JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
WAKNAGHAT
Himachal Pradesh

ANNUAL REPORT
2015 - 2016

CONTENTS

1.	Basic Information in Brief	--	3
2.	Introduction	--	5-14
3.	Academic Department – ECE	--	15-23
4.	Department of CSE/IT	--	24-40
5.	Department of Biotechnology & Bioinformatics	--	41-74
6.	Department of Civil Engineering	--	75-81
7.	Department of Physics & Materials Science	--	82-85
8.	Department of Mathematics	--	86-87
9.	Department of Humanities & Social Sciences	--	88-94
10.	Learning Resource Center (Libray)	--	95-98
11.	IT Infrastructure	--	99-104
12.	International Linkages of the University	--	105
13.	Academic Administration & Faculty	--	106
14.	Results & Scholarships	--	107
15.	JUIT Youth Club	--	108-118
16.	Governance	--	119
17.	Financial Status	--	120
18.	Training & Placement	--	121
	Appendices		
	Appendix-A – Details of Land	--	122-123
	Appendix-B – Faculty Details	--	124-129
	Appendix-C- University Results of Past 4 Years	--	130-132
	Appendix-D- Governing Council, Academic Council Executive Council & Finance Committee	--	133-138
	Appendix-E-Balance Sheet	--	139-167
	Appendix-F – Training & Placement Datga	--	168-172

BASIC INFORMATION IN BRIEF

Name	**:**	**Jaypee University of Information Technology, Waknaghat** (Established by H.P. State Legislature vide Act No. 14 of 2002 and approved by University Grants Commission vide its Notification No. F.9-10/2002(CPP-I) dated December 9, 2002)
Year of Establishment	:	July 2002
Status	:	State University, with effect from 23 May 2002
Location	:	Waknaghat, P.O. Waknaghat Tehsil – Kandaghat, Distt. Solan (H.P.)
Pin	:	173234
District	:	Solan
State	:	Himachal Pradesh

Officers of the Institute

Chancellor	:	Sh. Acharya Dev Vrat Hon'ble Governor of Himachal Pradesh
Pro-Chancellor	:	Sh. Manoj Gaur Executive Chairman, Jaiprakash Associates Ltd.
Vice Chancellor	:	Prof. S.C. Saxena (Acting)
Registrar	:	Brig. Balbir Singh (Retd.) upto 17-03-2016 Brig. K.K. Marwah (Retd.) w.e.f. 18-03-2016

Tele/Fax/Website

Vice Chancellor	:	(O) 01792-239201 (R) 01792-239279
Registrar	:	(O) 01792-245371/239203 (R) 01792-245367/239272
EPBAX	:	01792-257999 (30 lines)
Fax	:	01792-245362
Website	:	www.juit.ac.in

INTRODUCTION

About Jaiprakash Sewa Sansthan (JSS)

The Jaypee Group of Companies has consistently displayed full awareness of its social responsibilities through the Jaiprakash Sewa Sansthan (JSS), a 'not for profit' Trust registered under the Income Tax Act, 1961.

Seventeen junior-middle-senior secondary schools are in place spanning Jaypeenagar (M.P.) to Guna (M.P.), Sholtu (H.P.) and Sewagram (Gujarat) with combined student strength of around 15,000.

Three Industrial Training Institutes at Jaypeenagar (M.P.), Joshimath (Uttarakhand) and Samirpur (H.P.) covering the vocational stream of education are presently operational.

Four higher technical education campuses have been established in the emerging areas of technology – the Jaypee Institute of Information Technology (JIIT), Noida [August 2001]; the Jaypee University of Information Technology (JUIT) at Waknaghat, Himachal Pradesh [July 2002]; the Jaypee University of Engineering & Technology (JUET) at Guna, Madhya Pradesh [July 2003] and finally Jaypee University, Anoopshahr [July 2014].

Genesis

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. The sponsoring body of the University is Jaiprakash Sewa Sansthan (JSS).

The University commenced academic activities from July 2002 with undergraduate B.Tech. Degree programs in Electronics & Communication Engineering, Computer Science & Engineering, Information Technology, and Bioinformatics. Since then UG programs in Biotechnology, Civil Engineering, Information Technology have been added.

Vision

To become a Center of Excellence in the field of IT & related emerging areas of 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

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

Objectives of the University

As provided for, in the JUIT Act, the objectives of the University shall be to disseminate, create and advance knowledge, wisdom and understanding, and to offer technical education of the highest standards by teaching, research, training and extension activities.

Location and Area of Land

Land measuring 114.01 bighas comprising Khasra No. 408/4 and 429/185 situated in Village Rachhiana, Tehsil Kandaghat, District Solan, H.P.

SALIENT FEATURES – INFRASTRUCTURE

JUIT has been developed as a modern world class campus, with intellectually vibrant ambience in a serene and lush green environment, with a state-of-the-art campus covering a total built up area of around 80,000 Sq. m. Comprising smart buildings with internet, with Wi-Fi connectivity, including environmentally conditioned Academic Block, Annapurna (Mess), well-equipped modern laboratories, Learning Resource Centre, Faculty and student residences provide a pleasant and intellectually stimulating ambience for students in an eco-friendly environment. The details of the Infrastructure are attached as Appendix-A.

ACADEMIC PROFILE

The Academic Philosophy

- Student centric learning
- Encouragement to self learning
- Periodic review of Curricula to keep pace with changing technology
- Regular updating of Electives in the Curricula
- Emphasis on Project, Design and Laboratory skills
- Development of communication Skills and Leadership quality
- Emphasis on fundamentals, concepts, understanding and analytical & problem solving skills
- Enhancement of Scientific reasoning ability;
- Integration of human values and professionalism.

Accreditation

1. The following undergraduate programmes of the University are accredited by National Board of Accreditation (NBA) under Washington Accord upto 30th June 2017:-

Sr. No.	Name of Program(s)
1.	Computer Science & Engg.
2.	Electronics & Communication Engg.
3.	Biotechnology
4.	Civil Engineering
5.	Information Technology

2. The University have been accredited by the National Assessment and Accreditation Council (**NAAC)** Peer team for five years w.e.f. 16/9/2011, the University is further applying for the accreditation by the **NAAC.**

3. The University is also approved by University Grants Commission under Section 2(f) of UGC Act 1956.

EDUCATION SYSTEM

- At JUIT, special emphasis has been placed on developing an environment highly conducive to building a solid foundation of knowledge, personality development, confidence building, pursuit of excellence, self-discipline and enhancement of creativity through motivation and drive, which helps to produce professionals who are well trained for the rigors of professional and social life. All students are encouraged to make life outside the classroom vibrant and enjoyable by engaging themselves in multiple extracurricular areas. Fun creativity, competition, distinction, establishing relationships with fellow students and others in the community and ultimately enhancing the value of their educational experience, is at the heart of all extracurricular activities.

- The academic year consists of basically two semesters. The education system is organized around credit system which ensures continuous evaluation of students' performance and provides flexibility to choose courses of interest and to progress at an optimum pace suited to student's ability or convenience. Each course is assigned certain number of credits depending upon the class contact hours. A specified number of credits and CGPA are to be completed satisfactorily in order to qualify for a degree. The medium of instruction is English.

PROGRAMS OFFERED

- **UG PROGRAMS**

  In the pursuit of its objectives, the JUIT has gradually endeavored to increase the scope of programs, leading to the degree of Bachelor of Technology in (i) Electronics & Communication Engineering (ii) Computer Science & Engineering (iii) Information Technology (iv) Bioinformatics (v) Biotechnology (vi) Civil Engineering and (vii) Pharmacy.

  The programs of study emphasize strongly on conceptual understanding and practical skills in their respective areas of specialization. All students are provided with a sound foundation in basic sciences, coupled with courses in the Humanities and Social Sciences.

  Industry internship after 6th Semester is an integral part of the academic program leading to overall development of the student through exposure to practical skills in real life situations.

  Education Methodology comprises multiple learning stages, specific Lectures, Self-study, Tutorials, Laboratory Work, Assignments, Projects, Research, Internships, Guest Lectures, Seminars, Continuous Evaluation, Examinations and Personality Development programs.

- **DUAL DEGREE PROGRAM OR M. TECH PROGRAMS**

  - **5 Year Dual Degree Program B. Tech-M. Tech (Bio Technology)**

    The program has been offered for students admitted in B. Tech 2002, in their 7th Semester, as per merit drawn based CGPA. Since academic session 2006, the students for this program are being admitted in the 1st Semester itself. The program includes courses related to Biotechnology including Bioprocess Engineering, Genetic and Molecular biology, Genetic Engineering, IPR Biosafety and Bioethics, Advanced Bioinformatics leading to both Bachelor's as well as Master's degrees having provided strong fundamentals and extensive training at the B.Tech level through various compulsory & elective subjects and extensiveproject and thesis work in the final year.

  - **5 Year Dual Degree Program B. Tech-M. Tech (CSE)**

    The program has been offered for students admitted to 1st semester B. Tech. with effect from 2014 as per the merit. The program includes courses related to CSE including data structures, algorithms, theory of computation, compiler design, operating systems, data base systems, Object oriented programming and computer networks, having provided strong fundamentals and extensive training through various compulsory & elective subjects and extensive project and thesis work in the final year.

- **5 Year Dual Degree Program B. Tech-M. Tech (ECE)**

  The department offers 5-year dual degree program in Electronics and Communication Engineering in which the students are trained in core as well as advanced topics. Detailed emphasis and coverage is given to topics such as advanced mobile and wireless communications, advanced signal processing, statistical signal processing, bio-medical signal processing and VLSI. The program also focuses on developing analytical skills to

- **6 Year Integrated Dual Degree Program B. Tech-M. Tech (Bio Technology)**

  The program has been offered for students admitted in B. Tech 2002, in their 7th Semester, as per merit drawn based CGPA. Since academic session 2014, the students for this program are being admitted in the 1st Semester itself. The program includes courses related to Biotechnology including Bioprocess Engineering, Genetic and Molecular biology, Genetic Engineering, IPR Biosafety and Bioethics, Advanced Bioinformatics leading to both Bachelor's as well as Master's degrees having provided strong fundamentals and extensive training at the B.Tech level through various compulsory & elective subjects and extensiveproject and thesis work in the final year.

- **Post Graduate Program**

  JUIT has been successfully running M.Tech programs in Electronics & Communication Engineering (ECE), Computer Science and Engineering (CSE), Construction Management (CM) with effect from Academic Session 2008-09, Nanotechnology & Structural Engineering from Academic Session 2010-11 and Biotechnology & Environmental Engineering from the session 2014-15.

  The objective of the M. Tech program is to prepare professionals with advanced knowledge of their respective fields who can serve industry, R&D organizations and can take up a career in academics, including further studies in a relevant Ph.D. program. The 2-year M. Tech programs are spread over four semesters.

  All M. Tech Programs are designed to cover core/compulsory as well as elective subjects to advance knowledge, ability and skills of the students in their chosen area. Students can take the desired electives from the set of subjects offered from time to time to enable them to cater to their interests and to specialize in a particular field. Project and Thesis work are spread over the last two semesters, which provide ample opportunity to the student to carry out intensive work on a chosen topic resulting in an innovative and research oriented output. Seminars are included in the program to develop presentation skills in the students.

M.Tech (Electronics and Communication Engineering)

The program covers a number of areas like Mobile, Wireless, Satellite, Optical and Computer Communication Systems and Networks; Signal Processing, Spread Spectrum Communication and error control coding techniques; Microelectronics and VLSI Design and Information and Communication Theory through suitable core/compulsory and elective subjects and extensive project and thesis work. The program also focuses on developing analytical skills to enable fluent use mathematical techniques as to tool for engineering research..

M.Tech (Computer Science & Engineering)

This Program offers a balanced emphasis on theoretical computer science, computertechnology, software engineering, and applications of computing. The program provides advanced level education in areas like Algorithms and Data Structures, Software Engineering, Learning Sciences and Technology, High Performance Computer Architecture, Computer Networking, Network Security, Internet and Web Technologies, computer Graphics, Image Processing, Information Systems, Data Ware Housing & Mining, Data Base Management, Operating Systems, Computational Models, Cognitive Science, Soft Computing and Human Computer Interaction.

M. Tech (Biotechnology)

The Master´s in Biotechnology is a broad program covering different aspects of life sciences such as gene technology, bioprocess technology, immune-technology, bio-separation, enzyme technology, protein engineering, metabolic engineering and process and plant design. The curriculum has been closely aligned to market needs. Admissions are open either through GATE score in B.Tech or through entrance test for candidates with a Masters in life sciences, 4 years professional degrees in B.Sc. (Agriculture/horticulture), B.VSc, B.Pharm, and MBBS.

M.Tech (Construction Management)

This 2-year program aims to impart the knowledge in areas like Construction Techniques, Equipments, Safety, Planning; Contracts, Financial Management, Sustainable Design; Human Resource Management, Affordable Housing, Value Engineering and Construction Information Systems through suitable core/compulsory & elective subjects and capstone projects and thesis work.

M.Tech (Environmental Engineering)

The department has started a new M.Tech programme in Environmental Engineering from the academic session 2014-2015. The main objective of the program is to develop competent professionals including consultants, scientists, technocrats in the field of environmental engineering having requisite skills to solve complicated and practical problems, develop effective communication skills and have the ability to work in multi-faceted and diverse

groups. Beside elective subjects, The course has project work and thesis in the final year.

M.Tech (Structural Engineering)

This 2-year program has been designed to provide knowledge in the areas like Structural Dynamics. Design of Tall Buildings, Repair and Retrofitting of Structures, Modelling and Simulation, Bridge Engineering, Advance RCC and Steel Design, FEM, etc. through suitable core/compulsory & elective subjects, projects in two parts and thesis work in the final year. The main objective of the programme is to prepare the students for working in Structural Design teams and if they wish, carry out research in the relevant fields.

M.Tech (Nanotechnology)

This Program offers a balanced emphasis on experimental designs and synthesis of nanoparticles, thin films and other nanostructures. The academic programme gives more stress on the application based synthesis of nano structures. Advancedapplications like numerical modeling of nanostructured radiators of high frequency is also a part this curriculum.

M. Tech (Applied and Computational Mathematics)

The curriculum is designed to provide an in-depth exposure to mathematical analysis, modeling, and reasoning with high exposure to computer-based techniques. As a result, students shall become adept at exploiting mathematical libraries for improved productivity and develop the ability to concentrate on core issues in problem solving rather than do the routine drudgery of performing calculations. The curriculum has been designed to provide students a range of computer-based skills for industrial use. Three specialization streams – Computer Applications, Business Applications, and Applied Mathematics with Statistics, are provided.

- **DOCTORAL PROGRAMS (PhD)**

The award of PhD degree by the University is in recognition of high academic achievements demonstrated by independent research and application of knowledge to the solution of technical and scientific problems. Creative and productive inquiry is the basic requirement underlying research work. The academic program leading to the degree involves fulfilling course credit requirements, residential requirements and a thesis giving a critical account of the research carried out, in any of the areas listed below.

Electronics & Communication Engineering

The Department of ECE offers PhD program in **Electronics & Communication Engineering.**The Department promotes strong exposure in the area of Digital Hardware Design using VHDL, VLSI Design, Signal and Speech Processing, Digital and Data Communication, Data Compression and Error Control Coding, Optical Communication, Satellite, Wireless and Mobile

Communication Systems. Students are also exposed to core computer courses like Data Structures, Object Oriented Programming, Operating Systems and Computer Networks. Unique features of our department are designing electronic and communication systems using software tools such as MATLAB, PSPICE, Model-Sim and DSP kits.

Computer Science & Engineering

The Department of Computer Science & Engineering promotes software, database, internet and information system technologies as well as network and distributed systems. Students are exposed to CASE tools, conceptual modeling, Requirements engineering and data warehouse design. They study all standard courses like Data Structures, Object-Oriented Programming, Operating Systems, Compilers, Computer Networks, etc. A special feature of our teaching is workshop courses where intensive practical experience is given on important tools like Unix and Shell Programming,Network Programming, etc. Students are given courses in cutting edge technologies immediately relevant to industry, for example, Web Programming, Web Services, Web Application Development, Data Mining, etc. Further they can opt for courses in futuristic technologies like Quantum Information Theory, Nano-Science & Technology.

Current research interests are in the areas of Algorithms, Computer Graphics, Computer Network and Security, Database Systems, Data Warehousing & Data Mining, Digital Image Processing, Internet Technologies, Learning Science & Technology and Soft Computing, Parallel, Distributed and Grid Computing, Computer Architecture, Computer Networks.

Biotechnology, Bioinformatics and Pharmacy

The Department runs Ph.D. program in Biotechnology, Bioinformatics and Pharmaceutical sciences with a provision of teaching assistantship @ Rs. 18,000/month to scholars analogous to American Universities so that the students are provided an opportunity to learn modern teaching skills while pursuing their research so as to enable them to become finest academicians and researchers. The Dept. has registered 75 Ph.D.scholars in different areas of biotechnology such as Medical Biotechnology, Plant Biotechnology, Agriculture Biotechnology, Environmental, Biotechnology, Food Technology, Industrial Biotechnology, Computational Drug Discovery, Bioinformatics Tools Development, Medicinal Chemistry, Neuropharmacology, Pharmaceutics, etc. The DRDO, DIHAR, Leh have registered their JRFs/SRFs in PhD through an MoU with us. Fifteen Ph.D.s have been awarded by the Department and a few are in their final stages of Thesis writing and submission.

Civil Engineering

The Department carries out research and development activities in the areas Rockfill material modelling, Constitutive modeling, FEM in Geotechnical Engineering, Soil plasticity, Slope stability problems (including

seismic), Soil-nailing, Landfill design, Fluvial hydraulics, Scouring, Flow of water around hydraulic structures such as bridge piers and abutments, Concrete rheology, Development of HPC with Alcofine, micro-silica, etc., Composite materials, Prestressed concrete, Dynamic analysis of structures subjected to extreme loading, and earthquakes, Seismic evaluation of existing buildings, Active and passive control of tall structures against earthquakes, Smart structures, Air pollution, Estimation of NOx / CO concentrations, and Solid-waste management, Pavement Materials, Design and Maintenance, Optimization Techniques, and development of mini-standard penetration test.

Physics & Materials Science

The Department has strong research interests in microwaves, compound semiconductors, and nano-materials. The Department has established a laboratory for the fabrication of thin film devices and nano-materials. A microwave antenna laboratory has also been set up for fabrication and simulation of antennas. Research is carried out with a number of doctoral students in the fields of nano-materials, semiconductors and microwave antenna.

Mathematics

Departmental research interests are in Applied group theoretic techniques, Discrete symmetries, Mathematical modeling and simulation, non-linear partial differential equations, Linear Algebra, Numerical Methods, Operations Research, Differential Geometry, Multivariable Calculus, Mechanics of Continuous Media, Elastic Waves, Wave propagation, Wavelets and differential equations, Wavelets in image processing, Algebraic Coding Theory, Sequence Design, Distributed Source Coding, Fuzzy Information Measures, Decision Making, Pattern Recognition, Probability and stochastic process, Reliability theory and engineering applications, Statistical inference under non-standard conditions, Time series analysis and forecasting. Application of Markov Random Field and Bayesian Techniques in Image Processing, Statistical methods in Epidemiology, Environmental and Bio Sciences.

Humanities and Social Sciences

The Department was set up with the intention of producing well-rounded engineers, not only having good technological skills but also with the ability to interact with different organs of an organization. Thus, the Department develops ‘soft’ skills in students. These skills are group and co-operative working, economics, finance, project management etc. Additionally, the department exposes students to entrepreneurshipskills, HR management, Customer relationship management, total quality management etc.

ACADEMIC DEPARTMENTS

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

The Department of Electronics and Communication Engineering (ECE) has been playing a vital role in producing competent engineers of highest caliber ever since it was established in JUIT. The Electronics and Communication Engineering department emphasizes on technical skills, critical thinking and problem-solving skills. During the year under report, the department offered under-graduate, post-graduate and Ph.D. programs to cater to the ever challenging needs of technical excellence in all areas of electronics and communication engineering such as integrated electronics and circuits, telecommunications, Signal processing, VLSI, and Digital Communication. The ECE department created four research groups such as Signal Processing, VLSI Circuits and Systems, Microwave Engineering and Communication System to focus on research in advanced trends and applications in these fields. The department has distinguished faculty, all are research oriented and working on cutting edge technologies. In the year 2015-2016, the current faculty strength is 23 and 401 undergraduates, 23 postgraduates and 04 research scholars are registered in the department.

Department Vision and Mission

- To become a centre of excellence and to produce high-quality, self-motivated, creative and ethical engineers and technologists those will contribute effectively to the universal science and contemporary education. The mission of Department is:
- To impart high quality engineering education and ethics to its students.
- To adopt the best pedagogical methods in order to maximize the knowledge transfer.
- To have adequate mechanisms to enhance the understanding of implementation of theoretical concepts in practical scenarios.
- To carry-out high quality research leading to the creation and commercialization of Intellectual Property.
- To provide the best facilities, infrastructure, and environment to the students, researchers and faculty members, creating an ambience conducive for excellence in technical education and research.

The educational objectives of the program are to produce graduates:

- Those would have developed a strong background in basic science and mathematics and ability to use these tools in Electronics and Communication Engineering.
- Who would have the ability to demonstrate technical competence in the fields of electronics and communication engineering globally and develop solutions to the problems in various areas of Electronics and Communication Engineering.
- Who would attain professional excellence through life-long learning.
- Who function effectively in the multi-disciplinary teams/domains and exhibit professional leadership.
- Who would ensure the ethical and moral behaviour as a good human being.

Academic Programmes

The department offers a comprehensive B Tech programme in Electronics and Communication Engineering and an intensive M Tech programme in Electronics and Communication Engineering, which focuses on developing analytical skills to enable fluent use mathematical techniques as to tool for engineering research. The department of ECE offers PhD program in Electronics and Communication Engineering, which provides exciting opportunities for research in emerging areas. The candidates are selected for admission to B. Tech. and M. Tech. programmes through JEE and GATE Score/PGET test, respectively. The selection for Ph. D. candidates is carried out through tests/ interviews. The number of students and scholars admitted to various programmes in July 2015 are provided in Table-1.

Table-1 Electronics and Communication Engineering student on roll (July, 2015).

S. No.	Program	I Year	II Year	III Year	IV Year	Total
1.	B. Tech	111	99	92	99	401
2.	M. Tech	07	16	-	-	23
3.	Ph.D.	01	02	01	-	04
4.	Total	119	117	93	99	428

Program Outcomes

With the successful completion of the program, the students would have the following attributes.

a) Shall be able to solve problems through analytical thinking
b) An ability to apply knowledge of mathematics, science, and engineering to solve problems.
c) Shall be able to employ necessary techniques, hardware and software tools for engineering applications.
d) To synthesize solutions for existing problems within practical constraints.
e) Should be able to communicate effectively both orally and in writing.
f) Shall be able to write project proposals, devise implementation strategies and plan execution.
g) Should be aware of contemporary issues and their implications.
h) Should have strong ethical and professional responsibility and adherence to quality

In the academic year 2015-2016, the new courses introduced by the department are provided in Table-2.

Table-2 New Courses Introduced.

S. No.	Course Code	Title
1.	16M1WEC231	Advanced Digital Image Processing
2.	16B1WEC832	Spectral Analysis for Signal Processing

Laboratory Facilities

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.

- Basic Electronics Lab
- Electrical Science Lab
- Power Electronics Lab
- Analog and Digital Communication Lab
- Advance Communication Lab
- Electromagnetic Lab
- Control and Machine Lab
- Research Lab
- Digital Electronics Lab
- Analog Electronics Lab
- VLSI Design Lab
- Project Lab

The infrastructure and lab facilities are upgraded from time to time and provide adequate opportunities for students and researchers to learn and innovate. Various softwares are available in the department like MATLAB, LABVIEW, PSPICE, CST Microwave Studio, XILINX, and ORCAD.

Research and Development Activities

The research at the department continued to flourish during the year under review. Around 2 Ph D students enrolled in academic year 2015-2016, in keeping with the national goal increasing the availability of the high quality researchers and teachers to industry and academia. In 2015-2016, our faculty and research scholars published 19 papers in refereed international journals and 07 in various national/international conferences. The department is involved in a variety of frontier and traditional areas of research in Electronics and Communication Engineering. The thrust areas are: Communications Network and Internet, Channelization (OVSF) Codes and Optimization in WCDMA, Wireless Sensor Networks, OFDM, MIMO-OFDM, Microstrip Antenna, Signal and Image Processing, Medical Image Processing, Wireless and Mobile Communications, Signal Processing Application, Low Power VLSI System and Hardware Design, Devices and IC Technology, High-Frequency Switches, MEMS Design and Technology, Next Generation Communication System, Terahertz Communication System, Terahertz Imaging and Sensing, The department received grants from various sources towards many new projects during the year, apart from various ongoing projects.

Projects Sanctioned/Approved
Table-3 Several Funded Projects

S. No.	PI/Co-PI	Title of the Project	Funding Agency	Amount	Durectgion
1.	Dr. Ghanshyam Singh	Mathematical Modeling of Spectrum Sharing Techniques in Cognitive Radio Network	ISRO	11.10 Lacs	Onging (April 2015 – March 2017)
2.	Dr. Rajiv Kumar/ Dr. Piotr Cholda	Reliability Modeling and Optimized Planning of Risk-based Resilient Networks	DST	11.10.Lacs	Ongoing (March 2015) – 3 Years

List of Publications

Journal Publications

- Arpit Chitransh, Anshul Goyal, Krishan Choudhary, Pardeep Garg, " To compare carious filters for removal of noise from ECG wave", International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering, vol. 4, no. 6, pp. 9-13, June 2016.
- Utkarsh Sharma, Gaurav Gupta, Pardeep Garg , Akash Garg, "Automated parking system for nonholonomic cars", International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering, vol. 4, no. 3, pp. 196-200, March 2016.
- Shruti Jain, "Regression analysis on different mitogenic pathways", Network Biology, vol. 6, no. 2, pp. 40-46, June 2016.
- Shruti Jain, "Mathematical analysis using frequency and cumulative distribution functions for Mitogenic pathway", Research Journal of Pharmaceutical, Biological and Chemical Sciences, vol. 7, no. 3, pp. 262-272, May - Jun 2016.
- Shruti Jain, "Implementation of MIN/MAX functions using operational transconductance amplifier", International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering, vol. 4, no. 1, pp. 5-8, 2016.
- Shruti Jain and D. S. Chauhan, "Mathematical analysis of receptors for survival proteins", International Journal of Pharma and Bio Sciences, vol. 6, no. 3, pp. 164-176, 2015.
- Sahil Bhusri, Shruti Jain, and Jitendra Virmani, "Breast Lesions classification using the amalagation of morphological and texture features," International Journal of Pharma and BioSciences, vol. 7, no. 2B, pp. 617-624, Apr-Jun 2016.
- Shailja Rana, Shruti Jain, and Jitendra Virmani, "SVM-Based characterization of focal kidney lesions from B-Mode ultrasound images", Research Journal of Pharmaceutical, Biological and Chemical Sciences, vol. 7, no. 4, pp. 837- 846, July- Aug, 2016.

- Sahil Bhusri, Shruti Jain and Jitendra Virmani , "Classification of breast lesions using the difference of statistical features" Research Journal of Pharmaceutical , Biological and Chemical Sciences, vol. 7, no. 4, pp. 1365-1372, July- Aug 2016
- Shailja Rana, Shruti Jain, and Jitendra Virmani "Classification of focal kidney lesions using wavelet-based texture descriptors", International Journal of Pharma and Bio Sciences, vol. 7, no. 3B, pp. 646-652, July-Sep 2016.
- Akanksha Dhiman, Ambesh Singh, Shwetanjali Dubey, Shruti Jain, *"*Design of Lead II ECG Waveform and Classification Performance for Morphological features using Different Classifiers on Lead II *", Research Journal of Pharmaceutical, Biological and Chemical Sciences (RJPBCS),*7(4), 1226-1231: July-Aug 2016.
- Meenakshi Sood and Sunil V. Bhooshan, "Parameter-selective based CAD system for epileptic seizure classification", International Journal of Applied Engineering Research, vol. 10, no. 10, pp. 25389-25408, July 2015.
- Rajiv Kumar and Piotr Cholda, "A Framework for continuity of mission-critical network services, IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), Kolkata, India, Dec. 15-18, 2015.
- Ashutosh Sharma and Rajiv Kumar, "Realistic comparison of performance parameters of static and dynamic unicast routing over mesh topology", International Journal of Scientific & Engineering Research, vol. 6, no. 12, Dec 2015.
- Poonam Koundal and Rajiv Kumar, "Reliable Fault-Tolerant multipath routing scheme for wireless sensor networks," International Journal of Modern Trends in Engineering and Research, vol. 03, no. 05, May 2016.
- Keerti Tiwari, Davinder S. Saini and Sunil V. Bhooshan, "ASEP of MIMO System with MMSE-OSIC Detection over Weibull-Gamma Fading Channel Subject to AWGGN", *Journal of Computer Networks and Communications*, Volume 2016 (2016), Feb. 2016.
- Garima Bharti, K R Jha, and G Singh, "Terahertz frequency selective surface for future wireless communication systems", OPTIK: International Journal for Light and Electron Optics, vol. 126, no. 24, pp. 5909-5917, December 2015.
- Garima Bharti, K R Jha, G Singh, and Rajeev Jyoti, "Planar tri-band frequency selective surface with transmission in S-band and reflection in Ka/Ku-band", Radioelectronics and Communication Systems, vol. 58, no. 11, pp. 479-486, Nov. 2015.
- Garima Bharti, K R Jha, G Singh, and Rajeev Jyoti, "Design of azimuthally periodic wedge-shaped circular ring bandpass frequency selective surface using transmission-line method", Wireless Personal Communication, vol. 85, no. 12, pp. 1411-1428, December 2015.

Conference Publications

- Shruti Jain, "Mathematical analysis and probability density function of FKHR pathway for cell survival/Death", Control System and Power Electronics – CSPE 2015, Banglore, Aug 1-2, 2015, pp. 84-93.
- Shruti Jain and D. S. Chauhan, "Linear and non linear modeling of protein kinase B/ AkT", International Conference on Information and Communication

Technology for Sustainable Development (ICT4SD - 2015), Ahmedabad, India, July 3-4 2015, pp 81-88.

- Meenakshi Sood and Sunil V. Bhooshan "A novel module based approach for classifying epileptic seizures using EEG signals", 2016 International Conference on Industrial Informatics and Computer Systems (CIICS), American University of Sharjah, Sharjah, March 13-15, 2016, pp.1-5.
- Arjun Chauhan, Basudha Dewan, Pushp Bajaj Meenakshi Sood, "Interactive module for dyslexic students" 10th INDIACom: 3rd 2016 International Conference on Computing for Sustainable Global Development, BVICAM, New Delhi, March 16th - 18th, 2016, pp 2542-2545.
- Rahul Saxena, Tarunam Mahajan, Pragya Sharma, Menakshi Sood, "BRAILLE HAND GLOVE - A Real time translation and communication device", 10th INDIACom: 3rd 2016 International Conference on Computing for Sustainable Global Development, BVICAM, New Delhi, March 16th - 18th, 2016, pp 2550-2554.
- Meenakshi Sood and Sunil V. Bhooshan, "Prognosis of Epileptic seizures using EEG signals" International Conference on Image Information Processing (ICIIP -2015) Jaypee University of Information Technology, December 21-24, 2015, pp.12-16.
- Jitain Sharma and S.D. Sharma, "Evaluation of time frequency tools for multi-component chirp signals", IET supported International conference on signal processing, SATI, Vidisha, M.P. 7-9 Nov. 2016.

Patent Filed/Awarded

S. No.	Title of Research Project	Members	Application No
1	Energy Harvesting Footwear	Ritendra Mishra, Dr Sunil Kumar Hota, Dr C Durgaprasad, Dr Shruti Jain, Col. Vasant Ballewar, Dr R B Srivastava	Patent (Filed with the Indian Patent Office) Application number 325/DEL/2015

Workshop Organized/Session Chaired

- Sunil Bhooshan**:** ISPCC-15, Conference Chair in September 2015.
- Pradeep Garg: Organized a faculty development program on "Signal Processing & Applications" as Coordinator at JUIT, Waknaghat during January 13-18, 2016.
- Shruti Jain: 10th INDIACom: 3rd 2016 International Conference on Computing for Sustainable Global Development, BVICAM, New Delhi, India, March 16th – 18th , 2016.
- Shruti Jain: 2015 IEEE International Conference on signal processing and control (ISPCC 2015), Jaypee University of Information technology, Waknaghat, Solan, H.P, India, September 24-26, 2015.
- Shruti Jain: Control System and Power Electronics – CSPE 2015, Banglore, Aug 1-2, 2015.
- Ghanshyam Singh, (5-6 Nov. 2015), RDC Meeting, School of Engineering & Technology, Jaipur National University, Jaipur.

- Meenakshi Sood: Convener for FDP program on "Signal Processing and its Applications", Jan 13- 18, 2016 at Jaypee University of Information Technology, Himachal Pradesh, India.
- Meenakshi Sood: Organized three days workshop on "Pro and Engineering", Nov 4-6, 2015, at Jaypee University of Information Technology, Himachal Pradesh, India.
- Meenakshi Sood: Organized three days workshop on "Hands on C", Sept 24-26, 2015 at Jaypee University of Information Technology, Himachal Pradesh, India.
- Meenakshi Sood: Organizing committee member in International Conference ISPCC-15 organized by ECE Department during Sep 24-26, 2015.
- Meenakshi Sood: 2015 IEEE International Conference on Signal Processing and Control (ISPCC 2015), Jaypee University of Information technology, Waknaghat, Solan, H.P, India, September 24-26, 2015.
- Meenakshi Sood: 10th INDIACom: 3rd 2016 International Conference on Computing for Sustainable Global Development, BVICAM, New Delhi, India, March 16 – 18, 2016.
- Meenakshi Sood: 2016 International Conference on Industrial Informatics and Computer Systems (CIICS), American University of Sharjah, Sharjah, March 13-15, 2016.
- M Wazid and Meenakshi Sood: Faculty Development Program on "Signal Processing and Its Applications" held at JUIT during January 13 – 18, 2016
- Meenakshi Sood: One week faculty development program on "Virtualization & Cloud Computing - Fundamentals & Practical Approach", at JUIT, Waknaghat during December 24-30, 2015.
- Sunil Dutt Sharma: Session chair in IEEE international conference on signal processing, computing and control at Jaypee University of Information Technology, Waknaghat, Solan, H.P. on 24th -26th September, 2015.
- Rajiv Kumar: Visited AGH University, Poland, Sept. 25 – October 2, 2016, under INDO-POLISH research grant
- Shruti Jain: WORKSHOP AND TRAINING (2015-16)

Serial Number	Name of Workshop	Students Involved	Date	Number of Students Registered (includes Paid, Unpaid and Discounted)
1	Hand on 'C'	1st year	September 24 - 26, 2015	200+
2	Photoshop	Club Specific	October 4, 2015	30+
3	CPU Assembling	Club Specific	October 7, 2015	35+
4	Web Development	Club Specific	October 13-14, 2015	35+
5	Premier Pro	All years	November 4, 2015	40+
6	Sound Editing	All years	November 6, 2015	50+
7	Robotics	Club Specific	November 16-17, 2015	30+
8	PhP	All years	January 22, 2016	40+
9	Data Structure	1st year	January 27-28, 2016	130+
10	Murious X	Diff Universities	January 29- 31, 2016	200+

Special lectures delivered by the faculty in other institutions

Table-4 The invited lecture delivered by ECE department faculty members.

S No.	Name of Faculty Member	Topic of Lecture	Institution	Date
1	Ghanshyam Singh	Microstrip Antenna: Potential Challenges and Future Perspective	Jaipur National University, Jaipur	6th Nov., 2015
2	Shruti Jain	Bio Medical Signal Processing and Bio Electronic Sensor	Maharaja Agrasen University, Baddi, Himachal Pradesh	3rd Dec. 2015
3	Meenakshi Sood	Biomedical Signal Analysis for Diagnosis Decision Support System"	NIT Hamirpur	Feb. 2016.

Doctoral and M Tech Degree Awarded

Doctoral Degree

S. No.	Student Name	Topic	Guide Name
1.	Mr. Ritendra Mishra	Fabrication of Energy Harvesting Prototypes Using Piezoelectric Material	Jaypee University of Information Technology, Solan

M. Tech Degree

S. No.	Name	Topic	Supervisor
1	Mr. Sahil Bhusri	Classification of Breast Lesions for two class using Feature Extraction Techniques.	Dr. Shruti Jain
2	Ms. Shailija Rana	Analysis and Classification of Kidney FOCAL Lesion.	Dr. Shruti Jain
3.	Deepa Negi	Design of microstrip-line feed rectangular microstrip antenna at 60/77 GHz for defense applications	Prof. G Singh
4.	Ekta Thakur	Inset feed microstrip antenna design at60/77 GHz for next generation communication system	Prof. G Singh
5.	Anshu Thakur	Spectrum sensing techniques — A comprehensive study	Prof. G Singh

Professional Activities of Students

- Dr Shruti Jain, *Senior Member, IEEE*
- Dr Shruti Jain, *Member, IAENG*
- Dr Shruti Jain, *Life Member, Biomedical Engineering Society of India*
- Dr Pradeep Kumar, *Life Member, IETE*
- Dr Rajiv Kumar, *Member, IEEE*
- Dr Rajiv Kumar, *Corporate Member, IETE*
- Dr Rajiv Kumar, *Life Member, ISTE*
- Dr Rajiv Kumar, *Life Member, System Society of India*
- IEEE Student branch
- Annual Technical Fest-Murious
- Workshops (LabView, MATLAB…Robotics Workshop. Photoshop Workshop
- Paper presentation in conferences, publication in journals/conferences

Faculty and Their Expertise

S No	Faculty	Specializations
1	T. S. Lamba	Speech Signal Processing, Digitization of Speech Waveforms
2	Sunil Bhooshan	Milli-meter Wave Dielectric Waveguides, DSP Filters, Signal Compression
3	D.C. Kulshreshtha	Circuits and Systems
4	Ghanshyam Singh	RF/Microwave Communication Systems, Terahertz, Communication, Imaging and Sensing, Next Generation Communication System, Plasmonics
5	Davinder Singh Saini	Communication Systems, 3G/4G, OVSF, MIMO-OFDM
6	Pradeep Kumar	Antenna design and analysis, array design, signal and image processing
8	Jitendra Virmani	Image Processing, Bio-Medical Imaging
9	Neeru Sharma	Communication System
10	Rajiv Kumar	Fault-Tolerance, Network Recovery, Control Systems
11	Shruti Jain	Bio Medical Signal Processing, VLSI
13	Meenakshi Sood	Biomedical Signal and Image Processing, Antenna Design Metamaterials
14	Mohammad Wajid	Signal processing, Acoustic Wave
15	Munish Sood	Microwave Antennas
16	Pardeep Garg	Signal Processing, Genomic Signal Processing
17	Pragya Gupta	Semiconductor Material and Devices, Electromagnetic Field Theory, Digital Image Processing, Analog Electronics
18	Salman Raju Talluri	RF/ Microwave Engineering, Waveguide, Filter, Metamaterials
20	Vanita Rana	Electronic product design & technology, Cognitive Radios
21	Shweta Pandit	Cognitive Radio, Wireless Communication
22	Sunil Dutt Sharma	Time-frequency analysis, Signal processing for biological signals, Micro-Doppler signature analysis
23	Alok Kumar	Communication system, Cognitive Radio, wireless sensor Network

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING & INFORMATION TECHNOLOGY

The Department promotes software, database, internet and information system technologies as well as network and distributed systems. Students are exposed to CASE tools, conceptual modeling, Requirements engineering and data warehouse design. They study all standard courses like Data Structures, Object-Oriented Programming, Operating Systems, Compilers, Computer Networks, etc. A special feature of our teaching is workshop courses where intensive practical experience is given on important tools like Unix and Shell Programming, Network Programming, etc. Students are given courses in cutting edge technologies immediately relevant to industry, for example, Web Programming, Web Services, Web Application Development, Data Mining, etc. Further they can opt for courses in futuristic technologies like Quantum Information Theory, Nano-Science & Technology.

UNDERGRADUATE PROGRAM

- **B.Tech (Computer Science & Engineering)**
- **B.Tech (IT)**

The program consists of 195 credits in 4 years(Eight Semesters) covering all core areas in computing, Mathematics, Sciences, humanities and social sciences, management and other enginineering disciplines.

Research Groups

Current research interests are in the areas of Ubiquitous Computing, Algorithms, Computer Graphics, Computer Network and Security, Database Systems, Data Warehousing & Data Mining, Digital Image Processing, Internet Technologies, Learning Science & Technology and Soft Computing, Parallel, Distributed and Grid Computing, Computer Architecture, Computer Networks.

Ubiquitous Computing

Ubiquitous computing is a concept in software engineering and computer science where computing is made to appear everywhere and anywhere. In contrast to desktop computing, ubiquitous computing can occur using any device, in any location, and in any format. A user interacts with the computer, which can exist in many different forms, including laptop computers, tablets and terminals in everyday objects such as a fridge or a pair of glasses. The underlying technologies to support ubiquitous computing include Internet, advanced middleware, operating system, mobile code, sensors, microprocessors, new I/O and user interfaces, networks, mobile protocols, location and positioning and new materials.

Dr. Vivek Sehgal (Coordinator)
Dr Yashwant Singh
Dr. P.K. Gupta
Dr Sakshi Babbar
Mr. Punit Gupta
Mr. Ravindara Bhatt
Ms. Nishtha Ahuja
Mr. Shailendra Shukla

Algorithms and Parallel Computing

The Algorithms and Parallel computing group at the Jaypee University of Information Technology (JUIT) is part of the JUIT's Computer Science and Information Technology Department. The primary goal of the Algorithms and Parallel Computing group is to provide a mathematical design and engineering of computer algorithms, and to use these algorithms to produce better applications, protocols, and systems. Researchers in our group explore a variety of algorithm types and areas of applications. Some of the different research domains of our group is as follows:

Combinatorial algorithms
Randomized algorithms
Parallel and Distributed Algorithms
Distributed Synchronization
Self-stabilizing Algorithms
Automata
Theory of Computation
Programming languages.

Faculty:

Mr. Shailendra Shukla (coordinator)
Mr. Suman Saha
Mr. Amol Vasudeva
Mr. Arvind Kumar
Mr. Punit Gupta

Computational and Machine Intelligence

Computational intelligence and Machine intelligence (CMI) group addresses the challenges arising from the computational interpretation of complex data that may involve vision, speech and natural language. The group focuses on evolving solutions using logic, rule-based, statistical & hybrid modeling, knowledge & data mining, machine learning, soft computing, and human behavior modeling. The emphasis of the group is on developing applications of interdisciplinary nature for the benefit of the society at large and the same time provide frameworks for advancement of knowledge in the area.

Prof. Dr. SP Ghrera(coordinator)
Dr. Pooja Jain
Dr. Pardeep Kumar
Dr. Rajni Mohana
Mr. Amit Kumar Singh
Ms. Sanjana Singh
Mr. Suman Saha

Computer Systems and Networks

Computer network, also called Network, two or more computers that are connected with one another for the purpose of communicating data electronically. Besides physically connecting computer and communication devices, a network system serves the important function of establishing a cohesive architecture that allows a variety of equipment types to transfer information in a near-seamless fashion. Two popular architectures are ISO Open Systems Interconnection (OSI) and IBM's Systems Network Architecture (SNA).

Two basic network types are local-area networks (LANs) and wide-area (or long-haul) networks. LANs connect computers and peripheral devices in a limited physical area, such as a business office, laboratory, or college campus, by means of permanent links (wires, cables, fibre optics) that transmit data rapidly. A typical LAN consists of two or more personal computers, printers, and high-capacity disk-storage devices called file servers, which enable each computer on the network to access a common set of files. LAN operating system software, which interprets input and instructs networked devices, allows users to communicate with each other; share the printers and storage equipment; and simultaneously access centrally located processors, data, or programs (instruction sets). LAN users may also access other LANs or tap into wide-area networks. LANs with similar architectures are linked by "bridges," which act as transfer points. LANs with different architectures are linked by "gateways," which convert data as it passes between systems.

Faculty

Dr S P Ghrera (coordinator)
Dr. Hemraj Saini
Dr. P.K. Gupta
Dr. Vivek Sehgal
Dr Yashwant Singh
Mr. Punit Gupta
Ms. Nishtha Ahuja
Mr. Ravindara Bhatt
Mr. Amol Vasudeva
Mr. Shailendra Shuk
Mr. Arvind Kumar
Ms Ruchi Verma

Databases and Distributed Systems

The database group at JUIT conducts research on all areas of database systems and distributed systems. Projects range from the design of new user interfaces and query languages to handling structured and unstructured data in data-intensive systems i.e. Big Data Analytics / Management. One of the objectives of this group is to spread application and research awareness among students and research scholars regarding the usefulness of database system technology by creating, extending, and applying database technology. At the Undergraduate level, this group offers courses like databases, Data Mining, Big Data Analytics, Distributed systems, Data Warehousing and Advanced Databases.

Our current work is focused on building the data management infrastructure for the twenty-first century, with particular emphasis on issues surrounding the internet (including XML, text mining, database design, data integration, security), object-relational databases, mobile databases, on issues of data warehousing and data mining, and on the effective integration and efficient querying of big data.

Faculty

Dr. Pardeep Kumar (Coordinator)
Ms. Sanjana Singh
Mr. Suman Saha

Software Engineering and Information Systems

Software Engineering and Information Systems are the applications of a systematic, disciplined, quantifiable approach to the development, operation, and maintenance of software, and the study of these approaches. It is the application of engineering to software because it integrates significant mathematics, computer science and practices whose origins are in engineering. Prevalence of software in society provides significant opportunities to do good or cause harm, so one should ensure that the efforts are used to do good. Design and Security of software systems raises numerous open legal and ethical issues that are currently being addressed at both the academic and industrial levels. Many of these issues raise some clear conflicts between the global versus national interests, as well as government versus public interests. The bulk of programming consists of making a large number of small choices while attempting to solve a larger set of problems. How wisely those choices are made depends largely upon the programmer's skill and expertise. Use of solid coding techniques and good programming practices to create high quality code plays an important role in software quality and performance. By consistently applying a well-defined coding standard and proper coding techniques, and holding routine code reviews, a team of programmers working on a software project is more likely to yield a software system that is easier to comprehend and maintain. Software engineers, information system analysts, and researchers must always use the public interest as the highest and governing principle and must contribute to the society either by direct participation or by teaching, to the analysis, specification, design, development, certification, maintenance, and testing of software systems.

Faculty

Dr. P.K. Gupta (coordinator)
Dr. Rajni Mohana
Mr. Punit Gupta

Systems and Network Security

Our focus is to provide leadership in information security and networking science that predicts and solves critical problems in the cyber domain using novel practical solutions. Our work seeks to better protect consumers from fraud and identity theft, enhance individuals' privacy, and foster economic growth by enabling industry both to move more services online and to create innovative new services. The research aims to make online transactions more trustworthy, thereby giving businesses and consumers more confidence in conducting business online.

Faculty

Prof. Dr. S P Ghrera (coordinator)
Dr. Hemraj Saini
Dr Yashwant Singh
Ms. Ramanpreet Kaur
Mr. Arvind Kumar
Mr. Amit Kumar Singh
Ms. Sanjana Singh
Mr. Amol Vasudeva
Mr. Shailendra Shukla

Laboratory Infrastructure

The Department promotes software, database, internet and information system technologies as well as network and distributed systems. Students are exposed to CASE tools, conceptual modeling, Requirements engineering and data warehouse design. They study all standard courses like Data Structures, Object-Oriented Programming, Operating Systems, Compilers, Computer Networks, etc. A special feature of our teaching is workshop courses where intensive practical experience is given on important tools like Unix and Shell Programming, Network Programming, etc. Students are given courses in cutting edge technologies immediately relevant to industry, for example, Web Programming, Web Services, Web Application Development, Data Mining, etc. Further they can opt for courses in futuristic technologies like Quantum Information Theory, Nano-Science & Technology.

Current research interests are in the areas of Algorithms, Computer Graphics, Computer Network and Security, Database Systems, Data Warehousing & Data Mining, Digital Image Processing, Internet Technologies, Learning Science & Technology and Soft Computing which are enriched by their respective research groups.

Facilities including Labs

Department puts a great emphasis on laboratory work. While laboratories are also used for developing skills to use and apply various concepts, tools and techniques, their main purpose is to develop the core technical as well as general professional competencies through experimental and collaborative learning. Main purpose of the laboratories is to develop the abilities to design and conduct experiments; collect, analyze and interpret data; work independently and also in teams; and also to improve reporting and communication skills.

This practical experience in the laboratory is intended to nurture the students' initiative, originality, creativity and spirit of inquiry and also to generate an appreciation of the nature of engineering design and scientific discovery. Through various active learning experiences in laboratories, students gain more insights into the field of study, develop ability to apply their knowledge to a greater extent, exhibit a greater level of understanding of course material and sharpen their problem solving skills.

The laboratories of department provide computational facility of approximately 700 computer nodes interconnected via LAN. These nodes are running on the Windows 2000/Windows XP/Linux platform and are equipped with state-of-the-art software. A CUDA research lab has been established with a server and five clients. CUDA has been introduced as part of course on High Performance Computer Architecture for M Tech (first year) and B Tech(final year) students. In addition, a separate project lab having capacity of 58 computer nodes are also provided for the B.Tech. Final year students, M.Tech. students and Research Scholars with different cutting edge technologies to complete their high end assignments.

- **Course wise lab usage**

Different laboratories are being utilized for the conduct of various lab courses listed below:

Sr. No.	Title of the Lab	Running Courses
1	Algorithm Design and Programming Lab	• C Programming Lab (10B17CI171) • Objected Oriented Programming Lab (10B17CI371) • Object Oriented System & Programming Lab (10B17CI674) • Unix Programming Lab (10B17CI307) • Java Programming Lab (13B22CI583) • Algorithms Lab (10B17CI472) • Advanced Programming Lab • Data Structures and Computer Programming Lab (10B17CI271)
2	Software Engineering Lab	• Software Engineering Lab (10B17CI572) • Software systems Lab-I (10M17CI171) • Data Mining Lab (10B28CI682)

		• Software Testing & Debugging Lab (08B51CI101)
3	CUDA Lab	• Parallel Programming and High Performance Lab
4	Database Lab	• Database Systems Lab (10B17CI372) • Database Management Systems Lab (13B22CI381)
5	Multimedia Lab	• Computer Graphics Lab (11B1WCI671) • Multimedia Development Lab-I (10B28CI408) • Multimedia Development Lab-II (10B28CI683) • Multimedia Development Lab-III (13B22CI382)
6	Operating system Lab	• Operating system Lab (10B17CI571)
7	Web Engineering Lab	• Web Technology Lab (10B28CI581) • Information Systems Lab (10B28CI681)
8	Microprocessor and Controllers Lab	• Microprocessor and Controllers Lab (10B17CI407)
9	Network and Communication Lab	• Computer Networks Lab (10B17CI671) • System and Network Programming Lab (10B17CI673)
10	Compiler Design Lab	• Compiler Design Lab (10B17CI672)

FACULTY ACTIVITIES

1) Publications

Book Chapter(s):

- **Yashwant Singh, Vivek Kumar Sehgal, Nitin, Satya Prakash Ghrera (2014).** ***Proceedings of 3rd International Conference on Parallel Distributed and Grid Computing*****. USA: IEEE Press. [ISBN : 978-1-4799-7683-6] .**

Journal(s):

- Ashwani Kumar, **S. P. Ghrera**, Vipin Tyagi (2015), "Modified Buyer Seller Watermarking Protocol based on Discrete Wavelet Transform and Principal Component Analysis", Indian Journal of Science and Technology Vol 8(35), DOI: 10.17485/ijst/2015/v8i35/47258, December 2015.http://www.indjst.org/index.php/indjst/article/viewFile/47258/65851
- P K Gupta, Gunjan Gugnani and **S P Ghrera** [2015], "XML DNA Encryption: Improved Security of Cloud Applications", CSI Communications , Volume No. 39 , Issue No. 4 , July 2015 pp 16-18. http://www.csi-india.org/communications/CSI July15 Combine.pdf
- Suman Saha, **Satya Prakash Ghrera** (2015). Network Community Detection on Metric Space.Algorithms, 8 (3), 680-696. Google Citation

- P.K. Gupta, Gunjan Gugnani, **Satya Prakash Ghrera** (2015). XML DNA Encryption: Improved Security of Cloud Applications. CSI Communications , 39 (4), 16-18. Google Citation
- 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, (Forthcoming), -. Google Citation
- Punit Gupta, **Satya Prakash Ghrera** (2015). "Load Balancing Algorithm for Hybrid Cloud IaaS". International Journal of Applied Engineering Research vol.10 (69) August, 2015, pp. 257-261.
- Punit Gupta, **Satya Prakash Ghrera** (2015). "Deadline Aware Load Balancing of Distributed Servers in Distributed". International Journal of Applied Engineering Research vol.10 (69) August, 2015, pp. 268-273
- Punit Gupta, **Satya Prakash Ghrera** (2015). "Fault and Load Aware Load Balancing in Cloud Storage". International Journal of Applied Engineering Research vol.10 (69) August, 2015, pp. 280-285
- **Yashwant Singh**, Urvashi Chugh, M.V. Ramana Murthy, "Information Fusion and Change Point Detection in Mutual Exclusive distributive Clustering", Procedia Computer Science, Elsevier, 2015. (Accepted)
- Anum Javeed Zargar and **Amit Kumar Singh** "Wavelet based Image Watermarking using Huffman Compression Technique", International Journal of Applied Engineering Research, Vol. 10 No. 69, pp.1-4, 2015.
- **Amit Kumar Singh**, Mayank Dave and Anand Mohan "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, 2015.
- Gautam Kumar, Hemraj Saini (2015). Formal Verification on Signcryption Re-Cryptography: Secure and Efficient Approach towards Trust Problem. ***International Journal of Applied Engineering Research***, *10* (24), 44271-44277. Google Citation
- Geetanjali Rathee, Ninni Singh, **Hemraj Saini**, "Efficient Shortest Path Routing (ESPR) Algorithm for Multicasting in Wireless Mesh Network," Int.J.Computer Technology & Applications, 6 (1):111-115, 2015.
- S.B. Dash**, H. Saini**, T.C. Panda, A. Mishra, "Predator-Prey model for Infectious Virtual Machines in IaaS Cloud Environment based on Lakota-Volterra Equatio," Asian Journal of Information Technology, 14(3):84-91, 2015. DOI: 10.3923/ajit.2015.84.91
- Aswain Kumar Rauta, Yerra Shankar Rao, T. C. Panda, **Hemraj Saini,** "A Probabilistic Approach Using Poisson Process for Detecting the Existence of Unknown Computer Virus in Real Time," The International Journal Of Engineering And Science (IJES), 4(6), pp. 47-51, 2015.
- **Pardeep Kumar**, Ashish Rawat, Gunjan Gugnani and Minakshi Shastri, "Anomaly Recognition in Online Social Networks", International Journal of Security and Its Applications, Science & Engineering Research Support Society, Vol. 9 No. 7, pp. 109-118, July 2015DOI: dx.doi.org/10.14257/ijsia.2015.9.7.10
- **Pardeep Kumar**, Kalyani, Ekta Gupta, Geetanjali Rathi and Durg Singh Chauhan, "Mood Swing Analyser: A Dynamic Sentiment Detection Approach", Proceedings of the National Academy of Sciences, India

Section A: Physical Sciences, Springer, Vol. 85 No. 1 , pp. 149-157, March 2015

- **Ravindara Bhatt**, Raja Datta, "A Two-tier Strategy for Priority based Critical Event Surveillance with Wireless Multimedia Sensors, "*Springer Wireless Networks*, DOI: 10.1007/s11276-015-0971-7, 2015.
- Shubham Awasthi and **Sakshi Babbar**, "Predicting ICC Cricket World Cup 2015". International Journal of Engineering Technology Science and Research, Vol. 2(5), pp. 70-89., 2015
- **Suman Saha**, Satya Prakash Ghrera (2015). Network Community Detection on Metric Space.Algorithms, 8 (3), 680-696. Google Citation

Conference(s):

- Gupta P**, Ghrera SP**, Power and Fault Aware Reliable Resource Allocation for Cloud Infrastructure, International Conference on Information Security and Privacy (ICISP 2015). (Elsevier)
- Gupta P, **Ghrera SP** , Power and Fault Aware Reliable Resource Allocation for Cloud Infrastructure, Procedia Computer science, international Conference on Information Security and Privacy (ICISP), December 2015
- Neetu Faujdar, **Satya Prakash Ghrera** (2015). Analysis and Testing of Sorting Algorithms on a Standard Dataset. Proceedings of the Proceedings of the 2015 Fifth International Conference on Communication Systems and Network Technologies (CSNT), IEEExplore [Gwalior, India : 4-6 April 2015], pp.962-967.. Google Citation
- Geetanjali Rathee, Hemraj Saini, **Satya Prakash Ghrera** (2015). Secured Authentication and Signature Routing Protocol for WMN (SASR). Proceedings of the 2nd International Conference on Computer and Communication Technologies - IC3T [CMR Techical Campus, Hyderabad, India : 24-26 July, 2015], pp.327-336.. Google Citation
- Abhilasha Sharma, Mayank Dave, Amit Kumar Singh, **Satya Prakash Ghrera** (2015). Encryption Based Medical Image Watermarking against Signal Processing Attacks. Proceedings of the International Conference on Future Computational Technologies [Singapore : March 29-30, 2015], pp.78-84.. Google Citation
- Ashwani Kumar, **Satya Prakash Ghrera**, Vipin Tyagi (2015). A Comparison of Buyer-Seller Watermarking Protocol (BSWP) Based on Discrete Cosine Transform (DCT) and Discrete Wavelet Transform (DWT). Proceedings of the Emerging ICT for Bridging the Future - Annual Convention of the Computer Society of India [49 : Hyderabad, India : 12-14 December 2014], pp.401-408.. Google Citation
- Punit Gupta, **Satya Prakash Ghrera** (2015). Load and Fault Aware Honey Bee Scheduling Algorithm for Cloud Infrastructure. Proceedings of the International Conference on Frontiers of Intelligent Computing: Theory and Applications [3rd : Bhuvneshwar, India : 14-15 November, 2014], pp.135-143.. Google Citation
- Mayank Sharma, **Yashwant Singh**," Middle Position Dynamic Energy Opportunistic Routing For Wireless Sensor Networks", IEEE 4th

International Conference on Advances in Computing, Communications and Informatics (ICACCI), Kerala, Kochi 10-13 August 2015 (Accepted).

- Abhilasha Sharma, **Amit Kumar Singh** and S P Ghrera, "Encrypted EPR Data Hiding Technique using Medical Images", Fourth International Conference on Eco-friendly Computing and Communication Systems, 07-08 December, 2015, NIT Kurukshetra, Haryana, India, Latter will publish in Procedia Computer Science, Elsevier, 2015. (Accepted)
- **Amit Kumar Singh**, Basant Kumar and Anand Mohan "Digital Image Watermarking: Techniques and Emerging Applications", Handbook of Research on Modern Cryptographic Solutions for Computer and Cyber Security, IGI Global, USA, 2015 (Accepted).
- Oshin Sharma, Hemraj Saini (2015). Experimental analysis of energy management techniques for mobile devices using cloud computing. *Proceedings of the Green Computing and Internet of Things (ICGCIoT), 2015 International Conference on* [7370053 : Noida : 8-10 Oct. 2015], pp.737-742.. Google Citation
- Gautam Kumar, **Hemraj Saini**, "Secure Composition of ECC-PAKE Protocol for Multilayer Consensus using Signcryption," Fifth IEEE International Conference on Communication Systems and Network Technologies (CSNT-2015), 4-6 April, 2015, Machine Intelligence research Labs, Gwalior and Sponsored by Shri Ram Group of Institutes, Gwalior, pp.xx-yy. (Presented)
- Geetanjali Rathee, **Hemraj Saini**, Satya Prakash Ghrera, "Secured Authentication and Signature Routing Protocol for WMN (SASR)," 2nd International Conference on Computer and Communication Technologies - IC3T 2015, 24-26 July, 2015, CMR Technical Campus, Affiliated to JNTUH, Hyderabad- 501401, Telengana, India, Vol.-2, pp.327-336.
- Ninni Singh, **Hemraj Saini**, "Formal Verification of Secure Authentication in Wireless Mesh Network (SAWMN)," 2nd International Conference on Computer and Communication Technologies - IC3T 2015, 24-26 July, 2015, CMR Technical Campus, Affiliated to JNTUH, Hyderabad- 501401, Telengana, India, Vol.-3, pp.375-387.
- Geetanjali Rathee, **Hemraj Saini**, "On Reduced Computational Cost, Efficient and Secure Routing (ESR) for Wireless Mesh Network," Proceedia Computer Science Journal (Elsevier), Second International Symposium on Computer Vision and the Internet (VisionNet'15) 10-13 August, 2015, SCMS Group of Institutions, Corporate Office Campus, Prathap Nagar, Muttom, Aluva, Kochi (Ernakulam) , Kerala , India, Vol.-58, pp.333-341.
- **Pardeep Kumar**, Shailza Chaudhary, Abhilasha Sharma and Ravideep Singh, "Lexicographic Logical Multi-hashing For Frequent Item Set Mining", in Proceedings of the International Conference on Computing, Communication & Automation (ICCCA 2015), IEEE, pp. 563-568, 15-16 May, 2015, Galgotias University, Uttar Pradesh, India (2015)
- **Pardeep Kumar,** Ninni Singh, Sheenu Chabra and Anum Javeed, "Missing Value Imputation with Unsupervised Kohonen Self Organizing Map" in Proceedings of the Emerging Research in Computing, Information, Communication and Applications (ERCICA 2015), Springer, pp. 61-76, 31 July- 1 August 2015, Banglore, India (2015)

- Anandita Singh Thakur, Pradeep Kumar Gupta, Punit Gupta (2015). Handling Data Integrity Issue in SaaS Cloud. Proceedings of the International Conference on Frontiers of Intelligent Computing: Theory and Applications [3rd : Bhuvneshwar, India : 14-15 November, 2014], pp.127-134.. Google Citation
- **Sakshi Babbar**, "Detecting and describing non-trivial outliers using Bayesian networks". Proceedings of the International Conference on Cognitive Computing and Information Processing, Noida, India, pp. 1-6., 2015
- **Sanjana Singh**, and Sandeep K. Singh. "A novel approach for bug localization for Exception Handling and Multithreading through mutation."2015 Annual IEEE India Conference (INDICON). IEEE, 2015.
- **Sanjana Singh**, and Nishtha Ahuja. "Article recommendation system based on keyword using map-reduce." 2015 Third International Conference on Image Information Processing (ICIIP). IEEE, 2015.
- Rawat, Ashish; **Saha, S**; Ghrera, SP (2015) Time efficient ranking system on map reduce framework, 2015 Third International Conference on Image Information Processing (ICIIP), 496-501,IEEE
- Patel, LS; **Sana, S**; Ghrera, SP; (2015) Efficient Nystrom method for low rank approximation and error analysis, 2015 Third International Conference on Image Information Processing (ICIIP), 536-542 ,IEEE
- Singh, S., & **Ahuja, N**. (2015, December). Article recommendation system based on keyword using map-reduce. In 2015 Third International Conference on Image Information Processing (ICIIP) (pp. 548-550). IEEE.

2) International Conferences Organized

2015 Third International Conference on Image Information Processing (ICIIP -2015)
Theme: Big Image Data and Machine Learning
Duration: December 21 - 24, 2015

Keynote Speakers:

1. **Professor Shu-Ching Chen**, Florida International University, Miami, USA.

   Title:

   Multimedia Big Data: Challenges, Opportunities, and Applications

   Speaker :

   Professor Shu-Ching Chen,Eminent Scholar Chaired Professor in Computer Science
   Florida International University, School of Computing and Information Sciences
   11200 SW 8th Street, Miami, FL 33199, USA
   Webpage : http://users.cis.fiu.edu/~chens/

2. **Professor Nasser Kehtarnavaz**, Dept. of Electrical Engineering, University of Texas, Dallas, USA

   Title:

   Real-Time Image Processing: From Research to Reality

   Speaker : Professor Nasser Kehtarnavaz, Department of Electrical Engineering, University of Texas, Dallas, USA
   Webpage : http://www.utdallas.edu/~kehtar/

3. **Professor Nasser Kehtarnavaz**, Dept. of Electrical Engineering, University of Texas, Dallas, USA

   Title :

   Smartphones as Implementation Platforms for Real-Time Signal & Image Processing

   Speaker : Professor Nasser Kehtarnavaz, Department of Electrical Engineering, University of Texas, Dallas, USA
   Webpage : http://www.utdallas.edu/~kehtar/

4. **Professor A G Ramakrishnan**, MILE Laboratory, Professor & Chairman, Department of Electrical Engineering, Indian Institute of Science, Bangalore, India

   Speaker: Professor A G Ramakrishnan, MILE Laboratory, Professor & Chairman,

   Department of Electrical Engineering, Indian Institute of Science, Bangalore 560 012, India
   Webpage : http://mile.ee.iisc.ernet.in/mile/People.html

   Number of Papers Received: 461

   Number of Papers Accepted: 118 (Acceptance ratio: 25.6%)

   Number of Foreign participants: 06

   Number of Indian participants: 120

Photographs:

(a) Inauguration of ICIIP- 2015, Chief Guest and Keynote Speakers (on right)

(b) Participants attending the keynote lecture

(c) felicitation of the keynote by Vice chancellor at Inauguration of ICIIP-2015

(c) Releasing of the Proceeding of ICIIP-2015

1. Conferences/Workshops/Symposia organized

1. Dr. Yashwant Singh, Organizing Committee Member, IEEE Second International Conference Image Information Processing, December 9 - 11, 2013, JUIT, Waknaghat.

2. Dr. Hemraj Saini, Co-Chair Technical Program Committee, IEEE Second International Conference Image Information Processing, December 9 - 11, 2013, JUIT, Waknaghat.

3. Dr. Pardeep Kumar, Accommodation and Registration Committee Member, IEEE Second International Conference Image Information Processing, December 9 - 11, 2013, JUIT, Waknaghat.

2. Conferences/ Workshops Attended

S. No	Name of the Faculty member	Name of the Conference/Workshops/FDP	Place and Dates	Year (2011-15)
1	S. P. Ghrera	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
2	Vivek Sehgal	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
3	Yashwant Singh	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
4	Ravindara Bhatt	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
5	Hemraj Saini	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
6	Rajni Mohana	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
7	Sakshi Babbar	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
8	Pardeep Kumar	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
9	Pradeep Kumar Singh	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
10	Shailender Shukla	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
11	Amit Kumar Singh	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015

12	Amol Vasudeva	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
13	Suman saha	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
14	Ramanpreet kaur	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
15	Ruchi Verma	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
16	Arvind Kumar	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
17	Punit Gupta	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
18	Sanjana Singh	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
19	Ruhi Mahajan	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
20	Nishtha Ahuja	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
21	Annie Singla	Virtualization & Cloud Computing - Fundamentals & Practical Approach	JUIT , 24-30 Dec 2015	2015
22	Sanjana Singh	Signal Processing and its Applications	13 –18 January, JUIT waknaghat	2016
23	Punit Gupta	Signal Processing and its Applications	13 –18 January, JUIT waknaghat	2016
24	Nishtha Ahuja	Signal Processing and its Applications	13 –18 January, JUIT waknaghat	2016
25	Hemraj Saini	Signal Processing and its Applications	13 –18 January, JUIT waknaghat	2016
26	Rajni Mohana	Signal Processing and its Applications	13 –18 January, JUIT waknaghat	2016
27	Sanjana Singh	High Performance and High Strength Concrete: Principles, Development and Applcations	16 –17 March, JUIT Waknaghat	2016

Faculty Specialisations

Srl	Position	Name	Specialisation
1	Assistant Prof(Grade-I)	Ms Ruhi Mahajan	NLP
2	Assistant Prof(Grade-I)	Ms Annie Singla	Databases
3	Assistant Prof(Grade-I)	Ms Nishtha	Mobile Computing
4	Assistant Prof(Grade-I)	Ms Ruchi Verma	Data Structure and C Programming
5	Assistant Prof(Grade-I)	MS. SANJANA SINGH	Software Engineering
6	Assistant Prof(Grade-I)	Sh Punit	High Performance Computing
7	Assistant Prof(Grade-II)	Ms Ramanpreet Kaur	Computer Networks
8	Assistant Prof(Grade-II)	Sh Amit Kumar Singh	Web Application Engineering
9	Assistant Prof(Grade-II)	Sh Amol	Object oriented Systems and Programming
10	Assistant Prof(Grade-II)	Sh Arvind Kumar	Theory of Computation
11	Assistant Prof(Grade-II)	Sh Ravindara Bhatt	Computer Networks
12	Assistant Prof(Grade-II)	Sh Suman Saha	Algorithms
13	Assistant Prof(Grade-II)	Sh Shailendra	Algorithms
14	Assistant Prof(Senior)	Dr Rajni Mohana	Software Engineering
15	Assistant Prof(Senior)	Dr SAKSHI BABBAR	Data Mining
16	Assistant Prof(Senior)	Dr Pardeep Kumar	Machine Learning, Data Mining
17	Assistant Prof(Senior)	Dr Hem Raj	Network Security
18	Assistant Prof(Senior)	Dr Yashwant Singh	Wireless Sensor Networks
19	Associate Prof	Dr Vivek Sehgal	IOT

DEPARTMENT OF BIOTECHNOLOGY, BIOINFORMATICS & DEPARTMENT OF PHARMACY

Educational Programs

The Department offers 4 year B.Tech. programmes in Biotechnology and Bioinformatics, a dual degree 5 year M.Tech. programme in Biotechnology, 2 year M.Tech. programmes in Biotechnology and Computational Biology, and Ph.D. in Biotechnology/Bioinformatics. Keeping in view the interdisciplinary nature of BT and BI, the curricula have been designed with an engineering base encompassing courses from computer science & engineering, electronics and communication engineering, mathematics, statistics, physics and professional development so as to enable students to work not only in the Biotech and Bioinformatics industries but also in other industries. The Department has introduced an innovative system of elective modules to the final year students wherein the students are given a choice of choosing modules to strengthen their knowledge and skill profile in a particular technology domain. The elective module system complements the theoretical knowledge of students related to their project work. The B. Tech. students are provided an opportunity to do project work which helps them to handle independent projects in academia and industry. Each student is affiliated to a faculty member to supervise the project work and also to provide guidance for effective and productive implementation of the project work. JUIT has a unique distinction of providing teaching/research assistantships to all its PhD scholars. Biotechnology researchers of the University are venturing into modern areas of research such as nano-biotechnology, synthetic biology, biosensors, stem cells and regenerative medicine, metabolic engineering, etc. so as to remain at the forefront of biotech education and research at the global level.

Programme objectives

1. Core knowledge in biotechnology and bioinformatics, with particular emphasis on ability
   to integrate knowledge across disciplinary boundaries
2. Enable to identify, analyze and solve problems with novelty and updated knowledge
3. Integration of knowledge for product/process development to meet societal demands
4. Skills and knowledge to undertake research with a understanding of contemporary research and innovations within biotechnology
5. Spirit of team work, constructive thinking and wisdom to recognize the value of continuing education in their upliftment
6. Capability to work successfully in the working environments of industry, academia, and government organizations

Programme outcomes

1. The graduates demonstrate knowledge of basic biological sciences, general biotechnological principles and techniques that have been mastered and learning of broad range of basic lab skills applicable to biotechnology.
2. The graduates acquire applied research skills at an advanced level in at least one area of biology and biotechnology viz. ability to generate hypotheses and test them by designing and conducting experiments to analyze and interpret data from those tests to reach at valid conclusions.

3. The graduates develop capabilities of keeping abreast with the contemporary research and innovations in biotechnology, being inquisitive in understanding cutting edge areas of biotechnology, adopt, grasp and absorb knowledge across disciplines and ability to integrate within research areas of Biotechnology.
4. The graduates develop soft skills such as understanding of professional and ethical responsibilities, an ability to function on multi-disciplinary teams which help them in effective communication abilities.

Infrastructural Strengths

The Department has been equipped with 3 Bioinformatics Labs with high end servers, Sun Work Stations and IBM Machines installed with several bioinformatics software packages such as Discovery Studio and DNASTAR in addition to many more for educating students in algorithm design, bio-programming & scripting languages, computational drug designing, development of biological databases, advanced chemo-informatics, etc. The Department has 20 state-of-the-art modern biotech laboratories such as Proteomics Technology lab, Genomic Technologies lab, Plant Biotechnology Lab., Microbial Biotechnology lab., Animal & Plant Cell Culture labs. Animal house, Environmental Biotechnology Lab., Industrial Biotechnology lab, and Pharmacy labs.

R&D Activities

The high academic profile of faculty has enabled them to win external funding worth Rs. 20.0 crores from various funding agencies such as the Department of Science & Technology (DST) and the Department of Biotechnology (DBT) of the Ministry of Science & Technology, the DRDO, Ministry of Defence, Indian Council of Medical Research (ICMR) and National Medicinal Plants Board of the Ministry of Health & Family Welfare, Ministry of Environment & Forests on various aspects of Biotechnology and Bioinformatics. The faculty has set up research collaborations with other Institutes and Universities such as All India Institute of Medical Sciences (AIIMS), New Delhi, Institute of Himalayan Bioresource Technology (CSIR), Palampur, Panjab University, Chandigarh, Himalayan Forest Research Institute, Shimla, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, Indian Agriculture Research Institute (IARI), New Delhi, Defence Institute of High Altitude Research, DRDO, Leh-Ladakh, and the HP University, Shimla. The Department has also set up liaison with the Biotechnology and Pharmaceutical industries such as Panacea Biotech and AyurVet Ltd. by providing consultancy services and by doing R&D of commercial value.

The diversity of specializations and research pursuits of the faculty puts the department in a unique advantage of pursuing research in any area of biotechnology contrary to most of the departments or R&D institutes in India. As a result the faculty is engaged in research on diverse fields of research such as understanding molecular biology of kidney stone formation and cure thereof, cancer biomarkers development of molecular diagnostics for diseases and pathogens, animal cell cultures for bioassays and anti-cancer drug discovery, development of herbal-based anti-depressant formulations, low-cost micropropagation technologies for high value ornamentals, fruit plants and medicinal & aromatic plants, plant cell culture technologies for production of phytopharmaceuticals, bioprospecting of Himalayan bioresources for novel genes and metabolites of medicinal and nutritional importance, development of

genome resources for bioresources, transgenic plants with value addition, fermentation technologies for nutraceutical wines, refinements of bioprocesses towards green technologies, microbial bioremediation of environmental pollutants, bioleaching of E-waste, bioconversion of complex lignocellulosic waste into bio-ethanol, gene discovery through comparative and functional genomics, development & validation of molecular markers, DNA fingerprinting in forensics, computational drug designing for bacterial pathogens of biological warfare importance, development of computational prediction tools, development of bioinformatics pipelines & tools, and development of biological databases, etc. All these research programs provide B.Tech. Students an opportunity to "Learn While Doing"-the motto of our education system for producing world-class leaders in science &technology.

Sponsored Research Projects: no. 62
New: 5
Ongoing: 19
Completed: 43
Faculty Involved: 26

List of sponsored Research Projects

S. No	Principal Investi-gator	Title	Duration	Funding Agency	Amount (Rs in Lacs)	Completed / Ongoing
1	Dr. S. Naik	Cytogenetic evaluation, molecular characterization and improvement of some promising cultivars of turmeric and ginger through biotechnological methods	2003-2006	DST	10	Completed
2	Dr. S. Syal	Development of a bioremedial system for diesel contaminated sites in South-Western areas of H.P.	2005-2008	DST	2.5	Completed
3	Dr. C. Tandon	Biomolecules from Tamarind indicus and Terminalia arjuna influencing Mineralization/ Demineralization processes and their role in management of renal calculosis	2006-2009	DST	18	Completed
4	Dr. P.K. Naik	Study of population structure of Podophyllm hexandrum using biochemical and molecular markers	2006-2009	DST	14	Completed
5	Dr.S. Syal	Development of techno-logies for bioconversion of lignocellulosic waste from	2007-2009	AyurVet Ltd.	5	Completed

		herbal industries for developing commercially viable products				
6	Dr.R.S. Chauhan	Bioprospecting of buckwheat (Fagopyrum tataricum) for novel genes & metabolites of medicinal and nutritional importance	2007-2011	DBT	40.6	Completed
7	Dr.R.S. Chauhan	Development of candidate gene markers for Jatropha by utilizing genome resources of caster bean	2007-2011	DBT	59.5	Completed
8	Dr.R.S. Chauhan	Identification of low curcin genotypes of Jatropha and their utilization in developing candidate gene markers	2008-2011	DRDO	19.2	Completed
9	Dr. C.Tandon	Development of a standardized herbal product for urolithiasis from Tribulus terrestris and Achyranthes aspera	2009-2011	DBT	26.2	Completed
10	Dr. S. Syal	Development of a bioleaching strategy for sustainable disposal and recycling of electronics-waste	200 8-2011	MoE	19.7	Completed
11	Dr.Uday Bhanu	Formulation of an antidepressant/stress reliever drug based on St John's Wort (Hypericum perforatum)	2009-2012	DRDO	15	Completed
12	Dr.C. Rout	Computational Identification, Evaluation and in vivo Validation of Vaccine Candidates from Bioweapon Toxins, and Selected Potential Bacterial Bioweapons (PBBWs)	2010-2012	DRDE	9.4	Completed
13	Dr. C.Tandon	Exploring the role of matrix protein(s) from calcium oxalate stones in nephroli-thiasis and assessment of their molecular interactions with calcium oxalate monohy drate (COM) crystals in silico	2009-2011	ICMR	8.4	Completed

14	Dr. RS Chauhan	Identification of genetically superior strains of medicinal plants (P. kurroa and Valeriana jatamanshi) from North-Western Himalayas of India	2009-2012	Ministry of Health, GOI	16.5	Completed
15	Dr. PK Naik	Genetic characterization, chemical profiling and optimization of parameters for Artemisinin yield in Artemisia annua from the Ladakh region	2010-2012	DRDO	9.5	Completed
16	Dr. Poonan Sharma	Physico-chemical studies of drug-surfactant interactions in aqueous alcoholic solutions	2011-2013	DST	6.4	Completed
17	Dr. S. Tandon	The potential of human embryonic stem cells in developmental toxicity testing	2010-2012	DBT	17.2	Completed
18	Dr. G. Dey	Production of Nutrabeverages from Mahua Flowers	2010-2012	TRIFED	7	Completed
19	Dr. R S Chauhan	Elucidating missing links in the biosynthetic pathways of major medicinal constituents for utilization in the development of gene markers	2010-2015	DBT	198.7	Completed
20	Dr. Manu Sharma	Antioxidants and Lantadene A Hybrid compounds as anticancer agents	2010-2013	DBT	7.6	Completed
21	Dr. Manu Sharma	Design, synthesis and evaluation of Lantadene polyphenol conjugates as anticancer agents.	2010-2013	DST	12	Completed
22	Dr. Gopal Singh	Design, synthesis and evaluation of antibacterial peptidomimetics	2011-2014	DST	18	Completed
23	Dr. C. Tandon	Identification and functional characterization of proteins as key/rate-limiting enzymes in the biosynthesis of desired chemical constituents of target plant species	2010-2015	DBT	60.7	Completed

24	Dr.P.K. Naik	Identification of intermediate metabolites for linking missing links in the biosynthetic pathways of desired chemical constituents in target plant species	2010-2015	DBT	68.65	Completed
25	Dr. Hemant Sood	Identification of elite chemotypes and optimization of differential accumulation conditions for major & desired chemical constituents of three medicinal plants species	2010-15	DBT	60	Completed
26	Dr. Tiratha Raj Singh	Structural, functional and evolutionary analysis of repair pathways with special relevance to human disease	2012-15	DST	12.48	Completed
27	Dr. Harvinder Singh	Nucleotide diversity in granule bound starch synthase-I (GBSS-I) metabolic pathway genes and its association with starch quality in elite Indian rice genotypes	2011-2014	DST	16	Completed
28	Dr. Manu Sharma	Polyunsaturated fatty acids and Lantadene A conjugates as selective tumor targeting agents	2012-2015	ICMR	22	Completed
29	Dr. C. Tandon	Characterization of the antilithiatic proteins from Tamarindusindica and Terminaliaarjuna and evaluation of their cytoprotective role on oxalate-induced renal tubular epithelial cell injury	2012-2015	DST	50	Completed
30	Dr. Harvinder Singh	Genetic analysis to avoid inbreeding of the endangered western tragopan in the aviaries of Himachal Pradesh	2012-2015	DST	11.2	Completed
31	Dr. Rahul Srivastava	Identification of Macrophage Invasion Protein(s) of Atypical Mycobacteria M. fortuitum as Potential Drug Target and Inhibitors Thereof	2012-2015	DST	17.4	Completed

32	Mr. Dipankar Sengupta	Development of Business Intelligence Model of Army Personnel's at Higher Altitude	2012-2014	DRDO	9.9	Completed
33	Dr. GL Gupta	Development of a polyherbal preparation to treat ethanol abstinence syndrome.	2012-2015	DST	24.85	Completed
34	Dr. Mamta Raghav	Probiotics to prevent infection of Cronobacter sakazakii in neonatal mouse model	2012-15	DBT	42.15	Completed
35	Dr. Gunjan Goel	Development of a multicompartment in vitro model of the human gastrointestinal tract	2012-15	DBT	45.4	Completed
36	Dr. RS Chauhan	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	2013-2016	DBT	120	Completed
37	Dr. Gunjan Goel	Novel quorum sensing modulators against biofilm forming Cronobacter sakazakii	2013-16	DST	23.5	Completed
38	Dr. Anil Kant	Identification and validation of sex linked markers in seabuckthorn	2013-2015	DRDO	10	Completed
39	Dr. C.Tandon	Mass spectrometric identification of matrix protein(s) from calcium oxalate stones in nephroli-thiasis and assessment of their activity oncalcium oxalate crystal-mediated stress in renal epithelial cells	2013-2016	ICMR	17	Completed
40	Dr. P.K. Naik	Toxicological evaluation of herbal formulations: (a) herbal performance en-hancing capsules (Perf - oMax), (b) herbal adapto-genic appetizer, (C) herbal tea and (D) seabuckthron oil based soft gel capsule	2012-2013	DRDO	8.5	Completed

41	Dr. Jitendraa Vashistt	Identification, charact-erization of diarrhoeagenic pathogens in Himachal Pradesh	2013-2016	ICMR	16	Completed
42	Dr. Simran Tandon	Establishment of an assay using human embryonic stem cell derived cardiac precursors from KIND2 cells for cytotoxicity testing	2013-2015	DBT	45.67	Completed
43	Dr. Jayashree Ramana	Comparative genomics of diarrheal pathogens to identify vaccine candidates and study of various antibiotic resistance mechanisms.	2013-2016	DST	23.11	Completed
44	Dr. Harish Changotra	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	2013-2016	DBT	18	On going
45	Dr. RS Chauhan	DST-FIST	2012-2017	DST	150	On going
46	Dr. Aklank Jain	Ramanujan Fellowship	2012-2017	DST	73	On going
47	Dr. Harish Changotra	Autophagy genes (Atg16L1 and IRGM) single nucleotide polymorphisms in the susceptibility of chronic hepatitis B virus infection	2013-16	DST	23	On going
48	Dr. C.Tandon	Development of herbal product for urolithiasis from Tribulus terrestris	2013-2016	DBT	52.23	On going
49	Dr. Rahul Shrivastava	Identification of Macrophage Invasion Protein(s) of Atypical Mycobacteria M. fortuitum as Potential Drug Target and Inhibitors Thereof	2013-2016	DST	17.4	On going
50	Dr. C. Rout	Development of inhibitors to target glyoxylate and methylcitrate cycles essential for persistence of Mycobacterium tuberculosis	2013-2016	ICMR	36	On going

51	Dr. Gunjan Goel	Development of an in vitro gut model to study the survival of probiotics in mixed microbial consortia	2013-2016	DBT	34.5	On going
52	Dr. Sudhir Kumar	Bioremediation of electronic waste (E-waste) for precious metal recovery and removal of polybrominated diphenyl ethers (PBDE's)"	2013-2017	DBT	33.2	On going
53	Dr. Gunjan Goel	Elucidating the linkage between key limiting processes and microorganisms during anaerobic degradation of lignocellulosic waste	2014-2016	Indo-Russian	24	On going
54	Dr. Manju Jain	Investigating the role of thymus in mediating host immune modulation in visceral leishmaniasis	2013-2016	DST	27	On going
55	Dr. Anil Kant	Transcriptome analysis of seabuckthorn male and female flowers	2015-17	DRDO	10	On going
56	Dr. Gopal Singh Bisht	Synthesis of novel poly-N-substituted glycines (peptoids) based on cell selective antimicrobial peptides for Gram-negative bacterial infections	2015-2018	ICMR	24	On going
57	Dr. Hemant Sood	Molecular Dissection of Biosynthesis of Pharmacologically Important Phenol Glycosides in a High Value Medicinal Plant (Rhodiola imbricata) from Trans- Himalayan Region of Ladakh	2015-17	DRDO	10	On going
58	Dr. Hemant Sood	Socio Economic upliftment of high altitude farmers of Himachal Pradesh through transfer of micro-propagation technologies for high value medicinal herbs	2015-18	DST	14.5	On going

59	Dr. Jitendraa Vashistt	Identification of biofilm associated proteins of multidrug resistant *Acinetobacter baumannii* as potential drug target and inhibitors thereof.	2015-18	DST	23.30	On going
60	Dr. Rahul Shrivastava	Synthesis of Novel Poly-N Substituted Glycines (Peptoids) Based on Cell Selective Antimicrobial Peptides for Gram Negative and Gram Positive Bacterial Infections	2015-18	ICMR	18.76	On going
61	Dr Tiratha Raj Singh	A Bioinformatic and experimental approach to investigate the interaction between acetylcholinesterase (AChE) and angiotensin-converting-enzyme (ACE) along with Alzheimer's disease associated proteins.	2015-2018	ICMR	25.66	On going
62	Dr. RS Chauhan	Functional analysis and validation of picrosides biosynthetic pathway and development of gene markers for elite chemotypes of Picrorhizakurroa	2016-21	DBT	350	On going

Patents Granted

1. Tandon C, Chaudhary A, Gupta S and Jain S, Henna Based Dye, Process for Preparing the Same and Use Thereof in SDS-PAGE Method. (Patent application no. 1216/DEL/2007)

Published

1. Bisht GS, Lohan S, Non-Natural Short Cationic Antimicrobial Lipopeptides. (Patent application no. 1161/DEL/2014) (Publication Date: 06/11/2015).
2. Rout C, Chauhan A, Chauhan RS and Chauhan D, Automated Computer Aided Diagnosis (CAD) of Tuberculosis using Chest X-Ray. (Patent Application No. 396/DEL/2013) (Publication Date: 29/08/2014).
3. Sood H, Gulati S, Bakshi S, Sandhu BS, Kumar V and Chauhan RS, A process of enriching medicinal constituents in shoot cultures of *Swertia chirayita*. (Patent application No.362/DEL/2013)(Publication Date: 29/08/2014).
4. Sharma S, Sood H and Chauhan RS, INDITECH - A Novel Bioreactor. (Patent Application No. 1631/DEL/2012) (Publication Date: 25/07/2014) (Journal No.-29545).

5. Dey G, Negi B. 2010. A synbiotic formulation of sea buckthorn (*Hippophae rhamnoides* L.) berries with radical scavenging potential.(Patent Application No. 2714/DEL/2012) (Publication Date: 07/03/2014)
6. Sood H, Kumar V and Chauhan RS,Isolation and purification of Picroside-I and Picroside-II. (Patent Application No. 551/DEL/2012) (Publication Date: 14/02/2014) (Journal No.- 07/2014).
7. Sharma M, Kumar SS, An economical and improved isolation process of antitumor triterpenoid Lantadene B from weed *Lantana camara* L., (Patent Application No. 1940/DEL/2012) (Publication Date: 14/02/2014).
8. Sharma M, Kumar SS, An improved process of conversion of Lantadene A & B to reduced Lantadene A & B. (Patent Application No. 2867/DEL/2011) (Publication Date: 05/04/2013).
9. Kumari M, Kumar S, Chauhan RS and Ravikanth K. 2011. Process for production of cellulase and pectinase from herbal industry residue. (Patent Application No. 139/DEL/2011) (Publication Date: 15/03/2013).
10. Tandon C and Aggarwal A, A novel anti-calcifying protein from *Tribulus terrestris*(Patent Application No. 2248/DEL/2011) (Publication Date: 15/02/2013).
11. Chauhan RS, Anwar T, Mathur A, Malhotra A, Mathur G, Thermo-halotolarent Lipase by a New Strain of *Staphylococcus arlettae* (Patent Application No. 1865/DEL/2010) (Publication Date: 15/03/2013).
12. Dey G, Negi B. Novel method for producing sea buckthorn wine and wine thereof. (Patent Application No. 499/DEL/2010) (Publication Date: 10/02/2012).
13. Chauhan RS, Sharma A, Sood P. Gene Markers for Selection and Development of High Oil Content Jatropha (Patent Application No. 292/DEL/2010) ((Publication Date: 02/09/2011).
14. Sood H and Chauhan RS, A process of enriching the amount of medicinal compound, Picroside-1 in shoots of medicinal herb, *Picrorhiza kurroa*. (Patent Application No. 163/DEL/2009) (Publication Date: 06/08/2010) (Journal No.- 32/2010).
15. Chauhan RS, Kumar V, Sood H, Pandit S, Shitiz K, Biosynthetic pathway for the production of Picroside-I and Picroside-II and their Intermediates in *Picrorhiza kurroa* (Patent Application No. 1922/DEL/2012).

Outreach Activities

- The Outreach team of Synapse visited the Dumehar Secondary school, on every Saturday in 2015-16.
- A trip to CPRI was organized by Synapse on April 22nd2016 for the 3rd year students.
- Conducted biotech drives in different schools of Shimla and Solan
- The students of B. L. Public school, Solan have visited our department on 27th May 2016 under the outreach activity of the Synapse.
- Organized a National Symposium on Computational Systems Biology (NSCSB 2016) symposium (March 18-20, 2016).
- Organized Statistical Techniques in Biological and Medical Sciences (STBMS 2016) workshop in association with DBT and Department of Mathematics, JUIT Waknaghat (June 13-18, 2016).

- Dr. Sudhir Kumar:Our biogas team remains in touch and provide information on biogas plants fabrication and installation to various Panchayats of H.P. and Ministry of Rural Development, HP. This is to generate cost-effective and decentralized and renewable energy generationmodels. Activity is ongoing since 2009. We provide consultancy to already installed biogas plants in Himachal Pradesh and feasibility for new ones.
- Organized summer training for graduate students from the various college/institutes (June –July 2015).

Visitors List (01 July 2015-30 June 2016)

S. No.	Name of Visitors	Affiliation	Date
1.	Mr. Faiz Abuzer	Account Manager, Academics & Government IP & Science Thomson Reuters	29 July 2015
2.	Mr. G. S. Krishnan	Regional President, Novozymes South Asia Pvt. Ltd. Bangalore	24-25 Sept 2015
3.	Dr. Mads Bjørnvad	Director, Head of R&D, Novozymes South Asia Pvt Ltd. Bangalore	24-25 Sept, 2015
4.	Mr. Narayan Suresh	COO, ABLE India	24-25 Sept, 2015
5.	Mr. Divakar Rao	Advisor to Life Sciences Sector, Member-Vision Group on Biotech & Member-Governing Council, KSBDB, Govt. of Karnataka, Bangalore	24-25 Sept, 2015
6.	Mr. Girish Minocha	CEO of Minchy's industries, Shimla	15 Oct, 2015
7.	Dr. M. Aslam	Advisor, DBT, New Delhi	15 Oct, 2015
8.	Dr. Sanjay Gulati	Paediatrician, Gulati Pediatric Centre, Shimla	05 Dec 2015
9.	Dr. G.P.S. Raghava	IMTECH, Chandigarh	18 Mar 2016
10.	Dr. Debasis Dash	IGIB, Delhi	18 Mar 2016
11.	Dr. Vinod Scaria	IGIB, New Delhi	18 Mar 2016
12.	Dr. Vikram Singh	CUHP, Dharmashala	18 Mar 2016
13.	Dr. Vivek Thakur	IRRI, Los Banos, Philippines	18 Mar 2016
14.	Dr. Somdatta Sinha	IISER, Mohali	19 Mar 2016
15.	Dr. Debasisa Mohanty,	NII, Delhi	19 Mar 2016
16.	Dr. Pritish Kumar Varadwas	IIIT, Allahabad	19 Mar 2016

17.	Dr. Alok Bhattacharya	JNU, Delhi	20 Mar 2016
18.	Dr. Suresh Sharma	PU, Chandigarh	20 Mar 2016
19.	Dr. Shriram	R&D Head, Evolve Biotech, Chennai	13 April 2016
20.	Prof Ashish Sen Gupta	Indian Statistical Institute, Kolkata	11 June 2016
21.	Dr. Suresh K Sharma	PU, Chandigarh	13-14 June 2016
22.	Dr. Arun Kumar Aggarwal	PGIMER, Chandigarh	15 June 2016
23.	Dr. Athar Ali Khan	AMU Aligarh	16 June 2016
24.	Dr. Amar Nath Gil	PU, Chandigarh	17-18 June 2016
25.	Dr. Parminder Singh	GNDU, Amristar	17-18 June 2016

Publications

Books/Monographs

Chapters in Books

- Rana J.C., Mohar Singh, R.S. Chauhan, R.K. Chahota, T.R. Sharma, R. Yadav, S. Archak. 2016. Genetic Resources of Buckwheat in India. In Molecular Breeding and Nutritional Aspects of Buckwheat., pp., 109-136 Edited Eds. Zhou et al., Elsevier Inc. Academic Press, UK.
- Chauhan K, Sharma P and Chauhan GS (2015). Removal/Dissolution of Mineral Scale Deposits. In Zahid Amjad, D. Konstantinos, Mineral Scales and Deposits Scientific and Technological Approaches USA: Elsevier. [ISBN : 978-0-444-63228-9] (1, pp. 701-720).
- Garlapati VK, Roy LS and Banerjee R. (2015). An overview of Reactor Designs for Biodiesel production. In R. Navanietha Krishnaraj, Jong-Sung Yu (Eds.), Bioenergy: Opportunities and Challenges: CRC Press, Taylor and Franchis Group. [ISBN: 9781771881098], pp.221-240.
- Roy LS, Garlapati VK and Banerjee R. (2015). Challenges in Harnessing the Potential of Lignocellulosic Biofuels and the Probable Combating Strategies. In R. Navanietha Krishnaraj, Jong-Sung Yu (Eds.), Bioenergy: Opportunities and Challenges: CRC Press, Taylor and Franchis Group. [ISBN: 9781771881098], pp.171-204
- Kumar S, Bhalla A, Bibra M, Wang J, Morisette K, Raj SM, Salem D and Sani RK (2015).Thermophilic Biohydrogen Production: Challenges at the Industrial Scale." Bioenergy Opportunities and Challenges Edited by R. Navanietha Krishnaraj, Jong-Sung Yu. Apple Academic Press. ISBN 9781771881098.
- Singh TR (2015). Mitogenomics: Mitochondrial Gene Rearrangements, its Implications and Applications. In R. Keshav Radhakrishnan, Agriculture Bioinformatics: New India Publishing Agency. [ISBN: 978-93-83305-42-1] pp. 259-69.

- Singh N, Attri S, Sharma K and Goel G (2016) Indigenous Fermented Foods and Beverages. In Frontiers in Food Biotechnology. Editors: Chetan Sharma, Anil K. Sharma, and K.R. Aneja. Nova Science Publishers ISBN: 978-1-63484-679-0
- Vashistt J (2016) Paper: P-09.Techniques used in molecular biophysics I; Introduction to Mass spectrometry.
- Vashistt J (2016) Paper: P-09.Techniques used in molecular biophysics I; Gel based proteomic analysis using mass spectrometer (Details and online lectures are available on http://epgp.inflibnet.ac.in under Medical sciences)
- Singh TR, Vannier B and Moussa A (2016). Extraction of Differentially Expressed Genes in Microarray Data. In Mourad Elloumi, Costas S. Iliopoulos, Jason T. L. Wang and Albert Y. Zomaya, Pattern Recognitin in Computational Molecular Biology: Techniques and approaches, Wiley. [ISBN: 978-1-118-89368-5] pp. 335-345
- Srivastava A, Bansal S, and Shankar J (In press) Developments and diversity of proteins and enzymes. In V.C. Kalia, A.K. Saini, R.V. Sharma, D.K. Sharma, Strategies for metabolic engineering in bioactive compounds and processes. Springer.
- Thakur R and Shankar J. (In press) Strategies for gene expression in Prokaryotic and Eukaryotic system. In V.C. Kalia, A.K. Saini, R.V. Saini, D. K. Sharma, Strategies for metabolic engineering in bioactive compounds and processes. Springer.

Articles in Refereed Journals

- Agarwal S and Changotra H (2016).Association of PTPN22 +1858C>T Polymorphism and Susceptibility to Vitiligo: Systematic Review and Meta-Analysis. Indian Journal of Dermatology, Venereology and Leprology (Provisionally Accepted).
- Agarwal S, Kaur G, Randhawa R, Mahajan V, Bansal R, and Changotra H (2016). Liver X Receptor-α polymorphisms (rs11039155 and rs2279238) are associated with susceptibility to Vitiligo. Meta Gene 8: 33-36.
- Attri S, Singh N, Singh TR and Goel G (2016). Comparative evaluation of fruit juices from Himalayan belt of India as potential source of antioxidants: Effect of in vitro gastric and pancreatic digestion. Food Bioscience (In Press)
- Cao H, Tan K, Wang F, Bigelow L, Yennamalli RM, Jedrzejczak R, Babnigg G, Bingman CA, Joachimiak A, Kharel MK, Singh S, Thorson JS and Phillips GN (2016). Structural Dynamics of a Methionine γ-lyase for Calicheamicin Biosynthesis: Rotation of the conserved tyrosine.
- Chang CY, Lohman JR, Cao H, Tan K, Rudolf JD, Ma M, Xu W, Bingman CA, Yennamalli RM, Bigelow L, Babnigg G, Yan X, Joachimiak A, Phillips GN and Shen B (2016). Crystal Structures of SgcE6 and SgcC, the Two-Component Monooxygenase that Catalyzes Hydroxylation of a Carrier Protein-Tethered Substrate during the Biosynthesis of the Enediyne Antitumor Antibiotic C-1027 in *Streptomyces globisporus*. Biochemistry, 55 (36), 5142-5154. [IF: 2.876].
- Changotra H, Turk SM, Artigues A, Thakur NN, Gore M and Hutt-Fletcher L (2016). Epstein-Barr virus glycoprotein gM can interact with the cellular protein p32 and knockdown of p32 impairs virus assembly. Virology 489: 223-232. (IF: 3.4)

- Chauhan A, Sarkar M, Gupta P and Rout C (2016). Automated stitching of view fields of ZN-stained sputum smear microscopy slides. J Img. Infor. Proc. (Accepted)
- Chauhan K, Kaur J, Singh P, Sharma P, Sharma P, Chauhan GS (2016). An Efficient and Regenerable Quaternary Starch for Removal of Nitrate from Aqueous Solutions. Industrial & Engineering Chemistry Research, 55, 2507-2519.
- Chauhan M, Yennamalli RM and Garlapati VK (2016). Biochemical and Molecular Characterization of a unique lipase from Staphylococcus arlettae JPBW-1. Engineering in Life Sciences, (Accepted, Early View). (DOI: 10.1002/elsc.201600074) (SCIIndexed, IF:2.119)
- Devi R, Kumar A and Kumar S (2016). Comparison of biogas production in ambient temperature condition and under green house canopy. JCEET. 3(6), 495-499.
- Gangwar M, Sood H and Chauhan RS. (2016). Genomics and relative expression analysis identifies key genes associated with high female to male flower ratio in *Jatropha curcas* L. Molecular Biology Reports. doi: 0.1007/s11033-016-3953-7 (IF: 2.024)
- Garlapati VK (2016). E-waste in India and Developed countries: Management, Recycling, Business and Biotechnological Initiatives. Renewable and Sustainable Energy Reviews, 54:874-881.
- Garlapati VK, Shankar U and Budiraja A (2016). Bioconversion Technologies of Crude Glycerol to Value Added Industrial Products. Biotechnology Reports 9C, 9-14. IF:Awaiting)
- Garlapati VK, Sharma D and Goel G (2016). Bioprocessing of wheat bran for the production of lignocellulolytic enzyme cocktail by *Cotylidia pannosa* under submerged conditions. Bioengineered, 7(2), 88-97. (IF:1.87)
- Gautam L, YennamalliRM and Rathore J (2016). Implication on the function of novel Xn-relE toxin structure of *Xenorhabdus nematophila* using Homology modeling. Current Bioinformatics, 11 (2016), -. [IF: 0.77].
- Gour RS, Chawla A, Singh H, Chauhan RS and Kant A (2016). Characterization and screening of native *Scenedesmus* sp. isolates suitable for biofuel feedstock. PLoS ONE 11(5): e0155321. doi:10.1371/ journal.pone.0155321.
- Huang T, Chang CY, Lohman J, Rudolf J, Kim Y, Chang C, Yang D, Ma M, Yan X, Crnovcic I, Bigelow L, Clancy S, Bingman CA, Yennamalli RM, Babnigg G, Joachimiak A and Phillips GN Jr. (2016). Crystal Structure of SgcJ, an NTF2-Like Superfamily Protein Involved in Biosynthesis of the Nine-Membered Enediyne Antitumor Antibiotic C-1027. The Journal of Antibiotics, (), -. [IF: 2.173].
- Jain S, Nutan, Grover N, Vashistt J and Changotra H (2016).Prevalence of rotavirus in diarrheal diseases in Himachal Pradesh, India. VirusDisease 27: 77-83. (IF: 0.4)
- Jain S, Vashistt J, Gupta K, Kumar A and Changotra H (2016). Molecular analysis of VP7 gene of rotavirus G1 strains isolated from Himachal Pradesh, North India. Current Microbiology (In Press)
- Jones DC, Zheng W, Huang S, Du C, Zhao X, Yennamalli RM, Sen TZ, Nettleton D, Wurtele ES and Li L (2016). A Clade-Specific Arabidopsis Gene

Connects Primary Metabolism and Senescence. Frontiers in Plant Science, 7 (983), 1-18. [IF: 4.495]

- Khan AN and Khar RK (2016). Diffuse reflectance near infrared–chemometric method development and validation of amoxicillin capsule formulations.Journal of Pharmacy and Bioallied Sciences, vol. 8, no. 2, pp. 152-160.
- Khan AN, Khar RK and Malairaman U (2016). Pilot study of quality of diclofenac generic products using validated in-house method: Indian drug regulatory concern.Journal of Applied Pharmaceutical Science, vol. 5 (12), pp. 147-153.
- Kumar K, Sharma S, Vashishtha V, Bhardwaj P, Kumar A and Barhwal K et al. (2016). *Terminalia arjuna* bark extract improves diuresis and attenuates acute hypobaric hypoxia induced cerebral vascular leakage. Journal of ethnopharmacology 180, 43-53.
- Kumar P, Sharma R, Jaiswal V and Chauhan RS (2016). Identification, validation, and expression of ABC transporters in *Podophyllum hexandrum*and their role in podophyllotoxin biosynthesis.Biol Plantarum. doi: 10.1007/s10535-016-0611-9(IF: 1.85)
- Kumar V and Chauhan RS (2016). Higher amount of steviol detected in the leaves of a non-toxic endangered medicinal herb, *Aconitum heterophyllum*. J Plant Biochem Biotech doi: 10.1007/s13562-016-0361-y (IF: 1.09)
- Kumar V, N Malhotra,T Pal and Chauhan RS (2016). Molecular dissection of pathway components unravel atisine biosynthesis in a non-toxic Aconitum species, *A. heterophyllum* Wall.3 Biotech 6:106. doi: 10.1007/s13205-016-0417-7
- Kumar V, Sharma N, Sood H and Chauhan RS (2016). Exogenous feeding of immediate precursors reveals synergistic effect on picroside-I biosynthesis in shoot cultures of *Picrorhiza kurroa*Royle ex Benth. Scientific Reports | 6:29750 | DOI: 10.1038/srep29750 (I.F. 5.28).
- Kumar V, Shitiz K, Sood H, ChauhanRS and Tandon C (2016). Tracking dynamics of enzyme activities and their gene expression in Picrorhiza kurroa with respect to picroside accumulation. J Plant Biochem Biot 25(2): 125-132(IF: 1.09)
- Kumar V, Sood H and Chauhan RS (2016). Optimization of a preparative RP-HPLC method for isolation and purification of picrosides in *Picrorhiza kurroa*. J Plant Biochem Biot 25(2): 208-214 (IF: 1.09)
- Mahajan R, Nikitina A, Litti A, Nozhevnikova and Goel G (2016). Autochthonous microbial community associated with pine needle forest litterfall influences its degradation under natural environmental conditions. Environment Monitoring and Assessment.188:417.
- Mahajan R, Nikitina A, Nozhevnikova A and Goel G (2016). Microbial diversity in an anaerobic digester with biogeographical proximity to geothermal active region. Environmental Technology, 37:2694-702.
- Malhotra N, Sood H, and Chauhan RS (2016). Transcriptome-wide mining suggests conglomerate of genes associated with tuberous root growth and development in Aconitum heterophyllum Wall. 3 Biotech. 2016 Dec; 6(2): 152.Published online 2016 Jul 11. doi: 10.1007/s13205-016-0466-y.
- Mehla K and Ramana J (2016). Identification of epitope-based vaccine candidates against Enterotoxigenic *Escherichia coli*. Molecular Biosystems, 12(3), 890-901.

- Mehla K and Ramana J (2016). Structural signature of Ser83Leu and Asp87Asn mutations in DNA gyrase from Enterotoxigenic*Escherichia coli*and impact on Fluoroquinolone resistance.Gene, 576(1 Pt 1), 28-35.
- Mehla K and Ramana J (2016). Traveller's diarrhea associated Enterotoxigenic *E. coli* gyrase mutants and Quinolone affinity: A Molecular Dynamics Simulation and residue Interaction Network Analysis, Omics: Journal of Integrative Biology, Doi: 10.1089/omi.2016.010.
- Nutan, Jain S, Shilpa, Tomar A, Changotra H and Vashistt J (2016) .Computational Tools: Indispensable Armamentarium of Medical Biotechnology. Indian Journal of Science and Technology (In Press)
- Parashar A and Udayabanu M (2016). Gut microbiota regulates key modulators of social behaviour. European Neuropsychopharmacology 26 (1), 78-91.
- Patel SS, Gupta S and Udayabanu M (2016). Urtica dioica modulates hippocampal insulin signaling and recognition memory deficit in streptozotocin induced diabetic mice. Metabolic brain disease 31 (3), 601-611.
- Patel SS, Mehta V, Changotra H and Udayabanu M (2016). Depression mediates impaired glucose tolerance and cognitive dysfunction: A neuromodulatory role of rosiglitazone. Hormones and Behaviour 78:200-210. (IF: 4.7)
- Sahni A, Kumar A and Kumar S (2016). Chemo-biohydrometallurgy—A hybrid technology to recover metals from obsolete mobile SIM cards. Environmental Nanotechnology, Monitoring & Management. (In press)
- Sharma A, Mehta V, Tanwar S and Malairaman U (2016). In-vitro and in-silico evaluation of the antidiabitic effect of hydroalcoholic leaf extraxt of centella asiatica, International Journal of Pharmacy and Pharmaceutical Sciences, 8, 8.
- Sharma A, Sood A, Mehta V and Malairaman U (2016). Formulation and physicochemical evaluation of nano-structured lipid carrier for co-delivery of clotrimazole and ciprofloxacin. Asian Journal of Pharmaceutical and Clinical Research, 356-360.
- Sharma N, Chauhan RS and Sood H (2016). Discerning picroside-I biosynthesis via molecular dissection of in vitro shoot regeneration in *Picrorhiza kurroa*. Plant Cell Rep. doi: 10.1007/s00299-016-1976-0 (IF 3.07)
- Sharma N, Kumar V, Chauhan RS and Sood H (2016) Modulation of picroside-I biosynthesis ingrown elicited shoots of *Picrorhiza kurroa*in vitro. Journal of Plant Growth Regulation doi:10.1007/s00344-016-9594-1 (IF: 2.23)
- Sharma S, Sharma A, Mehta V, Chauhan RS, Udayabanu M and Sood H (2016). Efficient hydroalcoholic extraction for highest diosgenin content from *Trillium govanianum*(nag chhatri) and it's in vitro anticancerous activity.Asian journal of pharmaceutical and clinical research.9(4):283-284. (IF: 0.5)
- Sharma T and Chauhan RS (2016). Comparative transcriptomics reveals molecular components associated with differential lipid accumulation between microalgal sp., *Scenedesmus dimorphus* and *Scenedesmus quadricauda*. Algal Res. 19:109-122 doi: 10.1016/j.algal.2016.07.020. (I.F.: 4.7)
- Shukla A, Moussa A and Singh TR (2016). DREMECELS: A Curated Database for Base Excision and Mismatch Repair Mechanisms Associated Human Malignancies. PlosONE, 11(6), e0157031.
- Singh N, Patil A, Prabhune A and Goel G (2016). Quorum sensing mediated inhibition of biofilm formation in *Cronobacter sakazakii* isolates. Microbiology (In press)

- Singh N, Patil A, Prabhune A, Raghav M and Goel G (2016). Diverse profiles of N-acyl-homoserine lactones in biofilm forming isolates of *Cronobacter sakazakii*. Virulence. (In press)
- Sood A and Chauhan RS (2016). Comparative NGS Transcriptomics Unravels Molecular Components Associated with Mosaic Virus Infection in a Bioenergy Plant Species, Jatropha curcas L. Bioenergy Res. DOI 10.1007/s12155-016-9783-6 (IF: 3.3).
- Tamanna and Ramana J (2016). Structural Insights into the Quinolone Resistance Mechanism of Shigella flexneri DNA Gyrase, Microbial Drug Resistance, 22(5), 404-1.
- Thakur R and Shankar J (2016). In silico Analysis Revealed High-risk Single Nucleotide Polymorphisms in Human Pentraxin-3 Gene and their Impact on Innate Immune Response against Microbial Pathogens. Front. Microbiol. 7:192.
- Thakur R, Tiwari S. and Shankar J (2016). Differential Expression Pattern of Heat Shock Protein Genes in Toxigenic and Atoxigenic Isolate of *Aspergillus flavus*. British Microbiology Research, 14(2); 1-9.
- Thakur R. and Shankar J. (2016). New treatment regime for *Aspergillus*mediated infections. Virology & Mycology (Accepted).
- Tiwari S, Thakur R, Goel G and Shankar J (2016). Nano-LC-Q-TOF Analysis of Proteome Revealed Germination of *Aspergillus flavus*Conidia is accompanied by MAPK Signalling and Cell Wall Modulation. Mycopathologia, xx (xx).
- Vashisht I, Pal T, Sood H, Chauhan RS (2016). Comparative transcriptome analysis in different tissues of a medicinal herb, *Picrorhiza kurroa* pinpoints transcription factors regulating picrosides biosynthesis. Mol Biol Rep DOI: 10.1007/s11033-016-4073.
- Vij A, Randhawa R, Parkash J and Changotra H (2016). Investigating regulatory signatures of human autophagy related gene 5 (ATG5) through functional In Silico analysis. Meta Gene 9: 287-248.
- Anand, Shankar J, Tiwary BN and Singh AP (2015). *Aspergillus flavus* induces granulomatous cerebral aspergillosis in mice with display of distinct cytokine profile. Cytokine, 72 (2), 166-17.
- Beniwal V,Sharma A,Marwah S and Goel G (2015).Use of chickpea (*Cicer arietinum* L.) milling agrowaste for the production of tannase using co-cultures of Aspergillus awamori MTCC 9299 and *Aspergillus heteromorphus* MTCC 8818. Annals of Microbiology, 65 (3), 1277-1286.
- Gangwar M, Sharma S, Chauhan RS and Sood H (2015). Indirect shoot organogenesis in Jatropha curcus (L) for in vitropropagation. Indian Journal of Research-pariplex. 4(12):56-58.
- GarlapatiVK, Maheswari N and Gupta A (2015). Isolation and Screening of Fungal Isolates for Multienzyme Production Through Submerged and Solid State Fermentations. Journal of Bioprocessing & Biotechniques 5(8): 249.(GS Indexed, IF:1.82)
- Jayanegara A, Goel G, Makkar HPS and Becker K (2015). Divergence between purified hydrolysable and condensed tannin effects on methane emission, rumen fermentation and microbial population in vitro. Animal Feed Science and Technology, 209: 660-668.

- Khan AN and Khar RK (2015). Current scenario of spurious and substandard medicines in India: A systematic review.Indian Journal of Pharmaceutical Sciences, vol. 77, no. 1, pp. 2–7.
- Khan AN, Kaur A, Khar RK and Khanam S (2015). Medicine prescribing preference and patient adherence: perspectives of Indian medical practitioners.Journal of Young Pharmacist, vol. 7, no. 4 (Supple), pp. 446-454. DOI: 10.5530/jyp.2015.4s.
- Khan AN, Khar RK and Udayabanu M (2015). Quality and affordability of amoxicillin generic products: A patient concern. International Journal of Pharmacy and Pharmaceutical Sciences 8 (1), 386-390.
- Kumar A and Singh TR (2015). A New Decision Tree to Solve the Puzzle of Alzheimer's Disease Pathogenesis Through Standard Diagnosis Scoring System.
- Kumar V, Sharma N, Shitiz K, Singh TR, Tandon C, Sood H and Chauhan RS(2015). An insight into conflux of metabolic traffic leading to picroside-I biosynthesis by tracking molecular time course changes in a medicinal herb, *Picrorhiza kurroa*. Plant Cell, Tissue and Organ Culture: Journal of Plant Biotechnology.
- Kumar V, Singh TR, Hada A, Jolly M, Ganapathi A and Sachdev A (2015). Probing Phosphorus Efficient Low Phytic Acid Content Soybean Genotypes with Phosphorus Starvation in Hydroponics Growth System. Applied Biochemistry and Biotechnology, 177(3):689-99.
- Lohan, S, Monga, J, Chauhan CS and Bisht GS (2015). Systematic study of non-natural short cationic lipopeptides as novel broad-spectrum antimicrobial agents. Chemical Biology & Drug Design 86 (4), 829-836.
- Mehla K and Ramana J(2015). DBDiaSNP: An Open-Source Knowledgebase of Genetic Polymorphisms and Resistance Genes in Diarrheal Pathogens. Omics: Jounal of Integrative Biology, 19(6), 354-3.
- Mehla K and Ramana J (2015). Novel Drug Targets for Food-Borne Pathogen Campylobacter jejuni: An Integrated Subtractive Genomics and Comparative Metabolic Pathway Study. Omics: Journal of Integrative Biology, 19(7), 393-40.
- Mishra D, Fatima A, Rout C and Singh R (2015). An efficient one-pot synthesis of 2-aminothiazole derivatives. Der Chemica Sinica, 6, 14-18.
- Sharma T, Gour RK, Kant A and Chauhan RS (2015). Lipid content in Scenedesmus species correlates with multiple genes of fatty acid and triacylglycerol biosynthetic pathways, Algal Research, 12, 341-349, ISSN 2211-9264.
- Sharma D, Goel G, Sud A and Chauhan RS (2015). A novel laccase from newly isolated *Cotylidia pannosa* and its application in decolorization of synthetic dyes. Biocatalysis and Agricultural Biotechnology. doi:10.1016/ j.bcab.2015.07.008.
- Shitiz K, Sharma N, Pal T, Sood H and Chauhan RS (2015). NGS Transcriptomes and Enzyme Inhibitors Unravel Complexity of Picrosides Biosynthesis in *Picrorhiza kurroa* Royle ex. Benth. PLoS ONE 10(12): e0144546 (IF: 3.23)
- Singh C, Pradhan JK,Singh S,Naik PK, Kant A and Singh H (2015). Biosynthesis and antibacterial-activity of silver and gold nanoparticles using liquorice root: A Green Chemistry Approach. J. Colloid Sci. Biotechnol. 4, 147-152.

- Singh N, Goel G and Raghav M (2015). An insight into putative virulence factors determining the pathogenicity of *Cronobacter sakazakii*. Virulence, 6(5), 433-440.
- Singh N, Goel G, Singh N, et al. (2015). Modeling the pigment production by *Monascus purpureus* MTCC 369 by Artificial Neural Network using rice water based medium. Food Bioscience, 11, 17-22.
- Singh N, Goel G and Raghav M (2015). Prevalence and characterization of *Cronobacter* spp. from various foods, medicinal plants and environmental samples. Current Microbiology, 71(1), 31-38.
- Tamanna, and Ramana J (2015). MATEPRED- A SVM-Based Prediction Method for Multidrug And Toxin Extrusion (MATE) proteins. Computational Biology and Chemistry, 58, 199-20.
- Tiwari S, Thakur R, and Shankar J (2015). Role of Heat shock proteins in cellular functions and fungal biology. Biotechnology Research International. 1-11.
- Tripathi AK, Kumari M, Kumar A and Kumar S (2015). Generation of biogas using pine needles as substrate in domestic biogas plant. IJRER. 5(3), 716-721.

Under revision/ Communicated

- Khan AN and Khar RK (2016). "Multivariate calibration and validation for identification and quantification of diclofenac in tablet using near infrared spectroscopy," Journal of Pharmaceutical Sciences
- Khan AN and Khar RK (2016). "Patients non adherence indicators: A cross sectional study in India," Bulletin of The World Health Organization
- Garlapati VK, Samudrala PJK, Dash A, Banerjee R and Scholz P(2016). Sustainable Green Solvents and Techniques for Lipid Extraction from Microalgae: A Review. Alga Research (Under Revision). (SCIIndexed, IF:4.694)
- Singh N, Raghav M, Narula S and Goel G (2016). Profiling of virulence determinants in *Cronobacter sakazakii* isolates from different plant and environmental commodities. Current Microbiology (under revision)
- Randhawa R, Duseja A and Changotra H (2016).A novel Tetra-primer ARMS-PCR based assay for genotyping SNP rs12303764(G/T) of human Unc-51 Like Kinase 1 gene. Molecular Biology Reports (acceptable after revision)
- Jain S, Thakur N, Vashistt J, Grover N, Krishnan T and Changotra H (2016) .Predominance of unusual rotavirus G1P[6] strain in North India: an evidence from hospitalized children and adult diarrheal patients. Infection, Genetics and Evolution(acceptable after revision)
- Tiwari S, Gupta N, Udaybanu M and Shankar J (2016) Anti-aspergillus properties of phytochemicals against aflatoxin producing *Aspergillus flavus* and *Aspergillus parasiticus*. (Under revision)
- Mehla K and Ramana J (2016)Molecular Dynamics Simulations of quinolone resistance associated T86I and P104S mutations in *C. jejuni* gyrA: Unraveling structural repercussions (Under review)
- Mehla K and Ramana J: Tapping into *Salmonella typhimurium* LT2 genome in a quest to explore its therapeutic arsenal: a metabolic network modeling approach (Under review)

- Mehla Kand Ramana J: Surface Proteome Mining for Identification of Potential Vaccine Candidates Against *Campylobacter jejuni*: An in silico approach (Under review)
- Jain S, Thakur N, Vashistt J, Grover N, Krishnan T and Changotra H (2016) .Predominance of unusual rotavirus G1P[6] strain in North India: an evidence from hospitalized children and adult diarrheal patients. Infection, Genetics and Evolution(acceptable after revision)

Gene Bank submissions:

1. **SharmaV, Mahajan R, Attri S. and Goel G. (2016). Diversity of microbial communities in traditional starter used in food fermentation.**

    - Uncultured Klebsiella alba isolate DGGE gel band A1 [Sequence Id: KX583581]
    - Uncultured Bifidobacterium pseudocatenulatum isolate DGGE gel band A2 [Sequence Id:KX583582]
    - Uncultured Bifidobacterium kashiwanohense isolate DGGE gel band B1 [Sequence Id:KX583583]
    - Uncultured Bifidobacterium catenulatum isolate DGGE gel band B2 [Sequence Id: KX583584]
    - Uncultured Bifidobacterium angulatum isolate DGGE gel band B3 [Sequence Id: KX583585]
    - Uncultured Alloscardovia omnicolens isolate DGGE gel band B4 [Sequence Id: KX583586]
    - Uncultured Bifidobacterium callitrichos isolate DGGE gel band B5 [Sequence Id: KX583587]
    - Uncultured Bifidobacterium pseudocatenulatum isolate DGGE gel band B6 [Sequence Id:KX583588]
    - Uncultured Bifidobacterium pseudocatenulatum isolate DGGE gel band B8 [Sequence Id:KX583589]
    - Uncultured Bifidobacterium longum isolate DGGE gel band G1 [Sequence Id: KX583590]
    - Uncultured Bifidobacterium breve isolate DGGE gel band G2 [Sequence Id: KX583591]
    - Uncultured Bifidobacterium breve isolate DGGE gel band E1 [Sequence Id: KX583592]
    - Uncultured Streptomyces argenteolus isolate DGGE gel band E2 [Sequence Id: KX583593]
    - Uncultured Dickeya chrysanthemi isolate DGGE gel band H1 [Sequence Id: KX583594]
    - Uncultured Klebsiella sp. isolate DGGE gel band H2 [Sequence Id: KX583595]
    - Uncultured Klebsiella sp. isolate DGGE gel band H3 [Sequence Id: KX583596]
    - Uncultured Bifidobacterium sp. isolate DGGE gel band H4 [Sequence Id: KX583597]
    - Uncultured Propionivibrio militaris isolate DGGE gel band H5 [Sequence Id: KX583598]

2. **Attri S, Mahajan R. and Goel G (2016). Analysis of faecal microflora of an infant as revealed by PCR-DGGE 16S ribosomal RNA gene, partial sequence.**

- Uncultured Enterococcus sp. isolate gel band G7 [Sequence Id: KU891046]
- Uncultured Enterococcus sp. gel band G8 [Sequence Id: KU891047]
- Uncultured Streptococcus sp. isolate DGGE gel band G11 [Sequence Id: KU891048]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G44 [Sequence Id: KU877499]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G43 [Sequence Id: KU877500]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G42 [Sequence Id: KU877501]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G41 [Sequence Id: KU877502]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G40 [Sequence Id: KU877503]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G39 [Sequence Id: KU877504]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G38 [Sequence Id: KU877505]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G37 [Sequence Id: KU877506]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G36 [Sequence Id: KU877507]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G35 [Sequence Id: KU877508]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G34 [Sequence Id: KU877509]
- Uncultured Eubacterium sp. isolate DGGE gel band G33 [Sequence Id: KU877510]
- Uncultured Dialister sp. isolate DGGE gel band G32 [Sequence Id: KU877511]
- Uncultured Dialister sp. isolate DGGE gel band G31 [Sequence Id: KU877512]
- Uncultured Gemmiger sp. isolate DGGE gel band G30 [Sequence Id: KU877513]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G29 [Sequence Id: KU877514]
- Uncultured Streptococcus sp. isolate DGGE gel band G28 [Sequence Id: KU877515]
- Uncultured Veillonella sp. isolate DGGE gel band G27 [Sequence Id: KU877516]
- Uncultured Bifidobacterium sp. isolate DGGE gel band G26 [Sequence Id: KU877517]

- Uncultured Brevundimonas sp. isolate DGGE gel band G25 [Sequence Id: KU877518]
- Uncultured Lactobacillus sp. isolate DGGE gel band G13 [Sequence Id: KU877519]
- Uncultured Streptococcus sp. isolate DGGE gel band G12 [Sequence Id: KU877520]
- Uncultured Lactobacillus sp. isolate DGGE gel band G10 [Sequence Id: KU877521]
- Uncultured Enterococcus sp. isolate DGGE gel band G9 [Sequence Id: KU877522]
- Uncultured Enterococcus sp. isolate DGGE gel band G6 [Sequence Id: KU877523]
- Uncultured Clostridium sp. isolate DGGE gel band G5 [Sequence Id: KU877524]
- Uncultured Enterococcus sp. isolate DGGE gel band G4 [Sequence Id: KU877525]
- Uncultured Enterococcus sp. isolate DGGE gel band G3 [Sequence Id: KU877526]
- Uncultured Enterobacteriaceae bacterium isolate DGGE gel band G2 [Sequence Id:KU877527]
- Uncultured Escherichia sp. isolate DGGE gel band G1 [Sequence Id: KU877528]

3. Singh N, Raghav M, Yennamalli RM and Goel G Cronobacter sakazakii strain N15 glutamine-tRNA ligase (glnS) gene, partial cds. GenBank: KX518737.1
4. Singh N, Raghav M, Yennamalli RM and Goel G Cronobacter sakazakii strain N112 glutamine-tRNA ligase (glnS) gene, partial cds GenBank: KX427522.1
5. Singh N, Raghav M , Yennamalli RM and Goel G Cronobacter sakazakii strain N13 glutamine-tRNA ligase (glnS) gene, partial cds GenBank: KX427521.1
6. Singh N, Raghav M, Yennamalli RM and Goel G glutamine-tRNA ligase, partial [Cronobacter sakazakii] GenBank: ANW82728.1
7. Singh N, Raghav M, Yennamalli RM and Goel G glutamine-tRNA ligase, partial [Cronobacter sakazakii] GenBank: ANW82727.1
8. Singh N, Raghav M , Yennamalli RM and Goel G glutamine-tRNA ligase, partial [Cronobacter sakazakii] GenBank: ANW82726.1
9. Jain S, and Changotra H. Human rotavirus A strain JU-SOL-5 VP7 Glycoprotein gene. Accession number: KP938513.
10. Jain S, and Changotra H. Human rotavirus A strain JU-SOL-5 VP4 Glycoprotein gene. Accession number: KP938517.
11. Jain S, and Changotra H. Human rotavirus A strain JU-SOL-58 VP7 Glycoprotein gene. Accession number: KP938514.
12. Jain S, and Changotra H. Human rotavirus A strain JU-SOL-58 VP4 Glycoprotein gene. Accession number: KP938518.
13. Jain S, and Changotra H. Human rotavirus A strain JU-SOL-77 VP7 Glycoprotein gene. Accession number: KP938515.
14. Jain S, and Changotra H. Human rotavirus A strain JU-SOL-77 VP4 Glycoprotein gene. Accession number: KP938519.
15. Jain S, and Changotra H. Human rotavirus A strain JU-SHI-14 VP7 Glycoprotein gene. Accession number: KP938512.

16. Jain S, and Changotra H. Human rotavirus A strain JU-SHI-14 VP4 Glycoprotein gene. Accession number: KP938516.
17. Jain S, Yadav N and Changotra H. Human rotavirus A strain JU-SOL-173 VP7 glycoprotein (VP7) gene. Accession number: KM880063.
18. Jain S, Yadav N and Changotra H. Human rotavirus A strain JU-SOL-173 VP4 protein (VP4) gene. Accession number: KM880064.
19. Gustavo C. Cerqueira, Shankar J, Jennifer R. Wortman, Karl V. Clemons, David A. Stevens. Short Read Archive (SRA-NCBI) under the following accession identifiers: SRX1201397, SRX1201396, SRX1201395, SRX1201394, SRX1201392 (Unreleased).
20. KumarA and Kumar S [*Bacillus megaterium* SAG1] Sequencing of gold mine soil bacterial strains. [Accession no. of sequence KU163234].
21. Kumar A and KumarS[*Lysinibacillus sphaericus* SAG2] Sequencing of gold mine soil bacterial strains. [Accession no. of sequence KU163235].
22. Kumar A and Kumar S [*Bacillus* sp. SAG3] Sequencing of gold mine soil bacterial strains. [Accession no. of sequence KU163236].
23. Kumar A and Kumar S [*Bacillus amyloliquefaciens* SAG4] Sequencing of gold mine soil bacterial strains. [Accession no. of sequence KU163237].
24. Kumar A and KumarS [Bacillus sp. SAG5] Sequencing of gold mine soil bacterial strains. [Accession no. of sequence KU163238].
25. Kumar A and Kumar S[Brevibacterium] frigoritolerans SAG6] Sequencing of gold mine soil bacterial strains. [Accession no. of sequence KU163239]
26. Kumar Aand Kumar S [*Chryseomicrobium amylolyticum* SAG7] Sequencing of gold mine soil bacterial strains. [Accession no. of sequence KU163240].
27. Kumar A and Kumar S [*Bacillus safensis* SAG8] Sequencing of gold mine soil bacterial strains. [Accession no. of sequence KU163241].
28. Kumar Aand KumarS [*Pseudomonas balearica* SAE1] Sequencing of e-waste bacterial strains. [Accession no. of sequence KU053282].
29. Verma R and Kumar S [*Geobacillus thermodenitrificans* X1] Isolation of thermophilic Geobacillus thermodenitrificans X1 from hot spring soil. [KT899095].
30. Singh N, Raghav M, YennamalliRM. and GoelG. *Cronobacter sakazakii* strain N15 glutamine-tRNA ligase (glnS) gene, partial cds. GenBank: KX518737.1
31. Singh N, Raghav M, Yennamalli RM. and Goel G.*Cronobacter sakazakii* strain N112 glutamine-tRNA ligase (glnS) gene, partial cds GenBank: KX427522.1
32. Singh N, Raghav M, Yennamalli RM. and Goel G.*Cronobacter sakazakii* strain N13 glutamine-tRNA ligase (glnS) gene, partial cds GenBank: KX427521.1
33. Singh N, Raghav M, Yennamalli RM. and Goel G. glutamine-tRNA ligase, partial [*Cronobacter sakazakii*] GenBank: ANW82728.1
34. Singh N, Raghav M, Yennamalli RM. and Goel G. glutamine-tRNA ligase, partial [*Cronobacter sakazakii*] GenBank: ANW82727.1
35. Singh N, Raghav M, Yennamalli RM. and Goel G. glutamine-tRNA ligase, partial [*Cronobacter sakazakii*] GenBank: ANW82726.1.
36. Kanwar S, Kumar R, Walia V, and Bansal S. [*Klebsiella pneumoniae* strain STD]Cultured lignin-degrading bacterial strains. [Accession no.: KX180916].
37. Kanwar S, Kumar R, Walia V, and Bansal S. [*Klebsiella pneumoniae* strain STD] Cultured lignin-degrading bacterial strains. [Accession no.: KX180917].
38. Kanwar S, Kumar R, Walia V, and Bansal S. [Enterobacter sp. UPIB] Cultured lignin-degrading bacterial strains. [Accession no.: KX180918].

39. Kanwar S, Kumar R, Walia V, and Bansal S. [*Enterobacter cloacae* strain SS] Cultured lignin-degrading bacterial strains. [Accession no.: KX180919].

Papers in Proceedings of Conferences/Symposia/Seminars

1. Kotvi P, Enesh, Sharma S and Sood H (2015). Artificial seed production of Gentiana kurroo Royle (IPPC1013). Challenges and Strategies in plant Biology Research. 3rd international plant Physiology Congress. Convention Centre JNU, New Delhi, India, Dec.11-14, pp298

2. Kumar A and Singh TR (2016). System Biology Approach for Gene Set Enrichment and Topological Analysis of AD. Proceedings of the International Conference on Bioinformatics and Systems biology(BSB)-2016, 4 - 6 March, 2016 at IIIT-A, Allahabad, India.

3. Mehla K and Ramana J (2016).Constraint-based analysis of Clostridium difficile metabolic network; FBA and MOMA approach for drug target identification, at ABECBAB: International Conference on Advances in Biomedical Engineering, Cancer Biology, Stem Cells, Bioinformatics and Applied Biotechnology, May 21, 2016, JNU, New Delhi.

4. Munjal NS, Sharma M, Kumar N and Rout C (2016). QSAR Model Development for Solubility Prediction of Paclitaxel, Proceedings of the International Conference on Bioinformatics and Systems Biology (BSB2016)" published in IEEE Explorer, 4 - 6 March, at IIIT, Allahabad, India, DOI: 10.1109/BSB.2016.7552139.

5. Popli D and Sood H (2016). Optimization of liquid MS medium for enriching biomass of Dactylorhiza hatagirea. 3rd International Conference on Agriculture, Horticulture & Plant Sciences, 25-26 June, New Delhi, India.

6. Verma R, Kumar A, Tripathi AK, Kumar A and Kumar S (2016). Biogas for community services. In Conference Proceedings (full paper) National biogas convention 2015, 113-122. IIT Delhi.

Abstracts in Proceedings of Conferences/Symposia/Seminars

1. Attri S, Goel G (2015). Antioxidant and polyphenolic content of Sea buckthorn berries subjected to simulated gastric and pancreatic digestion. Bioprocessing India 2015, IIT Madras, Dec 17- 19 2015, pp 116.
2. Chauhan RS, Shitz K and Sood H (2015).Quality parameters to regulate herbal raw material of a pharmacologically important medicinal herb Picrorhiza kurroa. Proceedings of6th World Congress of Biotechnology. Journal of Biotechnology and BiomaterialsOctober 05-07,New Delhi, India . 5 (6):192 ISSN:2155-952X (Abstract)
3. Chawla A, Stobdan T, Srivastava RB, Chauhan RS and Kant A (2015). Cross-species application of female specific markers and sex-biased gene expression in seabuckthorn. 7th Conference of the International Seabuckthorn Association on Seabuckthorn- Emerging Technologies for Health Protection and Environmental Conservation. November 24-26 2015 New Delhi India.
4. Dogra T, Mukherjee S, Joshi V, Khosla R and Changotra H (2015). Role of genetic variants in Autophagy related gene 7 (Atg7) (rs35807939) in Asthma in North Indian population. National Conference on Recent Trends in Biomedical Engineering, Cancer Biology, Bioinformatics and Applied Biotechnology

(BECBAB-2015), Jawaharlal Nehru University, New Delhi, 28 November 2015.

5. Jha D, Joshi V, Sharma A, Khosla R and Changotra H (2015) .Autophagy Related Gene 5 (Rs17587319) Variants in Asthmatic Patients in North Indian Population. 6th World Congress on Biotechnology, New Delhi, India, 05-07 October, 2015.
6. Kumar A, Dhammi P, Saini HS and Kumar S. ([November 19-20, 2015]) Development of integrated treatment systems for resource recovery and bioremediation of e-waste. Central University of Himachal Pradesh, Dharamshala, HP. (Best Poster Award To Anil Kumar)
7. Kumar A, Mehta V, Raj U, Varadwaj PK , Udayabanu M and Singh TR (2015). Insights From Docking And Molecular Dynamic Simulation of Acetyl cholinesterase Inhibitors (AChEI) Structural Model For Possible Therapeutic Of Alzheimers Disease(AD). Proceedings of the Annual Conference of Indian Academy of neurosciences (IAN)-2015, October 31 - November 2, 2015 at Panjab University, Chandigarh, India.
8. Kumar A, Raj U, Varadwa PK, Singh TR (2015). Flexible docking and simulation studies of herbal compounds as Acetylcholinesterase inhibitor(AChEI) for Alzheimers disease. Proceedings of the National Conference on Bioinformatics Panorama in Agriculture and Health 5-6 October 2015at SHIATS, Allahabad, India.
9. Sharma A, Duseja A and Changotra H (2015). Association of autophagy gene Atg16L1 variant rs2241879 and Chronic Hepatitis B in North Indian population. National Conference on Recent Trends in Biomedical Engineering, Cancer Biology, Bioinformatics and Applied Biotechnology (BECBAB-2015), Jawaharlal Nehru University, New Delhi, 28 November 2015.
10. Sharma K, Raghav M, and Goel G (2015). Identification of potential lactic acid bacteria from indigenous fermented foods of Himachal Pradesh for probiotic attributes. Bioprocessing India, Dec 17-19, 2015, IIT Madras, Chennai
11. Singh N and Goel G (2015). Characterisation of extracellular polymeric substance (EPS) of biofilm forming food-borne *Cronobacter sakazakii*. 7th ASM Conference on Biofilms. Chicago, IL, Oct 24-29, 2015.
12. Singh N., Patil A., Prabhune A. and Goel G (2015). Detection and characterization of Quorum Sensing signal molecules of *Cronobacter sakazakii*. Second International Conference on Mass Spectrometry (ICMS 2015), Kottayam, Kerala, 11-14th Dec. 2015.
13. Thakur R and Shankar J (2015). In-silico T-cell epitope mapping from antigens of *Aspergillusfumigatus* for potential candidate for Aspergillus-specific T cells. Proceedings of National conference on Recent Trends in Biomedical Engineering, Cancer Biology and Bioinformatics organized by Krishi Sanskriti, JNU, November 28th, 2015. New Delhi, India
14. Vij A and Changotra H (2015). In silico prediction and analysis of non synonymous single nucleotide polymorphisms (nsSNPs) in autophagy related gene 5 (ATG5). National Conference on Recent Trends in Biomedical Engineering, Cancer Biology, Bioinformatics and Applied Biotechnology (BECBAB-2015), Jawaharlal Nehru University, New Delhi, 28 November 2015.
15. Gautam H and Bansal S (2016). Optimization of L-arginase Production from Lactobacillus species. Proceedings of3rd International Conference on Biotechnology & Bioinformatics (ICBB-2016), Pune, 5-7 Feb, 2016, at

International Center for Stem Cells, Cancer and Biotechnology (ICSCCB), Pune, India.

16. Mishra D, Poonam, Rout C and Singh R (2016). Synthesis of chromen-2-one derivatives as potential anti-alzheimeric agents. 1st National Conference on Emerging Trends and Future Challenges in Chemical Sciences, 3-4 February at Kirori Mal College, University of Delhi, India.
17. Mishra D, Veer B, Rout C and Singh R (2016). Synthesis of selected Triazole Derivatives as potential Anti-Alzheimeric Agent. 6th International Symposium on "Current Trends in Drug Discovery & Research" 25-28 February at CDRI Lucknow, Lucknow, India
18. Sharma S, Kapoor S, Sharma N, Chauhan RS, Chaurasia OP and Sood H (2016). Callus induction and shoot regeneration for conservation of high value medicinal plant Rhodiola imbricata. 3rd International Conference on Biotechnology and Bioinformatics(ICBB-2016).5-7 Feb, 2016 Pune, India
19. Thakur R and Shankar J (2016). In silico analysis of single nucleotide polymorphisms in human Dectin-1 gene and their impact on fungal infections. Proceedings of National symposium on computational system biology organized by dept. of biotechnology and bioinformatics, March 18th-20th,JUIT, Solan,
20. Tiwari S, Thakur R, Geol G and Shankar J (2016). Identification and functional characterization of protein involved in germination of Aspergillus flavus conidia. Proceedings of 7th Advances against Aspergillosis, March 3rd -5th,2016. Manchester, United Kingdom.
21. Verma R, Bhalla A, Kumar S (February 25-27, 2016). Isolation of thermophilic xylanase from hot spring soil sample.Second International Conference Recent advances in Bio-energy research (ICRABR-2016).National Institute of Bio-Energy, Kapurthala, Punjab(Ministry of New and Renewable Energy, Govt. of India.

Conferences/Symposia/Workshops/Seminars (participated/ Papers Presented): Conducted/ attended

1. Dr. Anil kant: National Symposium on Computational Systems Biology NSCSB – 2016 March 18-20, 2016 Department of Biotechnology and Bioinformatics (JUIT), H.P. National Network for Mathematical and Computational Biology Department of Mathematics Indian Institute of Science Bangalore 560 012.
2. Dr. Anil kant: Workshop on Statistical Techniques in Biological and Medical Sciences
   STBMS-16 June 13- 18, 2016 DBT Sponsored, Deptt. Of Biotechnology and Bioinformatics JUIT Solan.
3. Dr. Gopal Singh Bisht: Attended the DBT sponsored workshop on "Statistical Techniques in Biological and Medical Sciences. JUIT, Waknaghat, HP-173234, India: 13th – 18th June, 2016.
4. Dr. Gopal Singh Bisht: Attended the Faculty Development Program (FDP). JUIT, Waknaghat, HP-173234, India: 24th – 30th December, 2015
5. Dr. Gunjan Goel: Attended the Faculty Development Program (FDP) [JUIT, Waknaghat, HP-173234, India: 24th – 30th December, 2015.
6. Dr. Hemant Sood:Attended a workshop on Essential oil perfumery and aromatherapy from 12th – 14th March 2016 organized by MSME-Technology

Development Center, Fragrance and Flavor development Centre, Kannauj-209726, at New Delhi, INDIA.

7. Dr. Hemant Sood: Attended faculty Development programme organized by JUIT 14th-19th July, 2015.
8. Dr. Hemant Sood:Oral presentation on in vitro production of hypericin rich shoots of *Hypericum perforatum*. Proceedings of 6th World Congress of Biotechnology. Journal of Biotechnology and Biomaterials. October 05-07, New Delhi, India. 5(6):193 ISSN:2155-952X.
9. Dr.Jata Shankar: Outcome based Education in Biotechnology and Bioinformatics. Faculty Development Program. [JUIT, Waknaghat, H.P., India: 24th-30th December, 2015].
10. Dr. Jata Shankar: Statistical Techniques in Biological and Medical Sciences. Workshop. [DBT and JUIT, Waknaghat, H.P., India: 13th - 18th June, 2016].
11. Dr. Jata Shankar: National Symposium on Computational System Biology. Organizing Committee member. [SERB & DST JUIT, Waknaghat, H.P., India : 18th – 20th March, 2016]
12. Dr. R.S. Chauhan: Chairman, Statistical Techniques in Biological & Medical Sciences, June 13-18, 2016 at Jaypee University of Information Technology, Waknaghat; Co-Sponsored by the Department of Biotechnology, Ministry of Science & Technology, Govt. of India.
13. Dr. R.S. Chauhan: Chairman National Symposium on Computational Systems Biology, March 18-20, 2016, Jaypee University of Information Technology, Waknaghat, Co-Sponsored by the Department of Biotechnology, Ministry of Science & Technology, Govt. of India.
14. Dr. R.S. Chauhan:Organized Inter-Collegiate Public Speaking Contest on Biotechnology for Universities/Institutes in North India in collaboration with the multi-national biotech industry, Novozymes on Sept. 25, 2015.
15. Dr. R.S. Chauhan: Coordinator, Faculty Development Programme on "Outcome-based Education in Biotechnology & Bioinformatics" Dec. 20-26, 2015.
16. Dr. Saurabh Bansal: Coordinator, Inter-Collegiate Public Speaking Contest on Biotechnology for Universities/Institutes in North India in collaboration with the multi-national biotech industry, Novozymes on Sept. 25, 2015.
17. Dr. Saurabh Bansal: Attended Faculty Development Programme on 'Outcome-based education in Biotechnology' at JUIT, Waknaghat, 24-30 Dec, 2015.
18. Dr. Tiratha Raj Attended National Symposium on Computational Systems Biology (NSCSB 2016) symposium (March 18-20, 2016).
19. Dr. Tiratha Raj Attended Statistical Techniques in Biological and Medical Sciences (STBMS 2016) workshop (June 13-18, 2016).
20. Dr. Vijay Kumar Garlapati: Attended the DBT sponsored workshop on "Statistical Techniques in Biological and Medical Sciences [JUIT, Waknaghat, HP-173234, India: 13th – 18th June, 2016]
21. Dr. Vijay Kumar Garlapati: Attended the BIRAC workshop on "Bio-Entrepreneurship, Grant-Writing & Intellectual Property Management [Anna University, Chennai, Tamilnadu – 600113, India: 7th – 8th Jan 2016]
22. Dr. Vijay Kumar Garlapati: Attended the Faculty Development Program (FDP) [JUIT, Waknaghat, HP-173234, India: 24th– 30th December, 2015]
23. Dr. Vijay Kumar Garlapati: Atteneded the short term course on "Advances in Industrial Biotechnology" [NIT Jalandhar, Jalandhar, Punjab - 144011, India: Nov 30th November – 4th December, 2015].

24. Dr.Udayabanu M (2016). Statistical Techniques in Biological and Medical Sciences. JUIT. 13-18th June 2016.
25. Dr. Udayabanu (2016). National Symposium on computional Biology. JUIT. 18-20th March 2016.
26. Dr.Udayabanu M (2016). International Conference on Innovations in Pharmaceutical Sciences. Sri Aurobindo Institute of Pharmacy, Indore. 27-28th Feb2016.
27. Dr. Udayabanu M (2015). Neuroscience Research from mechanisms to Applications. Panjab University, Chandigarh. 31st Oct' – 2nd Nov' 2015.
28. Dr.Udayabanu M (2015) Attended the Faculty Development Program (FDP) [JUIT, Waknaghat, HP-173234, India: 24th– 30th December, 2015.

Invited Lectures

1. Dr. Harish Changotra:"Molecular Biology Techniques" invited talk cum workshop at Doaba College, Janandhar, Punjab (9th April 2016).
2. Dr. Sudhir Kumar: "Extremophilic xylanases for efficient conversion of lignocellulosic biomass" in the second international conference on '"Recent advances in Bio-energy research" ICRABR- 25 to 27 February 2016 at S.S.S. National Institute of Renewable Energy, Kapurthala, Pb. (An Autonomous Institution of the Ministry of New and Renewable Energy, Govt. of India).
3. Dr. Sudhir Kumar: "Biogas for community service" in the 'National Biogas Convention 2015" – 15-16 September 2015 at Centre of Rural Development and Technology, IIT Delhi.
4. Dr. Tiratha Raj Singh: "Computational predictions and evaluations for biological parameters and regulatory patterns for Alzheimer's disease" in the XXXIII Annual Conference of Indian Academy of Neurosciences at PU, Chandigarh on 31st Oct., 2015.

Awards/recognition achieved

1. Dr. Jata Shankar: Received Scholarship award from 7th Advances Against Aspergillosis, Manchseter, UK. Presented the research work entitled Identification and functional categorization of proteins involved in germination *Aspergillus flavus* conidia.
2. Dr. Sudhir Kumar: Best Poster Award: Best poster award at Central University of Himachal Pradesh, Dharamshala, HP. for the work presented: Development of integrated treatment systems for resource recovery and bioremediation of e-waste.
3. Dr. C.Rout: Best paper award at 1st National Conference on Emerging Trends and Future Challenges in Chemical Sciences, 3-4 February at Kirori Mal College, Kirori Mal College, University of Delhi, India.
4. Dr. C.Rout: Best paper award in Proteomics Session at International Conference on Bioinformatics and Systems Biology (BSB2016)", 4 - 6 March, at IIIT, Allahabad, India.
5. Mr.Ahmed Nawaz khan:Media Recognition

1 In 7 Indian Drugs Revealed As Substandard, Charu Bahri, February 15, 2016
IndiaSpend Newsletter, abplive, rediff and many more…

http://www.indiaspend.com/cover-story/1-in-7-indian-drugs-revealed-as-substandard-97614
http://www.abplive.in/india-news/1-in-7-indian-drugs-revealed-as-sub-standard-291071
http://www.rediff.com/money/special/special-beware-1-in-7-indian-medicines-revealed-as-substandard/20160216.htm
Drug Controller begins review of alarming findings on substandard drugs from a new pilot study By E Kumar Sharma, February 18, 2016
Business Today
http://www.businesstoday.in/sectors/pharma/drug-controller-findings-on-substandard-drugs-new-pilot-study/story/229316.html
Low-quality drugs in India raise concerns, By K. V. Venkatasubramanian, February 29, 2016
Special to C&EN, American Chemical Society (ACS) Magazine
http://cen.acs.org/articles/94/i9/Low-quality-drugs-India-raise.html?type=paidArticleContent
Many Indian Drugs Sub-standard, Reveals New Study, By Charu Bahri
February 16, 2016
IndiaWest
http://bloximages.chicago2.vip.townnews.com/indiawest.com/content/tncms/assets/v3/eedition/b/ef/bef7650f-0677-5c88-ab33-264d06c1afda/56c51152a82fc.pdf.pdf
High percentage of drugs in the Indian market is substandard, Written by Thomas Lim Meghalaya Times: http://meghalayatimes.info/index.php/editorial/33369-high-percentage-of-drugs-in-the-indian-market-is-substandard

Honorary Work (Editor, reviewer, committee expert, Session Chair, etc.)

1. **Dr. R.S. Chauhan**

- Editor: Journal of Plant Biochemistry & Biotechnology
- Reviewer for BMC Genomics, Journal of Plant Physiology, PLoS One, Journal of Plant Growth Regulation, etc.

2. **Dr. Vijay Kumar Garlapati**

- Serving as an International Advisory Panel Member, Elsevier
- Serving as a Editorial Board Member in
  - African Journal of Biotechnology
  - Journal of Biotechnology, Bioinformatics and Bioengineering
  - Bioengineering and Bioscience
  - Trends in Biotechnological Research
  - European Journal of Biotechnology and Bioscience
  - Haya:The Saudi Journal of Biological Sciences
  - Pharmaceutical and Biomedical Sciences: An International Journal (PBIJ)
  - International Journal of Biology Research.
- Serving as a Reviewer for
  - Food Research International (Elsevier)
  - Journal of the Taiwan Institute of Chemical Engineers (Elsevier)
  - Waste Mangement (Elsevier),

- International Journal of Biological Macromolecules (Elsevier)
- Biocatalysis and Biotransformation (Elsevier)
- ACS Sustainable Chemistry (ACS).
- PLOS One (PUbMed)
- Food and Bioprocess Engineering (Springer)
- Journal of Bioprocess Engineering and Biorefinery (ASPUB)
- IEEE Conferences (IEEE)

3. **Dr. Gopal Singh**

- **Reviewer**

- RSC Advances
- European Journal of Medicinal Chemistry
- Bio-organic Medicinal Chemistry

4. **Dr. Jitendraa Vashistt**

- Reviewer:

- Journal of Bimolecular Structure & Dynamics
- Science Journal of Environmental Engineering Research
- OMICS: A Journal of Integrative Biology

5. **Dr. Sudhir Syal**

- Reviewers for Journals
-
  - Environmental Geochemistry and Health (Springer)
  - Springer Plus (Springer)
  - Process Biochemistry (Elsevier)
- External examiner for M.Sc. - Microbiology thesis of Y.S. Parmar University of Horticulture and Forestry, Nauni, Solan, H.P. (2 December, 2015)
- External thesis evaluator for Ph.D. - thesis for Y.S. Parmar University of Horticulture and Forestry, Nauni, Solan, H.P. (March, 2016)

6 Dr. Rahul Srivastava

- **Reviewer for journals**

- Journal of the American Academy of Dermatology (Elsevier)
- JAAD Case Reports (Elsevier)
- African Journal of Microbiology Research

7 Dr. Gunjan Goel

- Review Editor: Frontiers in Systematic Microbiology

- **Reviewer:**

  - Frontiers in Microbiology,
  - Fungal Biology,
  - PLOSone, Anaerobe,
  - Current Microbiology,
  - The Science of total Environment,
  - Research in Biotechnology,
  - Bioresources and Bioprocessing

8 Dr. Harish Changotra

- **Reviewer:**

  - Cellular and Molecular Life Sciences (Impact Factor 5.9), Critical Reviews in Microbiology (Impact factor 8.0),
  - Vaccine (Impact Factor 3.5),
  - PLoS one (Impact factor 3.0),
  - World Journal of Gastroenterology (Impact Factor 2.5),
  - Gene (Impact Factor 2.5),
  - International Journal of Biology,
  - European Journal of Molecular Biology,
  - International Journal of Preventive Medicine

- Member Editorial Board of International Journal of Biology, Pharmacy and Allied Sciences (ISSN: 2277-4998); International Journal of Research in Biosciences (ISSN: 2319–2844); Journal of Cell Science and Molecular Biology; Journal of Immunology and Vaccine Technology.

9. Dr. Anil Kant:

- **Reviewer:**

  - Scientia horticulturae
  - Euphytica

10. Dr. Hemant Sood

- **Reviewer:**

  - Springer Plus (Scopus index Thomson Reuters)

11. Dr. J. Ramanna

- **Reviewer:**

  - Omics: A journal of Integrative Biology
  - Briefings in Bioinformatics

12. Dr. Udaybanu

- **Reviewer**

  - Plosone
  - Neurochemistry International
  - Neuroscience Letters

- Session Chair: Recent advances in Green Nanotechnology, Session: Applications of Nanotechnology in Drug Delivery. Bahra University, September 30th 2016.

13. Dr. Tiratha Raj Singh:

- Convener: National Symposium on Computational Systems Biology (NSCSB), March, 18-20, 2016.
- Coordinator: National workshop on Statistical techniques in biological and medical sciences(STBMS), June, 13-18, 2016.
- Coordinator: Bioinformatics Module in summer training, June 10-July, 09, 2016.
- Academic Editor, PLOSONE.
- Managing Editor, IJCB.

- **Reviewer:**

  - BMC Bioinformatics
  - PlosOne
  - Molecular Cancer
  - GENE
  - Molecular Ecology Resources
  - IJBRA

14. **Dr. Jata Shankar**

- Expert for Junior Project Fellow selection in a DST funded project at Shoolini University,HP
- Reviewer for peered reviewed International Research Journal of Public and Environmental Health (IRJPEH). OMIC Journal of Integrative Biology

15. Dr. Y. Ragothaman

- **Reviewer:**

  - PLOS Computational Biology
  - PLOS One,
  - Bioinformation,
  - International Journal for Computational Biology,
  - Journal of Clinical Medicine,
  - International Journal of Biological Macromolecules

16. **Dr. C. Rout**

- Associate Editor and Reviewer, Annals of Applied chemistry (http://pubs.iscience.in/journal/index.php/aac/index)

17. Dr. Saurabh Bansal

- Member of Editorial Board for the journal–Journal of Biotechnology, Bioinformatics and Bioengineering (http://www.sciknow.org/journals/editor/id/jbbb)
- Reviewer for Journal of Plant Biochemistry and Biotechnology, Springer.

Faculty Members and their Specialization

Sr. No	Name of Faculty Members	Specializations
1	Dr. R.S.Chauhan	Genomics and Gene Discovery
2	Dr. Harvinder Singh	Genetics and Plant Breeding, Biotechnology
3	Dr. Anil Kant Thakur	Plant Biotechnology, Molecular Biology
4	Dr. Jitender Vashistt	Bacterial Resistance, Clinical Proteomics
5	Dr. Manju Jain	Immunology
6	Dr. Saurabh Bansal	Protein engineering, Enzymology
7	Dr. Jata Shanker	Fungal biology, Functional genomics
8	Dr. Harish Changotra	Molecular Virology
9	Dr. Poonam Sharma	Chemistry
10	Dr. Hemant Sood	Plant Biotechnology
11	Dr. Vijay Kumar Garlapati	Bioprocess Engineering
12	Dr. Gunjan Goel	Microbiology and Food Biotechnology
13	Dr. Sudhir Kumar Syal	Environmental Biotechnology
14	Dr. Rahul Shrivastva	Microbial Pathogenesis, Mycobacteriology
15	Dr. C. Rout	Drug and Vaccine Designing, and Health Informatics
16	Dr. Tiratha Raj Singh	Bioinformatics, Functional genomics, Molecular Evolution and Systems Biology
17	Dr. Jayashree Ramana	Computational study of antibiotic resistance in infectious pathogens
18	Mr. Ahmed Nawaz Khan	Phamraceutical Chemistry & Drug Regulatory Affairs
19	Dr. Gopal Singh Bisht	Medicinal Chemistry
20	Dr. UdayBanu	Neuropharmacology

PhD degrees awarded

1. Mr. Aseem Chawla (2015) PhD. Thesis in Biotechnology-under the supervision of Dr Anil Kant.
2. Mr. Amit Sud (2016) Phd.Thesis in Biotechnology–under the supervision of Dr. Hemant Sood.

DEPARTMENT OF CIVIL ENGINEERING

The Department offers B. Tech. Degree in Civil Engineering and three 2-year M. Tech programmes in Construction Management, Environmental Engineering and Structural Engineering. The Department also offers doctoral program in various fields of Civil Engineering. The undergraduate program has been specially designed keeping in view the emerging civil infrastructure needs of the country as well as the modern emphasis on IT enabled Civil Engineering courses. The curriculum has been prepared to keep it more practice and industry oriented without losing its academic focus.

Infrastructural Strengths

Civil Engineering Department is equipped with laboratories covering the areas of Fluid Mechanics, Concrete Technology, Highway Engineering, Environmental Engineering, Geotechnical Engineering and Surveying. Students are enabled to work with latest equipment like Acoustic Doppler Velocimeter (Vetrino), TOTAL STATION and computerized UTM, Spectrophotometer, Autoclave Vertical High Pressure apparatus, Luminescent Dissolved Oxygen Probe, etc. and also software tools such as MXROADs, ANSYS, PLAXIS-2D, STAAD.pro-2008, MATLAB, Primavera P6, AutoCAD 2013, GEO-5 and Estimator 2.0. Additionally, a Hydraulic Research Lab has been developed for conducting research in the field of Fluvial hydraulics.

List of Laboratories

- CAD Lab
- Concrete Lab
- Environmental Engineering Lab
- Fluid Mechanics Lab
- Geotechnical Engineering Lab
- Highway Engineering Lab
- Surveying Lab
- Workshop Practices Lab
- Fluvial Hydraulics Lab
- Engineering Drawing Hall
- Structural Mechanics Lab

Student Collaboration

R&D Activities

Sponsored Research Projects:	One
New:	No
Ongoing:	No
Completed:	One
Faculty Involved:	Dr. Ashish Kumar

List of sponsored research projects

(1) Project Title: *"Effect of Stream-Wise Spacing of Circular Bridge Piers on Flow Characteristics and Local Scour"*
Under: Fast Track Scheme for Young Scientists, Department of Science and Technology, (DST) New Delhi.
Principal Investigator: Dr. Ashish Kumar
Status: Completed

Outreach Activities

Mr. Anil Kumar , Assistant professor delivered two guest lectures on "Analysis and Design of Structures using SAP and ETABS" and "Finite Element and Modal Analyses of Structures using ANSYS" at University of Petroleum & Energy Studies (UPES), Dehradun; 12th -13th March, 2016.

Publications

Books/Monographs:

"Engineering Mechanics - Statics and Dynamics (2015)" by Anil Kumar Dhiman, Poonam Dhiman, D C Kulshreshtha, McGraw Hill Education, New Delhi. [ISBN: 978-93-39219-17-8, eBook ISBN: 978-93-39219-29-1]

Details on research publications by faculties: In the academic year 2015-16 total 11 research papers were published in the International/National journals (No. in Scopus 10). 10 papers were published in International/ National Conferences.

Articles in Refereed Journals

- Ina Thakur and Saurabh Rawat (2016), "Aerobic Landfill Bioreactor: Modeling and Analysis." Journal of Civil Engineering and Environmental Technology, p-ISSN: 2349-8404; e-ISSN: 2349-879X; Volume 3, Issue 2; January-March, 2016, pp. 175-179.
- Ashok Kumar Gupta (2016), "Effects of Particle Size and Confining Pressure on Breakage Factor of Rockfill Materials using Medium Triaxial Test." *Journal of Rock Mechanics and Geotechnical Engineering, Volume 8, Issue 3, June 2016, pp. 378-388* (scopus index).
- Rajiv Ganguly, Sabnam Thapa (2016). "An assessment of Ambient Air Quality in Shimla City." Current Science. Volume111, Issue 3, pp. 509-516 (SCI Indexed).
- Rajiv Ganguly , Satyarth (2016). "Interrelationships amongst pollutants and their predictions in Shimla city – India." Journal of Industrial Pollution Control, Corrected Proof Article in Press to be published in July-August 2016. (Scopus Indexed).

- Rajiv Ganguly (2016), "E-Waste Management in India – An Overview." International Journal of Earth Sciences and Engineering, Volume9, Issue 2, pp. 574-588. (Scopus Indexed).
- Ankit Singh Mehra, Rajiv Ganguly, Ashok Kumar Gupta, Lav Singh, Abhilash Shukla (2016), "Performance and Durability Evaluation of Bamboo Reinforced Cement Concrete Beams." International Journal of Engineering and Technology, Volume8, Issue 2, pp.1138-1161. (Scopus Indexed). http://www.enggjournals.com/ijet/docs/IJET16-08-02-121.pdf
- Ruchi Devi, Ashish Kumar and Sudhir Kumar (2016). "Comparison of Biogas Production in Ambient Temperature Condition and Under Green House Canopy." Journal of Civil Engineering and Environmental Technology, Volume. 3, Issue. 6, pp 495-499. P-ISSN: 2349-8404; e-ISSN: 2349-879X.
- Jain R. K, Ashish Kumar and Kothyari, U. C., (2015). "Turbulence statistics of flow through degraded channel bed of sand-gravel mixture." Journal of Hydro-environment Research, International Association for Hydro-Environment Engineering and Research, Vol. 9, pp 508–518. (scopus Indexed) (SCI Indexed).
- Niraj Singh Parihar, Rajesh Prasad Shukla, Ashok Kumar Gupta (2015), "Effect of Reinforcement on Soil." *International Journal of Applied Engineering Research, 10* (55), 4147-4151. (scopus Indexed)
- Nikita Gupta, Aditya Tiwary, Poonam, Ashok Kumar Gupta (2015). Advanced Retrofitting Techniques for Reinforced concrete Buildings. *Journal of Civil Engineering and Environmental Technology*, Volume2, Issue 7, pp. 587-592. Google Citation
- Nikita Gupta, Poonam, Ashok Kumar Gupta (2015), "Retrofitting of an Existing Residential Building by Using Shear Wall." *Journal of Civil Engineering and Environmental Technology*, Volume 2, Issue 7, pp. 582-586. Google Citation

Papers in Proceedings of Conferences/Symposia/Seminars

- Rishi Rana, Rajiv Ganguly, Ashok Kumar Gupta (2016). "Impact of Leachate from non-engineered landfill sites on groundwater quality – A case study in Northern India" in 'Trends and Recent Advances in Civil Engineering (TRACE-2016) held during August 11-12, 2016 at Amity University, Noida, India. pp 11-14.
- Ashish Kumar (2016). "Turbulence measurements around circular pier." Souvenir Conference on Water Resources & Hydropower (WRHP-2016), Jun17-18, 2016, University of Petroleum & Energy Studies, Dehradun.(abstract published)
- Ashish Kumar (2016). "Scour around bridge piers." Proc. First International conference on Recent Advances in Civil Engineering, March 19-20, 2016, Jaypee University Anoopshahr, U P, India.

- Deepika Sharma, Rajiv Ganguly (2016). "Leachate Characterization from MSW Landfill Site in Solan" in National Conference on Recent Advances in Civil Engineering (RACE-2016) held during March 19-20, 2016 at Jaypee University, Anoopshahr., India. pp 11-14.
- Deepika Sharma, Rajiv Ganguly (2016) 'Parametric Analysis of Leachate and Water Resources around Municipal Solid Waste Landfill area in Solan' in 4th International Conference on Advancements in Engineering and Technology (ICAET-2016) held during March 18-19, 2016 at BGIET, Sangrur, India. Pp 1378-1381. (Scopus Indexed)
- Nitish Kumar Sharma, Ashish Kumar, Rajiv Ganguly (2016). "Frequency Analysis of Rainfall Data of Dharamshala Region" in 4th International Conference on Advancements in Engineering and Technology (ICAET-2016) held during March 18-19, 2016 at BGIET, Sangrur, India. Pp 1429-1432. (Scopus Indexed)
- Prachi Vasistha, Rajiv Ganguly, Ashok Kumar Gupta (2016). "Biomedical Waste Generation and management in Shimla city – Case Studies" in International Conference on Water, Environment, Energy and Society (ICWEES-2016) held during March 15-18, 2016 at AISECT University, Bhopal, India. (To be published as Book Chapter in Springer World). (To be Scopus Indexed)
- Umesh K singh, Z. Ahmad and Ashish Kumar (2015). "Incipient motion of gravel-silt mixture." Proc. Conf. on Hydraulics and Water Resources, Costal and Environmental Engg. -HYDRO 2015 International, 17-19 December, IIT Roorkee, Roorkee, India.
- Prachi Vasistha, Rajiv Ganguly, Ashok Kumar Gupta (2015). "Questionnaire method for assessing Biomedical Waste in Shimla City – Case Studies of Public and Private Hospitals" in 9th International Conference on Innovative Research in Civil Engineering, Architecture, and Environmental Engineering for Sustainable Development (CEAESD-2015) held during December 12-13, 2015 at Jawaharlal Nehru University (JNU), New Delhi., India. Pp. 11-14.
- Ritika Verma, Anil Kumar, Abhilash Kumar Tripathi, Ashish Kumar and Sudhir Kumar (2015). "Biogas plants for community service." Proc. Conf. on Current & Emerging trends in Indian Biogas & Bio-fertilizer development. – National Biogas Convention- 2015, 15-16 Sept, IIT Delhi, Delhi, India.

Conferences/Symposia/Workshops/Seminars (participated / Papers Presented): Conducted/ attended

Conference/Workshop/Symposium organised by Civil Engineering Department

- Department of Civil Engineering organized one-week Faculty Development Program on "Application of Computational Methods in Civil Engineering Education", 18th -23rd January, 2016, JUIT Waknaghat. Prof. P J Philip, NIT Kurukshetra was the key note Speaker. All the Civil Engineering faculty members attended the FDP.

- Department of Civil Engineering organized two-day Symposium on High Performance and High Strength Concrete – Principles, Development and Applications, March 16-17, 2016, JUIT Waknaghat. Mr. Namit Kumar Assistant Manager (RITES Ltd.) was the key note Speaker. All the Civil Engineering faculty members attended the Symposium.

Conference attended by faculty outside JUIT:

- Dr. Veeresh Gali, Dr. Ashish Kumar, Mr. Anil Kumar and Mr. Abhilash Shulka attended "First International conference on Recent Advances in Civil Engineering, (RACE-2016) March 19-20, 2016, Jaypee University Anoopshahr, U.P., India. Dr. Veeresh Gali presented the expert key note lecture and Dr. Ashish Kumar, Mr. Anil Kumar & Mr. Abhilash Shulka presented their research paper.
- Dr. Ashish Kumar attended National Conference on Water Resources & Hydropower (WRHP-2016), Jun17-18, 2016, University of Petroleum & Energy Studies, Dehradun and presented the research paper.

Significant Awards/ Distinctions

Honorary Work (Editor, Reviewer, Committee Expert, Session Chair etc.)

Prof. Ashok Kumar Gupta:
Reviewer, KSCE Journal of Civil Engineering
Reviewer, ASCE International Journal of Geo-mechanics

Dr. Ashish Kumar
Reviewer: Journal of Water Science Engineering (Elseviesr publication)

Faculty Members and their Specializations (2015-2016)**:**

S.No.	***Name***	***Designation***	***Specialization***	***Research Area***
1	Dr. Ashok K. Gupta	Professor & Head	Geotechnical Engineering	Constitutive modeling of Geological materials, Rock Mechanics and FEM
2	Dr. Veeresh Gali	Professor	Environmental Engineering	Anaerobic treatment of Phenolic and Toxic wastewater
3	Dr. Ashish Kumar	Associate Professor	Water Resources Engineering	Scouring around hydraulic structures, Fluvial Hydraulics

4	Dr. Rajeev Ganguly	Associate Professor	Environmental Engineering	Air pollution, Estimation of NOx / CO concentrations
5	Mr. Anil Kumar	Assistant Professor (G-II)	Structural Engineering	Active control systems, Blast-resistant design, Structural dynamics and reliability
6	Ms. Poonam	Assistant Professor (G-II)	Structural Engineering	Base Isolation, Semiactive Isolation, Retrofitting of structures
7	Mr. Chandrapal Gautam	Assistant Professor (G-II)	Structural Engineering	Rehabilitation of structure, Concrete technology, Fracture Mechanics
8	Mr. Abhilash Shukla	Assistant Professor (G-II)	Structural Engineering	Structural dynamics, Concrete rheology, Blast-resistant materials.
9	Mr. Saurav	Assistant Professor (G-II)	Structural Engineering	Concrete rheology, Development of HPC with Alcofine
10	Mr. Saurabh Rawat	Assistant Professor (G-II)	Geotechnical Engineering	Slope stability problems (including seismic), Soil-nailing, Landfill design
11	Mr. Lav Singh	Assistant Professor (G-II)	Structural Engineering	Structural Analysis and Dynamics, Bridge Engineering, Concrete Technology
12	Mr. Neeraj Singh Parihar	Assistant Professor (G-II)	Geotechnical Engineering	Liquefaction, Slope Stability, Hazard assessment
13	Mr. Santu Kar	Assistant Professor (G-I)	Construction Technology and Management	Risk Management and Delay Analysis in Construction Project, Green Building, Smart City, Concrete Microstructure
14	Mr. Bibhas Paul	Assistant Professor (G-I)	Structural Engineering	Structural Dynamics and Random Vibration, Structural Health Monitoring, Risk and Reliability assessment of structural systems, Stability of Steel Structures, Finite Element Modeling

Research Thrusts of the Department

Fluvial hydraulics, Development of High Performance Concrete, Rock-fill material modeling, Effects of dynamics loads on structures.

Significant achievements of current students and alumni

Academic achievement by the students:

27 students of B Tech. final year Civil Engineering Department qualified the "Graduate Aptitude test in Engineering" (GATE) in 2016. Mr. Roopak Jain (Roll No. CE16S58007329) secured All India Rank (AIR) 6 in the GATE Exam.

Extracurricular activities:

1. Civil Engineering Consortium (CEC) organized International conference "International Convention of Engineering and Management" (ICEM 2016) on 14th May, 2016 at JUIT Waknaghat.
2. A two-day workshop on Foundation analysis was organized by Civil Engineering Consortium (CEC), 13th -14th February, 2016. Expert lecture was given by experts of Civil Simplified, Bangalore. The students of B.Tech third and fourth years, M.Tech. Structural Engineering, Environmental Engineering and Construction Management, and faculty attended the same.

   Extracurricular events organised by Civil Engineering Consortium in the academic year 2015- 2016:

   - Youplay
   - Faculty cricket match
   - Tambola
   - Blind drive
   - Arm wrestling
   - Know your compatibility
   - Chess
   - Jenga

DEPARTMENT OF PHYSICS & MATERIALS SCIENCE

Department offers various interdisciplinary courses and projects at undergraduate level. All faculty members are actively involved in research in different key scientific and technological areas such as Chalcogenides, Microwave and antenna design (numerical modeling, design and simulations), Nanotechnology (Nano ferrites, Carbon Nano structures, Quantum dots, etc.), Polymers & polymer nanocomposites, Optical properties of oxide materials, Dilute magnetic semiconductors, Gas sensors, Arsenic removal and water purification, Solar energy harvesting, etc. The department is offering courses (core & elective) for odd and even semesters of the B.Tech program on a wide spectrum of physics and material based topics such as Wave optics, Laser physics, Statistical physics, Thermodynamics, Atomic physics, Electromagnetism, Solid state physics, Quantum physics, Biophysical techniques, Material science, Optical fibers, Wireless networks, Photonics and microwave devices, Nanotechnology, Thin film technology, Biosensors, etc. The faculty of the department has established many research collaborations with corresponding departments in various other Universities such as Himachal Pradesh University (Shimla), Panjab University (Chandigarh), Delhi College of Engineering, IITs, IISc. Bangalore, IOP, CAT Indore etc. In near future, the Department plans to extend these collaborations to Research Institutes and industries for fruitful realization and productivity of their research outcome. On account of this rigorous research, the Department has come out with research publications in esteemed international and national journals, and also presented their research efforts in many international and national conferences. Many students of the department have obtained their Ph.D degrees in the past and many more are currently pursuing their thesis work. To carry out advance research, financial grants (via sanctioned projects) have also been received from CSIR, DRDO, ISRO, SERB-DST, JSPS-DST etc.

Laboratories:

The department has well equipped laboratories having the latest well maintained instruments that cater to laboratory classes of B.Tech courses. These laboratories have setup such as Newton's Rings, Diffraction grating, polarimeter, radiation physics as Planck's photo cell, Hall Effect set up, Four probe set up, dielectric constant and capacitance measurements, Optical fibres set up, Hysteresis loop, Magnetostriction and Magneto resistance measurement devices. In order to carry out research, the department has additional five laboratories. They are (i) Spectroscopy laboratory with UV-VIS-IR & Photoluminescence setups for optical, and Keithley digital multimeter for electrical I-V measurements (ii) Nanotechnology semiconductor laboratory with a thermal and e-gun vacuum coating unit for thin film deposition, (iii) Synthesis (and sintering) laboratory for chemical synthesis of nanomaterials and high temperature treatment (using a furnace), (iv) Antenna laboratory with antenna design, measurement facility, and it is equipped with latest simulations tools like, HFSS, Empire Xcel, IE3D & other mathematical tools with high end processors (v) Chemical Vapour Deposition laboratory.

Sr. No	Name of the faculty	Designation	Area of Specialization
1	Prof. P.B. Barman	Professor *(& Head*)	Materials Science
2	Prof. Sunil K. Khah	Professor	Electromagnetic Antenna Theory
3	Dr. Vineet Sharma	Associate Professor	Chalcogenides
4	Dr. Pankaj Sharma	Assistant Professor (*Senior Grade*)	Chalcogenides, Quantum dots
5	Dr. Dheeraj Sharma	Assistant Professor (*Senior Grade*)	Polymer nanocomposites
6	Dr. Rajesh Kumar	Assistant Professor (*Senior Grade*)	Nanotechnology
7	Dr. Surajit Kumar Hazra	Assistant Professor (*Grade-II*)	Material & Sensors
8	Dr. Ragini Raj Singh	Assistant Professor (*Grade-II*)	Quantum dot structures
9	Dr. Sanjiv Kumar Tiwari	Assistant Professor (*Grade-II*)	Semiconductors/optics

FACULTY ACTIVITIES

1) Journal Publications (2015-16)

- Bandna Bharti, Santosh Kumar, Rajesh Kumar, *Superhydrophilic TiO_2 Thin Film by Nanometer Scale Surface Roughness and Dangling Bonds*, Applied Surface Science, 364 (2016) 51-60.
- Sarita Kango, Rajesh Kumar, *Magnetite nanoparticles coated sand for arsenic removal from drinking water*, Environmental Earth Science, 75 (2016) 381.
- Sarita Kango, Rajesh Kumar, *Low-cost magnetic adsorbent for As(III) removal from water: adsorption kinetics and isotherms*, Environmental Monitoring and Assessment 188(1), (2016), 1-14.
- Rajinder Kumar, Hitanshu Kumar, Ragini Raj Singh, P.B. Barman, *Variation in magnetic and structural properties of Co-doped Ni-Zn ferrite nanoparticles: a different aspect*, Journal of Sol-Gel Science and Technology 78(3), (2016), 566-575.
- Rohit Sharma, Prashant Thakur, Manoj Kumar, Nagesh Thakur, N.S Negi, Pankaj Sharma, Vineet Sharma, "*Improvement in Magnetic Behaviour of Cobalt doped Magnesium Zinc Nano-Ferrites via Co-precipitation Route*" Journal of Alloys and Compounds 684 (2016) 569 - 581 (Elsevier).
- Prashant Thakur, Rohit Sharma, Manoj Kumar, S.C. Katyal, N.S Negi, Nagesh Thakur, Vineet Sharma, Pankaj Sharma, "*Superparamagnetic La Doped Mn-Zn Nano Ferrites: Dependence on Dopant Content and Crystallite Size*" Materials Research Express 3 (2016) 075001 (14pp) (IOP: UK).
- Pankaj Sharma, *"Glass Forming Ability and Rigidity Percolation in SeTePb Lone Pair Semiconductors"* Applied Physics A 122 (2016) 402 (8pp) (Springer).

- Pankaj Sharma, Mohammed El Bana, Suzan S. Fouad, and Vineet Sharma, *"Effect of compositional dependence on physical and optical parameters of* $Te_{17}Se_{83-x}Bi_x$ *glassy system"* Journal of Alloys and Compounds 667 (2016) 204-210 (Elsevier).
- Dinesh C. Sati, S.C. Katyal, Pankaj Sharma, "*Role of Composition and Substrate Temperature on Nonlinear Optical Properties of GeSeTe Thin Films in 0.4μm to 2.4μm Wavelength Range*" IEEE Transactions in Electron Devices 63(2) (2016) 698-703.
- L.K. Abhilashi, Pankaj Sharma, V.S. Rangra, P. Sharma "*Effect of antimony addition on the optical behaviour of SnSeSb thin films*", Journal of Non-Oxide Glasses, 8 (1) (2016) 17 – 23.
- Pawan Kumar, Rajesh Kumar, Heung No Lee, *Magnetic field induced one-dimensional nano/micro structures growth on the surface of iron oxide thin film*, Thin Solid Films, 592 (2015) 155-161.
- Dahshan, Pankaj Sharma, K.A. Aly, "*Semiconducting quaternary chalcogenide glasses as new potential thermoelectric materials: an As-Ge-Se-Sb case*", Dalton Transactions 44 (2015) 14799–14804 (RSC).
- L.K. Abhilashi, Pankaj Sharma, R. Vaish, P. Sharma, "*Effect of Compositional Dependence on the Physical Properties of Sn-Se-Sb Chalcogenide glasses*" Universal Journal of Physics and Application 9(2) (2015) 58-63.
- Rajinder Kumar, Hitanshu Kumar, Manoj Kumar, Ragini Raj Singh, P B Barman, "*Enhanced Saturation Magnetization in Cobalt Doped Ni-Zn Ferrite Nanoparticles*", J Supercond Nov Magn 28 (2015) 3557-3564.
- D. Gupta, D. Dutta, M. Kumar, P.B. Barman, T. Som, S.K. Hazra, *Temperature dependent dual hydrogen sensor response of Pd nanoparticle decorated Al doped ZnO surfaces*, J. Appl. Phys., 118 (2015) 164501.
- Rajender Singh Singh, P. B. Barman, Dheeraj Sharma, *Enhanced thermal properties of highly monodispersed ZnO nanoparticle / Poly(styrene co acrylonitrile) nanocomposite*, Accepted in POLYMER SCIENCE Series C, 2016.

2) Conference Publications (2015-16)

- Neha Kondal, Sanjiv Kumar Tiwari, *Thermal and temporal evolution of microstructure in polycrystalline ZnO*, AIP Conference Proceedings (2016), 1728(1, International Conference on Condensed Matter and Applied Physics, 2015), 020369/1-020369/5.
- Dikshita Gupta, P.B. Barman, S.K. Hazra, *Effect of silver on the shape of palladium nanoparticles*, AIP Conference Proceedings (2016), 1728 (1, International Conference on Condensed Matter and Applied Physics, 2015), 020542/1-020542/3.
- Bandna Bharti, P.B. Barman, Rajesh Kumar, *XRD analysis of undoped and Fe doped* TiO_2 *nanoparticles by Williamson Hall method*, AIP Conference Proceedings (2015), 1675 (1, Fourth National Conference on Advanced Materials and Radiation Physics, 2015), 030025/1-030025/4.

- Sarita Kango, Rajesh Kumar, *Magnetite nanoparticles coated glass wool for As(V) removal from drinking water*, AIP Conference Proceedings (2015), 1675(1, Fourth National Conference on Advanced Materials and Radiation Physics, 2015), 030024/1-030024/4.
- Rajinder Kumar, Hitanshu Kumar, Ragini Raj Singh and P. B. Barman, "Synthesis and structural analysis of Co doped Ni-Zn ferrite", International conference on Science: emerging scenario and future challenges, 11-12 June, 2016, Dharamshala, H.P.
- Asha Kumari and Ragini Raj Singh, "*Optical properties of CdSe Encapsulated with Polymer structures*", National Conference on Multifunctional Advanced Materials (11-13 May 2016), Shoolini University, H.P.
- Asha Kumari and Ragini Raj Singh, "*Optical Properties of CdSe/ZnS core/shell Structures*", National Conference on Smart Materials: Advances in Research and Techniques (SMART-2015) (26-27 Nov, 2015), Shoolini Unersity, H.P.

3. **Projects Received by the Department from various Government /Private Agencies**

On going Projects:

S. No.	PI	Title	Funding Agency	Amount (INR)	Duration
1.	Ragini Raj Singh	Development, characterization & processing of quantum dots for imaging in near infrared (NIR) range	DST	24.8 lac	2014-2017 (3-Financial years)
2.	Pankaj Sharma	Semiconducting chalcognide quantum dots for exploiting the power of solar energy	DST	16.99 lac	2015-2018 (3- Financial years)

DEPARTMENT OF MATHEMATICS

The Department of Mathematics was established from the very inception of the University mainly to cater the needs of B. Tech. programs. The Department is well equipped with software like MATLAB, Maple, Mathematica, SPSS, Lingo and Lindo.

Research

The Department has an active Doctoral program. Since the establishment of the Department in 2002, four faculty members have obtained Doctoral degree. Currently 2 students are registered for Ph. D. degree.

Departmental research interests are in Applied group theoretic techniques, Discrete symmetries, Mathematical modeling and simulation, non-linear partial differential equations, Differential Geometry, Algebraic Coding Theory, Fuzzy Information Measures, Intuitionistic Fuzzy Information, Decision Making, Pattern Recognition, Statistical Inference and Multiple Comparison Inference Procedures

FACULTY

S. No.	Name	Designation	Qualification	Specialization
1.	Karanjeet Singh	Professor	Ph D	Nonlinear partial differential equations
2.	R S Raja Durai	Associate Prof	Ph D	Algebraic Coding Theory, Image and video processing
3.	R K Bajaj	Associate Prof	Ph D	Fuzzy Information Measures, Intuitionistic Fuzzy Information Measures, Decision Making
4.	Neel Kanth	Assistant Prof Sr. Grade	Ph D	Numerical Analysis, Operations Research, Mathematical Modeling and simulation
5.	P K Pandey	Assistant Prof Sr. Grade	Ph D	Differential Geometry, Geometry of Submanifolds
6.	Narendra Kumar	Assistant Professor Grade-II	PhD	Statistical Inference and Multiple Comparison Inference Procedures

FACULTY ACTIVITIES

1) Publications: Journals

- Neel Kanth, A.K Ray and Riti "Effect of Design and Process parameters on Nip width of Soft Calendering" International Journal for Computational Methods in Engineering Science and Mechanics(Taylor and Francis, ISSN No:1550-2287(print),1550-2295(online), indexed in Scopus,[Published Online in June 2016]
- Neel Kanth, B.K Pathak, Artificial Neural Network for Modeling the Uniform Load on Nip Width of Machine Calendering, Journal of Information and Optimization Sciences, Taylor and Francis, ISSN No:0252-2667(print),2169-1003(online) [In Press]
- Gaurav Kumar, Rakesh K Bajaj and Neeraj Gandotra, "Algorithm for Shortest Path Problem in a Network with Interval-valued Intuitionistic Trapezoidal Fuzzy Number", Fourth International Conference on Eco-friendly Computing & Communication Systems (ICECCS - 2015) , NIT, Kurukshetra, 7 - 8 Dec,2015, Procedia Computer Science, Vol 70, pp 123 - 129 (December 2015). [ISSN: 1877-0509, doi: 10.1016/j.procs.2015.10.056, Scopus, ELSEVIER]
- Rajeev Kaushik, Rakesh K Bajaj and Jimson Mathew,"On Image Forgery Detection Using Two Dimensional Discrete Cosine Transform and Statistical Moments", , Procedia Computer Science, Vol 70, pp 130 - 136 (December 2015). [ISSN: 1877-0509, doi: 10.1016/j.procs.2015.10.058, Scopus, ELSEVIER]
- Rajeev Kaushik, Rakesh K Bajaj and Tanuj Kumar,"On Intuitionistic Fuzzy Divergence Measure with Application to Edge Detection", Procedia Computer Science, Vol 70, pp 2 - 8 (December 2015). [[ISSN: 1877-0509, doi: 10.1016/j.procs.2015.10.017, Scopus, ELSEVIER]

1. Conferences/Workshops Organized

Organized One week Workshop on "Statistical Techniques in Biological and Medical Sciences" STBMS-2016,June 13-18,2016,JUIT Waknaghat, Solan in collaboration with the Department of Biotechnology and Bioinformatics, JUIT Waknaghat.

2. Students Currently Registered for PhD:

1. Mr. Manoj Gaur
2. Mr. Madan Mohan Sati

3. Students Awarded PhD: Nil

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

Department of Humanities and Social Sciences is a source of change-facilitators who serve to complement the existing and emerging educational programs of our University by imparting professional and behavioral competencies in the domain of humanities and social science and, thereby, transforming our students to become the New-age, Innovating, Competitive and Enterprising leaders in their chosen professions of service and technology. This department serves as a 'Centre of Excellence' dedicated to the dissemination of behavioral knowledge pertaining to skill oriented courses in fields of Social Sciences, Communication and Management.

The Department was set up with the intention of producing well-rounded engineers, not only having good technological skills but also with the ability to interact with different organs of an organization. Thus, the Department develops 'soft' skills in students. These skills are Group and Co-operative working, Economics, Finance, Project management etc. Additionally, the Department exposes students to Entrepreneurship, Conflict management skills, HR management, Customer relationship management, Total quality management etc.

The Department offers core (I-VI Semesters) and elective (VII-VIII Semesters) courses for all B.Tech students and it is mandatory for all students to take one course in each semester. The department offers doctoral program in Social Sciences, Languages and Management

Department of Humanities and Social Sciences commits to make the following deliverables in respect of teaching, research and service to our family of institutions:

Teaching

- To improve the quantitative, communication, social and interpersonal skills of our students
- To provide high-quality decision-making education in all area of professional and behavioral development
- To improve the effectiveness and quality of teaching of the faculty
- To encourage the faculty to place greater emphasis on motivating and counseling students and to participate in students' organization and activities
- To update, enrich and present the course content and keep them increasingly relevant and action-oriented
- To design customized professional courses to complement and enhance the niche areas of engineering and technologies and
- To develop, sponsor, and conduct executive education

Research

- To improve the research atmosphere and support to the Department
- To encourage faculty and students to undertake research and present at least one research output every year at professional meetings
- To help identify joint research projects and topics and to encourage faculty members towards interdisciplinary projects and
- To increase the approach and acquisition of research grants and sponsorships

FACULTY

Sr. No.	Name of Faculty	Designation	Area of Specialization
1	Dr Anil Sehrawat	Associate Professor & Head (Actg.)	Business communication & Organizational Behaviour
2	Dr Anupriya Kaur	Associate Professor	Marketing
3	Dr Amit Srivastava	Assistant Professor (Senior Grade)	International Business, Economics & Finance
4	Dr Tanu Sharma	Assistant Professor (Senior Grade)	Human Resource Management, Emotional Intelligence & Corporate Social responsibility
5	Dr Puneet B. Sood	Assistant Professor (Grade II)	Finance & Accounting
6	Ms. Triambica Gauitam	Assistant Professor (Grade II)	Finance
7	Ms. Neena Jindal	Associate lecture	Corporate Governance
8.	Ms. Rashmi Sud	Assistant Professor (Grade II)	Marketing

Research Groups

Emotional Intelligence and Leadership

Our work includes group and team building, job satisfaction, organizational commitment, Styles of leadership, leadership development, planning, recruiting and organizing of human resources, decision making at both individual and team level, Change management, conflict management, Emotional intelligence and

Faculty

Dr. Anil Sehrawat
Dr. Tanu Sharma

Courses

- **International Human Resource Management**

Finance Group

Our Work includes different areas of Finance, Economics and International Trade like Behavioural Finance, Financial Econometrics, Capital Structure, Financial Modelling, Banking, Financial Literacy, Social Networking, Economic Development, Macroeconomics, Financial Systems and Financial Planning etc.

Faculty

Dr. Amit Srivastava
Dr. Puneet Bhushan Sood
Ms. Triambica Gautam

Courses

- Financial Institutions and Markets
- Macroeconomics
- Advance Financial Planning
- Econometrics

Marketing Management

Areas of research are Consumer behavior, Brand Management, Service marketing, Impact of changing environment on marketing practices, rural marketing.

Faculty

Dr Anupriya Kaur
Courses

- Strategic Brand Management
- Global Marketing
- Service Marketing

Language and Literature Group

We focus on the research in the areas such as Textual Organization in English, Metadiscourse Features, Partition Literature, War Literature, Translation Studies, Shakespearean studies and South Asian Writers.

Faculty

Dr Anil Sehrawat

Courses

- Intercultural Communication
- Persuasive Communication

Humanities Group

This group focuses on the research in the areas such as Human rights, Ethics and Good Governance.

Faculty

Ms Neena Jindal

Service

- To encourage faculty and students to relate usefully to our institutions and wider community via active participation in selected activities
- To encourage faculty members to work with Departmental and University committees and programs
- To encourage faculty and students to serve the local, national and professional organizations and
- To encourage faculty and students to apply for and participate in service – oriented grants and sponsorships

Facilities

- CMIE – PROWESS –Financial database
- SPSS-16.0-Statistical analysis
- Clarity Infinity Digital Language Lab (4.6) –Software package for Language lab
- Proquest journal database
- Emerald journal database

FACULTY ACTIVITIES

1. Book Publications:

- Sehrawat, A. (Ed.). (2015) Reflections on Indian English Drama. Parbhani: New Man Publication. ISBN:978-93-83871-43-8

2. Journals/Book Chapter Publications:

- Jindal, N., Sehrawat, A. and Medury, Y. (2016), An Analysis of India's Need of Capacity Building for e-Governance. Prabandhan: Indian Journal of Management, Vol. 9 (6), 47-59.
- Jindal, N., Sehrawat, A. and Medury, Y. (2016), Status of User-Centric E-governance Practices in North India. Prabandhan: Indian Journal of Management, Vol. 9 (4), 18-29.
- Sharma, T. and Sehrawat, A. (2016), CSR as Approach in New Millennium. In N. Dwivedi and D.S. Yadav (Eds.) Corporate Social Responsibility: Emerging Issues and Challenges. New Delhi: Foundation Books, pp 20-31. ISBN: 9789385386145
- Sehrawat, A. (2016), Emotional Intelligence and Well Being. In N. Singh, T. Rawal and S. N. Arora (Eds.) New Dimensions for Dynamic Business Practices. Mumbai: Shroff Publishers & distributors, pp.321-326. ISBN13:9789352132829.

- Kumari, S., Sharma, T. and Sehrawat, A. (2016), Corporate Social Responsibility: A case Study of Pepsico & Coca-Cola. In N. Singh, T. Rawal and S. N. Arora (Eds.) New Dimensions for Dynamic Business Practices. Mumbai: Shroff Publishers & distributors, pp.14-18. ISBN13:9789352132829.
- Sehrawat, A. (2015), Indian Drama: A Historical Outlook. In A. Sehrawat (Ed.) Reflections on Indian English Drama. Parbhani: New Man Publication, pp. 11-19. ISBN:8789383871438
- Kaur, A., Chauhan, A., & Medury, Y. (2016). Destination image of Indian tourism destinations: an evaluation using correspondence analysis. Asia Pacific Journal of Marketing and Logistics, 28(3).
- Kaur, A., Chauhan, A., & Medury, Y. (2016). Destination image: scale validation and measurement invariance analysis. International Journal of Leisure and Tourism Marketing, 5(1), 4-25.
- Chauhan, A., Kaur, A., & Medury, Y. (2016). Measuring the impact of sociodemographic variables for propensity of wom and e-wom: a study on selective destinations in india. International Journal of Knowledge and Research in Management and E-Commerce, 5(4), 11-29.
- Sharma,T.(2016), Emotional Intelligence And Intelligence Quotient: Determinants of Success. In Dr Narendra Singh, Prof. Tripda Rawal, Prof. Shweta Narang Arora(Eds.) New Dimensions for dynamic Business Practices. Delhi: Shroff Publisher & Distributors Pvt. Ltd., pp 309-312.
- Dhani .P, Sharma, T., (2016) Relationship Between Emotional Intelligence and Job performance. In In Dr Narendra Singh, Prof. Tripda Rawal, Prof. Shweta Narang Arora(Eds.) New Dimensions for dynamic Business Practices. Delhi: Shroff Publisher & Distributors Pvt. Ltd., pp 289-291.
- Sakshi Khanna, Amit Srivastava, Yajulu Medury (2016), "A Study of Capital Structure Dynamics on the Value of Indian Firms using Panel Threshold Regression Model", International Journal of Management Practice, Vol 9, No. 1. pp 40-55.
- Sharma, T. (2015), Business Ethics: Impact of Globalization. In N. Singh, S. R. Norman & V. Mishra (Eds.) Innovative Business management: A Contemporary Approach. Delhi: Shroff Publisher & Distributors Pvt. Ltd., pp. 39-40. ISBN13: 978-93-5110-105-5.
- S. Kumari and T.Sharma (2015), Corporate Social Responsibility: A study of PepsiCo India. In S. Kumar, V. Negi, A. Sharma & K. Gupta (Eds.) Corporate Social Responsibility. New Delhi: YS book international, pp.193-202. ISBN: 93-83-793-28-7
- Sakshi Khanna, Amit Srivastava, Yajulu 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, Vol 5, Issue 4, pp 968-978.
- Sakshi Khanna, Amit Srivastava, Yajulu Medury (2015), "Is Equity Market Timing the Sole Criteria for Capital Structure Decisions? An Insight from Indian Firms", Indian Journal of Finance, Vol 9, Issue 10, pp 48-64.

3. Conference Publications:

- Sehrawat, A. (2015), "Emotional Intelligence and Well Being" at 4th International Conference on Dynamism and Contemporary Practices of Business Management organized by Vishisht Institute of Professional Studies and Research on 5 December.
- Sehrawat, A. (2015), "An Analysis of Speeches in Selected Plays of Shakespeare" at 7th International Conference on Language in Shakespeare: Rhetorical, Aesthetic, Communicative organized by Department of English & Foreign Languages, M. D. University, Rohtak from 8-10 October.
- Sehrawat, A. (2015), "New Trends in English Language Teaching" at Interdisciplinary International Conference on New Trends in Humanities, Gender and Cultural Studies organized by Department of English, N. G. Acharya and D. K. Marathe College of Arts, Science and Commerce, Chembur (E), Mumbai & M.G.E. & W. Society's Center for Humanities & Cultural Studies, Kalyan from 9-10 October.
- Sehrawat, A. (2015), "Contribution of Asian Literature to World Literature" at National Conference on New Trends in the Asian Literature in English organized by Department of English,Shri Panditguru Pardikar Mahavidyalaya, Sirsala on 28th August.
- Sehrawat, A. (2015), "English Language Teaching in India: New Perspective" at National Conference on English in India: Language, Literature and Pedagogy organized by the H M Patel Institute of English Training and Research & The Global Association of English Studies from 16-17 July.
- Sehrawat, A. (2015), "Corporate Governance, Business Ethics & Corporate Social Responsibility" at National Seminar on Corporate Governance and Business Ethics organized by Department of Commerce, H. P. University, Shimla & Board of Studies, Institute of Charted Accountants of India from 25-26 September.
- Sharma, T. (2015), Emotional intelligence and intelligence quotient: Determinants of success. 4th International Conference on Dynamism and Contemporary Practices of Business Management organized by VIPSAR Indore, 5th December
- Dhani, P., Sharma, T. (2015), Relationship between emotional intelligence and job performance. 4th International Conference on Dynamism and Contemporary Practices of Business Management organized by VIPSAR Indore, 5th December
- Sharma, T. and Arora, D. (2015), CSR- A strategic concept and CSR initiatives by Reliance Industries ltd. 4th International Conference on Dynamism and Contemporary Practices of Business Management organized by VIPSAR Indore, 5th December
- Sharma, T. (2015), Influence and Impact of Tourism on Economy of Himachal Pradesh. The Himalayan Studies Conference 2015 4-5 November.
- Sharma, T. (2015), CSR in emerging economies and sustainable development in India. National Seminar on Corporate Governance and Business Ethics, H. P. University, Shimla, 25-26, September.

- Dhani P. & Sharma, T. (2015), Impact of gender on emotional intelligence and leadership: A study in Indian context. 2nd International HR Conference on Emotional Intelligence organized by KJ Somaiya Institute of Management Studies & Research, 23rd January

4. Workshops Conducted

- Department of Humanities and Social Sciences organized 5th One-Week Self-Financed Workshop on "Tools and Techniques for Data Analysis in Management Research" during June 20-25, 2016. Dr. Amit Srivastava was organizer as well as one of resource person of the Workshop. Dr. Anupriya Kaur and Dr. Puneet Bushan Sood were the other two resource persons of the Workshop. About 22 participants (faculty members and research scholars) from different parts of India were participated in it.
- Dr. Anil Sehrawat conducted a Workshop on Research Methods in English Language and Literature at Department of English, Jain Vishva Bharati Institute Ladnun from 19-21 October 2015.

5. Resource Person/ Invited Lectures

- Sehrawat, A. (2016), "Metadiscourse; A Tool for Effective Classroom Delivery" at Faculty Development Program (FDP) on Application of Computational Methods in Civil Engineering Educationorganized by Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat from 18-23 January.
- Sehrawat, A. (2015), "New Trends in Cultural Studies" at Interdisciplinary International Conference on New Trends in Humanities, Gender and Cultural Studies organized by Department of English, N. G. Acharya and D. K. Marathe College of Arts, Science and Commerce, Chembur (E), Mumbai & M.G.E. & W. Society's Center for Humanities & Cultural Studies, Kalyan from 9-10 October.
- Sehrawat, A. (2015), "Emotional Intelligence in Education" at Department of Education, Jain Vishva Bharati Institute Ladnun on 20 October.
- Sehrawat, A. (2015), "Tools and Techniques in Research in Social Sciences" at Research Department, Jain Vishva Bharati Institute Ladnun on 19 October.

CENTRES

LEARNING RESOURCE CENTER (LIBRARY)

Learning Resource Center (LRC) is a backbone of academic and research activities of the University and has been catering to the information need of the faculty members, students, staffs and research scholars.

LRC is a separate block of three storied building embedded to main academic block which can accommodate **295 s**tudents at a time in order to carry any activity related to study and research. The LRC has around **33969** volumes of books and **1394** back volume of journals which covering the disciplines of Computer Science and Engineering, Electronics and Communication Engineering, Information Technology, Civil & Environmental Engineering, Biotechnology, Bioinformatics, Pharmacy, Mathematics, Physics & Material Science, Management, and languages. The Collection comprises of Print monograph such as Textbooks, Reference Books, Encyclopedias, Handbooks, Theses, Standards, Atlases, etc. LRC is regularly subscribing 18 International Journals, 44 National Journals, 39 National and International magazines in order to supplement teaching and research activity of the university. The Non-book materials include audio/video cassettes, CD-ROM discs, DVD-ROM discs etc.

LRC is subscribing to various online databases such as IEEE, ACM, Springer, ASCE, SIAM etc. Over 12450 full-texts e-books, electronic resources of Journals, Conference Proceedings, Transactions, Magazines and Reports are available for reading throughout the campus. LRC is also active member of Developing Library Network (DELNET), New Delhi for resource sharing, document delivery services among the member libraries and supplementing the needs of the resources which are not available with LRC. There are 65 dedicated computer nodes and are fully connected with Internet and LAN of the campus. Students, faculty, research scholars can use computer facility in LRC for the purpose of browsing internet, accessing journals, reading course materials during the opening hours of the LRC. LRC resources are fully computerized and bar-coded with latest version of library automation software Alice For Windows now upgraded to Liberty (a fully internet based library automation software). All activities of the LRC are computerized and patrons have been issued Bar-coded Identity card. All the resources of LRC can be viewed, searched through Internet OPAC or dedicated terminal for OPAC throughout the campus through Internet. LRC remains open from 8:45 AM to 12:00 PM midnight except holidays. LRC has implemented an integrated electromagnetic security system from 3M, USA for keeping a check on materials movement of the LRC. The LRC has also developed an institutional repository by using Dspace, Open Source Software for maintaining scholarly output of the university.

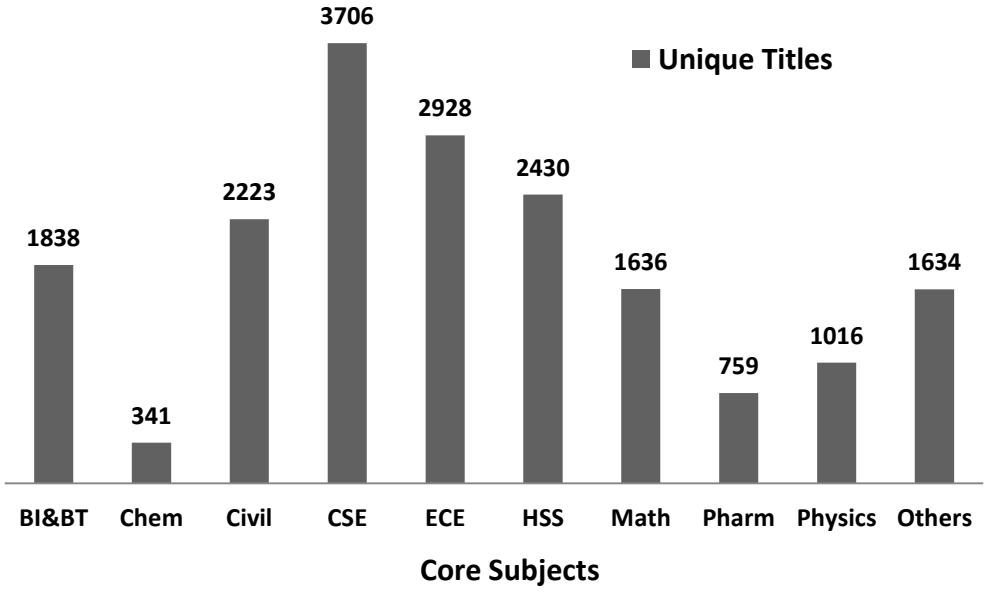
- **Resource Collection**

Unique Titles	:	18511
Total Copies	:	33969

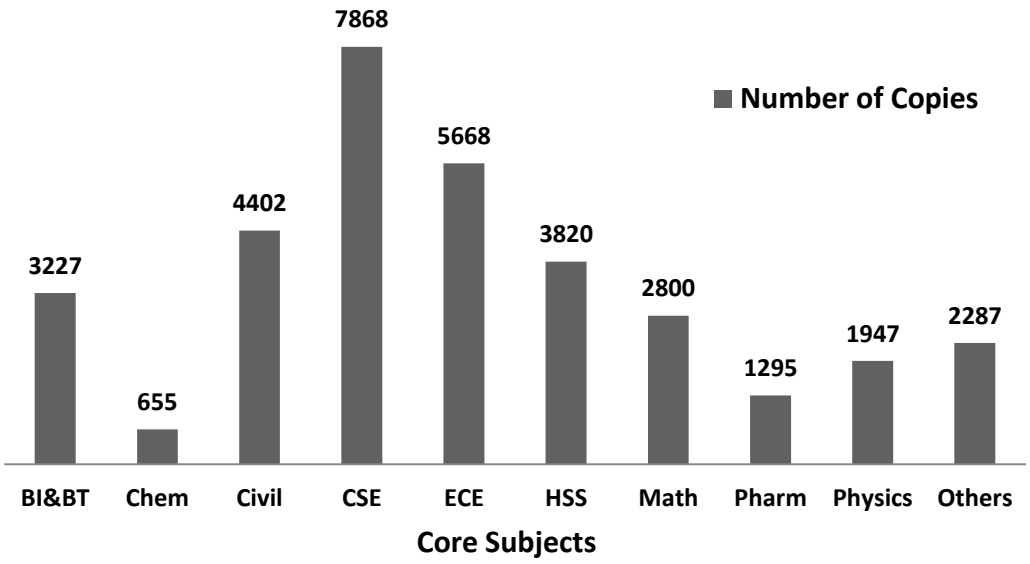
Subject-wise Book Collection:

S. No.	Departments	Unique Titles	Total Volumes
1	Bioinformatics & biotechnology	1838	3227
2	Chemistry	341	655
3	Civil Engineering	2223	4402
4	Computer Science Engineering	3706	7868
5	Electronics & Communication Engineering	2928	5668
6	Humanities & Social Sciences	2430	3820
7	Mathematics	1636	2800
8	Pharmacy	759	1295
9	Physics	1016	1947
10	Others	1634	2287
	Grand Total	18511	33969

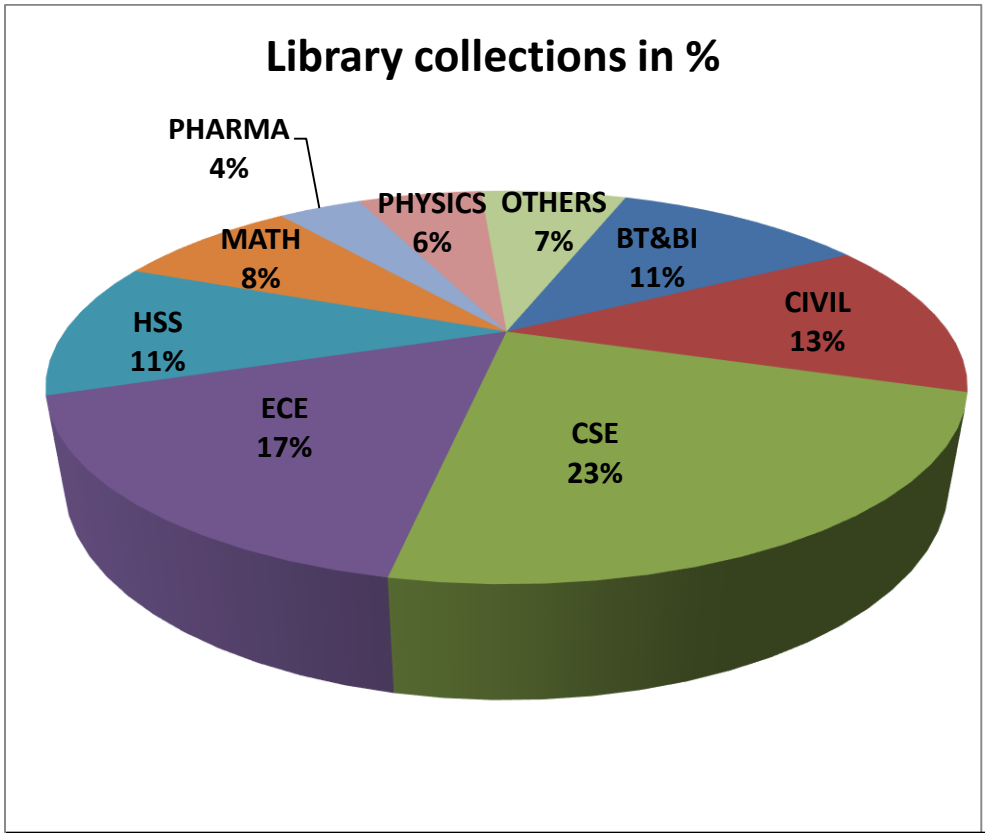
Subject-wise unique titles in the library collection:



Subject-wise total volumes (Number of copies) in the library collection:



Subject-wise coverage of total library collection in percentage (%):



BT&BI=Biotechnology and Bioinformatics; CHEM=Chemistry; CIVIL=Civil Engineering; CSE=Computer Science and Engineering; ECE=Electronics and Communication Engineering; HSS=Humanities and Social Sciences; MATH=Mathematics; PHARMA=Pharmacy; PHYSICS=Physics and Material Science; OTHERS=General books

Online Databases:

Database	URL	E-Books	No. of Journals	Conference proceeding and other reports	Total
Association of Computer Machinery (ACM)	http://portal.acm.org	-	61	1082	1143
American Society of Civil Engineers (ASCE)	http://ascelibrary.org	-	36	-	36
Institute of Electrical and Electronics Engineers (IEEE)	http://ieeexplore.ieee.org/	-	169	10144	10313
Springer	http://springerlink.com	-	586	-	586
Society for Industrial & Applied Mathematics (SIAM)	http://portal.igpublish.com/iglibrary/search/main?0	372			372
	Total	372	852	11226	12450

Other Collections: 3713

Type of Resource	Number
Print Journals (International)	18
Print Journals (National)	44
Print Magazines	39
Back Volume Journals	1394
Ph.D Theses	96
Dissertations (M.Tech & Dual Degree)	509
Project Reports (B.Tech)	1601
*Newspapers	12

***Multiple copies of each newspaper are being subscribed.**

IT INFRASTRUCTURE CENTRE

The main objectives of the Server Room (IT Infrastructure Center) are to provide support to all the members of JUIT on all aspects of academic computing, to implement and maintain IT infrastructure and application software, to impart introductory and advanced instructions to users, generate trained manpower to maintain IT infrastructure (Servers, Desktops, Network, Projectors, Printers, UPS, Wi-Fi, sound system, scanner), to provide support to institute computerization efforts, to do in house research & development, and to serve a user population of more than 3500 users consisting of undergraduate students, postgraduate students, research scholars, faculty and staff of the institute.

In addition, it also owns the responsibility to develop and implement application software for various needs of the Institute like finance, payroll, results, MIS reports and electronic attendance system etc.

- **General Computing Facilities**

The Server Room is equipped with IBM X series Server for high performance Unix Computing Server, Intel Xeon servers with multiple processors, High end Intel Pentium server with multiple processors, various engineering and technical computing software, network management tools, Client/Server Database computing system connected over a switched fast Ethernet with Optical fiber backbone.

For our printing needs we have total 65 printers with 14 heavy duty Network Printers and 1 Line matrix printers.

- **Hardware configuration**

SERVER DETAILS

S.No	Server	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	IBM X Series 206	Intel® P4 3.0 GHz 1.2 GB RAM 68 GB SCIC HDD	1
7	Lenovo workstation	Lenovo worlstation E5-1603	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 moniter	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 Number Of Servers	**30**

DESKTOP DETAILS

S. No	Brand	CONFIGURATIONS	QTY
1	Sun Think Client	Sun Client	35
2	IBM	P IV with 3 GHz, 80 GB HDD & 512 MB RAM	150
3	IBM	Core 2 due 2.4 Ghz, 160 GB HDD & 1 GB RAM 17 inch Monitor	60
4	IBM	P4 2.8 Ghz,40 GB HDD,256 MB RAM & 15 inch Monitor	35
5	IBM	P4 3.06 Ghz,80 GB HDD,256 MB RAM & 15 inch Monitor	25
6	IBM	Celeron 2.4 Ghz,40 GB HDD,256 MB RAM & 15 inch Monitor	25
7	IBM	Dule core 1.8 Ghz,80 GB HDD ,1 GB RAM & 17 inch Monitor	45
8	IBM	Dule core 1.8 Ghz,80 GB HDD ,512 MB RAM & 17 inch Monitor	15
9	IBM	INTEL CORE 2 DUO,160 GB HDD,4 GB RAM & 17 inch Monitor	2
10	IBM	INTEL CORE 2 DUO,160 GB HDD,2 GB RAM & 17 inch Monitor	50
11	IBM	INTEL CORE 2 DUO,160 GB HDD,2 GB RAM & 17 inch Monitor	135

12	IBM	core i3-530 (2.92 Ghz) with 2 GB RAM ,250 GB Sata HDD,18.5 inch TFT Monitor	90
13	IBM	Core I3- 2100 3.10 Ghz with 2 GB RAM ,320 GB Sata HDD,18.5 inch TFT Monitor	80
14	IBM	Core I3- 2100 3.10 Ghz with 4 GB RAM ,500 GB Sata HDD,dvd rom,18.5 inch TFT Monitor	120
15	IBM	Desktop computer lenovo M-73 core i5,4 gb ram,500 gb HDD,18.5 inch tft with wondows 8	45
		Total Number of computers	**912**

Engineering and Technical Computing Software.

SOFTWARE DETAILS

S. No	Product 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	100
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
50	Geo 5 suit of software with various modules (50 User)	50

- Database Services

The Server Room has a Client/Server Database Computing System – Oracle 11g with Developer 2000 version 6.0 at front end, the platform is windows NT/2000/2003.

- **Network Services**

The University Local Area Network (LAN) is a state of the art switched network with Fiber Optical and enhanced CAT5e/CAT6 UTP Backbone. It consists of more than 3500 network access points spread using 73-3 com switches, 3 Cisco Routers, 23 Cisco switches, 17 Cisco AP ,6 HP AP and 15 VLANs.

The network access is provided to every room in student's hostel, faculty & staff residence, doctors at JUIT hospital, mess, laboratories and rooms in guest houses.

Internet connection has been provided through a router. We have 1 Gbps (1: 1) leased circuit from BSNL and Railtel (10 MBPS) on OFC. Apart from internet and intranet many more services including mail, web, and library book search, domain name, antivirus and software upgrades are being provided over this network.

JUIT is using Cyberoam Suite to manage internet bandwidth and mailing services. Cyberoam is consists of software firewall, anti spam controller, content filtering and antivirus protection at gateway level. Lotus Domino is being used by JUIT for official mailing services.

INTERNATIONAL LINKAGES OF THE UNIVERSITY:

JUIT endeavors worldwide collaborations nwith universities, research laboratories and industries with a view to makingthe best academic expertise. The JUIT has tie ups with following Universities and Institutions:

1. University of Florida, International Center, Florida, USA
2. College of Informtion Science & Technology, University of Nebraska at Omaha
3. MoU with SAP AG, Germany on SAP University Alliances Academic Educational Material Utilization contract for Teaching Purpose.
4. Technion – Isrea Institute of Technology, Isreal.
5. South Dakota School of Mines and Technology, USA
6. Center for Industrial Microbiology, Food Industries.
7. Research Institute Nguyen Trai, Thanh Zual, Hanoi. Vietnam.
8. Arkansas State University, USA.
9. MoU with Youth Development Fund Bhutan.
10. MoU with National School of Applied Sciences (ENSAYg), Tangierorocco.
11. MoU with Defence Institute of High Altitude Research (Fotrmerly Field Research Laboratory) of DRDO, Govt. of India.

ACADEMIC ADMINISTRATION

Admission Process

1) **UG Program:**

Admissions in the academic session 2015-16 were carried out through a counselling process conducted by the University, based on all India merit in JEE ranking.

Admissions to the Biotechnology, Bioinformatics, Biotechnology & Dual Degree 50% admissions were carried out based on merit in 10+2 Examination & 50% on JEE Merit.

2) **PG Programme**

Admissions for M.Tech programs were based on GATE score / Entrance Test conducted by the University for eligible candidates.

3) **PhD:**

The selection is done through our own Eentrance Examination and an interview of short listed candidates, based on their merit in Entrance Examination, qualifications and credentials.

4) **Students Enrollment**

The University over the period of 14 years has gained strength and confidence of the masses. The number and quality of intake has shown a remarkable improvement. The current state of student strength is given below.

Year of Study	UG Prog.	PG (M. Tech) Prog.	Dual Degree	Integ. Dual Degree
a. 5th Year			13	
b. 4th Year	427		10	
c. 3rd Year	459			
d. 2nd Year	497	75		02
e. 1st Year	488	51		

Ph.D. Scholars in the University at present are: 102

FACULTY

The Unique feature of the University, despite being at nascent stages of development is the high quality of faculty on its rolls. The brief on the Faculty giving their terminal qualification is as Appendix-B.

VISITING / ADJUNCT FACULTY

The University further has some eminent academicians and eminent industry persons on its rolls as visiting faculty to conduct specialized classes. Currently there are four adjunct and 32 visiting faculty members associated with the University.

RESULTS:

The performance of Students in the University is graded in terms of Semester Grade Point Average (SGPA) and Cumulative Grade Average (CGPA) over a scale of 10. A typical analysis of results of a semester is given in Appendix-C.

SCHOLARSHIPS

1. **Prof. William C Webster Merit & Means Scholarship:** Eligible students get a tuition fee waiver for a year upto a maximum of Rs.25000/- The scholarship was started in the year 2004-05.

2. **The Jaypee India Scholars Fund:** has been launched to provide financial assistance to meritorious students with poor financial and economic conditions for pursuing higher technical education (4-year UG program) in Jaypee Education System. Under the scheme financially and economically poor students would be provided financial assistance of Rs.1.05 lacs each every year to pursue the 4-year UG Program starting from the admission year 2008 at the Jaypee Education System. The scholarship will be available for all the 4 years of their study, provided they maintain a minimum performance every year in their respective program of study. The unique aspect of this scholarship scheme is that such students will also enter into an undertaking to repay back the total scholarship amount over a period of 2-3years after post graduating from the Institute.

3. **Admission to Meritorious Students:** The Management has approved that students who take admission in the first year of the 4-year UG program in academic session 2008-09 onwards, with an All India Rank of less than 1000 in the AIEEE conducted by CBSE, shall be provided free education for the entire duration of under graduate program.

4. **Students from Bhutan under Scholarship Scheme** – waiver of Tuition & Hostel Charges.

5. **Scholarship for M. Tech. Students**

6. **Research Fellowship for Ph.D. Students**

JUIT YOUTH CLUB

JUIT Youth Club(JYC), the official student body of Jaypee University of Information Technology ,conducts various events.The body consists of 9 clubs and 5 committees which work throughout the year for the enjoyment and entertainment of the students of university.

MASTERCHEF 3.0

On 27-Sept-2015, the hidden chefs of JUIT came into action. The air was filled with mouth watering aroma. The JYC Cultural Club organised MASTERCHEF 3.0 (Taste of Home) at the Open Cafe. The event was sponsored by Sunny's Take Away. The event was a great success as a large number of students from all the years participated in teams and displayed their talents. From delicious pastas to amazing chocolate cake, the participants, they could cook everything. To lighten up the stress of the participants there was some good music being played in the background. In the end they came up with some very creative, innovative and tempting dishes. The participants were judged on the basis of taste, innovation and presentation.

CHILDREN'S DAY-

The children day was celebrated on 14th november'15 by JYC cultural club.This event was mainly organised for children of faculty members of juit.The children enjoyed watching animated movie and the painting competition was also held.It was good to see cheerful faces of children.

GOONJ

'Goonj' the much awaited event and biggest musical night of the year was held by arts club and cultural club on 28 November 2015 at 6:00 pm in auditorium.The performances was ranged from 'soothing instrumental music to English pop to hard rock to romantic melodies including some band performance'.If you have a natural aptitude and appreciation for it, then music simply draws you to it and connects..Students from different years came together to perform and give a time to the audience that was phenomenal.. The event was a great success and attracted a large crowd. People were pretty excited and gave a very enthusiastic response. It was set up in the auditorium and the ambience was breathtaking.

GEETA IN HOUSE-CZARINA'S NOCH:

Geeta in house was organised by cultural club on 30th November 2016.

Theme for the event was Halloween night. The girls were elevated for the event. Food stalls were displayed on the red carpet by all the JYC clubs **.** The event was enjoyed by all thegirls.

MURIOUS 10.0 – THE CULTURAL NIGHT , SYNCHROTON 2016

Synchroton , the cultural night of Murious X was held on 29 January 2016 in the auditorium.
Liveliness....Excitement....Vitality....all have two things in common....they are synonyms for fun and the perfect description for Synchrotron 2015. It was to brighten the corners and illuminate the spaces with the dances, acts, songs. It hosted a plethora of dances by different dance groups. It was the fight for the beat matchers. The most awaited night of the fest calendar. It was about vogue, dance and fun. Night where people were overwhelmed to enter but never thought of exit. The members of the club also performed on medley music.

Le-Fiestus-2016-Unleashing the Devil inside

Le Fiestus, the annual social and cultural festival of JUIT, Solan presented its 2016 edition from 29th to 1st may 2016.As we evolve to continuously learn and adapt different ideas and thoughts, , The three day panorama which is the largest University fest in the state, has established a name for itself, as the place to be in, just by the virtue of the quality of events organized by various clubs of the JUIT Youth Club (JYC) and the poise with which they are held.

HIGHLIGHTS OF EVENTS OF LE-FIESTUS 2016

Date and Time: April 29, 2016-18:00 hrs onwards
Event Location: Basket Ball Court, Jaypee University of Information Technology, Waknaghat, Dist. Solan

Event Description:

COMEDY SHOW BY APPURV GUPTA:

Comedian Appurv Gupta performed live at 2pm in auditorium.Everyone laughed their hearts out.The event was enjoyed and appreciated by one and all present there.

CULTURAL NIGHT:

Cultural Night is a unique extravagant night in the Le Fiestus calendar with students exploring and showcasing their various talents of dance, singing and ramp enriched with the myriad of cultural flavours. So come and experience the night of the young talents.The members of the club also performed on medley music.

DAY 2

Event Description:

WAR OF BANDS:

It is the fusion of bands to creating a reverberating environment in the serene hills of JUIT.

THE PUNJABI NIGHT:

GURU RANDHAWA:

Guru Randhawa ,the young popular Punjabi singer performed live on the second day.

He won the hearts of the audience by singing his famous songs like patola ,khat , outfit , yaar mod do etc.

DJ RAY:

"Play the moments
Pause the memories
Stop the pain
Rewind the happiness" -Dj Ray, DJ for VH1 Supersonicmade the people at juit dance to her DJ beats.

DAY 3

MR. AND MS. LE FIESTUS:

Mr. and Ms. Le Fiestuswas organized by cultural club on the third day of the fest. The students participated with great enthusiasm..

STAR NIGHT:

NAKAASH AZIZ:**Nakash Aziz** is an Indian playback singer and music composer. He has assisted the legendary composer A. R. Rahman on films like *Highway*, *Raanjhanaa*, *Rockstar*, *Delhi 6* and *I* in Hindi. He is popularly known for playback of songs like "Jabra Fan" from *Fan*,[2] "Sari Ke Fall Sa" and "GandiBaat" from the film *R... Rajkumar* and "DhatingNach" from film *Phata Poster Nikhla Hero*

Time: 19:00 hrs onwards

Event Location: Basket Ball Court, Jaypee University of Information Technology, Waknaghat, Dist. Solan.

- **PARAKRAM-2015**

"PARAKRAM-2015" organized on 7TH and 8th of November, 2015 was a great success. It was the two day fest organized in our college with students participating enthusiastically from different colleges and universities.

Over 17 colleges took part in the fest, thus comprising of 300 students. Participants from our college were 60.The main events were basketball, volleyball, table tennis and badminton. Winners of the various events are as follows:

- Basketball (Boys)-Thapar
- Basketball (Girls)-Thapar
- Volleyball (Boys)-Chitkara, Baddi
- Table Tennis (Boys)-HPU
- Table Tennis (Girls)-Chitkara, Rajpura
- Badminton (Boys)-HPU
- Badminton (Girls)-JUIT
- Chess-Thapar

Apart from the main events, fun events were also there such as cricket, chess, lucky 7, casino royale, blur, counter strike, arm wrestling. Winners were awarded with cash prize.

On behalf of JYC, the Sports Club was very much thankful to the Management of the University for their Help and support**.**

The Literary Club of the JYC deals with the organisation and execution of events pertaining to literature, public speaking and debating. The major events that the Literary Club executed during the tenure of 2015-16 included a CV writing workshop, the JUIT Youth Parliament and the JUIT Model United Nations, which were all major successes in terms of student participation.

CV WRITING WORKSHOP

The tenure for the Literary Club began with the first workshop that was conducted on CV Writing. Dr. Anil Sherawat headed the evening workshop and guided the students. A proper format was explained for making an effective CV. Students were briefed about the font, font size, paper weight and many other such details that are necessary for a presentable CV. It was also made clear as to what and how data was to be filled under various headings.The students present in the workshop actively participated and benefited by putting forth their queries and in return got a clear cut idea as to what needs to be there in their CV and what does not.

JUIT YOUTH PARLIAMENT ’15

The JUIT Youth Parliament is aimed at making the student fraternity aware of the rules and procedures followed in the Parliament of India during discussions and debates. During JYP ’15, held on the 28th and 29th of November the students were given the role of Parliamentarians in the Lok Sabha and asked to represent various parties and constituencies on a single agenda that was up for discussion. A bill was also tabled on the floor by students belonging to the ruling alliance so they may have a basic understanding as to how the Parliament of India functions in the lawmaking process.

JUIT MODEL UNITED NATIONS ’16

The JUIT Model United Nations (MUN) involves the students assuming the roles of delegates representing various nations and power blocks of the world and working together to resolve disputes and problems on a global level in the United Nations. The JUIT MUN ’16 was held on the 12th and 13th of March and was constituted of two councils, the General Assembly and the UNFCCC which each had separate agendas that were debated upon. The spring summit was a grand success and brought a lot of understanding of global diplomacy to the student fraternity.

Reverie , the editorial board of JUIT has been actively involved in reporting and publishing every event or fest at the college. Our coordinators for the tenure 2015-2016 were Pratishtha Mishra and Rupangi Vats. The committee has published various newsletters and the yearly magazine. In the past year we have done the following-

1. **NEWSLETTER**- We have published various newsletters over the year reporting the events on a regular basis.

   The events covered were-
   - Master chef
   - Dhun
   - Silverscreen
   - Halla Bol
   - Aphrodite
   - Cidering
   - Inizio
   - Jaypee Youth Parliament
   - MUN
   - Le Fiestus
   - Murious
   - Parakram
   - Goonj

2. **FACEBOOK PAGE**- We share our daily writings and all poetry written on the social platform too.Various images and news are regularly updated on our facebook page for all the students to see.

3. **JAYPEE YOUTH PARLIAMENT** – Various members participated as the press for the JYP. During the JYP we published a newsletter everyday reporting the activities and discussions. Our press kept everyone posted on the discussions and conclusions made both the days.
4. **MUN**- We published newsletters both the days of the MUN covering all the debates held and all the important points of discussion.
5. **LE FIESTUS**- On the college fest we reported all the events and competitions over the three days.
   The first day we published a newsletter and the other two days it was available online. From the food to the stalls, from the stage to the stars , we covered it all in the newsletter. The fest had been a great success.

   (i) Pranks- During the fest preparation time we did a lot of pranks with the students as well as faculty and posted their videos on our official page. We also posted all the pictures of the preparations and all the activities also.

6. **MONTHLY MEET**- Every month all our members came together to discuss various topics and promote writing skills among students.

7. **MAGAZINE**- We published the magazine for the year where we mentioned all the events of the year with articles about various topics .

RIVIERA

The arts club organized this year's art fest Riviera – Love is in the air. It started with a weeklong gift stall .Club members prepared many cards, gifts and paintings which were a huge sell out. The main events held on 13th and 14th February 2015.Mr. and Ms. Valentine took place in the open cafeteria which was vivaciously decorated for the occasion. It started off with a ramp walk followed by fun game round. The last round was the question-answer round. Various competitions like doodle making, caricature etc were through the day. Many fun one minute games were also organized. The day ended with an unplugged night which left everyone spell bound with soft and subtle love songs.In all it was a successful show which provided the students with a great platform to showcase their talent in music and arts.

INIZIO

INZIO –The Environment Week was from 3rd April – 5ththApril2016. Various events were-Kaizon: It was a rally to generate awareness about environment ,Environment Hunt: A treasure hunt. Environment Doodle making competition-to draw using leaves, sticks or other environment related stuff in spite of brushes, Bol-Bachchan: an open group discussion on any environment issue, ENAct: a short movie making competition and many more.

Murious 9.O – The Annual Technical Fest of JUIT

The 3-day Fest was organised fro28 January 2016 to 30 January 2016.

The events that were organised during the MURIOUS 9.O are as follows: Robo race, Impulse, Jeopardy quiz, Paintball, Circuit designing, Codez, Mock placement, Lan gaming, Innovatia, PCB designing(workshop)

Date and Time: Saturday, February 20, 2015, 6:30 pm onwards Event Location: Auditorium

SYNCHROTON:

Liveliness....Excitement....Vitality....all have two things in common....they are synonyms for fun and the perfect description for Synchrotron 2015. It was to brighten the corners and illuminate the spaces with the dances, acts, songs. It hosted a plethora of dances by different dance groups. It was the fight for the beat matchers. The most awaited night of the fest calendar. It was about vogue, dance and fun. Night where people were overwhelmed to enter but never thought of exit.

DAY 2

Date and Time: Saturday, February 21, 2015, 12:00 noon onwards Event Location: Academics, Jaypee University of Information Technology, Waknaghat, Dist. Solan

Event Description:

PCB DESIGNING: It was a workshop taken by Mr. D.V. Gadre and his team on designing a printed circuit board by using software named EAGLE, and burning the same circuit on PCB for practical applications.

MOCK PLACEMENT: It was an event especially for 3rd year students to give them an idea of real time experience during an interview process. It had 3 rounds- aptitude test, group discussion and then finally personal interviews.

JEOPARDY QUIZ: A general knowledge quiz that consisted of 2 rounds. Round 1 was a written test. The next one was a buzzer round.

PAINTBALL: An outdoor activity with an essence of a battlefield. It was a fun event that consisted of 2 teams with 5 members each.

LAN GAMING: It was an online event which included the following events:

BLUR-A multiplayer arcade racing style vehicular combat racing game. It can take upto 20 players over the internet or

LAN .FIFA 14-A multiplayer football game here done within two players. Each player attempting to win the match by scoring as many goals in the of two halves.

COUNTER STRIKE: A first person shooter game in which a player joins either the terrorist team , the counter-terrorist team or become a spectator.

DAY 3

Event Location: Academics, dhyan kaksh, open café , Jaypee University of Information Technology, Waknaghat, Dist. Solan

CODEZ: It was an event in which we had a programming contest, where coders from all fields competed. We had different sections in coding like AutoCAD, Matlab, web designing, coding in C, C++, Java, Python and many other coding languages.

ROBORACE: It was a race in which participants came with their manual robots which traversed the whole track with around 10 hurdles in minimum time and with maximum score. This event provided a zeal and thrill to students who competed with their bots to win and get the cash prize.

INNOVATIA: It was the first time that such type of event was organized in JUIT. Innovatia was an event which judged how you had grabbed your bookish knowledge to implement something practically. Participants came with their working projects and the projects which had the best working and the best idea behind it was awarded.

CIRCUIT DESIGNING: It was an event in which students were tested on their circuit designing and debugging skills. They were given a circuit for designing and a circuit which they had to debug also.

IMPULSE: an event in which the participants made and launched their water rockets.

GOVERNANCE

1. Governing Council

1. As per the Regulations of the University the responsibility for the general superintendence, direction and control of the affairs of the University is vested with the Governing Council. The composition is given at Appendix-D.
2. The Council carried out its task and functions through statutory committees, which have been specified in the statute of the University. The composition of standing committees is at Appendix-D

1. Academic Council

i) The Academic Council is the premier and august body of scholars, which decides and monitors the implementations of Academic Policies of the University. The powers and functions of the Council are defined in the Regulations of the University. Amongst other major functions, the Academic Council controls and approves the courses in various curricula, defines the thrust areas, objectives and constantly reviews the activities of the departments to ensure improvements in standards.

ii) The composition of the Academic Council is listed at Appendix-D

FINANCIAL STATUS

The Audited Balance Sheet is attached as Appendix-E.

TRAINING & PLACEMENT

a) Training and Placement is an important activity of the University. T&P cell is mainly responsible for arranging practical training of the Undergraduate students to meet their degree requirement and to facilitate the placements of undergraduate & postgraduates' students in suitable jobs in the Industry and various private & public sector organizations.

b) To facilitate placement T&P cell invites senior executives of major industries/organizations to give talk to the students at Campus which helps them acquire better knowledge about the organization prior to campus interviews.

c) The Placement summary for is attached at Appendix-F

Appendix-A

DETAILS OF LAND

EXISTING BUILDING AREA STATEMENT			
		Built Up Area	
S.No.	**Particular**	**Qty. in Sft.**	**Qty. in Mtr.**
1	Academic Block	1,41,877.43	13,185.63
2	Hostel Block		
	Student Lounge	1,427.10	132.63
	H-1	13,009.31	1,209.04
	H-2	12,473.38	1,159.24
	H-3	6,724.28	624.93
	H-4	14,276.75	1,326.84
	H-5	22,794.00	2,118.40
	H-5	12,402.10	1,152.61
	H-7	11,235.89	1,044.23
	H-8	9,865.34	916.85
	H-9	9,809.99	911.71
	H-10	9,984.01	927.88
	H-11	14,215.70	1,321.16
	Girls Hosta 12A	23,571.95	2,190.70
	Girls Hostel 12B	18,494.80	1,718.85
	Girls Hostel 12C	20,541.28	19,909.04
	Girls Hostel 12D	17,722.94	1,671.11
	Annapurna	10,618.08	986.81
	Unloading Bay	2,035.14	189.14
	H-14A	9,314.86	865.69
	H-14B	14,015.34	1,302.54
	H-14C	24,250.39	2,253.75
	H-14D	20,008.18	1,859.50
	H-15A	19,720.51	1,832.76
	H-15B	14,649.70	1,361.51
	H-15C	18,457.16	1,715.35
	H-15D	16,253.46	1,510.54
3	Telephone Exchange	9,827.22	913.31
4	ESS	21,517.40	1,999.76
5	Faculty Block (B Type)		
	F-01	13,250.22	1,231.43
	F-02	29,119.93	2,706.31
	F-03	13,246.25	12,131.06
6	Faculty Block C (C Type)		
	C-01	11,552.33	1,073.64
	C-02	11,618.23	1,079.76
	C-03	10,922.13	1,015.07

7	Guest House	15,360.92	1,427.59
8	Auditorium & Stage	14,251.66	1,324.50
9	Mandir	3,030.61	281.66
10	Dispensary	2,711.12	251.96
11	Faculty House (A Type)	19,238.51	1,787.97
12	Workers Dormitory-I	12,629.46	1,173.74
13	E Type Faculty	34,916.20	3,245.00
14	D Type Faculty	20,444.00	1,900.00
15	workers Dormitory II	19,002.16	1,766.00
16	Basket Ball Field & Volley Ball Field	1,200.00	111.52
17	Badminton Court	170.00	15.80
18	Store	3,512.40	326.43
19	Animal Lab	2,754.56	256.00
20	Civil Lab	14,396.66	1,337.98
21	Laundry	2,083.45	193.63
	TOTAL BUILT UP AREA	**7,96,504.49**	**1,02,948.56**

NOTE

- Residential for Students 1791 (1205 Boys & 586 Girls)

- Residential for Faculty HODs (8), Professors (26), Associate Professors (8) Assistant Professors (6) Lecturers (36)

Special Features

- Fully networked campus, including student hostels and faculty residences with 4 Mb leased line and 24 hour internet connectivity

- Learning Resource Centre – stocked with latest technical journals and reference books, and open from 8 am till 12 pm at night

Other Infrastructural Facilities

Facilities provided to students include the following:

- Student Hostels – Boys and Girls (Single and Double Seat Facility)
- Student Messing – Annapurna
- Sports Facility – Outdoor (Cricket, Volleyball, Basketball, and Badminton) and Indoor (Table-Tennis, Carrom, etc.)
- Student Lounge
- Student Canteen
- Dispensary with Resident Medical Officers
- Punjab National Bank
- PCO's for STD/ISD facility
- Student Convenience Shop
- Laundry (Washers & Dryers)
- 24-hour power back-up facility

APPENDIX 'B'

DETAILS OF TEACHING STAFF			
S.No.	**Name**	**Designation**	**Qualifications**
1	**Dr. Samir Dev Gupta**	**Director & Head - Academics**	**Ph.D.**
ELECTRONICS & COMMUNICATION ENGINEERING			
1	T.S. Lamba	Professor, Dean (A&R)	Ph.D.
2	Sunil Vidya Bhooshan	Prof. & HOD,	Ph.D.
3	Ghanshyam Singh	Professor	Ph.D.
4	Pradeep Kumar	Associate Professor	Ph.D.
5	Rajiv Kumar	Asstt. Professor	Ph.D.
6	Shruti Jain	Asstt. Professor (SG)	Ph.D.
7	Neeru Sharma	Asstt. Professor (SG)	Ph.D.
8	Pragya Gupta	Asstt. Professor (GR-II)	M.Tech
9	Vanita Rana	Asstt. Professor (GR-II)	M.E.
10	Tapan Kumar Jain	Asstt. Professor (GR-II)	M.Tech
11	Mohd. Wajid	Asstt. Professor (GR-II)	M.Tech
12	Salman Raju Talluri	Asstt. Professor (GR-II)	M.Tech
13	Pardeep Garg	Asstt. Professor (GR-II)	M.Tech
14	Meenakshi Sood	Asstt. Professor (GR-II)	M. E.
15	Shweta Pandit	Asstt. Professor (GR-II)	M. Tech
16	Sunil Datt Sharma	Asstt. Professor (Gr-II)	M. Tech
17	Alok Kumar	Asstt. Professor (Gr-II)	M. Tech

18	Munish Sud	Asstt. Professor (GR-I)	M. Tech
19	Ajay Kumar Agrawal	Asstt. Professor (GR-I)	M. Tech
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING/INFORMATION TECHNOLOGY			
1	Prof. R.M.K. Sinha	Dean (CSE &IT)	Ph.D.
2	Brig. (Retd.) S.P. Ghrera	Professor	Ph.D.
3	Deepak Dahiya	Professor	Ph.D.
4	Vivek Sehgal	Associate Professor	Ph.D.
5	Yashwant Singh	Asstt. Professor (SG)	Ph.D.
6	Hemraj Saini	Asstt. Professor (SG)	Ph.D.
7	Pardeep	Asstt. Professor (SG)	Ph.D.
8	Pooja Jain	Asstt. Professor (SG)	Ph.D.
9	Pradeep Kumar Gupta	Asstt. Professor (SG)	Ph.D.
10	Rajni Mohna	Asstt. Professor (SG)	Ph.D.
11	Sakshi Babbar	Asstt. Professor (SG)	Ph.D.
12	Ravindara Bhatt	Asstt. Professor (GR-II)	M.Tech
13	Suman Saha	Asstt. Professor (GR-II)	M.Tech
14	Arvind Kumar	Asstt. Professor (GR-II)	M. Tech
15	Amol Vasudeva	Asstt. Professor (GR-II)	M.Tech
16	Amit Kumar Singh	Assstt. Professor (GR-II)	M. Tech
17	Shailendra Shukla	Asstt. Professor (GR_II)	M. Tech
18	Ramanpreet Kaur	Assstt. Professor (GR-II)	M. Tech
19	Punit Gupta	Assstt. Professor (GR-I)	M. Tech

20	Sanjana Singh	Assstt. Professor (GR-I)	M. Tech
21	Ruchi Verma	Assistant Profess (GR-I)	M. Tech
22	Nishtha Ahuja	Assistant Profess (GR-I)	M. Tech
23	Annie Singla	Assistant Professor (Grade-I)	M. Tech
24	Ruhi Mahajan	Regular Faculty	M. Tech
DEPARTMENT OF BIOINFORMATICS/BIOTECHNOLOGY			
1	R.S. Chauhan	Professor	Ph.D.
2	Sudhir Syal	Associate Professor	Ph.D.
3	Chittranjan Rout	Associate Professor	Ph.D.
4	Harish Changotra	Associate Professor	Ph.D.
5	Jata Shankar	Asstt. Professor (SG)	Ph.D.
6	Harvinder Singh	Asstt. Professor (SG)	Ph.D.
7	Anil Kant	Asstt. Professor (SG)	Ph.D.
8	Rahul Shrivastava	Asstt. Professor (SG)	Ph.D.
9	Tiratha Raj Singh	Asstt. Professor (SG)	Ph.D.
10	Hemant Sood	Asstt. Professor (SG)	Ph.D.
11	Gunjan Goel	Asstt. Professor (SG)	Ph.D.
12	Manju Jain	Asstt. Professor (Sr. Grade)	Ph.D.
13	Poonam Sharma	Asstt. Professor (Sr. Grade)	Ph.D.
14	Jayashree Ramana	Asstt. Professor (Sr. Grade)	Ph.D.
15	Jitendraa Vashistt	Asstt. Professor (GR-II)	Ph.D.
16	Garlapati Vijay Kumar	Asstt. Professor (GR-II)	Ph.D.

17	Y.M. Raghothaman	Asstt. Professor (GR-II)	Ph.D.
18	Saurabh Bansal	Asstt. Professor (GR-I)	Ph.D.

DEPARTMENT OF PHARMACY			
1	Gopal Singh Bisht	Asstt. Professor (SG)	Ph.D.
2	Uday Banu M	Asstt. Professor (GR-II)	Ph.D.
3	Ahmed Nawaz Khan	Asstt. Professor (GR-I)	M. Pharm
DEPRTMENT OF CIVIL ENGINEERING			
1	Ashok K. Gupta	Professor	Ph.D.
2	V. S. Gali	Professor	Ph.D.
3	Rajiv Ganguly	Associate Professor	Ph.D.
4	Ashish Kumar	Associate Professor	Ph.D
5	Anil Kumar	Asstt. Professor (GR-II)	M.Tech.
6	Poonam	Asstt. Professor (GR-II)	M.Tech.
7	Chandrapal Gautam	Asstt. Professor (GR-II)	M. Tech
8	Abhilash Shukla	Asstt. Professor (GR-II)	M. Tech
9	Saurabh Rawat	Asstt. Professor (GR-II)	M. Tech
10	Saurav	Asstt. Professor (GR-II)	M. Tech
11	Lav Singh	Asstt. Professor (GR-I)	M. Tech
12	Niraj Singh Parihar	Asstt. Professor (GR-1)	M. Tech
13	Santu Kar	Assistant Professor (GR-I)	M. Tech
14	Deepak Kumar	Asssistant Professor (GR-I)	M.Tech
15	Mr. Bibhas Paul	Assistant Professor (GR-I)	M.Tech

DEPARTMENT OF PHYSICS			
1	P.B. Barman	Professor	Ph.D.
2	Sunil K. Khah	Professor	Ph.D.
3	Vineet Sharma	Associate Professor	Ph.D
4	Pankaj Sharma	Asstt. Professor (SG)	Ph.D
5	Dheeraj Sharma	Asstt. Professor (Sr. Grade)	Ph.D.
6	Rajesh Kumar	Asstt. Professor (Sr. Grade)	Ph.D.
7	S.K.Hazra	Asstt. Professor (GR-II)	Ph.D
8	Ragni Raj Singh	Asstt. Professor (GR-II)	Ph.D
9	Sanjiv Kumar Tiwari	Asstt. Professor (GR-II)	Ph.D.
DEPARTMENT OF MATHEMATICS			
1	Harinder Singh	Professor	Ph.D.
2	Karanjeet Singh	Professor	Ph.D.
3	R S Raja Durai	Associate Professor	Ph.D.
4	R K Bajaj	Associate Professor	Ph.D.
5	Neelkanth	Asstt. Professor (Sr. Grade)	Ph.D.
6	Pradeep K Pandey	Asstt. Professor (Sr. Grade)	Ph.D.
7	Narendra Kumar	Asstt. Professor (GR-I)	M.Sc.

DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES			
1	Anupriya Kaur	Associate Professor	Ph.D.
2	Amit Srivastava	Asstt. Professor (SG)	Ph.D.
3	Anil Sehrawat	Associate Professor	Ph.D.
4	Rashmi Sud	Asstt. Professor (GR-II)	MBA
5	Puneet Bhushan Sood	Asstt. Professor (GR-II)	Ph.D.
6	Triambica Gautam	Asstt. Professor (GR-II)	MBA
7	Tanu Shrma	Asstt. Professor (Sr. Grade)	Ph.D.
8	Neena Jindal	Associate Lecturer	M.Phil

Appendix-C

University Results of Past Four Years

The University was set up in the year 2002 and nine batches have graduated, the results of the last four batches are being furnished below:

RESULT OF THE BATCH 2009-2013

Branch	No. of Students	No. of students Passed	Pass Percentage
B. TECH.			
ECE	112	106	95
CSE	122	118	97
IT	47	45	94
BT	23	22	90
BI	12	12	88
CE	33	27	84
PHARMACY			
B. Pharma	30	28	85
M. Tech. (2011-2013)			
ECE	20	20	100
CSE	14	14	100
Construction Management	04	04	100
Computational Biology	04	04	100
Structural Engineering	02	02	100
Dual BT	01	01	100
Nanoteechnology	03	03	100

RESULT OF THE BATCH 2010-2014

Branch	No. of Students	No. of students Passed	Pass Percentage
B. TECH.			
ECE	128	117	91.40
CSE	147	139	94.50
IT	41	41	100.00
CE	98	90	91.80
BI	12	10	83.30
BT	14	14	100.00

PHARMACY

B. Pharm	06	03	50.00
M.Pharma	40	40	100.00

M. Tech. (2012-2014)

ECE	11	11	100.00
CSE	17	17	100.00
Construction Management	01	01	100.00
Computational Biology	05	05	100.00
Structural Engineering	01	01	100.00
Dual BT	31	30	96.70

RESULT OF THE BATCH 2011-2015

Branch	**No. of Students**	**No. of students Passed**	**Pass Percentage**
B. TECH.			
ECE	119	111	93%
CSE	129	121	94%
IT	59	58	98%
BI	12	11	92%
BT	17	17	100%
CE	101	95	94%
DUAL DEGREE (B.TECH-M.TECH) BIOTECHOLOGY			
BT	22	22	100%
B.PHARM	03	02	67%
M. PHARMA	28	28	100%
M.TECH (2013-2015)			
ECE	14	14	100%
CSE	22	22	100%
Structural Engngineering	12	12	100%
Biotechnology	08	08	100%

RESULT OF THE BATCH 2012-2016

Branch	No. of Students	No. of students Passed	Pass Percentage
B. TECH			
ECE	114	112	98%
CSE	130	128	98.4%
IT	21	21	100%
BI	19	19	100%
BT	24	24	100%
CE	97	95	98%
DUAL DEGREE (B.TECH-M.TECH) BIOTECHOLOGY			
BT	16	16	100%
M.TECH (2014-2016)			
ECE	10	10	100%
CSE	10	10	100%
Structural Engg	17	17	100%
Environmental Engg.	09	08	88%
Construction Management	09	09	100%
Biotechnology	06	06	100%

Appendix-D

GOVERNING COUNCIL

1. Pro-Chancellor

Shri Manoj Gaur — Chairman
Executive Chairman
Jaiprakash Associates Ltd.

2. Two Members of Trust nominated by the Pro-Chancellor

i) Shri Sunil Sharma — Member
Executive Vice Chairman
Jaiprakash Associates Ltd.

ii) Shri Sunny Gaur — Member
Managing Director (Cement)
Jaiprakash Associates Ltd.

3. Two Representatives of the Collaborating Universities

i) Prof William Webster
Ex-Acting Vice Chancellor (Budget & Finance)
University of California Berkeley, USA

ii) Prof. Sartaj Sahni — Member
Distinguished Professor
University of Florida at Gainsville, USA

4. **Three Distinguished Academicians/Professionals nominated by the Chancellor in consultation with the Pro-Chancellor**

i) Prof. Onkar Singh — Member
Vice Chancellor
MMM University of Technology, Gorakhpur

ii) Prof. P.K. Jain
Director
IIITDM, Jabalpur

iii) Prof. Manoj Arora — Member
Vice-Chancellor/Director
PEC Technical University, Chandigarh

5. Two Experts Representing other Disciplines such as Finance, Law and Management nominated by the Pro-Chancellor

i) Sh. S.S. Mittal — Member
Advocate, Shimla

ii) Sh. Pankaj Gaur — Member
Jt. Managing Director (Construction)
Jaiprakash Associates Ltd.

6. Vice Chancellor of the University

Prof. Vinod Kumar — Member

7. One Head of Another Institute/Laboratory of the Trust

Prof. S.C. Saxena
Vice Chancellor
JIIT, Noida

8. Two Deans of the University by Rotation

i) Prof. Samir Dev Gupta — Member

ii) Prof. R.S. Chauhan — Member

9. Three Secretaries of Government of Himachal Pradesh

i) Secretary (IT), Govt. of HP — Member

iii) Secretary (Education), Govt. of HP — Member

iv) Secretary (Technical Education), Govt. of HP — Member

10. Three Representatives of the Industr Nominated by the Pro-Chancellor

i) Sh. Alok Gaur
Head, HR Department
Jaiprakash Associates Ltd.

ii) Sh. C.S. Verma
Former Chairman
Steel Authority of India
(4086, Pocket C4, Vasant Cillas, Vasant Kunj,
New Delhi – 110070)

iii) Vacant

11. Non-Member Secretary

Brig. K.K. Marwah (Retd.)
Registrar

Appendix-D

EXECUTIVE COUNCIL

1. The Vice Chancellor of the University
Chairman

Prof. (Dr.) Vinod Kumar

2. Two Members of Governing Council nominated by the Pro-Chancellor

i) Sh. Sunil Sharma
Executive Vice Chairman
Jaiprakash Associates Ltd.

ii) Sh. S.S. Mittal
Advocate
Shimla

3. One Dean of the University

Prof. Samir Dev Gupta
Dean (Academic & Research)

4. One Academician of repute nominated by the Pro-Chancellor

Prof. S.C. Saxena
Vice Chancellor
Jaypee Institute of Information Technology (JIIT)
Noida

5. Non- Member Secretary

Brig. K.K. Marwah (Retd.)
Registrar

FINANCE COMMITTEE

1. The Vice Chancellor of the University **Chairman**

Prof. (Dr.) Vinod Kumar

2. One Nominee of the Pro-Chancellor

Sh. Sunil Sharma
Executive Vice chairman
Jaiprakash Associates Ltd

3. <u>One Nominee of the Governing Council</u>

Brig. K.K. Marwah (Retd.)
Registrar of the University

4. One Dean (by rotation) on the basis of Seniority

Prof. Samir Dev Gupta
Dean (Academic & Research)

5. The Finance Officer of the University shall be Non-Member Secretary

Sh. Hemant Vyas
Finance Officer

<u>BOARD OF STUDIES</u>

- Electronics & Communication Engineering
- Computer Science & Engineering
- Information & Communication Technology
- Bioinformatics
- Biotechnology
- Biotechnology Dual Degree
- Civil Engineering

Appendix-D

ACADEMIC COUNCIL OF THE UNIVERSITY

1. **The Vice Chancellor of the University**
   Chairman

   Prof. (Dr.) Vinod Kumar

2. **Two Professors other than Heads of Departments by Rotation and by Seniority**

   i) Prof.(Dr.) Sunil Kumar Khah – Physics & Material Science
   ii) Prof. (Dr.) Veeresh Gali – Civil

3. **Two Distinguished Academicians to be nominated by Pro- Chancellor**

   i) Prof. Manoj Arora,
   Vice Chancellor
   PEC University, Chandigarh

   ii) Prof. Padam Kumar,
   Dean (R&D)
   Jaypee Institute of Information Technology (JIIT), Noida

4. **Two Industry Professionals to be nominated by the Pro-Chancellor**

   i) Sh. Sunil Sharma
   Executive Vice Chairman
   Jaiprakash Associates Ltd.

   ii) Sh. Vinod Sharma
   Executive President
   Jaiprakash Associates Ltd.

5. **One Member from amongst the Heads of other Institution of the Trust**

   Prof. S.C. Saxena
   Vice Chancellor
   Jaypee Institute of Information Technology (JIIT), Noida

6. **The Deans of all Faculty of the University**

   i) Prof. Samir Dev Gupta
   Dean (Academic & Research)

   ii) Prof. R.S. Chauhan
   Dean (Biotechnology)

7. Heads of the Departments/Centres of the University

i) Prof. (Dr.) S.V. Bhooshan, HOD-ECE
ii) Prof. (Dr.) Karanjeet Singh, HOD, Mathematics
iii) Prof. (Dr.) P.B. Barman, HOD, Physics & Material Science
iv) Prof. (Dr.) R.S. Chauhan, HOD, BT & BI
v) Prof. (Dr.) Brig. S.P. Gherera (Retd.), HOD, CSE & IT
vi) Prof. (Dr.) Ashok Kumar Gupta, HOD, Civil

Non-Member Secretary

Brig. K.K. Marwah (Retd.)
Registrar of the University

Appendix-E

BALANCE SHEET FOR

THE

FINANCIAL YEAR 2015-16

FORM NO. 10B

[*See* rule 17B]

Audit report under section 12A(b) of the Income-tax Act, 1961, in the case of charitable or religious trusts or institutions

We have examined the balance sheet of **JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY** , **AAATJ4059Q** [name and PAN of the trust or institution] as at **31/03/2016** and the Profit and loss account for the year ended on that date which are in agreement with the books of account maintained by the said trust or institution.

We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of the audit. In our opinion, proper books of account have been kept by the head office and the branches of the abovenamed **trust** visited by us so far as appears from our examination of the books, and proper Returns adequate for the purposes of audit have been received from branches not visited by us , subject to the comments given below:

In our opinion and to the best of our information, and according to information given to us , the said accounts give a true and fair view-

(i) in the case of the balance sheet, of the state of affairs of the above named **trust** as at **31/03/2016** and

(ii) in the case of the profit and loss account, of the profit or loss of its accounting year ending on **31/03/2016**

The prescribed particulars are annexed hereto.

Place	**NEW DELHI**
Date	**27/08/2016**

Name	**ASHOK KUMAR JAIN**
Membership Number	**090563**
FRN (Firm Registration Number)	**000112N**
Address	**Delhi Gulmohar Park B-4, NEW DELHI DELHI 110049 INDIA**

ANNEXURE

Statement of particulars

I. APPLICATION OF INCOME FOR CHARITABLE OR RELIGIOUS PURPOSES

1.	Amount of income of the previous year applied to charitable or religious purposes in India during that year (₹)		416383840
2.	Whether the **trust** has exercised the option under clause (2) of the Explanation to section 11(1) ? If so, the details of the amount of income deemed to have been applied to charitable or religious purposes in India during the previous year (₹)		No
3.	Amount of income **accumulated or set apart** for application to charitable or religious purposes, to the extent it does not exceed 15 per cent of the income derived from property held under trust **wholly** for such purposes. (₹)		Yes 72848440
4.	Amount of income eligible for exemption under section 11(1)(c) (Give details)		No
5.	Amount of income, in addition to the amount referred to in item 3 above, accumulated or set apart for specified purposes under section 11(2) (₹)		0
6.	Whether the amount of income mentioned in item 5 above has been invested or deposited in the manner laid down in section 11(2)(b) ? If so, the details thereof.		Not Applicable
7.	Whether any part of the income in respect of which an option was exercised under clause (2) of the Explanation to section 11(1) in any earlier year is deemed to be income of the previous year under section 11(1B) ? If so, the details thereof (₹)		No
8.	Whether, during the previous year, any part of income accumulated or set apart for specified purposes under section 11(2) in any earlier year-		
	(a)	has been applied for purposes other than charitable or religious purposes or has ceased to be accumulated or set apart for application thereto, or	No
	(b)	has ceased to remain invested in any security referred to in section 11(2)(b)(i) or deposited in any account referred to in section 11(2)(b)(ii) or section 11(2)(b)(iii), or	No
	(c)	has not been utilised for purposes for which it was accumulated or set apart during the period for which	No

		it was to be accumulated or set apart, or in the year immediately following the expiry thereof? If so, the details thereof	

II. APPLICATION OR USE OF INCOME OR PROPERTY FOR THE BENEFIT OF PERSONS REFERRED TO IN SECTION

1.	Whether any part of the income or property of the **trust** was lent, or continues to be lent, in the previous year to any person referred to in section 13(3) (hereinafter referred to in this Annexure as such person)? If so, give details of the amount, rate of interest charged and the nature of security, if any.	No
2.	Whether any part of the income or property of the **trust** was made, or continued to be made, available for the use of any such person during the previous year? If so, give details of the property and the amount of rent or compensation charged, if any.	No
3.	Whether any payment was made to any such person during the previous year by way of salary, allowance or otherwise? If so, give details	No
4.	Whether the services of the **trust** were made available to any such person during the previous year? If so, give details thereof together with remuneration or compensation received, if any	No
5.	Whether any share, security or other property was purchased by or on behalf of the **trust** during the previous year from any such person? If so, give details thereof together with the consideration paid	No
6.	Whether any share, security or other property was sold by or on behalf of the **trust** during the previous year to any such person? If so, give details thereof together with the consideration received	No
7.	Whether any income or property of the **trust** was diverted during the previous year in favour of any such person? If so, give details thereof together with the amount of income or value of property so diverted	No
8.	Whether the income or property of the **trust** was used or applied during the previous year for the benefit of any such person in any other manner? If so, give details	No

III. INVESTMENTS HELD AT ANY TIME DURING THE PREVIOUS YEAR(S) IN CONCERNS IN WHICH PERSONS REFERRED TO IN SECTION 13(3) HAVE A SUBSTANTIAL INTEREST

S. No	Name and address of the concern	Where the concern is a company, number and class of shares held	Nominal value of the investment(₹)	Income from the investment(₹)	Whether the amount in col. 4 exceeded 5 per cent of the capital of the concern during the previous year-say, Yes/No
	Total				

Place **NEW DELHI**
Date **27/08/2016**

Name	**ASHOK KUMAR JAIN**
Membership Number	**090563**
FRN (Firm Registration Number)	**000112N**
Address	**Delhi Gulmohar Park B-4, NEW DELHI DELHI 110049 INDIA**

Form Filing Details	
Revision/Original	Original

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
	CORPUS FUND			
5,00,00,000	For University			5,00,00,000
1,01,55,000	For Research Promotion (UBSK)			1,01,55,000
6,01,55,000				**6,01,55,000**
	GENERAL FUND			
5,16,76,811	Opening Balance			6,23,84,606
1,07,07,795	Add: Surplus brought from Income & Expenditure A/C.			4,14,82,211
6,23,84,606				**10,38,66,817**
	RESEARCH PROJECT'S FUND			
1,14,03,982	Opening Balance			56,65,428
1,96,60,842	Add : Received during the year			2,66,08,328
(2,51,75,092)	Less : Expenses during the year			(1,81,21,128)
(2,24,304)	Less : Refunded during the year			(6,20,540)
56,65,428				**1,35,32,088**
	CURRENT LIABILITIES & PROVISIONS			
11,05,01,305	Sundry Creditors	SCH.	"H"	**9,02,51,577**
15,29,35,763	Other Liabilities	SCH.	"I"	**15,44,30,751**
	CAUTION MONEY			
1,79,08,533	Opening Balance			1,80,28,818
45,26,000	Add : Received during the year			49,40,000
(44,05,715)	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**

Amount (₹) 31.03.2015	ASSETS			Amount (₹) 31.03.2016
	FIXED ASSETS			
55,21,15,904	Opening Balance			56,17,51,317
96,35,413	Addition during the year			1,59,57,453
-	Disposed off during the year			(54,000)
56,17,51,317	**Gross Block**	SCH.	"A"	**57,76,54,770**
32,70,79,688	Less : up to date Depreciation			35,90,81,013
23,46,71,629	**Net Block**			**21,85,73,757**
1,52,68,359	**CAPITAL WORK IN PROGRESS**	SCH.	"B"	**-**
	CURRENT ASSETS, LOANS & ADVANCES			
14,03,41,840	Cash & Bank Balance	SCH.	"C"	**20,07,44,192**
85,77,556	Advances and Receivables in Cash or in Kind	SCH.	"D"	**96,85,488**
31,42,239	Prepaid Expenses	SCH.	"E"	**31,94,683**
21,95,186	Security Deposits	SCH.	"F"	**21,95,186**
54,74,111	Stock- in- Hand	SCH.	"G"	**61,24,252**
40,96,70,920	**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 JAIN)
PARTNER
MEMBERSHIP NO.:090563
PLACE:-New Delhi
DATE :27.08.2016

(VINOD KUMAR)
VICE CHANCELLOR

(BRIG.K .K.MARWAH (RETD.))
REGISTRAR

(NEHA ARORA)
ASTT. 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	Amount (₹) 31.03.2015	INCOME		Amount (₹) 31.03.2016
11,18,14,436	Institute Expenses	SCH. "J"	**11,02,70,837**	45,20,52,452	Collection from Students	SCH. "M"	**47,43,16,023**
20,29,02,801	Salary & Allowances	SCH. "K"	**19,78,67,425**	1,05,45,228	Interest received on FDs	SCH. "N"	**1,23,32,077**
10,23,72,958	Students Hostel Expenses	SCH. "L"	**10,76,10,484**	13,55,964	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**	**46,39,53,644**	**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.000112N

(ASHOK KUMAR JAIN)
PARTNER
MEMBERSHIP NO. 090563
PLACE:- New Delhi
DATE :27.08.2016

(VINOD KUMAR)
VICE CHANCELLOR

(BRIG.K .K.MARWAH (RETD.))
REGISTRAR

(NEHA ARORA)
ASTT. FINANCE OFFICER

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "A" : Fixed Assets

Amount (₹)

Block of Assets	Rate of Dep.	GROSS BLOCK					DEPRECIATION			NET BLOCK	
		Op. Balance as on 01.04.2015	Addition during the year		Disposed off during the year	As on 31.03.2016	Op. Balance as on 01.04.2015	For the Year	Up to 31.03.2016	As on 31.03.2015	As on 31.03.2016
Classification of Assets			180 Days or more	Less than 180 Days							
Buildings	10%	11,56,26,273		1,44,15,635		13,00,41,908	3,02,58,373	92,57,573	3,95,15,946	8,53,67,900	9,05,25,962
Library Books/Software Library	15%	6,34,32,196	3,23,815	1,50,842		6,39,06,853	3,80,78,645	38,62,918	4,19,41,563	2,53,53,551	2,19,65,290
Electronic Lab Equipments	15%	1,99,33,408				1,99,33,408	1,29,12,834	10,53,086	1,39,65,920	70,20,574	59,67,488
Bio Informatics Lab Equipments	15%	2,75,71,468	29,000	15,400		2,76,15,868	1,68,16,482	16,18,753	1,84,35,235	1,07,54,986	91,80,633
Physics Lab Equipments	15%	1,06,53,725				1,06,53,725	65,44,372	6,16,403	71,60,775	41,09,353	34,92,950
Computer Lab Equipments	60%	9,30,40,409	73,500		54,000	9,30,59,909	8,95,13,040	21,28,121	9,16,41,161	35,27,369	14,18,748
Imported Bio Lab Equipments	15%	2,20,31,080				2,20,31,080	1,54,23,581	9,91,125	1,64,14,706	66,07,499	56,16,374
Imported Electronic Lab Equipments	15%	33,58,810				33,58,810	29,24,855	65,093	29,89,948	4,33,955	3,68,862
Imported Computer Lab Equipments	60%	7,37,191				7,37,191	7,37,169	13	7,37,182	22	9
Imported Office Equipments	15%	87,905				87,905	63,952	3,593	67,545	23,953	20,360
Civil Lab Equipments	15%	95,34,567	2,36,250			97,70,817	50,53,374	7,07,616	57,60,990	44,81,193	40,09,827
Software-Computer	60%	30,64,905				30,64,905	30,29,544	21,217	30,50,761	35,361	14,144
Software -Math	15%	3,24,350				3,24,350	2,20,371	15,597	2,35,968	1,03,979	88,382
Software-Civil	15%	22,64,478				22,64,478	10,81,279	1,77,480	12,58,759	11,83,199	10,05,719
Software -Language Lab	15%	8,20,116				8,20,116	5,20,458	44,949	5,65,407	2,99,658	2,54,709
Office Equipments	15%	1,34,06,568	3,52,222	36,990		1,37,95,780	65,25,801	10,87,723	76,13,524	68,80,767	61,82,256
Miscellaneous Assets	15%	41,77,389		59,638		42,37,027	28,24,056	2,07,473	30,31,529	13,53,333	12,05,498
Gymnasium Equipments	15%	29,93,655				29,93,655	12,80,133	2,57,028	15,37,161	17,13,522	14,56,494
Furniture & Fixtures	10%	5,61,57,414				5,61,57,414	2,68,73,199	29,28,422	2,98,01,621	2,92,84,215	2,63,55,793
Vehicles	15%	1,12,71,394				1,12,71,394	80,74,234	4,79,574	85,53,808	31,97,160	27,17,586
Imported Kitchen Equipments	15%	2,78,308				2,78,308	1,89,089	13,383	2,02,472	89,219	75,836
Kitchen Equipments	15%	50,94,194	2,23,236			53,17,430	28,73,708	3,66,558	32,40,266	22,20,486	20,77,164
Plant & Machinery	15%	5,05,12,064				5,05,12,064	3,62,20,245	21,43,773	3,83,64,018	1,42,91,819	1,21,48,046
Electrical Equipments	15%	82,38,981		40,925		82,79,906	53,62,068	4,34,606	57,96,674	28,76,913	24,83,232
Mechanical Lab Equipments	15%	27,37,255				27,37,255	14,96,226	1,86,154	16,82,380	12,41,029	10,54,875
Research Equipments	15%	3,44,03,214				3,44,03,214	1,21,82,602	33,33,092	1,55,15,694	2,22,20,614	1,88,87,520
GROSS TOTAL		56,17,51,317	12,38,023	1,47,19,430	54,000	57,76,54,770	32,70,79,690	3,20,01,323	35,90,81,013	23,46,71,629	21,85,73,757
PREVIOUS YEAR		56,21,15,904	26,46,834	69,88,529		56,17,51,317	29,09,24,032	3,61,55,656	32,70,79,688	26,11,32,128	23,46,71,629

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT JUIT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "B" : CAPITAL WORK IN PROGRESS

Amount (₹)

Particulars	Opening Balance as on 01.04.2015	Addition during the Year	Capitalized during the Year	Expensed Out during the Year	Closing Balance as on 31.03.2016
Building under construction	1,52,68,359		1,44,15,635	8,52,724	-
Gross Total	**1,52,68,359**	**-**	**1,44,15,635**	**8,52,724**	**-**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT JUIT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "C" : Cash and Bank Balance

S.No	Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
I	**Cash in Hand**	2,24,523	2,10,070
II	**Balance with Schedule Banks**		
	In Current Account :		
	- State Bank of Patiala, Waknaghat	7,60,300	30,31,307
	- Punjab National Bank, Shimla	4,24,512	1,66,847
	- Oriental Bank of Commerce, Solan	3,91,477	2,57,067
	- Punjab National Bank , Waknaghat	41,67,523	28,55,307
	In Savings Account :		
	- Punjab National Bank , Samirpur	11,53,434	6,42,267
III	**Fixed Deposits with Banks**		
	- State Bank of Patiala, Wakanaghat	8,81,01,997	5,00,00,000
	- Punjab National Bank, Shimla	10,42,812	9,89,534
	- Punjab National Bank, Waknaghat	-	5,88,00,000
	- Oriental Bank of Commerce, Solan	8,37,33,164	50,00,000
	- Punjab National Bank, Samirpur	8,05,966	7,00,000
	- Interest Accrued but not due	17,98,522	7,88,220
	The above FDRs have been physically verified and not pledged with any Bank or Institution.		
IV	**Earmarked Deposits with Banks**		
	- Syndicate Bank UBSK, Noida (C/A)	1,52,448	1,52,562
	- Syndicate Bank UBSK, Noida (FDR)	1,46,82,579	1,46,82,579
	- Interest Accrued on FDR	33,04,935	20,66,080
	TOTAL	**20,07,44,192**	**14,03,41,840**

PASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT JUIT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "D" : ADVANCES AND RECEIVABLES IN CASH OR IN KIND

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
Advances To:-		
- Staff	24,625	1,70,441
- Suppliers/Agencies	12,06,225	4,83,060
Receivables From:-		
- Students	17,25,325	20,69,327
- Income Tax Department	23,48,417	18,22,034
- Excise & Taxation Department (VAT)	38,17,348	38,17,348
- Excise & Taxation Department (Entry Tax)	2,15,346	2,15,346
- Provident Fund Exps Receivable (PF)	3,48,202	-
TOTAL	**96,85,488**	**85,77,556**

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16
Annexure to ADVANCES AND RECEIVABLES IN CASH OR IN KIND

Annexure to Schedule "D"

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
Advance to Staff		
Imprest - Staff & Staff Advance	24,625	1,28,471
Other Charges Recoverable from students	-	41,970
Sub - Total	**24,625**	**1,70,441**
Advance to Suppliers/Agencies		
Air Fluid Engineers & Equipments	27,937	
Amba Electronics		31,500
Bruker Daltonik GMBH		1,01,906
Director NIN Nclas A/C	39,550	-
Everest Blowers	1,08,732	-
Genotypic Technology Pvt. Ltd.	3,59,902	7,927
Indian Oil Corporation Ltd.	87,121	38,605
Idream Networks Pvt.Ltd.	38,535	-
Jaypee Himachal Cement Plant Baga	-	90,202
Tek Chand Bharti	4,54,823	-
Technoware Systems India (P) Ltd.	89,625	-
PS Corporate Solutions Pvt. Ltd.		20,000
Shivam Trading Co.		726
Waters (India) Pvt. Ltd.		44,944
Zenith Engineers		1,47,250
Sub - Total	**12,06,225**	**4,83,060**
Receivables from Students :		
Development Fee- General Category	1,20,001	2,44,516
Development Fee- NRI Sponsored Students	5,14,597	3,91,622
Hostel Fee - General Category	2,00,890	5,94,640
Hostel Fee - NRI Sponsored Students	1,48,962	1,23,460
Tuition Fee - General Category	2,36,875	4,72,500
Tuition Fee - NRI Sponsored Students	5,04,000	2,42,589
Sub - Total	**17,25,325**	**20,69,327**

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT JUIT

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "E" : PREPAID EXPENSES

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
AMC for Equipments	10,91,438	7,39,910
Insurance	2,13,329	88,689
Subscription for Journals & Digital Library	18,89,916	23,13,640
TOTAL	**31,94,683**	**31,42,239**

DASS GUPTA & ASSOCIATES * NEW DELHI * CHARTERED ACCOUNTANTS

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY * WAKNAGHAT * JUIT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "F" : SECURITY DEPOSITS

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
For Electricity Charges	20,83,514	20,83,514
For LPG	1,00,300	1,00,300
For Telephones	11,372	11,372
TOTAL	**21,95,186**	**21,95,186**

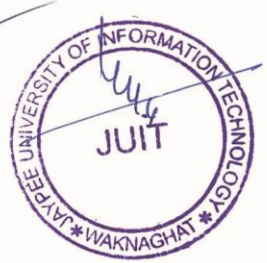
DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY JUIT WAKNAGHAT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "G" : STOCK-IN-HAND

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
Annapurna Grocery & Eatables	9,40,425	5,80,236
Medicines	33,314	43,406
Diesel	6,43,177	6,88,296
General Hardware Items	22,17,987	22,87,671
Electrical Items	21,24,548	18,27,706
Spares for Vehicles	1,64,801	46,796
TOTAL	**61,24,252**	**54,74,111**



JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "H" : SUNDRY CREDITORS

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
- For Goods	48,70,679	1,16,07,033
- For Services	5,21,74,806	7,53,47,883
- For Retention Money	2,67,187	8,27,696
- For Statutory Liabilities	3,29,38,905	2,27,18,693
TOTAL	**9,02,51,577**	**11,05,01,305**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY JUIT WAKNAGHAT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16
Annexure to Sundry Creditors

Annexure to Schedule - "H"

S. No.	Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
	FOR GOODS SUPPLIED: (i)		
1	Advanced Microdevices Pvt. Ltd.	-	2,526
2	AIMIL Ltd.	-	7,80,806
3	Ambala Motor Stores	-	60,210
4	Anamika Screen Printers	77,208	18,780
5	Anand Electronics	-	1,95,644
6	Anchal Enterprises	-	14,000
7	Apara Enterprises Solutions (P) Ltd.	-	32,722
8	Balani Infotech Pvt. Ltd.	-	8,99,360
9	Balzers Enterprises	-	1,74,999
10	Bio Rad Laboratories (India) Pvt. Ltd.	-	16,854
11	Brightway Agencies	-	22,680
12	Dinesh Kumar & Co.	68,040	63,369
13	Gainda Mull Hemraj	-	20,849
14	Gigo Bytes	-	1,04,683
15	Glance Enterprises	-	6,860
16	Global Information Systems Technology Pvt. Ltd.	-	13,63,586
17	Globe Electric Store	-	2,61,233
18	Gupta Sales Corp.	-	25,308
19	Heatex Boilers (India) Pvt. Ltd.	2,700	1,22,438
20	Hira Nand & Brothers	11,15,791	9,92,279
21	Inflibnet	-	5,000
22	International Scientific & Surgicals	2[illegible]75,633	21,03,113
23	Jay Sons Mill Store	-	1,79,213
24	Jaypee Alumni Association	43,200	3,58,000

DASS GUPTA & ASSOCIATES * NEW DELHI * CHARTERED ACCOUNTANTS

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY * WAKNAGHAT * JUIT

Annexure to Schedule - "H"

S. No.	Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
25	Jupiter India Sales	-	32,926
26	K & G Promotions	6,600	50,894
27	Kanwar NDNE Indane Gas Service	2,24,420	2,70,600
28	Krishna Book Distributors	-	2,47,410
29	Kumar Enterprises	-	49,542
30	Labrex Biologicals	-	94,654
31	M K Electric & Electronic Works	-	5,500
32	M. S. Auto Store	-	1,493
33	Mahamaya Promoters	-	4,586
34	MCAT Aptitude Classes	-	49,200
35	Metro Sports & General Suppliers	-	54,338
36	Milman Thin Film Systems Pvt.Ltd.	31,953	31,953
37	Moudgil Gas Services & Hardware	-	3,400
38	Namo Shivai Enterprises	-	4,568
39	Nayana Trading Company	4,589	4,589
40	Neha Fruit Company	65,353	-
41	Pals Trading & Services	-	9,410
42	Periodica Indica	-	3,11,765
43	Prime Book Service	65,572	-
44	Prime Sports	-	24,833
45	R S Associates	-	12,495
46	Rajesh	-	4,116
47	Rajesh Kumar & Sons	-	8,825
48	Rajinder Kumar	14,700	-
49	Rajinder kumar	-	62,353
50	Research Aid Instruments & Services	-	7,69,767
51	Rmaiden Agencies	-	24,728
52	Sai Agencies	-	1,24,766
53	Sai Indane Gas Services	-	28,308
54	Sheela Enterprises	9,63,470	10,71,864

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY JUIT WAKNAGHAT

Annexure to Schedule - "H"

S. No.	Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
55	Shiv Bakers	-	1,10,421
56	Sigma Aldrich Chemicals Pvt. Ltd.	-	19,807
57	Sikand & Co.	-	3,100
58	Supertreads	-	1,32,689
59	Stefab India Limited	11,450	-
60	Thakur News Agency	-	8,362
61	Xcelris Labs Ltd.	-	1,49,259
	Sub - Total (i)	**48,70,679**	**1,16,07,033**
	FOR SERVICES RENDERED:(ii)		
1	Alpha Engineers	-	3,811
2	Baldev Sharma	-	39,045
3	Catalyst Forwarders & Logistics Pvt. Ltd.	-	16,959
4	Civil Engineering Consortium	5,000	5,000
5	Dass Gupta & Associates	2,10,000	-
6	Dinesh Pandit	7,938	-
7	Electro Mech. Engineers	-	59,821
8	Ensure Support Services (India) Ltd.	-	53,133
9	Enviro Engineers	-	40,425
10	Eppendorf India Ltd.	-	11,236
11	Ergo Dynamix	-	1,75,408
12	Essence Life Sciences	-	6,198
13	Eureka Forbes Limited	-	35,300
14	Executive Officer Muncipal Council	23,000	-
15	Genomic Services	-	5,90,292
16	H. P. Private Educational Instt. Regulat. Co.	9,46,158	9,46,158
17	HCL Services Ltd.	-	68,775
18	JAL Baga	4,67,88,156	6,67,88,156
19	JIL Information Technology Ltd.	6,37,264	6,21,003

DASS GUPTA & ASSOCIATES * NEW DELHI * CHARTERED ACCOUNTANTS

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY * WAKNAGHAT * JUIT

Annexure to Schedule - "H"

S. No.	Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
20	JIMS	-	6,97,841
21	Jitender Singh	-	12,054
22	JUIT CLUB	-	56,000
23	Kamaluddin	1,485	1,485
24	Khan Brothers & Associates	1,91,797	4,52,871
25	Kannan Build Tech Pvt. Ltd.	11,706	-
26	Kamlesh	10,000	-
27	Labex Corporation	-	66,344
28	Lexport	-	69,120
29	Lovlesh Thakur	-	36,000
30	Monika	27,500	-
31	Master Launderers Co.	2,13,314	-
32	Naturalite Technologies	67,830	-
33	Oswal Scientific Stores	-	13,379
34	OYNX Mgt. Services Pvt. Ltd.	8,21,329	8,75,457
35	Pest Control (India) Pvt.Ltd.	-	57,543
36	Poonam Dalal	-	49,000
37	Prem Lata Bharti	-	85,064
38	Railtel Corp.of India Ltd.	6,29,750	6,08,880
39	Raj Analytical Solutions Pvt.Ltd.	-	1,26,949
40	Rajeev Sood & Co.	-	2,55,058
41	Ram Lal	-	24,500
42	Raman Sharma	28,000	28,000
43	Revolution	3,609	16,092
44	Rishi Mahajan	2,64,000	52,800
45	S. M. Bhatt	1,38,596	1,65,627
46	Samsuddin	-	10,200
47	Sawhney Brothers	-	3,575
48	Scientific Solutions	-	96,252
49	SGA Law Offices	-	29,700

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT JUIT

Annexure to Schedule - "H"

S. No.	Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
50	Shalini Dhadwal	9,000	19,800
51	Shallu Bharti	-	74,088
52	Sharma Associates	-	85,985
53	Shiva Gas Services	-	40,922
54	Shivam Trading Co.	1,37,740	96,360
55	Sophisticated Industrial Mat. Anay. Labs	39,381	39,381
56	Suraj Mani Bhatt	3,90,821	5,15,347
57	Suresh Kumar Chauhan	-	12,348
58	Tek Chand Bharti	-	2,88,314
59	Tera Tradelinks Pvt.Ltd.	-	1,68,525
60	Thakur Electrical Works	-	41,827
61	Utkarsh Utilities LLP	5,41,225	5,84,268
62	Vijay Kumar	30,207	30,207
	Sub - Total (ii)	**5,21,74,806**	**7,53,47,883**

	FOR RETENTION:(iii)		
1	Bhim Sain Pawan Kumar	-	70,048
2	Dinesh Pandit	2,772	-
3	Durga Agencies	-	6,118
4	Juned Ahmed	1,113	1,113
5	Kamaluddin	-	10,642
6	Khan Brothers & Associates	52,906	-
7	Kannan Build Tech. Pvt. Ltd.	2,098	-
8	Naturalite Technologies	7,294	-
9	Pandit Gunsagar	1,201	1,201
10	Prime Hi Tech Engg.	845	845
11	Parvez	1,697	-
12	Rakesh Chand Thakur	23,290	10,564

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT JUIT

Annexure to Schedule - "H"

S. No.	Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
13	Shivam Trading Company	1,39,871	6,66,355
14	Thakur Electrical Works	5,077	10,609
15	Vijay Kumar	22,413	43,591
16	Yes Water Proofing	6,610	6,610
	Sub - Total (iii)	**2,67,187**	**8,27,696**

	FOR STATUTORY LIABILITIES :(iv)		
1	Provision For Gratuity	3,06,06,394	2,03,59,891
2	Contribution to PF	23,32,511	23,58,802
	Sub - Total (iv)	**3,29,38,905**	**2,27,18,693**
	Grand Total (i+ii+iii+iv)	**9,02,51,577**	**11,05,01,305**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT JUIT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "I" : OTHER LIABILITIES

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
Advance Fee	9,07,05,311	8,58,95,773
Expenses Payable	78,91,082	1,05,84,830
Cheques Under Clearing/In hand	51,61,759	(1,08,282)
Due to Sponsoring Trust	3,72,08,122	4,19,58,284
JYC Students Fund	15,14,087	16,49,648
Salary and Allowances Payable	90,75,981	1,12,10,523
T.D.S. Payable	28,74,409	17,44,987
TOTAL	**15,44,30,751**	**15,29,35,763**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY JUIT WAKNAGHAT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16
Annexure to Other Liabilities

Annexure to Schedule - "I"

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
Expenses Payable:- (i)		
Scholarships	20,31,270	41,01,320
LTA	6,18,967	13,98,662
Electricity Expenses	19,85,439	22,52,879
Telephone Reimbursment	3,500	6,000
Telephone Expenses	11,605	37,109
Other Charges -Students/Imprest staff	1,08,621	0
Medical Reimbursement	31,31,680	27,88,860
Sub-Total (i)	**78,91,082**	**1,05,84,830**
Salary & Allowances Payable :- (ii)		
Teaching Staff	68,64,928	90,09,536
Non-Teaching Staff	22,11,053	22,00,987
Sub-Total (ii)	**90,75,981**	**1,12,10,523**
TDS Payable:- (iii)		
TDS - Contractor	81,612	1,30,163
TDS - Legal & Professional	2,37,906	3,25,472
TDS - Rent	274	500
TDS - Salary	25,31,327	12,86,350
TDS - W.C.T.	23,290	2,502
Sub-Total (iii)	**28,74,409**	**17,44,987**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY JUIT WAKNAGHAT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "J" : INSTITUTE EXPENSES

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
Admission Exps. including Advertisement	14,50,298	11,92,225
Audit Fee	2,30,000	1,68,540
Conference & Seminar Expenses	3,43,297	10,34,943
Convocation Expenses	-	6,84,126
Contribution towards Reasearch & Development	14,56,936	-
E-Journals & Periodicals	62,58,420	54,69,105
Electricity Expenses	98,13,994	1,02,56,921
Honorarium to Faculty & Remuneration of Visiting Faculty	4,73,230	7,42,629
Institute Promotional Expenses	3,03,104	29,71,432
Insurance Expenses	2,70,734	5,35,994
Internet Charges	18,34,922	4,72,063
Laboratory Expenses	17,52,429	26,88,590
Lease Rent	39,294	39,234
Legal & Professional Charges	2,77,870	3,48,025
Misc. Expenses	2,43,493	11,55,772
Payment to Technical Personnel	84,33,827	88,01,070
Placement Expenses	9,25,179	7,75,419
Postage & Telegram	1,25,189	1,62,351
Printing & Stationery	24,29,314	28,76,148
Prior Period Expenses	-	60,126
Recruitment Expenses	61,221	86,123
Debt Obligation Principal Amount	3,5[illegible]92,307	2,08,34,000
Debt Obligation Interest Amount	48,[illegible]3,293	96,93,222

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT JUIT

SCHEDULE - "J" (Continued)

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
Scholarship to Students	88,70,456	1,11,42,727
Security Expenses	20,70,125	19,33,260
Staff Welfare	7,27,615	13,08,904
Telephone Expenses	2,99,435	5,63,194
Travelling & Conveyance	3,94,165	3,64,912
Water Expenses	37,92,104	50,41,733
Repair & Maintenance		
- Civil Maintenance	27,09,428	39,08,891
- Equipment & Machinery	37,69,049	30,73,210
- Furniture & Fixture	9,14,652	7,17,331
- Horticulture Exps.	28,84,250	32,55,907
- Institute House Keeping	39,09,287	47,75,061
- Others	1,86,077	9,49,615
- Vehicles	26,42,304	35,39,369
- Water Supply Scheme	53,539	1,92,264
TOTAL	**11,02,70,837**	**11,18,14,436**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT JUIT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "K" : SALARY & ALLOWANCES

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
Teaching Staff :		
Salary	9,26,71,147	10,39,56,337
Conveyance Allowance	63,72,661	76,00,183
H.R.A.	58,22,061	67,62,935
Medical Reimbursement	32,24,030	37,83,430
Leave Travel Assistance	31,98,547	38,20,568
Contribution to Provident Fund	1,06,56,262	1,26,95,924
Provision for Gratuity	88,90,209	45,19,506
Other Allowances	1,84,94,462	2,08,87,294
Sub - Total	**14,93,29,379**	**16,40,26,177**
Non-Teaching Staff :		
Salary	2,97,11,639	2,64,94,157
Conveyance Allowance	16,96,992	16,49,344
H.R.A.	22,58,602	20,39,862
Medical Reimbursement	12,09,282	10,53,716
Leave Travel Assistance	12,03,850	10,79,870
Contribution to Provident Fund	39,72,025	32,65,529
Provision for Gratuity	60,09,117	5,99,015
Other Allowances	24,76,539	26,95,131
Sub - Total	**4,85,38,046**	**3,88,76,624**
TOTAL	**19,78,67,425**	**20,29,02,801**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY * WAKNAGHAT * JUIT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "L" : STUDENTS HOSTEL EXPENSES

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
Grocery & Eatables Consumed	5,02,37,439	5,01,09,203
Security Expenses	48,30,292	45,10,946
Electricity Charges	1,36,08,687	1,39,85,581
Water Charges	95,82,823	1,00,48,263
Housekeeping Expenses	71,29,808	56,36,449
Dispensary Expenses	24,47,462	23,64,854
Student Welfare Expenses	9,88,280	10,89,146
Messing Staff Expenses	74,15,749	69,06,028
Repair & Maintenance	78,32,669	47,41,194
Laundry Expenses	35,37,275	29,81,294
TOTAL	**10,76,10,484**	**10,23,72,958**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT JUIT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "M" : COLLECTIONS FROM STUDENTS

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
Fees From Students:		
Tuition Fee	20,51,68,221	19,59,77,320
Hostel Fee	14,95,46,453	13,69,23,525
Development Fee	10,33,70,968	10,02,90,025
Sub Total :	**45,80,85,642**	**43,31,90,870**
Other Collection:-		
Misc. Charges	13,52,860	20,16,542
Admission Form Charges	15,82,941	22,43,375
Tuck Shop Charges	40,86,725	45,97,753
Mess Charges	92,07,855	1,00,03,912
Sub Total :	**1,62,30,381**	**1,88,61,582**
TOTAL	**47,43,16,023**	**45,20,52,452**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT JUIT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "N" : INTEREST RECEIVED ON FDRs

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
Oriental Bank of Commerce - Solan	43,12,998	3,66,682
Punjab National Bank - Shimla	75,671	1,18,347
Punjab National Bank - Waknaghat	11,85,815	35,66,970
State Bank of Patiala - Waknaghat	52,43,903	51,97,306
Syndicate Bank - Noida (UBSK)	13,76,506	12,81,701
Punjab National Bank - Samirpur	1,37,184	14,222
TOTAL	**1,23,32,077**	**1,05,45,228**

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2015-16

SCHEDULE - "O" : OTHER INCOME

Particulars	Amount (₹) 31.03.2016	Amount (₹) 31.03.2015
Other Miscellaneous Income	3,52,746	-
Notice Pay Recovery	8,58,968	-
Overhead Charges for Research Projects	12,41,706	12,61,397
Registration Charges for Conference & Seminars	1,30,760	94,567
TOTAL OTHER INCOME	**25,84,180**	**13,55,964**

DASS GUPTA & ASSOCIATES * NEW DELHI * CHARTERED ACCOUNTANTS

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY * WAKNAGHAT * JUIT

Appendix-F

TRAINING & PLACEMENT DATA

JUIT, Waknaghat : 2007-2011

Branch	Total No. of Students	No. of Students Offered	% of Placement
BI	23	47	204%
BT	17	21	124%
CIE	35	24	69%
CSE	124	214	173%
ECE	124	201	162%
IT	47	70	149%
DDBT / BI	30	21	70%
M.TECH	16	12	75%
Total	416	610	147%

Note: Rest all the students are pursuing higher studies from various Institutes in India or Abroad.

Campus Placement 2008-12 Batch

BRANCH	Total No. of Students Eligible	No. of Students Offered	% of Placement
CSE	126	205	163%
ECE	125	169	135%
IT	45	76	169%
BT	30	27	90%
BI	12	11	92%
CIVIL	30	23	77%

Campus Placement 2009-13 Batch

BRANCH	Total No. of Students Eligible	No. of Students Offered	% of Placement
CSE	80	69	86%
ECE	47	39	83%
IT	36	29	81%
CIVIL	16	10	63%

Campus Placement 2010-14

Branch	No. of Participating Students	Number of Selection	% of Placement
CSE	131	127	97%
ECE	139	85	61%
IT	36	43	119%
CIVIL	33 57	20 50 – Students Joined higher studies	61% 88%

2011-2015 Batch Placements

Mr. ABHISHEK SHARMA Roll no 111318 bagged a package of 21 Lakhs from Amazon.

The placement statistics for 2011-2015 batch till now is as follows:

Branch	Students Appeared	Selections
CSE	105	98
ECE	90	84
IT	50	46
Civil	71	8
BI/BT	26	11
BTDD	23	9

2012-2016 Batch Placements

- **Highest package offered of 27.5 Lakhs per annum by Amazon.com**
- **354 offers received for 310 eligible students**
- **Of the 86 companies for campus placement of JUIT students, 34 Companies offered CTC > Rs 5 Lakhs pa**

PLACEMENT STATUS : JUIT, SOLAN 2012-16					
Branch	**Total Participating Students**	**Total No. of Offers**	**% of Total Offers**	**Absolute offers**	**% of absolute offers**
CSE	111	164	148%	101	91%
ECE	94	125	133%	80	85%
IT	18	20	111%	15	83%
BT	32	27	84%	23	72%
CIVIL	55	18	33%	16	29%
Total	**310**	**354**	**114%**	**235**	76%

KEY RECRUITERS FOR BATCH – 2016			
S. No.	**COMPANY**	**S. No.**	**COMPANY**
1	Aarkem	32	Kuliza
2	Abyeti Technologies	33	MAZ Digital
3	Amazon	34	Medd-healthcare
4	App Garage	35	Mtree
5	Appinventiv Technologies	36	Naukri.com
6	Aricent	37	NEC Technologies
7	Barclays	38	Newgen Software Technologies
8	Belzabar Software	39	NKG Infra limited
9	Browserstack	40	NovoInvent Software
10	Code Brew Labs	41	NTT DATA
11	Cognizant	42	Paradigm Business Ventures
12	Continental Automotive	43	Parity Infotech Solutions
13	ConveGenius Edu Solutions	44	Paytm

14	Deloitte	45	Phronesis Partners
15	Effectual Knowledge Services	46	Polaris
16	Energy Infratech	47	Press play
17	ERA Construction	48	RNA Life Sciences
18	Ernst & Young	49	Roots Analysis
19	Evalueserve	50	SAP Labs
20	Grail Research	51	Scrap Labs
21	Grofers	52	ST Micro electronics
22	Hashedin Technologies	53	Steria
23	HP Enterprises	54	Think and Learn
24	Incedo	55	TT Consultants Pvt. Ltd.
25	IndiaMART	56	TTND
26	Indus Valley Partners	57	Vinsol
27	Infosys	58	Wipro
28	INNOVACCER	59	XL Catlin
29	Khosla Labs	60	Yamha Motors
30	KRITIKAL SECURESCAN	61	Zomato
31	Kronos	62	Zycus Infotech

STUDENTS WHO WERE SELECTED FOR HIGHER STUDIES ABROAD

University of Nebraska, USA				
Student Exchange Programme				
S.No	**Roll No.**	**Name**	**Branch**	**Degree**
1.	121513	Sunandini Sharma	BI	B.Tech
2.	121521	Khushboo Jindal	BI	B.Tech

University of Florida, USA				
Student Exchange Programme				
S.No	Roll No.	Name	Branch	Degree
1.	121260	Lakshay Arora	CSE	B.Tech
2.	121266	Pulkit Kumar Dhir	CSE	B.Tech
3.	121271	Priya Goyal	CSE	B.Tech
4.	121279	Karan Sharma	CSE	B.Tech
5.	121311	Sagar Rajani	CSE	B.Tech
6.	121263	Shikhir Kalia	CSE	B.Tech
7.	121223	Himanshu Singla	CSE	B.Tech
8.	121288	Rishabh Sharma	CSE	B.Tech
9.	123218	Ankit Aggarwal	CSE	B.Tech
10.	121218	Aishwarya Saxena	CSE	B.Tech
11.	121248	Abhimanyu Singh	CSE	B.Tech