecturing through White board and power point presentation	Information or teach students about a particular subject <ul style="list-style-type: none"> • Lectures are used to convey critical information, history, background, theories and equations • Lectures are used to relate engineering practice with ethical issues • Lectures are also used to expose the students to contemporary issues and the need for life-long learning in the appropriate societal context • In academia as a quick, cheap and efficient way of introducing large numbers of students to the above
Case Studies/ Quizzes/Assignments	Case studies and assignments are given to understand the realworld problems related to interdisciplinary topics studied in courses <ul style="list-style-type: none"> • Quizzes are a check to judge whether course content is imbibed by the students
Interactions/ Audio/Video Presentations	Presentations are given to illustrate ideas and concepts in intricate graphics form. <ul style="list-style-type: none"> • Presentations give information with data relating to an issue. • Videos effectively communicate the working of actual engineering/technological solutions and their impact • Presentations are always followed by discussions
Experimental Laboratory Work	Laboratory work demonstrates how theory can be verified by experiments through interpretation of results. <ul style="list-style-type: none"> • Experiments are normally done in groups so that students learn to work in teams • Experiments give a realization that technologies keep changing, thus a life-long learning is necessary so that knowledge can be translated into products/processes that is used in practice.
Individual/Group Tasks (Projects)	Projects are taken in groups of 2 students. <ul style="list-style-type: none"> • Students are guided by faculty members • Projects are taken on a large variety of problems and sometimes of multidisciplinary nature • Projects are both theoretical and experimental • Project reports are written and evaluated by a panel of internal faculty in the presence of an external examiner

Handouts	<p>Handouts are given to supplement lectures.</p> <ul style="list-style-type: none"> • Handouts contain information for wider understanding of the philosophy of a subject and how it relates to contemporary world. • Handouts give information on the history of courses and its impact on society.
Seminars/Guest lectures	<p>Seminars and guest lectures connect students with the updated information related to subject areas studied.</p> <ul style="list-style-type: none"> • It helps them to connect their theory knowledge with the current research going on around the world.

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

The department monitors the programme objectives and learning outcomes of each programme through the following mechanism:

- Regular feedback by faculty
- Through regular exams Test-1 (15%), Test-2 (25%), Test-3 (35), and teacher assessment, which include quizzes, assignment and presentations (25%)
- The achievement of programme objectives is assessed through placement of graduates in industries/academia of repute.

47. Highlight the participation of students and faculty in extension activities.

Students and faculty members of the department are involved in following extension activities

- Visited Schools and interacted with students and teachers to create awareness of the pharmacy program.

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

Department organized various beyond the syllabus scholarly activities

- **Pharmacy Day-** Seminars and poster presentation on various topics related to the profession in academia and industry.
- **Industrial visits** On-site industry visits to provide exposure of industrial setting and environment.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

Yes

B.Pharm program is approved by the Pharmacy Council of India.

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

The faculty members of the Department have contributed in the following areas through their research activities:

- ✓ Evaluation and screening of medicinal herbs of North-Western Himalayas

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
Strengths

- All faculty members are PhDs and are engaged in active research
- Number of quality publications and patents filed from the department has increased in the last five years.

Weaknesses

- Less number of admission

Opportunities

- Undertake interdisciplinary/interdepartmental research activities to meet social relevance and impact

Challenges

- To encourage our student participation and train them for National and International level competitive examinations
- To provide professional exposure to the students for better understanding of Pharmacy profession.

52. Future plans of the department.

- ✓ To raise the bar of Departmental research publications in high impact journals
- ✓ To develop R&D programmes for generating industrial consultancy

B8. Evaluative Report of Department of Civil Engineering

1. **Name of the Department:** Civil Engineering
2. **Year of establishment:** 2003
3. **Is the Department part of a School/Faculty of the university?**
As such we do not have any school/faculty. But all departments are part of the university.
4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)**

B.Tech	Under Graduate Program
M.Tech (Construction Management since 2008)	Post-Graduate Programs
M.Tech (Structure Engineering since 2012)	
M.Tech (Environmental Engineering since 2014)	
Ph.D.	Research Program

5. **Interdisciplinary programmes and departments involved**
Nil
6. **Courses in collaboration with other universities, industries, foreign institutions, etc.**
MOU with Rinker school of Building Construction, University of Florida, Gainesville, Florida (From 2008-09).
Students of B Tech spend their VIII semester at University of Florida (“Senior certificate in Construction Management”).
7. **Details of programmes discontinued, if any, with reasons**
Nil
8. **Examination System: Annual/Semester/Trimester/Choice Based Credit System**
Semester
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)**

Positions	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	2	2	2
Associate Professors	3	2	2
Asst. Professors	12	11	11
Others Teaching Assistants	0	0	0

11. **Faculty profile with name, qualification, designation, area of specialization, experience and**

research under guidance

Name	Qualification	Designation	Specialization	Experience (in Years)	No of Ph.D./M.Tech. students guided for the last 4 years
Ashok K. Gupta	Ph D	Professor	Geotechnical Engineering	29	Awarded=01/17 Ongoing=07/05
Veeresh Gali	Ph D	Professor	Environmental Engineering	20	Awarded =00/03 Ongoing =01/03
Ashish Kumar	Ph D	Associate Professor	Hydraulic Engineering	10	Awarded = 00/04 Ongoing = 02/01
Rajiv Ganguly	Ph D	Associate Professor	Environmental Engineering	8	Awarded = 00/04 Ongoing = 02/02
Anil Kumar	M.Tech	Assistant Professor	Structural Engineering	11	Awarded = 00/00 Ongoing = 00/00
Poonam	M.Tech	Assistant Professor.	Structural Engineering	10	Awarded = 00/00 Ongoing = 00/00
Abhilash Shukla	M.Tech	Assistant Professor	Structural Engineering	5	Awarded = 00/04 Ongoing = 00/04
Chandrapal Gautam	M.Tech	Assistant Professor	Structural Engineering	6	Awarded = 00/06 Ongoing = 00/00
Saurav	M.Tech	Assistant Professor	Structural engineering	5.5	Awarded = 00/01 Ongoing = 00/03
Saurabh Rawat	M.Tech	Assistant Professor	Geotechnical Engineering	4	Awarded = 00/02 Ongoing = 00/02
Lav Singh	M.Tech	Assistant Professor	Structural Engineering	1+3	Awarded = 00/06 Ongoing = 00/04
Neeraj Singh Parihar	M.Tech	Assistant Professor	Geotechnical Engineering	3.33	Awarded = 00/00 Ongoing = 00/01
Santu Kar	M.Tech	Assistant Professor	Construction Management	3.5	Awarded = 00/03 Ongoing = 00/04
Bibhas Paul	M.Tech	Assistant Professor	Structural Engineering	0.5	Awarded = 00/00 Ongoing = 00/00
Deepak Kumar	M.Tech	Assistant Professor	Structural Engineering	0.5	Awarded = 00/00 Ongoing = 00/00

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

Nil

13. Percentage of classes taken by temporary faculty – programme-wise information

Nil

14. Programme-wise Student Teacher Ratio

UG: 20:1

PG: 18.5:1

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

actual

Support Staff	Sanctioned	Filled	Actual
Technical Staff	6	5	5
Administrative Staff	Central pool shared by all departments.		

16. Research thrust areas as recognized by major funding agencies

- Civil Department has four major research thrust areas funded by the university.
- Fluvial Hydraulics
- Structural Engineering
- Environmental Engineering
- Geotechnical Engineering

17. Number of faculty with ongoing/completed 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 Funding Agencies :

S. No.	Investigator(s)	Funding Agency	Project title	Duration	Grant in Lakh
ONGOING-Nil					
COMPLETED					
1.	Ashish Kumar	DST	Effect of steam-wise spacing of circular Bridge piers on Flow characteristics and local scour	2013-2016	9.88
Total=					9.88

- b) International Funding agencies: Nil
 c) Total Grants received: 9.88 Lakhs

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: Nil
- national recognition: Nil
- international recognition: Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies

Nil

22. Publications:

	2011	2012	2013	2014	2015
Number of papers published*	04	08	01	12	11
	national / international: 00/36				
Monographs	00	00	00	00	00
Chapters in Books	00	00	00	01	00
Edited Books	01	00	01	00	00
Books with ISBN with details of publishers	01	01	00	00	00
Number listed in International Database**	41				
Citation Index – range / average	(0-240) 37.41				
SNIP	0-1.642				
SJR	0-1.49				
Impact Factor – range / average	0-3.05				
h-index	1.7				
*in peer reviewed journals					
**For e.g., Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.					

23. Details of patents and income generated:

Nil

24. Areas of consultancy and income generated

Income generated=Nil

25. Faculty selected nationally / internationally to visit other laboratories / institutions/ industries in India and abroad

Nil

26. Faculty serving in

a) **National committees:** Nil

b) **International committees:** Nil

c) Editorial Boards

Prof. Ashok Kumar Gupta

- ✚ The Scientific World Journal (Civil Engineering)
- ✚ American Journal of Remote Sensing
- ✚ International Journal of Civil, Structural, Environmental and Infrastructure Engineering Research and Development - IJCSEIERD
- ✚ Journal of Civil, Structural, Environmental, Water resources and Infrastructure Engineering Research (JCSEWIER)
- ✚ Science PG Journal - Advances in Materials

d) **any other (please specify)**

Faculty members are assisting the editors of various peer reviewed journals in the reviewing process.

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

Faculty of Civil Engineering are encouraged to attend Conferences, Faculty development programmes and workshops and short term courses.

S. No.	Name of Faculty	Name of program/s	Venue	Dates
1	All Civil Engineering Faculty	Faculty Development Program on “Application of Computational Methods in Civil Engineering Education”	JUIT Waknaghat	18 - 23 Jan 2016
2	All Civil Engineering Faculty	Two Day Symposium on “High Performance and High Strength Concrete- Principles, Development and applications”.	JUIT Waknaghat	16-17 March 2016
3	All Civil Engineering Faculty	3 rd International Convention on Engineering and Management (iCEM) by Prof. Har Amrit Sandhu	JUIT Waknaghat	3-5 April 2015
4	Mr. Niraj Singh Parihar	International Conference on Advances in Applied Engineering and Technology (ICAAET-2015)	Syed Ammal Engineering College, (Anna University) Ramananthapuram, Tamilnadu	May 14-16, 2015
5	Faculty of Civil Engineering	One week Workshop on Primavera	JUIT Waknaghat	January 2015
6	All Civil Engineering Faculty	One week Faculty Development Program on Outcome Based Education	JUIT Waknaghat	14-19 July 2014
7	All Civil Engineering Faculty	Two- day workshop on “Rock Mechanics and Dam Foundations”	JUIT Waknaghat	29-30 March 2014
8	All Civil Engineering Faculty	2 nd International Convention on Engineering and Management (iCEM)	JUIT Waknaghat	27-28 April 2014
9	All Civil Engineering Faculty	Workshop on AUTOCAD by Kadkraft System Pvt. Ltd. Chandigarh	JUIT Waknaghat	8-9 July 2013
10	All Civil Engineering Faculty	Two day Fourth Indian Rock Conference “INDOROCK-2013”	JUIT Waknaghat	30-31 May 2013
11	All Civil Engineering Faculty	One day workshop on “Rock Engineering”	JUIT Waknaghat	29 May 2013
12	All Civil Engineering Faculty	Workshop on Mxroad Software by Bentley Systems India Pvt. Ltd.	JUIT Waknaghat	25 April 2013
13	All Civil Engineering Faculty	5 day IUCEE workshop on Introduction to “Finite Element Analysis for Civil Engineers”	JUIT Waknaghat	30 July- 3 Aug 2012
14	All Civil Engineering Faculty	International invited lecture on “Application of principles of Reliability to Bridges”	JUIT Waknaghat	18 Aug. 2012
15	All Civil Engineering Faculty	2 day workshop on “Critical State Soil Mechanics”	JUIT Waknaghat	30-31 May 2012

16	All Civil Engineering Faculty	Conference on “Recent Technological Advancement in Civil Engineering (SCTACE-2012)”	JUIT Wagnaghat	31March -1 April 2012
17	All Civil Engineering Faculty	IUCEE workshop on “Project Management and Heavy Construction Equipment”	JUIT Wagnaghat	8-12 Aug. 2011
18	Dr. S.K. Jain	Workshop on “Grouting and Deep Mixing”	Central Board of Irrigation and Power, Chanakyapuri, New Delhi	25-26 Aug. 2011
19	Dr. Amit Goel	IUCEE workshop on MATLAB: An Interactive Environment for Signal Processing”	Chitkara University Solan	25-26 July 2011

28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects 100%. All the students do in house 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

S. No.	Award	Name of Recipient	Year
Faculty			
1.	ISRMTT 2014 Best Paper Award, Indian Society of Rock Mechanics and Tunnelling Technology;	Dr. S K Jain (Associate Professor)	2014
Doctoral / Post-doctoral fellows			
	Nil		
Students			
1	Best paper award title “Design chart method of foundation design: A better way of geotechnical design of foundations,” <i>Students’ national conference- SCTACE 2012 at JUIT Wagnaghat</i>	Mr. Eshan Ganju	March 30-31, 2012
2.	First prize <i>STAAD.pro design event in SCTACE 2012 at JUIT Wagnaghat</i>	Mr. Rohit Dua jointly with Mr. Eshan Ganju and Mr. Sumit Jain	March 30-31, 2012
3.	First prize <i>AutoCAD competition</i>	Mr. Sumit Jain	Feb 18-20, 2011.

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

S. No.	Title	Year	Source of Funding	Outstanding Participants
Seminars				
1	Hydropower Engineering – Issues	3April, 2015	JUIT Wagnaghat	Mr. D.K. Sharma (M.D. , HPPCL)

	and Challenges			
2	Advances in Construction Management	28-02-2015	JUIT Waknaghat	Dr. K N Jha , Asso. Professor, IIT Delhi
3	Advanced Mapping in GIS.	5 April, 2015	JUIT Waknaghat	Prof. Har Amrit Sandhu from PEC University, Chandigarh.
4	International invited lecture on “Application of Principles of Reliability to Bridges”.	August 18, 2012.	JUIT Waknaghat	Prof. Chandrasekhar Putcha , California State University, Fullerton USA
Conferences				
1	3 rd International Convention on Engineering & Management (iCEM)	April 3-5, 2015	JUIT Waknaghat	Prof. Har Amrit Sandhu from PEC University, Chandigarh delivered expert lecture on “Advanced Mapping in GIS”.
2	2 nd International Convention on Engineering & Management (iCEM)	April 26-27, 2014	JUIT Waknaghat	Prof. Dimitris Kaskaoutis from Shiv Nadar University Noida. Selected papers published by <i>International Journal of Scientific & Engineering Research</i> < http://www.ijser.org/ICEM2014-conference-papers.aspx >
3	Two day Fourth Indian Rock Conference “INDOROCK-2013”	30-31 May 2013	JUIT Waknaghat & Indian Society for Rock Mechanics and Tunnelling Technology	Dr. Nick R. Bartan
4	1st International Convention on Engineering & Management (iCEM)	April 27-28, 2013	JUIT Waknaghat	NA
5	Conference on “Recent Technological Advancement in Civil Engineering” (SCTACE-2012)	March 31-1 April, 2012	JUIT Waknaghat	Inauguration: Prof. Manoj Datta , Director PEC University of Technology, Chandigarh the conference. Keynote lecture: Dr. Rajbal Singh , Joint Director, CSMRS New Delhi. Invited lecture: Graham Morphett , Director, Uretek India Pvt.
Workshops				
1	Application of Computational Methods in Civil Engineering Education	18–23 January, 2016	JUIT Waknaghat.	Prof. P J Philip , NIT Kurukshetra.
2	Two-day Symposium on High Performance and High Strength	March 16-17, 2016,	JUIT Waknaghat.	Mr. Namit Kumar , Assistant Manager (RITES Ltd.)

	Concrete – Principles, Development and Applications			
3	One-week Workshop on Primavera	January 2015	JUIT, Wagnaghat	CAD Centre and Deptt. Of Civil Engineering
4	One-day Workshop on CAD Software by CETPA for Civil Engineering students	August 27, 2014.	JUIT Wagnaghat	NA
5	Faculty Development Workshop on Outcome-based Education	July 14-19, 2014.	JUIT, Wagnaghat	Prof. M.P. Gupta , Department of Management Studies, IIT Delhi and Veerendra K Jaitly , CEO, C-cube consultants.
6	Two-day Workshop on “Rock Mechanics and Dam Foundations”,	29-30 March, 2014	JUIT Wagnaghat.	NA
7	One Day Workshop on Autocad 2013 by Kadkraft System Pvt Ltd Chandigarh	08-07-2013 & 09-07-2013.	JUIT Wagnaghat.	NA
8	One day Workshop on “Rock Engineering”	29 May 2013	JUIT and Indian Society for Rock Mechanics and Tunnelling Technology	Dr. Nick R. Bartan
9	One day Workshop on MxRoad Software organized by Bentley Systems India Pvt. Ltd.	25/04/2013	JUIT Wagnaghat.	NA
10	5 day IUCEE workshop on “Introduction to Finite Element Analysis for Civil Engineers”	July 30 - August 3, 2012.	JUIT Wagnaghat.	Prof. Subramaniam Rajan , Arizona State University, Tempe USA
11	2-day workshop on Critical State Soil Mechanics	30-31 May 2012.	JUIT Wagnaghat.	Dr. J.T. Shahu , IIT Delhi, Dr. R.G. Robinson , IIT Madras Dr. Altaf Usmani , EIL New Delhi.
12	IUCEE workshop on “Project Management and Heavy Construction Equipments”	8– 12 August 2011.		Dr. Vineet Kamat , Associate Professor, University of Michigan USA,

31. Code of ethics for research followed by the departments

- No manuscript with similarity index (SI) more than 30 is sent for publication
- For every Ph.D thesis a Plagiarism check certificate is given and attached in Ph.D thesis.

32. Student profile programme-wise:

Year / Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG					
2012-2013		89	10	96.6	80
2013-2014		107	8	-	-
2014-2015		91	4	-	-
2015-2016		91	4	-	-
PG					
2012-2013		2	0		
2013-2014		10	2		
2014-2015		23	12		
2015-2016		28	12	-	-
Ph. D.					
2012-2013		4	0	-	-
2013-2014		0	0	-	-
2014-2015		0	1	-	-
2015-2016		0	0	-	-

33. Diversity of students:

Year / Name of the Programme	% 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
Data not available				

The data on diversity is available at university level. The same is listed in the main report.

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

Examination	2011	2012	2013	2014	2015
Civil Services	--	--	--	--	--
Defence Service	--	--	--	--	--
NET	--	--	--	--	--
SET	--	--	--	--	--
GATE	12	17	8	15	13
Other	--	--	--	--	--

35. Student progression

Student progression	Percentage against enrolled
UG to PG	08 [Year-2014]
PG to M.Phil.	--
PG to Ph.D.	01 (Ashish Tiwary) [Year-2014]
Ph.D. to Post-Doctoral	--
Employed	--
• Campus selection	75% [Year-2011]

• Other than campus recruitment	--
Entrepreneurs	--

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	14.28% [M.Tech.] 0% [Ph.D]
from other universities within the State	0
from universities from other States from	85.71% [M.Tech.] 100% [Ph.D]
universities outside the country	0

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

- Library: University Library, Learning Resource Centre (LRC), Caters to all Departments. The Departments and the library are housed in Academic Block.
- Internet facilities for staff and students: All faculty members are having computers and internet facility. There is a CAD Lab equipped with net facility for the students.
- Total number of class rooms 19 (Shared with other Departments)

<i>Type of Room</i>	<i>Number</i>	<i>Minimum Capacity of each</i>
Lecture Theatres	3	240
Class Rooms	8	84
Tutorial Rooms	7	35
Group discussion Rooms	1	35

- Class rooms with ICT facility: All Class rooms are equipped with ICT facility.
- Students' laboratories: Chemistry Lab, Fluid Mechanics Lab, Concrete Lab, Highway Engineering Lab, Environmental Engineering Lab, Workshop Practices Lab, Geotechnical Lab, Structural Mechanics Lab, Survey lab, CAD/software lab, Drawing Hall, Engineering Graphics Lab.
- Research laboratories: Fluvial Hydraulics Lab, Computational Research Lab.

39. List of doctoral, post-doctoral students and Research Associates

- from the host institution/university

S. No.	Name of Student	Doctoral/Post Associate	Doc/Research	Supervisor
1	Ms. Rishi Rana	Doctoral		Dr. Rajiv Ganguly, Dr. Ashok Gupta
2	Mr. Saurabh Rawat	Doctoral (Part Time)		Dr. Ashok Gupta
3.	Mr. Saurav	Doctoral (Part Time)		Dr. Ashok Gupta
4	Anchal Sharma	Doctoral		Dr. Rajiv Ganguly, Dr. Ashok Gupta
5	Disha Thakur	Doctoral		Dr. Ashok Gupta, Dr. Veeresh Gali
6	Mr. Aakash Gupta	Doctoral (Part Time)		Dr. Ashok Gupta, Dr. Ashish Kumar
7	Mr. Arvind Kumar	Doctoral (Part Time)		Dr. Ashok Gupta

b) from other institutions/universities

S. No.	Name of Student	Doctoral/Post, Associate	Doc/Research	Supervisor
1.	Umesh Kumar Singh	Doctoral (IIT Roorkee)		Dr. Ashish Kumar

40. Number of post graduate students getting financial assistance from the university.
Session 2015-16: Nil

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

Yes, an assessment exercise is always undertaken before the development of new programme(s). Feedback from stakeholders such as Industry, parents, students are taken from time to time. On that basis the need of any programme to be run is decided. A departmental committee is constituted by Head of the department to design the new programme. Once the tentative programme is finalized, departmental meeting is called and it is finalized. A meeting of Board of studies comprising an external member from reputed Institutes is convened and based on inputs from the expert committee course structure of the programme is finalized. After that, it is sent to academic council for approval, and once approved from the academic council, the programme is floated.

42. Does the department obtain feedback from

i. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes, feedback is always taken from faculty on curriculum as well as teaching learning-evaluation. In each semester faculty meetings on department level are called in which faculty are asked to discuss the outcome of his teaching on the basis of day today evaluation and term exams. Also his views are taken on the curriculum and also any modification required or not. These suggestions are put in meeting of BOS and possible changes required in course syllabi are discussed.

ii. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

The department always collect feedback on staff, curriculum and teaching-learning-evaluation at the end of each semester for every subject. A feedback form is circulated among the students and students are encouraged to put their view on all the above mentioned points.

iii. alumni and employers on the programmes offered and how does the department utilize the feedback?

The feedback obtained from alumni and employers is utilized to know the current demand of industry. Accordingly changes in the course curriculum are made and scheme is redesigned.

43. List the distinguished alumni of the department (maximum 10)

Nil

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

S. No.	Name of program	Venue	Date	Outstanding Participants
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1	Two Day Symposium on “High Performance and High Strength Concrete- Principles, Development and applications”.	JUIT Waknaghat	16-17 March 2016	--
2	3 rd International Convention on Engineering and Management (iCEM)	JUIT Waknaghat	3-5 April 2015	Prof. Har Amrit Sandhu PEC University, Chandigarh delivered expert lecture on “Advanced Mapping in GIS”.
3	One week Workshop on Primavera	JUIT Waknaghat	January 2015	CAD Centre and Dept. of Civil Engineering
4	7 th International conference on Emerging Technologies in Civil Engineering, Architecture and environmental engineering for Global Sustainability”	JNU Delhi	5 April 2015	--
5	National Conference on “Advances in Engineering technology and management”	MM University Ambala	4 April 2015	--
6	Two- day workshop on “Rock Mechanics and Dam Foundations”	JUIT Waknaghat	29-30 March 2014	--
7	2 nd International Convention on Engineering and Management (iCEM)	JUIT Waknaghat	27-28 April 2014	--
8	Two day Fourth Indian Rock Conference “ “INDOROCK-2013”	JUIT Waknaghat	30-31 May 2013	--
9	One day workshop on “Rock Engineering”	JUIT Waknaghat	29 May 2013	Dr. Nick R. Bartan was the speaker.
10	5 day IUCEE workshop on Introduction to “Finite Element Analysis for Civil Engineers”	JUIT Waknaghat	30 July- 3 Aug 2012	Prof. Subramaniam Rajan, Arizona State University, Tempe USA
11	International invited lecture on “Application of principles of Reliability to Bridges”	JUIT Waknaghat	18 Aug. 2012	Prof. Chandrasekhar Putcha, California State University, Fullerton USA.
12	2 day workshop on “Critical State Soil Mechanics”	JUIT Waknaghat	30-31 May 2012	Dr. J.T Shahu, IIT Delhi, Dr. R. G. Robinson IIT Madras, and Dr. Altaf Usmani, EIL New Delhi
13	Conference on “Recent Technological Advancement in Civil Engineering (SCTACE-2012)”	JUIT Waknaghat	31March -1 April 2012	Prof. Manoj Dutta, Director PEC University of technology, Chandigarh.
14	IUCEE workshop on “Project Management and Heavy Construction Equipment”	JUIT Waknaghat	8-12 Aug. 2011	Dr. Vineet Kamat, Associate Professor Univ. of Michigan, USA
15	3 day Educational Tour [Visit to construction site of Hospital at Palampur and Cricket Stadium Dharamshala]	Palampur, and Dharamshala, H.P.	20-22 Aug 2011	--

45. List the teaching methods adopted by the faculty for different programmes.

Besides, conventional board teaching methods, the department makes use of computers audio video visuals in the class room. Lectures in the class room are given through Power point presentation. Moreover study materials for students are made available on server. Some of the modern teaching methods include:

- **Group and Self-Learning**
Students are encouraged to study in groups and also encouraged for self learning. They are given some topics of interest on which they are asked to prepare report and give presentation in the class room.
A student body CEC (Civil Engineering Consortium) was started in 2008, which keeps on organizing events like group discussions, invited lectures and other technical competitions.
- **Tutorial and Problem Solving exercises**
Most theoretical courses need interactive discussions in small tutorial-groups. Students are given problem solving and design exercises in the tutorial classes. A number of home-assignments are also given to the students to solve design problems.
- **Project Activity**
B. Tech. and M. Tech Students are given projects in their last year. B Tech students are divided into a number of groups consisting of not more than 2 students. These groups are required to complete minor and major projects with their supervisors. Students use the laboratory equipments and/or software-packages to execute the project work.
- **Industrial Internship**
Every undergraduate student undergoes an Industrial internship of 6 weeks after his/her 6th Semester.
- **Guest Lectures & Seminars**
Eminent professionals and other eminent persons are invited to the university on regular basis for guest lectures. Students are provided opportunities to attend workshops and conferences.

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

Inputs from the students are taken for each subject taught in every semester. Feed back is taken in the last week of the semester.

Inputs from Alumni, parents and industry are received through extensive surveys and personal mails.

Program educations objectives' assessment is done by various methods. These methods include student's results, student's performance in (university examinations, placement and competitive examinations) and feedbacks and suggestions obtained from students, alumni and employers, through surveys and time to time meetings with students. Also some students provide feedback of the subject to the concerned teacher in one to one interaction. Students' feedback is also taken in class by making open session and discussion regarding subject. Alumni and Employer feedback is taken very year. The objectives which are not met are reviewed in the faculty meeting and necessary changes in the curriculum are suggested.

In the process of the student feedback on teaching and learning practices in each course a questionnaire has been designed by the University. This form evaluate teaching methods of teachers and the feedback is assessed on a scale of 1 to 10.0. Review of examination data by faculty committees are also carried out to determine percentage of students progresses in the examination. Employers are asked for their feedback about the student's performance and their expectations at

the work place and data is used to update curriculum and course content.

The meetings of the students with industry personnel are done 2-3 times of a semester in order to assess the teaching quality as per industry requirements.

47. Highlight the participation of students and faculty in extension activities.

Faculty of Civil Engineering is involved in extension activities.

Name of the faculty	Project Title	Project Type Research/Consultancy	Funding Agency	Amount	Duration
Ashish Kumar	Design, fabrication and installation of Biogas Digester (3000 litres) at Govt. Senior Secondary School, Burmana of Distt.	Consultancy (Community service to the H.P. Govt.)	Nirmal Bharat Abhiyan, Govt. of H.P.	No charges levied	December 26, 2014
Ashish Kumar	Design, fabrication and installation of Biogas Digester (2000 litres) at Eternal University, Baru Sahib, Sirmour, Himachal Pradesh.	Consultancy (Community service to academic organization)	Eternal University, Baru Sahib, H.P.	No charges levied (TA/DA expenses borne by the	January 16, 2015

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

- Research papers are presented and published by B. Tech and M. tech students in conferences and Journals based on their thesis work.
- The department has local Indian Geotechnical society (IGS) chapter
- The department has local Indian institute of Bridge Engineers (IIBE)
- The department run a student body Civil Engineering Consortium (CEC), which conduct technical activities. CEC (Civil Engineering) publishes technical annual magazine “Sanrachna”. Faculty advisor of CEC is Mr. Chandrapal Gautam, Assistant Professor, Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

Department is accredited by NBA 2009-2014, and 2014 – April 2016.

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

- Department has well established Structural Engineering, Fluid Mechanics and Hydraulics, Concrete technology, Highway and Geotechnical Engineering, Environmental Engineering and Surveying lab to provide the needs of industry.
- Guest lectures, seminars on recent advances on Civil Engineering are conducted periodically. International Conference “International Convention of Engineering and Management” (iCEM) is organised annually by Civil Engineering department.
- Faculty development programme is conducted time to time in which ideas on new technologies are shared.
- Students are offered software based projects during the pre-final and final year so that they can

efficiently use software like STAAD-Pro, Primavera, AutoCAD and Estimator after they join the industry.

- e) The faculty of the department is engaged in research activities in collaboration with other researches and publishing research papers on advanced topics of interest.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

- Good performance of students in GATE examination. Students are pursuing M. Tech and other PG Programmes from reputed institutions like IITs, NITs, BITS, NICMAR and others.
- Department offers M Tech specialization in three core areas.
- Qualified and experienced faculty mostly having at-least one major degree from NIT/IIT/foreign Institutions.
- Accredited UG program among faculty and student.
- Revised and updated curriculum of UG and PG program.

Weaknesses

- Less Consultancy work.
- Remote Locations.
- Less number of research scholars.
- Lack of proactive placement activities.
- Lack of networking with National R &D Labs.

Opportunities

- To increase number of R&D projects.
- To enhance industrial interaction.
- To strengthen collaboration with industries for sponsored research projects.
- Development of faculty and supporting staff.
- To set research laboratories.

Challenges:

- To attract consultancy.
- To attract more number of brighter students at PG level.
- To get funding from Government and private agencies for sponsoring Conferences/workshops etc.
- Starting new PG courses.
- To get more research projects.

52. Future plans of the department.

- To attract more Ph.D. scholars.
- To enhance contribution to community services.
- To organize at least one national level workshops, seminars.
- To modernize existing laboratories and also establish new PG/research laboratories.



JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

(Established by H.P. State Legislative vide Act No. 14 of 2002)

Waknaghat, P.O. Dumehar Bani, Kandaghat, Distt. Solan - 173215 (H.P.) INDIA

Website : www.juit.ac.in

Phone No. (91) 01792-257999 (30 Lines)

Fax: (91) 01792 245362

C. Declaration by the Head of the Institution

I certify that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR 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 SSR during the peer team visit.

(Professor Vinod Kumar)

Vice Chancellor

Place: JUIT, Waknaghat

Date: 4 February 2017

Seal:

Prof. (Dr.) Vinod Kumar
Vice-Chancellor

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
P.O. Waknaghat, Distt. Solan-173234 (H.P.) INDIA



**UNIVERSITY GRANTS COMMISSION
BAHADUR SHAH ZAFAR MARG
NEW DELHI-110 002.**

F 9 DEC 2002

No. F.9-10/2002 (CPP-I)

December, 2002

NOTIFICATION

A new statutory university named as Jaypee University of Information Technology, Wagnaghat, P.O. Dumehar, Kandaghat, District-Solan (H.P) has been established by the Government of Himachal Pradesh through an Act of State Legislature (Act No. 14 of 2002), and notified in the State Gazette vide Notification No. L.L.R.D (6)-3/2002 dated 23-05-2002. The said university has been included in the list of recognised universities maintained by the University Grants Commission under Section-2 (f) of the UGC Act, 1956.

However, the above university has not been declared fit to receive Central assistance in terms of the rules framed under Section 12- (B) of the U.G.C. Act, 1956, since it is a private university.

K.P. Singh
(Dr. K. P. Singh)
Deputy Secretary

Copy to:-

1. The Vice-Chancellor, Jaypee University of Information Technology, Wagnaghat, P.O. Dumehar, Kandaghat, District-Solan-173 215.
2. The Secretary, Government of India, Ministry of Human Resource Development, (Department of Secondary & Higher Education), Shastri Bhavan, New Delhi-110 001.
3. The Secretary, Department of Education, Government of Himachal Pradesh, Shimla (H.P).
4. The Secretary General, Association of Indian Universities, 16 Kotla Marg, New Delhi-110 002.
5. The Joint Secretary, (SU), UGC, New Delhi.
6. Senior Statistical Officer, UGC, 35, Ferozshah Road, New Delhi-110 001.
7. All Regional Offices, UGC.
8. The Section Officer (Meeting Cell), UGC, New Delhi with the request to include the name of the Jaypee University of Information Technology, Wagnaghat, P.O. Dumehar, Kandaghat, District-Solan-173 215 in the list of Universities maintained under Section-2 (f) of the UGC Act, 1956.- Dr. Yaj Medury is the first Vice-Chancellor of the University.
9. All Section of the UGC, New Delhi.
10. D.T.P. Cell, UGC, New Delhi.
11. Guard file.

K.P. Singh
(Dr. K. P. Singh)
Deputy Secretary

23236351, 23232701, 23237721, 23234116,
23235733, 23232317, 23236735, 23239437

UGC Website : www.ugc.ac.in



विश्वविद्यालय अनुदान आयोग
बहादुरशाह जफर मार्ग
नई दिल्ली-110 002
UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110 002

F.1-12(1)/2004(M&E)

October, 2004

Principal Secretary
Department of Higher Education
Government of Himachal Pradesh
Secretariat
Shimla-171 002

Subject: Inspection Report in respect of Jaypee University of Information & Technology, Wagnaghat Distt. Solan, Himachal Pradesh established in the State of Himachal Pradesh.

Sir,

I am directed to inform you that the Commission has conducted Inspection of Jaypee University of Information and Technology, Solan established in your State in terms of UGC (Establishment & Maintenance of Standards of Private Universities) Regulations 2003. I am enclosing herewith a copy of the Inspection Report submitted by the Inspection Committee constituted by the Commission for Inspection of the said University for your information and further necessary action.

Yours faithfully,

(R.K. Chauhan)
Additional Secretary

✓ Copy to Vice-Chancellor, Jaypee University of Information & Technology, Wagnaghat Distt. Solan, Himachal Pradesh alongwith a copy of the Inspection Report for information and necessary action.

(R.K. Chauhan)
Additional Secretary

**University Grants Commission
Bahadur Shah Zafar Marg
New Delhi – 110 002**

**Report of the Inspection Committee on its visit to Jaypee University of
Information Technology, Wagnaghat, Himachal Pradesh (a private university)
on June 2, 2004**

1. INTRODUCTION

The University Grants Commission had constituted an Inspection Committee as per the following composition to visit Jaypee University of Information Technology, Wagnaghat, Himachal Pradesh for the purpose of ascertaining the availability of physical and academic infrastructure at the University (Ref. F.No. 1-1/2004 (DS-Admn) of May 19, 2004) :

- | | | |
|----|--|------------------------|
| 1. | Dr. B S Sonde
Former Vice-Chancellor,
Goa University, Goa | Convener |
| 2. | Dr. J V Prabhakar Rao
Department of Management
Andhra University
Waltair, Vishakhapatnam –530 003 | Member |
| 3. | Dr. Kapil Kapoor,
(Formerly Rector, JNU)
Department of English
Jawaharlal Nehru University
New Delhi – 110 067 | Member |
| 4. | Dr. Dev Swarup,
Deputy Secretary
University Grants Commission
New Delhi | Member Secretary |

The Committee visited Jaypee University of Information Technology, Wagnaghat, established in Himachal Pradesh on June 02, 2004, as per the programme suggested by UGC. All the members of the Committee were present during the visit. Prior to proceeding to the University campus, the Committee had its internal meeting at the place of stay to discuss the procedure to be followed, identify the items to be specifically looked into and consider the steps necessary for validation of the filled-in-questionnaire (in UGC format) submitted by the University.

On arrival at the campus at 1500 hrs, the Committee was received and welcomed by Dr. Y. Medury, Vice-Chancellor and Brig. (Retd.) Balbir Singh, Registrar. The Convenor and the Member Secretary in their opening remarks explained the purpose of the Committee visit and the procedure for inspection.

This was followed by brief presentations by Dr. Medury on Jaypee University of Information Technology, Wanknaghat, established in Himachal Pradesh. In the discussion that followed, the Convenor and the members of the committee sought clarifications from the Vice-Chancellor, Registrar, Head of Departments and Members of the permanent supervisory Board of the University on some items which came up in their presentations and also referring to the filled-in questionnaire submitted by the University, which were provided satisfactorily. The Committee then visited major parts of the campus, various infrastructure facilities, library computer centre, laboratories, students hostels, gym and other facilities and also had useful interaction with representative groups of faculty members and students on the campus. The Committee had its second internal meeting in the evening to discuss the day's proceedings and to take steps for preparing the Report of the Inspection Committee for Submission to UGC.

This Report is divided into five sections. Following this Introduction, major provisions in the Act of Jaypee University of Information Technology, Wanknaghat, established in Himachal Pradesh are compared with those in the UGC (Establishment and Maintenance of Standards in Private Universities) Regulations, 2003. This is followed by the Inspection Report in section 3. An Overall Analysis is then presented in section 4, followed by concluding remarks at the end. The filled-in-questionnaire submitted by the University is appended to this Report.

2. Jaypee University Act Versus UGC Regulations

The Jaypee University of Information Technology, Wanknaghat, established in Himachal Pradesh Act 2002 (Himachal Pradesh Government Gazette Notification dated May 22, 2002) is the basis for the establishment of this non-affiliating, unitary university. This has many features similar to other well-established universities and also following the UGC Regulations in the country, like :

- ⇒ clearly laid down "Object";
- ⇒ "powers and functions" well defined;
- ⇒ authorities, officers as per established practice;
- ⇒ some provision for association with the State Government;
- ⇒ powers for framing statutes and ordinances.

The main areas of differences in the Act and actual situation vis-à-vis UGC are given below:-

- (a) As per clause 7 of the Act of the university, the jurisdiction of the university shall be as follows:-

"Save as otherwise provided by or under this Act, the powers conferred on the University shall be exercisable in the area comprising Himachal Pradesh."

However, it has been noticed that the university has opened one institute in Noida (U.P.) and one institute at Guna (M.P.) which seems to be against the above provision. However, para 5(p) of the Act which defines powers and functions of the university states as under:-

"to affiliate any other centre / institution established and run by the Trust as a constituent body of the University for the purpose of its academic programme and admitting it for the award of Degrees, Diplomas and Certificates on fulfillment of the prescribed requirements by the recipients."

The University, it seems, has established these Institutes at Noida and Guna under this clause. However, there seems to be a contradiction between clause 5(p) and clause 7.

- b) There is a requirement as per UGC Regulations (clause 3.4), that a private university shall fulfill the minimum criteria in terms of programmes, faculty, infrastructural facilities, financial liability etc as laid down by UGC, AICTE and other Statutory Bodies. But in the Jaypee University Act, there does not seem to be any provision for this.

- c) The UGC Regulations (clause 3.6) require that the programmes of study offered by a private University shall conform to the relevant Regulations of UGC or the concerned Statutory Body. There is no such provision in the University Act.
- d) The admission of students and fixation of fees, shall be as per the norms/guidelines prescribed by UGC and concerned Statutory Bodies (UGC guidelines, clause 3.9). But there is no provision for this in the University Act.

However, the university functionaries have agreed to comply with the UGC Regulations at an early date.

3. INSPECTION REPORT

The following Inspection Report has been prepared by the Inspection Committee after carefully perusing the filled-in-questionnaire submitted by the University and on-site validation of this through visits to various infrastructural facilities on the campus and discussions with a cross section of stake holders of the University.

1	Name of the University	:	Jaypee University of Information Technology, Wagnaghat, established in Himachal Pradesh
2	Date of Visit	:	June 02, 2004
3	Registered Office	:	Wagnaghat District- Solan, Himachal Pradesh
4.a	Name & Headquarters of the Society/Promoting Agency	:	Jai Prakash Sewa Sansthan JA House, 03, Basant Lok, Vasant Vihar New Delhi – 110057.
4.b	Whether the agency is involved in promoting/running any other University/Institution? If yes, details	:	Yes, IIIT, Noida and JIET, Guna

5.	Claimed Territorial Jurisdiction	:	India; But, clause 7 of the Act restricts to the State of Himachal Pradesh only.
6.	Programmes permitted to be offered by gazetted notification of Govt. & its reference	:	As per Section 4 of the university Act, the object of the university shall be to disseminate, create and advance knowledge, wisdom and understanding, and to offer technical education of the high standards by teaching, research, training and extension activities. As per these provisions, the university is running B.Tech. and M.Tech. courses in the main campus at Solan and B.Tech., M.Tech. and MCA in the off campus centre at Noida and B.Tech. at off campus in Guna.
7.a	Whether all documents requested by the inspection team provided	:	Yes
7.b	If not, what are the deficit documents (list to be enclosed)	:	Not applicable
8.	Physical verification of administrative infrastructure.	:	Satisfactory, as per the details given under items 14,16 of the questionnaire filled-in and submitted to UGC.
8.a	Whether administrative authorities like Governing Council, Academic Council & BOS formed & minutes of their meetings produced?	:	Yes, details provided under item 13 of the Questionnaire filled in.
8.b	Whether VC, Registrar, FO & Administrative Officers appointed? If yes, whether they were physically present during inspection?	:	Yes, VC, Registrar, Members of the permanent supervisory Board and Heads of Departments were present.
8.c	List of authorized University Officers present during the UGC Committee Inspection.	:	As listed above.
8.d	Administrative Office details like approx. total plinth area, separate officers for VC, Registrar Administrative Office, Committee Room, Reception cum students waiting room etc.	:	The university has land area of 114.01 bighas. Plinth areas of all buildings are given in details under item 16 in the questionnaire filled in. All buildings have been planned aesthetically and are being constructed in phases, about 50% being now ready. All facilities required for faculty/students/others are provided on the campus.

8.e	Whether Office equipments like Computer(s) Telephone/Fax, Xerox machines available	:	Yes, in adequate numbers.
9.	Physical verification of Academic Infrastructure	:	The Committee is satisfied with the adequacy, quality and standard of the infrastructure.
9.a	Corpus of the society shown to the inspection team (i) Land documents, if shown, extent of land registered in the name of the University & its location. (ii) Deposits made in the name of Society/University, separately or jointly with State authorities.	:	Yes – A corpus of Rs.2.5 crores has been created; A second installment of Rs. 2.5 crores as required by the Act seems to be under process now. Yes, Details given under item 14 in Questionnaire filled in 114.01 bighas already in possession. The University is already functional on this site. Yes, Rs.2.5 crores as fixed deposit with Indus Ind. Bank, New Delhi and State Bank of Patiala, Noida.
9.b	Buildings shown to house the University & their plinth are details (i) Permanent (ii) Temporary/Leased Property	:	Buildings are permanent (item 16) and located in the main campus. Nil
9.c	Whether Library available? If available, details	:	Yes Details given under item 16(iii) in the questionnaire. The university has 1432 titles, valued at Rs.23.00 lakhs.
9.d	Whether Classrooms & Laboratories available? If available, details	:	Yes Class-room of various sizes, well equipped.

9.e	Whether teaching staff appointed? If yes, details to be enclosed	:	Yes Details given under item 18 consist of 30 faculty members.
9.f	Whether technical & non-teaching staff appointed? If yes, details to be enclosed.	:	Yes, Details given under item 19 consist of 22 non-teaching staff.
10.a	Whether students already admitted?	:	Yes. A total of 1872 UG students, 71 PG students and few Ph.D. students enrolled in three centres collectively.
10.b	If yes, breakup details of Courses as against the number of students admitted in each course.	:	Details given under item 17
10.c	Any Off-Campus or Study Centre or admission Centre established outside State?	:	Yes. Two. One in Noida (U.P.) and other in Guna (M.P.).
11.	Overall remarks / observations		<p>a) The University is well planned and organized and is functioning since May 22, 2002 when its Act was gazetted.</p> <p>b) The University functioning has been computerized – administrative, academic, evaluative, and financial functions. Right from the point a student is admitted to the University, all records pertaining to the students are held in the University Server.</p> <p>c) Future plans for new courses include starting new UG and PG programmes.</p>

4. OVERALL ANALYSIS

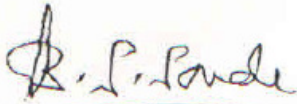
The University has been managed well in terms of physical infrastructure and has good students strength, which is now in the range of 2000. They make use of state of the art educational aids in students' laboratories/class rooms. They are giving considerable emphasis to industrial interaction, placement facilities for students, etc. with satisfactory results already being demonstrated. Moreover, a wide range of programme options upto Doctorate level are now available at the university. As a result, talented /merited students from all over India are always keen to join the programmes at this university.

However, the University has a few differences between the Act and the UGC Regulations 2003, which were brought to the attention of the Vice-Chancellor and other functionaries. They have agreed to take up compliance of UGC Regulations at an early date. The University functionaries have also be informed of the need (i) to make the B.Tech (Civil Construction Infrastructure) to be IT driven so as to truly qualify for a programme at JUIT, (ii) to add external members to BOS-both from academics and industry, so as to make the programmes more up to date and relevant, and (iii) make the library books more adequate in numbers. They have agreed to take early steps in all these cases.

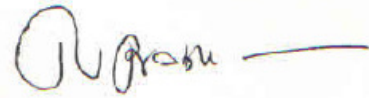
5. CONCLUDING REMARKS

It has been a great pleasure for the Inspection Committee to visit Jaypee University of Information Technology and familiarize with its programmes and activities. In a short time, this University has developed into a fine institution and is already attracting attention and admiration of the society. Its physical infrastructure and educational facilities are comparable with those of well established/reputed Universities in the country. Besides the management of the university appears to be keen to go along with the expectations of UGC in maintaining the norms and standards necessary for higher education in India, and also fulfilling the requirements of UGC Regulations 2003. The Committee has noted that UGC has already included Jaypee University of Information Technology under section 2(f) of UGC Act, 1956. The Committee recommends that this inclusion may be continued. The


Committee wishes the University all the best in its endeavour of providing high quality technical education in the relatively backward State of Himachal Pradesh. However, the university must take UGC's approval for running the study centers at Noida and Guna to comply with UGC regulations on establishment and maintenance of private universities.



Prof. B S Sonde
(Convenor)



Prof. J V Prabhakar Rao
(Member)



Prof. Kapil Kapoor
(Member)



Dr. Dev Swarup 03/06/04
(Member Secretary)

New Delhi
June 03, 2004



डॉ. दिनेश
सलाहकार-II
(गुणवत्ता आश्वासन ब्यूरो)
Dr. Dinash
ADVISER-II
(Quality Assurance Bureau)

अखिल भारतीय तकनीकी शिक्षा परिषद्
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
(भारत सरकार का एक सांविधिक निकाय) (A STATUTORY BODY OF THE GOVT OF INDIA)

राष्ट्रीय प्रत्यायन मंडल (रा.प्र.मं.)
NATIONAL BOARD OF ACCREDITATION (NBA)

(constituted under clause 10(U) of AICTE Act, 1987)
(अभिनविप अधिनियम 1987 की धारा 10 (प) के अधीन गठित)

F.No. NBA/ACCR-1113/2008

May 19, 2009

To

The Vice Chancellor,
Jaypee University of Information Technology,
Waknaghat, P.O. Dumehar Bani,
Tehsil - Kandaghat,
Distt. Solan - 173215
Himachal Pradesh

Sub: Accreditation Status of Programme(s) offered by your Institution.

Dear Sir / Madam:

With reference to your application for accreditation of the following programme(s) and the Expert Committee visit to your institution, the report of the visiting team was considered by the various Accreditation Committees. Based on the recommendations of the Accreditation Committees, I am pleased to communicate the Accreditation Status of the following programme(s) offered by your Institution.

Sl. No.	Name of UG Programme)	Accreditation Status	Period of validity w.e.f. 16.04.2009
1.	B.Tech. Computer Science & Engg.	Accredited	5 years
2.	B.Tech. Electronics & Communication Engg.	Accredited	5 years
3.	B.Tech. Bio-Informatics	Accredited	5 years
4.	B.Tech. Civil Engineering	Accredited	5 years
5.	B.Tech. Information Technology	Accredited	5 years

(Total number of programmes Accredited vide this letter - Five)

The Accreditation status awarded to the above programmes of your institution does not imply accreditation to the College/Institution as a whole. Complete name of the Programme Accredited and its period of validity, as well as the date from which the award is effective, should be quoted unambiguously whenever and wherever it is used. The accreditation status of the above programmes is subject to periodic review by the NBA Secretariat and will be changed if major deficiencies are identified on complaints that may be received/ surprise visits/ surveillance. You are also requested to comply with the mandatory disclosure of pertinent information as per the proforma available in the AICTE website with respect to accredited programmes of your institution. The same information should also appear in the website and information bulletin of your institution clearly indicating the date of publication of the same.

Contd..... 2

2

The status awarded to the above programmes of your college / institution is on the presumption that the programmes would maintain the current standards in future. If there are any changes that would effectively alter the status (such as, major changes in faculty strength or changes in the organizational structure, etc.), the same shall be communicated to the undersigned, with an appropriate explanatory note. The strength and weakness as indicated by the expert team is enclosed herewith for your guidance. An appeal of the results conveyed, if you so desire may be made within 30 days of receipt of this communications with requisite fee. Should you have any clarification, please do not hesitate to contact the undersigned

With best regards,

Yours Truly,

lh
19/5/09
(Dr. Dinesh)

C.C. :

1. The Secretary,
Deptt. of Technical Education,
Govt. of Himachal Pradesh,
Shimla (HP)
2. The Regional Officer,
All India Council for Technical Education
North-Western Regional office,
Plot No. 1316, Sector - 42-B,
Chandigarh - 160 036
3. Accreditation File
4. Guard File.

lh
19/5/09
(Dr. Dinesh)

NATIONAL BOARD OF ACCREDITATION

NBCC Place, East Tower, 4th Floor, Bhisham Pitamah Marg,
Pragati Vihar, New Delhi-110 003
Tel: +91 11 2436 0620, 2436 0654 Telefax: +91 11 2436 0682



F.No.22-02-2010-NBA

To,

The Director
Jaypee University of Information Technology
Kandaghat, Dist. Solan
Himachal Pradesh- 173 234

Subject: Accreditation status of programmes applied by Jaypee University of Information Technology, Kandaghat, Dist. Solan Himachal Pradesh- 173 234

Sir,

This has reference to your application dated 15-07-2013 in Tier-I format seeking accreditation by National Board of Accreditation to UG Engineering programmes offered by Jaypee University of Information Technology, Kandaghat, Dist. Solan Himachal Pradesh- 173 234 .

2. An Expert Team conducted an on-site evaluation of the programmes during 31st October – 2nd November, 2014. The reports submitted by the Expert Team were considered by the concerned Committees constituted for the purpose in NBA. The competent authority has approved the following accreditation status to the programmes as given in the table below:

Sl. No.	Name of the Programmes (UG)	Basis of Evaluation	Accreditation Status	Period of validity w.e.f. 01.07.2014	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
1.	Electronics and Communication Engineering	Tier-I Document	Provisionally accredited	2 years	Accreditation status granted is valid for the period indicated in col.5 or till the program has the approval of the competent authority, whichever is earlier
2.	Computer Science and Engineering	Tier-I Document	Provisionally accredited	2 years	
3.	Information Technology	Tier-I Document	Provisionally accredited	2 years	
4.	Civil Engineering	Tier-I Document	Provisionally accredited	2 years	
5.	Biotechnology	Tier-I Document	Provisionally accredited	2 years	

3. It may be noted that only students who graduate during the validity period of accreditation, will be deemed to have graduated with an NBA accredited degree.

4. The programmes have been granted provisional accreditation for 2 years. As such, Jaypee University of Information Technology, Kandaghat, Dist. Solan Himachal Pradesh- 173 234 should submit the Self Assessment Report alongwith a compliance report at least after 1 year to be considered by the Engineering Evaluation and Accreditation Committee (EEAC) to formulate a view whether compliance report is enough to recommend for accreditation or a visit to the Institute is necessary. The recommendation of EEAC will be considered by the Sub-Committee of the Academic Advisory Committee of Engineering.

Contd/...

-2-

5. The accreditation status awarded to the programmes as indicated in the above table does not imply that the accreditation has been granted to Jaypee University of Information Technology, Kandaghat, Dist. Solan Himachal Pradesh- 173 234 as a whole. **As such the institution should nowhere along with its name including on its letter head etc. write that it is accredited by NBA because it is programme accreditation and not institution accreditation. If such an instance comes to NBA's notice, this will be viewed seriously.** Complete name of the programme(s) accredited, level of programmes and the period of validity of accreditation, as well as the date from which the accreditation is effective should be mentioned unambiguously whenever and wherever it is required to indicate the status of accreditation by NBA.

6. The accreditation status of the above programmes is subject to change on periodic review, if needed by the NBA. It is desired that the relevant information in respect of accredited programmes as indicated in the table in paragraph 2, appears on the website and information bulletin of the Institute.

7. The accreditation status awarded to the programmes as indicated in table in paragraph 2 above is subject to maintenance of the current standards during the period of accreditation. If there are any changes in the status (major changes of faculty strength, organizational structure etc.), the same are required to be communicated to the NBA, with an appropriate explanatory note.

8. Copy of the Report of Chairman of the Visiting Team and Evaluator's reports in respect of the above programmes are also enclosed.

9. If the Institute is not satisfied with the decision of NBA, it may appeal within thirty days of receipt of this communication giving reasons for the same and by paying the requisite fee.

Thanking you,

Yours faithfully,



(Dr. Anil Kumar Nassa)
Member Secretary

Encls: 1.Copy of Report of Chairman of the Visiting Team.
2.Copy of Expert Reports of the Visiting Team.

Copy to:

1. The Principal Secretary
(Education Deptt.) H. P. Secretariat,
Shimla-171002
2. The Directorate of Technical education
Vocational & Industrial Training
Sundernagar – 174 401 Himachal Pradesh
3. Himachal Pradesh Technical University
Summer Hill, Shimla,
Himachal Pradesh 171005

NATIONAL BOARD OF ACCREDITATION

NBCC Place, East Tower, 4th Floor, Bhisam Pitamah Marg,
Pragati Vihar, New Delhi-110 003
Tel: +91 11 2436 0620-22, 2436 0654 Telefax: +91 11 2436 0682
Website: www.nbaiind.org



F.No. 22-02/2010-NBA

Dated: 08/07/2016

To,

The Director
Jaypee University of Information Technology
Waknaghat, Kandaghat, Dist. Solan
Himachal Pradesh- 173 234

Subject : Accreditation status of UG Engineering programs offered by Jaypee University of Information Technology, Waknaghat, Kandaghat, Dist. Solan, Himachal Pradesh- 173 234, granted provisional accreditation for 2 years w.e.f. 01-07-2014 in Tier I format.

Sir,

This has reference to NBA's letter of even number dated 26-03-2015 under which some of the UG Engineering programs offered by your Institution were granted accreditation in Tier I by National Board of Accreditation.

2. National Board of Accreditation (NBA) has now decided that in all cases where UG Engineering programs of an Institution were granted provisional accreditation for a period of 2 years w.e.f. 01-01-2014/01-07-2014 in Tier I/Tier-II format, the period of provisional accreditation of these programs shall be extended from 2 to 3 years subject to the condition that they meet the essential Pre-visit qualifiers. The Pre-visit qualifiers submitted by Jaypee University of Information Technology, Waknaghat, Kandaghat, Dist. Solan, Himachal Pradesh- 173 234 have been considered and approved by NBA in respect of the following UG Engineering programs. Accordingly, the competent authority in NBA has approved the following accreditation status to the programs as given in the Table below:

Sl. No.	Name of the Program (UG)	Basis of Evaluation	Accreditation Status	Period of extended validity	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
1.	Electronics & Communication Engineering	Tier I Document	Provisionally Accredited	Academic Year 2016-2017, i.e., upto 30-06-2017.	Accreditation status granted is valid for the period indicated in col.5 or till the program has the approval of the competent authority, whichever is earlier
2.	Computer Science & Engineering		Provisionally Accredited		
3.	Information Technology		Provisionally Accredited		
4.	Civil Engineering		Provisionally Accredited		
5.	Biotechnology		Provisionally Accredited		

3. It may be noted that only students who graduate during the validity period of accreditation, will be deemed to have graduated with an NBA accredited degree.

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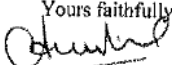
4. The programs have been granted provisional accreditation. Jaypee University of Information Technology, Wagnaghat, Kandaghat, Dist. Solan, Himachal Pradesh- 173 234 should submit the Compliance Report at least six months before the expiry of validity of accreditation mentioned above to be eligible to be considered by the concerned Committee in NBA for further processing of the accreditation status. This could entail further extension of accreditation or a revisit, as deemed appropriate by NBA Committees.

5. The accreditation status awarded to the programs as indicated in the above table does not imply that the accreditation has been granted to Jaypee University of Information Technology, Wagnaghat, Kandaghat, Dist. Solan, Himachal Pradesh- 173 234 as a whole. As such the Institution should nowhere along with its name, including on its letter head etc. write that it is accredited by NBA because NBA only accredits programs, and not Institutions. If such an instance comes to NBA's notice, this will be viewed seriously. Complete name of the programs accredited, level of programs and the period of validity of accreditation, should be mentioned unambiguously whenever and wherever it is required to indicate the status of accreditation by NBA.

6. The accreditation status of the above programs is subject to change on periodic review, as deemed necessary by the NBA. It is desired that the relevant information in respect of accredited programs as indicated in the Table in paragraph 2, appears on the website and information bulletin of your College/Institution.

7. The accreditation status awarded to the programs as indicated in Table in paragraph 2 above is subject to maintenance of the current standards during the period of accreditation. If there are any changes in the status (major changes of faculty strength, organizational structure etc.), the same are required to be communicated to the NBA, with an appropriate explanatory note.

Yours faithfully,


 (Dr. Anil Kumar Nassa)
 Member Secretary

Copy to:

1. The Principal Secretary
(Education Deptt.) H.P. Secretariat
Shimla-171 002
2. The Director
Department of Technical Education
Vocational & Industrial Training
Sundernagar-174 401, Himachal Pradesh
3. The Vice Chancellor
Himachal Pradesh Technical University
Summer Hill, Shimla,
Himachal Pradesh – 171 005
4. Master Accreditation Folder of the State



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद
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
Jaypee University of Information Technology
Solan, Tal. Kandaghat, Himachal Pradesh as
Accredited
with *CSPA* of 2.63 on four point scale
at B grade
valid up to September 15, 2016*

Date : September 16, 2011



[Signature]
Director



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 : Jaypee University of Information Technology

Place : Solan, Tal. Kandaghat, Himachal Pradesh

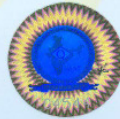
Criteria	Weightage (W_i)	Criterion-Wise Grade Point Averages (Cr_i GPA)	$W_i \times Cr_i$ GPA
I. Curricular Aspects	150	2.80	420
II. Teaching-Learning and Evaluation	250	2.84	710
III. Research, Consultancy and Extension	200	2.20	440
IV. Infrastructure and Learning Resources	100	2.95	295
V. Student Support and Progression	100	2.30	230
VI. Governance and Leadership	150	2.90	435
VII. Innovative Practices	050	2.00	100
Total	$\sum_{i=1}^7 W_i = 1000$		$\sum_{i=1}^7 (W_i \times Cr_i \text{ GPA}) = 2630$

$$\text{Institutional Score} = \frac{\sum_{i=1}^7 (W_i \times Cr_i \text{ GPA})}{\sum_{i=1}^7 W_i} = \frac{2630}{1000} = \boxed{2.63}$$

Grade =

Descriptor =

Date : September 16, 2011



H. K. Kaur
Director

- This certification is valid for a period of Five years with effect from September 16, 2011
- An institutional CGPA on four point scale in the range of 3.01 - 4.00 denotes A grade (Very Good), 2.01 - 3.00 denotes B grade (Good), 1.51 - 2.00 denotes C grade (Satisfactory)
- Scores rounded off to the nearest integer

PEER TEAM REPORT
ON
University Accreditation
Of

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
WAKNAGHAT 173234
HIMACHAL PRADESH

28 - 30 March, 2011

**National Assessment and
Accreditation Council, Bangalore**

Total Pages-8

1

NAAC for Quality and Excellence

Section I: GENERAL INFORMATION

1.1 Name & Address of the Institution:	JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT - 173234 HIMACHAL PRADESH
1.2 Year of Establishment:	23-05-2002
1.3 Current Academic Activities at the Institution (Numbers):	
• Faculties/ Schools:	8
• Departments/ Centres:	8
• Programmes/ Courses offered:	UG: 7; PG: 4; Dual Degree: 1 Ph.D.: 9 TOTAL: 21
• Permanent Faculty Members:	Total: 115 (Male: 87; Female: 28) Temporary: NIL
• Permanent Support Staff:	Non-Teaching: 78
• Students:	1860 (UG: 1737; PG: 123); Ph.D.: 73
1.4 Three major features in the institutional Context (As perceived by the Peer Team):	<ul style="list-style-type: none"> • Well maintained and serene campus in hilly areas. • Management is financially sound. • JUIT is in the process of acquiring additional 25 acres for further expansion
1.5 Dates of visit of the Peer Team	28 March to 30 March, 2011
1.6 Composition of the Peer Team which undertook the on-site visit:	
Chairperson	Prof S K Saidapur Former VC Karnataka University 108, Shripad Nagar, Saptapur, Dharwad, 580001
Member and Coordinator	Prof. Avinash Keskar Dept. of Electronics and Computer Science Visvesvaraya National Institute of Technology, Nagpur-440010
Member	Prof. Sher Ali Departments of Molecular Genetics National Institute of Immunology, Aruna Asaf ali Marg, New Delhi 110067

PT Report JUIT WAKNAGHAT (HP)

Sher Ali

 30/3/11

NAAC for Quality and Excellence

Section II: CRITERION WISE ANALYSIS	Observations (Strengths and/or Weaknesses) on Key-Aspects
2.1 Curricular Aspects:	
2.1.1 Curricular Design & Development:	<ul style="list-style-type: none"> • Curriculum well designed. • Inputs from students, academic peers and industry are considered in developing curriculum. • One Dual Degree program of B.Tech/M.Tech is being run. • No inter-disciplinary courses and Distance education programs yet.
2.1.2 Academic Flexibility:	<ul style="list-style-type: none"> • Choice based Credit System with provision for electives • Value added courses offered for multi skill development. • Credit transfer and migration options are available in group institutions and to some extent in collaborative universities.
2.1.3 Feedback on Curriculum	<ul style="list-style-type: none"> • Feedback on syllabi are taken informally from the stakeholders • Formal mechanism for obtaining/incorporating feedbacks needs to be evolved
2.1.4 Curriculum update	<ul style="list-style-type: none"> • Major syllabi revision done in the year 2009. • Most programs include IT component. • Electives are offered in emerging fields. • Updates can include <i>on-the-fly</i> minor changes
2.1.4 Best Practices in Curricular Aspects (If any):	<ul style="list-style-type: none"> • There is flexibility in the pace of learning. • Results are announced within 15 days after the examination.

Shr. Ad. Q.  


NAAC for Quality and Excellence

2.2 Teaching-Learning & Evaluation:	
2.2.1 Admission Process and Student Profile	<ul style="list-style-type: none"> • Admission process publicised through web and newspapers • Provision for on-line viewing of counselling • Admissions based on marks in the AIEEE and in biological sciences 50% admissions are based on 12th marks. • Admission for PG and PhD based on entrance test. • Reservation policy not in operation
2.2.2 Catering to the Diverse Needs:	<ul style="list-style-type: none"> • English is given as an audit course • Support to meritorious but economically weaker students in the form of fee concession and soft loans. • No specific support to disadvantaged communities.
2.2.3 Teaching-Learning Process:	<ul style="list-style-type: none"> • Conventional methods of teaching such as lectures, tutorials, practical, projects, seminars and industrial visits followed and a counsellor is made available for 25 students. • Academic calendar approved by Academic Council and Board of Studies is followed. • Modern teaching aids like visualisers, models and charts are also being used along with DELNET facility.
2.2.4 Teacher Quality:	<ul style="list-style-type: none"> • 52% faculty possess Ph. D degree. • Several other faculty members are pursuing doctoral degree. • 25% teachers have limited teaching/research experience.
2.2.5 Evaluation Process and Reforms:	<ul style="list-style-type: none"> • Continuous Internal Assessment system and self appraisal for faculty. • Grievance redressal mostly by the course teacher • Open book examination as an option exists. • Relative grading is mostly a part of evaluation.
2.2.6 Best Practices in Teaching-Learning and Evaluation (If any):	<ul style="list-style-type: none"> • Partial financial support is given for pursuing higher studies. • Computerisation of examination system • Emphasis on group learning.

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2.3 Research, Consultancy & Extension:	
2.3.1 Promotion of Research:	<ul style="list-style-type: none"> • University is supportive of research. • Rs 1 Crore allocated under the head "Shodh-kosh" for research activity. Rs 503 Lakhs are budgeted for R&D • 4 students are supported for conferences abroad. • DRDO lab is used for research training
2.3.2 Research and Publications Output:	<ul style="list-style-type: none"> • Research output is good especially in Life Science Departments. • Extra Mural Funds(DBT/ DST) are obtained for research projects. • In-house research programmes need to be developed and there is scope for improvement in quality and quantity of research publications per faculty member in some departments.
2.3.3 Consultancy:	<ul style="list-style-type: none"> • No revenue generated through consultancy. • Consultancy is to be formalised and strengthened. • Norms for consultancy need to be formulated
2.3.4 Extension Activities:	<ul style="list-style-type: none"> • Waste management and vermin-compositing is being popularized in the neighborhood. • University organizes events like blood donation along with ROTRACT
2.3.5 Collaborations:	<ul style="list-style-type: none"> • Linkages with some national and international organizations exist. • A few faculty members have utilised benefits of linkages for research work, exchange of faculty and training students.
2.3.6 Best Practices in Research, Consultancy & Extension (If any):	<ul style="list-style-type: none"> • Fellowship to Doctoral students • Budget allocation for Research is made. • Students are encouraged to participate in conferences etc.
2.4 Infrastructure and Learning Resources:	
2.4.1 Physical Facilities for Learning:	<ul style="list-style-type: none"> • The infrastructure for classrooms, computer centre, labs, faculty rooms, board rooms and auditorium is adequate • The laboratory facilities are good. • Academic infrastructure needs planned relocation to match expansion.
2.4.2 Maintenance of Infrastructure:	<ul style="list-style-type: none"> • Physical infrastructure optimally utilized and maintained well. • There is a budget allocation for maintenance of infrastructure. • Major buildings need to be made friendly for differently-abled persons
2.4.3 Library as a Learning Resource:	<ul style="list-style-type: none"> • Library is open for 16 hours on weekdays. • Rs. 394 lakhs have been utilised for journals in last 5 years. • DELNET facilities available • Library facilities appear to be not fully utilized.
2.4.4 ICT as a Learning Resource:	<ul style="list-style-type: none"> • Each faculty provided with internet connectivity. • Individual faculty members and labs have internet /ICT facility. • Additional centralized computer facility can be provided.
2.4.5 Other Facilities:	<ul style="list-style-type: none"> • Hostels for boys and girls with Internet • As many as 1800 students accommodated in the hostels. • A dispensary with qualified Male and Female doctors. • Basic facilities for blood/urine tests to be created. • A Central Instrumentation facility may be created.





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2.4.6 Best Practices in the development of Infrastructure and Learning Resources(If any)	<ul style="list-style-type: none"> • Class rooms are provided with audiovisual facilities. • All softwares are licensed.
2.5 Student Support and Progression:	
2.5.1 Student Progression:	<ul style="list-style-type: none"> • Student progression satisfactory • Dropout rate is low • Placement is good •
2.5.2 Student Support:	<ul style="list-style-type: none"> • Financial assistance available to needy students in the form of soft loan. • Govt norms are applied for SC/ST and other weaker sections of students. • Dining and Canteen facilities are good
2.5.3 Student Activities:	<ul style="list-style-type: none"> • Participation in sports at inter-university and national level is not evident. • Participation in cultural programs is not visible • NCC/NSS activities yet to be initiated.
2.5.4 Best Practices in Student Support and Progression (If any):	<ul style="list-style-type: none"> • Soft skill/personality development and Pre-placement training is provided.
2.6 Governance and Leadership:	
2.6.1 Institutional Vision and Leadership:	<ul style="list-style-type: none"> • Vision and Mission stated clearly. • Leadership committed to maintain discipline in the campus. • Faculty is involved in decision making in academic matters only.
2.6.2 Organizational Arrangements:	<ul style="list-style-type: none"> • Regular meetings of Statutory Bodies are held. • Administrative decentralization and participation of staff members in decision making process to be strengthened.
2.6.3 Strategy Development and Deployment:	<ul style="list-style-type: none"> • Perspective plan prepared by the Planning and Monitoring Board. • Academic Calendar exists and the University adheres to it. • Five UG programs are accredited by NBA for 5 years since 2009
2.6.4 Human Resource Management:	<ul style="list-style-type: none"> • Staff is recruited by the Selection Committee after advertisement in leading regional dailies. • Faculty performance reviewed on the basis of Self Appraisal, Peer Review of Teaching Report and students' feedback. • Skill up gradation programs for non teaching staff should be developed.
2.6.5 Financial Management and Resource Mobilization:	<ul style="list-style-type: none"> • University accounts subjected to internal and external audits regularly. • Operating Budget of the institution mostly met through tuition fees. • Group insurance for students is implemented.

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2.6.6 Best Practices in Governance and Leadership (If any):	<ul style="list-style-type: none"> • Provide good salary packages and other facilities to employees.
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2.7 Innovative Practices:	
2.7.1 Internal Quality Assurance System:	<ul style="list-style-type: none"> • IQAC should be established after NAAC accreditation.
2.7.2 Inclusive Practices:	<ul style="list-style-type: none"> • Not evident
2.7.3 Stakeholder Relationships:	<ul style="list-style-type: none"> • Alumni Association yet to be registered • Perception of the stakeholders is good.

Section III: OVERALL ANALYSIS	Observations
3.1 Institutional Strengths:	<ul style="list-style-type: none"> • Admission of students on all India basis. • Specialized in IT area • Infrastructure facilities in engineering departments are very good. • Sufficient funds are available for development of infrastructure and research. • Biotechnology department has potential to grow.
3.2 Institutional Weaknesses:	<ul style="list-style-type: none"> • A few teachers have research and teaching experiences. • Research and consultancy output needs to be strengthened • University is yet to attract highly talented students. • The location of the JUI is such that for children of employees, there is good no school within 25 km area.
3.3 Institutional Opportunities:	<ul style="list-style-type: none"> • University can generate revenue through consultancy and use of appropriate technology in nearby areas. • A formally registered Alumni association can help strengthening academic programs and placement. • May explore more opportunities of joint research projects with nearby academic institutions. • Young faculty can be mentored to develop quality teaching and focused research programs.
3.4 Institutional Challenges:	<ul style="list-style-type: none"> • Recruitment of adjunct faculty. • Promote facilities to under privileged community. • To enhance quality of teaching and Resource mobilization to attain desired standards of teaching and research • Integration of activities between all Jaypee campuses. • Introduction of new and specialized courses in tune with the growing demands in country.




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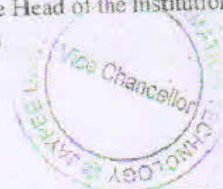
Section IV: Recommendations for Quality Enhancement of the Institution

- Attaining excellence in IT related programs on sustained basis, rather than diversifying in general engineering.
- Facilitating faculty members to carry out their Ph.D. work in other reputed academic Institutions.
- Industrial training to faculty members as well.
- Inclusion of hardware projects in curriculum.
- Collaboration among faculty members for quality research and publishing in high impact factor journals.
- Creation of Chair Professor and Adjunct Professor Positions.
- Enhancing consultancy activities with industry / other organizations.
- Promoting sports, cultural, NCC and NSS activities.
- Creating in house facility for early schooling of employees' children will go a long way in attracting and retaining good faculty as there are no good schools within 25 km area.

I agree with the Observations of the Peer Team as mentioned in this report.

(Signature)

Signature of the Head of the Institution
Seal of the Institution



Signatures of the Peer Team Members:

Name	Designation	Signature with date
Prof S. K. Saidapur	Chairperson	<i>(Signature)</i> 30/3/11
Prof. Avinash Keskar	Member Coordinator	<i>(Signature)</i> 30/3/2011
Prof. Sher Ali	Member	<i>(Signature)</i> 30.3.2011

Place: JUIT, Wagnaghat, Himachal Pradesh

Date: 30-03-2011

STUDENT FEEDBACK FORM For Lecture Classes

Subject Name _____ Subject Code _____

Semester _____ Year _____ Name of Faculty _____

Respond against each item using the following parameters wherever applicable.

Excellent [E]; Very Good [V]; Good [G]; Satisfactory [S]; Unsatisfactory [U]

S.No	ITEM	E	V	G	S	U
1.	Teaching for the subject was					
2.	Coverage of the subject matter was					
3.	Opportunity provided for asking questions in the class was					
4.	Delivery of lectures/tutorials was					
5.	Standard of the subject matter covered was					
6.	Emphasis on concepts and fundamentals was					
7.	Your learning of the subject has been					
8.	Usefulness of the subject to your career is					

9 Name three topics of this subject you learnt the best:

A] _____ B] _____ C] _____

10. Name three topics of this subject you could not learn to your satisfaction.

A] _____ B] _____ C] _____

11. Specific suggestions and comments on the subject and its teaching:

S.No.	SUBJECT	TEACHING
A		
B		
C		

12. Any Other Comments:

[Use reverse side for more space. Please do not indicate your identity anywhere]

STUDENT FEEDBACK FORM For Laboratory Classes

Lab Course Name _____ Lab Code _____

Semester _____ Year _____ Name of Faculty _____

Respond against each item using the following parameters wherever applicable.

Excellent [E]; Very Good [V]; Good [G]; Satisfactory [S]; Unsatisfactory [U]

S.No.	ITEM	E	V	G	S	U
1.	Level & Standard of experiments/design given					
2.	Usefulness of this Laboratory towards your understanding of theory					
3.	Usefulness of this Laboratory to your career					
4.	Status of the equipments in the lab					

5. Number of experiments you could complete successfully:

6. Name the best experiment you performed: _____

7. Name the experiment you could not complete to your satisfaction:

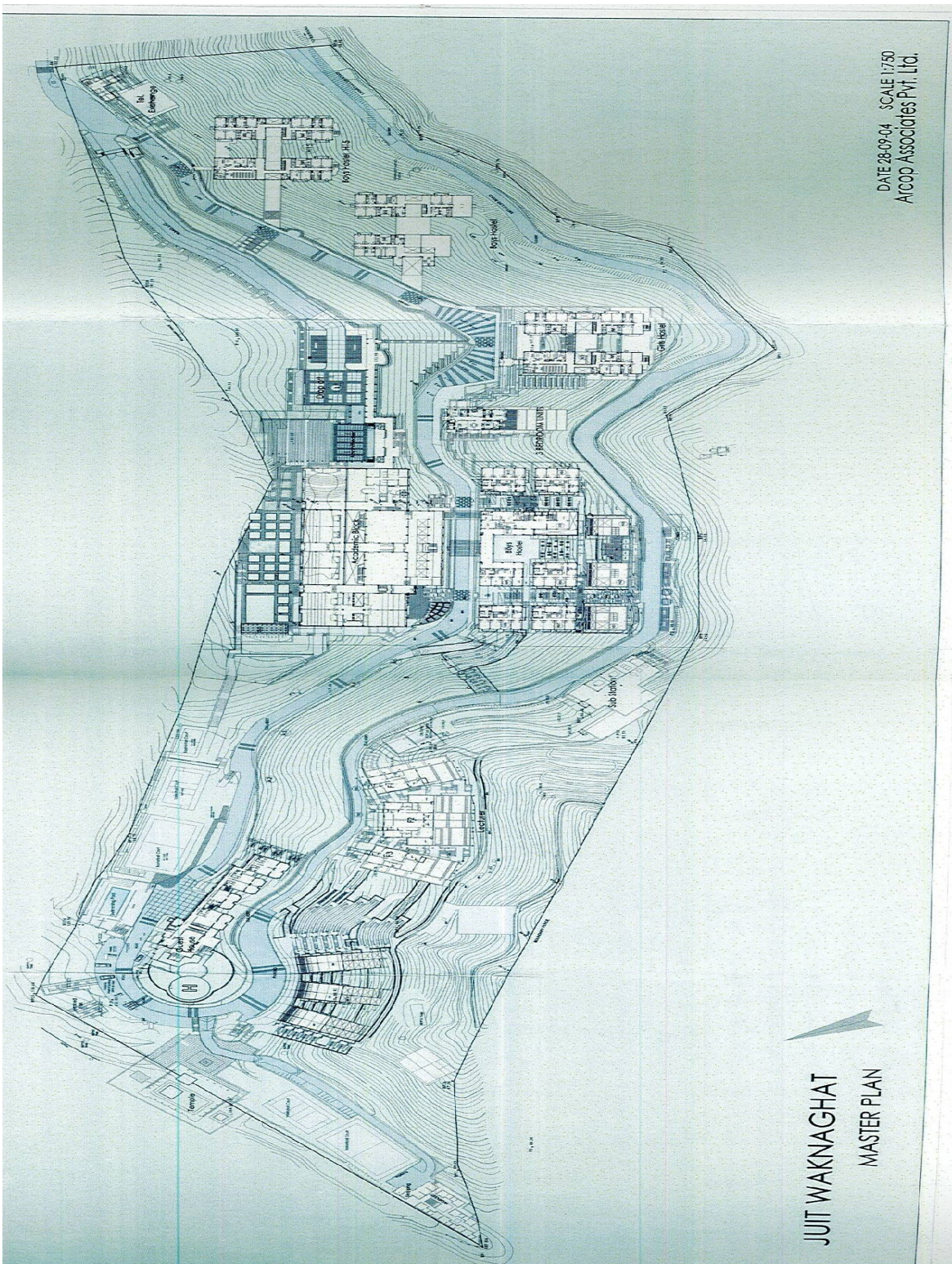
8. Specific suggestions and comments:

S.No.	LABORATORY/EXPERIMENT
A	
B	
C	

9. Any Other Comments:

[Use reverse side for more space. Please do not indicate your identity anywhere]

ANNEXURE-VI



DATE 28-09-04 SCALE 1:750
Arcop Associates Pvt. Ltd.

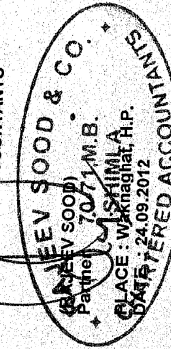
JUIT WAKNAGHAT
MASTER PLAN

**Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)
Consolidated Balance Sheet as on 31.03.2012**


Amount (₹) 31.03.2011	LIABILITIES	Amount (₹) 31.03.2012	ASSETS	Amount (₹) 31.03.2012
50,000,000	CORPUS FUND	50,000,000	FIXED ASSETS	331,881,381
10,155,000	For University	10,155,000	Opening Balance	29,594,226
60,155,000	For Research Promotion (UBSK)	60,155,000	Addition during the year	381,475,607
			Gross Block	SCH. "A"
130,512,555	GENERAL FUND	114,118,268	Less : up to date Depreciation	205,609,356
(16,394,287)	Opening Balance	(17,708,556)	Net Block	155,866,251
114,118,268	Add / (Less) - Surplus / (Deficit) brought from Income & Expenditure A/C.	96,409,712	CAPITAL WORK IN PROGRESS	SCH. "B"
				119,240,025
895,946	RESEARCH PROJECT'S FUND	23,388,258	CURRENT ASSETS, LOANS & ADVANCES	
32,630,043	Opening Balance	11,293,791	Cash & Bank Balance	SCH. "C"
(10,137,601)	Add : Received during the year	(27,933,963)	Advances and Receivables in Cash or in Kind	SCH. "D"
(130)	Less : Expenses during the year		Prepaid Expenses	SCH. "E"
23,388,258	Less : Refund during the year	6,742,086	Security Deposits	SCH. "F"
			Stock-in-Hand	SCH. "G"
20,114,784	CURRENT LIABILITIES & PROVISIONS	65,729,479		
130,417,937	Sundry Creditors			
	Other Liabilities			
16,799,625	CAUTION MONEY	16,915,500		
202,410	Current Students	231,626		
17,002,035	Ex-students	17,147,126		
365,196,282	Total Liabilities	403,614,468	Total Assets	403,614,468

Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Balance Sheet.

For RAVEEV SOOD & Co.
CHARTERED ACCOUNTANTS



For Jaypee University of Information Technology


 Vice-Chancellor
 Jaypee University of Information Technology
 Waknaghat, Solan (H.P.)
 Registrar (Asst. Finance Officer)

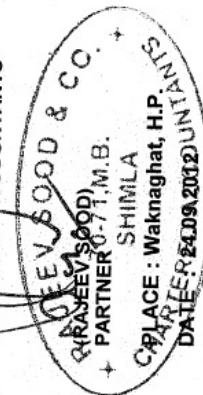
**Jaypee University of Information Technology
Waknaghat, Distt. Solan, H.P.**

Consolidated Income & Expenditure Account for the year ended on 31.03.2012


Amount (₹) 31.03.2011	EXPENDITURE	Amount (₹) 31.03.2012	Amount (₹) 31.03.2011	INCOME	Amount (₹) 31.03.2012
10,19,05,680	Institutional Expenses	11,71,65,934	33,66,55,569	Collection from Students	38,17,00,790
15,23,66,650	Salary & Allowances	17,65,60,726	95,48,835	Interest received on FDs	94,00,039
7,94,74,955	Students Hostel Expenses	8,72,88,320	36,95,099	Other Income	22,61,524
3,25,46,505	Depreciation	3,00,55,929			
36,62,93,790	Total Expenditure	41,10,70,909			
	Surplus / (Deficit)				
(1,63,94,287)	Transferred to General Fund A/C.	(1,77,08,556)			
34,98,99,503	TOTAL	39,33,62,353	34,98,99,503	TOTAL	39,33,62,353

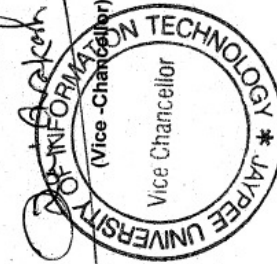
Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Balance Sheet.

For RAJEEV SOOD & CO.
CHARTERED ACCOUNTANTS



For Jaypee University of Information Technology


 (Vice-Chancellor) (Registrar) (Asst. Finance Officer)



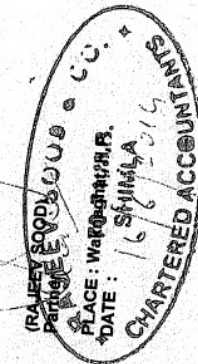
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Consolidated Balance Sheet as on 31.03.2013

Amount (₹) 31.03.2012	LIABILITIES	Amount (₹) 31.03.2013	Amount (₹) 31.03.2012	ASSETS	Amount (₹) 31.03.2013
5,00,00,000	CORPUS FUND			FIXED ASSETS	
1,01,55,000	For University	5,00,00,000		Opening Balance	33,18,81,381
6,01,55,000	For Research Promotion (UBSK)	1,01,55,000		Addition during the year	2,95,94,226
		6,01,55,000		Gross Block	36,14,75,607
11,41,18,268	GENERAL FUND			Less : up to date Depreciation	20,56,09,356
(1,77,08,556)	Opening Balance	9,64,09,712		Net Block	15,58,66,251
9,64,09,712	Add / (Less) - Surplus / (Deficit) brought from Income & Expenditure A/C.	(1,01,39,384)			24,93,97,328
		8,62,70,328		CAPITAL WORK IN PROGRESS	26,29,89,813
2,33,88,258	RESEARCH PROJECT'S FUND				
1,12,93,791	Opening Balance				
(2,79,39,963)	Add : Received during the year	67,42,086			
	Less : Expenses during the year	3,47,68,738			
	Less : Refund during the year	(-1,99,47,562)			
67,42,086		(29,685)			
		2,15,33,577			
6,57,29,479	CURRENT LIABILITIES & PROVISIONS				
15,74,31,065	Sundry Creditors				
	Other Liabilities				
1,69,15,500	CAUTION MONEY				
2,31,626	Current Students				
1,71,47,126	Ex-students				
40,36,14,468	Total Liabilities	43,87,91,088	40,36,14,468	Total Assets	43,87,91,088

Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Balance Sheet.

For RAJEEV SOOD & Co.
CHARTERED ACCOUNTANTS



For Jaypee University of Information Technology

(Vice-Chancellor) - (Registrar) - (Finance Officer)

**Jaypee University of Information Technology
Waknaghat, Distt. Solan, H.P.**

Consolidated Income & Expenditure Account for the year ended on 31.03.2013

Amount (₹) 31.03.2012	EXPENDITURE	Amount (₹) 31.03.2013	INCOME	Amount (₹) 31.03.2013
11,71,65,934	Institutional Expenses	SCH. "J" 12,55,08,423	Collection from Students	SCH. "M" 44,21,48,949
17,65,60,726	Salary & Allowances	SCH. "K" 19,57,31,839	Interest received on FDs	SCH. "N" 1,12,84,817
8,72,88,320	Students Hostel Expenses	SCH. "L" 10,17,12,737	Other Income	SCH. "O" 31,67,823
3,00,55,929	Depreciation	SCH. "A" 4,37,87,974		
41,10,70,909	Total Expenditure	46,67,40,973		
(1,77,08,556)	Surplus / (Deficit) Transferred to General Fund A/C.	(1,01,39,384)		
39,33,62,353	TOTAL	45,66,01,589	TOTAL	45,66,01,589

Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Balance Sheet.

For RAJEEV SOOD & CO.
CHARTERED ACCOUNTANTS

(RAJEEV SOOD & CO.)
PARTNER 70-71, M.S.
SHIMLA
PLACE: Waknaghat, H.P.
DATE: _____
CHARTERED ACCOUNTANTS

For Jaypee University of Information Technology

(Vice-Chancellor) (Registrar) (Finance Officer)

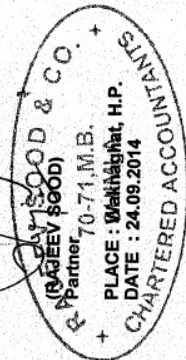
**Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)**

Consolidated Balance Sheet as on 31.03.2014

Amount (₹) 31.03.2013	LIABILITIES	Amount (₹) 31.03.2014	ASSETS	Amount (₹) 31.03.2014
5,00,00,000	CORPUS FUND	5,00,00,000	FIXED ASSETS	51,23,87,141
1,01,55,000	For University	1,01,55,000	Opening Balance	3,97,28,763
6,01,55,000	For Research Promotion (UBSK)	6,01,55,000	Addition during the year	55,21,16,904
			Gross Block	59,744
			Less : Adjustment of Vehicles	29,09,24,034
9,64,09,712	GENERAL FUND	8,62,70,328	Less : up to date Depreciation	26,11,32,126
(1,01,39,384)	Opening Balance	(3,45,93,517)		
8,62,70,328	Add / (Less) - Surplus / (Deficit) brought from Income & Expenditure-A/C.	5,16,76,811	CAPITAL WORK IN PROGRESS	75,87,494
67,42,086	RESEARCH PROJECT'S FUND	2,15,33,577	CURRENT ASSETS, LOANS & ADVANCES	
3,47,68,738	Opening Balance	2,82,37,595	Cash & Bank Balance	11,89,56,000
(1,99,47,562)	Add : Received during the year	(3,73,72,736)	Advances and Receivables in Cash or in Kind	1,17,12,075
(29,685)	Less : Expenses during the year	(9,94,454)	Prepaid Expenses	16,41,317
2,15,33,577	Less : Refund during the year	1,14,03,982	Security Deposits	20,87,352
			Stock- In- Hand	73,59,122
8,16,12,939	CURRENT LIABILITIES & PROVISIONS	10,40,68,014		
17,16,52,115	Sundry Creditors	16,52,63,146		
	Other Liabilities			
1,71,47,126	CAUTION MONEY	1,75,67,129		
44,90,000	Opening Balance	37,30,000		
(40,69,997)	Add : Received during the year	(33,88,596)		
1,75,67,129	Less : Refund during the year	1,79,08,533		
43,87,91,088	Total Liabilities	41,04,75,486	Total Assets	41,04,75,486

Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Balance Sheet.

For RAJEEV SOOD & Co.
CHARTERED ACCOUNTANTS



For Jaypee University of Information Technology

REGISTRAR,

Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

(Vice-Chancellor) (Registrar) (Finance Officer)

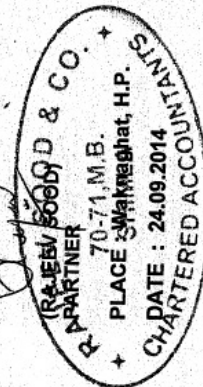
**Jaypee University of Information Technology
Waknaghat, Distt. Solan, H.P.**

Consolidated Income & Expenditure Account for the year ended on 31.03.2014

Amount (₹) 31.03.2013	EXPENDITURE	Amount (₹) 31.03.2014	Amount (₹) 31.03.2013	INCOME	Amount (₹) 31.03.2014
12,55,08,423	Institutional Expenses	SCH. "J" 13,17,13,449	44,21,48,949	Collection from Students	SCH. "M" 44,14,68,482
19,57,31,839	Salary & Allowances	SCH. "K" 20,66,31,565	1,12,84,817	Interest received on FDS	SCH. "N" 1,12,67,957
10,17,12,737	Students Hostel Expenses	SCH. "L" 11,14,94,236	31,67,823	Other Income	SCH. "O" 40,36,001
4,37,87,974	Depreciation	SCH. "A" 4,15,26,707			
46,67,40,973	Total Expenditure	49,13,65,957			
(1,01,39,384)	Surplus / (Deficit) Transferred to General Fund A/C.	(3,45,93,517)			
45,66,01,589	TOTAL	45,67,72,440	45,66,01,589	TOTAL	45,67,72,440

Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Balance Sheet.

For RAJEEV SOOD & CO.
CHARTERED ACCOUNTANTS



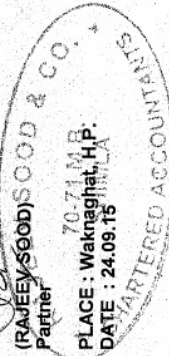
For Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)
(Vice-Chancellor) (Registrar) (Finance Officer)

**Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)
Consolidated Balance Sheet as on 31.03.2015**

Amount (₹) 31.03.2014	LIABILITIES	Amount (₹) 31.03.2015	Amount (₹) 31.03.2014	ASSETS	Amount (₹) 31.03.2015
5,00,00,000	CORPUS FUND	5,00,00,000	51,23,87,141	FIXED ASSETS	55,21,15,904
1,01,55,000	For University	1,01,55,000	3,97,28,763	Opening Balance	96,35,413
6,01,55,000	For Research Promotion (UBSK)	6,01,55,000	55,21,15,904	Addition during the year	SCH. "A" 56,17,51,317
				Gross Block	
8,62,70,328	GENERAL FUND	5,16,76,811	29,09,83,778	Less : up to date Depreciation	32,70,79,688
(3,45,93,517)	Opening Balance	1,07,07,795	26,11,32,126	Net Block	23,46,71,629
5,16,76,811	Add / (Less) - Surplus / (Deficit) brought from Income & Expenditure A/C.	6,23,84,606			
			75,87,494	CAPITAL WORK IN PROGRESS	SCH. "B" 1,52,68,359
2,15,33,577	RESEARCH PROJECT'S FUND				
2,82,37,595	Opening Balance	1,14,03,982		CURRENT ASSETS, LOANS & ADVANCES	
(3,73,72,736)	Add : Received during the year	1,96,60,842	11,89,56,000	Cash & Bank Balance	SCH. "C" 14,30,96,118
(9,94,454)	Less : Expenses during the year	(2,51,75,092)	1,17,12,075	Advances and Receivables in Cash or in Klinc	SCH. "D" 1,36,50,217
1,14,03,982	Less : Refund during the year	(2,24,304)	16,41,317	Prepaid Expenses	SCH. "E" 31,42,239
		56,65,428		Security Deposits	SCH. "F" 21,95,186
10,40,68,014	CURRENT LIABILITIES & PROVISIONS	11,05,01,305		Stock- in- Hand	SCH. "G" 54,74,111
16,52,63,146	Sundry Creditors	16,07,62,702	41,04,75,486	Total Assets	41,74,97,859
	Other Liabilities				
1,75,67,129	CAUTION MONEY	1,79,08,533			
37,30,000	Opening Balance	45,26,000			
(33,88,596)	Add : Received during the year	(44,05,715)			
1,79,08,533	Less : Refund during the year	1,80,28,818			
41,04,75,486	Total Liabilities	41,74,97,859			

Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Balance Sheet.

For RAJEEV SOOD & Co.
CHARTERED ACCOUNTANTS



For Jaypee University of Information Technology

(Signature)
Vice-Chancellor (Registrar) (Finance Officer)

**Jaypee University of Information Technology
Waknaghat, Distt. Solan, H.P.**

Consolidated Income & Expenditure Account for the year ended on 31.03.2015

Amount (₹) 31.03.2014	EXPENDITURE	Amount (₹) 31.03.2015	Amount (₹) 31.03.2014	INCOME	Amount (₹) 31.03.2015
13,17,13,449	Institutional Expenses	SCH. "J" 11,18,14,436	44,14,68,482	Collection from Students	SCH. "M" 45,20,52,452
20,66,31,565	Salary & Allowances	SCH. "K" 20,29,02,801	1,12,67,957	Interest received on FDs	SCH. "N" 1,05,45,228
11,14,94,236	Students Hostel Expenses	SCH. "L" 10,23,72,958	40,36,001	Other Income	SCH. "O" 13,55,964
4,15,26,707	Depreciation	SCH. "A" 3,61,55,656			
49,13,65,957	Total Expenditure	45,32,45,851			
	Surplus / (Deficit)				
(3,45,93,517)	Transferred to General Fund A/C.	1,07,07,795			
45,67,72,440	TOTAL	46,39,53,646	45,67,72,440	TOTAL	46,39,53,644

Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Balance Sheet.

For **RAJEEV SOOD & CO.**
CHARTERED ACCOUNTANTS

(RAJEEV SOOD)
PARTNER

PLACE : Waknaghat, H.P.

DATE : 24.09.2015

For Jaypee University of Information Technology

(Vice-Chancellor)

(Registrar)

(Finance Officer)

**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
WAKNAGHAT, DISTT. SOLAN (H.P.)**

Balance Sheet as on 31.03.2016

Amount (₹) 31.03.2015	LIABILITIES	Amount (₹) 31.03.2016	ASSETS	Amount (₹) 31.03.2016
	CORPUS FUND		FIXED ASSETS	
5,00,00,000	For University	5,00,00,000	Opening Balance	56,17,51,317
1,01,55,000	For Research Promotion (UBSK)	1,01,55,000	Addition during the year	1,59,57,453
6,01,55,000		6,01,55,000	Disposed off during the year	(54,000)
			Gross Block	SCH. "A" 57,76,54,770
	GENERAL FUND		Less : up to date Depreciation	35,90,81,013
5,16,76,811	Opening Balance	6,23,84,606	Net Block	21,85,73,757
1,07,07,795	Add: Surplus brought from Income & Expenditure A.C.	4,14,82,211		
6,23,84,606		10,38,66,817	CAPITAL WORK IN PROGRESS	SCH. "B" -
	RESEARCH PROJECT'S FUND		CURRENT ASSETS, LOANS & ADVANCES	
1,14,03,982	Opening Balance	56,65,428	Cash & Bank Balance	14,03,41,840
1,96,60,842	Add : Received during the year	2,66,08,328	Advances and Receivables in Cash or in Kind	85,77,556
(2,51,75,092)	Less : Expenses during the year	(1,81,21,128)	Prepaid Expenses	31,42,239
(2,24,304)	Less : Refunded during the year	(6,20,540)	Security Deposits	21,95,186
56,65,428		1,35,32,088	Stock-in- Hand	54,74,111
11,05,01,305	CURRENT LIABILITIES & PROVISIONS			
	Sundry Creditors	SCH. "H" 9,02,51,577		
15,29,35,763	Other Liabilities	SCH. "I" 15,44,30,761		
1,79,08,533	CAUTION MONEY			
45,26,000	Opening Balance	1,80,28,818		
(44,05,715)	Add : Received during the year	49,40,000		
	Less : Refunded during the year	(46,87,493)		
	(Due for payment during next one year Rs. 39,04,780/-)			
1,80,28,818		1,82,81,325		
40,96,70,920	Total Liabilities	44,05,17,558	Total Assets	44,05,17,558

Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Balance Sheet.
As per our report of even date attached

For DASS GUPTA & ASSOCIATES
CHARTERED ACCOUNTANTS
REG. NO. 000112N



(ASHOK KUMAR)
PARTNER
MEMBERSHIP NO.: 090563
PLACE:-New Delhi
DATE: 27.08.2016

(VINOD KUMAR)
VICE CHANCELLOR

(BRIG. K. K. MARWAH (RETD.))
REGISTRAR

(NEHA ARORA)
ASST. FINANCE OFFICER

**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
WAKNAGHAT, DISTT. SOLAN (H.P.)**

Income & Expenditure Account for the year ended on 31.03.2016

Amount (₹) 31.03.2015	EXPENDITURE	Amount (₹) 31.03.2016	INCOME	Amount (₹) 31.03.2016
11,18,14,436	Institute Expenses	SCH. "J" 11,02,70,837	Collection from Students	SCH. "M" 47,43,16,023
20,29,02,801	Salary & Allowances	SCH. "K" 19,78,67,425	Interest received on FDs	SCH. "N" 1,23,32,077
10,23,72,958	Students Hostel Expenses	SCH. "L" 10,76,10,484	Other Income	SCH. "O" 25,84,180
3,61,55,654	Depreciation	SCH. "A" 3,20,01,323		
45,32,45,849	Total Expenditure	44,77,50,069		
1,07,07,795	Surplus Transferred to General Fund in Balance Sheet.	4,14,82,211		
46,39,53,644	TOTAL	48,92,32,280	TOTAL	48,92,32,280

Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Income & Expenditure Account.
As per our report of even date attached

For DASS GUPTA & ASSOCIATES
CHARTERED ACCOUNTANTS
REG. NO. 000112M

(ASHOK KUMAR BAIN)
PARTNER
MEMBERSHIP NO. 090563
PLACE:- New Delhi
DATE: 27.06.2016

(VINOD KUMAR)
VICE CHANCELLOR

(BRIG. K. K. MARWAH (RETD.))
REGISTRAR

(NEHA AFORA)
ASST. FINANCE OFFICER

Publications during the period 2011-2015

Books

1. Anil Dhiman, Poonam Dhiman, D.C. Kulshreshtha (2015). "Engineering Mechanics", *Tata McGraw Hill Education Pvt Ltd.*
2. A. Sehrawat (Ed.). (2014). "British Literature: Critical Perspectives", *Parbhani: New Man Publication*, ISBN: 978-93-83871-42-1
3. A. Sehrawat (2014). "Emotional Intelligence, Well-being and Achievement Goals", *Saarbrücken: LAP Lambert Academic Publishing*, ISBN: 978-3-659-63521-2
4. A. Sehrawat (Ed.). (2014). "New Directions in English Language Teaching", *Parbhani: New Man Publication*, ISBN: 978-93-83871-39-1
5. A. Sehrawat (Ed.). (2014). "Perspectives on Indian English literature", *Parbhani: New Man Publication*, ISBN: 978-93-83871-40-7
6. T. Sharma, A. Sehrawat (2014). "Emotional Intelligence, Leadership and Conflict Management", *Saarbrücken: LAP Lambert Academic Publishing*, ISBN13:978-3-659-63123-8
7. Amit Srivastava (2014). "Intra-Industry Trade of India with Reference to Few Selected Sectors", *LAP Lambert Academic Publishing*, Germany, (ISBN: 978-3-659-64800-7).
8. T. Sharma (2014). Poverty in India: Issues & Challenges. *Parbhani: New Man Publication*. ISBN: 978-93-83871-41-4
9. T. Sharma (2014). "Socio-Economic Development of Below Poverty Line Classes", *Parbhani: New Man Publication*, ISBN No: 978-93-83871-41-4.
10. Harinder Singh, Jimson Mathew, Rakesh Kumar Bajaj, Mahesh P (2013). "Advances in Energy Aware Computing and Communication Systems", *New Delhi: McGraw Hill Education*. [ISBN: 9351343324].
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12. Meenakshi Sood (2012). "Digital electronics" for ICDOEL, *HP University, Shimla*
13. W.B. Vasantha Kandasamy, Florentin Smarandache, R. Sujatha, R.S. Raja Durai (2012). "Erasure Techniques in MRD Codes", *Columbus, OH: ZIP publishing*.
14. Poonam (2012). "Effect of Variation in Damping of Bearings of Base-Isolated Buildings", *Germany: LAP LAMBERT Academic Publishing*. [ISBN: 9783659002403]
15. Sunil Bhooshan (2012). "Fundamentals of Engineering Electromagnetics", *Oxford University Press*, India, and USA, ISBN-10: 0198077947 ISBN-13: 0198077947.
16. D.C. Kulshreshtha (2012). "Basic Electrical Engineering", *Tata McGraw Hill Education Pvt Ltd.*, ISBN – 978-007-132896-8.
17. Anil Kumar (2011). "Active Control of Buildings Subjected to Seismic Excitations: Control System Design Using LQG Optimal Approach", *LAP LAMBERT Academic Publishing*, [ISBN: 9783846527146].
18. K.G. Sharma, V.K. Kanjlia, A.C. Gupta, Ashok Kumar Gupta, Subodh Kumar Jain (2011). "Proc. of Workshop on Construction of Dams & Tunnels in Weak Rocks", *CBIP, New Delhi*.

19. Shruti Jain (2011). “Synthetic Biology: Towards Digital Circuit” *VDM Veralag, Mauritius*, (ISBN-10: 3639338111)

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1. I.Bala, M.S. Bhamrah, V. Rana, N. Jain, G. Singh (2015). “Adaptive Power Control Scheme for the Cognitive Radio System Based on Receiver Sensitivity”, in Koushik Maharatna, Goutam Kumar Dalapati, P.K Banerjee, Amiya Kumar Mallick, Moumita Mukherjee, Ed. “Computational Advancement in Communication Circuits and Systems,” *New Delhi: Springer*, pp. 69-79. (ISBN: 978-81-322-2274-3). <http://dx.doi.org/10.1007/978-81-322-2274-3>.
2. D. Singh, A. Sehrawat (2014). “Social and Political Concerns in Arnold Wesker's Chicken Soup with Barley”. In A. Sehrawat (Ed.) *British Literature: Critical Perspectives. Parbhani: New Man Publication*, pp.12-24. ISBN: 9789383871421.
3. A. Sehrawat (2014). “Teaching Coherence”, In A. Sehrawat (Ed.) *New Directions in English Language Teaching, Parbhani: New Man Publication*, pp. 153-176.
4. K. Gangrade, A. Sehrawat (2014). “Power politics in G. P. Deshpand’s play a man in Dark Time”, In A. Sehrawat (Ed.) *Perspectives on Indian English Literature. Parbhani: New Man Publication*, pp. 144-151.
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6. A. Chauhan, A. Kaur, Y. Medury (2012). “Destination image: Insights for Indian tourism”, in R. Chopra, J. Ranjan, S. Puri, N. Awasthy, *Beyond Norms Strategies for Excellence, Bloomsbury Publishers*, ISBN 978-93-82563-45-7.
7. Rachit Singhal, Shubhrangshu Naval, Amit Srivastava (2011). “Leveraging IT to Foster Financial Inclusion”, *Facets of Business Excellence*, Edited by Rakesh Chopra et.al., pp 278-287, *Macmillan Advanced Research Series*, (ISBN: 978-935-059-029-4).

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2. S. Khanna, A. Srivastava, Y. Medury, (2015). “The Effect of Macroeconomic Variables on the Capital Structure Decisions of Indian Firms: A Vector Error Correction Model/Vector Autoregressive Approach”, *International Journal of Economics and Financial Issues*, 5(4), 968-978 (ISSN: 2146-4138)
3. S. Khanna, A. Srivastava, Y. Medury, (2015). “Is Equity Market Timing the Sole Criteria for

- Capital Structure Decisions? An Insight from Indian Firms”, *Indian Journal of Finance*, 9(10), 48-64 (ISSN: 0973-8711)
4. S. Khanna, A. Srivastava, Y. Medury, (2015). “Analyzing the Relationship Between Management Efficiency, Capital Structure, and Firms' Performance in a Turbulent Environment: Evidence from India”, *Indian Journal of Research in Capital Markets*, 2(2), 56-64 (ISSN: 2394-3459)
 5. A. Srivastava, (2015). “Factor Endowment Differences and Intra-Industry Trade of India with Different Country Groups”, *BHU Management Review*, 5, 1-12 (ISSN: 2231-0142)
 6. A. Srivastava, (2015). “Exploring the Determinants of India’s Intra-Industry Trade: A Panel VAR/VECM Approach”, *International Journal of Computational Engineering and Management*, 18(3), 23-31 (ISSN: 2230-7893)
 7. Tanuj Kumar, Rakesh Kumar Bajaj, (2015). “NTV metric based entropies of interval-valued intuitionistic fuzzy sets and their applications in decision making”, *Annals of Fuzzy Mathematics and Informatics*, 9(1), 1-21.
 8. A. Dahshan, P. Sharma, K.A. Aly (2015). “Semiconducting quaternary chalcogenide glasses as new potential thermoelectric materials: an As-Ge-Se-Sb case”, *Dalton Transactions*, 44(33), 14799-14804.
 9. A.K. Dixit, P. Sharma, A. Thakur, V. Mishra, Pankaj Sharma, V.S. Rangra (2015). “Compositional Dependence of Physical Parameters in Sn-Se-In Chalcogenide Glasses”, *Chalcogenide Letters*, 12(5), 249-256.
 10. Arpit Kaistha, V.S. Rangra, Pankaj Sharma (2015). “Assessment of physical parameters for quaternary antimony substituted Ge-Se-Te alloys”, *Glass Physics and Chemistry*, 41(2), 175-179.
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 12. Pankaj Sharma, Vineet Sharma (2015). “Temperature Dependent Electrical Study of Ge₁₇Se₇₄Sb₉ Thin Film”, *International Journal of New Horizons in Physics*, 2(1), 21-24.
 13. Neha Sharma, Sunanda Sharda, Vineet Sharma, Pankaj Sharma (2015). “Thermal analysis of quaternary Ge-Se-Sb-Te chalcogenide alloys”, *Journal of Thermal Analysis and Calorimetry*, 119(1), 213-218.
 14. S.S. Fouad, M.S. El-Bana, Pankaj Sharma, Vineet Sharma (2015). “Analysis of chemical ordering and fragility for Ge-Se-In glasses”, *Applied Physics A-Materials Science & Processing*, 120(1), 137-143.
 15. Ankush Thakur, Partha Bir Barman, Ragini Raj Singh (2015). “Effects of La³⁺-Nd³⁺ ions and pre-calcination on the growth of hexaferrite nanoparticles prepared by gel to crystallization technique: Non-isothermal crystallization kinetics analysis”, *Materials Chemistry and Physics*, 156, 29-37.
 16. H. Kumar, Partha Bir Barman, Ragini Raj Singh (2015). “Effect of size and shell: Enhanced optical and surface properties of CdS, ZnS and CdS/ZnS quantum dots”, *Physica E: Low-Dimensional Systems and Nanostructures*, 67, 168-177.
 17. Rajinder Kumar, Hitanshu Kumar, Manoj Kumar, Ragini Raj Singh, P.B. Barman, (2015). “Enhanced Saturation Magnetization in Cobalt Doped Ni-Zn Ferrite Nanoparticles”, *J Supercond Nov Magn.*, 28, 3557-3564.
 18. Hitanshu Kumar, Partha B. Barman, Ragini Raj Singh, (2015). “Low-Temperature Growth of Inverted Hexagonal ZnS/CdS Quantum Dots: Functional and Luminescence Properties”, *Journal of*

- Electronic Materials*, 44(2), 675-681.
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 20. D. Gupta, D. Dutta, M. Kumar, P.B. Barman, T. Som, S.K. Hazra (2015). "Temperature dependent dual hydrogen sensor response of Pd nanoparticle decorated Al doped ZnO surfaces", *Journal of Applied Physics* 118, 164501(8pp).
 21. Abhishek Kandwal, Jai V. Chauhan, Sunil Kumar Khah (2015). "Wideband Gap Coupled Sectoral Antenna for Communication Systems", *Progress in Electromagnetics Research C*, 56, 73-82.
 22. Sarita Kango, Rajesh Kumar, (2015). "Low-cost magnetic adsorbent for As(III) removal from water: adsorption kinetics and isotherms", *Environmental Monitoring and Assessment*, 188, 60.
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 25. Abhilash Kumar Tripathi, Mamta Kumari, Ashish Kumar, Sudhir Kumar (2015). "Generation of Biogas using Pine needles as substrate in domestic biogas plant", *International Journal of Renewable energy research*, 5(3), 716-721.
 26. Nichole Baldwin, Owais Gilani, Suresh Raja, Stuart Batterman, Rajiv Ganguly, Philip Hopke, Veronica Berrocal, Thomas Robins, Sarah Hoogterp (2015). "Factors affecting pollutant concentrations in the near-road environment", *Atmospheric Environment*, 115, 223-235.
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 29. Rajiv Ganguly, Stuart Batterman, Vlad Isakov, Michelle Snyder, Michael Breen, Janet Burke, Wilma Brakefield-Caldwell (2015). "Effects of geocoding errors on traffic related air pollutant exposure and concentration estimates", *Journal of Exposure Science and Environmental Epidemiology*, 25(5), 490-490-8.
 30. Nikita Gupta, Poonam, Ashok Kumar Gupta (2015). "Retrofitting of an Existing Residential Building by Using Shear Wall", *Journal of Civil Engineering and Environmental Technology*, 2(7), 582-586, ISSN: 2349-8404.
 31. Nikita Gupta, Aditya Tiwary, Poonam, Ashok Kumar Gupta (2015). "Advanced Retrofitting Techniques for Reinforced concrete Buildings", *Journal of Civil Engineering and Environmental Technology*, 2(7), 587-592, ISSN: 2349-8404.
 32. Rishi Rana, Rajiv Ganguly, Ashok Kumar Gupta (2015). "An Assessment of Solid Waste Management System in Chandigarh City, India", *Electronic Journal of Geotechnical Engineering*, 20(6), 1547-1572.
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34. A. Usmani, G. Kannan, A. Nanda, Subodh Kumar Jain (2015). "Seepage behavior and grouting effects for large rock caverns", *ASCE International Journal of Geomechanics*, 15(3), 06014023.
35. Ashok Kumar Gupta, Rajiv Ganguly, Ankit Singh Mehra (2015). "Bamboo as Green Alternative to Steel for Reinforced Concrete Elements of a Low Cost Residential Buildings", *Electronic Journal of Geotechnical Engineering*, 20(6), 1523-1545.
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38. P.K. Gupta, Gunjan Gugnani, Satya Prakash Ghrera (2015). "XML DNA Encryption: Improved Security of Cloud Applications", *CSI Communications*, 39(4), 16-18.
39. Uday Singh Kushwaha, P.K. Gupta, Satya Prakash Ghrera (2015). "Performance evaluation of AOMDV routing algorithm with local repair for wireless mesh networks", *CSI Transactions on ICT*, 2(4), 253-260
40. Punit Gupta, Satya Prakash Ghrera (2015). "Load Balancing Algorithm for Hybrid Cloud IaaS", *International Journal of Applied Engineering Research*, 10(69), 257-261.
41. Punit Gupta, Satya Prakash Ghrera (2015). "Deadline Aware Load Balancing of Distributed Servers in Distributed", *International Journal of Applied Engineering Research*, 10(69), 268-273
42. Punit Gupta, Satya Prakash Ghrera (2015). "Fault and Load Aware Load Balancing in Cloud Storage", *International Journal of Applied Engineering Research* 10(69), 280-285
43. Yashwant Singh, Urvashi Chugh, M.V. Ramana Murthy (2015). "Information Fusion and Change Point Detection in Mutual Exclusive distributive Clustering", *Procedia Computer Science*, 65, 592-600.
44. Anum Javeed Zargar, Amit Kumar Singh (2015). "Wavelet based Image Watermarking using Huffman Compression Technique", *International Journal of Applied Engineering Research*, 10(69), 1-4.
45. Amit Kumar Singh, Mayank Dave, Anand Mohan (2015). "Hybrid Technique for Robust and Imperceptible Multiple Watermarking using Medical Images", *Multimedia Tools and Applications: An International Journal*, Springer, DOI:10.1007/s11042-015-2754-7.
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- Recognition in Online Social Networks”, *International Journal of Security and Its Applications, Science & Engineering Research Support Society*, 9(7), 109-118. DOI: dx.doi.org/10.14257/ijasia.2015.9.7.10
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 55. Punit Gupta, Satya Prakash Ghrera (2015). “Load Balancing Algorithm for Hybrid Cloud IaaS”, *International Journal of Applied Engineering Research*, 10(69), 257-261.
 56. Punit Gupta, Satya Prakash Ghrera (2015). “Deadline Aware Load Balancing of Distributed Servers in Distributed”, *International Journal of Applied Engineering Research*, 10(69), 268-273
 57. Punit Gupta, Satya Prakash Ghrera (2015). “Fault and Load Aware Load Balancing in Cloud Storage”, *International Journal of Applied Engineering Research*, 10(69), 280-285.
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National Assessment and Accreditation Council (NAAC)

Jaypee University of Information Technology Solan (Himachal Pradesh)

An Autonomous Institution of the University Grants Commission

P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bangalore – 560 072

To enhance rigour and objectivity to the assessment and accreditation process, the University is requested to upload and submit the following information along with the SSR to NAAC.

Sl.no	A. Core Indicators	
1	Percentage of courses where major syllabus restructuring was carried out during last 3 years	40 %
2	Temporal Plan in more than 50% of programmes (CBCS/ Semester/ Annual)	CBCS/Semester
3	Percentage of teachers with Ph.D. qualification General Courses Professional courses (For ex.MD/ DM for medicine and ME/MS for engineering)	98% 100%
4	Student computer ratio	3:1
5	The number of departments with UGC/SAP/CAS/DST/FIST etc, in university	01
6	Number of Post Doctoral Fellows/ Research associates working a) Locals b) outsiders	Local=00 Outsiders=03
7	Number of ongoing research projects /per teacher	0.2
8	Number of completed research projects/per teacher (Funded by National/International Agencies)	0.6
9	Coordinated/ Collaborative projects (National and International)	Ongoing: National=02 International=01 Completed: National=05 International=02

10	National recognitions for faculty for Teaching/Research/ Consultancy/Extension (Reputed/recognised bodies)	36%
11	Number of Patents (last 5 years)	Granted=01 Filed=19
12	Output of M.Phil & Ph.D per faculty	M.Tech = 3.2 PhD = 0.84
13	Revenue generated from consultancy per year	Rs 9.5 lacs
14	Number of MoUs with International recognized bodies	07
15 (a)	- Publications per faculty - Total number of publications of the university:	10.7 1101
15 (b)	Percentage of papers published in journals listed in well known international databases	54.4 %
16	Average impact factor of publications	3.9
17	Number of papers with more than 10 citations	75
18	Number of book titles per student (in the central library) excluding book bank	16.3
19	Percentage of annual allocation for library spent on purchase of journals (national & international) and other library resources (CDs, Cassettes, etc.)	84%
20	Number of national/international conferences /workshops organised per department per year and names of experts participated	02 (Names of experts- Annexure-X)
21	Student performance in national/international level examinations (eg: ET/SLET/GATE/GMAT/CAT, GRE/TOFEL, Civil Services)	17.5%
22	Student Teacher Ratio(average across all disciplines)	20:1
23	University has the following. i)IQAC ii)Accreditation by national body iii)International accreditation/ISO certification iv)AAA	(i) Yes (ii) Yes (iii) No (iv) No
24	Outstanding Achievements/ Recognition by faculty/alumni both at national and international level	15
B. Desirable Indicators		
25	Outstanding performance of students in sports/cultural activities at national level	17

26	Feedback received from different stakeholders on syllabi etc. (i) Students (ii) Alumni (iii) Parents (iv) Employers (v) peers	All
27	Percentages of recommendations of the stakeholders implemented	90 %
28	Number of interdisciplinary course combinations introduced during last five years as percentage of total programmes	8
29	Percentage of Departments conducting tutorial classes	100%
30	Number of courses, where continuous assessment of student performances is structured into the system	100%
31	Percentage of faculty availing international fellowship for advance studies	2.9%
32	Percentage of courses/programmes that formally integrate e-learning resources from National Programmed Teaching Enhanced Learning (NPTEL) Digital library retrieval	8.4 %
33	Percentage of annual budget allocated for augmentation of infrastructure facilities(average of last 3 years)	10.4%
34	Total number of class rooms, seminar halls with LCD/OHP etc.	100% (18)
35	Declaration of results within	2-weeks
36	Average pass percentage of students	97%
37	Student Placement percentage average per year	93.5 %
38	Percentage of student progression to higher education	24%
39	Average drop-out percentage of students	1 %
40	Unit cost of Education (excluding salary)	Rs 1.12 Lac
41	Aggregate percentage of seats filled against seats reserved for various categories as per applicable reservation policy	28.5%
42	Number of differently abled persons on roll: Teaching / Non Teaching/ Students	Nil
43	Percentage representation of staff (teaching/ nonteaching) in decision making bodies	17.5 %
44	* Percentage of autonomous colleges to the total number of colleges	NA

45	Percentage of teachers from other states	77.7 %
46	Donations received for institution of Chairs, endowments, seminars, and lecture series in crores of INR in last 5 years.	5**
47	Contribution of Alumni/parents (average of last 5 years) for development of university in lakhs	Nil
48	Percentage of Female Students	30%
49	Programme for professional development of staff per year	1
50	Projection of successful innovative practices	5

**Applicable only to the affiliating Universities.*

***Interest free loan from Jai Prakash Sewa Sansthan in the year 2012.*

Place: JUIT, Waknaghat

Date: 31 March 2017



[Handwritten Signature]
Signature
Vice Chancellor

NAMES OF EXPERTS

Department	Experts in Conferences/Workshops/Seminars
Humanities and Social Sciences	Prof. Radha K. Maheshwari, USA; Prof. Sheila Bunwaree, Mauritius; Prof. Arun Kulshreshtha, NAM; Shireen Kamal Assem, Abdel-Halim Assem, Shireen Kamal Assem, Abdel-Halim Assem, Egypt; Ms. Geeta Malhotra, Director, READ India.
Physics and Materials Science	Prof. R. P. Bajpai, Prof. R.B. Mathur, Prof. Tarasankar Pal, Prof. Ravi Kumar, Prof. A. K. Pal, Prof. Bansi Malhotra, Prof. Vijayamohan K. Pillai, Prof. S. Basu, Prof. Mahavir Singh, Prof. Ajay Gupta, Prof. C.H. Bhosale, Prof. Guru Balasubramanyam, University of Dayton, USA; Prof. Mahavir Singh, Prof. R.K.Pandey, Prof. O. P. Pandey, Dr. Praveen Kumar, Dr. Vimal C. Srivastva.
Mathematics	Prof Sanjay Ranka, University of Florida, USA; Prof. Bhargab Bhattacharya, ISI Kolkata; Prof. M. C. Joshi, IIT Gandhinagar; Prof. Ashish Srivastav, St. Louis University, USA; Prof D. S. Broca, XLRI Jamshedpur; Prof. R Radha, University of Hyderabad; Prof Ranjit K. Upadhyay Indian School of Mines, Dhanbad; Prof. Mythily Ramaswamy, TIFR Bangalore.
Computer Science and Engineering	Prof. Yale Patt, The University of Texas at Austin USA; Prof. Christian Scheideler Universität Paderborn Germany; Prof. Rajkumar Buyya Manjrasoft Pvt Ltd, Melbourne Australia; Prof. Dietmar Tutsch University of Wuppertal Germany; Prof. Ioannis Pitas University of Thessaloniki, GREECE; Prof. Amitabh Varshney, University of Maryland, USA; Prof. Andres Bruhn, Saarland University, Saarbruecken, GERMANY; Prof. Gaurav Sharma, University of Rochester, USA; Prof. R.K. Mittal, Director, BITS Pilani, DUBAI; Dr. Tinku Acharya, Videonetics Technology, INDIA; Prof. B.B. Chaudhuri, Indian Statistical Institute, Kolkata, INDIA; Prof. K.K.Biswas, IIT Delhi, India; Dr. D. Datta, BARC Mumbai, INDIA; Prof. Ivan Stojmenovic University of Ottawa; Prof. Peter Widmayer ETH Zürich Institut f. Theoretische Informatik Universitätstrasse 68092 Zürich Switzerland; Prof. Assaf Schuster Israel Institute of Technology Technion City, Haifa 32000, Israel; Prof. Nikil Dutt, University of California, Irvine; Prof. Eliezer Dekel IBM Haifa Research Lab, Haifa, Israel; Prof. Sanjay Ranka University of Florida, Gainesville, FL 32611, USA; Prof. Theo Gevers, University of Amsterdam, The Netherlands; Prof.. Bob Fisher, University of Edinburgh, Edinburgh, UK; Prof. David W. Jacobs, University of Maryland, USA; Prof. Filip Sroubek, Academy of Sciences, Czech Republic; Prof. Abdul Quaiyum Ansari, Jamia Millia

	Islamia, New Delhi; Prof. Sartaj Sahani, University of Florida, USA; Prof. Philip Wadler University of Edinburgh; Prof. Hong Shen University of Adelaide; Prof. Shu-Ching Chen, Florida International University School of Computing and Information Sciences Miami, FL 33199, USA; Prof. Nasser Kehtarnavaz, University of Texas, Dallas, USA; Prof. A G Ramakrishnan, MILE Laboratory, Indian Institute of Science, Bangalore, India; Dr. Buddhadeb Sau Jadavpur University; Dr. Gautam Kumar Das, IIT Guwahati; Dr Mukesh Negi Tech. Mahindra, India.
Electronics and Communications Engineering	Prof. Ved Prakash Sandlas, ISRO & DRDO; Prof. Laxmidhar Behera, IIT Kanpur; Prof. Satyabrata Jit, IIT BHU; Prof. Surendra Prasad, IIT Delhi; Prof. Rajendar Bahl, IIT Delhi; Prof. Andrea Conti, University of Ferrara, Italy; Prof. C. Sidney Burrus, Rice University; Prof. Arun Kumar, IIT Delhi; Prof. Shubhalaxmi Kher, Arkansas State University; Prof. S. D. Joshi, IIT Delhi; Prof. Omar Farooq, AMU Aligarh
Biotechnology and Bioinformatics	Dr. OP Sharma, Institute of Himalayan Bioresource Technology, CSIR, Palampur; Dr. SK Sharma Institute of Himalayan Bioresource Technology, CSIR, Palampur; Dr. Mahalaxmi Andheria, Vice president, IP Cell, Panacea Biotech Ltd., Dr. Mandar Kodgule, Vice President, Global IP & Strategic Planning & Sr. Director, Wockhardt Ltd.; Dr. Alok Bhattacharya, JNU, New Delhi; Dr. Debasis Mohanty, NII, New Delhi; Dr. G.P.S. Raghava, IMTECH, Chandigarh, Dr. Sumeet Dua, Louisiana Tech University, LA, USA; Dr. Hesham Ali, University of Nebraska, Omaha, USA; Dr. Nathan Hillson, Joint BioEnergy Institute, Fuels Synthesis Division, Emeryville, CA, USA.
Department of Civil Engineering	Mr. D.K. Sharma (M.D., HPPCL); Dr. K N Jha, Asso. Professor, IIT Delhi; Prof. Har Amrit Sandhu from PEC University, Chandigarh; Prof. Chandrasekhar Putcha, California State University, Fullerton USA; Prof. Har Amrit Sandhu from PEC University, Chandigarh; Prof. Dimitris Kaskaoutis from Shiv Nadar University Noida.; Dr. Nick R. Bartan, Prof. Manoj Datta, Director PEC University of Technology, Chandigarh; Dr. Rajbal Singh, Joint Director, CSMRS New Delhi Graham Morphett, Director, Uretek India Pvt.; Prof. P J Philip, NIT Kurukshetra; Mr. Namit Kumar, Assistant Manager (RITES Ltd.); Prof. M.P. Gupta, Department of Management Studies, IIT Delhi; Veerendra K Jaitly, CEO, C-cube Consultants; Prof. Subramaniam Rajan, Arizona State University, Tempe USA; Dr. J.T. Shahu, IIT Delhi; Dr. R.G. Robinson, IIT Madras; Dr. Altaf Usmani, EIL New Delhi.; Dr. Vineet Kamat, Associate Professor, University of Michigan USA.

POST ACCREDITATION INITIATIVES

The first cycle of NAAC accreditation of Jaypee University of Information Technology, Wanknaghat was carried out in March 2011. The Peer Team visited the University on 28-30 March 2011. The certain recommendations were made by the Peer Team for the quality enhancement of the University and advised the University to take initiatives regarding them. Based on the recommendations of the Peer Team, the University has undertaken certain measures to enhance the quality.

This document provides the responses to the observations and the recommendations made by the NAAC Peer Team.

- Feedback from the students is taken at the end of each semester in the specially designed format for Theory and Lab courses. All the feedbacks obtained are analyzed and the main/important points/ suggestions are conveyed to the teacher concerned.
The University elicits feedback on curriculum development from national and international experts. The experts from industry are invited for workshops to contribute through their comments, suggestions and observations on current and proposed curriculum. All suggestions/comments received are considered and suitable amendments are made in the curriculum.
On regular basis, the feedback from outgoing students is collected and assessed for further improvement of the curriculum. Alumni feedback is also collected and assessed.
- The minor syllabi updates are under taken by the Departments as and when needed.
- Reservation policy is well laid in the admission rules/brochure. On the first day of counseling the SC/ST category students are offered admission first and then the counseling begins for the open category. Besides this, 10% seats are reserved for HP category students.
- The University has a grievance redressal committee headed by the Registrar & Dean, Student Welfare.
- The University has an in-house PhD program being offered by all Departments. The number of quality research publications is consistently and continuously going up with an average of 10.7 per faculty.
- The academic block and a hostel have a lift to make it convenient for the differently-able students and ramp is also provided at certain residential areas and hostels. The university has the policy to provide the residential and hostel accommodation at ground level to differently-able students. LRC has made provision for serving differently-able users by providing a dedicated terminal for accessing OPAC as well as online resources. Two floors are easily accessible to them and one staff member is assigned to help them for finding literature or other kind of assistance.
- A dedicated laboratory with 59 networked computers and preloaded software is centrally used by the students as University Computer Centre/Research Lab/Project Lab.
- The Students regularly take part in various inter-university and national level sports and cultural activities. Our students won gold medal in cricket in the Sports Fest of IIT Ropar in March 2017. The girls' team also won silver medal in both Volleyball and Badminton.

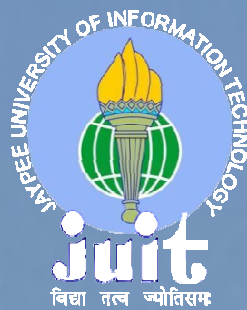
- The faculty and staff participate in regular meetings with their HoD's, who in turn put forward their inputs as agenda item in the regular meetings of all HoD's with the Vice Chancellor.
- The University has started holding some workshops like Spoken Tutorials under the guidance and supervision of a Professor level faculty member. The teaching and non-teaching staff participate in Virtual Lab workshops held in the University.
- The Department of Biotechnology has been awarded with the program support in "Centre of Excellence in Biotechnology", by DBT, New Delhi in the year 2010 for a period of five years for an amount of Rs 4.50 crores. The Department has also been awarded DST-FIST grant in the year 2012 for a period of five years for an amount of Rs 1.50 crores.
- About 70% of faculty members are PhD degree holders and are actively involved in research.
- The University follows the consultancy policy of its sister institute JIIT Noida. The University encourages its faculty to take up consultancy and has a well laid and articulated policy in this regard.
- The University offers admission on the basis of JEE Main rank. For the Biotechnology and Bioinformatics programs 50% of seats are allotted through JEE merit. The balance 50% seats in Biotechnology and Bioinformatics programs are allotted on the basis of merit at (10+2) level or equivalent for Biology students for which separate application are requested.
- The young faculty has access to Vice Chancellor and Director & Academic Head to seek support and guidance for career enhancement.

Response to recommendations of the Peer Team for Quality Enhancement of the University:

1. In order to attain excellence in IT related programmes on sustained basis, the University has taken some concrete steps such as introducing IT based courses in Civil Engineering and Bioinformatics curricula. To name a few of these courses : Engineering Graphics and CAD Lab, Computer Aided Planning and Costing Lab, Civil Engineering Software Lab, Biological Computation, Scripting Languages for Bioinformatics, Biomedical Informatics Lab and Machine Learning for Bioinformatics etc.
2. NAAC made the recommendations that the university should facilitate faculty members to carry out their Ph.D work in other reputed academic institutions. It may be mentioned that during the last five-six years some faculty members have been allowed to do their Ph.D outside JIIT.
3. Regarding the recommendations that the faculty member should also do Industrial training, the university has provisions to give sabbatical/study leave.
4. The hardware projects have been made the regular feature in the B.Tech course curriculum.
5. The collaborative work amongst faculty members for quality research and publications in high impact factor journals has always been encouraged and supported by the University. The Biotechnology and Civil Engineering Departments are presently working on joint project, "Biogas Production for Sustainable Energy Generation in Rural HP using One Stage Portable Digester", sanctioned by the State Council for Science, Technology & Environment, Himachal Pradesh. Similarly, Biotechnology and Computer Science Engineering Departments have submitted a joint project, "IOT Enabled Fencing System to Control

Monkey's Menace in Shimla (Urban Areas of Himachal Pradesh)", to SCSTE Shimla, HP Govt.

6. The University is already in the process of creating the Chair Professor and the Adjunct Professor positions.
7. The University has worked out a formal consultancy policy and now the steps are being taken to commence the various consultancy activities.
8. Our students regularly take part in inter-university sports and cultural fests throughout the year. Recently, our Naati group of students secured second position at Chitkara University and won a prize of Rs.25,000/-, and in "AAROHAN" the sports fest held at IIT Ropar our students won Gold in Cricket and Silvers in Volleyball, Badminton, and Basketball.
9. The University does not need to create in-house facilities for early schooling of employees' children as there are good schools within a radius of 3-7 kms at Wagnaghat and Shoghi.



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