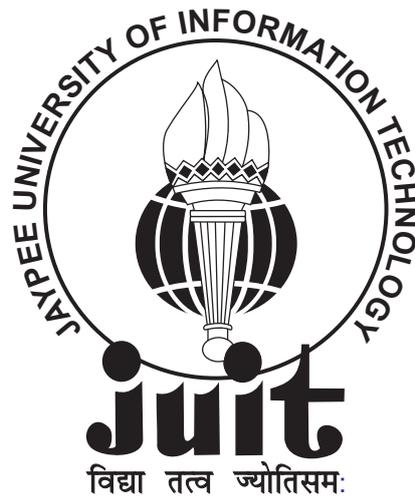


JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

WAKNAGHAT

Himachal Pradesh



**ANNUAL REPORT
2018 - 2019**

CONTENTS

	From	To
1. University Establishment	1	1
2. Introduction	3	5
3. Programmes of Study	6	12
4. Academic Departments		
a) Department of ECE	13	42
b) Department of CSE/IT	43	61
c) Department of Biotechnology & Bioinformatics	62 97	96 134
d) Department of Civil Engineering	135	145
e) Department of Physics & Materials Science	146	150
f) Department of Mathematics	151	158
g) Department of Humanities & Social Sciences	159	162
5. Learning Resource Centre (Library)	163	168
6. IT Centre	169	169
7. International Linkages	170	170
8. Academic Administration	171	171
9. Faculty & Scholarship	172	184
10. JUIT Youth Club	185	185
11. Training & Placement	185	185
12. Financial Status		
Appendices	186	187
Appendix-A Governing Council	188	188
Appendix-B Executive Council	189	189
Appendix-C Finance Committee	190	191
Appendix-D Academic Council	192	193
Appendix-E Details of Land	194	197
Appendix-F Faculty Details	198	200
Appendix-G University Results of Past 4 Years	201	201
Appendix H Training & Placement Data	203	231
Appendix-I Balance Sheet		

UNIVERSITY ESTABLISHMENT

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:	:	2002
Status	:	State Private 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
Chancellor	:	Acharya Dev Vrat Hon'ble Governor of Himachal Pradesh
Pro-Chancellor	:	Sh. Manoj Gaur Executive Chairman, Jaiprakash Associates Ltd
Vice Chancellor	:	Prof. (Dr.) Vinod Kumar
Registrar	:	Maj Gen Rakesh Bassi, SM (Retd)
<u>Tele/Fax/Website</u>		
Vice Chancellor	:	(O) 01792-239201 (R) 01792-239250
Registrar	:	(O) 01792-239203 (R) 01792-239272
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.

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

Salient Features Of The University

Genesis

Set up by Act No. 14 of 2002 vide Extraordinary Gazette notification of Government of Himachal Pradesh dated May 23, 2002 and 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 w.e.f. July 2002 with Undergraduate (UG) programmes for award of B.Tech. degrees in Biotechnology, Bioinformatics, Computer Science & Engineering, Electronics & Communication Engineering, Information Technology, and Civil Engineering. Post Graduate and Doctoral programmes leading to award of M.Tech and Ph.D degrees were added subsequently and are being conducted in the University.

Vision

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

Mission

1. To develop as a benchmark University in emerging technologies.
2. To provide state-of-the-art teaching learning process and a stimulating R&D environment.
3. 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.

Governance

The JUIT is governed in accordance with the JUIT Act and the Statutes .The statutory bodies are as follows:-

Governing Council

- 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 of the Governing Council is given at **Appendix-A**.

Executive Council and Finance Committee

- The Council carries 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 **Appendices-B and C**.

Academic Council

- The Academic Council is the premier and august body of the University, which decides and monitors the implementations of academic policies of the university. The powers and functions of the Council are defined in the University Act. 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.
- The composition of the Academic Council is listed at **Appendix-D**

Meetings of Various Statutory Bodies:

- Executive Council – 12 April 2018
- Academic Council – 12 April 2018, 27 June 2018
- Finance Committee – 12 April 2018
- Executive Council – 25 October 2018
- Academic Council – 25 October 2018
- Finance Committee- 25 October 2018
- Governing Council – 20 April 2019

Location and Area of Land

The University is located 3 Kms. Off the Chandigarh-Shimla highway from Wagnaghat. Land measuring 114.01 bighas comprising Khasra No. 408/4 and 429/185 situated in Village Rachhiana, Tehsil Kandaghat, District Solan, H.P. have been allotted on lease by the Govt of HP for JUIT.

Infrastructure

JUIT has been developed as a modern world-class campus, with intellectually vibrant ambience in serene and lush green environment. The state-of-the-art campus covers a total built up area of around 73,864.81 Sq. m. Smart buildings with internet and Wi-Fi connectivity, 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-E**.

Education System

An academic year consists of two semesters. The education system is based on credit system alongwith continuous evaluation of students' performance. System provides flexibility in choice of courses of interest and to pursue the same at an optimum pace suited to student's ability and convenience. Each course is assigned certain number of credits depending upon the class contact hours. A specified number of credits and attainment of minimum CGPA completion of Industrial Training satisfactorily are essential in order to qualify for a degree. The medium of instruction is English

Accreditation

The University has been accredited by the National Assessment and Accreditation Council twice. The first was in 2011 and the second time was in 2017. The NAAC accreditation is valid upto 29 October 2022 with B+ Grading.

The NIRF ranking of the University is 121 among all Engineering Institutes in the country in the year 2018-19.

The following undergraduate programmes of the University are accredited by National Board of Accreditation (NBA) under Washington Accord upto 30th June 2020.

- Electronics & Communication Engg.
- Biotechnology

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

Visit of Regulatory Body

The University was inspected by HP Private Educational Institutions Regulatory Commission from 23 August 2018 to 24 August 2018.

PROGRAMMES OF STUDY

1. UG Programmes

JUIT offers Undergraduate programmes to award B.Tech degrees in the respective discipline:-

- a) Bioinformatics
- b) Biotechnology
- c) Civil Engineering
- d) Computer Science & Engineering
- e) Information Technology
- f) Electronics & Communication Engineering

Industrial internship at the end of 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.

The studies and examination of these B.Tech Programmes is on the basis of marks-cum-credit system and final evaluation by grading system. Each Academic year is divided in two semesters' viz. Odd Semester (July to Dec) and Even Semester (Jan to June).

Admission

1. The admissions to B.Tech programme is governed by the rules of the UGC/MHRD or any other competent authority of the Govt. of India and as notified in the Admission Brochure of the respective academic year.
2. The minimum academic qualification for admission to the programme is as laid down by AICTE.
3. Minimum qualification for admission to the first year B.Tech is qualifying the Senior Secondary School Certificate (10+2) Examination or an equivalent examination with Physics and Mathematics as compulsory subjects from CBSE, New Delhi or any other recognized Board.
4. Non-resident Indian (NRI) candidates shall also be eligible for admission in B.Tech in accordance with directives of the MHRD/UGC.
5. For admission in Biotechnology & Bioinformatics programme
 - a) Minimum qualification for admission is qualifying the Senior Secondary School Certificate (10+2) Examination or an equivalent examination with Physics and Biology/Biotechnology as compulsory subjects from CBSE, New Delhi or any other recognized Board.

- b) A candidate with Mathematics and Biology/Biotechnology with Physics at 10+2 level is also eligible for admission to the programme.
6. A candidate who has qualified three year diploma programme/B.E./B.Tech.-1st year in related branch of engineering is eligible for admission to B.Tech – 2nd year through Lateral Entry process and minimum qualification for such Lateral Entry is as per the prevalent norms of the Govt of India/UGC/MHRD or as approved in the Academic Council of the University.

2. **Post Graduate Programs**

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, Structural Engineering from Academic Session 2010-11, Biotechnology from 2013-14 & Environmental Engineering from the Session 2014-15. The 2-year MTech programs are spread over four semesters.

a) **M. Tech (Biotechnology)**

The Masters 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..

b) **M.Tech Civil Engineering with Specialisation in Construction Management**

This two year program aims to impart 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.

c) **M.Tech Civil Engineering with Specialization in Environmental Engineering**

A new M.Tech programme in Environmental Engineering has been started from the academic session 2014-2015. The main objective of the program is to develop competent professionals including consultants, scientists, and 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.

d) **M.Tech Civil Engineering with Specialization in Structural Engineering**

This two 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.

e) **M.Tech (Computer Science & Engineering) & M.Tech (CSE with Specialization in Information Security)**

This program offers a balanced emphasis on theoretical computer science, computer technology, 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 warehousing & mining, data base management, operating systems, computational models, cognitive science, soft computing and human computer interaction.

f) **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 of mathematical techniques as a tool for engineering research.

Admission

1. The University offers regular full time M.Tech Programmes through classroom teaching.
2. Candidates who have a Bachelor degree in engineering or equivalent/ Masters' degree or equivalent/possessing Associate Membership of professional bodies in the discipline of the degree are eligible for admission. The details of eligibility criteria for admission to specific M.Tech programme are included in the admission brochure.

3. Candidate admitted to the M.Tech programme may be awarded a University Fellowship whose duration, amount, and applicable conditions are detailed under the heading Fellowship for M. Tech students.
4. Candidates having valid GATE Score are exempted from (PGET) Post Graduate Entrance Test. However, Non GATE candidates admission is subject to meeting the qualified marks of PGET & performance in interview.

3. **Doctor Of Philosophy (Ph.D.) Programs**

The Scholars are required to take up intensive research work under the guidance of a Supervisor on a specific problem for a minimum of three years in this program. The academic programme leading to the Ph.D degree is broad-based and involves course credit requirements. The Scholars are required to deliver seminars on their research progress regularly and publish their work. Finally, they are required to submit the thesis embodying their research findings for the award of Ph.D degree.

a) **Ph.D Biotechnology, Bioinformatics**

The department runs Ph.D. program in biotechnology, bioinformatics and pharmaceutical sciences with a provision of fellowships @ Rs. 22,000/month to scholars 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 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, pharmaceuticals, etc. The DRDO, DIHAR, Leh have registered their JRFs/SRFs in PhD through an MoU. Fifteen Ph.D.s have been awarded by the Department and a few are in their final stages of Thesis writing and submission.

b). **Ph.D. Civil Engineering**

The Department carries out research and development activities in the areas rock fill material modelling, constitutive modelling, 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 NO_x / co concentrations, solid-waste management and pavement materials.

c) **Ph.D 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.

d) **Ph.D 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.

e) **Ph.D 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. The Department develops 'soft' skills in group and co-operative working, economics, finance, project management etc. Additionally, the department exposes students to entrepreneurship skills, HR management, customer relationship management, total quality management etc.

f) **Ph.D 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, wavelets and differential equations, Algebraic Coding Theory , sequence design, distributed source coding, fuzzy information measures, decision making, pattern recognition, Nonlinear Programming (Operations Research), Statistical Inference, Sampling Theory and Applied Statistics.

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, SPSS, Lingo and Lindo.

g) **Ph.D Physics & Materials Science**

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

The award of the Ph.D. degree 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.

Nano-structured semi-conducting thin films, electro-luminescent display devices, magnetic multi-layered thin films, ferrite based micro-strip antennas, opto-electronic materials, semi-conducting materials for microelectronic devices.

Admission

Minimum Qualifications:

- a) Regular (Not Distance Mode) M.Tech Degree of a University or equivalent for Ph.D. in Engineering/Technology in respective branch with 60% aggregate Marks or CGPA not less than 6 on scale of 10.

- b) Regular (Not Distance Mode) Master's Degree of a University for Ph.D. in Sciences / Humanities / Social Sciences / Management in respective discipline or equivalent with 60% Aggregate marks or CGPA not less than 6 on scale of 10.
- c) Consistently good academic record/performance with 1st division i.e. 60% aggregate marks or equivalent CGPA of not less than 6 on a scale of 10 at post graduate level for Scholars admitted after PG programs at (a) to (b) above.
- d) Consistently good academic record / performance with 1st division with Distinction all through; i.e. 80% aggregate marks or equivalent CGPA of not less than 8.0 on a scale of 10 at undergraduate level for students from IIT's/NIT/IISER/IIT's.
- e) Candidates having qualified UGC / CSIR NET / SLET are exempted from Ph.D. Entrance Test. Non NET / SLET candidates admission is subject to meeting the marks requirement of Ph.D. Entrance Test and performance in interview.

ACADEMIC DEPARTMENTS

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Department Vision and Mission

- **Vision**

To become a center of excellence; to produce high quality, self motivated, creative, ethical engineers and technologists contributing effectively to universal science and contemporary education.

- **Mission**

M1. To impart high quality electronics and communication engineering education and professional ethics to students.

M2. To adopt the best pedagogical methods in order to maximize knowledge transfer.

M3. To have adequate mechanisms to enhance understanding of implementation of theoretical concepts in practical scenarios.

M4. To carry out high quality research leading to the creation of knowledge and of intellectual property.

M5. To provide the best facility, infrastructure, and environment to its students, researchers and faculty members, creating an ambience conducive for excellence in technical education and research.

- **Faculty Details**

S No	Faculty	Qualification	Specializations
1	M.J. Nigam	Ph.D.	Controls Engineering, Image Processing and Wireless Communication
2	Shruti Jain	Ph.D.	Bio Medical Signal Processing, VLSI Design
3	Rajiv Kumar	Ph.D.	Fault-Tolerance, Network Reliability & Networked Control Systems
4	Neeru Sharma	Ph.D.	Wireless Communication
5	Meenakshi Sood	Ph.D.	Biomedical Signal and Image Processing, Antenna Design, Meta materials
6	Salman Raju	Ph.D.	RF & Microwave Engineering, Digital Filter Design
7	Sunil Datt Sharma	Ph.D.	Signal Processing & Applications
8	Shweta Pandit	Ph.D.	Cognitive Radio, Wireless Communication

9	Nafis Uddin Khan	Ph.D.	Signal and Image Processing
10	Naveen Jaglan	Ph.D.	Microwave Communication, Planar and Conformal Microstrip Antennas
11	Harsh Sohal	Ph.D.	VLSI Design, FPGA based Algorithm Implementation
12	Nishant Jain	Ph.D.	Biomedical Signal Processing, Image Processing
13	Emjee Puthooran	Ph.D.	Medical Instrumentation and Signal Processing, Image Processing, Soft Computing Techniques
14	Vikas Baghel	Ph.D.	Radar Signal Processing, Adaptive Signal Processing, Soft and Evolutionary Computing
15	Pragya Gupta	M. Tech.	Communication Engineering, Image Processing
16	Alok Kumar	M. Tech.	Communication Systems, Cognitive Radio, Wireless Sensor Networks
17	Pradeep Garg	M. Tech.	Genomic Signal Processing
18	Munish Sood	M. Tech. MBA (HR)	Communication Engineering
19	Mohit Garg	M. Tech.	Control Systems and Robotics

- **Programs**

- **Undergraduate Programs**

The department offers a comprehensive B.Tech programme in Electronics and Communication Engineering which focuses on developing analytical skills to enable fluent use mathematical techniques as a potential tool for engineering research. The candidates are selected for admission to B.Tech.

- **NBA Accreditation**

The Department of Electronics and Communication Engineering has been granted accreditation by National Board of Accreditation (NBA) for a period of three years, i.e. from 1st July 2017 to 30th June 2020 for the B.Tech programme.

- **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. 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, LabView.

- **Placement**

For the academic year 2018-19, there were 73 eligible students who could sit for placements. Out of 73 students, 63 students got placed in various companies like Infosys, Wipro, Cognizant, Erricsson, Genpact.

- **New Courses introduced during the year**

Following new courses were introduced during the academic session 2018-19

S No	Title of New Course	Course Code
1	Networked Embedded Control Systems	18B1WEC831
2	Fault Tolerant Communication Systems	18B1WEC832
3	Pattern Analysis in Machine Intelligence	18B1WEC833
4	Fundamentals of Next Generation Communication Systems	18B1WEC834
5	Digital Filters: Analysis, Design, and Signal Processing Applications	18B1WEC835
6	Theory and Applications of Intelligent Systems	18B1WEC837
7	Optimum Array Processing	18B1WEC836
8	Machine Learning and Data Analytics-I	18B1WEC733
9	Medical Image Processing	18B1WEC734
10	Design of Dependable Systems	18B1WEC732
11	FPGA based Instrumentation System Design	18B1WEC731
12	Embedded System Design	18B1WEC735

Following MOOC courses were introduced during the academic year 2018-19

S No	Title of New Course	Course Code
1	Design of Photovoltaic Systems	18B2WEC701
2	Introduction to Wireless and Cellular Communications	18B2WEC703
3	Fabrication Techniques for MEMs-based Sensors : Clinical Perspective	18M1WEC736
4	Microwave Theory and Techniques	18B1WEC738
5	Computational Electromagnetic & Applications	18B1WEC739
6	Information Theory, Coding and Cryptography	18B1WEC741
7	Applied Optimization for Wireless, Machine Learning, Big Data	18B1WEC742
8	Principles of Signal Estimation for MIMO/ OFDM Wireless Communication	18B1WEC740
9	Principles of Communication Systems-1	18B2WEC801
10	Modern Digital Communication Techniques	18B2WEC802
11	Introduction to Photonics	18B2WEC803
12	Machine Learning for Engineering and Science Applications	18B2WEC806

Post Graduate Programs

The department offers an intensive M.Tech programme in Electronics and Communication Engineering. The candidates are selected based on the GATE score and entrance test along with personal interview. 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.

Ph.D. Program

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

PhD completed

Two students completed their PhDs in the academic year 2018-19.

S.No	Name	Title of Thesis
1	Isha Malhotra	Analysis, Design And Characterization of Small-Gap Photoconductive Dipole Antenna For Terahertz Imaging Applications
2	Prabhat Thakur	Mathematical Modeling of Spectrum Sharing In Cognitive Radio Communication Systems

PhD Enrolled

For the academic year 2018-19, six new scholars enrolled in PhD program.

S.No	Roll No.	Name
1	186001	Ratish Kumar
2	186002	Kanishka Katoch
3	186003	Sakshi Anand
4	186004	Diksha Thakur
5	186005	Munish Sood
6	186006	Pragya Gupta

- **Lab Facilities**

- **New Labs** Following new labs have been established in the academic year

Wireless lab (ECL-8)
Research Lab (ECL-9)

- **Lab Staff with qualification**

S. No	Name	Qualification	Designation
1	Dr. Ajay Kumar Singh	PhD	Sr. Lab Engineer
2	Dhirendra Kumar Singh	B. Tech.	Sr. Lab Engineer
3	Pramod Kumar	B. Tech.	Sr. Lab Engineer
4	Kamlesh Kumar Srivastava	B. Sc.,B. Tech.	Lab Engineer
5	Mohan Lal	Diploma in CSE	Lab Technician
6	Shambhoo Nath	ITI Diploma in ECE	Lab Technician
7	Abhishek Ray	Diploma in ECE	Lab Assistant
8	Deep Narayan Tripathi	Diploma in ECE	Lab Assistant

- **Labs (Major equipment with Photos)**

1. WiCOMM-T

The WiCOMM-T is a digital communication training system manufactured by Benchmark Electronic Systems. It provides maximum exibility in learning complete digital communication system concepts, which includes digital modulation techniques, Baseband Equalization, Filtering concepts, and the basics of CDMA, GSM etc.



WiCOMM-T with the pluggable RF module

2. XILINIX Zed Board

ZedBoard is a low-cost development board for the Xilinx Zynq-7000 SoC. This board contains everything necessary to create a Linux, Android, Windows® or other OS/RTOS-based design. Additionally, several expansion connectors expose the processing system and programmable logic I/Os for easy user access.

3. MATLAB 9.5.0.944444(R2018b)

- Research Projects Sanctioned during the Academic Year/In Progress**

S No	Name of Faculty	Project title	Funding Agency	Amount sanctioned	Duration	Current Status
1	Dr. Meenaks hi Sood	Identification of Tomato Diseases Using Image Processing Techniques For The Farmers of Himachal Pradesh with Feedback System Using IoT And Android Application	Department of Environment, Science & Technology, Government of Himachal Pradesh	9.24 lacs	Two years 2018-2020	Ongoing
2	Dr. Shruti Jain Dr. Meenaks hi Sood	Design and Analysis of A Thermoelectric Generator For Energy Harvesting System From Waste Heat For The State Of HP	Himachal Pradesh Council for Science, Technology & Environment Government of Himachal Pradesh	5.24 Lacs	Two years 2017-2019	Ongoing

- Patent Filed :**

S No	Title of Research Project	Members	Application No
1	A Novel N-Bit Compressor Based High-Speed Multiplier Algorithm For Low Power Arithmetic Circuits	Raj Kumar Sharma, Shresh Jain	855/2019

- **Conferences, Seminars and Workshops/Faculty development program**

- **Conferences**

- **Conferences Organised**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation Faculty Name</u>	<u>Remarks</u>
May 30- 31, 2019	International Conference on Contemporary Engineering Technology and Management (ICETM-19)	Radisson Jass, Shimla	Dr. Shruti Jain	

- **Conferences Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
March 07-08, 2019	5 th International Conference on Signal Processing and Communication (ICSC-2019)	JIIT Noida	Dr. Shruti Jain	
March 08 – 09, 2019	2nd International Conference on Recent Innovations in Computing - 2019)	Central University of Jammu, J&K	Dr. Shruti Jain Dr. Meenakshi Sood	
February 26 - 28, 2019	International Conference on Sustainable Computing in Science, Technology and Management	Amity University Rajasthan, Jaipur, India	Dr. Shruti Jain Dr. Meenakshi Sood	
Dec 20- 22, 2018	Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC)	Jaypee University of Information technology, Wahnaghat, Solan, H.P, India	Dr. Shruti Jain Dr. Meenakshi Sood Dr. Shweta Pandit Dr. Nafis U. Khan Dr. Sunil Datt Sharma	
July 14- 15, 2018	2nd International Conference on Advanced Informatics for Computing Research (ICAICR-2018)	Shimla, India	Dr. Shruti Jain Dr. Meenakshi Sood	
October 22-23, 2018	Third Himachal Pradesh Science Congress on Rural Upliftment through Science & Technology Interventions	IIT Mandi, India	Dr. Neeru Sharma Dr. Shruti Jain Dr. Meenakshi Sood, Ms. Pragya Gupta. Dr. Harsh Sohal, Mr. Mohit Garg	

August 29 -31, 2018	Seventh IEEE International Conference on Reliability, Infocom Technologies and Optimization, ICRITO'18	Amity University, Noida, India	Mr. Mohit Garg	
---------------------	--	--------------------------------	----------------	--

Seminars

- **Seminars Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
October 29, 2018	Innovation, Renewable Energy & Entrepreneurship	Jointly organized by CESTRD (Centre of Excellent in Sustainable Technologies for Rural Development of BT BI Dept. & TIED Cell of JUIT	Dr. Shruti Jain Dr. Meenakshi Sood Dr. Shweta Pandit	
May 26, 2018	IoT at a Glance	UIIT, H. P University, Shimla	Dr. Meenakshi Sood	

Workshops

- **Workshops Organised**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
May 20-25, 2019	Emerging Trends and Applications of Machine Learning	Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Wagnaghat, Solan, H.P	Dr. Neeru Sharma, Dr. Shruti Jain , Dr. Meenakshi Sood	
January 10, 2019	MATLAB 2018b and recent toolbox add-ons	Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Wagnaghat, Solan, H.P	Dr. Shruti Jain Dr. Nishant Jain	
April 19-21, 2019	R & D Expo of IEEE JUIT SB	Jaypee University of Information Technology, Himachal Pradesh	Dr. Meenakshi Sood	
April 15, 2019	Cyber Security workshop	Jaypee University of Information Technology, Himachal Pradesh	Dr. Meenakshi Sood	
Feb 1-2, 2019	2 days workshop Mobile robotics organized by	Zonal centre at JUIT Solan	Dr. Meenakshi Sood Dr. Nishant	

	Finland Labs		Jain Mr. Mohit arg	
September 22 -23 , 2018	ANDROID app development workshop	Jaypee University of Information Technology, Himachal Pradesh	Dr. Meenakshi Sood	
August 27 -28, 2018	C Programming Workshop With IEEE SB	Jaypee University of Information Technology, Himachal Pradesh	Dr. Meenakshi Sood	
August 11, 2018	Expert Talk And Training Session On IEEE Xplore Digital Library	Jaypee University of Information Technology, Himachal Pradesh	Dr. Meenakshi Sood	
November 30, 2018	Patent Filing and Geographical Indications of Himachal Pradesh	Jaypee University of Information Technology, Himachal Pradesh, India in collaboration with Himachal Pradesh Patent Information Centre, Shimla, H.P. (HPPIC)	Dr. Shruti Jain	
September 12, 2018	Recent Research Trends using MATLAB	Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Wagnaghat, Solan,	Dr. Shweta Pandit	
September 19, 2018	Advance Wireless Systems	Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Wagnaghat, Solan,	Dr. Shweta Pandit	
Feb 25, 2019	Benchmark WiCOMM-T:Wireless Digital Communication Training System and Benchmark iCONSeT: An IoT Training System	Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Wagnaghat, Solan, H.P	Dr. Shweta Pandit	

Oct 31- Nov. 1, 2018	Latest EDA tools for electronic circuit design: Xilinx Vivado, HSPICE	Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Waknaghat, Solan, H.P	Dr Harsh Sohal Dr Shruti Jain	
February 01-02, 2019	Mobile Control Robotics	Jaypee University of Information Technology, Solan	Mr. Mohit Garg Dr. Nishant Jain	
August 9, 2018	Circuit hours	Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Waknaghat, Solan, H.P	Dr. Nishant Jain	

- **Workshops Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
June 24- 28, 2019	Recent Advances in Signal & Image Processing (RASIP 2019)	Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Waknaghat,	Mr. Mohit Garg	
June 15, 2019	NPTEL awareness	Conducted by IIT Roorkee at Jaypee University of Information Technology, Waknaghat, Solan, H.P	Dr. Shweta Pandit Dr. Sunil Datt Sharma Dr. Neeru Sharma	
May 20- 25, 2019	Recent Trends on Machine Learning for Signal Processing (RTMLS)	Department of Electronics and Communication Engineering Jaypee University of Information Technology, Waknaghat, Solan, H.P	Dr. Vikas Baghel	

February 25 , 2019	Benchmark WiCOMM-T:Wireless Digital Communication Training System" and "Benchmark iCONSeT: An IoT Training System	Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Wagnaghat, Solan, H.P.	Dr. Shruti Jain Dr. Neeru Sharma Dr. Emjee Puthooran Dr. Nafis U. Khan Dr. Sunil Datt Sharma Dr. Emjee Puthooran	
February 22, 2019	Lecture on Patents on Computer and Electronics	Jaypee University of Information Technology, Wagnaghat, Solan, H.P.	Dr. Neeru Sharma	
January 10, 2019	MATLAB 2018b and recent toolbox add-ons	Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Wagnaghat, Solan, H.P	Dr. Shweta Pandit Dr. Sunil Datt Sharma Dr. Vikas Baghel	
Nov. 30,2018	Patent Filing and Geographical Indications of Himachal Pradesh	Jaypee University of Information Technology, Himachal Pradesh, India in collaboration with Himachal Pradesh Patent Information Centre, Shimla, H.P. (HPPIC)	Dr. Shweta Pandit Mr. Pardeep Garg Dr. Neeru Sharma Dr. Meenakshi Sood Dr. Sunil Datt Sharma Dr. Vikas Baghel	
Oct 31- Nov 1, 2018	Latest EDA tools for electronic circuit design: Xilinx Vivado, HSPICE	Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Wagnaghat, Solan, H.P	Dr. Shweta Pandit Mr. Pardeep Garg Dr. Emjee Puthooran Dr. Salman Raju Talluri Dr.Nafis U. Khan Dr. Meenakshi Sood Dr. Emjee Puthooran Dr. Salman Raju Talluri	

October 11-13, 2018	Three days Workshop on "Virtual Lab"	Jaypee University of Information Technology, Himachal Pradesh, India in association with IIT Delhi	Dr. Vikas Baghel	
September 19, 2018	Trending Wireless Devices	Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Wahnaghat, Solan, H.P.	Dr. Shruti Jain Dr. Neeru Sharma	
September 12, 2018	Recent Research Trends using MATLAB	JUIT Solan	Dr. Meenakshi Sood	
July 23-27, 2018	Artificial Neural Networks and Fuzzy Logic through ICT	Jaypee University of Information Technology, Wahnaghat, Himachal Pradesh, India in collaboration with NITTTR Chandigarh.	Dr. Emjee Puthooran Mr. Pardeep Garg Dr. Nafis U. Khan Dr. Meenakshi Dr. Sunil Datt Sharma Dr. Vikas Baghel Dr. Emjee Puthooran Dr. Nishant Jain	

- **Faculty Development Programs Organised**

The department organized two FDPs in the academic session 2018-19. The details of the same are as follows”

Dates	Name	Organised by	No. of participants
May 20-25, 2019	Recent Trends on Machine Learning for Signal Processing (RTMLS)	Dr. Neeru Sharma Dr. Shruti Jain Dr. Meenakshi Sood	40
June 24-28, 2019	Recent Advances in Signal & Image Processing (RASIP)	Dr. Sunil Datt Sharma Dr. Nafis U Khan	29

- **Publications**

- **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Shruti Jain	An image feature selection approach for dimensionality reduction based on kNN and SVM for AkT proteins	Cogent Engineering	Volume 6, Issue 1 pp. 1-14, April 2019	
Shruti Jain	Computational Analysis of MK2 protein for HT Carcinoma Cells using Pre-Processing and Characterization Techniques for Cell Death/ Survival	Journal of Global Pharma Technology	Volume 10, Issue 11, pp. 13-19, November 2018.	
Shruti Jain	Classification of Mitogen Activated Protein Kinase using Different Wavelet Transforms (Discrete and Gabor)	Asian Journal of Microbiology, Biotechnology and Environmental Sciences	Volume 20, Issue 2, pp. 569-574, July 2018.	
Rajkumar Sarma, Cherry Bhargava, Shruti Jain	Accelerated PVT analysis of UCM architecture using Cadence ADE-XL	International Journal of Engineering and Advanced Technology	Volume 8 Issue 5, pp. 1913-1919, June 2019	
Jyotsna Dogra, Shruti Jain, Meenakshi Sood	Glioma Classification of MR brain tumor employing Machine Learning	International Journal of Innovative Technology and Exploring Engineering	Volume 8 Issue 8, pp. 2676-2682, June 2019	
Kirti, Harsh Sohal, Shruti Jain	FPGA implementation of Power-Efficient ECG pre-processing block	International Journal of Recent Technology and Engineering	Volume 8 Issue 1, pp. 2899-2904, May 2019	

Navdeep Prashar, Meenakshi Sood, Shruti Jain	Design and Performance Analysis of Cascade Digital Filter for ECG Signal Processing	International Journal of Innovative Technology and Exploring Engineering	Volume 8 Issue 8, pp 2659-2665, June 2019	
Charu Bhardwaj, Shruti Jain, Meenakshi Sood	Computer Aided Hierarchical Lesion Classification for Diabetic Retinopathy Abnormalities	International Journal of Recent Technology and Engineering	Volume 8 Issue 1, pp. 2880-2887, May 2019	
Rajkumar Sarma, Cherry Bhargava, Sandeep Dhariwal, Shruti Jain	UCM: A Novel Approach for Delay Optimization	International Journal of Performability Engineering	Volume 15 Issue 4, pp. 1190-1198 April 2019	
Jyotsna Dogra, Shruti Jain and Meenakshi Sood	Glioma Extraction from MR Images Employing GBKS Graph Cut Technique	The Visual Computer	DOI: 10.1007/s00371-019-01698-3	
Navdeep Prashar, Meenakshi Sood, Shruti Jain	Semiautomatic Detection of Cardiac Diseases employing Dual Tree Complex Wavelet Transform	Periodicals of Engineering and Natural Sciences	Volume 6, Issue 2, pp. 129-140, July 2018.	
Garima Thakur, Harsh Sohal, Shruti Jain	High Speed Radix-2 Butterfly Structure using Novel Wallace Multiplier	International Journal of Engineering and Technology (UAE)	Volume 7, Issue 3.4, pp. 213-217, July 2018	
Urvashi Sharma, Meenakshi Sood, and Emjee Puthooran.	Resolution Adaptive Threshold Selection for Gradient Edge Predictor in Lossless Biomedical Image Compression	Journal of Science and Technology	In Press	

Urvashi Sharma, Meenakshi Sood, and Emjee Puthooran.	A Novel Resolution Independent Gradient Edge Predictor for Lossless Compression of Medical Image Sequences	International Journal of Computers and Applications	doi:10.1080/1206212X.2019.1610994.	
Urvashi, Meenakshi Sood, and Emjee Puthooran.	Lossless Compression of Medical Image Sequences Using Resolution Independent Predictor and Block Adaptive Encoding	International Journal of Electrical and Computer Engineering Systems	Volume 9, Issue 2, pp. 69–79, December 2018.	
Urvashi, Meenakshi Sood, Emjee P., Yugal K	A Block-Based Arithmetic Entropy Encoding Scheme for Medical Images	International Journal of Healthcare Information Systems and Informatics IJHISI: Computational Intelligence in Healthcare	In Press	
Jyotsna Dogra , Shruti Jain , Ashutosh Sharma , Rajiv Kumar , Meenakshi Sood	Brain Tumor Detection from MR Images employing Fuzzy Graph Cut Technique	Recent Patents on Computer Science	DOI : 10.2174/2213275912666181207152633	
Meenakshi Sood	Ensemble Framework for Epileptic Seizure Classification from EEG Signals	Journal of Global Trends in Pharmaceutical Sciences	Volume 9, No. 3, pp. 5838-5847 September 2018	
Karmvir Singh, Ishpal Rawal, Neeru	Quantum efficient fast UV photodetectors based on nanocrystalline	Material Science in Semiconductor Processing	Volume 95, pp. 7-19, June 2019	

Sharma, Priksht Gautam, Rakesh Dhar	Zn _{1-x} PxO (x=0.00, 0.03, 0.07) thin films deposited by pulsed laser deposition technique			
Karmvir Singh, Ishpal Rawal, Priksht Gautam, Neeru Sharma, Rakesh Dhar	Diluted magnetic semiconducting properties of nanocrystalline Zn _{0.98} X _{0.02} O (X = Fe, Ga, Ni) thin films deposited by PLD technique for spintronic applications	Journal of magnetism and Magnetic Materials	Volume 468, pp.259-268, December 2018	
Dinesh Kumar, Ashutosh Sharma, Rajiv Kumar and Neeru Sharma	A Holistic Survey on Disaster and Disruption in Optical Communication Network	Recent Advances in Electrical & Electronic Engineering	Volume 12, No. 1, 2019.	
Swati Bhalaik, Ashutosh Sharma, Rajiv Kumar and Neeru Sharma	Performance Modeling and Analysis of WDM Optical Networks under Wavelength Continuity Constraint using MILP	Recent Advances in Electrical & Electronic Engineering	Volume 12, No. 1, 2019.	
Ashutosh Sharma, Rajiv Kumar	A constrained framework for context-aware remote E-healthcare (CARE) services.	Transaction on Emerging Telecommunications Technologies	Special Issue, June 2019	
Geetanjali , Ashutosh Sharma, Hemraj Saini , Rajiv Kumar , Razi Iqba	A Hybrid Framework for Multimedia Data Processing in IoT-Healthcare using Blockchain Technology.	Multimedia Tools and Applications	June 19	

Ashutosh Sharma, Rajiv Kumar	Computation of the Reliable and Quickest Data Path for Healthcare Services by Using Service-Level Agreements and Energy Constraints	Arabian Journal for Science and Engineering	June 19	
Ashutosh Sharma, Rajiv Kumar, Pra deep Kumar Singh	SLA Constraint Quickest Path Problem for Data Transmission Services in Capacitated Networks.	International Journal of Performability Engineering	Volume 15, Issue 4, pp. 1061-1072	
Ashutosh Sharma, Rajiv Kumar	A Framework for Risk-Energy Aware Service-Level Agreement Provisioning (RESP) for Computing the Quickest Path	Journal of Computer Networks and Communications		
Ashutosh Sharma, Rajiv Kumar	Service level agreement and energy cooperative cyber physical system for quickest healthcare services	Journal of Intelligent and Fuzzy Systems	Volume 36, Issue 5, pp. 4077-4089	
Ashutosh Sharma, Getanjali, Rajiv Kumar, Hemraj Saini, Vijayakumar Varadarajan, Yunyoung Nam, Naveen Chilamkurti	A Secure, Energy- and SLA-Efficient (SESE) E-Healthcare Framework for Quickest Data Transmission Using Cyber-Physical System	Sensors	Volume 19, Issue 9, pp. 1-22	
Ashutosh Sharma, Rajiv	On Energy-constrained Quickest Path	Recent Patents on Computer Science,	Volume 12, Issue 4	

Kumar, Rak esh Kumar Bajaj	Problem in Green Communication Using Intuitionistic Trapezoidal Fuzzy Numbers			
Ashutosh Sharma, Rajiv Kumar	SLA-Energy Cooperative Quickest Ambulance Routing for Critical-Healthcare Services	Arabian Journal for Science and Engineering,	Volume 44, Issue 4, pp. 3831-3848	
Ashutosh Sharma, Rajiv Kumar	Risk-Energy Aware Service Level Agreement Assessment for Computing Quickest Path in Computer Networks.	International Journal of Reliability and Safety	Volume 13, Issue 1-2, pp. 96-124	
Prabhat Thakur, Alok Kumar, Shweta Pandit, Ghanshyam Singh, and S. N. Satashia	Spectrum Monitoring in Heterogeneous Cognitive Radio Network: How to Cooperate?	IET Communications	Volume 12, Issue 17, pp. 2110 – 2118, October 2018	
Prabhat Thakur, Alok Kumar, Shweta Pandit, Ghanshyam Singh, and S.N. Satashia	Analysis of High- Traffic Cognitive Radio Network with Imperfect Spectrum Monitoring Technique	Computer Networks	Volume 147, pp. 27-37, December 2018	
A Kumar, P Thakur, Shweta Pandit, and G. Singh	Analysis of optimal threshold selection for spectrum sensing in a cognitive radio network: an energy detection approach	Wireless Networks	Volume 25, Issue 1, pp. 1-15, Jan 2019	

Diksha Thakur, Vishakha Thakur, Salman Raju Talluri	A novel cross over design based on parallel coupled line structure	International Journal of Electronics Engineering	Volume10, Issue 2, pp. 614-623, December 18	
Salman Raju Talluri	Effects of highpass filtering on transmitted signals of non-linear frequency modulated radar systems	International Journal of Advances in Microwave Technology	Volume 4, Issue 1, pp. 190-193, February, 2019	
Salman Raju Talluri	Design of dual band-reject filter based on short circuited parallel couple lines structure at S-band	International Journal of Advances in Microwave Technology	Volume 3, Issue 4 pp.180-184, November 2018	
Salman Raju Talluri	Design of Wide Band Rejection Filter using All-stop Parallel Coupled Line Canonical Form along with Transmission Line	International Journal of Advances in Microwave Technology	Volume 3, Issue 3 pp.165-169, August 2018	
Veervrat Singh, Rajiv Tripathi, Rahul Pachauri and Nafis uddin Khan	An Energy Efficient Routing Protocol based on New Variable Data Packet Algorithm for Wireless Sensor Networks	Recent Patents on Computer Science	DOI : 10.2174/2213275912666190204125259 2018	
Nafis uddin Khan and K. V. Arya	Two Stage Image De-noising and Edge Enhancement by SVD on Large Scale Heterogeneous Anisotropic Diffused Image Data	Multimedia Tools and Applications	Volume 77, Issue 1, pp. 22543 – 22566, May 2018	

Vikas Baghel	Adaptive Mismatched Filter Design for Radar Pulse Compression	Journal of Engineering Science & Technology,	Volume 14, Issue 3, pp. 1361–1373, June 2019	
Harsh Sohal, Bishal Karki, Anjali Sharma, You souffa Mohamadou	Design of impedance measurement module for an eeg and eit integrated system	International Journal of Control and Automation,	Volume 11 (9), 97-108	
Sharma, A., Sohal, H., Jit Kaur, H	Sleepy CMOS-Sleepy Stack (SC-SS): A Novel High Speed, Area and Power Efficient Technique for VLSI Circuit Design	Journal of Circuits, Systems and Computers	Volume 28, Issue 11 pp. 1-25, December 2018	

- **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Bhardwaj C., Sharma U., Jain S., Sood M	Implementation and Performance Assessment of Biomedical Image Compression and Reconstruction Algorithms for Telemedicine Applications	Compressive Sensing for Biomedical Images Medical Data Security for Bioengineers,	pp52-80	IGI Global
Urvashi, Emjee Puthooran, and Meenakshi Sood.	“Implementation and Performance Assessment of Gradient Edge Detection Predictor for Reversible Compression of Biomedical Images	Communications in Computer and Information Science, Springer, Singapore.	195–205. doi:10.1007/978-981-13-3140-4_18.	
Navdeep Prashar, Meenakshi Sood, and Shruti Jain	Morphology Analysis and Time Interval Measurements Using Mallat Tree Decomposition for CVD Detection	Communications in Computer and Information Science (CCIS), Springer, CCIS	171-181, DOI: https://doi.org/10.1007/978-981-13-3140-4_16	

Charu Bhardwaj, Shruti Jain and Meenakshi Sood	Automated Optical Disc Segmentation and Blood Vessel Extraction for Fundus Images Using Ophthalmic Image Processing	Springer Nature Singapore Pte Ltd. 2019, Communications in Computer and Information Science (CCIS), Springer, CCIS	182-194 DOI: https://doi.org/10.1007/978-981-13-3140-4_17	
--	---	--	---	--

- **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Jyotsna Dogra, Shruti Jain and Meenakshi Sood	Analysis of Graph Cut Technique for Medical Image Segmentation	3rd International Conference on Advanced Informatics for Computing Research (ICAICR-2019), Deventure Shimla Hills, Solan Shimla National Highway, Kandāghāt, India		June 15-16, 2019
Meenakshi Sood Vibhor Kashyap, Shruti Jain	Energy Harvesting System from Household Waste Heat employing Thermoelectric Generator	3rd International Conference on Advanced Informatics for Computing Research (ICAICR-2019), Deventure Shimla Hills, Solan Shimla National Highway, Kandāghāt, India		June 15-16, 2019
Shilpa Kaushal, Sunil Datt Sharma, Shruti Jain	Investigation of Image Processing Techniques for Glaucoma Detection in Human Eyes	Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC), Jaypee University of Information technology, Wagnaghat, Solan, H.P, India.	pp 747 – 753	Dec 20-22, 2018
Kirti, Harsh Sohal, Shruti Jain	Interpretation of Cardio Vascular Diseases using Electrocardiogram:	Fifth International Conference on Parallel, Distributed and Grid Computing	pp 159-164	Dec 20-22, 2018

	A Study	(PDGC) , Jaypee University of Information technology, Wagnaghat, Solan,		
Charu, Shruti Jain, Meenakshi Sood	Appraisal of Pre-processing Techniques for Automated Detection of Diabetic Retinopathy	Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC) , Jaypee University of Information technology, Wagnaghat, Solan, H.P, India.	pp 734-739	Dec 20-22, 2018
Shruti Jain, Vibhor Kashyap, Meenakshi Sood	Design and Analysis of Thermoelectric Energy Harvesting Module for Recovery of Household Waste Heat	2nd International Conference on Recent Innovations in Computing (ICRIC-2019), , Central University of Jammu, J & K		March 08 – 09, 2019
Urvashi, Emjee Puthooran, and Meenakshi Sood.	Comparative Analysis of Different 2D Predictors for Lossless Compression of Biomedical Images	2018 Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC), Solan Himachal Pradesh, India	105–10. doi:10.1109/PDGC.2018.8745809.	
Salman Raju Talluri	A novel distributed T-equivalent circuit model of a microstrip interdigital capacitor	2018 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON)	Doi:10.1109/UPCON.2018.8597075	Nov 2-4 , 2018
Nafis uddin Khan, Pallavi Sharma and Kanchan Rani	Morphology based Character Recognition of Overlapped and Touched Objects	Fifth International Conference on Signal Processing and Communication (ICSC 2019)		March 07 – 09, 2019

Salman Raju Talluri	Envelope modulation of nonlinear frequency modulated signals to obtain narrow autocorrelation function with reduced sidelobe levels	International Conference on New Trends in Engineering and Technology		September 7-8, 2018
Neelam Kumari, Salman Raju Talluri, Meenakshi Sood	Multi Bandpass Asymmetrical Filter Design with Parallel Coupled Line Stub	5th International Conference for Convergence in Technology (I2CT) Pune, India.		March 29-31, 2019
Shruti Jain, Vibhor Kashyap, Meenakshi Sood	Optimizing Booster Circuits for Thermo Electric Generators to Utilize Waste Heat	International Conference on Sustainable Computing in Science, Technology and Management, Amity University Rajasthan, Jaipur, India.		February 26 - 28, 2019
Urvashi, Emjee Puthooran, and Meenakshi Sood.	Comparative Analysis of Different 2D Predictors for Lossless Compression of Biomedical Images	2018 Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC), Solan Himachal Pradesh, India	105–10. doi:10.1109/PDGC.2018.8745809.	
Salman Raju Talluri	A novel distributed T-equivalent circuit model of a microstrip interdigital capacitor	2018 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON)	Doi:10.1109/UPCON.2018.8597075	November 2-4, 2018
Nafis uddin Khan, Pallavi Sharma and Kanchan Rani	Morphology based Character Recognition of Overlapped and Touched Objects	Fifth International Conference on Signal Processing and Communication (ICSC 2019)		March 07 – 09, 2019

Salman Raju Talluri	Envelope modulation of nonlinear frequency modulated signals to obtain narrow autocorrelation function with reduced sidelobe levels	International Conference on New Trends in Engineering and Technology		September 7-8, 2018
Anuj Purwar, Mohit Patel, Mohit Garg, and Karan Ahuja	A Novel Approach for Water Leakage Detection and Localization	7th IEEE International Conference on Reliability, Infocom Technologies and Optimization, ICRITO'18, Amity University, Noida.		August 29-31, 2018
Mohit Garg, M. J. Nigam	Navigation and Control of Multiple UAVs for Autonomous Flight in Unknown Environments	3rd Himachal Pradesh Science Congress on Rural Upliftment through Science & Technology Interventions, IIT Mandi, India.		October, 22-23, 2018

- **Guest Speakers/Lectures/ Visits**

- **Guest Speakers**

Name of Guest Speaker	Designation of speaker	Topic of Lecture	Date
Dr. M. Wajid	Ass Professor, Department of Electronics Engineering, AMU, Aligarh	HDL based System Design	April 15, 2019
Prof. (Dr.) Debashis Ghosh	Head of the Department, Department of Electronics & Communication Engineering, IIT Roorkee	Compressed Sensing: Beating the Nyquist Sampling	March 23, 2019
Mr. Mayank Sood	Partner in the K& S Technology Group	Patents on Computers and Electronics	February 22, 2019
Prof. Rajiv Saxena	Vice Chancellor. Jaypee University Anoopshahar	FrFT: Fragrant & Fantastic Tool	June 24, 2019
Prof. Sumantra Dutta Roy	Professor, IIT Delhi	Motion Segmentation and Tracking	June 27, 2019

- Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Dr. Shruti Jain	Associate Professor	Applied Research in Biomedical Image and Signal Processing	June 27, 2019	Jaypee University of Information technology, Wagnaghat, Solan, H.P, India
Dr. Shruti Jain	Associate Professor	Detection of Arrhythmia using Automatic Differentiation Method	October 03, 2018	Giani Zail Singh Campus College of Engineering and Technology (GZS CCET), Maharaj Ranjit Singh Punjab Technical University, Bathinda, Punjab, India
Dr. Shruti Jain	Associate Professor	Standard Multiple Regression Analysis Model for Cell Survival/ Death Decision of JNK Protein using HT-29 Carcinoma Cells	February 01, 2019	University Institute of Engineering and Technology (UIET) Kurukshetra, India on
Dr. Nafis U. Khan	Assistant Professor	Anisotropic Diffusion in Image Processing	June 24, 2019	Jaypee University of Information technology, Wagnaghat, Solan, H.P, India
Dr. Meenakshi Sood	Assistant Professor (Sr. Grade)	Bio Medical Signal Processing: Research Perspective	29-31st May 2019	Jaypee University of Information technology, Wagnaghat, Solan, H.P, India
Dr. Meenakshi Sood	Assistant Professor (Sr. Grade)	The 4th Industrial Revolution : A Pathway to Digital and Artificial Intelligence Revolution	15 Sep 2018	Institute of Engineers Shimla
Dr. Meenakshi Sood	Assistant Professor (Sr. Grade)	Scientific Social Responsibility Of S & T Based Institutions, Organizations And Professional Bodies In India	Jan 2018	SSR of DST Scheme

Dr. Meenakshi Sood	Assistant Professor (Sr. Grade)	IoT at a Glance	26th May 2018	UIIT, H. P University, Shimla.
Dr. Meenakshi Sood	Assistant Professor (Sr. Grade)	Latest techniques and trends for Engineering students	28th May 2018	UIIT, H. P University, Shimla.
Dr. Nafis U. Khan	Assistant Professor	Anisotropic Diffusion in Image Processing	June 24, 2019	Jaypee University of Information Technology, Wagnaghat, Solan, H.P, India
Dr. Sunil Datt Sharma	Assistant Professor	Role of transforms for Genomics Data Analysis	May 31, 2019	National workshop on bioinformatics and biomedical image analysis (NBIA-2019) at JUIT
Dr. Sunil Datt Sharma	Assistant Professor	Genomics Signal Processing	June 28, 2019	Recent advances in signal and image processing(RASIP-2019) at JUIT
Dr. Nishant Jain	Assistant Professor	Biomedical Image Analysis	May 29-31, 2019	Centre of Excellence in Health care Technologists and Informatics, Jaypee University of Information technology, Wagnaghat, Solan,
Dr. Nishant Jain	Assistant Professor	Extraction of Features for classification of abnormalities in biomedical images	June 25, 2019	Department of Electronics and Communication Engineering, Jaypee University of Information technology, Wagnaghat, Solan, H.P, India

- **Recognition & Awards**

- **By Faculty**

Name of Faculty	Designation of Faculty	Award	Date	Achievement
Shruti Jain	Associate Professor	Nation Builder Award	05, September 2018	Teacher's Day / International Literary Day

- **Composition of Various Bodies**

- Board of Studies (BOS)

S No	Name	Designation	Institution
1	Prof (Dr.) M.J Nigam	HOD, Deptt of ECE (Chairperson)	JUIT
2	Prof. Dr. S.P. Ghreera	HOD, CSE	JUIT
3	Prof. Dr. Karanjeet Singh	HOD Mathematics	JUIT
4	Prof. Dr. P.B Barman	HOD PMS	JUIT
5	Prof. Dr. A.K Gupta	HOD CE	JUIT
6	Prof. Dr. Sudhir Kumar	HOD BT/BI	JUIT
7	Prof. Dr. Anupriya Kaur	HOD HSS	JUIT
3	Prof. (Dr.) C.C. Tripathi	Prof. & HOD, ECE	University Institute of Engineering & Technology Kurukshetra University, Kurukshetra
4	Dr. Balwinder Singh	Coordinator & Principal Engineer	Centre for Development of Advanced Computing- A Scientific Society of the Ministry of Communication & Information Technology, A-34, Indl Area, Phase VIII, Mohali
5	Dr. Shruti Jain	Associate Professor, Deptt of ECE	JUIT
6	Dr. Rajiv Kumar	Associate Professor, Deptt of ECE	JUIT
7	Dr. Neeru Sharma	Asst Professor, Deptt of ECE	JUIT
8	Dr. Meenakshi Sood	Asst Professor, Deptt of ECE	JUIT
9	Dr. Vikas Baghel	Asst Professor, Deptt of ECE	JUIT
10	Dr. Shweta Pandit	Asst Professor, Deptt of ECE	JUIT

- Program Curriculum Committee

S No	Name	Designation	Institution
1	Prof (Dr.) M.J Nigam	HOD, Deptt. of ECE	Jaypee University of Information Technology
2	Dr. Rajiv Kumar	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
3	Dr. Shruti Jain	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
4	Dr. Meenakshi Sood	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
5	Dr. Neeru Sharma	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
6	Dr. Shweta Pandit	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
7	Dr. Vikas Baghel	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- Program Evaluation Committee

S No	Name	Designation	Institution
1	Prof (Dr.) M.J Nigam	HOD, Deptt. of ECE	Jaypee University of Information Technology
2	Dr. Rajiv Kumar	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
3	Dr. Shruti Jain	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
4	Dr. Meenakshi Sood	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
5	Dr. Sunil Datt Sharma	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
6	Dr. Nafis U Khan	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
7	Dr. Naveen Jaglan	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- Modernization of Lab Committee

S No	Name	Designation	Institution
1	Prof (Dr.) M.J Nigam	HOD, Deptt. of ECE	Jaypee University of Information Technology
2	Dr. Rajiv Kumar	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
3	Dr. Shruti Jain	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
4	Dr. Meenakshi Sood	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
5	Dr. Shweta	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
6	Dr. Vikas Baghel	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
7	Dr. Harsh Sohal	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
8	Dr. Emjee Puthooran	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
9	Dr. Nishant Jain	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
10	Dr. Salman Raju Talluri	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- **Entrepreneurship Committee**

S No	Name	Designation	Institution
1	Prof (Dr.) M.J Nigam	HOD, Deptt. Of ECE	Jaypee University of Information Technology
2	Dr. Shruti Jain	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
3	Dr. Meenakshi Sood	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
4	Dr. Neeru Sharma	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
5	Dr. Nishant Jain	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
6	Mr. Pranav Bhasin	Entrepreneur	Electrovese Solutions

- **Student** Counselor Committee

S No	Name	Designation	Institution
-------------	-------------	--------------------	--------------------

1	Dr. Shruti Jain	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
2	Dr. Pradeep Garg	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
3	Dr. Sunil Datt Sharma	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
4	Ms. Pragya Gupta	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- Department Consultative Committee

S No	Name	Designation	Institution
1	Prof (Dr.) M.J Nigam	HOD, Deptt. Of ECE	Jaypee University of Information Technology
2	Dr. Meenakshi Sood	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
3	Dr. Rajiv Kumar	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
4	Dr. Neeru Sharma	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
5	Dr. Naveen Jaglan	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
6	Dr. Shruti Jain	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
7	Dr. Nishant Jain	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
8	Dr. Shweta Pandit	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING & INFORMATION TECHNOLOGY

- **Department Vision and Mission**

- **Vision:**

To become a Center of Excellence in the computer sciences and information technology discipline with a strong research and teaching environment that adapts swiftly to the challenges of the 21st century.

- **Mission:**

M1. To provide qualitative education and generate new knowledge by engaging in cutting-edge research and by offering state-of-the-art undergraduate, postgraduate and doctoral programmes, leading to careers as Computer and IT professionals in the widely diversified domains of industry, government and academia.

M2. To promote a teaching and learning process that yields advancements in state-of-the-art in computer science and information technology, resulting in integration of research results and innovations into other scientific disciplines leading to new technologies and products.

M3. To harness human capital for sustainable competitive edge and social relevance by inculcating the philosophy of continuous learning and innovation in Computer Science and IT.

- **Faculty Details**

All faculty, their qualification and specialization as Appendix B

S.No	Name	Qualification	Specialization
1.	Prof. Dr. Satya Prakash Ghrera	Ph.D.	Computer network and network security
2.	Dr. Hemraj Saini	Ph.D.	Network Security, Information security, Cyber Security
3.	Dr. Pardeep Kumar	Ph.D.	Computational and Machine Intelligence
4.	Dr. Pradeep Kumar Gupta	Post-Doctorate	Internet-of-Things, Sustainable Computing
5.	Dr. Rajni Mohana	Ph.D.	software engineering, sentiment analysis , Health informatics
6.	Dr. Vivek Sehgal	Ph.D.	Embedded Systems, Advanced Computer Architecture
7.	Dr. Amit Kumar	Ph.D.	Software Effort Estimation, Defect Prediction

8.	Dr. Ekta Gandotra	Ph.D.	Malware Threat Profiling, Cyber Threat Intelligence
9.	Dr. Geetanjali	Ph.D.	Network security, Blockchain Technology, Fog computing
10.	Dr. Hari Singh	Ph.D.	Distributed and Parallel Computing, Grid Computing
11.	Dr. Jagpreet Sidhu	Ph.D.	Distributed computing, Grid Computing, Cloud Computing
12.	Dr. Kapil Sharma	Ph.D.	Data Center Network, Software defined network
13.	Dr. Pradeep Kumar Singh	Ph.D.	Image processing, Big data
14.	Dr. Rajinder Sandhu	Post Doctorate	Cloud computing, fog computing, machine learning
15.	Dr. Ramanpreet Kaur	Ph.D.	Network Security, Peer to Peer Networks
16.	Dr. Ravindara Bhatt	Ph.D.	Sensor networks: Deployment modeling, communication and energy efficient algorithms.
17.	Dr. Ruchi Verma	Ph.D.	Information systems, social networks
18.	Dr. Suman Saha	Ph.D.	Complex Networks, advanced algorithms
19.	Dr. Yugal Kumar	Ph.D.	meta heuristic algorithms, swarm intelligence, pattern recognition
20.	Dr. Amol Vasudeva	Ph.D.	<i>arious attacks in MANETs, VANETs and Sensor Networks and their detection</i>
21.	Dr. Himanshu Jindal	Ph.D.	Wireless Sensor Networks, Efficient Data Transmission, Digital Image Processing
22.	Arijit Das	M.E.	Data mining, NLP
23.	Arvind Kumar	Ph.D. (Pursuing)	internet of Things, Computer Networks, Algorithms
24.	Monika Bharti	Ph.D. (Thesis submitted)	cloud computing, networking, and Internet-of-Things
25.	Nitin Kumar	Ph.D. (Pursuing)	Image processing, computer vision
26.	Prateek Thakral	Ph.D. (Pursuing)	Graph theory, discrete mathematics
27.	Rizwan ur Rehman	Ph.D. (Pursuing)	Data mining, cyber security
28.	Praveen Modi	Ph.D. (Pursuing)	Data Mining with Statistical Analysis
29.	Surjeet Singh	Ph.D. (Pursuing)	Computer networks, mobile computing

- **Programs**

Undergraduate Programs

At the undergraduate level, the Department lays emphasis on theoretical and practical aspects of object-oriented programming, software engineering, Computer organization & architecture, database management, operating systems, theory of computation, compiler design, computer graphics, computer networks and Microprocessors and microcontrollers. The department provides exposure to emerging technologies as well as futuristic technologies like nanotechnology, quantum computing, bioinformatics, genetic algorithms and parallel programming.

New Courses introduced during the year

SNo	Title of New Course	Course Code
1	Python Programming Essentials	18B11CI314
2	Python Programming with Raspberry Pi	18B11CI315
3	Python programming Lab	18B17CI374
4	Python programming with Raspberry Pi Lab	18B17CI375
5	Information Theory & Coding	18B1WCI531
6	Data Compression	18B1WCI534
7	Information Theory & Coding Lab	18B1WCI571
8	Data Compression Lab	18B1WCI574
9	Computational Techniques and Algorithms	18B1WCI740

Ph.D. Program

The award of the Ph.D. degree 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. Algorithms, Artificial Intelligence, Computer Networks, Computer Systems Architecture, Cyber Security, Software Engineering and Information Systems, Image Information Processing, Parallel and Distributed Computing, Database systems and Data mining.

- **Lab Facilities**

New Labs

Lab No.	Lab Name
CL12	Research Lab
CL9	University Computer Centre, Spoken Tutorials, Webinars, Virtual Lab

New Equipments

Lab No.	Equipment Name
CL5	2 PC's
CL9	DLink Wireless N300 Router
CL12	12 Pc's set (Dell Vostro 3669-Intel Core i5-7400 @ 3.00Ghz,8GB RAM,64 bit,Windows 10 Pro)

- Lab Staff with qualification**

S. No.	Name	Qualification	Designation
1	Sh. Shiv Kumar Gupta	Pre. Ph.D. Course (CS), M.Phil. (CS), MCA, M.Sc. (Mathematics)	Sr. Lab Engineer
2	Sh. Ashok Kishtwal	M.Tech (CSE)	Sr. Lab Engineer
3	Sh. Rohit	M.Phil.(CS), MCA, M.Sc.(IT), PGDCA, PGDBI, GNIIT	Lab Engineer
4	Ms. Anshul Sood	MTech (CSE), MCA, ADCA, PGDCA, Diploma in e-commerce, DISM	Sr. Lab Technician
5	Sh. Vijay Kumar	MCA, A LEVEL, APGDIT	Sr. Lab Technician
6	Sh. Hardeep Singh	Diploma in Computer Engg, B.com, MS-CIT,MCA Pursuing	Sr. Lab Technician
7	Sh. Mohan Sharma (Associated with ECE Dept.)	BCA, Diploma in H/N ,CCNA	Lab Technician
8	Sh. Ranvijai Singh	M.A, ADCA,PGDCA	Lab Technician
9	Sh. Ravi Raina	3 Years Diploma in Computer, BCA, MCSE and Network+: Concepts and Application Complete	Lab Assistant
10	Sh. Rajesh Kumar Sahu (Associated with Civil Dept.)	3 Years Diploma in Computer Science and Engg., BCA	Lab Assistant
11	Sh. Vineet Paliwal	Diploma In Computer H/W and Networking, B.Com.	Lab Assistant
12	Sh. Arun Kumar Guleria	B.Tech CSE, 3-Years Diploma in Computer Engg.	Jr. Lab Assistant
13	Sh. Sanjeev Kumar	M.E. in CSE (Pursuing), B.Tech in CSE, 3-Years Diploma in Computer Engg.	Jr. Lab Assistant

- Research Projects Sanctioned during the Academic Year/In Progress**

S No	Name of Faculty	Project title	Funding Agency	Amount sanctioned	Duration	Current Status
1	Dr. Pradeep Kumar Singh	Identification of Diseases of Tomato Using Image Processing Techniques for the Farmer of HP with Feedback System Using IoT and Android Application	Rs 9,96,750	Rs 3,43,000	3 years	On going

- **Conferences, Seminars and Workshops/Faculty development program**

- **Conferences**

Conferences Organised

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
April 12-13, 2019	3rd International conference on Advances in Computing and Data Sciences (ICACDS 2019)	Inderprastha Engineering College, Ghaziabad, India	TPC Chair (Dr. P.K. Gupta)	
20-22 December, 2018	2018 Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC)	Department of CSE, Jaypee University of IT, Wazirpur, Solan, HP	Dept of CSE (Organizing Secretary (Dr. Pradeep Kumar Singh)	

Details of PDGC 2018 (20-22 December 2018)

Dr. Pradeep Kumar Singh
Executive General Chair- PDGC 2018

Key note speakers

1. Official Name: Dr. Mohammad S. Obaidat
Affiliations: King Abdullah II School of Information Technology, the University of Jordan.
Fellow of IEEE and Fellow of SCS, Past President of SCS
Founding Editor in Chief, Security and Privacy Journal, Wiley
Editor in Chief, International Journal of Communication Systems, Wiley
Editor, IEEE Wireless Communications Magazine
Editor, IEEE Systems Journal



- Conferences Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
20-22 December, 2018	2018 Fifth International Conference on Parallel , Distributed and Grid Computing(PDGC)	Department of CSE, Jaypee University of IT,Waknaghat, Solan, HP	Dr. Geetanjali and Hemraj Saini	
20-22 December, 2018	2018 5th PDGC	JUIT Solan, HP, India	Dr. P.K. Gupta	
29-30 December, 2018	2018 International Conference on Advanced Computation and Tele-commun ication (ICACAT-2018),	LNCT Group of Colleges, Bhopal,Madhya Pradesh 462021, India	Dr. P.K. Gupta	
20-21 April , 2018	2018 International Conference on Advaced Computing and Data Sciences	Uttaranchal University, Dehradun, India	Dr. P.K. Gupta	
21-22 June 2019	International Confer- ence on Emerging Trends in Information Technology (ICETIT 2019)	IITM, Janakpuri, New Delhi	Sh. Prateek	
20-22	International	JUIT		

December 2018	Conference on Parallel, Distributed & Grid Computing (PDGC 2018)	Waknaghat, Solan (HP)	Sh. Prateek	
20-22 December, 2018	2018 Fifth International Conference on Parallel, Distributed and Grid Computing(PDGC)	Department of CSE, Jaypee University of IT, Waknaghat, Solan, HP	Praveen Modi	
29 March 2019.	Parallel computing of matrix multiplication in Open MP supported CodeBlocks”, International conference on “Intelligent systems: Approaches, Technologies and Networks”,	Panipat Institute of Engineering & Technology, Panipat, Haryana	Hari Singh	
15-16, March 2019	Amazon Rating Analysis and Prediction on Hive”, International Conference on Intelligent Machines (ICIM2019) March 15-16, 2019	Baba Farid College of Engineering & Technology, Bhatinda, Punjab	Hari Singh	

- **Seminars Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
26 Oct 2018	Blockchain	Educational Television Centre, NITTTR Chandigarh at NITTTR Chandigarh	Dr. Geetanjali Rathee and Dr. Hemraj Saini	
6.8.2018 to 10.8.2018	Deep Learning	Educational Television Centre, NITTTR Chandigarh at NITTTR Chandigarh	Dr. Ekta Gandotra	
7.12.2018	LDRA Orientation workshop	JUIT, Waknaghat	Dr. Ekta Gandotra and Dr. Geetanjali	
23.07.2018 to 27.07.2018	Artificial Neural Network and Fuzzy Logic through ICT	Educational Television Centre, NITTTR Chandigarh at NITTTR Chandigarh	Dr. Ekta Gandotra	
15th June,	NPTEL	IIT, Roorkee at JUIT,	Dr. Ekta	

2019	Workshop	Waknaghat	Gandotra	
24-28 jun2019	Short term course on RASIP-2019	JUIT WAKNAGHAT	Praveen Modi	

Workshops

• **Workshops Organised**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participatio n</u>	<u>Remarks</u>
27 March 2019	Network Security and Cyber Crime by Mrs. Janpreet Bedi of APIN Technologies,	JUIT	Rajinder Sandhu	
15th March 2019	Red-Hat Linux for Secure Server Deployment	JUIT	Rajinder Sandhu	
1st March 2019	Enforcing Standard Driven Software Development	JUIT	Rajinder Sandhu	
May 29-31, 2019	National Workshop on Bioinformatics and Biomedical Image Analysis (NBBIA-2019)	JUIT, Waknaghat	Organizing Committee Member	
July 23-27, 2018	Artificial Neural Networks and Fuzzy Lozzic through ICT	JUIT, Waknaghat	Coordinator	
11-15 February 2019	Introduction to Computers	JUIT Waknaghat, Solon (HP)	17 Members	

• **Workshops Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
28/02/ 2019	Red Ribbon Club Training on HIV	CMO Office, Solon	Hemraj Saini	
29.05.2019 to 31.05.2019	National workshop on Bioinformatics and Biomedical Image Analysis	Excellence in health care technologies and informatics, Deptt. Of BT, BI at JUIT, Waknaghat	Dr. Ekta Gandotra and Dr. Geetanjali	
27.03/2019	Network Security and Cyber Crime by Mrs. Janpreet Bedi of APIN	JUIT	Rajinder Sandhu	

	Technologies,			
15/03/2019	Red-Hat Linux for Secure Server Deployment	JUIT	Rajinder Sandhu	
01/03/2019	Enforcing Standard Driven Software Development	JUIT	Rajinder Sandhu	
23/07/2018 to 27/07/2018	Artificial Neural Networks and Fuzzy Logic through ICT	JUIT, Solan, HP, India	Dr. P.K. Gupta	
15/06/2019	NPTEL Workshop	JUIT, Solan, HP, India	Dr. P.K. Gupta	
15/06/2019	NPTEL for E-learning	JUIT WAKNAGHAT	PRAVEEN MODI	
20.05.2019 to 27.05.2019	Faculty Development Workshop on Python organized	by Spoken Tutorial Project, IIT Bombay at JUIT, Wagnaghat	Dr. Geetanjali, Dr. Ekta Gandotra, Sh. Praveen Modi, Sh. Rizwan Ur Rehman, Ms. Monika Bharti, Dr. Himanshu Jindal, Dr. Amol Vasudeva, Dr. Jagpreet Singh, Dr. Ruchi	
20-05-2019 to 27/05/2019	Recent Trends on Machine Learning for Signal Processing (RTMLS-2019)	JUIT Wagnaghat	Dr. Hemraj Saini, Dr. Geetanjali, Dr. Hari Singh and Prateek, Sh. Surjeet Singh	
31/05/2019 to 1/6/2019	Machine Intelligence & Data Science	Kochi, India	Sh. Prateek	
27/05/2019 to 31/05/2019	Research & Professional Skills	NIT Kurukshetra	Sh. Prateek	
20/05/2019 to 25/05/2019	Faculty development workshop on python	Department of CSE, Jaypee University of IT, Wagnaghat, Solan, HP	Dr. Amit Kumar Jhakar	
15-6-19	NPTEL Workshop	By IIT Roorkee at Wagnaghat Solan	Member	
24/06/2019 to 28/06/2019	Short Term course on Recent Advances on Signal & Image	Department of CSE, Jaypee University of IT, Wagnaghat,	Member	

	Processing	Solan, HP		
January – Apr 2019	Successfully completed a twelve weeks MOOC equivalent to 1.5 week AICTE approved FDP on “Parallel Algorithms”	NPTEL organized by IIT Guwahati	Hari Singh	
7 December 2018	Participated in one day LDRA Orientation Workshop	CSE&IT Dept., Jaypee University of Information Technology, Wagnaghat	Dr. Geetanjali, Dr. Hari Singh, Dr. Ravinder Bhatt, Sh. Surjeet Singh	
May 1, 2019 to June 15, 2019	Successfully completed a MOOC on Basic Programming using Python	FOSSE IIT Bombay	Hari Singh	
March 3, 2018	Participated in one day LDRA Orientation Workshop	CSE&IT Dept., Jaypee University of Information Technology, Wagnaghat	Nitin Kumar	
May 6 2019 to May 11 2019	Faculty Workshop for InfyTQ Foundation Program	Infosys	Nitin Kumar	
15 June, 2019	NPTEL Workshop	JUIT, Wagnaghat	Ravindara Bhatt	

- **Publications**

- Journal Publications

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Prof Dr. S.P. Ghrera	An approach for de-noising and contrast enhancement of retinal fundus image using CLAHE	<i>Optics & Laser Technology</i>	110, 87-98, 2019	
Geetanjali and Hemraj Saini	Secure handoff technique with reduced authentication delay in wireless mesh network.	<i>International Journal of Advanced Intelligence</i>	13 (1/2), 130-154, 2019	

		<i>Paradigms</i>		
	A Hybrid Framework for Multimedia Data Processing in IoT-Healthcare using Blockchain Technology	<i>Multimedia Tools and Applications</i>	1-23, 2019	
	A Secure, Energy- and SLA-Efficient (SESE) E-Healthcare Framework for Quickest Data Transmission Using Cyber-Physical System	<i>Sensors</i>	19 (9), 1-22, 2019	
	SALT cryptography for privacy in Mobile Crowdsourcing	<i>International Journal of Information Technology</i>	11 (2), 1-7, 2019	
Geetanjali Rathee	A Secure Communicating Things Network Framework for Industrial IoT using Blockchain Technology	<i>Ad Hoc Networks</i>	1-15, 2019	
	A Blockchain Framework for Securing Connected and Autonomous Vehicles	<i>Sensors</i>	19, 2019	
Hemraj Saini	State of art on efficient document co-editing in cloud collaboration	<i>International Journal of Spatio-Temporal Data Science</i>	1 (1), 114-129, 2019	
	A Mutation Operator-Based Scenario for Evaluating Software Clone Detection Tools and Techniques	<i>International Journal of Information Security and Privacy</i>	13 (1), 30-45, 2019	
	Behavioral Modeling of Malicious Objects in a Highly Infected Network Under Quarantine Defence	<i>International Journal of Information Security and Privacy</i>	13 (1), 17-29, 2019	
	Energy and SLA Efficient Virtual Machine Placement in Cloud Environment Using Non-	<i>International Journal of Information Security and</i>	13 (1), 1-16, 2019	

	Dominated Sorting Genetic Algorithm	<i>Privacy</i>		
Vivek Sehgal	The MPEG-4 based Energy Efficient Application Traffic Modelling and Synthesis for Networks-on-Chip Architecture.	<i>Sustainable Computing: Informatics and Systems</i>	2019	
	Qualitative Analysis of 3D Routing Algorithms in 3x3x3 Mesh NoC Topology Under Varying Load in Bio-SoC .	<i>International Journal of E-Health and Medical Communications</i>	11 (3), 1-12, 2019	
	A Novel Approach of Cloud Based Scheduling Using Deep-Learning Approach in E-Commerce Domain	<i>International Journal of Information System Modeling and Design</i>	10 (3), 1-10, 2019	
Ekta Gandotra	Malware Capability Assessment using Fuzzy Logic	<i>Journal Cybernetics and Systems: An International Journal</i>	50 (4), 323-338, 2019	
Hari Singh	An improved integrated Grid and MapReduce-Hadoop architecture for spatial data: Hilbert TGS R-Tree based IGSIM	<i>Concurrency and Computation Practice and Experience</i>	31, 2019	
Jagpreet Sandhu	Using the Improved PROMETHEE for Selection of Trustworthy Cloud Database Servers	<i>The International Arab Journal of Information Technology</i>	16 (2), 194-202, 2019	
Pardeep Kumar Singh	Average Energy Analysis in Wireless Sensor Networks using Multitier Architecture	<i>International Journal of Performability Engineering (IJPE)</i>	15 (4), 1199-1208, 2019	
	SLA Constraint Quickest Path Problem for Data Transmission Services in Capacitated Networks	<i>International Journal of Performability Engineering (IJPE)</i>	15 (4), 1061-1072, 2019	
	Survey of robust and imperceptible watermarking	<i>Multimedia Tools and Applications</i>	78 (7), 8603-8633, 2019	

	A Chaotic Teaching Learning based Optimization Algorithm for Clustering Problems.	<i>Applied Intelligence</i>	49 (3), 1036-1062, 2019	
	Vibrating Particle System Algorithm for Hard Clustering Problems	<i>Pertanika Journal of Science and Technology</i>	27 (2), 815-827, 2019	
	Network Lifetime and Throughput Analysis in Wireless Sensor Networks Using Fuzzy Logic.	<i>Recent Advances in Electrical and Electronic Engineering</i>	12 (1), 1-9, 2019	
	Taxonomy on Localization Issues and Challenges in Wireless Sensor Networks.	<i>Recent Advances in Electrical and Electronic Engineering</i>	12 (1), 1-10, 2019	
	Applicability of Wireless Sensor Networks in Precision Agriculture: A Review	<i>Wireless Personal Communication</i>	(1), 1-42, 2019	
Yugal Kumar	A Chaotic Teaching Learning based Optimization Algorithm for Clustering Problems.	<i>Applied Intelligence</i>	49 (3), 1036-1062, 2019	
	Applicability of Wireless Sensor Networks in Precision Agriculture: A Review.	<i>Wireless Personal Communication</i>	(1), 1-42, 2019	
Arvind Kumar	Applicability of Wireless Sensor Networks in Precision Agriculture: A Review.	<i>Wireless Personal Communication</i>	(1), 1-42, 2019	

- Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Prof. Dr. S.P. Ghrera	A Robust Approach of Copyright Protection for Digital Videos Using Zero Padding Algorithm Technique	<i>Futuristic Trends in Network and Communication Technologies</i>	Singapore : Springer Nature	
Pardeep Kumar	Efficient Generation of Association Rules from Numeric Data Using Genetic Algorithm for Smart Cities	<i>Security in Smart Cities: Models, Applications, and Challenges</i>	Springer	

Pardeep Kumar Singh	<i>Advanced Informatics for Computing Research</i>	Singapore: Springer, Singapore		
	<i>Advanced Informatics for Computing Research</i>	Singapore: Springer, Singapore		
	<i>Futuristic Trends in Network and Communication Technologies</i>	Singapore: Springer, Singapore		
	A PHR-Based System for Monitoring Diabetes in Mobile Environment. In Sara Paiva, <i>Mobile Solutions and Their Usefulness in Everyday Life</i>	<i>Mobile Solutions and Their Usefulness in Everyday Life</i> Springer, Switzerland: Springer	Springer, Switzerland	
	Performance Investigation of Energy Efficient HetSEP for Prolonging Lifetime in WSNs	<i>Futuristic Trends in Network and Communication Technologies</i> (p p. 496-509). India: Springer, Singapore	India: Springer, Singapore	
Rajinder Sandhu	An API for Development of User-Defined Scheduling Algorithms in Aneka PaaS Cloud Software: User Defined Schedulers in Aneka PaaS Cloud Software	<i>Handbook of Research on Cloud Computing and Big Data Applications in IoT</i>	USA: IGI Global	
	An Adaptive Security Framework for the Internet of Things Applications Based on the Contextual Information	<i>Cryptographic Security Solutions for the Internet of Things</i>	IGI Global	
Suman Saha	<i>Advanced Data Structures: theory and applications</i>	Boca Raton, Florida: Chapman and Hall	CRC	
Yugal Kumar	<i>Futuristic Trends in Network and Communication Technologies</i>	Singapore: Springer, Singapore		
	A PHR-Based System for Monitoring Diabetes in	<i>Mobile Solutions and</i>	Springer, Switzerland	

	Mobile Environment	<i>Their Usefulness in Everyday Life</i> (2019, pp. 129-144). Springer, Switzerland: Springer	d	
Parteek Thakral	Transfusion of Extended Vigenere Table and ASCII Conversion for Encryption Contrivance.	<i>Innovations in Bio-Inspired Computing and Applications</i> (pp. 36-45). Switzerland : Springer.	Switzerland : Springer	

- Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Prof Dr. S.P. Ghrera	Probe Messaging in Wireless Networks to Reduce Broadcast Storm Problem	<i>Proceedings of the International Conference on Smart IoT Systems: Innovations in Computing (SSIC-2019)</i>	Manipal University Jaipur, Raj. :	18-20 January 2019
	Global Network Information Based Counter Specific Network Coding	<i>Proceedings of the International Conference on Smart IoT Systems: Innovations in Computing (SSIC-2019)</i>	Manipal University Jaipur, Raj. :	18-20 January 2019
	Heterogeneous Rate-Network Coding in Wireless Networks	<i>Proceedings of the International Conference on Smart IoT Systems : Innovations in Computing (SSIC-2019)</i>	Manipal University Jaipur, Raj. :	18-20 January 2019
Geetanjali and Hemraj Saini	Big Data Analytics for Crop Prediction Mode Using Optimization Technique.	<i>Proceedings of the IEEE International Conference on Parallel, Distributed and</i>	IEEE International Conference on Parallel, Distributed	20-22 Dec, 2018

		<i>Grid Computing (PDGC-2018)</i>	and Grid Computing (PDGC-2018), JUIT	
Parteek Thakral	A Study on IoT: Model, Communication Protocols, Security Hazards & Countermeasures.	<i>Proceedings of the Parallel Distributed and Grid Computing [44302 : Solan Himachal Pradesh, India</i>	JUIT	20-22 December 2018
Ekta Gandotra	Comparative Analysis of Ensemble Methods for Classification of Android Malicious Applications	<i>International Conference on advances and computing and data sciences, (ICACDS)</i>	Ghaziabad	
	Permission based Android Malicious Application Detection using Machine Learning	<i>International Conference on Signal Processing and Communication</i>	JIIT Noida	

- **Guest Speakers/Lectures/ Visits**

Lectures Delivered by Faculty

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Dr. P.K. Gupta	Resource Person	Predictive Computing Techniques and Applications	June 24-28, 2019	JUIT, Solan, HP
Dr. P.K. Gupta	Keynote Speaker	Secure IoT	April 12-13, 2019	IPEC Ghaziabad, UP, India
Dr. Pardeep Kumar	Associate Professor	Machine Learning Technique for Secure Human Health Care System	20 th June 2019	Department of ECE, Jaypee University of IT, Wagnaghat, Solan, HP
Dr. Suman Saha	AP(SG)	Advance Data Models	10/07/2019	Poornima University, Jaipur
Dr. Hari Singh	Assistant Professor (SG)	Parallel programming techniques	March 16, 2019	Baba Farid College of Engineering &

				Technology, Bhatinda, Punjab
Dr. Ravindara Bhatt	Assistant Professor (SG)	Machine Learning	01-05-2019	GNOIT, Greater Noida, UP

- **Composition of Various Bodies**

Board of Studies (BOS)

S. No.	Name	Designation	Institution
1	Prof. Dr. S.P. Ghrera	HOD, CSE(Chairperson)	JUIT
2	Prof. Dr. M.L.Nigam	HOD ECE	JUIT
3	Prof. Dr. Karanjeet Singh	HOD Mathematics	JUIT
4	Prof. Dr. P.B Barman	HOD PMS	JUIT
5	Prof. Dr. Ashok Kumar Gupta	HOD CE	JUIT
6	Prof. Dr. Sudhir Kumar	HOD BT/BI	JUIT
7	Prof. Dr. Anupriya Kaur	HOD HSS	JUIT
8	Dr. Vivek Sehgal	Associate Prof	JUIT
9	Dr. Hemraj Saini	Associate Prof	JUIT
10	Dr. Pradeep Gupta	Associate Prof	JUIT
11	Dr. Pardeep Kumar	Associate Prof	JUIT
12	Dr. Hari Singh	Assistant Prof	JUIT
13	Dr. Ekta Gupta	Assistant Prof	JUIT
14	Dr. Ravindra Bhatt	Assistant Prof	JUIT
15	Dr. Yugal	Assistant Prof	JUIT

Departmental Consultative Committee

- **Faculty Members**

Principal Chair: Prof Dr S P Ghrera

Coordinating Chair: Dr Pradeep Kumar Gupta

Members:

Dr Yugal Kumar

Dr. Geetanjali

- **Student Members**

B.Tech 1st year

171454 Amit Verma

171460 Abhinav Mishra

B.Tech 2nd year

171223 Gudakesh
171304 Akansha

B.Tech 3rd year

151289 Yogesh Khurana
151274 Abhinav Kriti Gupta
151325 Ritwik Tiwari
151332 Vaibhav Dutta

B.Tech 4th year

141240 Deepansh Gupta
141248 Puru Aggarwal

M.Tech 1st year

172203 Shaifali Varshney

M.Tech 2nd year

162205 Divyansh Thakur

Ph.D. Scholar(s)

Sh. M Dilshad, Phd Scholar
Ms. Laxmanika, Phd Scholar

Stake Holders Feedback Committee**• Sub Committee-1(for B Tech CSE)**

Chairperson: Dr. Hemraj Saini, Associate Professor

Members

Dr. Shailendra Shukla, Assistant Professor (Senior Grade)
Dr. Amit Kumar, Assistant Professor (Grade –II)

• Sub Committee-2(for B Tech Information Technology)

Chairperson: Dr. Vivek Sehgal, Associate Professor

Members

Dr. Pardeep Kumar, Associate Professor
Dr. Rajni Mohana, Assistant Professor Senior Grade

DEPARTMENT OF BIOTECHNOLOGY & BIOINFORMATICS

- **Department Vision and Mission**

- **Vision:**

To produce Biotechnology and Bioinformatics professionals with leadership quality in technology, creativity, innovation, and entrepreneurship

- **Mission:**

DM1: To provide state of the art outcome-based teaching/learning practices

DM2: To develop a research-based education model in Biotechnology & Bioinformatics

DM3: To harness human capital for sustainable competitive edge and social relevance

- **Faculty Details**

1.	<u>Name</u>	Qualification	Specialization
2.	Prof. (Dr.) Sudhir Kumar	Ph.D.	Environmental Biotechnology
3.	Dr. Anil Kant Thakur	Ph.D.	Plant Biotechnology, Molecular Biology
4.	Dr. Gopal Singh Bisht	Ph.D.	Medicinal Chemistry, Peptides and Peptidomimetics
5.	Dr. Harish Changotra	Ph.D.	Molecular Virology
6.	Dr. Hemant Sood	Ph.D.	Plant Biotechnology and IPR
7.	Dr. Jata Shanker	Ph.D.	Fungal biology, Functional genomics
8.	Dr. Rahul Shrivastva	Ph.D.	Microbial Pathogenesis, Mycobacteriology
9.	Dr. Tiratha Raj Singh	Ph.D.	Bioinformatics, Functional genomics, Molecular Evolution and Systems Biology
10.	Dr. Vijay Kumar Garlapati	Ph.D.	Bioprocess Engineering
11.	Dr. Jayashree Ramana	Ph.D.	Computational study of antibiotic resistance in infectious

			pathogens
12.	Dr. Jitendraa Vashistt	Ph.D.	Bacterial Resistance, Clinical Proteomics
13.	Dr. Poonam Sharma	Ph.D.	Chemistry
14.	Dr. Saurabh Bansal	Ph.D.	Protein engineering, Enzymology
15.	Dr. Udayabanu M.	Ph.D.	Neuropharmacology
15.	Dr. Raghu M. Yennamalli	Ph.D.	Structural Bioinformatics, Bioenergy
17.	Dr Ashok Nadda	Ph.D.	Bioenergy/Biopolymer/ Enzyme Technology/Biocatalysis
18.	Dr Narendra Kumar	Ph.D.	Genomes and Transcriptomes
19.	Dr. Abhishek Chaudhary	Ph.D.	Nanobiotechnology

- **Programs:**

- **Undergraduate Programs**

- The program is designed to provide hands on training through appropriate laboratory courses to make better understanding of the theory courses.
- The course curriculum encompasses courses from core Biotechnology, Mathematics, Physics, Electronics & Communication, Computer Science and Humanities & Social Sciences.
- Elective modules are offered in the final year to strengthen and specialize students' knowledge (theoretical and practical) in their area of interest.
- The students are encouraged to participate in various extra-curricular and co-curricular activities for developing leadership, communication, critical thinking and problem solving skills.
- The students are encouraged to participate in various bio-entrepreneurial activities through entrepreneurship cell and Bio-club 'Synapse' for developing their business and entrepreneurial skills.
- Summer Internships with industry projects is a mandatory component.

- **Programmes**

- **B. Tech (Biotechnology)**
- **B. Tech (Bioinformatics)**

- **B.Tech.and M.Tech Integrated (Biotechnology)**

Five years integrated program in Biotechnology

Post Graduate Programs

- **M. Tech (Biotechnology)**
- **M.Sc. Biotechnology** (from July 2018)
- **Ph. D. (Biotechnology)**
- **Ph. D. (Bioinformatics)**

New Courses introduced during the year

The scheme of Biotechnology and Bioinformatics is revised, detailed course structure is as:-

S No	Title of New Course	Course Code
B.TECH :(BIOTECHNOLOGY\BIOINFORMATICS) 1st SEMESTER		
1	English and Technical Communication	18B11HS111
2	Basic Mathematics -1 OR	18B11MA112
3	Fundamental Biology	18B11BT111
4	Fundamental Biology lab	18B17BT171
5	Basic Engineering Physics-I	18B11PH112
6	Programming for Problem Solving	18B11CI111
7	Engineering Graphics	18B17GE173
8	Basic Engineering Physics Lab-I	18B17PH172
9	Programming for Problem Solving Lab	18B17CI171
B. TECH (BIOTECHNOLOGY\BIOINFORMATICS) 2nd SEMESTER		
1	Basic Mathematics-II	18B11MA212
2	Bioinstrumentation Techniques	18B11PH212
3	Basic Electrical Sciences	18B11EC212
4	Basic Electrical Sciences lab	18B17EC272
5	Data Structure & Algorithms	18B11CI211
6	Data Structure & Algorithms Lab	18B17CI271
7	Workshop Practices	18BI7GE171
B. TECH (BIOTECHNOLOGY) 3rd SEMESTER		
1	Interpersonal Dynamics Values and Ethics	18B11HS311
2	Probability & Statistical Techniques	18B11MA312
3	Genetics	18B11BT311
4	Biochemistry	18B11BT312
5	Thermodynamics & Chemical	18B11BT313

	Processes	
6	General Chemistry	18B11BT314
7	Genetics Lab.	18B17BT371
8	Biochemistry Lab	18B17BT372
9	Thermodynamics & Chemical Processes lab	18B17BT373
10	General Chemistry Lab	18B17BT374
B. TECH (BIOTECHNOLOGY) 4th SEMESTER		
1	Finance and Accounts	18B11HS411
2	Cell Biology and Culture Technologies	18B11BT411
3	Molecular Biology	18B11BT412
4	Introduction to Bioinformatics	18B11BT413
5	Microbiology	18B11BT414
6	Cell Biology and Culture Technologies lab	18B17BT471
7	Molecular Biology Lab	18B17BT472
8	Introduction to Bioinformatics lab	18B17BT473
9	Microbiology Lab	18B17BT474
10	Environmental Studies	18B11GE411
B. TECH (BIOTECHNOLOGY) 5th SEMESTER		
1	Project Management and Entrepreneurship	18B11HS511
2	Bioprocess Engineering	18B11BT511
3	Genetic Engineering	18B11BT512
4	Immunology	18B11BT513
5	Bioprocess Engineering Lab	18B17BT571
6	Genetic Engineering Lab	18B17BT572
7	Immunology Lab	18B17BT573
8	Departmental Elective-I	
9	Minor Project Part-I	18B19BT591
B. TECH (BIOTECHNOLOGY) 6th SEMESTER		
1	Downstream Processing	18B11BT611
2	Food and Agricultural Biotechnology	18B11BT612
3	Downstream Processing Lab.	18B17BT671
4	Food and Agricultural Biotechnology Lab	18B17BT672
5	Departmental Elective- II	
6	Departmental Elective-III	
7	Open Elective-I	
8	Open Elective-II	
9	Minor Project Part-II	18B19BT691
10	Industrial Training	
B. TECH (BIOTECHNOLOGY) 7th SEMESTER		
1	Departmental Elective- IV	
2	Open Elective – III	
3	Open Elective – IV	
4	Major Project Part I	18B19BT791
5	Indian Constitution	

B. TECH (BIOTECHNOLOGY) 8th SEMESTER		
1	Departmental Elective- V	
2	Departmental Elective- VI	
3	Open Elective-V	
4	Major Project Part II	18B19BT891
PROFESSIONAL ELECTIVES		
1	Phytopharmaceuticals and Biologicals	18B1WBT531
2	Comparative & Functional Genomics	18B1WBT532
3	Peptide Therapeutics	18B1WBT631
4	Infectious Diseases	18B1WBT632
5	Nano-Biotechnology	18B1WBT633
6	Bioenergy & Biofuels	18B1WBT634
7	Industrial Enzymes Technologies	18B1WBT731
8	Intellectual Property Rights & Commercialization	18B1WBT732
9	Genetic Counselling	18B1WBT831
10	Traditional Bioprocessing & Their Up Scaling	18B1WBT832
11	Diagnostics & Vaccine Manufacture	18B1WBT833
12	NGS Data Analysis & Applications	18B1WBI834
13	Biology for Engineers	18B1WBT635
14	Industrial Chemistry	18B1WBT636
15	Sustainable Technologies for Waste Management	18B1WBT733
16	Food Nutrition & Health Care	18B1WBT734
BIOINFORMATICS		
1ST AND 2ND SEMESTER IS SAME FOR BOTH BT & BI		
B. TECH (BIOINFORMATICS) 3rd SEMESTER		
1	Interpersonal Dynamics Values and Ethics	18B11HS311
2	Cell and Molecular Biology	18B11BI311
3	Database Managements Systems	18B11CI313
4	Microbiology & Immune System	18B11BI312
5	Biological Computation	18B11BI313
6	Database Management Systems Lab	18B11CI373
7	Cell and Molecular Biology Lab	18B17BI371
8	Microbiology & Immune System Lab	18B17BI372
9	Biological Computation Lab	18B17BI373
10	Linux Lab	18B17BI374
B. TECH (BIOINFORMATICS) 4th SEMESTER		
1	Finance and Accounts	18B11HS411
2	Bio-Statistics	18B11MA411
3	Genetic Engineering and Genomics	18B11BI412
4	Object Oriented Programming	18B11CI415
5	Structural Biology	18B11BI413
6	Programming Languages for Bioinformatics	18B11BI414

7	Object Oriented Programming Lab	18B11CI474
8	Bio-Statistics Lab	18B11MA412
9	Genetic Engineering and Genomics Lab	18B17BI472
10	Structural Biology Lab	18B17BI473
11	Programming Languages for Bioinformatics Lab	18B17BI474
12	Environmental Studies	18B11GE411

B. TECH (BIOINFORMATICS) 5th SEMESTER

1	Project Management and Entrepreneurship	18B11HS511
2	Design and Analysis of Algorithms	18B11BI511
3	Bioprocess Engineering	18B11BT511
4	Scripting Languages for Bioinformatics	18B11BI512
5	Design and Analysis of Algorithms Lab	18B17BI571
6	Bioprocess Engineering Lab	18B17BT571
7	Scripting Languages for Bioinformatics Lab	18B17BI572
8	Structural Bioinformatics Lab	18B17BI573
9	Departmental Elective-I	
10	Open Elective-I	
11	Minor Project Part-I	18B19BI591

B. TECH (BIOINFORMATICS) 6th SEMESTER

1	Machine Learning for Bioinformatics	18B11BI611
2	Computer Aided Drug Design	18B11BI612
3	Machine Learning for Bioinformatics lab	18B17BI671
4	Computer Aided Drug Design Lab	18B17BI672
5	Advanced Algorithms for Bioinformatics Lab	18B17BI673
6	R Language Lab	18B17BI674
7	Departmental Elective-II	
8	Departmental Elective-III	
9	Open Elective-II	
10	Minor Project Part-II	18B19BI691
11	Industrial Training	

B. TECH (BIOINFORMATICS) 7th SEMESTER

1	Departmental Elective- IV	
2	Open Elective - III	
3	Open Elective - IV	
4	Major Project Part I	18B19BI791
5	Indian Constitution	

B. TECH (BIOINFORMATICS) 8th SEMESTER

1	Departmental Elective- V	
2	Departmental Elective- VI	
3	Open Elective-V	
4	Major Project Part II	18B19BI891

PROFESSIONAL ELECTIVES		
1	Structural Bioinformatics	18B1WBI531
2	Comparative & Functional Genomics	18B1WBT532
3	Advanced Algorithms for Bioinformatics	18B1WBI631
4	Infectious Diseases	18B1WBT632
5	Dataware housing and Mining for Bioinformatics	18B1WBI632
6	Bioenergy & Biofuels	18B1WBT634
7	Computational Systems Biology	18B1WBI731
8	Intellectual Property Rights & Commercialization	18B1WBT732
9	Genetic Counselling	18B1WBT831
10	Computational Molecular Evolution	18B1WBI831
11	Diagnostics & Vaccine Manufacture	18B1WBT833
12	NGS Data Analysis & Applications	18B1WBI834

- **Post Graduate Programs**

New Courses introduced during the year

1. M.Sc. Biotechnology and M.Sc. Bioinformatics are the two new PG programs introduced in the department. The course structure is approved through BOS and Academic Council.
2. M.Tech syllabus was also revised as per recommendations of BOS and approved by academic council.

M.Tech. Biotechnology Course Curriculum		
S No	Title of new Course	Course Code
1st SEMESTER		
1	Advances in Molecular Cell Biology	13M11BT111
2	Advances in Molecular Cell Biology Lab	13M11BT171
3	Research Methodology and Ethics	13M11BT115
4	Patenting in Biotechnology	
5	Advanced Bioinformatics	13M11BT112
6	Advanced Bioinformatics Lab	13M11BT172
7	High Throughput Technologies	13M11BT114
8	DE-1	
9	DE-II	
2nd SEMESTER		
1	Industrial Biotechnology	14M11BT211
2	Industrial Biotechnology Lab	14M17BT271
3	Immunotechnology	14M11BT212
4	Immunotechnology Lab	14M17BT272
5	Bioenterpreunership Management	14M11BT214

6	Functional Genomics	14M11BT213
7	Functional Genomics Lab	14M17BT273
8	Metabolic Engineering	-
9	DE-III	-
10	DE-1V	-
3rd SEMESTER		
1	Seminar	-
2	Project- Thesis Part I	
4th SEMESTER		
1	Seminar	-
2	Project- Thesis Part II	-
M. Tech. Biotechnology Electives courses:		
1	Food Processing & Engineering	14M1WBT331
2	Plant Tissue Culture Technologies	-
3	Advances in Computational System Biology	-
4	Microbial Ecology	-
5	Vaccine Production	-
6	QC Analysis and Management	-
7	Clinical Diagnostics	-
8	Plant Biotechnology	-
9	Advances in Gene manipulations	-

M. Sc. Biotechnology Course Curriculum New Course

S No	Title of new Course	Course Code
1st SEMESTER (MS1)		
1	General Microbiology	18MS1BT111
2	Molecular Genetics and Genomics	18MS1BT112
3	Biochemistry and Intermediary Metabolism	18MS1BT113
4	Research Methodology and Inferential Statistics	18MS1BT114
5	GLP and Bioinstrumentation	18MS1BT115
6	Introduction to IPR	18MS1BT116
7	General Microbiology lab.	18MS7BT111
8	Molecular Genetics and Genomics lab	18MS7BT112
9	Biochemistry and Intermediary Metabolism lab.	18MS7BT113

2nd SEMESTER (MS2)		
1	Immunology and Immunotechnology	18MS1BT211
2	Bioprocess Technology	18MS1BT212
3	Plant and Animal Biotechnology	18MS1BT213
4	Basic Bioinformatics	18MS1BI214
5	Elective-I	
6	Immunology and Immunotechnology lab.	18MS7BT211
7	Bioprocess Technology lab.	18MS7BT212
8	Plant and Animal Biotechnology lab	18MS7BT213
9	Environmental Biotechnology	18MS1BT215
10	Basic Bioinformatics lab.	18MS7BI214
11	Masters Research review seminar	18MS9BT211
3rd SEMESTER (MS3)		
1	Food Biotechnology	18MS1BT311
2	Enzymology and Enzyme Technology	18MS1BT312
3	Recombinant DNA Technology	18MS1BT313
4	Elective-II	
5	Food Biotechnology lab.	18MS7BT311
6	Enzymology and Enzyme Technology Lab	18MS7BT312
7	Recombinant DNA Technology Lab.	18MS7BT313
8	Master's Research Thesis Part-I	18MS9BT311
4th SEMESTER (MS4)		
1	Master's Research Thesis Part-II	18MS9BT411

Ph.D. Program

- Doctoral Degree Program in Biotechnology
- Doctoral Degree Program in Bioinformatics

The following courses are available for Ph.D. students

S No	Title of new Course	Course Code
1	Ethics, Intellectual Property Issues and Plagiarism	17P1WGE102
2	Literature Survey	17P1WGE101
3	Research Methodologies Include quantitative methods & comp. app.	18P1WGE101
4	Advances in Computational System Biology	18M1WBT133
5	High Throughput Technologies	13M11BT114
6	Industrial Enzyme Technologies	18M1WBT131
7	Plant Tissue Culture Technologies	18M1WBT132
Electives		
1	Applied Environmental Biotechnology	18M1WBT231
2	Comprehensive test	17P1WBT131
3	Nanobiotechnology: Concept and Applications	18M1WBT232
4	Advance in Computational Molecular Evolution	18M1WBT233
5	Industrial Biotechnology	14M11BT211

- **Lab Facilities**

New Labs

- The new instrumentation lab is functional now consisting of instruments like Atomic Absorption Spectrophotometer, Gas Chromatograph, Bomb calorimeter. Safety precautions are taken for placing gas cylinders.
- Research Lab for Bioinformatics is a new addition to the department. This lab is dedicated to project students and scholars.

- **New Equipments– The following two equipments were purchased in this year.**

1. Surface Tensiometer
2. Bomb Calorimeter

- **Lab Staff with Qualification**

Name	Designation	Qualification
Sh. Mohd. Ismail Siddiqui	Sr. Lab Engineer	M.Sc
Ms. Somlata Sharma	Sr. Lab Engineer	M.Sc-IT
Sh. Baleshwar Prasad	Sr. Lab Technician	M.Sc
Ms. Mamta Mishra	Lab Technician	M.Sc
Ms. Sonika Gupta	Lab Technician	D. Pharma

- **Research Projects Sanctioned during the Years 2015-2019/ In Progress**

S No	Name of Faculty	Project title	Funding Agency	Amount sanctioned	Duration	Current Status
1	Dr. Poonam Sharma	Physico-chemical Study of Flavonoid-Surfactant Interaction: Utilization in Neomycin Topical Formulation	DST	22.50	2017-20	On going
2	Dr. Hemant Sood	Socio Economic upliftment of high altitude farmers of Himachal Pradesh through transfer of micro-propagation technologies for high	DST	14.5	2015-19	Completed in march 2019

3	Dr. Jitendraa Vashistt	Identification of biofilm associated proteins of multidrug resistant Acinetobacter baumannii as potential drug target and inhibitors thereof.	SERB	23.30	2015-18	completed
4	Dr Sudhir Kumar	Biogas production for sustainable energy generation in Rural Himachal Pradesh using one-stage portable digester.	HPSCST&E	7,87,000	2016-18	completed
5	Dr. Gopal Singh Bisht	Synthesis of Novel Poly-N Substituted Glycines (Peptoids) Based on Cell Selective Antimicrobial Peptides for Gram Negative and Gram Positive Bacterial Infections	ICMR	24.3	2015-18	completed

- **Conferences, Seminars and Workshops/Faculty development program**

- **Conferences:**

- **Conferences Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
22-23 Oct, 2018	Bioremediation and management of e-waste.	3rd Himachal Science Congress; Rural Upliftment Through Science & Technology Interventions held at IIT	Dr. Sudhir Kumar	
22-23 Oct, 2018	Effective metal-catalyzed oxidative delignification of wheat straw.	3rd Himachal Science Congress; Rural Upliftment Through Science & Technology Interventions held at IIT		
22-23 Oct, 2018	Biogas generation from co-digestion of lignocellulosic and	3rd Himachal Science Congress; Rural Upliftment Through		

	kitchen waste.	Science & Technology Interventions held at IIT		
22-23 Oct, 2018	Sexual differences and seasonal variations in total phenolics and antioxidant capacities in Hippophae rhamnoides leaves.	3rd Himachal Science Congress; Rural Upliftment Through Science & Technology Interventions held at IIT		
22-23 Oct, 2018.	Evaluation of onion genotypes for quality of bulb during post harvest storage in agro-climatic conditions of Ladakh.	3rd Himachal Science Congress; Rural Upliftment Through Science & Technology Interventions held at IIT, Mandi	Dr. Anil kant	
22-23 Oct, 2018	Sexual differences and seasonal variations in total phenolics and antioxidant capacities in Hippophae rhamnoides leaves.	3rd Himachal Science Congress; Rural Upliftment Through Science & Technology Interventions held at IIT Mandi,.		
Oct.28 -30, 2018	Deciphering host-response in <i>Aspergillus</i> mediated infection	International conference on Emerging Researches in Bioscience' (ICERB-2018) Guru Ghasidas Viswavidyalaya-Central University Bilaspur CG	Dr. Jata Shankar	

- **Conferences Organised: Nil**
- **Seminars**
- **Seminars Organized**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
22/02/2019	Seminar on Patent Filing in Engineering	JUIT	JUIT Faculty and Scholars	(Through IPR Cell, JUIT)
29/10/2018	Innovation and Entrepreneurship in the field of Renewable Energy	JUIT	JUIT Faculty and Students	Jointly by BT & BI Dept. and TIEDC Cell

- **Seminars Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
7/03/2019	Role of Computational Methods and Data for Drug Candidate Selection	JUIT	All Faculty	
<u>16/03/2019</u>	Design and Development of Nanostructured Heterogeneous Catalysts for Energy and Environmental Applications".	JUIT	All Faculty	
	Seminar on Patent Filing in Engineering	JUIT	JUIT Faculty and Scholars	(Through IPR Cell, JUIT)
18/09/2018	Computational Mining of Genomic and Proteomic Data to gain insight for Alzheimer's Disease	JUIT	All Faculty	
29/9/2018	Faculty interactions Mathematical Modelling, Computational Biology, Data Mining.	JUIT	All Faculty	
29/10/2018	"Innovation, Renewable Energy & Entrepreneurship"	JUIT	All Faculty	Jointly by BT & BI Dept. and TIEDC Cell
27/11/2018	Innovation and Entrepreneurship support options	JUIT	All Faculty	
14/12/2018	Radiations in Medicine and Research	JUIT	All Faculty	
5/10/2018	Conclave of Chief Ministers and Parliamentarians of Himalayan	(HIMCOSTE) at Peterhoff Shimla	Dr. Anil Kant and Dr. Hemant Sood	

- **Workshops**

- **Workshops Organised**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
29-31May	National Workshop on Bioinformatics and	BT & BI Deptt. Collaboration	UG & PG student,	

2019	Biomedical Image Analysis NBBIA-2019	with Electronics Deptt. JUIT, Waknaghat	faculty	
May 31 st 2019	Awarner about different streams of BT & BI and their future applications	Deptt. of BT & BI JUIT, Waknaghat	Medical/Non medical students of Loreto Convent School (Tara Hall)	
7 Mar, 2019	Insight about the future aspects of Biotechnology for post-graduate studies and for research explorations	BT & BI Deptt JUIT, Waknaghat	UG Students of Govt. Degree College, Solan HP	
7 Dec, 2018	Microbiology Workshop	N.D.P.S.S School Galore at Budhwin, Hamirpur H.P.	School students of science stream	
25-26 Dec, 2018	Awarner and Exposure Visit of Farmers for Their Socioeconomic Improvement	BT & BI Deptt JUIT. & DST(SYST-project)	Farmers of Kullu district	
14-16 Sep, 2018	Three day workshop Techstar Startup weekend powered by Google for Entrepreneurs	TIEDC of JUIT and HPCED Shimla at JUIT, Waknaghat	UG & PG students, From Different Institutes	
11th, Sep, 2018	Awarner about molecular techniques, biogas plant and advance equipments like HPLC,GS and Gene gun.	Deptt. of BT & BI JUIT, Waknaghat	Govt. College Sanjauli Student's Educational Tour by B.Sc. final year students	
4-9 June, 2018	Workshop on Statistical Techniques in Biological and Medical Sciences STBMS-18	. Collaboration with Math Deptt., JUIT, Waknaghat	UG & PG student, faculty	

- **Workshops Attended**

Dates	Subject	Venue	Faculty Name	Remarks
28/02/2019	One day workshop on National Science day BI, BT and Physics	St Bede's Shimla	Dr. Sudhir Kumar, Dr. Tiratha Raj ,Dr. Hemant, Dr. rahul, Dr. Sanjeev kumar,Dr. Pankaj, Dr. Jata Shankar	
15/12/2018	One Day Workshop on Biotechnological Techniques	Centre of Excellence, Govt. College, Sanjauli, Shimla	Dr.Sudhir Syal, Dr. Raghu, Dr. Rahul, Dr. Anil kant,Dr. Ragani	
25-26/10/2018	Workshop on "Application of Bioinformatics Research in Teaching and Research	Himachal Pradesh University, Summer Hill, Himachal Pradesh	Dr. Raghu Yennamalli,	
23/7/2018	Workshop on Biogas Plant fabrication, maintenance and use organized by he Swachh Bharat Mission (Gramin),	Ranchi, Jharkhand	Dr. Sudhir Kumar	

- **Faculty Development Programs Organised: Nil**

- **Publications**

- **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Dr. Sudhir Kumar & Dr. Ashok Nadda	Synthesis and characterization of cross-linked enzyme aggregates (CLEAs) of thermostable xylanase from Geobacillus thermodenitrificans X1	Process Biochemistry	72-79	3

Dr. Kumar	Sudhir	Valorization of Lignocellulosic Residues for Cost-Effective Production of Thermo-Alkali-Stable Xylanase by <i>Geobacillus thermodenitrificans</i> X1 of Indian Himalayan Hot Spring	Waste and Biomass Valorization	1-11	1
Dr. Sood	Hemant	Enhanced production of phenolic compounds in compact callus aggregate suspension cultures of <i>Rhodiola imbricata</i> Edgew	Applied biochemistry and biotechnology	817-837	0
		Anti-fertility activity and contraceptive potential of the hydroalcoholic rhizome extract of <i>Trillium govanianum</i> in female wistar rats. clinical research	Asian Journal of Pharmaceutical and clinical research	329-332	1
		Influence of light quality on growth, secondary metabolites production and antioxidant activity in callus cultures of <i>Rhodiola imbricata</i> Edgew	Journal of Photochemistry and Photobiology	258-265	2
Dr. Shankar	Jata	Proteome analysis revealed Jak/Stat signaling and cytoskeleton rearrangement proteins in human lung epithelial cells during interaction with <i>Aspergillus terreus</i> .	Current Signal Transduction Therapy	55-67	0
		Docking analysis of hexanoic acid and quercetin with seven domains of polyketide synthase	3 Biotech	149	0

	A provided insight into quercetin-mediated aflatoxin biosynthesis inhibition in			
	RNA-Seq Profile Reveals Th-1 and Th-17-Type of Immune Responses in Mice Infected Systemically with <i>Aspergillus fumigatus</i>	Mycopathologia	645–658	3
	Resistance mechanism and proteins in <i>Aspergillus</i> species against antifungal agents	Mycology	-	1
Dr. Anil Kant	Gender differences in phenotypic plasticity and adaptive response of Seabuckthorn (<i>Hippophae rhamnoides</i> L.) along an altitudinal gradient in trans-Himalaya.	Journal of Berry Research	-	
Dr. Tiratha Raj Singh	Network-based Approach to Understand Dynamic Behaviour of Wnt Signaling Pathway Regulatory Elements in Colorectal Cancer	<i>Network Modeling Analysis in Health Informatics and Bioinformatics</i>	14	1
	Development of QSPR Strategy for the Solubility Prediction	<i>Current Computer Aided Drug Design</i>	302-309	0
	Network and structure based inference of functional single nucleotide polymorphisms associated with the TGF β 1 gene and its role in colorectal	<i>Gene Reports</i>	131-142	1

	cancer (CRC)			
	In silico Screening and Molecular Interaction Studies of Tetrahydrocannabinol and its Derivatives with Acetylcholine Binding Protein	Current Chemical Biology	181-190	2
	Computational and In-Vitro Validation of Natural Molecules as Potential Acetylcholinesterase Inhibitors and Neuroprotective Agents.	Current Alzheimer Research	116 -127	3
	Virtual screening, pharmacokinetics, molecular dynamics and binding free energy analysis for small natural molecules against cyclin-dependent kinase 5 for Alzheimer's	Journal of Biomolecular Structure and Dynamics	1 - 15	2
Dr. Raghu M. Yennamalli	Structural dynamics of lytic polysaccharide monooxygenases reveals a highly flexible substrate binding region	Journal of Molecular Graphics and Modelling	1- 10	0
	Structure and function prediction of arsenate reductase from <i>Deinococcus indicus</i> DR1.	Journal of Molecular Modeling	1 - 9	0
	Ribosomal maturation factor (RimP) is essential for survival of nontuberculous mycobacteria <i>Mycobacterium fortuitum</i> under in vitro acidic stress conditions.	3 Biotech	127- 137	0

Dr. Udayabanu M	Antidepressant and anxiolytic like effects of Urticadioica leaves in streptozotocin induced diabetic mice	Metabolic Brain Disease	1281-1292	4
	Computational and In-Vitro Validation of Natural Molecules as Potential Acetylcholinesterase Inhibitors and Neuroprotective Agents	Curr Alzheimer Res	116-127	3
	Proficient surface modification of CdSe quantum dots for highly luminescent and biocompatible probes for bioimaging: A comparative experimental investigation	Journal of Luminescence	174-182	4
Dr. Vijay Kumar Garlapati	The path forward for lignocellulose biorefineries: Bottlenecks, solutions, and perspective on commercialization	Bioresource Technology	370-381	41
	Intervention of Microfluidics in Biofuel and Bioenergy Sectors: Technological Considerations and Future Prospects	Renewable and sustainable Energy Reviews	548-558	1
Dr. Gopal Singh Bisht	In Vitro Efficacy of Lipid Conjugated Peptidomimetics Against Mycobacterium smegmatis.	International Journal of Peptide Research and Therapeutics	(Online), 1-7	0
	Pharmacological Evaluation of Bacopa monnieri Extract	Pharmacognosy Journal	s48-s53	0

	against Depressive like Behavior Induced by Ethanol Withdrawal in Rats.			
	Protective effect of <i>Ocimum sanctum</i> Linn. leaf extract on ethanol withdrawal syndrome in wistar rats.	Asian Pacific Journal of Tropical Medicine	467-472	1
	Acute and Sub-acute Oral Toxicity Assessment of a Standardized Polyherbal Preparation POL-6 in Rats	The Natural Products Journal	207 - 216	0
Dr. Ashok Nadda	Unique structured SiO ₂ microparticles with carbon nanotube-derived mesopores as an efficient support for enzyme immobilization	Chemical Engineering Journal	1252-1264	
	Characterization and improved properties of Glutamine synthetase from <i>Providencia vermicola</i> by site-directed mutagenesis	Scientific Reports	-	0
	High throughput synthesis of ethyl pyruvate by employing superparamagnetic iron nanoparticles-bound esterase	Process Biochemistry	109-117	1
	Improved catalytic properties of a Serine hydroxymethyl transferase from <i>Idiomarina loihiensis</i> by site directed mutagenesis	International Journal of Biological Macromolecules	-	3
Dr. Rahul Shrivastva	Ribosomal maturation factor (RimP) is essential for survival of	3 Biotech	127-137	0

	nontuberculous mycobacteria Mycobacterium fortuitum under in vitro acidic stress conditions			
	In Vitro Efficacy of Lipid Conjugated Peptidomimetics Against Mycobacterium smegmatis	International Journal of Peptide Research and Therapeutics	-	0

Patents

S. No.	Patent No. and Date of Grant	Application no.	Title	Department and Inventors
1	304824 and 21 st December, 2018	139/DEL/2011	Process of production of cellulase and pectinase from herbal industry residue	1. BIOTECHNOLOGY & BIOINFORMATICS 2. Ayurvet Limited Sudhir Kumar, Mamta Kumari, RS Chauhan, K Ravikanth
2	302295 and 22 nd October, 2018	2867/DEL/2011, 4 th October, 2011	An improved process of conversion of Lantadene A and B to reduced Lantadene A and B"	BIOTECHNOLOGY & BIOINFORMATICS & Pharmacy Manu Sharma and SSKumar

Books/Book Chapters Published

Name of Faculty	Title of Book Chapter	Name of Book	Reference No.	Remark
Dr. Sudhir Kumar	Conversion of Lignocellulosic feedstocks into biogas.	Extremophilic Microbial Processing of Lignocellulosic Feedstocks to Biofuels, Value-Added Products, and Usable Power	978-3-319-74457-5	
Dr. Ashok Kumar	Keratin as Protein Biopolymer: Extraction from Waste Biomass	Springer	978-3-030-02901	

	and Applications			
	OMICS-Based Approaches in Plant Biotechnology(1 st). Austin. USA	Wiley-Scrivener	9781119509936	
	Stabilization of Black Cotton Soil Using Waste Glass. In Chaudhery Mustansar Hussain	Handbook of Environmental Materials Management , Springer	9783319585383	
	Enzyme Triggered Hydrogels for Pharmaceutical and Food Applications. In Shashi Lata Bharati and Pankaj Kumar Chaurasia	<i>Research Advancements in Pharmaceutical, Nutritional and Industrial Enzymology.</i>	9781522552376	
Dr. Vijay Kumar Garlapati	OMICS-based Approaches for Plant Biotechnology	Wiley-Scrivener Publishing House, Austin. USA	9781119509936	
	Technological barriers in bio-butanol production of. In: Lalit Kamel Singh and Gaurav Chaudhary	Advances in Biofeedstocks and Biofuels	9781119459873	
	Sustainability assessment of Microbial fuel cells. In: Lakhveer Singh and Durga Madhab Mahapatra (Eds)	Waste to Sustainable Energy	9781138328211	
	LCA of First-, Second-generation, and MicroalgaeBiofuels. In: Majid Hosseini (Ed.),	Advances in Feedstock Conversion Technologies for Alternative Fuels and Bioproducts.	B978-0-12-817937-6.00019-9	
Dr. Poonam Sharma	Basic Analytical Chemistr	Delhi: Vinesh Publishers	978-3-659-93498-8	
	Phylogenetic Analysis: Gene Duplication and Speciation. In Shoba	Module in Life Sciences	9780128114148	

	Ranganathan, Kenta Nakai, Christian Schonbach			
	Metabolome Analysis: Disease Biomarker Discovery. In Shoba Ranganathan, Kenta Nakai, Christian Schonbach	Module in Life Sciences	9780128114148	
	Tau Pathology: A Step Towards Understanding Neurodegenerative Disorders Network Complexity	Handbook of Research on Critical Examinations of Neurodegenerative Disorders	978-1-5225-5282-6	
Dr. Tiratha Raj Singh	Ankush Bansal (2018). Epigenome-Wide DNA Methylation and Histone Modification of Alzheimer's Disease, Computational Epigenetics and Diseases, Volume 9 in Translational Epigenetics,	Elsevier	978-0-12-814513-5	
Dr. Gunjan Goel	A review on Implications of Interaction between Human Pathogenic Bacteria and Host on Food Quality and Disease. In Alexandru Grumezescu, Alina Maria Holban, Food Safety and Preservation..	Cambridge, Massachusetts, United States: Academic Press	9780128149560	

Dr. Jitendraa Vashistta	Techniques used in Molecular biophysics . In , Introduction to mass spectrometry	INFLIBNET Centre, Gandhinagar, Gujarat, India.	-	
	Techniques used in Molecular biophysics. In , Gel based proteomic analysis using mass spectrometer	INFLIBNET Centre, Gandhinagar, Gujarat, India.:	-	
	Membrane Biophysics . In , Components and Architecture of Cell Membrane	INFLIBNET Centre, Gandhinagar, Gujarat, India.	-	
Dr. Jata Shankar	Evolution, Function and Vaccine Candidate. In Dr. Alexzander A. A. Asea & Dr. Punit Kaur, HSP70 in Human Diseases and Disorders	Springer International Publishing AG, part of Springer Nature: Springer, Cham	978-3-319-89550-5	
Dr. Rahul Shrivastava	Pavan Kumar Agrawal, Rahul Shrivastava, Jyoti Verma (2019). Bioremediation Approaches for Degradation and Detoxification of Polycyclic Aromatic Hydrocarbons. In Ram Naresh Bharagava, Pankaj Chowdhary, Emerging and Eco-Friendly Approaches for Waste Management	Singapore: Springer	978-981-10-8669-4	

- Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Dr. Udaybanu M.	Diabetes mediated neurological complications: Therapeutic Potential of phytochemicals	Conference: Cutting edge Research and Innovation in iotechnology	Chandigarh College of Technology, Landran	04Apr, 2019
Dr. Udaybanu M	Microfluidics in bioelectrochemical system: Technological considerations and future prospects	Poster Presentation at <i>Research Conclave 2019</i>	IIT Guwahati	2019, March
Dr. Hemant Sood	Selection of elite chemotypes of <i>Rhodiola 86ycelia86e</i> by rapid and validated reverse phase high performance liquid chromatographic method.	International conference on new age opportunities and challenges for quality, safety and GMPs in herbal drug development	23 rd national convention of society of pharmacogony, CSIR-NBRI, Lucknow, India	22-23 Feb, 2019
	Hardening of Tissue Cultured Plants via Hydroponics System : An Alternative and Rapid Methodology	International Conference on New Horizons in Green Chemistry & Technology organized at Uttaranchal college of Applied and Life Sciences, Uttaranchal University, Dehradun	pp 19	27-28 Nov, 2018
	Effect of growth hormones on in vitro propagation and secondary metabolite production in <i>Stevia rebudiana</i>	International Conference on New Horizons in Green Chemistry & Technology organized at Uttaranchal college of Applied and	pp22	27-28 Nov, 2018

		Life Sciences, Uttaranchal University, Dehradun		
	Effect of electricity on the morphological aspects and metabolite production in <i>Rhodiola imbricata</i>	BIOCAMP 2018 National Symposium on Current Trends and future prospects in Biotechnology organized by Department of Biotechnology, Panjab University, Cha ndigarh.		1 – 2 nd Nov, .20 18
	Direct organogenesis for rapid in vitro propagation of <i>Stevia rebudiana</i>	3 rd Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi	Proceeding of Himachal Pradesh Science Congress	22-23 rd Oct, 2018
Dr. Sudhir Kumar	Bioremediation and management of e- waste.	3 rd Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi	Proceeding of Himachal Pradesh Science Congress	22-23 rd Oct, 2018
	Effective metal- catalyzed oxidative delignification of wheat straw. In	3 rd Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi	Proceeding of Himachal Pradesh Science Congress	22-23 rd Oct, 2018
	Biogas generation from co-digestion of lignocellulosic and kitchen waste.	3 rd Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi	Proceeding of Himachal Pradesh Science Congress	22-23 rd Oct, 2018

Dr. Anil Kant	Evaluation of onion genotypes for quality of bulb during post harvest storage in agro-climatic conditions of Ladakh.	3 rd Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi	Proceeding of Himachal Pradesh Science Congress	22-23 rd Oct, 2018
	Sexula differences and seasonal variations in total phenolics and antioxidant capacities in Hippophae rhamnoides leaves.	3 rd Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi	Proceeding of Himachal Pradesh Science Congress	22-23 rd Oct, 2018
Dr. Rahul Shrivastava	Acid Stress Based Mycobacterium fortuitum Model: a window to Mycobacterium tuberculosis latency	3 rd Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi	Proceeding of Himachal Pradesh Science Congress	22-23 rd Oct, 2018
	Standardization of Biofilm Formation of an Opportunistic Pathogen Mycobacterium fortuitum for Rapid Drug Screening	3 rd Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi	Proceeding of Himachal Pradesh Science Congress	22-23 rd Oct, 2018
Dr. Gopal Bisht	Design, synthesis, characterization and evaluation of antimycobacterial activity of peptidomimetics	3 rd Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi	Proceeding of Himachal Pradesh Science Congress	22-23 rd Oct, 2018
	Antimicrobial peptides as novel drug candidates for treatment of microbial infections	3 rd Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi	Proceeding of Himachal Pradesh Science Congress	22-23 rd Oct, 2018

Dr. Harish Changotra	E2F1 genetic variant predisposes individuals to the head and neck cancer risk in Himachal Pradesh population	3 rd Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi	Proceeding of Himachal Pradesh Science Congress	22-23 rd Oct, 2018
Dr. Jata Shankar	Proteome analysis of 89ycelia extracts from opportunistic pathogen Aspergillus terreus revealed underlying molecular pathways involved in pathogen development and establishment.	New Delhi, India	MYCOCON – 2018	22-23 Sep, 2018
	Scanning Electron Microscope and Proteomic Analysis of Aspergillus terreus; Revealed Biofilm Associated Protein in Mycelial Morphotypes.	3 rd Himachal Science Congress National” organized by HIMCOSTE and IIT Mandi at IIT Mandi	Proceeding of Himachal Pradesh Science Congress	22-23 rd Oct, 2018
Dr. Saurabh Bansal	One Variable at a Time Approach to enhance Lactobacillus L-arginase production	3 rd Himachal Pradesh Science Congress on rural upliftment through Science and Technology Interventions	IIT Mandi	22-23 Oct, 2018
	Abiotic conductive materials enhance the electrochemical potential during anaerobic digestion of pine needle	3 rd Himachal Pradesh Science Congress on rural upliftment through Science and Technology Interventions	IIT Mandi	22-23 Oct, 2018
	Effect of pre-treatment on ultra-structure of pine	2 nd International Bioresource	Sitges, Spain	16-19 Sept, 2018

	needle forest litter: exploring potential of forest biomass for renewable bioenergy generation	Technology for Bioenergy, Bioproducts & Environmental Sustainability		
Dr. Jayashree Ramana	Human Skin Microbiome Database	3 rd Himachal Pradesh Science Congress on rural upliftment through Science and Technology Interventions	IIT Mandi	22-23 Oct, 2018
Dr. Udaybanu M	Characterization of Medical Waste towards Microalgal-based Bioremediation	Oral presentation at 3 rd Himachal Pradesh Science Congress, ,	IIT Mandi, HP- 175005, India	October 22-23, 2018

- **Guest Speakers/Lectures/ Visits**

- **Guest Speakers**

Name of Guest Speaker	Designation of speaker	Topic of Lecture	Date
Dr. Atanu Banerjee	Department of Chemistry, Oakland University, Rochester, Michigan, USA	Mimicking the biologically relevant model compounds for the active site of different metalloenzymes	13/02/2019
Mr. Mayank Sood	LL.B patent agent of Computers and Electronics in the K & S Partners.	Intellectual property Rights	22/02/2019
Dr. Girinath,	Director, Zastra Innovations, Bengaluru	Role of Computational Methods and Data for Drug Candidate Selection	7/03/2019
Dr. Venkata Krishnan	Assistant Professor ,IIT Mandi, Himachal Pradesh	Design and Development of Nanostructured Heterogeneous Catalysts for Energy and Environmental Applications".	<u>16/03/2019</u>
Professor A. S. Ahluwalia	(P.N. Mehra Chair Professor) of	Potential of Microscopic Photo-autotrophic	11/09/2018

	Department of Botany, Panjab University, Chandigarh	Organisms with Special Reference to Biofuel	
Dr. K.R. Pardasani	Professor of Mathematics Former head of Mathematics, Bioinformatics and Computer Applications Maulana Azad National Institute of Technology, Bhopal	Computational Mining of Genomic and Proteomic Data to gain insight for Alzheimer's Disease	18/09/2018
Er. Simarpreet Singh Mr. Anil Sankhla Mr. Sanjeev Kumar Gautam Mr. Vineet Sood	Director Strategy - Hartek Group Deputy Resident Director PHDCCI (Punjab Haryana Delhi Chamber of Commerce and Industries) Additional Superintendent Engineer HIMURJA Senior Project Officer HIMURJA	"Innovation, Renewable Energy & Entrepreneurship"	29/10/2018
Dr. Ashutosh Pastor	Manager, Biotechnology Business Incubation Facility, IIT Delhi	Innovation and Entrepreneurship support options	27/11/2018
Professor D. K. Dhawan	Department of Biophysics, Panjab University, Chandigarh "	Radiations in Medicine and Research	14/12/2018
Mr. Sahil Sethi	RM	Inform them about about career options and future prospects in India and Overseas	17/9/2018
Dr. Kamal Raj Pardasani	Professor of Mathematics and former head of Mathematics	Interaction with faculty and Ph.Ds	29/9/2018
Mr. Kunal	Skypee Interaction with one of our alumni Kunal. He is working in a wine	Harvesting season	25/12/2018

- Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Dr. Raghu M. Yennamalli	Assistant Professor	Invited for delivering a talk and conducting workshop on Bioinformatics 4 th at School of Biological Sciences, Symbiosis	February 2019	University in Pune.
Dr. Ashok Nadda	Assistant Professor	Advanced Biomaterials and Biosensors	13th - 15th November, 2018	Royal society of Chemistry and British council co-sponsored UK-India Interdisciplinary Workshop on Advanced Biomaterials and Biosensors IIT Ropar Punjab India,
Dr. Jata Shankar	Associate Prof.	Deciphering host-response in <i>Aspergillus</i> mediated infection. International conference on Emerging Researches in Bioscience'	28-30/10/2018	Guru Ghasidas Viswavidyalaya-Central University Bilaspur CG
Dr. Rahul Shrivastava	Associate Professor	'Requisite of Antibody Engineering to Mankind' and 'Antibody Engineering – Applications and Job Potential'	18/9/2018	G.B. Pant Engineering College, Pauri (U.K.)
Dr. Hemant Sood	Associate Professor	Future avenues and prospects of Biotechnology and Bioinformatics	8/8/2018	BL Central Public Senior Secondary School, Shamti, Solan
	Associate Professor	Production of medicinal compounds for Commercial and	13/9/2018	HFRI, Panthaghati, Shimla

		Endangered Medicinal Plants through Cell and Tissue Culture Technology for Herbal Industry on		
Dr. Saurabh Bansal	Assistant Professor	future avenues and prospects of Biotechnology and Bioinformatics	8/8/2018	BL Central Public Senior Secondary School, Shamti, Solan
Dr. Jata Shankar	Associate Prof.	Deciphering host-response in Aspergillus mediated infection. International conference on Emerging Researches in Bioscience'	28-30/10/2018	Guru Ghasidas Viswavidyalaya-Central University Bilaspur CG
Dr. Sudhir Kumar	Professor	Biogas Plant fabrication, maintenance and use organized by the Swachh Bharat Mission (Gramin),	30/07/2018	Drinking Water and Sanitation Department, Ranchi, Jharkhand.

- Visits Organized**

Institution visited	Dates	Aim of visit	Participation
Directorate of Mashroom ,solan	28 th Sep, 2018	Educational Tour	BT&BI 1 st Yr
Amity University, Noida	September 28 th 2018	Why is "Bio technology" the future segment of growth in India	BT 4 th Yr
CRI Kasauli , H.P	20 th Nov, 2018	The purpose of the visit was to make students aware about how various activities related to Microbiology, vaccine, antisera and diagnostic reagent production are carried out in Govt. research institution	BT&BI 2 nd Yr

- Recognition & Awards**

- **By Faculty**

Name of Faculty	Designation of Faculty	Award	Date	Achievement
Dr. Raghu M. Yennamalli	Assistant Professor	Cutting Edge Research Fellowship, University of Wisconsin-Madison, United States	July-Sep, 2018	Bioenergy-Awards
	Assistant Professor	Nature Communications Biology	Oct, 2018	Early-Career spotlight Researcher
Dr. Raghu M. Yennamalli	Assistant Professor	Panelist at Sci-Rol Chicago	7-9 Sep, 2018	Young Investigator's

- **Students**

Name of Student	Semester	Award	Date	Achievement
Dr. Rishi Mahajan	National Post Doc Fellow	Financial support from SERB to Dr. Rishi Mahajan for participating in "International Conference on Bioresource Technology for Bioenergy, Bioproducts & Environmental, Spain	16\09\2018 to 19\9\2019	Best Poster Award
Mr. Arun Sharma	Ph.D.	International Conference of Pharmacology & Drug Discovery on "Pharmacology for Future: Towards Translational Approach for Next Generation Pharmacologists, Maharaja Agrasen University, Barotiwala, Solan (H.P.)	4-6 Oct, 2018	Second position in Oral presentation
Mr. Deepak Sharma	Ph.D.	Science Congress at IIT Mandi , H.P.	_22-23 Oct, 2018	Best Poster Award
Mr. Lalit Sharma	Ph.D.	conference in Hongkong	June, 2019	DST Travel grant
Mr. Vikrant Abbot	Ph.D.	International Conference, 4 th green & sustainable chemistry in Germany	5-8, May 2019	DST Travel grant

- **Composition of Various Bodies**

- Board of Studies (BOS)**

Sr. No.	Name	Designation	Institution
1	Dr.Sudhir Kumar	Professor and Head , Dept. of BT & BI	JUIT
2	Dr. Anil Kant	Associate Professor, Dept. of BT & BI	JUIT
3	Dr. TC Bhalla	Professor, Dept. of BT	HPU, Shimla
4	Mr. Girish Minocha	Managing Director	Minchys Industries, Shoghi& Kandaghat
5	Dr. Tiratha Raj Singh	Associate Professor, Dept. of BT & BI	JUIT
6	Dr. Harish Changotra	Associate Professor, Dept. of BT & BI	JUIT
7	Dr. Jayashree Ramana	Assistant Professor (Senior Grade), Dept. of BT & BI	JUIT
8	Dr. Saurabh Bansal	Assistant Professor (Grade III) Dept. of BT & BI	JUIT
9	Prof. (Dr.) Satya Prakash Ghrera	Professor, Brig (Retd.) and Head, Dept. of CSE and IT	JUIT
10	Prof. (Dr.) M. J. Nigam	Professor and Head, Dept. of ECE	JUIT
11	Prof. (Dr.) P.B. Barman	Professor and Head, Dept. of PMS	JUIT
12	Prof. (Dr.) Karanjeet Singh	Professor and Head, Dept. of Maths	JUIT
13	Prof. (Dr.) Ashok Kumar Gupta	Professor and Head, Dept. of CE	JUIT
14	Dr. Anupriya Kaur	Associate Professor and Head, Dept. of HSS	JUIT

- Student Consultative Committee**

Sr. No.	Name	Designation	Institution
1	Prof. (Dr.) Sudhir Kumar	Professor and Head , Dept. of BT & BI	JUIT
2	Dr. Hemant Sood	Member, Associate Professor, Dept. of BT & BI	JUIT
3	Dr. Tiratha Raj Singh	Member, Associate Professor, Dept. of BT & BI	JUIT
4	Dr. Rahul Shrivastava	Member, Associate Professor, Dept. of BT & BI	JUIT
5	Dr. Saurabh Bansal	Coordinator , Assistant Professor (Grade II) Dept.	JUIT

		of BT & BI	
6	Mrs. Sonia Kumari	PhD Scholar, Dept. of BT & BI	JUIT
7	Ms. Ayushi Sharma	PhD Scholar, Dept. of BT & BI	JUIT
8	Ms. Nadia	PhD Scholar, Dept. of BT & BI	JUIT
9	Ms. Kritika	Int. M.Tech	JUIT
10	Mr. Himalaya Atri	4 th Yr. BT	JUIT
11	Mr. Pulkit Anupam	4 th Yr. BI	JUIT
12	Ms. Aditi Sharma	3 rd Yr. BT	JUIT
13	Ms. Medhavi Pokhriyal	3 rd Yr. BI	JUIT
14	Ms. Nainika	2 nd Yr. BT	JUIT
15	Ms. Chhavi Thakur	2 nd Yr. BI	JUIT
16	Ms. Janki	1 st Yr. BT	JUIT
17	Ms. Bhoomi	1 st Yr. BI	JUIT

DEPARTMENT OF CIVIL ENGINEERING

- **Department Vision and Mission**

- **Vision**

To strive for excellence, knowledge creation and research contribution to the field of Civil Engineering, and to serve the society and the nation with missionary zeal, thus to be recognized internationally as one of the best centres of research and education in all the areas of Civil Engineering.

- **Mission**

To provide a vibrant educational environment to the students in the competitive field of Civil Engineering keeping in view the emerging infrastructural needs of the country as well as the emphasis on IT-enabled Civil Engineering profession.

To keep pace with the advances in Civil Engineering techniques and technologies to provide training and skills for creative, innovative and ethical attitude without losing academic focus.

To provide state-of-the-art skills and knowledge in multi-disciplinary and multi-domain operations to the undergraduate and graduate students; so they may emerge as leaders in the world of Civil Engineering and highly sought after professionals to serve the nation and the society .

- **Faculty Details**

	<u>Name</u>	<u>Qualification</u>	<u>Specialisation</u>
1.	Prof. Ashok Kumar Gupta	Ph.D.	Geotechnical Engineering
2.	Prof. Ashish Kumar	Ph.D.	Hydraulic Engineering
3.	Dr. Rajiv Ganguly	Ph.D.	Environmental Engineering
4.	Dr. Amardeep	Ph.D.	Transportation Engineering
5.	Dr. Pankaj Kumar	Ph.D.	Structural Engineering
6.	Dr. Rishi Rana	Ph.D.	Environmental Engineering
7.	Dr. Saurav	Ph.D.	Structural

8.	Dr. Saurabh Rawat	Ph.D.	Engineering Geotechnical Engineering
9.	Mr. Aakash Gupta	M.Tech.	Transportation Engineering
10.	Mr. Abhilash Shukla	M.E.	Structural Engineering
11.	Mr. Anirban Dhulia	M.Tech	Environmental Engineering
12.	Mr. Chandra Pal Gautam	M.Tech	Structural Engineering
13.	Mr. Kaushal Kumar	M.Tech.	Structural Engineering
14.	Mr. Niraj Singh Parihar	M.Tech.	Geotechnical Engineering
15.	Mr. Tanmay Gupta	M.E.	Structural Engineering

- **Programs**

- **Undergraduate Programs**

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.

New Courses Introduced During the Year

S	Title of New Course	Course Code
1	Highway Construction Maintenance and Management	10B13CE842
2	Planning Design and Construction of Rural Roads	18M1WCE231

- **Post Graduate Programs**

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 and elective subjects, and capstone projects and thesis work.

M.Tech (Environmental Engineering)

The 2-year M.Tech program in Environmental Engineering aims to develop competent professionals including consultants, scientists, and 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.

- **Ph.D. Program**

The Department carries out research and development activities in the areas Rock fill material modelling, Constitutive modelling, 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 Alcolfine, 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.

- **Lab Facilities**

- New Equipments

SI No	Name of Apparatus	Supplier Name	Quantity	Lab
1	Laboratory Stirrer	Meters Cornar	2	Environmental Engineering Lab
2	Hydraulic Jack	Ideal Integrated Technology	1	Environmental Engineering Lab
3	LVDT-25mm	Ideal Integrated Technology	1	Environmental Engineering Lab

4	Thermocouple	Ideal Integrated Technology	1	Environmental Engineering Lab
5	Gas Sensor	Ideal Integrated Technology	1	Environmental Engineering Lab
6	Biodegradation of waste settlement parameter analyzer	Ideal Integrated Technology	1	Environmental Engineering Lab
7	SS Liquid water depth sampler 2000ml	J N Science tech Hyderabad	1	Environmental Engineering Lab
8	Dell Optiplex 3060 PC with Intel Core i7, 3.20 GHz, 8 GB Ram, 1 TB HDD, Win 10 Pro.	Dell	9	CAD Lab
9	Simula Academic Teaching Suite	EDS Technologies Bangalore	20 Users	CAD Lab

- **Lab Staff**

Name	Designation	Qualification
Mr. Jaswinder Singh	Lab. Technician	Diploma, Civil Engineering
Mr. Amar Kumar	Lab. Technician	Diploma, Civil Engineering
Mr. Rajesh Sahu	Lab. Technician	Diploma in CSE
Mr. Itesh Kumar Singh	Lab. Assistant	B.Tech, Civil Engineering
Mr. Pradeep Kumar	Jr. Lab. Assistant	B.Sc.

- Labs

1	Chemistry Laboratory
2	CAD/software lab
3	Engineering Graphics lab
4	Workshop Practices Lab
5	Fluid Mechanics Lab
6	Concrete Technology Lab
7	Highway Engineering Lab
8	Environmental Engineering Lab (shared with Chemistry Laboratory)
9	Geotechnical Engineering Lab
10	Structural Mechanics Lab
11	Survey Lab (storage only)
12	Research laboratories - Fluvial Hydraulics Lab
13	Computational Research Lab

- **List of Major Equipments**

1. Triaxial Shear Test Apparatus
2. Los angles Abrasion testing machine
3. Ductility testing machine
4. Laboratory C.B.R. apparatus
5. Aggregate crushing value apparatus 30 cm
6. Concrete flow table
7. Direct Shear Test Apparatus
8. Benkelman Beam, Digital
9. Tintometer
10. Microprocessor based UV-VIS spectrophotometer
11. Marshall Test Apparatus (Digital)
12. Automatic Compactor for Marshall mould of 100mm dia
13. Digital Humidity Chamber/Cabinet
14. Electronic Total Station SET 610
15. Accelerated Curing Tank
16. Universal Testing Machine
17. Respirable Dust Sampler
18. Total Station
19. Spectrophotometer
20. Multiparameter Testing Apparatus (pH/BOD)
21. Unconfined Compression test Apparatus
22. Dynamic Cone Penetration Test Apparatus (DCPT)
23. Triaxial Electronic Conversion Kit
24. Hobart Mixer MADE IN U.S.A./GERMANY
25. Flexural Testing Machine capacity – 20 ton (Electrically operated)
26. Compression Testing Machine capacity – 200 ton Digital (Electrically Operated)
27. LATHE MACHINE 4.5 Feet Long .
28. Milling Machine
29. Furnace (Capacity Upto 1200 °C)
30. 10m long 0.75m wide and .06m deep rectangular open channel flume

- List of Software

Name of Software	Version	Number of Licenses
MX Roads	V8i	5
Geo 5	V18	50
STAAD Pro 2008	V8i	5
AutoCAD 2014 Student	2013	20

ETABS	V11	10
ANSYS Acad. Adv.	12.1	5
Microsoft Office	2007	20
Primavera	P6.1	5
Microsoft Project	2003	20
PLAXIS 2D	2010	1
Estimator	2	Unlimited
SAP2000	V9.4.1	10
Bentley Academic select Package (Bundle of 168 Software)	Select 6 series	Unlimited
Simula Academic Teaching Suite	EDS Technologies Bangalore	20 Users



1. Jar Test Apparatus 2. Hot Bath Apparatus 3. Respirable Dust Sampler
4. COD Digester



5. Civil Engineering Software Lab 6. Ductility Apparatus 7. CBR Testing Machine
8. Bitumen Extractor/ Marshall Mould Sampler



9. Compression Testing Machine 10. Flexural Strength Testing Apparatus
11. Soil Pulling Apparatus 12. Humidity Apparatus



13



15



14



16

13. Civil Engineering Software Lab
15. Triaxial Shear Test Apparatus

14. Direct Shear Test Apparatus
16. Unconfined Compression Machine



17



19



18



20

17. Muffle Furnace
18. Water Distillation Setup
19. Kjedahl Nitrogen Apparatus
20. BOD Incubator



21. Bitumen Mixer/ Impact Testing Machine

22. Hobart Mixer

23. Los angles Abrasion testing machine

24. Marshall Testing Apparatus



25. Open Channel Flume

26. Universal Testing Machine

27. Apparatus for conducting orifice experiments (C_d , C_c , C_v)

28. Soil Pulling Machine



29. Biodegradation Settlement Analyzer 30. Consolidation Apparatus
 31. Lathe machine/ Milling Machine
 32. Oven



33. Biogas Incubator 34. Total Station/ Theodolite/ Auto Level/ Dumpy Level
 35. Open Channel Flume
 36. COD Digester/ pH Meter/ Conductivity Meter/ Turbidity Meter

Research Projects Sanctioned during the Academic Year/In Progress

S No	Name of Faculty	Project title	Funding Agency	Amount sanctioned	Duration	Current Status
1	Prof. Ashish Kumar	Biogas production for sustainable energy generation in rural HP using one stage portable digester	State Council for Science, Technology & Environment, H.P.	INR 7.87 lakhs	2 years (w.e.f) 18.10.2016)	Completed

- **Conferences, Seminars and Workshops/Faculty development program**

- **Conferences**

- **Conferences Organized - Nil**

- **Conferences Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
December 14-15, 2018	3 rd R. N. Raikar Memorial international Conference and Gettu-Kodur Symposium on Advances in Science and Technology of Concrete	The St. Regis, Mumbai	Mr. Abhilash Shukla	International Conference organized by Indian Chapter of American Concrete Institute
November 29-30, 2018	Next Frontiers in Civil Engineering (NFICE 2018)	IIT Bombay	Mr. Abhilash Shukla	
March 1-2, 2019	Indian Conference on Geotechnical and Geo-Environmental Engineering (ICGGE-2019)	MNNIT Allahabad	Mr. Anirban Dhulia	

August 23-24, 2018	International Conference on Trends and Recent Advances in Civil Engineering	Amity, Noida	Mr. Aakash Gupta	
--------------------	---	--------------	------------------	--

Seminars

• Seminars Organized

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
March 20, 2019	Importance of GATE (Why GATE?)	JUIT Waknagh at	Students of Civil Engineering Department	Mr. Priyanshu from The GATE Academy discussed about the current job opportunities, importance of appearing GATE exam and also about the vision and mission of The Gate Academy. Faculty Coordinator: Mr. Aakash Gupta Student Coordinator: Civil Engineering Consortium (CEC)
April 20, 2019	Entrepreneurship session	JUIT Waknagh at	Students of Civil Engineering Department	Guest Speaker: Mr. Sunny Kumar (Managing Director, Innovation & Design Technologies)

• Seminars Attended

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
July 27, 2018	Interactive session with start-ups under CM Start-up scheme	Udyog Bhawan, Bemloi Shimla	Dr. Ashish Kumar	
November 14, 2018	Time management for professional excellence	Engineers bhawan, nigam	Mr. Anirban Dhulia	Organized by HP State Centre of the

		vihar, shimla		Institution of Engineers(India) with CSDEC
November 14, 2018	Time management for professional excellence	Engineers bhawan, nigam vihar, shimla	Mr. Aakash Gupta	Organized by HP State Centre of the Institution of Engineers(India) with CSDEC

Workshops

- **Workshops Organized**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
August 10, 2018	Autodesk Seminar and Workshop	Civil Engineering Department, JUIT	Students and Faculties of Civil Engineering Department	Experts from Autodesk discussed about Company Profile, Various Autodesk Softwares, Importance of Civil Softwares, Civil Market Trends, Their Applications in Real World, and Value of the Certification. Faculty Coordinator: Mr. Chandra Pal Gautam Student Coordinator: CEC Team
October 16-17, 2018	Recent Trends In Civil Engineering Towards Sustainable Environment	JUIT Waknaghat	Students and Faculties of Civil Engineering Department, Haryana PWD, HPPWD	Notable Speakers: Prof. V K Sehgal (Former Prof. NIT Kurukshetra) and Prof. G.D. Ransinchung R.N. (Associate Prof. IIT

				Roorkee) Convener: Dr. Amardeep Coordinator: Mr. Abhilash Shukla
December 17-21, 2018	AutoCAD Software Workshop	Civil Engineering Department, JUIT Waknaghat	21 Junior Engineer and Assistant Engineer from HPPWD, Town Country Planning Department H.P.	5 day AutoCAD training workshop focused on AutoCAD 2d and AutoCAD 3d Faculty Coordinator: Mr. Chandra Pal Gautam Student Coordinator: Mr. Gaurav Mahajan
January 14-19, 2019	Advances in Civil Engineering	Civil Engineering Department, JUIT Waknaghat	Civil Engineering Faculty from JUIT Waknaghat, Chandigarh University	Faculty Development Program Guest Speaker: Prof. S. K. Singh Convener: Dr. Rajiv Ganguly Coordinator: Mr. Aakash Gupta Mr. Anirban Dhulia
September 20, 2018	Placement and aptitude preparation	Civil Engineering Department, JUIT Waknaghat	B.Tech 4 th year students of Civil Engineering Department	Conducted by Mr. Anirban Dhulia and Mr. Aakash Gupta
June 10-15, 2019	Mix Design Methodology for Concrete and Bitumen	Civil Engineering Department, JUIT Waknaghat	Junior Engineer and Assistant Engineer from HPPWD and faculty member from other technical institutions	Convener: Dr. Pankaj Kumar, Dr. Amardeep & Mr. Tanmay Gupta
June 24-	Mix Design	Civil	Junior	Convener: Dr. Pankaj

29, 2019	Methodology for Concrete and Bitumen	Engineering Department, JUIT Waknaghat	Engineer and Assistant Engineer from HPPWD and faculty member from other technical institutions	Kumar, Dr. Amardeep & Mr. Tanmay Gupta
----------	--------------------------------------	--	---	--

- **Workshops Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
October 5, 2018	Conclave of Himalayan States	Shimla	Dr. Ashish Kumar	Organized by State Council for Science, Technology & Environment, HP
October 26, 2018	SME funding : Role of capital Markets in collaboration with securities and Exchange Board of India	Shimla	Dr. Ashish Kumar	Organized by Dept. of Industries, HP
December 23-27, 2018	Advance mechanics of Continua	Malaviya National Institute of Technology Jaipur	Dr. Pankaj Kumar	Training Course on "Advance mechanics of Continua" organized by Professor Karan Surana, Deane E. Ackers University Distinguished Professor of Mechanical Engineering, University of

				Kansas (USA).
--	--	--	--	---------------

- **Faculty Development Program – Nil**

- **Publications**

- Journal Publications

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Prof. Ashok Kumar Gupta	Road Assets Management using Pavement Performance Prediction Models.	Journal of Advanced Research in Dynamical and Control Systems	Road Assets Management using Pavement Performance Prediction Models.' Journal of Advanced Research in Dynamical and Control Systems, 10(12-Special Issue), 300-310	
Prof. Ashok Kumar Gupta	Stabilization of expansive soil using potassium chloride.	Stavební obzor - Civil Engineering Journal	Stabilization of expansive soil using potassium chloride. Stavební obzor - Civil Engineering Journal. 2018, 27(1), 25–33	
Prof. Ashok Kumar Gupta	Study and Remedy of Kotropi landslide in Himachal Pradesh, India.	Indian Geotechnical Journal	Study and Remedy of Kotropi landslide in Himachal Pradesh, India, Indian Geotechnical Journal, Available online at https://doi.org/10.1007/s40098-018-0343-1	
Prof. Ashok Kumar Gupta	Shear Strength of Medium Plastic Expansive Soil Reinforced with Polyester Fibers.	Slovak Journal of Civil Engineering	Shear Strength of Medium Plastic Expansive Soil Reinforced with Polyester Fibers. Slovak Journal of Civil Engineering. 2018, 26(2), 1–8	
Prof. Ashok Kumar Gupta	Development of Maintenance Management System by Functional Evaluation for Rural Roads in	International Journal of Recent Technology and Engineering	Development of Maintenance Management System by Functional Evaluation for Rural Roads in Himachal Pradesh. International	

	Himachal Pradesh		Journal of Recent Technology and Engineering, 2019, 8 (1), 1682-1690	
Prof. Ashish Kumar	Road Assets Management using Pavement Performance Prediction Models.	Journal of Advanced Research in Dynamical and Control Systems	Road Assets Management using Pavement Performance Prediction Models.' Journal of Advanced Research in Dynamical and Control Systems, 10(12-Special Issue), 300-310	
Prof. Ashish Kumar	Incipient motion for gravel particles in clay-silt-gravel cohesive mixtures.	Journal of Soils and Sediments	Incipient motion for gravel particles in clay-silt-gravel cohesive mixtures" Journal of Soils and Sediments. Vol. 18, No. 10 pp. 3082-3093	
Prof. Ashish Kumar	Development of Maintenance Management System by Functional Evaluation for Rural Roads in Himachal Pradesh	International Journal of Recent Technology and Engineering	Development of Maintenance Management System by Functional Evaluation for Rural Roads in Himachal Pradesh. International Journal of Recent Technology and Engineering, 2019, 8 (1), 1682-1690	
Dr. Rajiv Ganguly	Occupational Health Hazard Exposure among municipal solid waste workers in Himachal Pradesh, India.	Waste Management	Occupational Health Hazard Exposure among municipal solid waste workers in Himachal Pradesh, India.' Waste Management, 78, 483-489	
Dr. Rajiv Ganguly	The Air Quality Assessment of a Northern Hilly City in India			
Dr. Saurabh Rawat	Study and Remedy of Kotropi landslide in Himachal Pradesh, India.	Indian Geotechnical Journal	Study and Remedy of Kotropi landslide in Himachal Pradesh, India, Indian Geotechnical Journal, Available online at https://doi.org/10.1007/	

			s40098-018-0343-1	
Mr. Niraj Singh Parihar	Stabilization of expansive soil using potassium chloride.	Stavební obzor - Civil Engineering Journal	Stabilization of expansive soil using potassium chloride. Stavební obzor - Civil Engineering Journal. 2018, 27(1), 25–33	
Mr. Niraj Singh Parihar	Shear Strength of Medium Plastic Expansive Soil Reinforced with Polyester Fibers.	Slovak Journal of Civil Engineering	Shear Strength of Medium Plastic Expansive Soil Reinforced with Polyester Fibers. Slovak Journal of Civil Engineering. 2018, 26(2), 1–8	
Mr. Aakash Gupta	Road Assets Management using Pavement Performance Prediction Models.	Journal of Advanced Research in Dynamical and Control Systems	Road Assets Management using Pavement Performance Prediction Models.' Journal of Advanced Research in Dynamical and Control Systems, 10(12-Special Issue), 300-310	
Prof. Ashok Kumar Gupta	Life-cycle assessment of municipal solid-waste management strategies in Tricity region of India.	Journal of Material Cycles and Waste Management	Life-cycle assessment of municipal solid-waste management strategies in Tricity region of India.' Journal of Material Cycles and Waste Management, 21(3), 606-623	
Prof. Ashok Kumar Gupta	Spectral characterization and quality assessment of organic compost for agricultural purposes.	International Journal of Recycling of Organic Waste in Agriculture	Spectral characterization and quality assessment of organic compost for agricultural purposes.' International Journal of Recycling of Organic Waste in Agriculture, 8(2), 197-213	
Prof. Ashok Kumar Gupta	Characterization and Energy Generation Potential of Municipal Solid Waste from nonengineered Landfill Sites in Himachal	Journal of Hazardous, Toxic and Radioactive Waste	Characterization and Energy Generation Potential of Municipal Solid Waste from nonengineered Landfill Sites in Himachal Pradesh, India.' Journal of Hazardous, Toxic and Radioactive Waste,	

	Pradesh, India.		23(4), Article ID: 04019008	
Prof. Ashish Kumar	Incipient motion for gravel particles in cohesionless sediment mixture.	Iranian Journal of Science and Technology	Incipient motion for gravel particles in cohesionless sediment mixture". Iranian Journal of Science and Technology, Transactions of Civil Engineering. Vol. 43, No. 2, 253-262	
Dr. Rajiv Ganguly	Life-cycle assessment of municipal solid-waste management strategies in Tricity region of India.	Journal of Material Cycles and Waste Management	Life-cycle assessment of municipal solid-waste management strategies in Tricity region of India.' Journal of Material Cycles and Waste Management, 21(3), 606-623	
Dr. Rajiv Ganguly	Spectral characterization and quality assessment of organic compost for agricultural purposes.	International Journal of Recycling of Organic Waste in Agriculture	Spectral characterization and quality assessment of organic compost for agricultural purposes.' International Journal of Recycling of Organic Waste in Agriculture, 8(2), 197-213	
Dr. Rajiv Ganguly	Characterization and Energy Generation Potential of Municipal Solid Waste from nonengineered Landfill Sites in Himachal Pradesh, India.	Journal of Hazardous, Toxic and Radioactive Waste	Characterization and Energy Generation Potential of Municipal Solid Waste from nonengineered Landfill Sites in Himachal Pradesh, India.' Journal of Hazardous, Toxic and Radioactive Waste, 23(4), Article ID: 04019008	
Dr. Rishi Rana	Spectral characterization and quality assessment of organic compost for agricultural purposes.	International Journal of Recycling of Organic Waste in Agriculture	Spectral characterization and quality assessment of organic compost for agricultural purposes.' International Journal of Recycling of Organic Waste in Agriculture, 8(2), 197-213	
Mr. Aakash	Influence of Nanomaterials	International Journal of	Influence of Nanomaterials on	

Gupta	on Properties of Bituminous Concrete Mixes.	Recent Technology and Engineering	Properties of Bituminous Concrete Mixes, International Journal of Recent Technology and Engineering, 7(6), 937-943	
Mr. Aakash Gupta	Development of Maintenance Management System by Functional Evaluation for Rural Roads in Himachal Pradesh	International Journal of Recent Technology and Engineering	Development of Maintenance Management System by Functional Evaluation for Rural Roads in Himachal Pradesh. International Journal of Recent Technology and Engineering, 2019, 8 (1), 1682-1690	

• **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Prof. Ashok Kumar Gupta	Matrix Method for Evaluation of Existing Solid Waste Management Processes in Jalandhar City.	Pollutants from Energy Sources. Energy, Environment, and Sustainability.	Matrix Method for Evaluation of Existing Solid Waste Management Processes in Jalandhar City, Punjab, India. In: Agarwal R., Agarwal A., Gupta T., Sharma N. (eds) Pollutants from Energy Sources. Energy, Environment, and Sustainability. Springer, Singapore	
Prof. Ashok Kumar Gupta	Parametric Evaluation of Leachate Generated from a Non-engineered Landfill Site and Its Contamination Potential of Surrounding Soil and Water Bodies.	Pollutants from Energy Sources. Energy, Environment, and Sustainability.	Parametric Evaluation of Leachate Generated from a Non-engineered Landfill Site and Its Contamination Potential of Surrounding Soil and Water Bodies. In: Agarwal R., Agarwal A., Gupta T., Sharma N. (eds) Pollutants from Energy Sources. Energy, Environment, and Sustainability. Springer, Singapore	
Prof.	Comparative	Lecture Notes	Comparative Analysis of	

Ashok Kumar Gupta	Analysis of Solid Waste Management Processes in Himachal Pradesh and Punjab.	in Civil Engineering, Springer	Solid Waste Management Processes in Himachal Pradesh and Punjab. In: Singh H., Garg P., Kaur I. (eds) Proceedings of the 1st International Conference on Sustainable Waste Management through Design. ICSWMD 2018. Lecture Notes in Civil Engineering, vol 21. Springer, Cham	
Dr. Rajiv Ganguly	Matrix Method for Evaluation of Existing Solid Waste Management Processes in Jalandhar City.	Pollutants from Energy Sources. Energy, Environment, and Sustainability.	Matrix Method for Evaluation of Existing Solid Waste Management Processes in Jalandhar City, Punjab, India. In: Agarwal R., Agarwal A., Gupta T., Sharma N. (eds) Pollutants from Energy Sources. Energy, Environment, and Sustainability. Springer, Singapore	
Dr. Rajiv Ganguly	Parametric Evaluation of Leachate Generated from a Non-engineered Landfill Site and Its Contamination Potential of Surrounding Soil and Water Bodies.	Pollutants from Energy Sources. Energy, Environment, and Sustainability.	Parametric Evaluation of Leachate Generated from a Non-engineered Landfill Site and Its Contamination Potential of Surrounding Soil and Water Bodies. In: Agarwal R., Agarwal A., Gupta T., Sharma N. (eds) Pollutants from Energy Sources. Energy, Environment, and Sustainability. Springer, Singapore	
Dr. Rajiv Ganguly	Comparative Analysis of Solid Waste Management Processes in Himachal Pradesh and Punjab.	Lecture Notes in Civil Engineering, Springer	Comparative Analysis of Solid Waste Management Processes in Himachal Pradesh and Punjab. In: Singh H., Garg P., Kaur I. (eds) Proceedings of the 1st International Conference on Sustainable Waste Management through Design. ICSWMD 2018.	

			Lecture Notes in Civil Engineering, vol 21. Springer, Cham	
Dr. Rajiv Ganguly	Life Cycle Assessment of First-, Second-generation and Micro-algae Biofuels	Advances in Feedstock Conversion Technologies for Alternative Fuels and Bioproducts: New Technologies, Challenges and Opportunities. Elsevier	Chapter 19: "Life Cycle Assessment of First-, Second-generation and Micro-algae Biofuels", in Majid Hosseini (Editor), "Advances in Feedstock Conversion Technologies for Alternative Fuels and Bioproducts: New Technologies, Challenges and Opportunities". Elsevier, Imprint: Woodhead Publishing., USA, pp. 355-371. (ISBN: 978-0-12-817937-6) DOI: 10.1016/B978-0-12-817937-6.00019-9	

- **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Prof. Ashok Kumar Gupta	Present scenario and challenges of municipal solid waste management practices in Shimla.	Himachal Pradesh Science Congress(HP SC 2018)	Present scenario and challenges of municipal solid waste management practices in Shimla, Himachal Pradesh in 3 rd Himachal Pradesh Science Congress (HPSC 2018) held during October22-23 2018 at IIT Mandi, Mandi, Himachal Pradesh, India	October 22-23, 2018
Prof. Ashok Kumar Gupta	Comparative Study between Factor of Safety of a slope using a Conventional Soil Nail and a Helical Soil nail.	Himachal Pradesh Science Congress(HP SC 2018)	Comparative Study between Factor of Safety of a slope using a Conventional Soil Nail and a Helical Soil nail 3 rd Himachal Pradesh Science	October 22-23, 2018

			Congress(HPSC 2018) held during October 22-23 2018 at IIT Mandi, Mandi, Himachal Pradesh, India	
Dr. Ashish Kumar	Rural Development by Affordable Housing a Review study.	Himachal Pradesh Science Congress(HP SC 2018)	Rural Development by Affordable Housing a Review study.” Proc. 3rd Himachal Pradesh Science Congress, “Rural Upliftment Through Science & Technology Interventions” 3rd Himachal Pradesh Science Congress (HPSC 2018) held during October 22-23 2018 at IIT Mandi, Mandi, Himachal Pradesh, India	October 22-23, 2018
Dr. Ashish Kumar	Biogas Generation from Co-digestion of Lignocellulose and Kitchen waste.	Himachal Pradesh Science Congress(HP SC 2018)	Biogas Generation from Co-digestion of Lignocellulose and Kitchen waste.” Proc. 3 rd Himachal Pradesh Science Congress, “Rural Upliftment Through Science & Technology Interventions 3rd Himachal Pradesh Science Congress (HPSC 2018) held during October 22-23 2018 at IIT Mandi, Mandi, Himachal Pradesh, India	October 22-23, 2018
Dr. Ashish Kumar	A Review on Partial Replacement of Concrete Ingredients with Waste Materials.	Himachal Pradesh Science Congress(HP SC 2018)	A Review on Partial Replacement of Concrete Ingredients with Waste Materials.” Book of Abstract & Souvenir, 3 rd	October 22-23, 2018

			Himachal Pradesh Science Congress on Rural upliftment through Science and Technology Interventions, 22- 23 Oct, 2018, IIT Mandi. pp.101.	
Dr. Rajiv Ganguly	Present scenario and challenges of municipal solid waste management practices in Shimla.	Himachal Pradesh Science Congress(HP SC 2018)	Present scenario and challenges of municipal solid waste management practices in Shimla, Himachal Pradesh in 3 rd Himachal Pradesh Science Congress(HPSC 2018) held during October22-23 2018 at IIT Mandi, Mandi, Himachal Pradesh, India	October 22-23, 2018
Dr. Rajiv Ganguly	Biomedical waste generation and management in hospitals – case study in Shimla.	Himachal Pradesh Science Congress(HP SC 2018)	Biomedical waste generation and management in hospitals – case study in Shimla in 3 rd Himachal Pradesh Science Congress (HPSC 2018) held during October 22-23 2018 at IIT Mandi, Mandi, Himachal Pradesh, India.	October 22-23, 2018
Dr. Rajiv Ganguly	Evaluation of existing ambient air quality status in Shimla city.	Himachal Pradesh Science Congress(HP SC 2018)	Evaluation of existing ambient air quality status in Shimla city in 3 rd Himachal Pradesh Science Congress (HPSC 2018) held during October 22-23 2018 at IIT Mandi, Mandi, Himachal Pradesh, India	October 22-23, 2018
Dr. Saurabh Rawat	Comparative Study between Factor of Safety of a slope	Himachal Pradesh Science	Comparative Study between Factor of Safety of a slope	October 22-23, 2018

	using a Conventional Soil Nail and a Helical Soil nail.	Congress(HP SC 2018)	using a Conventional Soil Nail and a Helical Soil nail in 3 rd Himachal Pradesh Science Congress(HPSC 2018) held during October 22-23 2018 at IIT Mandi, Mandi, Himachal Pradesh, India	
Dr. Amardeep	Rural Road Construction by using waste material in Flexible Pavement.	Himachal Pradesh Science Congress(HP SC 2018)	Rural Road Construction by using waste material in Flexible Pavement in 3 rd Himachal Pradesh Science Congress (HPSC 2018) held during October 22-23 2018 at IIT Mandi, Mandi, Himachal Pradesh, India.	October 22-23, 2018
Dr. Amardeep	Effect of waste materials on Properties of Bituminous Mix.	Advanced Structures, Materials and Methodology in Civil Engineering	Effect of waste materials on Properties of Bituminous Mix in National Conference on Advanced Structures, Materials and Methodology in Civil Engineering held during November 03-04 2018 at B.R Ambedkar National Institute of Technology Jalandhar, Jalandhar, Punjab, India	November 03-04, 2018
Dr. Amardeep	Utilization of Waste Materials in construction of Cool Pavements.	Advanced Structures, Materials and Methodology in Civil Engineering	Utilization of Waste Materials in construction of Cool Pavements: A Review Study in National Conference on Advanced	November 03-04, 2018

			Structures, Materials and Methodology in Civil Engineering held during November 03-04 2018 at B.R Ambedkar National Institute of Technology Jalandhar, Jalandhar, Punjab, India	
Dr. Saurav	An Experimental approach to improve the Seismic Resistance of Unconfined Brick Masonry.	Trends and Recent Advances in Civil Engineering (TRACE 2018)	An Experimental approach to improve the Seismic Resistance of Unconfined Brick Masonry' in 2nd International Conference on Trends and Recent Advances in Civil Engineering (TRACE 2018)) held during August 24-25, 2018 at Amity University, Noida, UP India	August 24-25, 2018
Dr. Saurav	A Review on Partial Replacement of Concrete Ingredients with Waste Materials.	Himachal Pradesh Science Congress on Rural upliftment through Science and Technology Interventions	A Review on Partial Replacement of Concrete Ingredients with Waste Materials." Book of Abstract & Souvenir, 3 rd Himachal Pradesh Science Congress on Rural upliftment through Science and Technology Interventions, 22- 23 Oct, 2018, IIT Mandi. pp.101.	October 22-23, 2018
Mr. Aakash Gupta	Mix Design & Factors Affecting Design of Pervious Concrete.	Trends and Recent Advances in Civil Engineering (TRACE 2018)	Mix Design & Factors Affecting Design of Pervious Concrete in 2nd International Conference on Trends and Recent	August 24-25, 2018

			Advances in Civil Engineering (TRACE 2018)) held during August 24-25, 2018 at Amity University, Noida, UP India	
Mr. Abhilash Shukla	Experimental Investigations on Binary, ternary and Quaternary blends of cementitious materials for Ultra high performance concrete.	Advances in Science and Technology of Concrete	Experimental Investigations on Binary, ternary and Quaternary blends of cementitious materials for Ultra high performance concrete. Proceedings of 3 rd R. N. Raikar Memorial international Conference and Gettu-Kodur Symposium on Advances in Science and Technology of Concrete [December 14-15, 2018], Volume II, pp. - 131-137.	December 14-15, 2018
Mr. Abhilash Shukla	Influence of packing density on compressive strength of UHPC for binary, ternary and quaternary blends of cementitious materials.	NFiCE 2018	Influence of packing density on compressive strength of UHPC for binary, ternary and quaternary blends of cementitious materials, E Proceedings of NFiCE 2018, Paper id - DJCE188.	November 29 – 30, 2018
Mr. Abhilash Shukla	Effect of Nano silica and Nano Alumina in packing density model	Himachal Pradesh Science Congress(HP SC 2018)	Effect of Nano silica and Nano Alumina in packing density model 3 rd Himachal Pradesh Science Congress(HPSC 2018) held during October 22-23 2018 at IIT Mandi, Mandi,	October 22-23, 2018

			Himachal Pradesh, India	
Mr. Aakash Gupta	Use of Polyethylene Terephthalate (PET) in Soil Stabilization.	Indian Conference on Geotechnical and Geo-Environmental Engineering (ICGGE-2019)	Use of Polyethylene Terephthalate (PET) in Soil Stabilization. Proceedings of the Indian Conference on Geotechnical and Geo-Environmental Engineering (ICGGE-2019) [MNIT Allahabad: March 01-02, 2019], pp.11-16.	March 01-02, 2019
Mr. Aakash Gupta	Green Airport- An Innovation In Air Transportation (A Case Study Of Shimla Airport).	Indian Conference on Geotechnical and Geo-Environmental Engineering (ICGGE-2019)	Green Airport- An Innovation In Air Transportation (A Case Study Of Shimla Airport), Indian Conference On Geotechnical And Geo-Environmental Engineering (ICGGE-2019),2019	March 01-02, 2019
Mr. Anirban Dhulia	Use of Polyethylene Terephthalate (PET) in Soil Stabilization.	Indian Conference on Geotechnical and Geo-Environmental Engineering (ICGGE-2019)	Use of Polyethylene Terephthalate (PET) in Soil Stabilization. Proceedings of the Indian Conference on Geotechnical and Geo-Environmental Engineering (ICGGE-2019) [MNIT Allahabad: March 01-02, 2019], pp.11-16.	March 01-02, 2019
Mr. Anirban Dhulia	Review on SBR (Sequencing Batch Reactor) for Various Wastewater Treatment.	Indian Conference on Geotechnical and Geo-Environmental Engineering (ICGGE-2019)	Review on SBR (Sequencing Batch Reactor) for Various Wastewater Treatment. Proceedings of the Indian Conference on Geotechnical and Geo-Environmental Engineering (ICGGE-2019) [MN	March 01-02, 2019

			NIT Allahabad: March 01-02, 2019], pp.58-70.	
--	--	--	--	--

- **Guest Speakers/Lectures/ Visits**
 - **Guest Speakers**

- **Lectures Delivered by Faculty**

Name of	Designation	Topic of	Date	Venue
----------------	--------------------	-----------------	-------------	--------------

Faculty	of Faculty	Lecture		
Mr. Chandra Pal Gautam	Assistant Professor (II)	Training on AutoCAD	August 7-9, 2018	H.P. Institute of Public Administration, Shimla
Mr. Chandra Pal Gautam	Assistant Professor (II)	Training on AutoCAD	September 11-13, 2018	H.P. Institute of Public Administration, Shimla
Mr. Abhilash Shukla	Assistant Professor (II)	Dynamic Characterization of UHPC	January 15, 2019	Civil Engineering Department, JUIT Waknaghat
Mr. Kaushal Kumar	Assistant Professor (II)	Tender-Contracts and Arbitration	January 15, 2019	Civil Engineering Department, JUIT Waknaghat
Dr. Rishi Rana	Assistant Professor (SG)	E-waste Management	January 15, 2019	Civil Engineering Department, JUIT Waknaghat
Dr. Saurav	Assistant Professor (SG)	Introduction to Finite Element Method	January 16, 2019	Civil Engineering Department, JUIT Waknaghat
Mr. Tanmay Gupta	Assistant Professor (II)	Some complexities in Bridge Engineering	January 16, 2019	Civil Engineering Department, JUIT Waknaghat
Mr. Aakash Gupta	Assistant Professor (II)	Introduction to Pavement Evaluation-Maintenance and Management	January 16, 2019	Civil Engineering Department, JUIT Waknaghat
Mr. Niraj Singh Parihar	Assistant Professor (II)	The roadway to Modern Geotechnical Engineering	January 17, 2019	Civil Engineering Department, JUIT Waknaghat
Dr. Saurav	Assistant Professor (SG)	Continuation - Introduction to Finite Element Method	January 17, 2019	Civil Engineering Department, JUIT Waknaghat
Dr. Saurabh Rawat	Assistant Professor (SG)	Helical Soil Nail	January 17, 2019	Civil Engineering Department, JUIT

				Waknaghat
Dr. Amardeep	Assistant Professor (SG)	Characterization of followers on two-lane intercity highways	January 18, 2019	Civil Engineering Department, JUIT Waknaghat
Dr. Rajiv Ganguly	Associate Professor	Application of Modelling for Air Quality Studies	January 18, 2019	Civil Engineering Department, JUIT Waknaghat
Prof. Ashish Kumar	Professor	Scour around Bridge piers	January 18, 2019	Civil Engineering Department, JUIT Waknaghat
Prof. A K Gupta	Professor	The Vision for Civil Engineering in 2025	January 19, 2019	Civil Engineering Department, JUIT Waknaghat
Prof. Ashish Kumar	Professor	Turbulence Measurements around Bridge Piers	October 16, 2018	JUIT Waknaghat
Dr. Pankaj Kumar	Assistant Professor (SG)	Steel-Concrete Composite Shear Connection	October 16, 2018	JUIT Waknaghat
Mr. Abhilash Shukla	Assistant Professor (II)	Blast Resistant Concrete	October 16, 2018	JUIT Waknaghat
Dr. Saurav	Assistant Professor (SG)	Concrete Technology Lab	October 16, 2018	JUIT Waknaghat
Mr. Aakash Gupta	Assistant Professor (II)	Highway Engineering Lab	October 16, 2018	JUIT Waknaghat
Prof. Veeresh Gali	Professor	Engineering and Environmental Philosophy	October 17, 2018	JUIT Waknaghat
Dr. Saurabh Rawat	Assistant Professor (SG)	Slope Stabilization Using Helical Soil Nails	October 17, 2018	JUIT Waknaghat
Prof. Ashish Kumar	Professor	Hydraulics Lab	October 17, 2018	JUIT Waknaghat

Dr. Rajiv Ganguly	Professor	Environmental Engineering Lab	October 17, 2018	JUIT Waknaghat
Prof. Ashish Kumar	Professor	Survey Lab	October 17, 2018	JUIT Waknaghat
Mr. Niraj Singh Parihar	Assistant Professor (II)	Geotechnical Engineering Lab	October 17, 2018	JUIT Waknaghat
Dr. Pankaj Kumar	Assistant Professor (SG)	Repair and Retrofitting of Structures	November 1- 3, 2018	Sagar Institute of Science and Technology, Gandhi Nagar, Bhopal
Dr. Pankaj Kumar	Assistant Professor (SG)	Composite and Pre-Fabricated Structures	November 1- 3, 2018	Sagar Institute of Science and Technology, Gandhi Nagar, Bhopal

- **Visits Organized**

Institution visited	Dates	Aim of visit	Participation	
			Students	Faculty
NTPC KOLDAM	September 22, 2018	Industrial Visit	60	Mr. Abhilash Shukla Mr. Aakash Gupta
JUIT Water Tank	April 10, 2019	Site Visit for Construction Site Exposure	B. Tech 3 rd and 4 th year Civil Engineering Students	Prof. Ashok Kumar Gupta, Prof. Ashish Kumar, Mr. Chandra Pal Gautam & Mr. Anirban Dhulia

Recognition & Awards

- **By Faculty**

Name of Faculty	Designation of Faculty	Award	Date	Achievement
Dr. Rajiv Ganguly	Associate Professor	Bharatiya Eminence Award by S. C. Ray Educational Trust	October 10, 2018	Distinguished scientist in Civil Engineering
Prof. Ashok Kumar Gupta	Professor	Outstanding Reviewer Award	March 28, 2019	Recognized as Outstanding Reviewer in International Journal of Geomechanics by ASCE

- **Composition of Various Bodies**

- **Board of Studies (BOS)**

Sr. No.	Name	Designation	Institution
1	Prof. Ashok Kumar Gupta	Head of the Department, Civil Engineering	Jaypee University of Information Technology, Waknaghat
2	Prof. S. K. Singh	Professor	PEC Chandigarh
3	Prof. S. P. Ghera	Head of the Department, CSE/IT	Jaypee University of Information Technology, Waknaghat
4	Prof. Karanjeet Singh	Head of the Department, Mathematics	Jaypee University of Information Technology, Waknaghat
5	Prof. Sudhir Kumar	Head of the Department, BT/ BI	Jaypee University of Information Technology, Waknaghat
6	Dr. Anupriya Kaur	Head of the Department,	Jaypee University of

		HSS	Information Technology
7	Prof. Ashish Kumar	Professor, CE	Jaypee University of Information Technology
8	Dr. Rajiv Ganguly	Associate Professor, CE	Jaypee University of Information Technology
9	Mr. Yeshpal Vasishta	Executive Engineer	HPPWD
10	Ms. Surabhi Sharma	Faculty, CE	Jawaharlal Nehru Government Engineering College, Sundernagar

- **List of Various Departmental Coordinators**

PhD Coordinator	Dr. Saurabh Rawat
M Tech Coordinator	M.Tech. EE: Dr. Rajiv Ganguly M.Tech. SE: Mr. Chandra Pal Gautam M.Tech. CM: Dr. Saurabh Rawat
M Tech Seminar Coordinator	M.Tech. EE: , Dr. Rajiv Ganguly M.Tech. SE: Mr. Chandra Pal Gautam M.Tech. CM: Dr. Saurabh Rawat
B Tech Coordinator	Mr. Chandra Pal Gautam & Dr. Saurav
Placement Coordinator	Mr. Aakash Gupta & Mr. Anirban Dhulia
Department Club Coordinator	Mr. Chandra Pal Gautam
BOS Coordinator	Prof. A K Gupta
NAAC Coordinator	Dr. Rajiv Ganguly
NBA Coordinator	Mr. Anirban Dhulia
Library Coordinator	Mr. Niraj Singh Parihar
Student Exchange Data management Coordinator	Mr. Anirban Dhulia

Program Assessment and Quality Improvement Committee Coordinator	Prof. Ashish Kumar
Virtual Lab	Mr. Aakash Gupta & Dr. Saurav
MOOC/SWAYAM courses Coordinator	Dr Rajiv Ganguly
Course Curriculum Evaluation Coordinator	Prof. Ashok Kumar Gupta & Mr. Chandra Pal Gautam
Academically Weak Students Committee	Mr. Niraj Singh Parihar
Consultative Committee	Dr. Rajiv Ganguly
Website Maintenance Coordinator	Mr. Tanmay Gupta
Lab In charge	Highway Engineering Lab: Mr. Aakash Gupta Environmental Engineering & Chemistry Lab: Dr. Rajiv Ganguly Concrete Technology Lab: Dr. Saurav Geotechnical Engineering Lab: Mr. Niraj Singh Parihar Workshop Practices: Mr. Abhilash Shukla Engineering Graphics Lab: Mr. Niraj Singh Parihar Surveying Lab: Prof Ashish Kumar Geology Lab: Dr. Saurabh Rawat Civil Engineering Software Lab: Mr. Tanmay Gupta Structural Mechanics Lab: Mr. Chandra Pal Gautam Fluid Mechanics Lab: Prof. Ashish Kumar Hydraulics Lab: Prof. Ashish Kumar Computational Research Lab: Mr. Kaushal Kumar
Research Publications, Patents and IPR	Dr. Rajiv Ganguly/ Dr. Saurabh Rawat
Attendance Review Coordinator	Mr. Aakash Gupta
Feedback of Students Coordinator	Mr. Chandra Pal Gautam
Mentoring Coordinator	Mr. Niraj Singh Parihar

Expert lecture/ Workshop organized/ Seminar data collection Coordinator	Dr. Amardeep, Dr. Pankaj Kumar & Mr. Tanmay Gupta
Course Files/Lab files Coordinator	Mr. Anirban Dhulia
Faculty Project proposal I/C	Dr Rajiv Ganguly & Prof. Ashok Kumar Gupta
Hilly Ramblings Coordinator	Prof. Ashish Kumar
Result Coordinator	Prof Ashok Kumar Gupta
Finance Coordinator	Mr. Niraj Singh Parihar
M-Tech Load Distribution	Mr. Chandra Pal Gautam
M-Tech/ PhD Stipend Coordinator	Dr. Saurabh Rawat
Member Secretary (Departmental Affairs)	Mr. Chandra Pal Gautam
Gender Champion (UGC Program)	Mr. Niraj Singh Parihar & Prof. Ashish Kumar
Stock Verification	Mr. Niraj Singh Parihar
Data from Final year (GATE, Exit Survey, Foreign university admission etc)	Mr. Anirban Dhulia
Database of Visitors	Mr. Anirban Dhulia
PhD Examiner Database	Dr. Saurabh Rawat
Project Monitoring Committee	Prof. Ashok Kumar Gupta, Prof. Ashish Kumar & Dr. Rajiv Ganguly
Mock Interviews	Prof. Ashish Kumar, Dr. Saurabh Rawat, Mr. Abhilash Shukla, Mr. Kaushal Kumar, Mr, Aakash Gupta & Mr. Anirban Dhulia
Course Curriculum Revision Committee	Mr. Chandra Pal Gautam

List of Department Faculty and Biodata	Mr. Chandra Pal Gautam & Mr. Anirban Dhulia
Industrial Training Relation Officer	Mr. Anirban Dhulia & Mr. Aakash Gupta
Department Annual Report Coordinator	Mr. Anirban Dhulia
Research Lab Coordinator	Dr. Rajiv Ganguly & Dr. Saurabh Rawat
Departmental Quality Assurance Committee	Prof. Ashok Kumar Gupta, Prof. Ashish Kumar & Dr. Rajiv Ganguly
Summer Training Coordinator	Mr. Anirban Dhulia & Mr. Aakash Gupta
Outreach Activities Coordinator	Mr. Abhilash Shukla
Store Management Committee	Mr. Niraj Singh Parihar
Purchase Committee	Mr. Niraj Singh Parihar

Civil Engineering Department- Consultative Committee

Prof. Ashok Kumar Gupta, Chairman

Prof. Ashish Kumar, Member

Dr. Rajiv Ganguly, Member

Mr. Chander Pal Gautam, Member

Mr. Deepak, Representative B.Tech Ist year Civil Engineering

Mr. Ujjwal Kumar, Representative B.Tech IInd year Civil Engineering

Mr. Hemant Goel, Representative B.Tech IIIrd year Civil Engineering

Mr. Sushant Gupta, Representative B.Tech IVth year Civil Engineering

Mr. Bhawani Singh, Representative M.Tech students of Civil Engineering

Ms. Disha Thakur, Representative PhD scholars of Civil Engineering

DEPARTMENT OF PHYSICS & MATERIALS SCIENCE

• **Vision**

The Department ideates: “Student centered learning and student-faculty research by using a mixture of traditional, current and integrative pedagogical techniques dictated by state of the art education & research in order to create a nationally & internationally recognized unique model for physics and materials science education in both public and professional spheres.”

Specifically

- To provide end-oriented education & striving for excellence in performance-based teaching and research in order to maintain high levels of professionalism and integrity.
- To be internationally and nationally recognized for teaching and research.
- To be recognized and appreciated for different courses in order to contribute in shaping.
- Successful engineering graduates.
- Implementing fundamental physics & applications to integrate the research and innovative teaching for motivating students to be better intellectuals.

• **Mission**

- To provide qualitative education and preparing students for challenges in industry, government and academia.
- To provide a panorama of courses coupled with teaching, research, and mentoring opportunities for graduate students.
- To provide courses that enhances their skills and their appreciation for science.
- The department is dedicated to teaching and learning physics in a collaborative and performance based active environment.

• **Faculty Details**

<u>S.No.</u>	<u>Name</u>	<u>Qualification</u>	<u>Specialisation</u>
1.	Prof. (Dr.) P.B. Barman	Ph.D.	III-V compound semiconductors
2.	Prof. (Dr.) Sunil K. Khah	Ph.D.	Microstrip Antennas
3.	Dr. Vineet Sharma	Ph.D.	Amorphous Semiconductors
4.	Dr. Pankaj Sharma	Ph.D.	Chalcogenides (Films & Quantum Dots)
5.	Dr. Rajesh Kumar	Ph.D.	Magnetic Nanoparticles
6.	Dr. Dheeraj Sharma	Ph.D.	Conducting Polymers
7.	Dr. S.K. Hazra	Ph.D.	Gas Sensors
8.	Dr. R.R. Singh	Ph.D.	Core-shell nanostructures
9.	Dr. S. K. Tiwari	Ph.D.	ZnO nanoparticles

- **Programs**

- **Undergraduate Program**

Department of Physics and Materials Science offers the following core courses to various undergraduate programmes

S No	Title of New Course	Course Code
1	Engineering Physics - I	18B11PH111
2	Engineering Physics Lab - I	18B17PH171
3	Basic Engineering Physics - I	18B11PH112
4	Basic Engineering Physics Lab - I	18B17PH172
5	Engineering Physics - II	18B11PH211
6	Engineering Physics Lab - II	18B17PH271
7	Bio-Instrumentation Techniques	18B11PH212
8	Materials Science	10B11PH611

Department of Physics and Materials Science has offered the following elective courses to undergraduate programmes

S No	Title of New Course	Course Code
1	Nanoscience and Technology	10B1WPH731
2	Optical Fiber Networks	10B1WPH732
3	Photonics & Microwave Devices	10B1WPH833

- **Post Graduate Programs**

M.Sc. (Physics): Not running

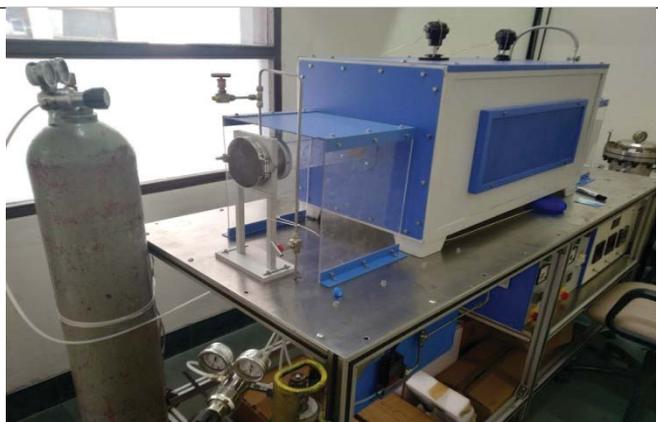
- **Ph.D. Program**

The award of the Ph.D. degree 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. Nano-structured semi-conducting thin films, electro-luminescent display devices, magnetic multi-layered thin films, ferrite based micro-strip antennas, opto-electronic materials, semi-conducting materials for microelectronic devices.

- **Lab Facilities**

- **New Labs** Sensor Lab.

Advanced chemical vapour deposition unit.



- **New Equipments**

- i) Single Stage 50 l.p.m Vaccum pump (Qty. 01)
- ii) Double Stage 50 l.p.m. Vaccum pump (Qty. 01)
- iii) 250 l. p m. vaccum pump (Qty. 01)
- iv) Magnetic Stirrer hot Plate with Sensor (Qty. 01)
- v) e/m Setup (Qty. 02)
- vi) Four probe Setup (Qty. 02)
- vii) Fiber optics set (Qty. 01)

- **Lab Staff with Qualification**

Name	Designation	Qualification
Kamlesh kr Mishra	Sr.lab Engineer	M.Tech.
Ravendra Tiwari	Lab Technician	B.Sc. (PCM)
Deepak Kr singh	Lab Assistant	B.Sc. (PCM)

- **Labs (Major equipment with Photos)**

- Material Science Lab
- CVD Lab
- Characterization Lab
- Nanotechnology Lab
- EM Analysis Lab
- Sensor lab

Major equipments procured in 2018-2019:

Dielectric Constant Measurement Set up.



Two Probe Experimental Setup for Resistivity Measurement at different temperatures.

High Power DC Supply



Constant Current Source



Power Supply



- Research Projects Sanctioned during the Academic Year/In Progress**

S No	Name of Faculty	Project title	Funding Agency	Amount sanctioned	Duration	Current Status
1	Dr. Pankaj Sharma (Principal Investigator)	<i>Semiconducting chalcogenide quantum dots for exploiting the power of solar energy</i>	DST-SERB	16.99 Lacs	10/2015 to 4/2019	Completed
2	Dr. Rajesh Kumar (Principal Investigator)	<i>Formation of room temperature Ferrite thin films for the Application of Spintronic devices</i>	DST-DAAD (Indo-German)	11.72 Lacs	2017-2019	In Progress
3	Dr. Surajit Kumar Hazra (Principal Investigator) Prof. P.B. Barman (Co-PI)	<i>Hydrogen storage using 2D chalcogenide and graphene layered materials</i>	DST-SERB	32.00 Lacs	2017-2020	In Progress
4	Prof. P.B. Barman (Principal Investigator) Dr. Surajit K. Hazra (Co-PI)	<i>Catalytic nanoparticles based graphene devices for selective detection of industrial</i>	HIMCO STE	8.00 Lacs	2017-2019	In Progress

		<i>gases</i>				
5	Dr. Pankaj Sharma (Co-PI)	<i>IoT enabled fencing systems to control monkey menace in Shimla (Urban Areas of Himachal Pradesh)</i>	HIMCO STE	7.50 Lacs	2017-2019	In Progress
6	Dr. Vineet Sharma (Principal Investigator)	<i>Enhancing the thermal stability of Chalcogenide Phase-change materials for switching and memory applications</i>	DST-SERB	20.06 Lacs	2017-2020	In Progress

- **Conferences, Seminars and Workshops/Faculty development program**

Conferences

- **Conferences Organised : Nil**
- **Conferences Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
23-25 September 2018	Nano-TR 15, Multifunctional ferrite@quantum dots nanostructures	Cesme, Turkey	Prof. P. B. Barman	

Seminars

- **Seminars Organised : Nil**
- **Seminars Attended : Nil**

Workshops

- **Workshops Organised : Nil**
- **Workshops Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
29 May – 31 May, 2019	National Workshop on Bioinformatics and Biomedical Image Analysis	JUIT, Wagnaghat Solan	Dr. Ragini Raj Singh	

	NBBIA-2019			
31 st Oct 2018 to 2 nd Nov 2018	International Workshop on Nano/Micro 2D-3D fabrication, manufacturing of electronic Biomedical Devices and Applications	IIT Mandi, Himachal Pradesh	Dr. Sanjiv Tiwari	

- **Publications**
 - **Journal Publications**

Name of Faculty	of	Title of Article	Name of Journal	Reference	Citation
Partha Barman Dheeraj Sharma	Bir	UV shielding with visible transparency based properties of poly (styrene-co-acrylonitrile)/ Ag doped ZnO nanocomposite	Material Research Express	5(2), 025035.	02
Partha Barman Surajit Kumar Hazra	Bir	Role of Capping Agent in Palladium Nanoparticle Based Hydrogen Sensor	Journal of Cluster Science	29 (6), 1209-1216	--
Pankaj Sharma		High thermoelectric action in vacuum deposited indium alloyed chalcogenide thin films: In_xSe_{100-x}	IEEE Transactions on Electron devices	65(8) 3408-3413	08
Pankaj Sharma		On the optical study of Pb additive Se-Te-Ge nano-crystalline quaternary alloys	Journal of Optoelectronics and Advanced Materials	20 (7-8), 435-440	--
Pankaj Sharma		Study of some network parameters for chalcogenide glasses at an average coordination number 2.4	AIP Conference Proceedings	2050 (2018), 020019	01
Pankaj Sharma		Polyaniline – tin oxide polymeric 141rapheme141sites films: an electrical and dielectric study	Materials Science-Poland	36(4) (2018) 711-716	--
Pankaj Sharma		Synthesis and Characterization of Ag-Chalcogenide Nanoparticles for Possible Applications in	Materials Science-Poland	36 (3), 375-380	--

	Photovoltaics			
Pankaj Sharma	Optical, dielectric and opto-electrical study of Se-Te-Ge glassy thin films.	Journal of Optoelectronics and Advanced Materials	20 (5-6), 319-325	02
Pankaj Sharma	Multifunctional CZTS Thin Films: Structural, Optoelectrical, Electrical and Photovoltaic properties.	Journal of Alloys and Compounds,	757 (2018), 124-133	06
Vineet Sharma Pankaj Sharma	Cohesive energy calculation of quaternary Ge-Te-Se-Ga chalcogenide glasses using chemical bond approach	AIP Conference Proceedings	2050 (2018), 020008	01
Vineet Sharma Pankaj Sharma	Morphological and Optical Study of Ag ₂ Se Quantum Dots	AIP Conference Proceedings	2009 (2018), 020026	--
Vineet Sharma Pankaj Sharma	Mn ²⁺ Doped Mg-Zn Ferrite Nanoparticles for Microwave Device Applications	IEEE Electron Device Letters	39 (6), 901-904	01
Vineet Sharma Pankaj Sharma	Nanomaterials for high frequency device and photocatalytic applications: Mg-Zn-Ni ferrites	Journal of Alloys and Compounds,	746 (2018), 532-539	09
Vineet Sharma Pankaj Sharma	Effect of visible light on the structural and optical properties of (Ge ₂ Sb ₂ Te ₅) _{100-x} Ag _x (x = 0, 1 and 3) thin films	Journal of Materials Science: Materials in Electronics	29 (2) (2018), 1042-1047	02
Ragini Raj Singh	Structural and Luminescent Properties of Multifunctional Nanostructures	AIP Conference Proceedings	2009 (2018), 020004	--
Ragini Raj Singh	Effect of Coating on Antimicrobial and Optical Properties of Quantum Dots	AIP Conference Proceedings	2009 (2018), 020025	--
Ragini Raj Singh	Proficient Surface Modification of CdSe Quantum Dots for Highly Luminescent and Biocompatible Probes for Bioimaging: a comparative experi-	Journal of Luminescence	199 (2018), 174-182	04

	mental investigation			
--	----------------------	--	--	--

- **Books/Book Chapters Published : Nil**

- **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Partha Bir Barman	Wideband Monopole Planar Antenna with Stepped Ground Plane for WLAN/WiMAX Applications	International Conference on Futuristic Trends in Network and Communication Technologies, FTNCT 2018, Solan, India	pp 253-264	9-10 Feb 2018
Partha Bir Barman Surajit Kumar Hazra	Sensing Mechanism of Resistive Palladium Nanoparticle Based Hydrogen Sensors	3 rd Himachal Pradesh Science Congress, IIT, Mandi, H.P	--	22-23 October, 2018
Partha Bir Barman Surajit Kumar Hazra	Effect of Post treatment on chemically exfoliated reduced graphene oxide with ammonia solution	3 rd Himachal Pradesh Science Congress, IIT, Mandi, H.P	--	22-23 October, 2018
Partha Bir Barman Surajit Kumar Hazra	Optimization of reduced graphene oxide synthesis by chemical exfoliation route	3 rd Himachal Pradesh Science Congress, IIT, Mandi, H.P	--	22-23 October, 2018
Rajesh Kumar Partha Bir Barman	One Step Formation of ZnO Thin Films on the Surface of Precursor Solution using Ammonia Vapors in Simple Liquid-Vapor Method	3 rd Himachal Pradesh Science Congress, IIT, Mandi, H.P	--	22-23 October, 2018
Pankaj sharma Vineet Sharma	Analysis of thermal stability on addition of rare earth elements to Ge-Sb-Te Compounds	3 rd Himachal Pradesh Science Congress, IIT, Mandi, H.P	--	22-23 October, 2018
Vineet Sharma and Pankaj Sharma	Calculation of mean coordination number and lone pair of electron of quaternary ge-te-se-ga chalcogenide	3 rd Himachal Pradesh Science Congress, IIT, Mandi, H.P	--	22-23 October, 2018

	glasses			
Pankaj Sharma	Analyze the ITO enabled fencing system for the smart security	3 rd Himachal Pradesh Science Congress, IIT, Mandi, H.P	--	22-23 October, 2018
Rajesh Kumar Partha Bir Barman	Tuning Oxygen Vacancies in Ferrite Films by Applying Magnetic Field during Growth Process	Chitkara University Doctoral Consortium (CUDC), Chitkara University, Punjab	--	17-18 May, 2019
Vineet Sharma Pankaj Sharma	Morphological and Optical Study of Ag ₂ Se Quantum Dots	National Conference on Advanced Materials and Nanotechnology , IIIT Noida	pp.02002 6-1-020026-4	15-17 March, 2018

• **Guest Speakers/Lectures/ Visits**

- **Guest Speakers : Nil**
- **Lectures Delivered by Faculty : Nil**
- **Visits Organised**

Institution visited	Dates	Aim of visit	Participation	
			Students	Faculty
Osnabruck University, Osnabruck Germany	November 2018 (15 days)	Visiting Scientist / research collaborator,	--NA--	Rajesh Kumar
Jaypee University of Information Technology, Wagnaghat	07-17 October 2018	Visiting Scientist/research collaborator,	--NA--	Joachim Wollschläger
Gwangju Institute of Sci. & Tech. (GIST), South Korea	June-July 2018 (21 days)	Visiting Professor,	--NA--	Rajesh Kumar
Jaypee University of Information Technology, Wagnaghat	14-03-2019	Workshop cum exposure visit	140 Final year B.Sc. (non-medical) students of Govt. Degree College Solan, HP	Dr. Pawan Kumar, Dr Deepak Gupta, Dr. Anil Thakur, Govt. Degree College Solan, HP

St. Bede's College, Shimla	28-02-2019	Conducted One Day Workshop on 'National Science' workshop was conducted by the Departments' of - Biotechnology & Bioinformatics and Physics & Materials Science	Final year B.Sc. (non-medical) students of St. Bede's College, Shimla	Dr R.R. Singh, Dr. Sanjiv K Tiwari & Dr. Pankaj Sharma fas Resource Persons from Jaypee University of Information Technology, Wagnaghat
----------------------------	------------	---	---	---

- **Recognition & Awards**
 - **By Faculty : Nil**
 - **Students : Nil**
- **Composition of Various Bodies**
 - **Board of Studies (BOS)**

Ser No	Name	Designation	Institution
1.	P. B Barman	Professor	JUIT
2.	Sunil K. Khah	Professor	JUIT
3.	Vineet Sharma	Associate Professor	JUIT
4.	Pankaj Sharma	Associate Professor	JUIT
5.	Rajesh Kumar	Associate Professor	JUIT
6.	Dheeraj Sharma	Asstt. Prof (SG)	JUIT
7.	Surajit K Hazra	Asstt. Prof (SG)	JUIT
8.	Ragini Raj Singh	Asstt. Prof (SG)	JUIT
9.	Sanjiv Tiwari	Asstt. Prof (SG)	JUIT
10.	Karanjeet Singh	Professor	JUIT
11.	S. P. Ghreera	Professor	JUIT
12.	Ashok K. Gupta	Professor	JUIT
13.	Sudhir Syal	Professor	JUIT
14.	M. J. Nigam	Professor	JUIT
15.	D. K. Rai	Professor	JIIT, Noida
19.	Anil Vohra	Professor	K.U. Kurkshetra

DEPARTMENT OF MATHEMATICS

Vision:

- To produce leaders in technology with excellent analytical skills through mathematics education at global level and training the students in acquiring conceptual understanding of the framework and structure of mathematics, its logical, cognitive and operational processes, and applications.

Mission:

- To strive by introducing the students to main ideas and methods of Mathematics for building up their reasoning and analytical skills.
- To provide quality Mathematics course work which supports and enhances the capability and competence in assimilating, dissecting and distilling information for engineering and technology applications.

Faculty Details

S.No.	Name	Qualification	Specialisation
1.	Prof. (Dr.) Karanjeet Singh	Ph.D.	Nonlinear Differential Equations
2.	Dr. R. S. Raja Durai	Ph.D.	Algebraic Coding Theory
3.	Dr. Rakesh Bajaj	Ph.D.	Fuzzy Information Measures
4.	Dr. Neel Kanth	Ph.D.	Mathematical Modelling
5.	Dr. Pradeep Kumar Pandey	Ph.D.	Differential Geometry
6.	Dr. Saurabh Srivastava	Ph.D.	Nonlinear Programming (OR)
7.	Dr. Mandeep Singh	Ph.D.	Nonlinear Boundary Value Problems
8.	Dr. Vishal Mehta	Ph.D.	Statistical Inference, Sampling Theory and Applied Statistics

- **Ph.D. Program**

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, wavelets and differential equations, Algebraic Coding Theory, sequence design, distributed source coding, fuzzy information measures, decision making, pattern recognition, Nonlinear Programming (Operations Research), Statistical Inference, Sampling Theory and Applied Statistics.

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, SPSS, Lingo and Lindo.

Conferences

- **Conferences Organised - Nil**
- **Conferences Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
5-7 Dec, 2018	Recent Advances in Fluid and Thermal Sciences	BITS Pinali Dubai Campus	Neel kanth	Presented research paper
3-5 Aug, 2018	National Conference on Differential Geometry and Its Applications	Nehru Gram Bharti University, Allahabad, U.P.	Pradeep Kumar Pandey	Presented research paper

Seminars

- **Seminars Organised – Nil**
- **Seminars Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
30 th Nov. 2018	Patent Filing Procedures and Geog Indications of HP	JUIT	Rakesh Kumar Bajaj	

- **Workshops Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
15 th June, 2019	NPTEL Workshop	JUIT Waknaghat	Dr. Pradeep Kumar Pandey	Organized by IIT Roorkee, held at JUIT
15 th June, 2019	NPTEL Workshop	JUIT Waknaghat	Dr. Vishal Mehta	Organized by IIT Roorkee, held at JUIT
20 th – 25 th May,	FDP on “Recent Trends On Machine Learning For Signal Processing	Department of ECE, JUIT	Dr. Vishal Mehta	

2019	(RTMLS)”	Waknaghat		
20 th – 25 th May, 2019	FDP on “Recent Trends On Machine Learning For Signal Processing (RTMLS)”	Department of ECE, JUIT Waknaghat	Dr. Mandeep Singh	

- **Publications**

- Journal Publications

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
R S Raja Durai	Design of T -Direct codes over $GF(2^N)$ with increased users	Finite Fields and Their Applications (Elsevier)	vol. 55, pp. 202-215, 2019.	
R S Raja Durai	Construction of high rate T - Direct codes	Journal of Computational and Applied Mathematics (Springer)	vol. 37(5), pp. 5844 -5856, November 2018.	
Rakesh Kumar Bajaj	On Pythagorean fuzzy soft matrices, operations and their applications in decision making and medical diagnosis	Soft Computing,	SCI – Scopus Aug 2018 https://doi.org/10.1007/s00500-018-3419-z IF= 2.367	
Rakesh Kumar Bajaj	Credibility distribution based R -norm fuzzy information measures in noiseless coding theorems	International Journal of General Systems 48 (3), 302-320	SCI – Scopus 2019	
Rakesh Kumar Bajaj	Pythagorean Fuzzy-Norm Information Measure for Multicriteria Decision-Making Problem	Advances in Fuzzy Systems	Scopus 2018	
Rakesh Kumar Bajaj	Multi-criteria Decision Making with Triangular Intuitionistic Fuzzy	Procedia Computer Science 125, 34-41	Scopus 2018	

	Number based on Distance Measure & Parametric Entropy Approach			
Neel kanth	Nip Mechanics Model for Rolling Calender used in Textile Industry	Journal of the Siberian society of computational mechanics	DOI: 10.24874/jssc.2018.12.02.03	
Neel kanth	Study of heat flow in a rod using homotopy analysis method and homotopy perturbation method	AIP conference proceedings	https://doi.org/10.1063/1.5086635	
Pradeep Kumar Pandey	Bronze differential geometry	Journal of Science and Arts, 4(45), pp 973-980 (2018). Indexed in Emerging SCI, zbMATH, ISSN: 1844-9581.	ESCI	
Mandeep Singh	On an Iterative method for a class of 2 point & 3 point nonlinear SBVPs	Journal of Applied Analysis and Computation	Volume 9, Number 4, 2019, 1242-1260	

• **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Vishal Mehta	A New Morgenstern Type Bivariate Exponential Distribution With Known Coefficient Of Variation By Ranked Set Sampling.	<i>“Ranked Set Sampling: 65 years improving the accuracy in Data Gathering”, Publisher: ELSEVIER (USA), 127-141. [ISBN: 9780128150443].</i>	Ranked Set Sampling. DOI: https://doi.org/10.1016/B978-0-12-815044-3.00010-1	
Vishal Mehta	Shrinkage Estimators Of Scale Parameter Towards An Interval Of Morgenstern Type Bivariate Uniform Distribution Using Ranked Set Sampling	<i>“Ranked Set Sampling: 65 years improving the accuracy in Data Gathering”, Publisher: ELSEVIER (USA), 143-155. [ISBN: 9780128150443].</i>	Ranked Set Sampling. DOI: https://doi.org/10.1016/B978-0-12-815044-3.00010-1	

		9780128150443].	815044-3.00011-3	
Pradeep Kumar Pandey		Lecture Notes in Discrete Mathematics	Lambert Academic Publishing, 2019.	ISBN: 978-613-7-34497-2

- **Guest Lectures : Nil**
- **Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Vishal Mehta	Assistant Professor (Grade-I)	“Utilization of Statistical Software’s in Research Work”	11 th March, 2019	National Seminar on “Statistical Tools and Software’s Used for Making Project/Dissertation/Thesis” at BFiT Group of Institution, Deharadun, Uttarakhand, India.
Saurabh Srivastava	Assistant Professor (Grade-II)	Integral Calculus	8 th July 2019	SCERT, SOLAN

- **Composition of Various Bodies**
 - **Board of Studies (BoS)**

Ser No	Name	Designation	Institution
1.	Prof. (Dr.) Karanjeet Singh	Professor & HoD (Maths)	JUIT
2.	Dr. R. S. Raja Durai	Associate Prof. of Maths	JUIT
3.	Dr. Rakesh Kumar Bajaj	Associate Prof. of Maths	JUIT
4.	Dr. Neel Kanth	Assistant Prof. of Maths	JUIT
5.	Dr. Pradeep Kumar Pandey	Assistant Prof. of Maths	JUIT
6.	Prof. P. B. Barman	Prof. & HoD Physics	JUIT
7.	Prof. S. P. Gherera	Prof. & HoD CSE	JUIT
8.	Prof. Ashok Kumar Gupta	Prof. & HoD Civil	JUIT
9.	Prof. Sudhir Syal	Prof. and HoD BT, BI	JUIT
10.	Prof S. K. Tomar	Prof. of Maths	Punjab University, Chandigarh

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

- **Department Vision and Mission**

- **Vision**

To be the change-facilitators by imparting professional and behavioral competencies to complement the existing and emerging educational programs of the University and match the Industry Requirements.

- **Mission**

M1: To facilitate students and professionals to become Innovative, Competitive and Enterprising in their chosen fields.

M2: To create responsible global citizens, who are able to express and assess opinions, take independent decisions and value the power of imagination and continuous learning.

M3: To bridge the gap between academia and industry by incorporating contemporary concepts and practices in our courses.

- **Faculty Details**

<u>Faculty Name</u>	Qualification	Specialisation
Dr Anupriya Kaur	PhD	Marketing
Dr Amit Srivastava	PhD	Finance and International Business
Dr Tanu Sharma	PhD	HRM
Ms Triambica Gautam	MBA	Banking and Finance
Dr Papiya Lahiri	PhD	Commonwealth Literature, British and Canadian Drama, Gender Studies
Dr Neena Jindal	PhD	Good Governance, Human rights
Dr Sakshi Khanna	PhD	Finance

- **New Courses introduced during the year**

S No	Title of New Course	Course Code
1	Contemporary India in Globalized Era: Challenges of Democracy and Development	18B1WHS831
2	Soft Skill Workshop	Optional workshop

- **Ph.D. Program**

The Department of Humanities and Social Sciences strives to nurture young minds to become well-rounded engineers, responsible global citizens and leaders. The Department acts as change-facilitator by imparting professional and behavioral competencies to complement the existing and emerging educational programs of the University. We have multifaceted faculty in the department who offer a variety of contemporary courses to students at undergraduate and post graduate level. Additionally, the faculty has been vigorous in conducting FDP programs, community development programs and workshops based on research methods. Faculty in the department has been actively pursuing and guiding research in the areas of marketing management, finance and econometrics, business communication and human resource management with research publications in journals of high repute.

Research Specializations: Consumer Behavior, Service Marketing, Internet Marketing, Corporate Social responsibility, Emotional intelligence, Good Governance, English Language and Literature, Conflict Management, Corporate Finance, Financial Econometrics, Personal Finance, International Business, Behavioral Finance, Economic Development and Financial & Management Accounting.

- **Lab Facilities**

Equipments

1. Dell Computer-D19M-Intel Core i5-7400-7th Gen@3.00Ghz, RAM-8Gb, HDD-1TB Windows 10 Pro (25)
2. Headphones (30)

- **Operational Softwares**

1. Snet 8.0 Client, Business Writing, Tense Buster (Port 1-30)
2. Snet 8.0 Master, Business Writing, Tense Buster (1)
3. IBM SPSS Statistics 24 (Port 2,3,4)
Cyber client, office 2007

- **Lab Staff with Qualification**

Name	Designation	Qualification
Arun Guleria	Junior lab Assistant	B.Tech (CSE)

- **Conferences Organised - Nil**

- **Conferences Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
Dec., 08,2018	7 th International Conference on Pradigm Shift in Global Business Pracrices and Socio Economic Development,	Vishisht Institute of Professional studies and Research, Indore	Tanu Sharma	Paper presentation

- **Seminars Organised – Nil**

- **Seminars Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
29 March 2019	Migration and Nostalgia: Australia, New Zealand, India	Himachal Pradesh University, Shimla.	Dr. Papiya Lahiri	
22 February, 2019	Patents on Computers and Electronics	Jaypee University of Information Technology, Wagnaghat, Solan	Triambica Gautam	

- **Workshops Organised**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
June 10-16, 2019	8th One Week Workshop on Tools and Techniques for Data Analysis in Management Research	JUIT	Dr. Amit Srivastava (Org Secy and Resource Person), Dr. Anupria Kaur (Coordinator and Resource Person)	

- **Workshops Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
30 November, 2018	One day Workshop on “Patent Filing Procedures and Geographical Indications of Himachal Pradesh”	Jaypee University of Information Technology, Waknaghat, Solan, Himachal Pradesh.	Triambica Gautam	
May 20-25, 2019	Six day Faculty Development Workshop on “Recent Trends on Machine Learning for Signal Processing(RTMLS)”	Jaypee University of Information Technology, Waknaghat, Solan, Himachal Pradesh.	Triambica Gautam	
30 November, 2018	One day Workshop on “Patent Filing Procedures and Geographical Indications of Himachal Pradesh”	Jaypee University of Information Technology, Waknaghat, Solan, Himachal Pradesh.	Dr. Papiya Lahiri	
30 November, 2018	One day Workshop on “Patent Filing Procedures and Geographical Indications of Himachal Pradesh”	Jaypee University of Information Technology, Waknaghat, Solan, Himachal Pradesh.	Dr. Sakshi Khanna	
7-14, June.2019	Stress Management in Higher Education	International Roerich Memorial trust, Naggar, Manali, Himachal Pradesh	Dr Neena Jindal	

- **Publications**

- Journal Publications

<u>Name of Faculty</u>	<u>Title of Article</u>	<u>Name of Journal</u>	<u>Reference</u>	<u>Citation</u>
Dr Neena Jindal	Neena Digital India: Challenges, Solutions and its Impact on Society	International Journal of Environment, Ecology, Family and Urban Studies	Online	UGC
Dr Tanu Sharma	Technology and Automation-A	7th International Conference on	Online	UGC

	Threat To Human resource management?	Pradigm Shift in Global Business Pracrices and Socio Economic Development		
Dr Tanu Sharma	Role of Cultures in Socio-Economic Development: Case study of India and China”,	7th International Conference on Pradigm Shift in Global Business Pracrices and Socio Economic Development	KAAV, International Journal of Economics Commerce and Business management, VOI(6) Issue (1) ISSN:2348-4969	UGC
Dr Tanu Sharma	Role of Emotional Intelligence in Enhancing Leadership skills in Higher Education	7th International Conference on Pradigm Shift in Global Business Pracrices and Socio Economic Development	KAAV, International Journal of Economics Commerce and Business management, VOI(6) Issue (1) ISSN:2348-4969	UGC
Dr Anupriya Kaur	Tier 2 consumers online segmentation- insights from an empirical study in india	ELK's International Journal of Marketing - UGC Approved	Volume 10, Issue 1 (2019)	UGC
Dr Anupriya Kaur	Online shopping Attitude of Indian Tier 2 Consumers : Some Qualitative Insights	International Journal of Online Marketing, Volume 9, Issue 2 (forthcoming)	IGI Global Web of Science Emerging Sources Citation Index (ESCI)	ESCI
Dr Anupriya Kaur	Kaur, A. & Thakur, P (2018) Determinants of Tier 2 Indian Consumer's Online Shopping Attitude: A SEM Approach	Asia Pacific Journal of Marketing and Logistics (under revision)	Emerald Publishing SSCI, Scopus Indexed Ranked 'B' ABDC Ranking	SSCI

- **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Dr. Papiya Lahiri	Interview of Papiya Lahiri published.	Writersmel on.com	Online Publication	

- **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Dr Tanu Sharma	Technology and Automation-A Threat To Human resource management?	7 th International Conference on Pradigm Shift in Global Business Pracrices and Socio Economic Development	Online	8,Dec., 2019
Dr Tanu Sharma	Role of Cultures in Socio-Economic Development: Case study of India and China”,	7 th International Conference on Pradigm Shift in Global Business Pracrices and Socio Economic Development	KAAV, International Journal of Economics Commerce and Business management, VOI(6) Issue (1) ISSN:2348-4969	8,Dec., 2019
Dr Tanu Sharma	Role of Emotional Intelligence in Enhancing Leadership skills in Higher Education	7 th International Conference on Pradigm Shift in Global Business Pracrices and Socio Economic Development	KAAV, International Journal of Economics Commerce and Business management, VOI(6) Issue (1) ISSN:2348-4969	8,Dec., 2019

- **Guest Lectures – Nil**
- **Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Dr. Amit Srivastava	Associate Professor	Microsoft Excel for beginners	Feb 18-20, 2019	Baddi University of Emerging Sciences and Technology, Baddi, Solan

- **Visits Organised**

Institution visited	Dates	Aim of visit	Participation	
			Students	Faculty
Directorate of Elementary Education	16.04.2019	Collecting data and information on preparing of External Evaluation report for Mid Day Meal Programme in Himachal Pradesh.	Students	Faculty Dr. Papiya Lahiri. Dr. Sakshi Khanna
Delhi Education Fair Expo	17.05.2019 - 20.05.2019	Delhi Education Fair Expo		Dr. Papiya Lahiri
Selected Schools In Shimla District , HP		Preparing of Questionnaire, Collecting data and information For External Evaluation report for Mid Day Meal inHP		Dr Tanu Sharma

- **Recognition & Awards**

- **By Faculty**

Name of Faculty	Designation of Faculty	Award	Date	Achievement
Dr. Papiya Lahiri	Asst. Prof. (Grade II)	On NPTEL received Elite plus Gold certificate for an 8 week course on Enhancing Soft Skills and Personality from IIT Kanpur with 94 %. (Top 2%)	27.04.2019	Elite plus Gold certificate

- **Composition of Various Bodies**

- **Board of Studies (BOS)**

Sr No	Name	Designation	Institution
1.	Dr. Anupriya Kaur	HoD-HSS	Dept of HSS, JUIT
2.	Sh. Balkar Singh	AGM (EC)	Punjab Energy Development Agency Chandigarh
3.	Prof. S.P. Singh	Dept of Humanities & Social Sciences	IIT Roorkee,
4.	Dr. Amit Srivastava,	Associate Professor	Dept of HSS, JUIT
5.	Dr. Tanu Sharma,	Asst Professor (Sr. Grade)	Dept of HSS, JUIT
6.	Dr. Ashish Kumar	Associate Professor	Dept of CE, JUIT

Student Consultative Committee

S. No.	Name	Semester
1	Shazan Ahmed	Second semester
2.	Aditya Tiku	Second semester
3.	Tarun Gupta	Fourth Semester
4.	Aakriti Chauhan	Fourth Semester
5.	Manasvi Kashyap	Sixth Semester
6.	Mahima Suri	Eighth Semester
7.	Yogesh Khurana	Eighth Semester

CENTRES

LEARNING RESOURCE CENTRE (LIBRARY)

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

LRC is a separate block of three storied building embedded to main academic block which accommodates 275 students at a time in order to carry any activity related to study and research. The LRC has **41032** volumes of books and **1394** back volume of journals covering the disciplines of Computer Science Engineering, Electronics & Communication Engineering, Information Technology, Civil & Environmental Engineering, Biotechnology, Bioinformatics, Mathematics, Physics, Material Science, Management, and other general subject areas. The Collection comprises of Print monograph such as Textbooks, Reference Books, Encyclopedias, Handbooks, Dictionaries, Theses, Standards, etc. LRC has been subscribing to **20** International Journals, **51** National Journals, and **41** National and International magazines, in print, in order to supplement teaching and research activities of the university.

LRC has access to various online databases such as IEEE, ACM, Springer, ASCE, ASTM, IET, SIAM, MathSciNet, World eBook Library, South Asia Archive, Packt Publishing e-Books, J-Gate (Sci. & Tech.) etc. These e-resources accommodate over 41+Lakh full-text e-books, and other electronic resources such as Journals, Conference Proceedings, Transactions, Magazines and Reports. All e-resources are accessible over IP range of the campus. LRC has also acquired NPTEL (National Programme on Technology Enhanced Learning) course contents from IIT Kanpur and hosting it on a high capacity server for providing seamless access to users within the campus. LRC system is fully computerized and bar-coded with the latest version of Library Management Software known as '**Liberty**'- Internet-based library automation software). The library has a separate dynamic website. The collection of the library can be browsed, searched and explored with the help of OPAC (Online Public Access Catalogue) anywhere in the campus. The library has been providing dedicated terminals to access OPAC throughout the library premises. It has about 65 dedicated computer nodes that are fully connected with LAN & WiFi Internet facility. Students, faculty, research scholars can use computer facility in LRC for the purpose of browsing the Internet, accessing journals, reading course materials etc. during the opening hours of the LRC.

LRC remains open from 9.00 AM to 12:00 Midnight except for holidays. LRC has also implemented an integrated electromagnetic security system from 3M, USA for keeping a check on print materials movement in the LRC. The LRC has been maintaining an institutional repository on Dspace, an Open Source Software, for managing scholarly research output of the university. The library is extending various quality services such as subject support, research support, maintaining JUIT publications database, providing anti-plagiarism detection by using Turnitin software, locker facility for research scholars and various alert services.

LRC is an 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. LRC is

also participating actively in Shodhganga (a reservoir of Theses of Indian Universities), Shodhgangotri- a repository of Synopses/Research Proposals for Ph.D.) and e-Shodh Sindhu of INFLIBNET to subscribe e-resources. The LRC has been playing an active role in the National Digital Library (NDL) mission and sharing university publications to all academicians through NDL portal. About 1500 publications have already been shared with the NDL and accessible through the NDL portal.

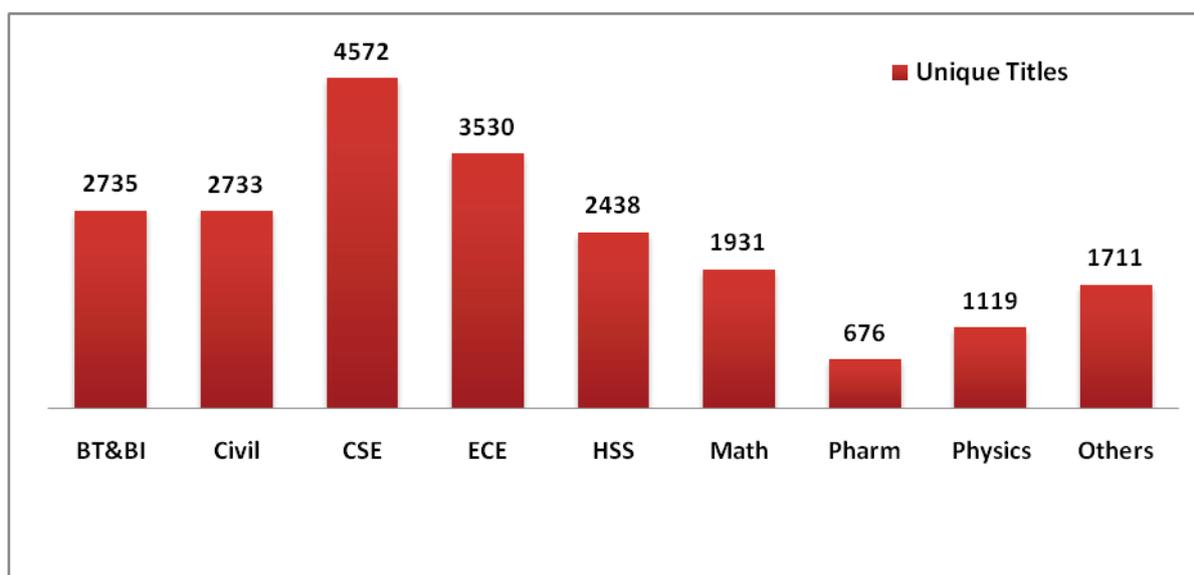
Resource Collection

- Unique Titles : **21445**
- Total Copies : **41032 [As on 30-06-2019]**

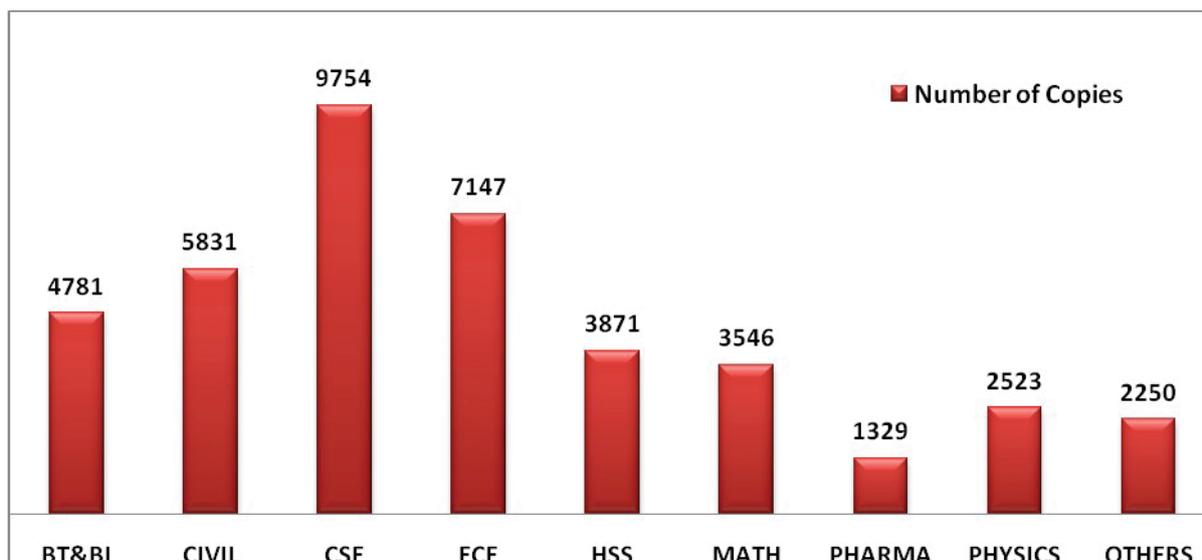
Subject-wise Book Collection:

S. No.	Departments	Titles	Copies
1	Bioinformatics & Biotechnology	2735	4781
2	Civil Engineering	2733	5831
3	Computer Science Engineering	4572	9754
4	Electronics & Communication Engineering	3530	7147
5	Humanities & Social Sciences	2438	3871
6	Mathematics	1931	3546
7	Pharmacy	676	1329
8	Physics	1119	2523
9	Others	1711	2250
	Grand Total	21445	41032

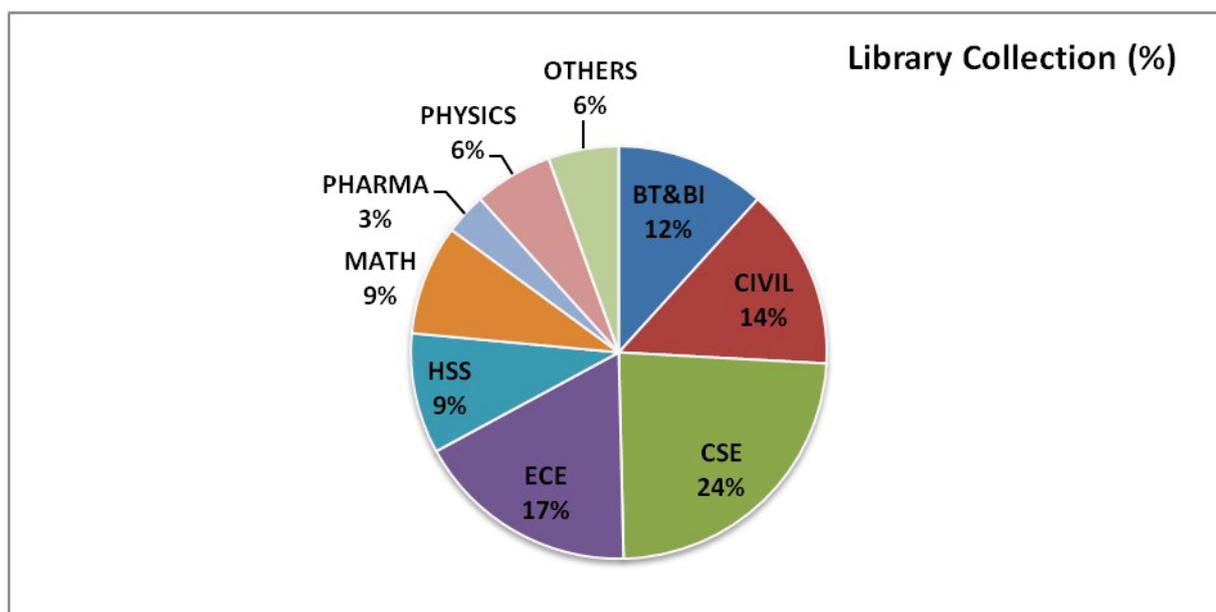
Subject-wise unique titles (Books) in the library collection:



Subject-wise total volumes or copies (Books) in the library collection:



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



BT&BI=Biotechnology and Bioinformatics; 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 Accessible at JUIT:

S. No	Database	E-Books	No. of Journals	Conference proceeding and other reports	Total
1	Association of Computer Machinery (ACM)	-	66	1082	1148
2	American Society of Civil Engineers (ASCE)	-	37	-	37
3	Institute of Electrical and Electronics Engineers (IEEE)	-	207	3855	4062
4	Springer	-	1700	-	1718
5	ASTM Digital Library	-	9	1715	1724
6	IET Digital Library (IET)	-	31	1494	1525
7	Society for Industrial & Applied Mathematics (SIAM)	372	-	-	372
8	World eBook Library	41+ Lakh	-	-	41+ Lakh
9	South Asia Archive	2595	388	213	3196
10	Packt Publishig e-Books	50			50
11	J-Gate (Sci. & Tech.)		4500		4500
12	MathSciNet	Searchable database of reviews, abstracts, and bibliographic information			

Other Collections: 4694

Type of Resource	Number
Print Journals (International)	20
Print Journals (National)	51
Print Magazines	41
Back Volume Journals	1394
Ph.D Theses	180
Dissertations (M.Tech & Dual Degree)	694
Project Reports (B.Tech)	2300
*Newspapers	14

*Multiple copies of each newspaper are being subscribed

IT CENTRE

The main objectives of the Server Room (IT 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 printing needs JUIT has total 70 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 226	Intel® XEON 3.0 GHz 4 GB RAM 140 GB SCIC HDD with RAID Support.	1
2	IBM System X 3400	Intel® XEON 2.0 GHz 4 GB RAM 956.32 GB SCIC HDD with RAID Support.	6
3	IBM server X 3100 M4	Intel® XEON E31220 @ 3.10 GHZ 8 GB DDR IV RAM 1200 GB SCIC HDD with RAID 5 Support , 17 inch TFT monitor	3
4	CR 1000i	10 10/100/1000 Gigabit ports with 3.5 Gbps firewall throughput and 600 Mbps anti-virus throughput	2
5	IBM X Series 3500	Intel® XEON 2.26 GHz 6 GB DDR III RAM 1200 GB SCIC HDD with RAID 5 Support , 17 inch TFT monitor	6
6	HP ML 110G SERVER	Intel XEON QUAD Core X3430 Processor, 4 GB DDR III RAM 250 GB	2

		HDD sata , 18.5 inch TFT monitor	
7	Dell	Dell Precision Tower 3420 with Intel Xeon E3-1225 3.3 ghz,8gb ddr4,19 inch tft and mouse	10
8	IBM X3300	IBM server x3300 m4 server 16 gb ram,1200 gb hdd with raid 5 card	1
9	HP rack server	hp dl 60 gen 9 intel xeon e5 (2.1 ghz/8core/20 mb/85w) Additional processor 2620 v4 2.1 ghz,8 core & 20 mb l3,16 gb X3 ram,HPE 240 smart HBA,hpe 6 tb hdd X4	1
10	HP rack server	hp dl 60 gen 9 intel xeon e5 (2.1 ghz/8core/20 mb/85w) Additional processor 2620 v4 2.1 ghz,8 core & 20 mb l3,16 gb X3 ram,HPE 240 smart HBA,hpe 3 tb hdd X3	2
11	HP rack server	hp dl 60 gen 9 intel xeon e5 (2.1 ghz/8core/20 mb/85w) Additional processor 2620 v4 2.1 ghz,8 core & 20 mb l3,16 gb X3 ram,HPE 240 smart HBA,hpe 2 tb hdd X3	1
12	Lenovo Rack server	Lenovo data center solutions thinksystem sr530 including Lenovo rok win server 2016	3
Total Number of Server			38

DESKTOP DETAILS			
S.No	Brand	CONFIGURATIONS	QTY
1	IBM	P IV with 3 GHz, 80 GB HDD & 512 MB RAM and 17 inch monitor	88
2	IBM	Core 2 due 2.4 Ghz, 160 GB HDD & 1 GB RAM 17 inch Monitor	52
3	IBM	P4 3.06 Ghz,80 GB HDD,512 MB RAM & 15 inch Monitor	10
4	IBM	Celeron 2.4 Ghz,40 GB HDD,256 MB RAM & 15 inch Monitor	10
5	IBM	Dule core 1.8 Ghz,80 GB HDD ,1 GB RAM & 17 inch Monitor	40
6	IBM	Dule core 1.8 Ghz,80 GB HDD ,512 MB RAM & 17 inch Monitor	15
7	IBM	INTEL CORE 2 DUO,160 GB HDD,4 GB RAM & 17 inch Monitor	2
8	IBM	INTEL CORE 2 DUO,160 GB HDD,2 GB RAM & 17 inch Monitor	50

9	IBM	INTEL CORE 2 DUO,160 GB HDD,2 GB RAM & 17 inch Monitor	125
10	IBM	core i3-530 (2.92 GHz) with 2 GB RAM ,250 GB Sata HDD,18.5 inch TFT Monitor	90
11	IBM	Core I3- 2100 3.10 GHz with 2 GB RAM ,320 GB Sata HDD,18.5 inch TFT Monitor	80
12	IBM	Core I3- 2100 3.10 GHz with 4 GB RAM ,500 GB Sata HDD,dvd rom,18.5 inch TFT Monitor	120
13	HP	Intel core i5-6500 3.2 G 6M 2133 4C CPU with 18.5 inch TFT ,KB and Mouse	190
14	Dell	Desktop Dell i5 7th gen,8 gb ram,1 tb HDD with 18.5 inch tft	300
15	HP	Desktop Model HP 280 G4 MT	10
16	Dell	dell Desktop intel core i7-8700,8 gb dd4 ram,19 inch led,win10 pro 64 bit. 1tb hdd	10
		Total Number of computers	1192

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	SQL Server 2000 Standard Edtn	1
11	Windows Server CAL 2003 English OLP NL AE Device CAI	4
12	VStudio .Net Pro 2003 Win32 English OLP NL	15

	AE	
13	Office XP Pro Win 32 English	20
14	VStudio .Net Pro 2002 Win32 English	9
15	ISA Server 2000 English	1
16	Windows Advanced Svr 2000 English.	1
17	Windows CAL 2000 English OLP NL AE	23
	DB2 UBD Enterprise Server Edition .	1
18	IBM Tivoli Storage Managed Processor	1
19	Cyberoam software for internet	1
20	Schrodinger For Biotech	1 user 25 Token
21	Lotus Domain	100
22	AutoCad 2005 Education	5
23	A'Desk 3 ds Max 6 (Edu)	20
24	Rational suit Enterprise Software	20
25	Mathematica Ver 5.0	10
26	Autocad 2004 Network User	10
27	Maple 9.5	1
28	Sun Solrix Ver 8	35
29	Window XP Proffesional	20
30	Oracle 9i	10
31	Visual Prolog ver 6.1	15
32	Soft image xsi Ver 4.0	20
33	Staad Pro	5
34	SPSS Base 16.0	15
35	Oracle 11g	1
36	Clarity Digital Multimedia Language Lab	31
37	Clarity English Teaching Software from U.K	
	1. Sky Pronunciation Suite	5
	2. Connected Speech	5
	3. Tense Buster Compilation	5
	NI Lab View Academic Site License 2010	50
38	Pasw Amos 18.0	3
39	Windows Server Enterprise 2008 with media	10
40	Antivirus Symantec Protection Suite enterprise	1000
41	Bentley Civil of perpetual network based software a.Mx Road V8 b.Power Civil c.Power Map	5
42	Ansys release 12.1	
43	HyperLynx 3d EM Super Structure Designer V 15.2	3
44	Auto CAD 2013	30
45	Matlab ver 10	50

46	Simulink	10
	Filter Design Toolbox	10
	Communications Blockset	10
	Communications Toolbox	10
	Signal Processing Toolbox	10
	Video and Image processing Blockser	10
	Window server standard 2012	4
47	Geo 5 suit of Software with various modules	50
48	Xilinx UEF-VIVADO_SYSTEM	25
49	Base2 100	7
	Atlys Spartan-6 FPGA Development Board	1
	8.1 V Clarity Snet Language Lab software 1 teacher + 30 User	30 user
50	Tense Buster V9 for 20 user	20 user
	Business writing for 30 user	30 user
	SPSS Base 24.0	1
51	SPSS Advance Statistics	1
	SPSS regression	1
	SPSS Neural Network	1
	SPSS conjoint	1
	SPSS Amos 24.0	1
	SPSS Categories	1
	Acrobat Pro 2017	10
52	Windows server 2016 pro	4
53	Matlab 2018 b	25
	simulink	5
	Signal Processing toolbox	5
	dsp system toolbox	5
	communications toolbox	5
	control system toolbox	2
	image processing toolbox	2
	statistics and machine learning	2
	deep learning toolbox	2
	antenna toolbox	2
	54	SIMULIA Academic Teaching Suite Q9T for 20 user
55	PMOD Wifi Interface 802.11 G for ECE department	1
	PMOD MP3 Temperature Sensor	1
56	Windows server 2016 pro	3

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 63-3 com switches, 3 Cisco Routers, 26 Cisco switches, 10 Aruba switch, 17 Cisco AP ,6 HP AP and 16 VLANs. H1-H2-H3 hostel is complete wifi with 19 Access point.

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) internet lease line circuit from BSNL and 40 MBPS from Railtel 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 Sophos XG 450 security Appliance to manage internet bandwidth and mailing services. Sophos 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

JUIT endeavors worldwide collaborations with Universities, Research Laboratories and Industries with a view to making the best in academic expertise. The JUIT has MOU with following Universities and Institutions:

1. University of Florida, International Center, Florida, USA.
2. College of Information Science & Technology, University of Nebraska at Omaha.
3. South Dakota School of Mines and Technology, USA.
4. MoU with Youth Development Fund Bhutan.
5. MoU with National School of Applied Sciences (ENSAYg), Tangierorocco, Morocco.
6. Tampere University of Applied Sciences, Finland - MOU valid upto October, 2019
7. Department of Industries, Government of Himachal Pradesh – MOU signed on 08.05.2017 – Term of engagement not disclosed.
8. Pushchino State Natural Science Institute, Russia – MOU valid upto August, 2022.
9. The Institute of Electrical & electronics Engineers, Incorporated, (IEEE) New York – MOU signed in May 2012 – Term of engagement not disclosed.
10. MOU with DRDO

ACADEMIC ADMINISTRATION

Admission Process

1) **UG Program**

During the academic session 2018-19, 80% of the admissions were carried out through a common counseling process for students having JEE (Mains) All India Rank. 20% of the admissions to the programme were made on the basis of 10+2 marks merit basis.

In B. Tech Biotechnology & Bioinformatics 50% seats were filled through JEE (Mains) All India Ranking basis and 50% seats were on the basis of 10+2 Merit Basis.

Admission to B. Tech. 2nd year under (Lateral Entry) were made on the merit marks of three year diploma / B.E. / B. Tech 1st year in related branch of engineering.

2) **PG Program**

Admission to PG programs (M. Tech.) were offered to the eligible candidates having valid GATE score and through PGET-2018 conducted by University for Non GATE qualified candidates followed by an interview by the PG programme Selection Board.

3) **Doctoral Programme:**

Admission to the Ph.D. programs were offered to the eligible candidates having UGC/CSIR NET/SLET and through Ph.D. Entrance Examination conducted by the University for Non NET / SLET qualified candidates followed by an interview of the shortlisted candidates qualified in entrance examination based on their inter se merit among the shortlisted candidates.

4) **Students Enrollment**

The status of student strength as on 30 Sep 2018 is given below.

<u>Year of Study</u>	<u>U.G. Prog.</u>	<u>P.G. Prog.</u>	<u>Integrated Dual Degree Prog.</u>
6 th Year	01		
5 th Year	21		04
4 th Year	488		
3 rd Year	430		
2 nd Year	392	24	
1 st Year	383	13	

Ph.D. Scholars Registered during the Academic Session 2018-19 are 154

FACULTY AND SCHOLARSHIPS

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

Visiting / Adjunct Faculty

The University also has eminent academicians and industry persons on its rolls as visiting faculty to conduct specialized classes.

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. An analysis of results of last four years is given in **Appendix-G**.

Scholarships

1. **Prof. William C Webster Merit & Means Scholarship:** Eligible students get a tuition fee waiver for a year upto a maximum of one semester's fees. The scholarship was started in the year 2004-05.
2. **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 JEE conducted by CBSE, shall be provided free education for the entire duration of under graduate program.
3. **Students from Bhutan under Scholarship Scheme –** Students from Bhutan are exempted from paying the Tuition fee & Hostel charges.
4. **Teaching Assistantship for M. Tech. Students**
5. **Research Fellowship for Ph.D. Students**

JUIT YOUTH CLUB (JYC)

This is the official student body of University and it conducts various events. The body consists of 9 clubs and 5 committees which organize various fests & activities throughout the year for extra co curricular development of the students.

Masterchef (18th January, 2019)

The Cultural Club organized the first event of the year, MasterChef to bring out the oozing talent of cookery. We had 12 teams of 2 to 3 members each. Teams started to prepare dishes they had thought of, but God be the witness, it doesn't always go as per the plan. Some teams had some of the ingredients short, while others tried desperately to prepare a dish worth presenting. With time running as per it's fate, and competition about to be over, the dishes were ready for display.



The team from Electronics 3rd Year convincingly lead the scores all the way through.

DIKSHA –the freshers night

To welcome the Freshers, Diksha 2k18 - A Freshers' Night was organised in the Auditorium on 24th August 2018. The event began with the welcoming of the guests and was followed by the traditional lamp lightening ceremony. The night saw a mixture of traditional and western dances, with various dance groups coming to the fore. Rhythm Twisters came up with a freestyle dance performance, and along with entertaining the audience, it also educated the audience about the ill effects of drug addiction. With this standoff performance, the group won the best dance award in the western dance category. Apocalypse, another one of JUIT's most amazing dance groups, came up with a power packed hip-hop performance, along with good performances from DNR and F-society. In the category of traditional dances, the

night was graced with a performance of Himachali folk dance 'Natti' by Pakke Pahadiye, a choreography thoroughly enjoyed by the audience.



Also staged were a series of colourful and heart touching acts, ranging from a mime on freedom fighters by Young Thespians to a funny choreography on modern day dating by Stage Players. The mime showcasing the sacrifices of our brave freedom fighters, awakened a sense of patriotism. The modern day dating act was one that sent roars of laughter through the audience. To select the Mr. and Ms. Fresher 2k18, two rounds of ramp walk were held, with freshers walking down the ramp in their best attires. The second round - question & answer round- led to the selection of the winners of the night.



No function is complete without singing performances, and Diksha 2k18 witnessed many solo and duet singing performances too. The last performance of the night was the Bhangra, which as Natti, sent an extreme energy wave throughout the auditorium as everybody began dancing. The United Bhangra Crew, for its performance, won the best dance award in the traditional dance category. The announcement of the winners brought the function and JYC's tenure to a close and all sorts of new possibilities for the new batch.

Swachh Bharat Abhiyaan

The JYC organised Cleanliness Drive under Swachh Bharat Abhiyaan on 1st October 2018. The main purpose of this programme was to create awareness among the students regarding cleanliness and its benefits. Under this programme, all the students and the faculty members had to participate in it. Each department was allotted with different locations of the University. Disposable plastic gloves and black garbage bags were provided.

Later, all the departments were requested to assemble in Basket Ball Court for a NukkadNatak which was conducted by "Young Thespians", the dramatics club of JUIT.

The nukkad natak aimed at propagating the nuances for living in a clean and healthy environment by spreading awareness about sanitation. More than 200 students and faculty members saw the nukkad natak including our Vice Chancellor and Dean of the students. The natak highlighted littering done by people and spreading awareness about the drive.

This was followed by a group photograph under the banner of JUIT .Briefly put, it was an instructive as well as an enthralling day for everyone in JUIT.

Good Triumph over evil: Dussehra Celebration

Keeping the festive spirit alive, Jaypee University of information Technology, celebrated Dusshera on Friday, 19 October.

Student and campus staff prepared Ravan for Ravandhan and participated in the program. The celebration was conducted in football ground of the college. The festivities were filled with great joy and enthusiasm. To mark Lord Rama's victory over Ravan and to reinforce that good Triumphs over evil, the effigy of Ravan was burnt along with which students burnt their one evil habit while promising to shun it.

LOHRI Celebration

The Cultural club of JUIT decided to celebrate the very first festival of 2019 ,Lohri with great zeal and enthusiasm. Marking the culmination of winter and to honour Lord Agni for His blessings a bonfire was lit up in the football ground of the campus. Students, faculty members and helpers gathered around in high spirits. Greeting were exchanged and the seasonal festival bid everyone to enjoy the bounties of winter. Reories, parched groundnut and popcorn were much in demand. Lohri being a cultural celebration of winter solstice everyone enjoyed the freezing weather and

celebrated the festival with enormous joy and enthusiasm. This small but refreshing get together set everyone to their work in right earnest with renewed vigour and vitality.

DHUN (24th February, 2019)

The University through the JUIT Youth Club organised a musical night on 24 Feb. The music festival or “Dhun” as it is called, is a community event oriented towards live performances of singing and instrument playing that is often presented with a theme. The theme for this year’s event was love. There were a lot of students who participated in it, making their own little contribution to the success. Everyone in the audience, from students sitting on the ground to the students who were passing by, and even the faculty members, who witnessed the event enjoyed a lot. Participants could be seen in their full enthusiasm singing romantic songs and playing various instruments like guitar and piano. Our artists, through their talents, depicted the theme of the all-powerful Love for the event and cherished the affection, passion and the love people share. Love is not only the romantic kind, but also a foundation of friendship one makes during their lifetime. And so, many of our talented singers also sang songs for their best friends, thanking them for all the moments they had spent together.



Children's Day (14th November, 2018)



Republic Day

The morning was cold and wet with a brisk wind sweeping the rain across the land. A curtain of patriotism beat down from the heavens. A brief programme was set up at the Vivekananda Statue for the Independence Day. The programme initiated with flag hoisting and was followed by the esteemed salute by revered guards of JUIT and NCC girls. Succeeding this, the young minds graced the occasion with short poems and rhymes on patriotism.



This was followed by a few words of wisdom by our Vice Chancellor and Dean of students, which focused on all the important aspects of college. Thereupon, came NCC team of first year girls, trained for Republic Day Parade with an exceptional

execution. The celebration ended with traditional tea party organised by Bhutanese students of the college.



Hasta La Vista (29th January, 2019)

Farewells are subject to overwhelming emotions and a need to get the boat sailing, and when one spends 4 of the best years of their life in a place, the departure should be ceremonious.

The Cultural Club of JUIT Youth Club organized “Hasta-La-Vista”, the first of it’s kind Cultural Program of the University, to give a proper enriching Farewell experience to the students of the Batch of 2019. Not a Passing Out Parade, but certainly an event that ranks right up with it. It was a night of music and rhythm.



One event, one night but certainly more than that, it was a consolidated effort to make the graduating batch realise what college was about all through these years and to make them laugh and dance together for perhaps the one last time. The night was filled with musical performances by participants from the first to third year. A harmonious melody amalgamating beautifully, a touch of rock-n-roll with a touch of separation. Later in the evening, the stage was taken over by the two regional dance groups of the University, the PakkePahaadi with their famed Naati and the United Bhangra Crew to pump up the audience with their ever so energetic performances.



HALLA BOL (3rd February, 2019)

In the midst of a gleaming day, HallaBol, a street play competition was organized by the Environment Club of JUIT on the 3rd of February, 2019. The event consisted of a lot of assorted street plays, performed by the ever so enthusiastic bunch of students. There were a total of 5 teams contesting against each other. The abode was filled with the spirit of ambition. All the teams touched upon social issues that needed to be paid attention to, giving judges a hard time to decide upon the best performers.



The affair was loaded up with nail-biting moments as there was a set of norms to be followed so as to get a perfect score. The winner of the Annual Street Play Competition was the Environment Club who scored the highest among the rest of the teams, following this, the first runner-up was Young Thesians and finally, the second runner-up was Stage Players. Altogether, the event turned out to be a huge success with everyone having a gala time together.



“Alfaaz”

On 9th and 10th of March, the first edition of 'Alfaaz', the Literary Festival of JUIT was organized. The highlight event was the Jaypee Youth Parliament, which in itself is a much-awaited event in regions of Shimla and Solan. The participants were given a portfolio each and the topic for discussion was Triple Talaq and Sabrimala Temple Verdict.



A very substantial and concise debate was presented by both the opposition and the ruling party. Towards the end of the event, for the first time in the history of JYP, a bill was passed by the ruling party.



A poetic musical night was also presented by the Messengers, who were surpassingly able to mesmerize the audience with their words and aura.

Murious 2k19 (15th – 17th March,2019)

In the midst of a tempestuous storm, sputtering lamps and misty weather, the Annual technical fest, Murious 2k19, the three days panorama of Jaypee University of Information Technology, commenced with its cultural night, synchrotron. True to its scientific meaning, cyclic particles accelerator, it did prove to be a boost of energy among the students as the pomp and show of the event brought the entire college together and it succeeded to be one of the most enthralling nights ever.



Later, for the night, Hackathon, a 12 hour non-stop working and creating your own little phenomenal prototype competition was planned. Tech enthusiasts took part in this very ardently. The official Day 2 of Murious was full packed with various different types of contests, namely, Robo race, maze bot, jeopardy quiz, Codez and IP hunt. A tech talk session was also organized for all the tech maniacs. All in all, it proved out to be a long yet a bewildering day for everyone.



Likewise, the third and the final day of the fest was full of amazement too, comprising of a noteworthy photography session taken by one of the most esteemed photographer, Raghav Rai Ralhan. The extravagant 3day long Technical event ended with the much awaited prize distribution. Succinctly, the whole event manifested to become one of the most amazing and memorable happenings in the history of college affairs.



Le Fiestus (26th – 28th April, 2019)

Day 1:

As the dusk set in on the evening of 26th of April, the 3-day Annual Cultural Fest of Jaypee University of Information Technology, Le Fiestus 2019 began with SDM making his presence felt as the chief guest.



The opening day saw the students of the University participating in what could be described as a Skill Exhibition with the performances by various dance groups of the University amalgamated beautifully with the soulful voices of the varsity's singing sensations who presented a self-written and self-composed songs to make the night worthy of all the hype it had generated. The Cultural Night was followed by the EDM performance by Twinrave, where the modernity set in and students and the faculty danced to the beats of the piper.



Day 2:

The ongoing Cultural Festival of JUIT saw on its second day the magic of The Local Train. With their evergreen songs that are most famous amongst the youth, The Local Train produced the calm to the storm. As amazing is the name of the band, one has to listen to their music to know why it is one of the top bands worldwide. The lyrics, the melody and the pitch perfect notes made the Fest, one of the Best the University has witnessed thus far.

The Local Train was followed by DJ Maddy who, after a soulful musical by the band, made the student hip, hop and pop out of their shells to his extraordinary mix. With

the day 2 of the Fest done and dusted, the University is set to host Swastik the Band and Punjabi Singers, Sandeep Brar and Shivjot on the final day of the festival.



Day 3:

Le Fiestus '19 had its final day just as exciting as the other two. It started off with the prize distribution ceremony for the dances and the ramp walks. Following this, the JYC took an opportunity to felicitate and honor the club coordinators for the last tenure. Swastik, a band of fusion rock and Indian classical took the stage and left the audience in awe.



To bring an end to LF 2019, Sandeep Brar and Shivjot raised the roof with ever so loved Punjabi songs. One of the best Cultural fests this college has ever witnessed, Le Fiestus was a different experience to all students, fresher's and seniors alike.



To bring an end to LF 2019, Sandeep Brar and Shivjot raised the roof with ever so loved Punjabi songs. One of the best Cultural fests this college has ever witnessed, Le Fiestus was a different experience to all students, fresher's and seniors alike.

TRAINING & PLACEMENT

- 1) 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.
- 2) 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.
- 3) The Placement summary for last year is attached at **Appendix-H**

FINANCIAL STATUS

The Audited Balance Sheet of thye FY 2018 -19 is attached as **Appendix-I**.

GOVERNING COUNCIL**1. Pro-Chancellor**

Shri Manoj Gaur
Executive Chairman
Jaiprakash Associates Ltd. Chairman

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

1. Shri Sunil Sharma Member

Executive Vice Chairman
Jaiprakash Associates Ltd.

2. 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 Gainesville, USA

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

a) Prof. Onkar Singh Member
Professor
Mechanical Engineering Department
HBTI
Kanpur UP - 208002

b) Prof. P.K. Jain
Director
IIIT BHU
Varanasi UP

c) Prof. Manoj Arora Member
Vice-Chancellor
BML Munjal University
Gurgaon
Haryana

5. **Two Experts Representing other Disciplines such as Finance, Law and Management nominated by the Pro-Chancellor**
 - a) Sh. S.S. Mittal
Advocate, Shimla Member
 - b) Sh. Pankaj Gaur
Jt. Managing Director (Construction)
Jaiprakash Associates Ltd. Member
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 Member
8. **Two Deans of the University by Rotation**
 - a) Prof. Samir Dev Gupta
Director and Academic Head
JUIT, Waknaghat Member
 - b) Vacant Member
9. **Three Secretaries of Government of Himachal Pradesh**
 - a) Secretary (IT), Govt. of HP Member
 - b) Secretary (Education), Govt. of HP Member
 - c) Secretary (Technical Education), Govt. of HP Member
10. **Three Representatives of the Industry Nominated by the Pro-Chancellor**
 - a) Sh. Alok Gaur
Head, HR Department
Jaiprakash Associates Ltd.
 - b) Sh. C.S. Verma
Former Chairman
Steel Authority of India
4086, Pocket C4, Vasant Villas, Vasant Kunj,
New Delhi – 110070)
 - c) Sh. B. Prasada Rao
Former Chairman & Managing Director, BHEL
699, Mahavir Prasad Block
Asian Games Village Complex
New Delhi - 110049
11. **Non-Member Secretary**
Maj Gen Rakesh Bassi, SM (Retd)
Registrar & Dean of Students, JUIT

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**
 - a) Sh. Sunil Sharma
Executive Vice Chairman
Jaiprakash Associates Ltd.
 - b) 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**
Maj Gen Rakesh Bassi, SM (Retd)
Registrar & Dean of Students

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. One Nominee of the Governing Council

Maj Gen Rakesh Bassi, SM (Retd)
Registrar & Dean of Students
JUIT Waknaghat

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

Prof. Samir Dev Gupta
Dean (Academic & Research)

5. Non Member Secretary

The Finance Officer of the University
Sh. Hemant Vyas
Finance Officer

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

- a) Prof. (Dr.) Sunil Kumar Khah – Physics & Material Science
- b) Prof. (Dr.) Ashish Kumar – Civil Engineering

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

- a) Prof. Manoj Arora Member
Vice-Chancellor
BML Munjal University
Gurgaon
Haryana
- b) Prof. Padam Kumar,
Dean (R&D)
Jaypee Institute of Information Technology (JIIT), Now vacant
Noida

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

- a) Sh. Sunil Sharma
Executive Vice Chairman
Jaiprakash Associates Ltd.
- b) 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

- a) Prof. Samir Dev Gupta
Dean (Academic & Research)
- b) Vacant

7. Heads of the Departments/Centres of the University

- a) Prof. (Dr.) M.J. Nigam, HOD-ECE
- b) Prof. (Dr.) Karanjeet Singh, HOD, Mathematics
- c) Prof. (Dr.) P.B. Barman, HOD, Physics & Material Science
- d) Prof. (Dr.) Sudhir Kumar, HOD, BT & BI
- e) Prof. (Dr.) Brig. S.P. Gherera (Retd.), HOD, CSE & IT
- f) Prof. (Dr.) Ashok Kumar Gupta, HOD, Civil
- g) Dr Anupriya Kaur, HOD, Dept. of HSS

8. Non-Member Secretary

Maj Gen Rakesh Bassi, SM (Retd)
Registrar & Dean of Students

DETAILS OF LAND

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY				
Waknaghat Solan (H.P.)				
Summary (Plinth Area)				
Sl. No.	Particulars	Area (In Sqft)	Area (In Sqm)	Total No. of Floor
1	Institution and administrative area			Phase-1 =6 Floor Phase-2 =7Floor Phase-3 =7Floor Phase-4 =6Floor
	Academic Block	151970.99	14123.70	
	Auditorium & Stage	14251.66	1324.50	
	Animal House Lab	2754.56	256.00	2 Floor
	Civil Lab	14396.66	1337.98	5 Floor
	TOTAL	183373.87	17042.18	
2	Faculty housing			
	Faculty Block A Type	19238.51	1787.97	9
	Faculty Block B Type	0	0	
	F01	13250.22	1231.43	8+Mumty
	F02	29119.93	2706.31	8+Mumty
	F03	13246.25	1231.06	8+Mumty
	Faculty Block C Type	0	0	
	C01	11552.33	1073.64	8+Mumty
	C02	11618.23	1079.76	8+Mumty
	C03	10922.13	1015.07	7+Mumty
	Guest House	15360.92	1427.59	4 Floor
	E Type Faculty	11038.46	1025.88	4 Floor
	D Type Faculty	22410.39	2082.75	10 Floor
TOTAL	157757.37	14661.46		
3	Student housing (HOSTAL)			
	H-1	13009.31	1209.04	8+Mumty
	H-2	12473.38	1159.24	7+Mumty
	H-3	6724.28	624.93	5+Mumty
	H-4	14276.75	1326.84	8+Mumty
	H-5	22794.00	2118.40	12+Mumty
	H-6	12402.10	1152.61	8
	H-7	11235.89	1044.23	7+Mumty
	H-8	9865.34	916.85	6+Mumty
	H-9	9809.99	911.71	6+Mumty
	H-10	9984.01	927.88	6+Mumty
	H-11	14215.70	1321.16	8+Mumty
	Girls Hostel 12A	23571.95	2190.70	10+Mumty
	Girls Hostel 12B	18494.80	1718.85	9+Mumty
Girls Hostel 12C	20541.28	1909.04	9+Mumty	
Girls Hostel 12D	17733.94	1648.14	9+Mumty	

	H-14A	9314.86	865.69	9
	H-14B	14015.34	1302.54	8+Mumty
	H-14C	24250.39	2253.75	11
	H-14D	20008.18	1859.50	10+Mumty
	H-15A	19720.51	1832.76	11
	H-15B	14649.87	1361.51	8+Mumty
	H-15C	18457.16	1715.35	10
	H-15D	16253.46	1510.54	8+Mumty
	Student Lounge	1427.10	132.63	2
	TOTAL	355229.59	33013.89	
4	Dormitory (For supporting staff/Worker)			
	Worker Dormitory-1	17404.73	1617.54	4 Floor
	Worker Dormitory-2 (F Block)	7243.63	673.20	4 Floor
	TOTAL	24648.36	2290.74	
5	Miscellaneous Structures			
	Annapurna	21699.04	2016.64	
	Uploading Bay (Annapurna)	2035.14	189.14	2 Floor
	Telephone Exchange	9827.22	913.31	5 Floor
	ESS	21517.40	1999.76	5 Floor
	Plant Room / Green Room	6364.13	591.46	1 Floor
	Mandir	3030.61	281.66	1 Floor
	Dispensary	2711.12	251.96	3 Floor
	S.T.P	995.85	92.55	1 Floor
	Store	3512.40	326.43	1 Floor
	Laundry	2083.45	193.63	1 Floor
	TOTAL	73776.36	6856.54	
	G Total	794785.55	73864.81	

DETAILS OF TEACHING STAFF

DETAILS OF TEACHING STAFF			
S.No.	Name	Designation	Qualifications
ELECTRONICS & COMMUNICATION ENGINEERING			
1	Madhav Ji Nigam	Professor & HOD	Ph.D.
2	Ghanshyam Singh	Professor	Ph.D.
3	Rajiv Kumar	Associate Professor	Ph.D.
4	Shruti Jain	Associate Professor	Ph.D.
5	Neeru Sharma	Assistant Professor (SG)	Ph.D.
6	Meenakshi Sood	Assistant Professor (SG)	Ph.D.
7	Shweta Pandit	Assistant Professor (SG)	Ph.D.
8	Sunil Datt Sharma	Assistant Professor (SG)	Ph.D.
9	Nafis uddin khan	Assistant Professor (SG)	Ph.D.
10	Harsh Sohal	Assistant Professor (SG)	Ph.D.
11	Emjee Puthooran	Assistant Professor (SG)	Ph.D.
12	Vikas Baghel	Assistant Professor (SG)	Ph.D.
13	Pragya Gupta	Assistant Professor (GR-II)	M.Tech
14	Salman Raju Talluri	Assistant Professor (SG)	Ph.D.
15	Pardeep Garg	Assistant Professor (GR-II)	M.Tech
16	Alok Kumar	Assistant Professor (GR-II)	M. Tech
17	Naveen Jaglan	Assistant Professor (SG)	Ph.D.
18	Munish Sood	Assistant Professor (GR-II)	M. Tech
19	Nishant Jain	Assistant Professor (SG)	Ph.D.
20	Mohit Garg	Assistant Professor (GR-II)	M. Tech

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING/INFORMATION TECHNOLOGY			
21	Brig. S.P. Ghrera (Retd.)	Professor & HOD	Ph.D.
22	Praveen Modi	Assistant Professor (GR-I)	M.Tech
23	Surjeet Singh	Assistant Professor (GR-I)	M.Tech
24	Himanshu Jindal	Assistant Professor (GR-II)	M.Tech
25	Kapil Sharma	Assistant Professor (SG)	Ph.D.
26	Monika Bharti	Assistant Professor (GR-II)	M.Tech
27	Hari Singh	Assistant Professor (SG)	Ph.D.
28	Prateek	Assistant Professor (GR-II)	M.Tech
29	Jagpreet	Assistant Professor (SG)	Ph.D.
30	Vivek Sehgal	Associate Professor	Ph.D.
31	Hemraj Saini	Associate Professor	Ph.D.
32	Pardeep Kumar	Associate Professor	Ph.D.

33	Pradeep Kumar Gupta	Associate Professor	Ph.D.
34	Rajni Mohna	Associate Professor	Ph.D.
35	Pradeep Kumar Singh	Assistant Professor (SG)	Ph.D.
36	Ravindara Bhatt	Assistant Professor (SG)	Ph.D.
37	Shailendra Shukla	Assistant Professor (SG)	Ph.D.
38	Yugal Kumar	Assistant Professor (SG)	Ph.D.
39	Suman Saha	Assistant Professor (SG)	Ph.D.
40	Arvind Kumar	Assistant Professor (GR-II)	M.Tech
41	Amol Vasudeva	Assistant Professor (GR-II)	M. Tech
42	Ramanpreet Kaur	Assistant Professor (SG)	Ph.D.
43	Geetanjali	Assistant Professor (SG)	Ph.D.
44	Ruchi Verma	Assistant Professor (SG)	Ph.D.
45	Amit Kumar	Assistant Professor (SG)	Ph.D.
46	Rizwan Ur Rehman	Assistant Professor (GR-II)	M. Tech
47	Nitin Kumar	Assistant Professor (GR-II)	M. Tech
48	Ekta Gandotra	Assistant Professor (SG)	Ph.D.
49	Rajinder Sandhu	Assistant Professor (SG)	Ph.D.
50	Arijit Das	Assistant Professor (GR-II)	M. Tech

DEPARTMENT OF BIOTECHNOLOGY / BIOINFORMATICS

51	Sudhir Syal	Professor & HOD	Ph.D.
52	Harish Changotra	Associate Professor	Ph.D.
53	Jata Shankar	Associate Professor	Ph.D.
54	Anil Kant	Associate Professor	Ph.D.
55	Rahul Shrivastava	Associate Professor	Ph.D.
56	Tiratha Raj Singh	Associate Professor	Ph.D.
57	Hemant Sood	Associate Professor	Ph.D.
58	Poonam Sharma	Assistant Professor (SG)	Ph.D.
59	Jayashree Ramana	Assistant Professor (SG)	Ph.D.
60	Jitendraa Vashistt	Assistant Professor (SG)	Ph.D.
61	Garlapati Vijay Kumar	Assistant Professor (SG)	Ph.D.
62	Y.M. Raghothaman	Assistant Professor (GR-II)	Ph.D.
63	Saurabh Bansal	Assistant Professor (SG)	Ph.D.
64	Abhishek Chaudhary	Assistant Professor (GR-I)	Ph.D.
65	Narendra Kumar	Assistant Professor (GR-II)	Ph.D.
66	Ashok Kumar	Assistant Professor (GR-II)	Ph.D.
67	Gopal Singh Bisht	Associate Professor	Ph.D.
68	Udaybanu M	Assistant Professor (SG)	Ph.D.

DEPARTMENT OF CIVIL ENGINEERING			
69	Ashok Kr. Gupta	Professor & HOD	Ph.D.
70	Veeresh. S. Gali	Professor	Ph.D.
71	Ashish Kumar	Professor	Ph.D.
72	Rishi Rana	Assistant Professor (SG)	Ph.D.
73	Pankaj Kumar	Assistant Professor (SG)	Ph.D.
74	Gaurav Tyagi	Assistant Professor (GR-I)	M. Tech
75	Rajiv Ganguly	Associate Professor	Ph.D.
76	Chandrapal Gautam	Assistant Professor (GR-II)	M. Tech
77	Abhilash Shukla	Assistant Professor (GR-II)	M. Tech
78	Saurabh Rawat	Assistant Professor (SG)	Ph.D.
79	Saurav	Assistant Professor (SG)	Ph.D.
80	Niraj Singh Parihar	Assistant Professor (GR-II)	M. Tech
81	Kaushal Kumar	Assistant Professor (GR-II)	M.Tech
82	Aakash Gupta	Assistant Professor (GR-II)	M. Tech
83	Anirban Dhulia	Assistant Professor (GR-II)	M.Tech
84	Amardeep	Assistant Professor (SG)	Ph.D.
85	Tanmay Gupta	Assistant Professor (GR-II)	M.Tech

DEPARTMENT OF PHYSICS			
86	P.B. Barman	Professor & HOD	Ph.D.
87	Sunil Kr. Khah	Professor & CoE	Ph.D.
88	Vineet Sharma	Associate Professor	Ph.D.
89	Pankaj Sharma	Associate Professor	Ph.D.
90	Dheeraj Sharma	Assistant Professor (SG)	Ph.D.
91	Rajesh Kumar	Associate Professor	Ph.D.
92	Surajit K.Hazra	Assistant Professor (SG)	Ph.D.
93	Ragini Raj Singh	Assistant Professor (SG)	Ph.D.
94	Sanjiv Kumar Tiwari	Assistant Professor (SG)	Ph.D.

DEPARTMENT OF MATHEMATICS			
95	Karanjeet Singh	Professor & HOD	Ph.D.
96	Vishal Mehta	Assistant Professor (GR-I)	Ph.D.
97	R S Raja Durai	Associate Professor	Ph.D.
98	Rakesh Kumar Bajaj	Associate Professor	Ph.D.
99	Neelkanth	Assistant Professor (SG)	Ph.D.
100	Pradeep K Pandey	Assistant Professor (SG)	Ph.D.
101	Saurabh Srivastava	Assistant Professor (GR-II)	Ph.D.
102	Mandeep Singh	Assistant Professor (GR-I)	Ph.D.

DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES			
103	Anupriya Kaur	Associate Professor & HOD	Ph.D.
104	Amit Srivastava	Associate Professor	Ph.D.
105	Tanu Shrma	Assistant Professor (SG)	Ph.D.
106	Triambica Gautam	Assistant Professor (GR-II)	MBA, UGC Net
107	Papiya Lahiri	Assistant Professor (GR-II)	Ph.D.
108	Neena Jindal	Assistant Professor (GR-I)	Ph.D.
109	Sakshi Khanna	Assistant Professor (GR-I)	Ph.D.

RESULTS OF PAST FOUR YEARS

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

RESULT OF THE BATCH 2012-2016

<u>Branch</u>	<u>No. of Students</u>	<u>No. of students Passed</u>	<u>Pass %</u>
<u>B. TECH.</u>			
ECE	114	112	98%
CSE	130	128	98.4%
IT	21	21	100%
BI	19	19	100%
BT	24	24	100%
CE	97	95	8%

DUAL DEGREE (B.TECH-M.TECH) BIOTECHNOLOGY

BT	16	16	100%
----	----	----	------

M.TECH

ECE	10	10	100%
CSE	10	10	100%
Structural Engineering	17	17	100%
Biotechnology	06	06	100%
Construction Management	09	09	100%
Environmental Engineering	09	08	88%

RESULT OF THE BATCH 2013-2017

<u>Branch</u>	<u>No. of Students</u>	<u>No. of students Passed</u>	<u>Pass %</u>
<u>B. TECH.</u>			
ECE	98	96	98%
CSE	127	121	95%
IT	21	20	95%
BI	25	22	88%
BT	30	28	93%
CE	115	108	94%

DUAL DEGREE (B.TECH-M.TECH) BIOTECHNOLOGY

BT	9	9	100%
ECE	1	1	100%
CSE	3	3	100%

M.TECH

ECE	16	15	93%
CSE	16	16	100%
Structural Engineering	14	14	100%
Biotechnology	04	04	100%
Construction Management	14	14	100%
Environmental Engineering	11	9	81%

RESULT OF THE BATCH 2014-2018

<u>Branch</u>	<u>No. of Students</u>	<u>No. of students Passed</u>	<u>Pass%</u>
----------------------	-------------------------------	--------------------------------------	---------------------

B. TECH.

ECE	91	82	89%
CSE	164	162	99%
IT	46	45	99%
BI	13	12	92%
BT	46	28	93%
CE	92	85	92%

DUAL DEGREE (B.TECH-M.TECH) BIOTECHNOLOGY

BT	11	11	100%
----	----	----	------

M.TECH

ECE	07	07	100%
CSE	05	05	100%
Structural Engineering	14	14	100%
Biotechnology	06	06	100%
Construction Management	12	12	100%
Environmental Engineering	07	07	100%

RESULT OF THE BATCH 2015-2019

<u>Branch</u>	<u>No. of Students</u>	<u>No. of students Passed</u>	<u>Pass%</u>
---------------	------------------------	-------------------------------	--------------

B. TECH.

ECE	97	87	89.69%
CSE	219	214	97.71%
IT	26	25	96.15%
BI	8	8	100%
BT	43	40	93.02%
CE	89	69	77.52%

INTEGRATED DEGREE (B.TECH-M.TECH) BIOTECHNOLOGY (2014-19)

BT	04	04	100%
----	----	----	------

M.TECH (2017-2019)

CSE	04	04	100%
Structural Engineering Construction Management	06	06	100%
Environmental Engineering	09	09	100%
	07	07	100%

TRAINING & PLACEMENT DATA**For 2018 Batch:**

- Highest Salary – 17.75 Lacs by Amazon Web Services
- 2nd Highest Salary – 14.5 Lacs by Magnitude Software

PLACEMENT STATUS : JUIT Solan 2014-18 as on 14/June/2018					
Branch	Eligible Participating Students	No. of Absolute Offers	% of Absolute Offers	No. of Total Offers	% of Total Offers
CSE	116	104	90%	113	97%
ECE	41	29	71%	29	70%
IT	27	22	81%	24	88%
BT/BI	22	11	50%	13	59%
CIVIL	33	8	25%	8	24%
Total	239	174	72%	187	78%

For 2019 Batch

- Highest Salary – 10.00 Lacs by Byjus
- 2nd Highest Salary – 8 Lacs by Zscaler

PLACEMENT STATUS : JUIT Solan 2015-19 as on 25/July/2019					
Branch	Eligible Participating Students	No. of Absolute Offers	% of Absolute Offers	No. of Total Offers	% of Total Offers
CSE	182	150	83%	229	125%
ECE	73	65	89%	76	104%
IT	22	21	90%	32	145%
BT/BI	43	23	53%	26	60%
CIVIL	56	19	33%	21	37%
Dual BT/BI	4	3	75%	3	75%
Total	380	281	73%	387	101%

**BALANCE SHEET FOR
THE
FINANCIAL YEAR 2018-19**

DASS GUPTA & ASSOCIATES

Chartered Accountants

B-4, NDG Enclave, Gulmohar Park, New Delhi - 110049
Phones: 46111000 (30 lines) FAX: 011-4611 1099 E-mail: admin@dassgupta.com

INDEPENDENT AUDITORS' REPORT

TO THE MEMBERS OF THE GOVERNING BODY
JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
WAKNAGHAT, SOLAN DISTRICT

REPORT ON THE FINANCIAL STATEMENTS

WE HAVE AUDITED THE ATTACHED BALANCE SHEET OF JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY (HERE IN AFTER REFERRED AS UNIVERSITY) AS AT 31ST MARCH 2019 AND THE ANNEXED INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED, AND A SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND OTHER EXPLANATORY INFORMATION.

MANAGEMENT'S RESPONSIBILITY FOR THE FINANCIAL STATEMENTS

MANAGEMENT IS RESPONSIBLE FOR THE PREPARATION OF THESE FINANCIAL STATEMENTS THAT GIVE A TRUE AND FAIR VIEW OF THE FINANCIAL POSITION AND FINANCIAL PERFORMANCE OF THE UNIVERSITY IN ACCORDANCE WITH THE INCOME TAX ACT 1961 ("THE ACT"). THIS RESPONSIBILITY ALSO INCLUDES MAINTENANCE OF ADEQUATE ACCOUNTING RECORDS IN ACCORDANCE WITH THE PROVISIONS OF THE ACT FOR SAFEGUARDING THE ASSETS OF THE UNIVERSITY AND FOR PREVENTING AND DETECTING FRAUDS AND OTHER IRREGULARITIES; SELECTION AND APPLICATION OF APPROPRIATE ACCOUNTING POLICIES; MAKING JUDGMENTS IN THE ESTIMATES THAT ARE REASONABLE AND PRUDENT; AND DESIGN, IMPLEMENTATION AND MAINTENANCE OF ADEQUATE INTERNAL FINANCIAL CONTROLS, THAT WERE OPERATING EFFECTIVELY FOR ENSURING THE ACCURACY AND COMPLETENESS OF THE ACCOUNTING RECORDS, RELEVANT TO THE PREPARATION AND PRESENTATION OF THE FINANCIAL STATEMENTS THAT GIVE A TRUE AND FAIR VIEW AND ARE FREE FROM MATERIAL MISSTATEMENT, WHETHER DUE TO FRAUD OR ERROR.



DASS GUPTA & ASSOCIATES

Chartered Accountants

B-4, NDG Enclave, Gulmohar Park, New Delhi - 110049
Phones: 46111000 (30 lines) FAX: 011-4611 1099 E-mail: admin @ dassgupta.com

AUDITOR'S RESPONSIBILITY

OUR RESPONSIBILITY IS TO EXPRESS AN OPINION ON THESE FINANCIAL STATEMENTS BASED ON OUR AUDIT. WE CONDUCTED OUR AUDIT IN ACCORDANCE WITH THE STANDARDS ON AUDITING ISSUED BY THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA. THOSE STANDARDS REQUIRE THAT WE COMPLY WITH ETHICAL REQUIREMENTS AND PLAN AND PERFORM THE AUDIT TO OBTAIN REASONABLE ASSURANCE ABOUT WHETHER THE FINANCIAL STATEMENTS ARE FREE FROM MATERIAL MISSTATEMENT.

AN AUDIT INVOLVES PERFORMING PROCEDURES TO OBTAIN AUDIT EVIDENCE ABOUT THE AMOUNTS AND DISCLOSURES IN THE FINANCIAL STATEMENTS. THE PROCEDURES SELECTED DEPEND ON THE AUDITOR'S JUDGMENT, INCLUDING THE ASSESSMENT OF THE RISKS OF MATERIAL MISSTATEMENT OF THE FINANCIAL STATEMENTS, WHETHER DUE TO FRAUD OR ERROR. IN MAKING THOSE RISK ASSESSMENTS, THE AUDITOR CONSIDERS INTERNAL CONTROL RELEVANT TO THE UNIVERSITY PREPARATION AND FAIR PRESENTATION OF THE FINANCIAL STATEMENTS IN ORDER TO DESIGN AUDIT PROCEDURES THAT ARE APPROPRIATE IN THE CIRCUMSTANCES, BUT NOT FOR THE PURPOSE OF EXPRESSING AN OPINION ON THE EFFECTIVENESS OF THE ENTITY'S INTERNAL CONTROL. AN AUDIT ALSO INCLUDES EVALUATING THE APPROPRIATENESS OF ACCOUNTING POLICIES USED AND THE REASONABLENESS OF THE ACCOUNTING ESTIMATES MADE BY MANAGEMENT, AS WELL AS EVALUATING THE OVERALL PRESENTATION OF THE FINANCIAL STATEMENTS.

WE BELIEVE THAT THE AUDIT EVIDENCE WE HAVE OBTAINED IS SUFFICIENT AND APPROPRIATE TO PROVIDE A BASIS FOR OUR AUDIT OPINION.



DASS GUPTA & ASSOCIATES

Chartered Accountants

B-4, NDG Enclave, Gulmohar Park, New Delhi - 110049
Phones: 46111000 (30 lines) FAX: 011-4611 1099 E-mail: admin@dassgupta.com

OPINION

- A. IN OUR OPINION AND TO THE BEST OF OUR INFORMATION AND ACCORDING TO THE EXPLANATIONS GIVEN TO US, THE SAID ACCOUNTS WITH SIGNIFICANT ACCOUNTING POLICIES AND OTHER NOTES THEREON GIVE A TRUE AND FAIR VIEW:
- (i) IN THE CASE OF BALANCE SHEET, OF THE STATE OF AFFAIRS OF THE UNIVERSITY AS AT 31ST MARCH 2019;
AND
 - (ii) IN THE CASE OF INCOME & EXPENDITURE ACCOUNT, OF THE SURPLUS FOR THE YEAR ENDED ON THAT DATE.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

- B. WE HAVE OBTAINED ALL THE INFORMATION AND EXPLANATIONS, WHICH TO THE BEST OF OUR KNOWLEDGE AND BELIEF WERE NECESSARY FOR THE PURPOSE OF OUR AUDIT.
- C. IN OUR OPINION PROPER BOOKS OF ACCOUNT AS REQUIRED BY LAW HAVE BEEN KEPT BY THE UNIVERSITY SO FAR AS APPEARS FROM OUR EXAMINATION OF THOSE BOOKS;
- D. THE BALANCE SHEET AND STATEMENT OF INCOME & EXPENDITURE ACCOUNT DEALT WITH BY THIS REPORT ARE IN AGREEMENT WITH THE BOOKS OF ACCOUNT;



DASS GUPTA & ASSOCIATES

Chartered Accountants

B-4, NDG Enclave, Gulmohar Park, New Delhi - 110049
Phones: 46111000 (30 lines) FAX: 011-4611 1099 E-mail: admin @ dassgupta.com

E. IN OUR OPINION THE BALANCE SHEET AND INCOME & EXPENDITURE ACCOUNT DEALT WITH BY THIS REPORT COMPLY WITH THE APPLICABLE ACCOUNTING STANDARDS SUBJECT TO OUR COMMENTS IN SIGNIFICANT ACCOUNTING POLICIES AND NOTES ANNEXED TO AND FORMING PART OF THE ACCOUNTS.

FOR AND ON BEHALF OF
DASS GUPTA & ASSOCIATES
CHARTERED ACCOUNTANTS
REGISTRATION NO: 000112N

(ASHOK KUMAR JAIN)
PARTNER

MEMBERSHIP NO. 090563

UDIN NO. 19090563 AAAA C77448

UDIN No. 19090563 AAAA CZ1221

DATE: 25.09.2019
PLACE: NEW DELHI

**Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)**

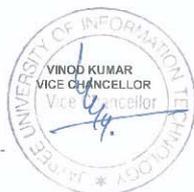
Balance Sheet as on 31.03.2019

Amount (₹) 31.03.2018	LIABILITIES	Amount (₹) 31.03.2019	Amount (₹) 31.03.2018	ASSETS	Amount (₹) 31.03.2019
	CORPUS FUND			FIXED ASSETS	
5,00,00,000	For University	5,00,00,000	60,12,98,341	Opening Balance	65,51,63,546
1,01,55,000	For Research Promotion (UBSK)	1,01,55,000	5,38,65,205	Addition during the year	1,90,52,078
6,01,55,000		6,01,55,000	-	Disposed off during the current period	4,27,000
	GENERAL FUND		65,51,63,546	Gross Block	SCH. "A" 67,37,88,624
20,87,29,339	Opening Balance	27,62,96,746	42,97,55,968	Less : up to date Depreciation	46,56,71,106
6,75,87,407	Add - Surplus brought from Income & Expenditure A/C	86,88,446	22,54,07,578	Net Block	20,81,17,518
27,62,96,746		28,49,85,192			
	RESEARCH PROJECT'S FUND			CAPITAL WORK IN PROGRESS	SCH. "B" 1,16,71,717
44,31,339	Opening Balance	65,31,757			
1,47,31,978	Add : Received during the year	62,86,771		CURRENT ASSETS, LOANS & ADVANCES	
(1,21,55,950)	Less : Expenses during the year	(1,02,08,029)	31,35,86,536	Cash & Bank Balance	SCH. "C" 31,09,35,164
(4,75,610)	Less : Refund during the year	(1,35,369)	7,13,24,326	Advances and Receivables in Cash or in Kind	SCH. "D" 7,27,69,508
65,31,757		24,75,130		31,97,719	Prepaid Expenses
	SECURED LOAN			22,24,686	Security Deposits
9,62,31,892	Term Loan Yes Bank Ltd.-Noida	9,52,64,263		69,23,032	Stock- in- Hand
	CURRENT LIABILITIES & PROVISIONS				SCH. "G" 96.66.198
5,68,52,101	Sundry Creditors	6,10,94,129			
10,86,08,220	Other Liabilities	10,08,59,960			
	CAUTION MONEY				
1,88,01,430	Opening Balance	1,79,88,161			
39,20,000	Add : Received during the year	36,10,000			
(47,33,269)	Less : Refund during the year	(50,88,221)			
	(Due for payment during next one year Rs.47.36,400/-)				
1,79,88,161		1,65,09,940			
62,26,63,877	Total Liabilities	62,13,43,613	62,26,63,877	Total Assets	62,13,43,613

Significant Accounting policies and notes on accounts as per Schedule 'P' forming part of Balance Sheet.

For DASS GUPTA & ASSOCIATES
CHARTERED ACCOUNTANTS
REG.NO. 000112N

ASHOK KUMAR JAIN
PARTNER
MEMBERSHIP NO. 090563
PLACE:-New Delhi
DATE : 25.09.2019




MAJ GEN RAKESH BASSI, SM (RETD)
REGISTRAR

REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



**Jaypee University of Information Technology
Waknaghat, Distt. Solan, H.P.
Income & Expenditure Account for the year ended on 31.03.2019**

Amount (₹) 31.03.2018	EXPENDITURE	Amount (₹) 31.03.2019	Amount (₹) 31.03.2018	INCOME	Amount (₹) 31.03.2019
8,42,68,914	Institutional Expenses SCH. "J"	9,84,41,582	49,94,04,110	Collection from Students SCH. "M"	48,52,56,447
20,19,60,453	Salary & Allowances SCH. "K"	22,11,02,881	1,75,87,609	Interest received on FDs SCH. "N"	1,60,61,642
12,63,68,659	Students Hostel Expenses SCH. "L"	13,90,81,195	22,64,278	Other Income SCH. "O"	19,11,152
3,90,90,564	Depreciation SCH. "A"	3,59,15,137			
45,16,88,590	Total Expenditure	49,45,40,795			
	Surplus				
6,75,67,407	Transferred to General Fund A/C.	86,88,446			
51,92,55,997	TOTAL	50,32,29,241	51,92,55,997	TOTAL	50,32,29,241

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.0001126

(ASHOK KUMAR JAIN)
PARTNER
MEMBERSHIP NO.-098563

PLACE:- New Delhi
DATE : 25.09.2019



Uban

MAJ GEN RAKESH BASSI (RETD)
REGISTRAR

REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P)

Hemant Vyas

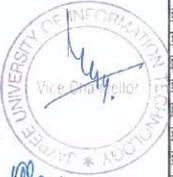
HEMANT VYAS
CHIEF FINANCE OFFICER



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
Details of Fixed Assets as on 31.03.2019**

SCHEDULE : "A"

Block of Assets	Rate of Dep.	GROSS BLOCK					DEPRECIATION			NET BLOCK	
		Op. Balance as on 01.04.2018	Addition during the year		Disposed off during the year	As on 31.03.2019	Op. Balance as on 01.04.2018	For the Year	Up to 31.03.2018	As on 31.03.2018	As on 31.03.2019
			180 Days or more	Less than 180 Days							
Buildings	10%	13,53,58,494				13,53,58,494	5,72,55,903	78,10,269	6,50,68,162	7,81,02,691	7,02,92,332
Library Books	15%	6,64,16,164	1,28,525	13,92,109		6,79,34,798	4,82,16,717	28,53,304	5,10,70,021	1,81,89,447	1,58,64,777
Electronic Lab Equipments	15%	1,87,13,520		3,71,700		2,00,85,220	1,43,59,858	8,30,925	1,51,80,793	53,53,652	48,54,427
Bio Informatics Lab Equipments	15%	2,73,71,506				2,73,71,506	2,01,52,297		2,12,35,179	72,15,209	61,36,328
Physics Lab Equipments	15%	1,11,92,338		52,068		1,12,44,406	80,48,955	4,75,413	85,24,368	31,43,383	27,20,038
Computer Lab Equipments	40%	11,77,31,283	30,60,551	12,16,840		12,20,09,444	10,40,63,630	69,34,798	11,09,98,428	1,38,67,623	1,10,10,616
Imported Bio Lab Equipments	15%	2,20,31,080				2,20,31,080	1,79,73,250	6,08,675	1,85,61,925	40,57,830	34,48,155
Imported Electronic Lab Equipments	15%	33,58,610				33,58,610	30,92,307	39,975	31,32,282	2,65,503	2,26,528
Imported Computer Lab Equipments	40%	7,37,191				7,37,191	7,37,189	1	7,37,190	2	1
Imported Office Equipments	15%	87,905				87,905	73,195	2,207	75,402	14,710	12,503
Civil Lab Equipments	15%	1,17,08,007	1,57,383	6,30,118		1,24,95,508	71,92,340	7,48,216	79,40,556	45,15,667	45,54,952
Software-Computer	40%	32,00,369		13,03,900		45,04,269	30,88,603	3,05,486	33,94,059	1,11,786	1,10,10,180
Software -Math	40%	3,24,350				3,24,350	2,79,275	18,030	2,97,305	45,075	27,045
Software-Civil	40%	22,64,476				22,64,476	17,51,561	2,05,167	19,56,728	5,12,917	3,07,760
Software -Language Lab	40%	11,37,938				11,37,938	7,86,687	1,38,500	9,33,187	3,41,251	2,04,751
Software -Biotech Lab	40%	19,44,888				19,44,888	13,81,428	2,25,384	16,05,812	5,63,460	3,38,076
Software -Electronics Lab	40%	26,00,674		14,82,021		40,82,695	19,59,853	5,39,133	25,32,866	6,05,621	15,49,709
Software -Library	40%	2,73,000				2,73,000	2,14,930	23,228	2,38,158	58,070	34,842
Software -Physics Lab	40%	4,35,123				4,35,123	3,15,343	47,912	3,63,255	1,19,780	71,868
Software -PD Lab	40%	4,66,390				4,66,390	2,42,502	89,555	3,32,057	2,23,888	1,34,333
Office Equipments	15%	1,79,45,535	9,47,171	19,84,718		2,08,57,424	99,73,733	14,85,200	1,14,58,933	79,71,602	93,98,491
Miscellaneous Assets	15%	47,45,055	51,600	2,91,063		50,87,729	34,61,460	2,22,112	36,83,562	12,83,616	14,04,167
Gymnasium Equipments	15%	30,14,655	6,78,150	19,85,830		56,77,635	19,45,827	4,10,759	23,66,586	10,68,628	33,21,048
Furniture & Pictures	10%	5,94,79,034	19,824			5,94,98,858	3,52,21,393	24,27,747	3,78,46,140	2,42,57,641	2,18,49,718
Vehicles	15%	2,06,56,533	8,23,845		4,27,000	2,11,53,478	1,00,11,831	16,71,247	1,16,83,076	1,06,44,602	94,70,400
Imported Kitchen Equipments	15%	2,78,308				2,78,308	2,23,616	8,219	2,31,735	54,792	46,573
Kitchen Equipments	15%	79,46,904	5,14,537			85,61,441	41,71,048	5,88,569	48,29,607	37,75,856	37,81,834
Plant & Machinery	15%	6,71,65,869	3,81,866	11,62,087		8,87,29,932	4,42,82,533	35,78,453	4,78,60,986	2,28,83,336	2,09,68,946
Electrical Equipments	15%	84,37,595	1,05,382	1,13,280		86,56,257	65,02,716	3,14,535	68,17,251	19,34,879	18,39,006
Mechanical Lab Equipments	15%	27,37,255				27,37,255	19,75,108	1,14,322	20,89,430	7,62,147	6,47,625
Research Equipments	15%	3,44,03,214				3,44,03,214	2,07,58,981	20,46,935	2,28,03,916	1,36,45,233	1,15,59,298
GROSS TOTAL		66,51,63,546	70,86,334	1,19,86,744	4,27,000	67,37,89,624	42,67,65,988	3,69,15,137	46,56,71,198	22,54,07,578	20,81,17,816
PREVIOUS YEAR		60,12,98,341	3,54,12,073	1,84,63,132	-	65,81,63,546	39,06,85,405	3,80,90,694	42,97,55,989	21,06,32,938	22,84,07,576



REGISTRAR,
Jaypee University of Information Technology,
Waknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
Capital Work in Progress**

SCHEDULE - "B"

Amount (₹)

Particulars	Opening Balance as on 01.04.2018	Addition during the Year	Capitalized during the Year	Expensed Out during the Year	Closing Balance as on 31.03.2019
Capital Goods In Store	-	88,019	-	-	88,019
Capital Work in Progress		11,483,698			11,483,698
Gross Total	-	11,571,717	-	-	11,571,717



[Handwritten Signature]

REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
Cash and Bank Balance

SCHEDULE - "C"

S.No	Particulars	Amount (₹) 31.03.2019	Amount (₹) 31.03.2018
I	Cash in Hand	111,479	75,962
II	Balance with Schedule Banks		
	<u>In Current Account :</u>		
	- State Bank of India, Wakanaghat	284,065	255,202
	- Punjab National Bank, Shimla	696,869	309,447
	- Oriental Bank of Commerce, Solan	173,138	227,535
	- Punjab National Bank, Wakanaghat	4,902,676	3,444,554
	- Yes Bank Ltd., Noida	843,663	1,339,458
	- Cheque / DD in hand	51,095,298	5,438,000
	Balance with Schedule Banks		
	<u>In Saving Account :</u>		
	- Punjab National Bank, Samirpur	160,450	155,025
III	Fixed Deposits with Banks		
	- State Bank of India, Wakanaghat	-	14,400,000
	- Punjab National Bank, Shimla	1,175,949	1,145,291
	- Punjab National Bank, Wakanaghat	169,500,000	121,200,000
	- Oriental Bank of Commerce, Solan	50,000,000	136,900,000
	- Punjab National Bank, Samirpur	2,486,863	2,346,695
	- Interest Accrued but not due	7,460,693	5,686,199
IV	Earmarked Deposits with Banks		
	- Syndicate Bank UBSK, Noida (C/A)	151,746	152,040
	- Syndicate Bank UBSK, Noida (FDR)	18,187,613	18,187,613
	- Interest Accrued on FDR	3,704,662	2,323,515
	TOTAL	310,935,164	313,586,536



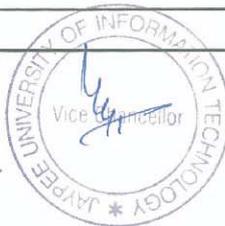
REGISTRAR,
Jaypee University of Information Technology
Wakanaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
ADVANCES AND RECEIVABLES IN CASH OR IN KIND**

SCHEDULE - "D"

Particulars	Amount (₹)	
	31.03.2019	31.03.2018
Advances To:-		
- Staff	140,046	933,512
- Suppliers/Agencies	448,212	201,015
- Other Educational Trust	56,831,084	55,916,768
Receivables From:-		
- Students	360,000	501,500
- Income Tax Department as on 31.03.19	5,516,328	4,082,347
- Assessment Year 2010-11	Rs. 6,61,804	
- Assessment Year 2011-12	Rs. 97,434	
- Assessment Year 2012-13	Rs. 93,910	
- Assessment Year 2013-14	Rs. 1,09,376	
- Assessment Year 2015-16	Rs. 3,71,907	
- Assessment Year 2017-18	Rs. 8,06,550	
- Assessment Year 2018-19	Rs. 17,59,028	
- Assessment Year 2019-20	Rs. 16,16,319	
- Excise & Taxation Department (VAT)	3,817,348	3,817,348
- Excise & Taxation Department (Entry Tax)	-	215,346
- Income Tax Department Appeal	5,573,000	5,573,000
- Receivable Of TCS	83,490	83,490
TOTAL	72,769,508	71,324,326



Das
REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
PREPAID EXPENSES**

SCHEDULE - "E"

Particulars	Amount (₹)	Amount (₹)
	31.03.2019	31.03.2018
AMC for Equipments	626,918	971,936
Insurance	505,231	258,617
Subscription for Journals & Digital Library	4,663,671	1,967,166
TOTAL PREPAID EXPENSES	5,795,820	3,197,719



[Handwritten Signature]

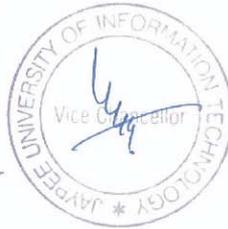
REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
SECURITY DEPOSITS**

SCHEDULE - "F"

Particulars	Amount (₹)	
	31.03.2019	31.03.2018
For Electricity Charges	2,344,514	2,083,514
For LPG	119,800	119,800
For Labour Office Solan	10,000	10,000
For Telephones	11,372	11,372
TOTAL SECURITY DEPOSITS	2,485,686	2,224,686



Das

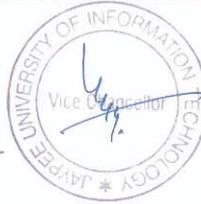
REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
STOCK-IN-HAND**

SCHEDULE - "G"

Particulars	Amount (₹)	Amount (₹)
	31.03.2019	31.03.2018
Annapurna Grocery & Eatables	2,277,580	1,217,907
Medicines	54,617	77,778
Diesel	1,058,819	734,111
General Hardware Items	2,160,113	2,023,346
Electrical Items	3,205,661	2,810,975
Material in Transit	862,126	-
Spares for Vehicles	49,282	58,915
TOTAL STOCK IN HAND	9,668,198	6,923,032



Bar

REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
SUNDRY CREDITORS**

SCHEDULE - "H"

Particulars	Amount (₹)	Amount (₹)
	31.03.2019	31.03.2018
- For Goods Supplied	7,111,626	5,400,604
- For Services Rendered	9,500,742	9,408,380
- For Retention	1,069,104	884,747
- For Statutory Liabilities	43,412,657	41,158,370
TOTAL SUNDRY CREDITORS	61,094,129	56,852,101



[Handwritten Signature]

REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
OTHER LIABILITIES**

SCHEDULE - "I"

Particulars	Amount (₹) 31.03.2019	Amount (₹) 31.03.2018
Uncleared Cheques	1,242,185	3,062,288
Fee in Advance	89,934,121	94,005,869
JYC Students Fund	1,473,354	1,706,636
Expenses Payable	5,193,423	7,793,402
Salary and Allowances Payable	-	23,113
T.D.S. Payable	3,016,877	2,016,912
TOTAL OTHER LIABILITIES	100,859,960	108,608,220



[Handwritten Signature]

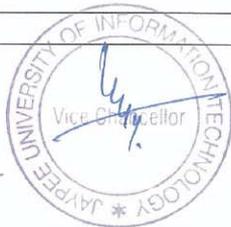
REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



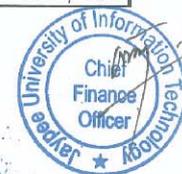
**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
INSTITUTIONAL EXPENSES**

SCHEDULE - "J"

Particulars	Amount (₹)	
	31.03.2019	31.03.2018
Admission Exps. including Advertisement	5,626,229	3,995,098
Audit Fee	354,000	236,000
Conference & Seminar Expenses	286,976	213,497
Convocation Expenses	43,775	40,685
Contribution towards Research & Development	87,925	-
E-Journals & Periodicals	5,673,182	4,530,247
Electricity Expenses	5,812,069	4,209,673
Honorarium to Faculty & Remuneration of Visiting Faculty	854,295	1,004,630
Institute Promotional Expenses	212,716	516,242
Insurance Expenses	191,609	454,838
Internet Charges	641,789	549,748
Interest & Finance Charges	9,135,295	9,364,606
Laboratory Expenses	3,045,210	2,260,383
Lease Rent	22,651	21,584
Legal & Professional Charges	466,389	730,429
Misc. Expenses	1,060,985	256,618
Payment to Technical Personnel	9,310,009	6,921,377
Placement Expenses	1,027,442	476,619
Postage & Telegram	140,498	109,423
Prior Period Exps.	75,941	35,110
Printing & Stationery	1,930,485	1,905,585
Recruitment Expenses	424,087	689,806

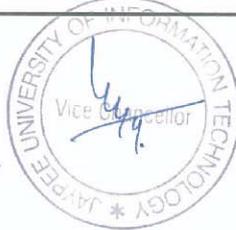


Basu
REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



SCHEDULE - "J" (Continued)

Particulars	Amount (₹)	Amount (₹)
	31.03.2019	31.03.2018
Scholarship to Students	14,940,523	7,915,236
Security Expenses	5,081,161	3,873,099
Staff Welfare	1,580,553	1,249,475
Telephone Expenses	626,809	210,909
Travelling & Conveyance	1,401,789	943,656
Water Expenses	2,770,883	2,357,521
Repair & Maintenance		
- Civil Maintenance	5,307,284	9,150,866
- Equipment & Machinery	5,860,474	6,323,700
- Furniture & Fixture	1,577,138	1,417,594
- Horticulture Exps.	2,132,478	1,822,589
- Institute House Keeping	3,898,204	3,175,036
- Others	2,820,281	3,532,939
- Vehicles	3,792,682	3,516,399
- Water Supply Scheme	227,766	257,697
TOTAL INSTITUTIONAL EXPENSES	98,441,582	84,268,914



Alban

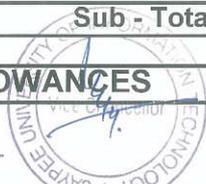
REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
SALARY & ALLOWANCES**

SCHEDULE - "K"

Particulars	Amount (₹)	Amount (₹)
	31.03.2019	31.03.2018
Teaching Staff :		
Salary	100,614,665	95,255,602
Conveyance Allowance	7,334,688	7,118,820
H.R.A.	6,701,694	6,097,352
Medical Reimbursement	4,053,938	3,746,471
Leave Travel Assistance	3,782,981	3,654,261
Contribution to Provident Fund	12,301,699	12,044,295
Provision for Gratuity	3,952,938	7,192,468
Other Allowances	28,655,875	19,185,115
Sub - Total	167,398,478	154,294,384
Non-Teaching Staff :		
Salary	34,048,256	30,936,274
Conveyance Allowance	1,929,195	1,964,199
H.R.A.	2,769,074	2,711,278
Medical Reimbursement	1,277,797	1,260,927
Leave Travel Assistance	1,207,351	1,151,007
Contribution to Provident Fund	4,171,521	4,029,752
Provision for Gratuity	3,648,866	2,694,086
Other Allowances	4,652,343	2,918,546
Sub - Total	53,704,403	47,666,069
TOTAL SALARY & ALLOWANCES	221,102,881	201,960,453



REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
STUDENTS HOSTEL EXPENSES**

SCHEDULE - "L"

Particulars	Amount (₹)	Amount (₹)
	31.03.2019	31.03.2018
Grocery & Eatables Consumed	43,851,011	41,517,286
Security Expenses	11,856,026	9,037,234
Electricity Charges	15,871,100	16,838,692
Water Charges	8,906,034	7,072,564
Housekeeping Expenses	11,290,552	7,954,221
Dispensary Expenses	6,099,013	4,389,184
Students Welfare Expenses	744,103	1,696,047
Messing Staff Expenses	12,223,802	9,214,189
Salary Annapurna & Technical Staff	7,148,481	6,741,792
Repair & Maintenance	17,417,031	18,546,934
Laundry Expenses	3,674,042	3,360,516
TOTAL STUDENTS HOSTEL EXPENSES	139,081,195	126,368,659



Basu

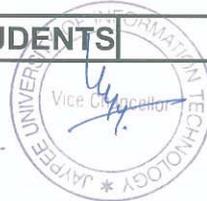
REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



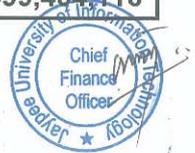
**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
COLLECTIONS FROM STUDENTS**

SCHEDULE - "M"

Particulars	Amount (₹)	
	31.03.2019	31.03.2018
Fees From Students:		
Tuition Fee	324,063,014	310,825,273
Hostel Fee	144,187,141	149,717,721
Development Fee	-	21,546,579
Sub Total :	468,250,155	482,089,573
Other Collection:-		
Misc.Charges	1,695,198	1,767,973
Admission Form Charges	2,032,125	1,912,755
Tuck Shop Charges	3,770,898	3,703,377
Mess Charges	9,508,071	9,930,432
Sub Total :	17,006,292	17,314,537
TOTAL COLLECTIONS FROM STUDENTS	485,256,447	499,404,110



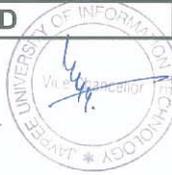
Ban
REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
INTEREST RECEIVED ON FDRs**

SCHEDULE - "N"

Particulars	Amount (₹)	Amount (₹)
	31.03.2019	31.03.2018
Oriental Bank of Commerce - Solan	3,387,013	8,262,550
Punjab National Bank - Shimla	193,503	78,956
Punjab National Bank - Waknaghat	10,761,738	3,955,091
State Bank of India - Waknaghat	23,542	3,520,735
Syndicate Bank - Noida (UBSK)	1,534,608	1,437,792
Yes Bank Ltd.- Noida	-	175,648
Punjab National Bank - Samirpur	161,238	156,837
TOTAL INTEREST RECEIVED	16,061,642	17,587,609



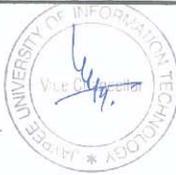
[Signature]
REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2018-19
OTHER INCOME**

SCHEDULE - "O"

Particulars	Amount (₹)	
	31.03.2019	31.03.2018
Other Miscellaneous Income	7,49,001	2,28,037
Notice Pay Recovery	3,85,133	10,33,579
Overhead Charges for Research Projects	4,03,443	6,25,911
Registration Charges for Conference & Seminars	10,683	2,42,295
Sundry Balance Written Off	3,62,892	1,34,456
TOTAL OTHER INCOME	19,11,152	22,64,278



[Signature]
REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
WAKNAGHAT, SOLAN, HIMACHAL PRADESH**

FINANCIAL YEAR 2018-19

**SCHEDULE – “P” : SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON
ACCOUNTS FORMING PART OF ACCOUNTS.**

I. BACK GROUND

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, HAVING HEAD QUARTER AT WAKNAGHAT, HIMACHAL PRADESH IS A BODY CORPORATE BY THE NAME AFORE SAID, ESTABLISHED AND INCORPORATED UNDER SECTION 3 OF JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY ACT NO. 14 OF 2002 (AS ASSENTED TO BY THE GOVERNOR ON 22ND MAY, 2002) IS REGISTERED U/SEC 12A OF THE INCOME TAX ACT 1961 AND NOTIFIED U/SEC 10(23C) AND 80G OF THE INCOME TAX ACT, 1961. THE UNIVERSITY CONTINUE TO RUN ON “NOT FOR PROFIT” BASIS TO OFFER TECHNICAL EDUCATION OF THE HIGH STANDARDS BY TEACHING, RESEARCH, TRAINING AND EXTENSION ACTIVITIES. THE UNIVERSITY HAS ESTABLISHED THE “UNNAT BHARAT SHODH KOSH” FOR CARRYING OUT THE RESEARCH ACTIVITIES INVOLVING STUDENTS, FACULTY MEMBERS AS WELL AS INDUSTRY.

II. SIGNIFICANT ACCOUNTING POLICIES

A) GENERAL

THE ACCOUNTS HAVE BEEN PREPARED UNDER MERCANTILE SYSTEM OF ACCOUNTING AS PER HISTORICAL CONVENTION TO MEET WITH THE REQUIREMENTS OF CLAUSE 20 (1) AND (2) OF ACT NO.14 OF 2002 OF JUIT ACT AND THE REQUIREMENTS OF THE INCOME TAX ACT 1961 AND RECOGNIZED ACCOUNTING POLICIES AND PRACTICES



Basu
REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



INCLUDING THE ACCOUNTING STANDARDS ISSUED BY THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA TO THE EXTENT APPLICABLE, EXCEPT OTHERWISE STATED. ACCOUNTING POLICIES NOT SPECIFICALLY REFERRED TO OTHERWISE BE CONSISTENT AND IN CONSONANCE WITH GENERALLY ACCEPTED ACCOUNTING POLICIES.

B) USE OF ESTIMATES:

THE PRESENTATION OF FINANCIAL STATEMENTS IN CONFORMITY WITH THE GENERALLY ACCEPTED ACCOUNTING PRINCIPLES REQUIRES ESTIMATES AND ASSUMPTIONS TO BE MADE THAT AFFECT THE REPORTED AMOUNT OF ASSETS AND LIABILITIES ON THE DATE OF THE FINANCIAL STATEMENTS AND THE REPORTED AMOUNT OF REVENUES AND EXPENSES DURING THE REPORTING PERIOD. DIFFERENCE BETWEEN ACTUAL RESULT AND ESTIMATES ARE RECOGNIZED IN THE PERIOD IN WHICH THE RESULTS ARE KNOWN/ MATERIALIZED.

C) FIXED ASSETS

FIXED ASSETS ARE STATED AT COST OF ACQUISITION INCLUSIVE OF FREIGHT AND OTHER INCIDENTAL EXPENSES.

D) DEPRECIATION

DEPRECIATION ON FIXED ASSETS HAS BEEN PROVIDED ON WRITTEN DOWN VALUE AS PER THE CLASSIFICATION AND ON THE BASIS OF PROVISIONS OF INCOME TAX ACT, 1961.

E) INVENTORY: INVENTORY OF CONSUMABLES LIKE GROCERY & EATABLES, STATIONARY, MEDICINES, LABORATORY CONSUMABLES, STORES & SPARE ARE VALUED AT COST OR NET REALIZABLE VALUE WHICHEVER IS LESS. INVENTORY OF DIESEL IS VALUED AT YEARLY WEIGHTED AVERAGE BASIS.

F) CLAIMS

CLAIMS LIKE INTEREST ON INCOME TAX REFUND, INSURANCE CLAIMS ETC. ARE ACCOUNTED FOR ON RECEIPT BASIS.



Ban
REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Dist. Solan (H.P.)



G) REVENUE: TUITION, HOSTEL AND DEVELOPMENT FEES COLLECTED FROM STUDENTS FOR A SEMESTER HAS BEEN PRORATED OVER THE PERIOD OF SEMESTER. OTHER CHARGES RECOVERED FROM STUDENTS HAVE BEEN RECOGNIZED IN THE YEAR OF RECEIPT.

BORROWING COST: BORROWING COST INCURRED DURING CONSTRUCTION PERIOD IS DIRECTLY CHARGED TO PROFIT & LOSS A/C.

H) EMPLOYEE BENEFITS

- SHORT TERM EMPLOYEE BENEFITS ARE RECOGNIZED AS AN EXPENSE AT THE UNDISCOUNTED AMOUNT IN INCOME & EXPENDITURE ACCOUNT OF THE YEAR IN WHICH THE RELATED SERVICE IS RENDERED.
- POST EMPLOYMENT AND OTHER LONG TERM EMPLOYEE BENEFITS ARE RECOGNIZED AS AN EXPENSE IN THE INCOME & EXPENDITURE ACCOUNT FOR THE YEAR IN WHICH THE EMPLOYEE HAS RENDERED SERVICES. THE EXPENSE IS RECOGNIZED AT THE PRESENT VALUE OF THE AMOUNT PAYABLE DETERMINED USING ACTUARIAL VALUATION TECHNIQUES. ACTUARIAL GAINS AND LOSSES IN RESPECT OF POST EMPLOYMENT AND OTHER LONG TERM BENEFITS ARE CHARGED TO INCOME AND EXPENDITURE ACCOUNT.

I) FOREIGN CURRENCY TRANSECTIONS:

TRANSACTIONS IN FOREIGN CURRENCY LIKE FEES RECEIVED IN FOREIGN CURRENCY ARE RECORDED AT THE EXCHANGE RATE PREVAILING ON THE DATE OF TRANSACTION. AMOUNT PAYABLE AND RECEIVABLE IN FOREIGN CURRENCY AS AT THE BALANCE SHEET DATE ARE REINSTATED AT THE APPLICABLE EXCHANGE RATES PREVAILING ON THAT DATE. ALL EXCHANGE DIFFERENCES ARE CHARGED TO INCOME & EXPENDITURE ACCOUNT IF RELATE TO REVENUE TRANSACTIONS AND ADJUSTED TO THE COST OF CAPITAL ASSETS IF RELATE TO CAPITAL TRANSACTIONS.




REGISTRAR,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



III. NOTES ON ACCOUNTS

1. CONTINGENT LIABILITIES:

- A) DISPUTED VAT LIABILITY UNDER APPEAL Rs. 38,17,348/- (PREVIOUS YEAR: Rs. 38,17,348/-)
 B) DISPUTED INCOME TAX LIABILITY UNDER APPEAL Rs. 1,02,02,851/- (PREVIOUS YEAR: 1,02,02,851/-)

* AMOUNT PAID Rs. 55,73,000/- SHOWN IN SCHEDULE -D

2. BALANCES IN PARTIES' ACCOUNTS ARE SUBJECT TO CONFIRMATION FROM THEM.

3. FUNDS RECEIVED FROM VARIOUS GOVERNMENT AUTHORITIES/RESEARCH FUNDING AGENCIES FOR UTILIZATION IN VARIOUS PROJECTS AS DIRECTED BY THAT AUTHORITIES/AGENCIES ON THEIR BEHALF HAS BEEN SHOWN UNDER "RESEARCH PROJECT FUND". DETAILS OF UTILIZATION OF RESEARCH PROJECT FUND DURING THE YEAR IS AS FOLLOWS:-

PARTICULARS	OPENING BALANCE AS ON 01.04.2018 (RS)	RECEIVED DURING THE YEAR* (RS)	REFUND DURING THE YEAR (RS)	UTILIZATION DURING THE YEAR			CLOSING BALANCE AS ON 31.03.2019 (RS)
				REVENUE EXPENDITURE (RS)	CAPITAL EXPENDITURE (RS)	TOTAL (RS)	
DST/DBT/HI MCOST-PROJECTS	35,77,521	45,06,103	1,35,369	61,63,221	12,16,530	73,79,751	5,68,504
OTHER PROJECTS	29,54,236	17,80,668	-	19,40,401	8,87,877	28,28,278	19,06,626
TOTAL	65,31,757	62,86,771	1,35,369	81,03,622	21,04,407	1,02,53,029	24,75,130

4. TERM LOAN HAS BEEN SECURED BY EXCLUSIVE CHARGE OVER CURRENT ASSETS INCLUDING ALL RECEIPTS (INCLUDING DEVELOPMENT FUNDS) FEES AND MOVABLE FIXED ASSETS OF THE UNIVERSITY AND ALL LAND AND BUILDINGS OF UNIVERSITY CAMPUS AND HOSTEL OWNED BY SPONSORING TRUST).



Dan
 REGISTRAR,
 Jaypee University of Information Technology
 Wazirpur, Distt. Solan (H.P)



5. PREVIOUS YEAR FIGURES HAVE BEEN REGROUPED/ REARRANGED OR RECLASSIFIED WHEREVER FOUND NECESSARY TO CONFIRM WITH CURRENT YEAR'S CLASSIFICATION.
6. FIGURES HAVE BEEN ROUNDED UP TO NEAREST RUPEES.

FOR DASS GUPTA & ASSOCIATES
CHARTERED ACCOUNTANTS
REGISTRATION No. 000112N


(ASHOK KUMAR JAIN)
PARTNER
MEMBERSHIP No: 090563

PLACE: NEW DELHI
DATE: 25.09.2019

FOR JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY


(VINOD KUMAR)
VICE CHANCELLOR


MAJ GEN RAKESH BASSI, SM (RETD.)
REGISTRAR
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)


CHIEF FINANCE OFFICER
(HEMANT VYAS)