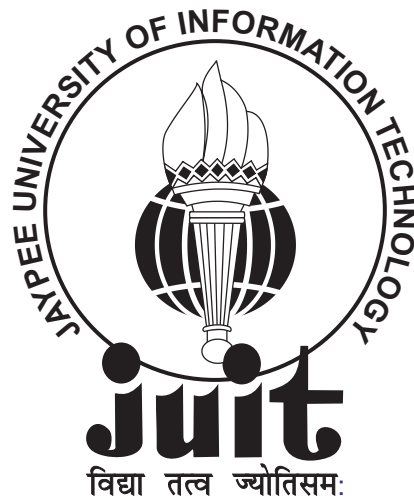


JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

WAKNAGHAT

Himachal Pradesh



**ANNUAL REPORT
2019 - 2020**

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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	:	Shri Bandaru Dattatreya Hon'ble Governor of Himachal Pradesh
Pro-Chancellor	:	Shri. Manoj Gaur Executive Chairman, Jaiprakash Associates Ltd
Vice Chancellor	:	Prof. (Dr.) Vinod Kumar
Registrar	:	Maj Gen Rakesh Bassi, SM (Retd)

Tele/Fax/Website

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 Wahnaghat, 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 Act of the University, the Governing Council is the supreme body of the University and its powers and functions shall be such as may be prescribed by the statutes. The composition of the Governing Council is given at **Appendix-A**.

Executive Council and Finance Committee

- The Executive is responsible for the general management and administration of the University. The Finance Committee oversees the budget forecasts and approves the budget. The composition of Executive Council and Finance Committee 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
- Academic Council 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
- Executive Council 05 September 2019
- Academic Council 05 September 2019
- Finance Committee 05 September 2019
- Academic Council 04 June 2020

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, attainment of minimum CGPA and 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 115 among all Engineering Institutes in the country in the year 2019-20.

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

Further accreditation of all the programs of the University have been taken up with NBA in an Online Mode as directed by them.

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

Visit of Regulatory Body

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

The University was visited by Member HP Private Educational Institutions Regulatory Commission on 08 June 2020.

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 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 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 & M.Sc.(Biotechnology from the Academic session 2019-20), 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.

g) **M.Sc. (Biotechnology)**

One of the major objectives of M. Sc Biotechnology program is to generate human resource in all areas of basic and applied Biotechnology useful in industries and economical activities. The program is designed to impart skills in areas like Microbiology, Plant and Animal Tissue Culture, Molecular Biology, Recombinant DNA Techniques, Environment Biotechnology, Biomolecules, Bioprocess Technology, Basic Immunology Techniques and Clinical Diagnostics. The Department of Biotechnology, Govt. of India accepted JUIT proposal to fund this program (10 seats) for 2020-25.

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/IIIT'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	Rajiv Kumar	Ph.D.	Fault-Tolerance, Network Reliability & Networked Control Systems
3	Shruti Jain	Ph.D.	Bio Medical Signal Processing, VLSI Design
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	Alok Kumar	Ph.D.	Communication Systems, Cognitive Radio, Wireless Sensor Networks
16	Pragya Gupta	M. Tech.	Communication Engineering, Image Processing
17	Pradeep Garg	M. Tech.	Genomic Signal Processing
18	Munish Sood	M. Tech. MBA (HR)	Computer Vision, Deep Learning

- **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 through JEE. 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

- **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, XILINX VIVADO, ORCAD, and LABView. For the enhancement of quality of Lab work, ECE department has also adopted Virtual Lab platform in most of the labs. This platform is also very helpful for conducting the experiments in an online mode. Recently, ECE department introduced Python programming for Automatic Control System lab.

- **Placement**

For the academic year 2019-20, there were 78 eligible students who could sit for placements. Out of 78 students, 68 students got placed in various companies like Infosys, Wipro, Cognizant, Ericsson, Genpact, BYJU'S, Amazon, etc. as on July 27, 2020. There are total 88 offers to these students.

- **New Courses introduced during the year**

Following new courses were introduced during the academic session 2019-20

S No	Title of New Course	Course Code
1	Electronic Devices & Circuits	18B11EC313
2	Electronic Devices & Circuits Lab	18B17EC373
3	Automatic Control Systems	18B11EC311
4	Automatic Control Systems Lab	18B17EC371
5	Digital Electronics & Logic Design	18B11EC312
6	Digital Electronics & Logic Design Lab	18B17EC372
7	Network Theory	17B11EC513
8	Minor Project-I	17B19EC591
9	Control Systems	18B1WEC531
10	Microwave Components And Devices	18B1WEC532
11	Applied Artificial Intelligence	18B1WEC533
12	Reconfigurable Computing	19P1WEC101

13	Python Lab	18B17EC474
14	Analog Integrated Circuits	18B11EC411
15	Analog Integrated Circuits Lab	18B17EC471
16	Fundamentals of Signals & Systems	18B11EC412
17	Fundamentals of Signals & Systems Lab	18B17EC472
18	Modern Analog and Digital Communication	18B11EC413
19	Modern Analog and Digital Communication Lab	18B17EC473
20	Minor Project-II	17B19EC691
21	Neural Networks	19B1WEC631
22	Embedded Systems	19B1WEC632

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

S No	Title of New Course	Course Code
1	Principles of Communication Systems-I	18B2WEC709
2	Introduction to Photonics	18B2WEC805
3	Modern Digital Communication Techniques	18B2WEC804
4	Machine Learning for Engineering And Science Applications	18B2WEC806
5	Digital IC Design	19B2WEC801
6	Electronic Systems for Cancer Diagnosis	19B2WEC802
7	Mapping Signal Processing Algorithms To Dsp Architectures	18B2WEC710
8	Op-Amp Practical Application :Design, Simulation and Implementation	18B2WEC711
9	Introduction to Computer Vision	18B2WEC712
10	Sensors and Actuators	18B2WEC713
11	Computer Vision	19B2WEC701
12	Digital IC Design	19B2WEC801
13	Electronic Systems for Cancer Diagnosis	19B2WEC802

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; 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 in 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.

Ph.D. completed

Three students completed their Ph.Ds in the academic year 2019-20.

S.No	Name	Title of Thesis
1	Ashutosh Sharma	Risk-Aware Communication Network Architecture and Planning
2	Jyotsna Dogra	An Automatic Glioma Detection and Extraction framework for the Removal of Shrinkage in Segmentation
3	Alok Kumar	Optimal Threshold Selection of Energy Detection Based Cooperative Spectrum Sensing in Cognitive Radio Networks

Ph.D. Enrolled

For the academic year 2019-20, five new scholars enrolled in Ph.D. program.

S.No	Roll No.	Name
1	196001	Garima Thakur
2	196002	Vishakha Thakur
3	196003	Niveditta Thakur
4	196004	Munish Patial
5	196005	Anjana Kumari

- **Lab Facilities**

- **New Labs**

Following new labs have been established in the academic year

- 1. Automatic Control Systems Lab:**

Installed new packages viz., Conda package manager, Python, Jupyter Notebook and Spyder IDE. Developed experiments of the Automatic Control System Lab in Python.

- 2. Digital Signal Processing Lab Using LabVIEW:**

Digital Signal Processing (DSP) lab conduction has been started using LabVIEW since July 2019. Therefore, Lab VIEW based experiments and its manuals have been developed for the DSP lab.

- **Lab Staff with qualification**

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

- **Labs**

- 1. MATLAB (R2019b)**

The software has been updated from an older version to the latest version R2019b.

- 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. Meenakshi Sood and Dr. Pradeep Kumar Singh	Identification of commercial crop diseases using image processing techniques & its environmental effects for the farmers of Himachal Pradesh with feedback system using IOT and android application	Department of Environment, Science & Technology, Government of Himachal Pradesh	9.97 Lacs	Two years 2018-2020	Ongoing
2	Dr. Shruti Jain and Dr. Meenakshi 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	Completion report submitted

- Patent Filed:**

S No	Title of Research Project	Members	Application No
1	A Multiplexer Based MAC Architecture Implementation on FPGA	Raj Kumar Sharma, Shruti Jain	L-TEMP/E-29819/2020-DEL
2	A Novel N-Bit Compressor Based High-Speed Multiplier Algorithm For Low Power Arithmetic Circuits	Rajkumar Sarma, Cherry Bhargava, Sandeep Dhariwal, & Shruti Jain	TEMP/E-1/23170/2018-DEL

Copyright Received

S No	Title of the Work	Members	Registration No
1	A Handbook to Use Digital Circuit Simulation Tools	Cherry Bhargava, Rajkumar Sarma and Shruti Jain.	L-83855/2019
2	Novel Signed Floating-Point MAC (SFMAC) Architecture	Cherry Bhargava, Rajkumar Sarma and Shruti Jain.	L-91179/2020

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

- **Conferences**

- **Conferences Organised**

Dates	Subject	Venue	Participation Faculty Name	Remarks
October 10-12, 2019	5th IEEE International Conference on Signal Processing and Control (ISPCC 2k19)	Jaypee University of Information Technology, Wagnaghat	Dr. Shruti Jain and Dr. Meenakshi Sood	

- **Conferences Attended**

Dates	Subject	Venue	Faculty Name	Remarks
March 26 - 28, 2020	1st International Conference on Mobile Radio Communications	U.I.E.T-KUK	Dr. Shruti Jain	
20 -21 March, 2020	3rd International Conference on Recent Innovations in Computing (ICRIC-2020)	Central University of Jammu	Dr. Shruti Jain	
November 15-17, 2019	5th International Conference on Image Information Processing	Jaypee University of Information Technology, Wagnaghat	Dr. Shruti Jain	

October 10-12, 2019	5th IEEE International Conference on Signal Processing and Control	Jaypee University of Information Technology, Wagnaghat	Dr. Shruti Jain, Dr. Neeru Sharma, Dr. Shweta Pandit, Dr. Naveen Jaglan, Dr. Nafis, Mr. Pardeep Garg	
September 06-07, 2019	International Conference on Computational Intelligence and Data Science (ICCIDS 2019)	North Cap University, Gurugram	Dr. Shruti Jain, Dr. Sunil Datt, Mr. Pardeep Garg	
September 28-29, 2019	E-Summit organised by TIED Cell	Jaypee University of Information Technology, Wagnaghat	Dr. Neeru Sharma, Dr. Naveen Jaglan, Dr. Sunil Datt, Dr. Vikas Baghel, Dr. Nishant, Mr. Alok, Mr. Pardeep Garg	
November 15-17, 2019	International Conference on Image Information Processing (ICIIP 2019)	Jaypee University of Information Technology, Wagnaghat	Dr. Nafis, Dr. Sunil Datt	
December 6-8, 2019	3rd IEEE Conference on Information and Communication Technology	IIIT Allahabad	Dr. Sunil Datt	

Seminars/Webinars

- Webinars Attended

Dates	Subject	Faculty Name	Remarks
June 10, 2020	Webinar on AI for Drug Discovery in the Epidemic Era by IET	Dr. Sunil Datt	
June 8, 2020	Webinar: Post Covid Awareness & Opportunities	Dr. Sunil Datt	

June 12, 2020	Webinar: Evolution & Future of the Industrial Control Network by IET	Dr. Sunil Datt	
June 12, 2020	Webinar: AI and Engineering for Healthcare Crises: Rapid Response Strategies for Covid-19 by IET	Dr. Sunil Datt	
May 20, 2020	Webinar: IEEE 802.11 and Building Wireless Community Networks by IEEE	Dr. Sunil Datt	
May 22, 2020	One day webinar on IOT based solution to fight with COVID-19	Dr. Sunil Datt	
May 25, 2020	One day webinar on Opportunities for engineers at DRDO organized by CIT Chennai	Dr. Sunil Datt	
May 27, 2020	One day webinar on AI for health care applications organized by CIT Chennai	Dr. Sunil Datt	
June 23, 2020	One day webinar on Internet of things using Node MCU organized by SKITS, Indore	Dr. Sunil Datt	
June 30, 2020	One day webinar on Face Recognition using deep learning organized by BITS Warangal	Dr. Sunil Datt	
May 19- June 9, 2020	Attended Webinar Series on Remote Sensing in Crop Monitoring and Assessment organised by Indian Institute of Remote Sensing (IIRS), ISRO.	Dr. Nishant	
May 1, 2020	Attended Webinar on Smart Manufacturing organised by Shri G S Institute of Technology and Science, Indore	Dr. Nishant	

Workshops

- Workshops Organized

Dates	Subject	Venue	Participation	Remarks
September, 20-21, 2019	Workshop on Virtual Labs by IIT Delhi:	Jaypee University of Information Technology, Himachal Pradesh.	Dr. Rajiv Kumar	

October 10-12, 2019	Three day workshop on Biomedical Signal Processing in Computer Vision - Techniques and Advancements by the experts from ADInstruments, New Delhi from, at	Jaypee University of Information Technology, Himachal Pradesh.	Dr. Shruti Jain	
October 10-12, 2019	Organized three day workshop on Computational Tools and Techniques for Biomedical Signal Processing- Advances in Biomedical Engineering by the experts from Biopac, New Delhi, India from, at, India.	Jaypee University of Information Technology, Himachal Pradesh.	Dr. Shruti Jain	
January 06-12, 2020	One week workshop Emerging areas of Research in Image Processing (ERIP 2020) by Signal and Image Processing Group, Department of Electronics and Communication Engineering, , Himachal Pradesh, India.	Jaypee University of Information Technology, Himachal Pradesh.	Dr. Shruti Jain, Dr. Nishant	

November 18-24, 2019	Convener of One week workshop on Machine Learning	Jaypee University of Information Technology, Himachal Pradesh	Dr. Shruti Jain	
November 06-11, 2019	Convener of One week Workshop on Web Development.	Jaypee University of Information Technology, Himachal Pradesh	Dr. Shruti Jain	
September 16-22, 2019	Convener of one week workshop Boot Camp on C by Technical Club, Jaypee University of Information Technology, Himachal Pradesh.	Jaypee University of Information Technology, Himachal Pradesh	Dr. Shruti Jain	
October 13-17, 2019	Convener in five days Boot Camp on Python by Technical club, Jaypee University of Information Technology, Himachal Pradesh	Jaypee University of Information Technology, Himachal Pradesh	Dr. Shruti Jain	
February 10-12, 2020	Three day workshop on Perception towards IPR from, by IPR cell at Jaypee University of Information Technology, Himachal Pradesh.	Jaypee University of Information Technology, Himachal Pradesh	Dr. Shruti Jain	
September 23-26, 2019	Four days workshop on Graphic Designing	Jaypee University of Information Technology, Himachal Pradesh, India	Dr. Shruti Jain	

- **Workshops Attended**

Dates	Subject	Venue	Faculty Name	Remarks
February 10-12, 2020	Three days workshop on Perception towards IPR	Jaypee University of Information Technology, Himachal Pradesh.	Dr. Shweta, Dr. Sunil Datt, Dr. Nishant, Dr. Neeru Sharma, Dr. Emjee Puthooran, Dr. Vikas Baghel,	
January 6 – 12, 2020	One Week Workshop on Emerging Areas of Research in Image Processing	Jaypee University of Information Technology, Solan	Dr. Nafis, Dr. Sunil Datt, Dr. Neeru Sharma Dr. Vikas Baghel, Mr. Alok, Mr. Pardeep Garg	
October 10-12, 2019	Attended three day workshop on Biomedical Signal Processing in Computer Vision - Techniques and Advancements by the experts from AD Instruments, New Delhi.	Jaypee University of Information Technology, Himachal Pradesh	Dr. Nishant, Dr. Sunil Datt, Dr. Vikas Baghel, Mr. Pardeep Garg	
October 10-12, 2019	Attended three day workshop on Computational Tools and Techniques for Biomedical Signal Processing- Advances in Biomedical Engineering by the experts from Biopac, New Delhi.	Jaypee University of Information Technology, Himachal Pradesh	Dr. Nishant, Dr. Sunil Datt, Dr. Vikas Baghel, Mr. Pardeep Garg	

September, 6-7, 2019	Workshop on Artificial Intelligence-Reasoning and Learning	North Cap University, Gurugram, Haryana	Mr. Pardeep Garg	
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- **Faculty Development Programs Organised**

The department organized one FDP in the academic session 2019-20. The details of the same are as follows:

Dates	Name	Organized by	No. of participants
January 6-12, 2020	Emerging Areas of Research in Image Processing-2020 (ERIP-2020)	Dr. Shruti Jain, Dr. Nishant, Dr. Emjee Puthooran, Dr. Harsh, Ms. Pragya	40

- **Faculty Development Programs Attended**

Dates	Name	Organized by	No. of participants
May 11-15, 2020	Online FDP on Artificial Intelligence .	University Institute of Engineering and Technology, Kurukshetra	Dr. Shruti Jain
April 27, 2020 to May 01, 2020	Online FDP on Internet of Things (IoT)	University Institute of Engineering and Technology, Kurukshetra	Dr. Shruti Jain
January-April, 2020	8 Weeks NPTEL FDP on course Evolution of Air Interface towards 5G on Swayam platform.	NPTEL	Dr. Neeru Sharma, Dr. Shweta
June 22-28, 2020	Online One week FDP on Recent trends in control system engineering.	National Institute of Technology, Patna	Dr. Soloman Raju Talluri
April 28-May 2, 2020	FDP on R training	Organised by Spoken Tutorial, IIT Bombay Jaypee University of Information Technology, Himachal Pradesh	Dr. Shweta, Dr. Nishant

June 15-20, 2020.	One week FDP on Transforming Education with Industry 4.0.	CSE & IT Department Jaypee University of Information Technology, Himachal Pradesh	Dr. Shweta
February 24 – 28, 2020	FDP on Deep Learning for Image Processing: Overview, Challenges and Future.	NITTTR Chandigarh	Dr. Emjee Puthooran, Dr. Neeru Sharma, Dr. Vikas Baghel
April 15-22, 2020	Online FDP on Machine Learning and Data Analytics with Python	EICT, IIT Roorkee	Dr. Nishant
June 23-July 3, 2020	Attended FDP on Machine Learning and IoT with AWS	EICT, IIT Roorkee	Dr. Nishant

- **Publications**

- **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Rajiv Kumar, Hemraj Saini	Secure, Resilient and Green Computing in Wireless Sensor Networks	Recent Advances in Electrical and Electronic Engineering	Vol.13, no. 2, pp. 128-129, 2020	
Geetanjali, Ashutosh Sharma, Rajiv Kumar, Farhan Ahmad, Razi Iqbal	A trust management scheme to secure mobile information centric networks	Computer Communications	Vol. 151 , pp. 66-75, February 2020	
Ashutosh Sharma, Rajiv Kumar, Manar Wasif Abu Talib, Saurabh Srivastava, Razi Iqbal	Network modelling and computation of quickest path for service-level agreements using bi-objective optimization	International Journal of Distributed Sensor Networks	Vol. 15, no. 10, pp. 1-17, Oct. 2019	

Amit Sharma, Pradeep Kumar Singh , Ashutosh Sharma, Rajiv Kumar	An efficient architecture for the accurate detection and monitoring of an event through the sky	Computer Communications	Vol. 148, pp. 115-128, 2019	
G. Rathi, A. Sharma, R. Kumar and R. Iqbal	A Secure Communicating Things Network Framework for Industrial IoT using Blockchain Technology	Ad Hoc Networks	Vol. 94, Nov. 2019.	
G. Rathi, A. Sharma, R. Iqbal, M. Aloqaily, N. Jaglan, and, R. Kumar	A Blockchain Framework for Connected and Autonomous Vehicles Services Delivery	Sensors	Vol. 19, 14 July 2019.	
M. Poongodi, A. Sharma, V. Vijayakumar, V.Bhardwaj, AP. Sharma, R. Iqbal and R. Kumar	Prediction of the price of Ethereum blockchain cryptocurrency in an industrial finance system	Computers & Electrical Engineering	Vol. 81, Jan 2020	
A. Sharma, G. Rathi, R. Kumar and R. Iqbal	An Efficient Internet of Things Transportation Mechanism by Considering Critical Issues during Data Transmission	Ad Hoc Networks	2019	
A. Sharma, R. Kumar, ManarWasif Abu Talib, S. Srivastava and R. Iqbal	Network Modelling and Computation of Quickest Path for Service Level Agreements Using Bi-Objective Optimization	International Journal of Distributed Sensor Networks	Vol. 15, no. 10, Oct. 2019	

J.Dogra, S. Jain, A. Sharma, R. Kumar, M.Sood	Brain Tumor Detection from MR Images employing Fuzzy Graph Cut Technique	Recent Patent in Computer Science	Vol. 13, no. 3, 2020.	
S. Bhailaik, A. Sharma, R. Kumar, and N. Sharma	Performance Modeling and Analysis of WDM Optical Networks under Wavelength Continuity Constraint using MILP	Recent Advances in Electrical and Electronic Engineering	Vol. 13, no. 2, 2020.	
D. Sharma, A. Sharma, R. Kumar, and N. Sharma	A Holistic Survey on Disaster and Disruption in Optical Communication Network	Recent Advances in Electrical and Electronic Engineering	vol. 13, no. 2, 2020	
Jyotsna Dogra, Shruti Jain and Meenakshi Sood	Glioma Extraction from MR Images Employing GBKS Graph Cut Technique	The Visual Computer	Vol. 36, pp. 875–891, 2020	
Jyotsna Dogra, Shruti Jain, Meenakshi Sood	Gradient-based kernel selection technique for tumour detection and extraction of medical images using graph cut	<u>IET Image Processing</u>	<u>Vol. 14, no. 1, pp.84-93, Jan. 2020</u>	
Navdeep Prashar, Meenakshi Sood, Shruti Jain	Dual-tree complex wavelet transform technique-based optimal threshold tuning system to deliver denoised ECG signal	Transactions of the Institute of Measurement and Control	Vol. 42, no. 4, pp. 854-869, 2020	
Shruti Jain	Computer Aided Detection system for the Classification of Non Small Cell Lung Lesions using SVM	Current Computer-Aided Drug Design	Vol. 16, no. 1, 2020	

Kirti, H. Sohal and S. Jain	Design and Implementation of Low Power ECG Pre-processing Module on Xilinx FPGA	IETE Journal of Research	pp. 1-7, 2020	
Ayodeji Olalekan Salau and Shruti Jain	Computational modeling and experimental analysis for the diagnosis of cell survival/ death for Akt protein	Journal of Genetic Engineering and Biotechnology	Vol. 18, pp. 1-10, 2020	
Charu, Shruti Jain, Meenakshi Sood	Retinal Blood Vessel Localization to Expedite PDR Diagnosis	Periodicals of Engineering and Natural Sciences	Vol. 8, no. 1, pp. 1233-1246, 2020.	
Charu Bhardwaj, Shruti Jain, Meenakshi Sood	Diabetic Retinopathy Lesion Discriminative Diagnostic System for Retinal Fundus Images	Advanced Biomedical Engineering	Vol. 9, pp. 71–82, 2020	
Kirti, H. Sohal and S. Jain	Computer Aided Diagnostic System for Feature Based Classification using Heart Rate Variability	Biomedical Engineering Applications, Basis and Communications	Vol. 32, no. 2, 2020.	
Kirti, Harsh Sohal, and Shruti Jain	Multistage Classification of Arrhythmia and Atrial Fibrillation on Long- Term Heart Rate Variability	Journal of Engineering Science and Technology	Vol. 15, no. 2, 2020	
Charu, Shruti Jain, Meenakshi Sood	Two-Tier Grading System for NPDR Severities of Diabetic Retinopathy in Retinal Fundus Images	Recent Patents on Engineering, Bentham Science	Vol. 14, no. 1, 2020.	

Charu, Shruti Jain, Meenakshi Sood	Automated Diagnostic Hybrid Lesion Detection System for Diabetic Retinopathy Abnormalities	International Journal of Sensors, Wireless Communications and Control	Vol. 9, no. 1, 2019.	
Charu Bhardwaj, Shruti Jain, Meenakshi Sood,	Automatic Blood Vessel Extraction of Fundus Images Employing Fuzzy Approach	Indonesian Journal of Electrical Engineering and Informatics (IJEEI)	Vol. 7, no. 4, pp. 757-771, 2019	
Jyotsna Dogra, Shruti Jain and Meenakshi Sood	Novel Seed Selection Techniques for MR Brain Image Segmentation using Graph Cut	Computer Method in Biomechanics and Biomedical Engineering	Vol. 8, no.4, 2020.	
Shruti Jain, Durg Singh Chauhan	Instance-Based Learning of Marker Proteins of Carcinoma Cells for Cell Death/ Survival	Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization	Vol. 8, no. 3, pp. 313-322, 2020	
Jain, S. & Salau, A.O	Detection of Glaucoma using Two Dimensional Tensor Empirical Wavelet Transform	SN Appl. Sci.	Vol. 1, no. 11, pp. 1417, Nov. 2019	
Shruti Jain	Design of Survival-Hazard and Mathematical Model for High Osmolarity Glycerol Protein using Parametric and Nonparametric Methods	International Journal of Emerging Technologies	Vol. 10, no. 3, pp. 01–09, 2019.	

Shruti Jain, D S Chauhan	Standard Multiple Regression Analysis Model For Cell Survival/ Death Decision of JNK Protein using HT-29 Carcinoma Cells	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	Vol. , no. 10, pp. 187-197, 2019.	
Meenakshi Sood and ShrutiJain	Ensemble Classifier Framework for Epileptic Seizure Classification of EEG Signals	International Journal on Emerging Technologies	Vol. 10, no. 2, pp. 200-206, 2019.	
Shruti Jain and Meenakshi Sood	SVM Classification of Cell Survival/ Apoptotic Death for Color Texture Images of Survival Receptor Proteins	International Journal on Emerging Technologies	Vol. 10, no. 2, pp. 23-28, 2019.	
Dinesh Kumar, Rajiv Kumar and Neeru Sharma	A Proactive fast Recovery Strategy for Survival Elastic Optical Networks	International Journal of Engineering and Advanced Technology (IJEAT)	Vol.9, no. 3, pp. 4018-4022, Feb. 2020,	
Dinesh Kumar, Rajiv Kumar and Neeru Sharma	A Resource Efficient Recovery Strategy for A Failure in Elastic Optical Networks	International Journal of Recent Technology and Engineering (IJRTE)	Vol.8, no. 5, pp. 4245-4249, Jan. 2020,	
Dinesh Kumar, Rajiv Kumar and Neeru Sharma	Path-based recovery scheme for a failure in elastic optical networks, Elsevier Scopus indexed,	International Journal on Emerging Technologies (IJET)	vol.11, issue 4, June 2020, pp. 178-183.	
Dinesh Kumar, Rajiv Kumar and Neeru Sharma	Proactive fast connection recovery scheme for a failure in elastic optical networks	International Journal on Emerging Technologies (IJET)	vol.11, no. 2, pp. 1066-1070, April 2020,	

A Kumar, P Thakur, S Pandit, and G. Singh	Analysis Of Optimal Threshold Selection for Spectrum Sensing in a Cognitive Radio Network: An Energy Detection Approach	Wireless Networks	Vol. 25, no.7, pp. 3917-3931, Oct. 2019	
A Kumar, P Thakur, S Pandit, and G. Singh	Intelligent Threshold Selection in Fading Environment of Cognitive Radio Network: Advances in Throughput and Total Error Probability	International Journal of Communication Systems (Wiley)	Vol 33, no. 1, Jan 2020.	
A. Kumar, P. Thakur, S. Pandit and G. Singh	Threshold selection and cooperation in fading environment of cognitive radio network: Consequences on spectrum sensing and throughput	AEU- International Journal of Electronics and Communications (Elsevier)	vol. 117, Jan 2020	
A. Kumar, S. Pandit and G. Singh	Optimization of censoring based cooperative spectrum sensing approach with multiple antennas and imperfect reporting channel scenarios for cognitive radio network	IET Communications	June 2020	

Pardeep Garg and Sunildatt Sharma	Identification of CpG Islands in DNA Sequences Using Short-Time Fourier Transform	Interdisciplinary sciences, computational life sciences	2020	
Garg, P. and Sharma, S.D	Sensitivity Enhancement of DWT Based Algorithm for Detection of CpG Islands in DNA Sequences	Procedia Computer Science	Vol. 167, pp.1829-1838, 2020	
D. Thakur, V. Baghel, S.R. Talluri	Design of an Efficient Wideband Beamformer using OPSO	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	Vol. 8, no. 11, pp. 2144-2152, Sept. 2019	
U. Sharma, M. Sood, and E. Puthooran	A Block Adaptive Near-Lossless Compression Algorithm for Medical Image Sequences and Diagnostic Quality Assessment	J. Digit. Imaging	Vol. 33, pp. 516–530, 2019.	
S. K. Randhawa, R. K. Sunkaria, and E. Puthooran	Despeckling of ultrasound images using novel adaptive wavelet thresholding function	Multidimens. Syst. Signal Process	Vol. 30, no. 3, pp. 1545–1561, Jul. 2019.	
U. Sharma, M. Sood, and E. Puthooran	Volumetric medical image compression using inter-slice correlation switched prediction approach	International Journal of Imaging Systems and Technology	2020	

Urvashi, M. Sood, and E. Puthooran	Resolution Adaptive Threshold Selection for Gradient Edge Predictor in Lossless Biomedical Image Compression	Pertanika J. Sci. Technol.	Vol. 27, no. 4, pp. 1671–1692, 2019.	
Anjali Sharma, Harsh Sohal	Sleepy-Gate Diffusion Input (S-GDI) - Ultra Low Power Technique for Digital Design	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	Vol. 9, no. 1, pp. 4340- 4347, November 2019	
Geetanjali, Naveen Jaglan, Sahil Garg, Kim-Kwang Raymond Choo, Bong Jun Choi	A Secure Spectrum Handoff Mechanism in Cognitive Radio Networks	IEEE Transactions on Cognitive Communications and Networking	2020	
E. Thakur, N. Jaglan, S. D. Gupta	Design of compact triple band-notched UWB MIMO antenna with TVC-EBG structure	Journal of Electromagnetic waves and applications	June 2020	
R. Krishnamurth, Geetanjali, Naveen Jaglan	An enhanced security mechanism through blockchain for E-polling/counting process using IoT devices	Wireless Networks	pp. 1-12, Aug. 2019	
Rathee, G., Jaglan, N. & Kanaujia, B.K	An Attack Resilient Framework in Cognitive Radio Network Environment for Inter-domain and Intra-domain Communication	Wireless PersCommun	2020	

Kanishka Katoch, Naveen Jaglan, Samir Dev Gupta	Design of a Triple Band Notched Compact FSS at UWB Frequency Range	Progress In Electromagnetics Research M	Vol. 87, pp. 147-157, 2019.	
Ekta Thakur, Naveen Jaglan, Samir Dev Gupta	Design of Compact UWB MIMO Antenna with Enhanced Bandwidth	Progress In Electromagnetics Research C	Vol. 97, pp. 83-94, 2019.	
Ekta Thakur, Naveen Jaglan, Samir Dev Gupta, Binod Kumar Kanaujia	A Compact Notched UWB MIMO Antenna with Enhanced Performance	Progress In Electromagnetics Research C	Vol. 91, no. 39-53, 2019.	
Nafis uddin Khan and K. V. Arya	A New Fuzzy Rule based Pixel Organization Scheme for Optimal Edge Detection and Impulse Noise Removal	Multimedia Tools and Applications	2020	
Urvashi Sharma, Meenakshi Sood, Emjee Puthooran, Yugal Kumar	A Block-Based Arithmetic Entropy Encoding Scheme for Medical Images	International Journal of Healthcare Information Systems and Informatics (IJHISI)	Vol. 15, no. 3, pp. 65-81, 2020	
Urvashi Sharma, Meenakshi Sood, Emjee Puthooran	Predictor Based Block Adaptive Near-Lossless Coding Technique for Magnetic Resonance Image Sequence	Procedia Computer Science	Vol. 167, pp. 696-705, 2020.	

- **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Jain S., Virmani J.	Texture Ratio Vector Technique for the Classification of Breast Lesions Using SVM	Recent Trends in Image and Signal Processing in Computer Vision	pp 201-210	Springer, Singapore
Bhardwaj C., Jain S., Sood M.	Deep Learning Based Diabetic Retinopathy Prediction of Colored Fundus Images with Parameter Tuning	Advances in Computational Intelligence Techniques. Algorithms for Intelligent Systems	pp. 53-62	Springer, Singapore
Rajkumar Sarma, Cherry Bhargava, Shruti Jain	PVT Variability Check on UCM Architectures at Extreme Temperature-Process Changes	AI Techniques for Reliability Prediction for Electronic Components	pp. 238-251	IGI Global
Jain S., Chauhan D.S.	Computer Aided Design and Synthesis for Marker Proteins of HT Carcinoma Cells: A Study	Biomedical Engineering and its Applications in Healthcare	pp. 399-419	Springer, Singapore
Jain S., Sachdeva M., Dubey P., Vijan A	Multi-sensor Image Fusion Using Intensity Hue Saturation Technique	ICAICR 2019, Communications in Computer and Information Science	Vol. 1076	Springer, Singapore
Dogra J., Jain S., Sood M.	Analysis of Graph Cut Technique for Medical Image Segmentation	ICAICR 2019, Communications in Computer and Information Science	Vol. 1075	Springer, Singapore
Sood M., Kashyap V., Jain S.	Energy Harvesting System from Household Waste Heat Employing Thermoelectric Generator	ICAICR 2019. Communications in Computer and Information Science	Vol 1076.	Springer, Singapore

E. Thakur, D. Kumar, N. Jaglan, S.D. Gupta, S. Srivastava	Mathematical Analysis of Commonly Used Feeding Techniques in Rectangular Microstrip Patch Antenna	Advances in Signal Processing and Communication	pp. 27-35	Springer, Singapore
Rathee G., Gupta S.D., Jaglan N.	A Review on Blockchain and Its Necessitate in Industrial IoT	Innovations in Computer Science and Engineering. Lecture Notes in Networks and Systems	Vol 103.	Springer, Singapore
Thakur A., Talluri S.R, Kumar S.	Radial velocity Distortion reduction for NLFM-Based radar system using a Notch filter	Algorithms for Intelligent Systems	pp. 643-656	Springer, Singapore
Thakur A., Talluri S.R, Verma P.K.	Chebyshev Polynomial-Based Pulse Compression Waveform for Modern Microwave Radars	Algorithms for Intelligent Systems	pp. 665-675	Springer Singapore

- **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Ratish Kumar, Rajiv Kumar, M. J. Nigam	Evolution of Third Eye with the Convergence of Networked Control System and ImageProcessing Techniques	2019 Fifth International Conference on Image Information Processing (ICIIP -2019), Jaypee University of Information Technology Wagnaghat, Dist. Solan, Himachal Pradesh, INDIA		November 15-17, 2019
Ratish Kumar, Rajiv Kumar, M. J. Nigam	Path planning of a networked robot using camera feedback to minimize computational time	5th International Conference on Signal Processing, Computing and Control (ISPCC 2k19), Jaypee University of Information Technology, Wagnaghat, India.		October 10-12, 2019

Dinesh Kumar, Rajiv Kumar and Neeru Sharma	A Risk Reduction Approach in Optical Backbone Network	5th International Conference on Signal Processing, Computing and Control (ISPCC 2k19), Jaypee University of Information Technology, Waknaghat, India		October 10-12, 2019
Ratish Kumar, Rajiv Kumar, M. J. Nigam	Novel applications of networked controlled system in precision polyhouse farming	International Conference on Artificial Intelligence and Applications (COER-ICAIA-2019)		November 20-21, 2019
Takele Ferede Agaje ,Ayodeji Olalekan Salau, Engidaw Abel Hailu, Meenakshi Sood, Shruti Jain	Optimal Sizing and Siting of Distributed Generators for Minimization of Power Losses and Voltage Deviation	5th International Conference on Signal Processing, Computing and Control (ISPCC 2k19), Jaypee University of Information Technology, Waknaghat, India	pp 292-297	October 10-12, 2019
Charu, Shruti Jain, Meenakshi Sood	Diabetic Retinopathy Detection from Eye Fundus Images with Parameter Tuning for Convolutional Neural Networks	5th International Conference on Signal Processing, Computing and Control (ISPCC 2k19), Jaypee University of Information Technology, Waknaghat, India	pp 13-18	October 10-12, 2019
Kirti, Harsh, Shruti	Review and Comparison of QRS Detection Algorithms for Arrhythmia Diagnosis	5th International Conference on Signal Processing, Computing and Control (ISPCC 2k19), Jaypee University of Information Technology, Waknaghat, India	pp 200-205	October 10-12, 2019
Anish Vijan , Parth Dubey, Shruti Jain	Comparative Analysis of Various Image Fusion Techniques for Brain Magnetic Resonance Images	International Conference on Computational Intelligence and Data Science (ICCIDS 2019), The NorthCap University, Gurugram		September 06-07, 2019

Sharma, S.D., Sharma, S.N. and Saxena, R.	Model Independent Method for Acceptor Splice Sites Prediction in DNA Sequences	2019 IEEE Conference on Information and Communication Technology	pp. 1-5	Dec. 2019
Jain, S. and Sharma, S.D.,	Classification of Glaucoma Fundus Images Using Curvelet Empirical Wavelet Transform	2019 Fifth International IEEE Conference on Image Information Processing (ICIIP)	pp. 321- 325	Nov. 2019
Garg, Pardeep, and Sunil Datt Sharma	MGWT based Algorithm for Tandem Repeats Detection in DNA Sequences	2019 5th International Conference on Signal Processing, Computing and Control (ISPCC)	pp. 196- 199	Oct. 10- 12, 2019

- **Guest Speakers/Lectures/ Visits**

- **Guest Speakers**

Name of Guest Speaker	Designation of speaker	Topic of Lecture	Date
Dr. Farhad Ilahi Bakhsh	Asst. Professor, National Institute of Technology Srinagar	A Novel Method for Control of Wind Energy Conversion System (WECS)	October 11, 2019
Prof. Manu	Professor of UIET, Himachal Pradesh University	Security Threats to Ad-Hoc Computing: A Perspective on Sybil Attack	October 11, 2019
Mr. Muketesh Sharma; Mr. JKL Prasad	Application Specialist, North; BDM for any sales process (Quotation, specification, equipment enquiry, technical discussions), ADInstruments	Advancements methods of Biomedical Signal Processing	Oct 11, 2019
Prof. Dinesh Kant Kumar	Professor, RMIT University, Melbourne, Australia	Biomedical Signals and Image Analysis for Affordable Diagnostic	October 10, 2019
Ms. Taranmeet	Account Sales and Marketing Specialist, Biopac Systems Gentech Marketing & Distribution Pvt. Ltd	Tools and Techniques in Biomedical Signal Processing	October 10, 2019

Dr. Zahir Ahmed Ansari	Scientist, IRDE (DRDO)	Advances in Electro-Optical Tracking System (EOTS)	January 07,2020
Dr. Arvind R Yadav	Professor at PIET, Gujarat	Feature Extraction and Classification of Microscopic Images	January 08,2020
Dr. Jitendra Virmani	Sr. Technical Officer (2), CSIO-CSIR	Classification of focal liver diseases using machine learning techniques	January 09,2020
Dr. N. D. Londhe	Associate Prof and Head, Electrical Engineering Department, NIT Raipur	Cardiovascular Disease Diagnosis using Image Processing	January 09,2020
Dr. Meenakshi Sood	Associate Professor, NITTTR Chandigarh	Futuristic trends and challenges in Biomedical Image processing	January 10,2020

• **Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Vinod Kumar	Prof. and Vice-Chancellor, JUIT	Emerging areas of Research in Image Processing: Introduction	January 06-12, 2020	FDP on "Emerging Areas of Research in Image Processing-2020 (ERIP-2020)", JUIT Wagnaghat
Rajiv Kumar	Associate Professor	An Architecture Framework of Cyber-Physical System in Precision Farming of Maize in Changing Climate Scenario.	December 20-21, 2019	National Conference on "Climate Change and Agriculture: Impacts, Resilience & Adaptations for Sustainable Food Security" at India International Centre (Annexe). 40, Max Mueller Marg, (Near Lodi Garden), New Delhi.
Shruti Jain	Associate Professor	Recent Trends in Biomedical Signal Processing and VLSI Design	November 01, 2019	Department of Electronics Engineering, ZHCET, Aligarh Muslim University, Aligrah, India under TEQIP-III

Shruti Jain	Associate Professor	Advances and Future Trends in Image Processing	Feb 24-28, 2020	FDP on “Deep Learning for Image Processing: Overview, Challenges and Future” organised by NITTTR, Chandigarh, AICTE sponsored at Jaypee University of Information Technology, Wagnaghat during
Shruti Jain	Associate Professor	Emerging Trends and Advanced Technologies in Engineering	October 23-24, 2019	Int. Conf. on Future Advancements in Mobile Cloud Computing and Applications, Toronto, Canada
Nafis Uddin Khan	Assistant Professor (SG)	Anisotropic Diffusion Approaches for Adaptive Image Enhancement	January 08, 2020	One Week National Workshop on “Emerging Areas of Research in Image Processing” (ERIP - 2020) in Jaypee University of Information Technology, Solan (H.P.) 173234 from 06/01/2020 to 12/01/2020.
Emjee Puthooran	Assistant Professor (SG)	Image coding using Python	Feb. 24-28, 2020	FDP on “Deep Learning for Image Processing: Overview, Challenges and Future” organized by NITTTR Chandigarh conducted at JUIT Wagnaghat.
Emjee Puthooran	Assistant Professor (SG)	Image Compression Techniques	Jan. 06 – 12, 2020	FDP on “Emerging Areas of Research in Image Processing-2020 (ERIP-2020)”, JUIT Wagnaghat

Vikas Baghel	Assistant Professor (SG)	Machine Learning Algorithms in Image Processing	Feb 27, 2020	FDP on “Deep Learning for Image Processing: Overview, Challenges and Future” organized by NITTTR, Chandigarh, AICTE sponsored at Jaypee University of Information Technology, Waknaghat
Nishant Jain	Assistant Professor (SG)	Hands-on practice on CAD system for Biomedical images	Jan. 06 – 12, 2020	FDP on “Emerging Areas of Research in Image Processing-2020 (ERIP-2020)”, JUIT Waknaghat

- **Recognition & Awards**

- **By Faculty**

Name of Faculty	Designation of Faculty	Award	Date	Achievement
Shruti Jain	Associate Professor	Awarded “Quarterly Franklin Membership”	Feb 26, 2020.	Membership ID# HS75601; given by Editorial Board of London Journals Press (2020) for research paper titled, “An Image Feature Selection Approach for Dimensionality Reduction Based on kNN and SVM for AKT Proteins”
Shruti Jain	Associate Professor	Best Electrical & Electronic Engineering Paper	29/06/2020	Paper in 2019, for An image feature selection approach for dimensionality reduction based on kNN and SVM for AKT proteins by Cogent Engineering.

Shruti Jain	Associate Professor	Awarded honorary "Rosalind Member of London Journals Press",	May 19, 2020	Membership ID#WK14138 for research paper titled "Comparative Analysis of Various Image Fusion Techniques for Brain Magnetic Resonance Images"
Shruti Jain	Associate Professor	Appointed as Editor in Chief of ENGMEDNEWS (bimonthly newsletter)	2019-20 session	Member# L1095 for 2019-20 session
Shweta Pandit	Assistant Professor	Awarded with Elite NPTEL certification with consolidated score of 96% for successfully completing 8 week course on "Principles of Modern CDMA/MIMO/OFDM Wireless Communications"	Aug.- Oct. 2019	Topper in the course, awarded with Elite certificate
Neeru Sharma	Assistant Professor	NPTEL certificate with consolidated score of 89% for successfully completing 8 week course on "Evolution of Air Interface towards 5G"	Jan-April 2020	
Shweta Pandit	Assistant Professor	NPTEL certificate with consolidated score of 92% for successfully completing 8 week course on "Evolution of Air Interface towards 5G"	Jan-April 2020	

- **Composition of Various Bodies**

- **Board of Studies (BOS)**

S No	Name	Designation	Institution
1	Prof. M.J Nigam	HOD, Deptt of ECE (Chairperson)	JUIT
2	Prof. Samir Dev Gupta	HOD, CSE	JUIT
3	Prof. Karanjeet Singh	HOD Mathematics	JUIT
4	Prof. P.B Barman	HOD PMS	JUIT
5	Prof. A.K Gupta	HOD CE	JUIT
6	Prof. Sudhir Kumar	HOD BT/BI	JUIT
7	Dr. Anupriya Kaur	HOD HSS	JUIT
8	Prof. (Dr.) Debashish Ghosh	HOD, ECE	IIT Roorkee
9	Prof. (Dr.) C.C. Tripathi	Prof. & HOD, ECE	University Institute of Engineering & Technology Kurukshetra University, Kurukshetra
10	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
11	Dr. Shruti Jain	Associate Professor, Deptt of ECE	JUIT
12	Dr. Rajiv Kumar	Associate Professor, Deptt of ECE	JUIT
13	Dr. Neeru Sharma	Asst Professor, Deptt of ECE	JUIT
14	Dr. Vikas Baghel	Asst Professor, Deptt of ECE	JUIT
15	Dr. Shweta Pandit	Asst Professor, Deptt of ECE	JUIT
16	Dr. Naveen Jaglan	Asst Professor, Deptt of ECE	JUIT

- **Course Curriculum Revision 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. Nishant Jain	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
4	Dr. Shweta Pandit	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
5	Dr. Naveen Jaglan	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- **Course Curriculum Evaluation Committee**

S No	Name	Designation	Institution
1	Prof (Dr.) M.J Nigam	HOD, Deptt. of ECE	Jaypee University of Information Technology
2	Dr. Naveen Jaglan	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- **Modernization and Upgradation 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. Shweta Pandit	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

4	Dr. Nishant Jain	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
5	Dr. Vikas Baghel	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- **Department Consultative Committee**

S No	Name	Designation	Institution
1	Dr. Rajiv Kumar	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
2	Dr. Shruti Jain	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
3	Dr. Neeru Sharma	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
4	Dr. Naveen Jaglan	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
5	Dr. Nishant Jain	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- **Department Quality Assurance 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

5	Dr. Emjee Puthooran	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
6	Dr. Naveen Jaglan	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
7	Dr. Sunil Datt	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
8	Dr. Vikas Baghel	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- **Minor Courses Committee**

S No	Name	Designation	Institution
1	Prof (Dr.) M.J Nigam	HOD, Deptt. of ECE	Jaypee University of Information Technology
2	Dr. Neeru Sharma	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
3	Dr. Naveen Jaglan	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
4	Dr. Vikas Baghel	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- **Proficiency Courses 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. Nafis U Khan	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
4	Dr. Shweta Pandit	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
5	Dr. Naveen Jaglan	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- **Purchase 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. 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	Ms. Pragya Gupta	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- **Mock Interviews Committee**

S No	Name	Designation	Institution
1	Dr. Nafis U Khan	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
2	Dr. Sunil Datt	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

3	Dr. Harsh Sohal	Asst Professor, Deptt of ECE	Jaypee University of Information Technology
4	Dr. Emjee Puthooran	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

- **Academically Weak Students Committee**

S No	Name	Designation	Institution
1	Dr. Shruti Jain	Associate Professor, Deptt of ECE	Jaypee University of Information Technology
2	Dr. Sunil Datt	Asst Professor, Deptt of ECE	Jaypee University of Information Technology

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING AND
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

Name	Qualification	Specialization
Prof. Dr. Samir Dev Gupta	Ph.D.	Conformal Microstrip Patch Antenna for Aircraft Systems
Dr. Hemraj Saini	Ph.D.	Network Security, Information security, Cyber Security
Dr. Pardeep Kumar	Ph.D.	Computational and Machine Intelligence
Dr. Pradeep Kumar Gupta	Ph.D., Post-Doctorate	Internet-of-Things, Sustainable Computing
Dr. Pradeep Kumar Singh	Ph.D.	Information security, artificial intelligence, cryptography
Dr. Rajni Mohana	Ph.D.	Software engineering, Sentiment analysis , Health informatics
Dr. Ravindara Bhatt	Ph.D.	Sensor Networks: Deployment modeling, communication and energy efficient algorithms.
Dr. Vivek	Ph.D.	Embedded Systems, Advanced Computer

Sehgal		Architecture
Dr. Amit Kumar	Ph.D.	Software Effort Estimation, Defect Prediction
Dr. Amol Vasudeva	Ph.D.	<i>Various attacks in MANETs, VANETs and Sensor Networks and their detection</i>
Dr. Ekta Gandotra	Ph.D.	Malware Threat Profiling, Cyber Threat Intelligence
Dr. Geetanjali	Ph.D.	Network security, Blockchain Technology, Fog computing, Industrial IoT
Dr. Hari Singh	Ph.D.	Distributed and Parallel Computing, Grid Computing
Dr. Himanshu Jindal	Ph.D.	Wireless Sensor Networks, Efficient Data Transmission, Digital Image Processing
Dr. Jagpreet Sidhu	Ph.D.	Distributed computing, Grid Computing, Cloud Computing
Dr. Kapil Sharma	Ph.D.	Data Center Network, Software defined network
Dr. Mrityinjay Singh	Ph.D.	Database system, Dataspace System and PAY-AS-YOU-GO data Integration
Dr. Rajinder Sandhu	Post Doctorate	Cloud computing, fog computing, machine learning
Dr. Rakesh Kanji	Ph.D.	Personalized medicine, Natural language processing
Dr. Ruchi Verma	Ph.D.	Information systems, social networks
Dr. Suman Saha	Ph.D.	Complex Networks, advanced algorithms
Dr. Yugal Kumar	Ph.D.	meta heuristic algorithms, swarm intelligence, pattern recognition
Dr. Aman Sharma	Ph.D.	Machine learning, bioinformatics, artificial intelligence, deep learning and data analytics
Arvind Kumar	Ph.D. (Pursuing)	Internet of Things, Computer Networks, Algorithms
Monika Bharti	Ph.D.	Cloud computing, networking, and Internet-of-Things
Rizwan ur Rehman	Ph.D. (Pursuing)	Data mining, cyber security
Praveen Modi	Ph.D. (Pursuing)	Data Mining with Statistical Analysis
Prateek Thakral	Ph.D. (Pursuing)	Graph theory, discrete mathematics
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

S No	Title of New Course	Course Code
1	Foundation for Data Science and Visualization	Elective
2	Foundation for Data Science and Visualization Lab	Elective
3	Graph to knowledge graph	Elective
4	Graph to knowledge graph lab	Elective
5	Computational data analysis	Elective
6	Computational data analysis lab	Elective
7	Optimization methods in business analytics	Elective
8	Social and information network analysis	Elective

- **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 Nil

New Equipments Nil

- **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. Rajinder Sandhu	Cloud Computing (Consultancy Work)	Giga Byte Pvt. Ltd.	20000	1 Week	Completed
2.	Dr. Mrityunjay Singh	A collaborative approach for building a Research Dataspace System for an organization	AICTE under CRS scheme	11,76,000/-	June 2019 to September 2020	On going

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

Conferences

Conferences Organized

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
Nov 15-17, 2019	5 th International conference on Image Information Processing (ICIIP 2019)	Department of CSE, Jaypee University of IT, Wagnaghat, Solan, HP	Dept of CSE (Conference General Chair- Dr. Pradeep Kumar Gupta)	
Nov 15-17, 2019	2019 Fifth International Conference on Image Information Processing (ICIIP -2019)	Jaypee University of Information Technology, Wagnaghat, Solan (H.P), India	Conference Chair and session chair (Dr. Ekta Gandotra)	
Nov 15-17, 2019	2019 Fifth International Conference on Image Information Processing (ICIIP -2019)	Jaypee University of Information Technology, Wagnaghat, Solan (H.P), India	Session chair (Dr. Rajinder Sandhu)	
Nov 15-17, 2019	Member of transportation committee in ICIIP 2019 conference organized at JUIT, Solan, H.P, India	JUIT, Solan, H.P, India	Member of transportation committee (Dr. Aman Sharma)	
Nov 15- 17, 2019	2019 Fifth International Conference on Image Information Processing (ICIIP -2019)	Jaypee University of Information Technology Wagnaghat, District Solan, Near Shimla, Himachal Pradesh, INDIA	Dr. Ravindara Bhatt, Member	
Nov 15- 17, 2019	2019 Fifth International Conference on Image Information Processing	Jaypee University of Information Technology Wagnaghat, District Solan, Near Shimla, Himachal Pradesh, INDIA	Chair Registration Committee (Dr. Hemraj Saini)	
Nov 15- 17, 2019	2019 Fifth International Conference on Image Information Processing (ICIIP -2019)	Jaypee University of Information Technology Wagnaghat, District Solan, Near Shimla, Himachal Pradesh, INDIA	Hari Singh, Member	

Nov 15- 17, 2019	2019 Fifth International Conference on Image Information Processing (ICIIP -2019)	Jaypee University of Information Technology Wagnaghat, District Solan, H.P,	Rizwan ur Rehman, Member	
Nov 15- 17, 2019	Fifth International Conference on Image Information Processing	Jaypee University of Information Technology, Wagnaghat	Dr. Amol (Member of Publicity and Reviewer Committee)	
Nov 15- 17, 2019	2019 Fifth International Conference on Image Information Processing (ICIIP -2019)	Jaypee University of Information Technology Wagnaghat, District Solan, Near Shimla, Himachal Pradesh, INDIA	Vivek Kumar Sehgal, Member	
Nov 22–23, 2019	Second International Conference on Futuristic Trends in Networks and Computing Technologies (FTNCT)	CDAC, Mohali	Organizing Secretary (Dr. Yugal Kumar)	
Nov 15-17, 2020	2019 Fifth International Conference on Image Information Processing (ICIIP -2019)	Jaypee University of Information Technology Wagnaghat, District Solan, Himachal Pradesh, INDIA	Member (Dr. Yugal Kumar)	
Nov 15-17, 2020	2019 Fifth International Conference on Image Information Processing (ICIIP -2019)	Jaypee University of Information Technology Wagnaghat, District Solan, Himachal Pradesh, INDIA	Publicity, hospitality (Dr. Yugal Kumar)	

Details of ICIP 2019 (15-17 November 2019)

Dr. Pradeep Kumar Gupta
Conference General Chair- ICIP 2019

Key note speakers

1. Official Name: Dr. Barbara Zitova
Affiliations: Academy of Sciences of the Czech Republic, Prague.
Head of the Department of Image processing
2. Official Name: Prof. Dr. D. K. Dhawan, Ph.D.
Affiliation: Department of Biophysics, Panjab University, Chandigarh, India
3. Official Name: Prof. Dr. Aparajita Ojha, Ph.D.
Affiliation: Department of Computer Engineering, PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, India
4. Official Name: Dr. Badri Narayan Subudhi, Ph.D.
Affiliation: Department of Electrical Engineering, Indian Institute of Technology Jammu

Photographs taken during conference







- **CONFERENCES**

Conferences Attended

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
Nov 15-17, 2019	2019, Fifth International Conference on Image Information Processing	Department of CSE, Jaypee University of IT, Wagnaghat, Solan, HP	Dr. Hemraj Saini and Dr. Geetanjali	Session chair
Oct 10-12, 2019	5th International Conference on Signal Processing, Computing and Control	Jaypee University of Information Technology Wagnaghat, District Solan, Near Shimla, Himachal Pradesh, INDIA	Dr. Hemraj Saini and Dr. Geetanjali	Session Chair`
Aug 01-03, 2019	International Conference on Recent Trends in Biotechnology and Bioinformatics (ICBAB-2019)	Jaypee University of Information Technology Wagnaghat, District Solan, Near Shimla, Himachal Pradesh, INDIA	Dr. Hemraj Saini and Dr. Geetanjali	Session Chair`
Nov 15-17, 2019	Attended as a Session Chair in ICIP 2019 conference organized at JUIT, Solan, H.P, India	JUIT, Solan, H.P, India	Dr Aman Sharma	
Sep. 6-7, 2019	International Conference on Computational Intelligence and Data Science (ICCIDS-2019)	Northcap University, Gurugram, Haryana	Dr. Pardeep Kumar	
Nov 15-17, 2019	ICIP	JUIT	Amit Kumar	Attended
May 26-27, 2020	2nd International Conference on Engineering, Technology and Management for the Sustainable Development	IIMT Engineering College, Meerut	Dr Mrityunjay Singh	Session chair on Image Processing and Data Science

May 1-3, 2020	International Conference on Paradigms of Computing, Communication and Data Sciences	NIT Kurukshetra	Dr Mrityunjay Singh	Attended Online
Nov 15-17 2019	Fifth International Conference on Image Information Processing	Japye University of Information Technology, Wagnaghat	Dr. Amol Vasudeva	

- **Seminars Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
Jun 11, 2020	Webinar Series "To Guide Students to Select Meaningful Engineering Projects"	Dassault Systems Foundation, India	Dr Aman Sharma	4:00 PM - 6:00 PM IST
April 25, 2020	Roles of Teachers in Technology driven Higher Education	GAD- TLC, Delhi (Online Mode)	Mr. Prateek	
April 22, 2020	Re-Engineering Higher Education: A seamless Knowledge Management system for University	GAD-TLC, Delhi (Online Mode)	Mr. Prateek	

Workshops/MOOCs

- **Workshops Organized**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
06-12Jan 2020	Workshop on Emerging areas of research in image processing	JUIT Waknaghat	Member (Mr. Praveen Modi)	06-12Jan 2020

- Workshops/MOOCs Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
MOOC	Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization	Online Coursera	Dr. Rajinder Sandhu	15 hours instructor led training
MOOC	Structuring Machine Learning Projects	Online Coursera	Dr. Rajinder Sandhu	8 hours instructor led training
MOOC	Introduction to Tensor Flow for Artificial Intelligence, Machine Learning, and Deep Learning	Online Coursera	Dr. Rajinder Sandhu	20 hours instructor led training
Feb. 10-12, 2020	Perception Towards IPR	JUIT, Wagnagh at	Dr. Hemraj Saini	
Jan. 6-12, 2020	Emerging areas of research in image processing (ERIP)-2020	ECE Dept., Jaypee University of Information Technology	Dr. Hari Singh	
Feb. 10-12, 2020	Perception towards IPR	CSE&IT Dept. Jaypee University of Information Technology	Dr. Hari Singh	
Jan 6-12, 2020	Attended ERIP (Emerging areas of Research in Image Processing) - 2020 workshop organized at	JUIT, Solan, H.P, India	Dr. Aman Sharma	
May, 24, 2020	Optimization Algorithms	GUVI Geek Network Pvt Ltd.,	Dr. Aman Sharma	
Feb. 25, 2020	Training Feed forward Neural Networks	GUVI Geek Network Pvt Ltd.,	Dr. Aman Sharma	
Jan 28, 2020	Feedforward Neural Networks	GUVI Geek Network Pvt Ltd.,	Dr. Aman Sharma	
Jan 9, /2020	Primitive Neurons	GUVI Geek Network Pvt Ltd.,	Dr. Aman Sharma	

May 24, 2020	Introduction to object detection	GUVI Geek Network Pvt Ltd.,	Dr. Aman Sharma	
May 24, 2020	Deep Learning	GUVI Geek Network Pvt Ltd.,	Dr. Aman Sharma	
Jan 13, 2020	Sigmoid Neuron	GUVI Geek Network Pvt Ltd.,	Dr. Aman Sharma	
June 15, 2019	NPTEL	JUIT	Amit Kumar	
July 16, 2019	Orientation Workshop for the Principal Investigators	AICTE, New Delhi	Dr. Mrityunjay Singh	
Jan 6-12, 2020	Emerging areas of research in image processing (ERIP)-2020	Dept of EC, Jaypee University of Information Technology	Rizwan ur Rehman	
Jan. 6-12, 2020	Emerging areas of research in image processing (ERIP)-2020	ECE Dept., Jaypee University of Information Technology	Dr. Geetanjali, Dr. Hemraj Saini, Sh. Surjeet	

FDPs

- **FDPs Organized**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
Apr 28-02 May, 2020	Programming in R	Online	35	Organized in association with MHRD, GOI and IIT Bombay (Dr. Rajinder Sandhu)
June 15-20, 2020	Transforming Education with Industry 4.0	Jaypee University of Information Technology, Wagnaghat, H.P. (Attended)	1100	Organized in association with Consilio Intelligence Research lab (Dr. Ruchi Verma)

- FDPs Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
May 29-30, 2020	2020 International Workshop on Education 4.0: Transformation of Learning Environment	Rajkiya Engineering College Banda in collaboration with Consillio Intelligence Research Lab Noida, Held virtually	Dr. Ekta Gandotra	Attended
June 15-20, 2020	Transforming Education with Industry 4.0	Jaypee University of Information Technology, Wagnaghat, H.P. (Attended)	Dr. Ekta Gandotra	Attended
June 9-13, 2020	Entrepreneurship and Innovation	Entrepreneurship Development Cell, Parul University, Vadodra, Gujarat, Supported by Student Start-up and Innovation Policy (SSIP), Govt. of Gujarat (Attended)	Dr. Ekta Gandotra	Attended
Jun 29-July 8, 2020	Machine Learning for Computer Vision	Electronics and ICT Academy, IIITDM Jabalpur (An initiative of the (MeitY), Govt. of India)	Dr. Ekta Gandotra	Coordinated
April 28-2 May, 2020	R programming	Jaypee University of Information Technology with course material provided by Spoken Tutorial Project, IIT Bombay. (Attended)	Dr. Ekta Gandotra	Attended
April 28-May 02, 2020	Programming in R	Online	Dr. Jagpreet sidhu	28/04/2020 to 02/05/2020 (1 Week)
June 29-July 8, 2020	Machine Learning for Computer Vision Programme	EICTE Academy online	Dr. Jagpreet sidhu	June 29-July 8, 2020
April 28-May 02, 2020	Attended Faculty Development Program from on R	Online Mode, JUIT, Solan, H.P, India	Dr Aman Sharma	
June 15-20, 2020	Attended FDP on Transforming Education with Industry 4.0	Online Mode, JUIT, Solan, H.P, India	Dr Aman Sharma	

April 28- May 02, 2020	Programming in R	Online	Dr. Geetanjali	28/04/2020 to 02/05/2020
April 28- May 02, 2020	Faculty Development Program on R	Spoken Tutorial by IIT Bombay (Online)	Hari Singh	
June 24- 28, 2019	Recent advances in signal and image processing	JUIT	Amit Kumar	
June 15- 20, 2020	Transforming Education with Industry 4.0	JUIT Waknaghat (Online Mode)	Mr. Prateek	
May 27- June 2, 2020	ICT based Tools & its Applications in Teaching Learning Process	Education Learning Centre, Nagpur	Mr. Prateek	
May 4-8, 2020	Data Science	PEC Chandigarh (Online Mode)	Mr. Prateek	
April 27-1 May, 2020	R Programming	CT University, Ludhiana (Online Mode)	Mr. Prateek	
June 15- 20, 2020	Transforming Education with Industry 4.0	juit	Dr. Rakesh Kanji	
April 27-1 May, 2020	Programming with R	IIT Bombay	Dr. Rakesh Kanji	
July 20- 25, 2020	One Week Online Faculty Development Programme on Emerging Trends in Information Technology	IITM, Janakpuri, New Delhi	Dr Mrityunjay Singh	Online
July 21, 2020	National level E- Quiz on "Plagiarism Awareness- Research & Academic Ethics	Organized by the Faculty of Doctoral Studies & Research and Faculty of Computer Application in association with Indian Society for Technical Education	Dr Mrityunjay Singh	Online
June 29- July 8, 2020.	A two week Online Faculty development program on "Machine Learning for Computer Vision"	IIITDM Jabalpur	Dr Mrityunjay Singh	Online

June 24-30, 2020	One week Online STTP on "Data science and Learning Systems for Engineering Research and Design"	NIT Kurukshetra & Engineering College of Bikaner	Dr Mrityunjay Singh	Online
April 28-May 2, 2020	Faculty development program on R	IIT Bombay & JUIT Waknaghat	Dr Mrityunjay Singh	Online
July 1-6, 2019	Deep Learning and its Applications	JIIT Noida	Dr Mrityunjay Singh	Online
June, 15-20, 2020	Intermediate Python	Online	Rizwan ur Rehman	One Week Course
April 28- 2 May, 2020	Faculty Development Program Workshop on R Programming	Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat with course material provided by Spoken Tutorial Project, IIT Bombay.	Amol Vasudeva	
April 28, 05 May, 2020	FDP on R programming	IIT Bombay spoken tutorial	Amol Vasudeva	
June 15-20, 2020	Transforming Education with Industry 4.0	JUIT Waknaghat (Online Mode)	Praveen Modi	
June 23-27, 2020	Demystifying the Data	LNJIPT, Chhapra (Online Mode)	Praveen Modi	
April 27-May 1, 2020	R Programming	JUIT Waknaghat (Online Mode)	Praveen Modi	

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

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Dr. Geetanjali Rathee	A trust computed framework for IoT devices and fog computing environment	Wireless Networks		

	A Decision-Making Model for Securing IoT Devices in Smart Industries.	IEEE Transactions on Industrial Informatics DOI: 10.1109/TII.2020.3005252	Early Access	
	A Secure Multimedia Processing through Blockchain in Smart Healthcare Systems	ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)	https://doi.org/10.1145/3396852	
	CRT-BloV: A Cognitive Radio Technique for Blockchain-enabled Internet of Vehicles	IEEE Transactions on Intelligent Transportation Systems	Early Access	
	Handoff Security using Artificial Neural Networks in Cognitive Radio Networks	IEEE Magazine of Internet of Things.	Accepted	
	A secure IoT sensors communication in industry 4.0 using blockchain technology	Journal of Ambient Intelligence and Humanized Computing	doi.org/10.1007/s12652-020-02017-8	
	A resilient and secure two-stage ITA and blockchain mechanism in mobile crowd sourcing	Journal of Ambient Intelligence and Humanized Computing	doi.org/10.1007/s12652-020-01800-x	
	<i>Secure handoff technique with reduced authentication delay in wireless mesh network</i>	<i>International Journal of Advanced Intelligence Paradigms</i>		
	<i>A resilient and secure two-stage ITA and blockchain mechanism in mobile crowd sourcing</i>	<i>Journal of Ambient Intelligence and Humanized Computing</i>		
Dr. Rajinder Sandhu	Shared data-aware dynamic resource provisioning and task scheduling for data intensive applications on hybrid clouds using Aneka	Future generation computing systems, Elsevier. Impact Factor-6.125	S. Tuli, R. Sandhu, and R. Buyya, "Shared data-aware dynamic resource provisioning	

			and task scheduling for data intensive applications on hybrid clouds using Aneka,” Futur. Gener. Comput. Syst., 2020.	
	A trust computed framework for IoT devices and fog computing environment	Wireless Networks, Springer	G. Rathee, R. Sandhu, H. Saini, M. Sivaram, and V. Dhasarathan, “A trust computed framework for IoT devices and fog computing environment,” Wirel. Networks, 2020	
Dr. Ekta Gandotra, Meghna Dhalaria	Convolutional Neural Network for Classification of Android Applications Represented as Grayscale Images	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	https://www.ijitee.org/wp-content/uploads/papers/v8i12S/L118910812S19.pdf	
Dr. Jagpreet Sidhu	Energy-Efficient Framework for VM Placement in Cloud Data Centers	Arabian Journal for Science and Engineering	Khattar, N., Singh, J. & Sidhu, J. Multi-criteria-Based,” Energy-Efficient Framework for VM Placement in Cloud Data Centers”, Arab J Sci Eng, Vol. 44, pp. 9455–9469 (2019). https://doi.org/10.1007/s13369-019-04048-6	

	Comparative analysis of VM consolidation algorithms for cloud computing	Procedia Computer Science	Khattar, N., Singh, J. & Sidhu, J. Multi-criteria-Based, "Comparative analysis of VM consolidation algorithms for cloud computing", Procedia Computer Science, Vol. 167, pp. 1390-1399 (2020) ISSN 1877-0509, https://doi.org/10.1016/j.procs.2020.03.35	
	A note on cloud computing security	Journal of Ad Hoc and Ubiquitous Computing	<i>D Garg, J Sidhu & S Rani," A note on cloud computing security", International Journal of Ad Hoc and Ubiquitous Computing (IJAHUC), Vol. 33, No. 3, (2020). Print ISSN: 1743-8225 Online ISSN: 1743-8233 https://doi.org/10.1504/IJAHUC.2020.106644</i>	
	An Energy Efficient and Adaptive Threshold VM Consolidation Framework for Cloud Environment.	Wireless Personal Communications	<i>Khattar, N., Singh, J. & Sidhu, J. An Energy Efficient and Adaptive</i>	

			<p><i>Threshold VM Consolidation Framework for Cloud Environment. Wireless Pers Commun 113, 349–367 (2020). https://doi.org/10.1007/s11277-020-07204-6</i></p>	
	<p><i>Asymmetric Authentication as a Service in Private Cloud, Formal Validation by Scyther</i></p>	<p><i>International Journal of Advanced Science and Technology</i></p>	<p>G. deep, J. Sidhu & R. Mohana, "Asymmetric Authentication as a Service in Private Cloud, Formal Validation by Scyther", <i>International Journal of Advanced Science and Technology</i>, Vol. 28 No. 19 (2019)</p>	
<p>Aman Sharma and Rinkle Rani</p>	<p><i>An Ensembled Machine Learning framework for Drug Sensitivity Prediction</i></p>	<p><i>IET Systems Biology [SCI Indexed, Impact Factor – 1.392]</i></p>	<p>DOI: 10.1049/iet-syb.2018.5094</p>	
	<p><i>Drug Sensitivity Prediction Framework using Ensemble and Multi-task Learning</i></p>	<p><i>International Journal of Machine Learning and Cybernetics [SCI Indexed, Impact Factor – 3.844]</i></p>	<p>DOI: https://doi.org/10.1007/s13042-019-01034-0</p>	
	<p><i>C-HMOSHSSA: Gene selection for cancer classification using multi-objective meta-heuristic and machine</i></p>	<p><i>Computer Methods and Programs in Biomedicine [SCI Indexed,</i></p>	<p>DOI: https://doi.org/10.1016/j.cmpb.2019.06.029</p>	

	<i>learning methods</i>	<i>Impact Factor – 3.424]</i>		
Dr. Pardeep Kumar	<i>A novel approach for multimodality medical image fusion over secure environment</i>	<i>Transaction on Emerging Telecommunication Technologies</i>	<i>P. Kumar and M. Diwakar, “A novel approach for multimodality medical image fusion over secure environment” https://doi.org/10.1002/ett.3985</i>	
	<i>Versatile Approaches for Medical Image Compression: A Review</i>	<i>Procedia Computer Science</i>	<i>P. Kumar and A. Parmar, “Versatile Approaches for Medical Image Compression: A Review” <i>Procedia Computer Science</i>, Elsevier Volume 167, 2020, Pages 1380-1389</i>	
	<i>Time Series Data Prediction using IoT and Machine Learning Technique</i>	<i>Procedia Computer Science</i>	<i>R Kumar, P Kumar and Y Kumar, “Time Series Data Prediction using IoT and Machine Learning Technique”, Volume 167, 2020, Pages 373-381</i>	
	<i>Dual watermarking: An approach for securing digital documents</i>	<i>Multimedia Tools and Applications</i>	<i>C Kumar, AK Singh and</i>	

			P.Kumar, "Dual watermarking: An approach for securing digital documents", Multimedia Tools and Applications volume 79, pages7339–7354(2020)	
Dr. Ravindara Bhatt	Hybrid Cryptography Algorithm for Securing Wireless Sensor Networks from Node Clone Attack	Recent Advances in Electrical & Electronic Engineering Volume 13 , Issue 2 , 2020	DOI : 10.2174/2352096512666190215125026	
	Reauthentication scheme for mobile wireless sensor networks	Sustainable Computing: Informatics and Systems Volume 23, September 2019	https://doi.org/10.1016/j.suscom.2019.07.010	
	Securing wireless sensor networks from node clone attack: a lightweight message authentication algorithm	Int. J. Information and Computer Security, Vol. 12, Nos. 2/3, 2020	DOI: 10.1504/IJICS.2020.105174	
Dr. Hemraj Saini	A trust computed framework for IoT devices and fog computing environment	Wireless Networks		
	A novel four-tier architecture for delay aware scheduling and load balancing in fog environment	Sustainable Computing: Informatics and Systems, 24 (100355)		
	Efficient Solution for Load Balancing in Fog Computing Utilizing Artificial Bee Colony	International Journal of Ambient Computing and Intelligence (IJACI)		

	<i>Advanced Network Security Analysis (ANSA) in Big Data Technology</i>	<i>International Journal of Innovative Technology and Exploring Engineering</i>		
	<i>Secure handoff technique with reduced authentication delay in wireless mesh network</i>	<i>International Journal of Advanced Intelligence Paradigms</i>		
	<i>A resilient and secure two-stage ITA and blockchain mechanism in mobile crowd sourcing</i>	<i>Journal of Ambient Intelligence and Humanized Computing</i>		
	<i>Secure, Resilient and Green Computing in Wireless Sensor Networks</i>	<i>Recent Advances in Electrical and Electronic Engineering</i>		
	<i>Fog assisted task allocation and secure deduplication using 2FBO2 and MoWo in cluster-based industrial IoT (IIoT)</i>	<i>Computer Communications</i>		
Dr. Hari Singh	An improved integrated Grid and MapReduce-Hadoop architecture for spatial data: Hilbert TGS R-Tree Based IGSIM	Concurrency and Computation: Practice and Experience	John Wiley & Sons, Vol. 31, Iss. 17, Sept. 10, 2019. (SCIE) https://doi.org/10.1002/cpe.5202	
	Stream of Traffic Balance in Active Cloud Infrastructure Service Virtual Machines Using Ant Colony	International Journal of Cloud Computing, ISSN (Online) : 2043-9997, ISSN (Print): 2043-9989	https://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijcc	
Dr. Amit Kumar	A feature selection model for prediction of software defects	International journal of embedded systems	A feature selection model for prediction of software defects. International	

			Journal of Embedded Systems, 13(1), 28-39.	
Dr. Pradeep Kumar Gupta	Performance analysis of various machine learning-based approaches for detection and classification of lung cancer in humans.	Neural Computing and Applications	31 (10), 6863-6877	
	A Novel and Secure Hybrid iWD-MASK Algorithm for Enhanced Image Security.	Recent Patents on Computer Science,	12 (1), 1-13	
Sh. Rizwan ur Rahman	A New Web Forensic Framework for Bot Crime Investigation	Forensic Science International: Digital Investigation, Elsevier	Rizwan ur Rahman, Deepak Singh Tomar "A New Web Forensic Framework for Bot Crime Investigation" Forensic Science International: Digital Investigation, Elsevier 33 (2020): 300943.	A New Web Forensic Framework for Bot Crime Investigation
	Phish-Shelter a Novel Anti-Phishing Browser using Fused Machine Learning	Journal of Information Technology Research	Rizwan ur Rahman, Deepak Singh Tomar "Phish-Shelter a Novel Anti-Phishing Browser using Fused Machine Learning" Journal of Information Technology Research	Phish-Shelter a Novel Anti-Phishing Browser using Fused Machine Learning

Dr. Vivek Kumar Sehgal	A context sensitive security framework for Enterprise multimedia placement in fog computing environment	Multimedia Tools and Applications Springer Nature Switzerland 79, 15-16, 10733â€“10749 / 2020	https://link.springer.com/article/10.1007/s11042-020-08649-4	
	Modern architecture for photonic networks-on-chip	The Journal of Supercomputing Published Online https://doi.org/10.1007/s11227 / 2020	https://link.springer.com/article/10.1007/s11227-020-03220-2	
	Energy-Efficient Fairness-Aware Memory Access Scheduling International Journal of Services Technology and Management	Journal of Services Technology and Management (IJSTM). Inderscience USA 10.1504/IJSTM.2020.10029154 / 2020	https://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijstm	
	The MPEG-4 based energy efficient application traffic modelling and synthesis for network-on-chip architecture	Sustainable Computing: Informatics and Systems Elsevier USA 23, 2019, Pages 67-79, / 2019	https://www.sciencedirect.com/science/article/abs/pii/S2210537918304475#!	
	Qualitative Analysis of 3D Routing Algorithms in 3Ã—3Ã—3 Mesh NoC Topology Under Varying Load in Bio-SoC	International Journal of E-Health and Medical Communications (IJEHMC) IGI Global USA 11, no. 3 (2020): 86-102 / 2020	https://www.igi-global.com/article/qualitative-analysis-of-3d-routing-algorithms-in-333-mesh-noc-topology-under-varying-load-in-bio-soc/251858	
Dr. Rajni Mohana	A Novel Deep-Learning-Based Bug Severity Classification Technique Using	<i>Sensors</i> 2019, 19, 2964.	SCI	

	Convolutional Neural Networks and Random Forest with Boosting.			
	Authentication Protocol for Cloud Databases Using Blockchain Mechanism.	<i>Sensors</i> 2019, 19, 4444.	SCI	
	Distance Aware VM Allocation Process to Minimize Energy Consumption in Cloud Computing”,	Recent Advances in Computer Science and Communications (2020) 13: 1	SCOPUS	
	Prediction of Sentiment from Macaronic Reviews.	IJGHPC: Volume 12, Issue 3, Article 3	Scopus	
	Asymmetric Authentication as a Service in Private Cloud, Formal Validation by Scyther	”, International Journal of Advanced Science and Technology Vol. 28, No. 19, (2019), pp. 710 - 717	Scopus	
	Static load balancing technique for geographically partitioned public cloud	Scalable Computing: Practice and Experience Vol 20 No 2 (2019)	Scopus ESCI	
	. Bug Report Summarization by using Swarm Intelligence Approaches.	Recent Patents on Computer Science. Volume 13 , Issue 1 , 2020	Scopus	
Dr. Yugal Kumar	A Block-Based Arithmetic Entropy Encoding Scheme for Medical Images	International Journal of Healthcare Information Systems and Informatics (IJHISI), IGI Global	Sharma, Urvashi, et al. "A Block-Based Arithmetic Entropy Encoding Scheme for Medical Images." International Journal of Healthcare Information Systems and	

			Informatics (IJHISI) 15.3 (2020): 65-81.	
	An Integrated Fire Detection System using IoT and Image Processing Technique for Smart Cities	Sustainable Cities and Society, Elsevier	Sharma, A., Singh, P. K., & Kumar, Y. (2020). An Integrated Fire Detection System using IoT and Image Processing Technique for Smart Cities. Sustainable Cities and Society, 102332.	
	A neighborhood search based cat swarm optimization algorithm for clustering problems	Evolutionary Intelligence, Springer	Singh, H., & Kumar, Y. (2020). A neighborhood search based cat swarm optimization algorithm for clustering problems. Evolutionary Intelligence, 1-17.	
	A feature selection model for prediction of software defects	International Journal of Embedded Systems, InderScience	Kumar, A., Kumar, Y., & Kukkar, A. (2020). A feature selection model for prediction of software defects. International Journal of Embedded Systems, 13(1), 28-39.	
	Does bug report summarization help in enhancing the accuracy of bug severity classification?	Procedia Computer Science, Elsevier	Kukkar, A., Mohana, R., & Kumar, Y. (2020). Does bug report	

			summarization help in enhancing the accuracy of bug severity classification?. Procedia Computer Science, 167, 1345-1353.	
	Hybrid Artificial Chemical Reaction Optimization Algorithm for Cluster Analysis	Procedia Computer Science, Elsevier	Singh, H., & Kumar, Y. (2020). Hybrid Artificial Chemical Reaction Optimization Algorithm for Cluster Analysis. Proc edia Computer Science, 167, 531-540.	
	Time Series Data Prediction using IoT and Machine Learning Technique	Procedia Computer Science, Elsevier	Kumar, R., Kumar, P., & Kumar, Y. (2020). Time Series Data Prediction using IoT and Machine Learning Technique. Pr ocedia Computer Science, 167, 373-381.	
	Smart Irrigation and Intrusions Detection in Agricultural Fields Using IoT	Procedia Computer Science, Elsevier	Thakur, D., Kumar, Y., & Vijendra, S. (2020). Smart Irrigation and Intrusions Detection in Agricultural Fields Using IoT. Procedia Computer Science, 167, 154-162.	

	Cellular Automata Based Model for E-Healthcare Data Analysis	International Journal of Information System Modeling and Design, IGI Global	Singh, H., & Kumar, Y. (2019). Cellular Automata Based Model for E-Healthcare Data Analysis. International Journal of Information System Modeling and Design (IJISMD), 10(3), 1-18.	
	Applicability of wireless sensor networks in precision agriculture: A review	Wireless Personal Communications	Thakur, D., Kumar, Y., Kumar, A., & Singh, P. K. (2019). Applicability of wireless sensor networks in precision agriculture: A review. Wireless Personal Communications, 107(1), 471-512.	

• **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Dr. Geetanjali Rathee and Dr. Hemraj Saini	Large-Scale Data Streaming, Processing, and Blockchain Security	IGI Global, UK		
	A Hybrid Cryptographic Technique for File Storage Mechanism Over Cloud			
	Effect of Vaccination in the Computer Network for Distributed Attacks - A Dynamic Model			

Dr. Pradeep Kumar Gupta, Dr. Ekta Gandotra, Dr. Vipin Tyagi, Dr. Satya Prakash Ghrera, Dr. Vivek Kumar Sehgal		Proceedings of 2019 Fifth International Conference on Image Information Processing (ICIIP 2019), USA: IEEEExplore digital Library. [ISBN : 978-1-7281-0898-8]		
Dr. Hemraj Saini	Mutation Testing-Based Evaluation Framework for Evaluating Software Clone Detection Tools			
	An ECC with Probable Secure and Efficient Approach on Noncommutative Cryptography			
Dr. Pradeep Kumar Gupta	Machine Learning and Information Processing	Springer Nature Singapore Pte Ltd: Springer Singapore		
	Trust & Fault in Multi Layered Cloud Computing Architecture.	Springer Nature Switzerland AG: Springer International Publishing		
	Proceedings of 2019 Fifth International Conference on Image Information Processing (ICIIP 2019).	USA: IEEEExplore digital Library. [ISBN : 978-1-7281-0898-8]		
	Advances in Computing and Data Sciences: Part II(CCIS 1046)	Singapore: Springer. [ISBN : 1865-0929]		
	Open Issues and Research Problems in Multilayered Cloud. In , Trust & Fault in Multi Layered Cloud Computing Architecture (1, pp. 195-203)	Springer Nature Switzerland AG 2020: Springer, Cham. [ISBN : 978-3-030-37319-1] .		
	Tools for Fault and Reliability in Multilayered	Springer Nature		

	Cloud. In , Trust & Fault in Multi Layered Cloud Computing Architecture (1, pp. 181-194).	Switzerland AG 2020: Springer, Cham. [ISBN : 978-3-030-37319-1]		
	QoS Based Resource Provisioning in Cloud Computing Environment: A Technical Survey.	Advances in Computing and Data Sciences (CCIS, volume 1046, pp. 711-723). : Springer Singapore. [ISBN : 978-981-13-9942-8]		
	Optimizing Smart Parking System by Using Fog Computing	Advances in Computing and Data Sciences. (CCIS, volume 1046, pp. 724-737). : Springer Singapore. [ISBN : 978-981-13-9942-8]		
Sh. Rizwan ur Rahman	Classification of Spamming Attacks to Blogging Websites and Their Security Techniques	Encyclopedia of Criminal Activities and the Deep Web (3 Volumes)	Rizwan ur Rahman, Deepak Singh Tomar, "Classification of Spamming Attacks to Blogging Websites and Their Security Techniques "Encyclopedia of Criminal Activities and the Deep Web (3 Volumes). IGI Global, 2020.	
	The Emerging Threats of Web Scrapping to Web Applications Security and	Encyclopedia of Criminal Activities and	Rizwan ur Rahman, Deepak	

	Their Defense Mechanism	the Deep Web (3 Volumes)	Singh Tomar, "The Emerging Threats of Web Scrapping to Web Applications Security and Their Defense Mechanism" Encyclopedi a of Criminal Activities and the Deep Web (3 Volumes). IGI Global, 2020.	
	Taxonomy of Login Attacks in Web Application and their Security techniques using Behavioral Biometrics	Handbook of Research on Cyber Security, Cyber Safety, and Cyber Ethics	Rizwan ur Rahman, Deepak Singh Tomar, "Taxonomy of Login Attacks in Web Application and their Security techniques using Behavioral Biometrics" Handbook of Research on Cyber Security, Cyber Safety, and Cyber Ethics. IGI Global, 2020.	Scopus Index
Dr. Vivek Kumar	Proceedings of Fifth International	Proceedings of Fifth	https://ieeexplore.ieee.org	Reference Book

Sehgal	Conference on Image Information Processing (ICIIP -2019)	International Conference on Image Information Processing (ICIIP -2019)	rg/xpl/conhome/8966550/proceeding	
Dr. Yugal Kumar		Futuristic Trends in Networks and Computing Technologies	Singh, P.K., Sood, S., Kumar, Y., Paprzycki, M., Pljonkin, A., Hong, W.-C, Futuristic Trends in Networks and Computing Technologies, Springer	

- **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Dr. Pardeep Kumar	Versatile Approaches for Medical Image Compression: A Review	International Conference on Computational Intelligence and Data Science (ICCIDS-2019)	https://www.sciencedirect.com/science/article/pii/S1877050920308152	6th-07th September, 2019
Dr. Ravindara Bhatt	Possibilities of Block Chain in Indian Market and Notably In Advertising Industry	5th IEEE International Conference on Signal Processing, Computing and Control (ISPC 2k19), Oct 10-12, 2019, JUIT, Solan, India	DOI: 10.1109/ISPC 48220.2019.8988349	Oct 10-12, 2019, JUIT
Dr. Hemraj Saini and Dr. Geetanjali	Taxonomy of Missing Data along with their handling Methods	Proceedings of the IEEE International Conference on Image Information Processing (ICIIP) [Fifth : Shimla, India	http://dx.doi.org/10.1109/ICIIP47207.2019.8985715	15-17 Nov. 2019

	Big Data Analytics for Crop Prediction Mode Using Optimization Technique	Proceedings of the IEEE International Conference on Parallel, Distributed and Grid Computing (PDGC-2018)	http://dx.doi.org/10.1109/PDGC.2018.8746001	20-22 Dec, 2018
Amit Kumar	Dog breed classification using CNN	International Conference On Cutting-Edge Technologies In Computing And Communication Engineering	Accepted	
Dr Mrityunjay Singh	A Proposed Ranked Clustering Approach for Unstructured Data from Dataspace using VSM	The 20th International Conference on Computational Science and its Applications	Accepted for publication	July 1-4, 2020
	Dog Breed classification using Convolution Neural Network	International Conference on Paradigms of Computing, Communication and Data Sciences (PCCDS 2020), NIT Kurukshetra	Accepted for publication	May 01-03, 2020
	Multilayer Perceptron Using TFIDF for News category Classification	International Conference on Engineering, Mathematical and Computational Intelligence (ICEMCI 2019), Jabalpur, India	Accepted for publication	December 21-23, 2019
Dr. Rajni Mohana	Is Summarizing bug report enhancing the accuracy of the Bug Triage Process?,	Procedia Computer Science	Vol. 167, 2020, Pages 1345-1353	

• **Guest Speakers/Lectures/ Visits**

Lectures Delivered by Faculty

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Dr. Rajinder Sandhu	Assistant Professor	Cloud Computing and its implementation using Aneka	17th September, 2019	IIT Roorkee

Dr. Rajni Mohana	Associate Professor	Naive Bayes and SVM	11th to 15th May 2020	AICTE Training and Learning Academy (ATAL) Faculty Development Program(FDP) IIIT Nagpur
	Associate Professor	How to write thesis	July 11, 2020	Two Week Online Short Term Training Programme on Research Methodology Gautam Buddha university
	Associate Professor	Introduction to Big Data : Hadoop	Apr 30th 2020	Expert lecture GNA university

- **Composition of Various Bodies**

Board of Studies (BOS)

S. No.	Name	Designation	Institution
1	Prof. Dr. Samir Dev Gupta	HOD, CSE(Chairperson)	JUIT
2	Dr. Vivek Sehgal	Associate Prof	JUIT
3	Dr. Hemraj Saini	Associate Prof	JUIT
4	Dr. Pradeep Gupta	Associate Prof	JUIT
5	Dr. Pardeep Kumar	Associate Prof	JUIT
6	Dr. Hari Singh	Assistant Prof	JUIT
7	Dr. Ekta Gupta	Assistant Prof	JUIT
8	Dr. Ravindra Bhatt	Assistant Prof	JUIT
9	Dr. Yugal	Assistant Prof	JUIT

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**

S. No.	Name	Qualification	Specialization
1.	Prof. (Dr.) Sudhir Kumar	Ph.D.	Environmental Biotechnology
2.	Dr. Anil Kant Thakur	Ph.D.	Plant Biotechnology, Molecular Biology
3.	Dr. Gopal Singh Bisht	Ph.D.	Medicinal Chemistry, Peptides and Peptidomimetics
4.	Dr. Harish Changotra	Ph.D.	Molecular Virology
5.	Dr. Hemant Sood	Ph.D.	Plant Biotechnology and IPR
6.	Dr. Jata Shanker	Ph.D.	Fungal biology, Functional genomics
7.	Dr. Rahul Shrivastva	Ph.D.	Microbial Pathogenesis, Mycobacteriology
8.	Dr. Tiratha Raj Singh	Ph.D.	Bioinformatics, Functional genomics, Molecular Evolution and Systems Biology
9.	Dr. Vijay Kumar Garlapati	Ph.D.	Bioprocess Engineering
10.	Dr. Jayashree Ramana	Ph.D.	Computational study of antibiotic resistance in infectious pathogens
11.	Dr. Jitendraa Vashistt	Ph.D.	Bacterial Resistance, Clinical Proteomics

12.	Dr. Poonam Sharma	Ph.D.	Chemistry
13.	Dr. Saurabh Bansal	Ph.D.	Protein engineering, Enzymology
14.	Dr. Udayabanu M.	Ph.D.	Neuropharmacology
15.	Dr. Raj Kumar	Ph.D.	Bioinformatics
16.	Dr Ashok Nadda	Ph.D.	Bioenergy/Biopolymer/ Enzyme Technology/Biocatalysis
17.	Dr Narendra Kumar	Ph.D.	Genomes and Transcriptomes
18.	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, Bioinformatics, 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.
- Two undergraduate programs are currently run by the Department:
 - **B. Tech (Biotechnology)**
 - **B. Tech (Bioinformatics)**

NBA Accreditation

The Department of Biotechnology and Bioinformatics 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. Biotechnology programme.

Course Structure

The scheme of Biotechnology and Bioinformatics was revised in 2018, detailed course structure is as:-

S No	Course Name	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 Processes	18B11BT313
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**
 - **Integrated M.Tech (Biotechnology)**
 - **M. Tech (Biotechnology)**
 - **M.Sc. Biotechnology**

- **Course Structure**

M.Tech. Biotechnology Course Curriculum		
S No	Course Name	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 Structure

S No	Course Name	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	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

PhD Completed

S.No	Name	Program	Title of Thesis
1.	Ankush Bansal	BI	Development of computational pipeline and framework for differential and co-expression networks analysis
2	Ritika Verma	BT	Production, characterization and immobilization of thermo-alkali-stable

			xylanase from <i>Geobacillus</i>
3	Smriti Mishra	BI	Comprehensive knowledge generation for clinical, radiology and genetics of interstitial lung diseases (ilds)
4	Avilekh	BT	Fruit quality, phytochemical and diversity studies of apricot (<i>Prunus armeniaca</i> L.) Along an altitudinal gradient in trans-Himalayan region
5	Kavita Sharma	BT	Characterization of probiotic cultures from fermented foods of Himachal Pradesh and their efficacy against colonization by <i>Cronobacter sakazakii</i>
6	Tsewang Rinchen	BT	Agro-morphological, molecular and nutritional characterization of indigenous population of <i>Atriplex hortensis</i> L. From trans-Himalayan region

New Ph.D Students Enrolled

S.No	Roll No.	Name
1	196501	Ajay Sharma
2	196551	Diksha
3	196552	Suhani Bhagta

- **Infrastructural Strengths**

The Department has been equipped with 3 Bioinformatics Labs with high end servers, Sun Work Stations and IBM Machines installed with several bioinformatics software packages such as Discovery Studio and DNASTAR in addition to many more for educating students in algorithm design, bio-programming & scripting languages, computational drug designing, development of biological databases, advanced chemo-informatics, etc. The Department has 21 state-of-the-art modern biotech laboratories such as Proteomics Technology lab, Genomic Technologies lab, Plant Biotechnology Lab, Microbial Biotechnology lab, Animal & Plant Cell Culture labs, Animal house, Environmental Biotechnology Lab, Industrial Biotechnology lab, Fermentation Technology lab and High End Instrumentation lab.

- **Centre of Excellence**

Two Centres of Excellence were established in the Department by a decision from the Academic Council in its meeting held on 2nd Dec., 2017.

1. **Centre of Excellence in Healthcare Technologies and Informatics (CEHTI):** The Centre is working with the following objectives:

- Carry out training activities that are concentrated in the field of health information of national importance and strategic dimension.
- Enabling a scientific research environment, in order to enable researchers, graduate, postgraduate, and PhD students to conduct innovative research and develop advanced technologies to assume its leader in the field of biomedical and health informatics.
- Strengthen cooperation in the areas of health informatics between national and international universities and other centres of excellence.
- Working to submit projects that are emanating from the distinguished research ideas in the field of health informatics, in order to benefit health sectors.

2. Centre Of Excellence In Sustainable Technologies For Rural Development (CESTRD): The Centre is working with the following objectives:

- General awareness program for the rural youth, women and children of the rural areas on interactive basis.
- To survey and analyze the problems in planning and implementation of the Government schemes & programs for rural development.
- To run the innovative training workshops, seminars, disseminate information and transfer technology to the rural people in an integrated sustainable mode of rural development.
- To make people from rural areas information friendly by teaching them the use of internet for availing various facilities such as online transactions, payment of bills, purchase form online merchandise, to learn and avail form the schemes provided by government using government portals etc
- To make rural people aware about education especially vocational trainings to make earnings other then agriculture.

• **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 2019-2020/ In Progress**

S No	Name of Faculty	Project title	Funding Agency	Amount sanctioned (In Lakhs)	Duration	Current Status
1	Dr. Poonam Sharma	Physico-chemical Study of Flavonoid - Surfactant Interaction: Utilization in Neomycin Topical Formulation	DST	22.50	2017-20	Ongoing
2	Dr. Udayabalan Malairaman	To investigate the effect of <i>Uritica dioica</i> on maternal diabetes induced neuronal dysfunction in the offspring	ICMR	6.0	2018-20	Ongoing
3	Dr. Tirath Raj Singh	Identification, Inhibition mechanism analysis and validation of novel multi-target inhibitors for Alzheimer's disease using polypharmacology and systems pharmacology approaches	ICMR	14.20	2019-22	Ongoing
4.	Dr. Sudhir Kumar, Dr. Rahul Shrivastava, Dr. Gopal Singh Bisht	DBT Skill Vigyan Project	DBT	49.8	2019-22	Ongoing
5.	Dr. Anil Kant	Proposal for postgraduate teaching program	DBT Govt Of India	171.0 (Proposed Amount)	2020-25	Sanctioned

- **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>
01-03 Aug 2019	International Conference on Recent Trends in Biotechnology and Bioinformatics (ICBAB-2019)	Department of Biotechnology and Bioinformatics-JUIT HP	All Faculty	

18 -19 Oct 2019	National Seminar on Strategies for Conservation & Sustained utilization for Biodiversity	Department of BT, School of Applied and Life sciences, Uttaranchal Univ.,Dehradun and Uttrakhand Science Education and Research Centre, DST, Government Of Uttarakhand		Member of Advisory Committee
15-18 Nov 2019	60 th Annual Conference of Association of Microbiologists of India (AMI) & International Symposium on Microbial Technologies in Sustainable Development of Energy, Environment, Agriculture and Health	Central University of Haryana, Mahendergarh	Dr. Rahul Shrivastava	
30 Jan – 01 Feb 2020	International Conference on Advances in Biosciences and Biotechnology - ICABB-2020	Jaypee Institute of Information Technology Noida	Dr. Jata Shankar	Oral Presentation
22 – 23 May 2020	International Conference on Covid-19: Challenges in Testing Prophylaxis Management (Online Conference)	ISF College of Pharmacy, Moga	Dr. Poonam Sharma	
07 - 09 Jun 2020	International Symposium on Nanoscience and Nanotechnology	Online attended Amity University Noida	Dr. Ashok Kumar	

• **Conferences Organised:**

Dates	Subject (Topic)	Venue	Participation*	Remarks**
01 - 03 Aug 2019	International Conference on Recent Trends in Biotechnology and Bioinformatics (ICBAB) 2019	JUIT	180 (all parts of country as well as abroad)	

- **Seminars**

- **Seminars Organized**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
01 Oct 2019	Gandhi Jayanti	JUIT	150	
14 June 2020	SYNAPSE webinars by Mr. Sehaj Singh Gulati	JUIT	60	Faculty and students of the department
28 June 2020	SYNAPSE webinars by Ms. Mansi Arora	JUIT	45	Faculty and students of the department

- **Seminars Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
04 June 2019	World Environment Day 2020	HIMCOSTE, Shimla. Speakers were from Mumbai, Shimla, and Solan (Online mode)	Dr. Sudhir Kumar	
18 -19 Oct 2019	Optimization of Culture Conditions in Different Hydroponic Systems for Propagating and Hardening of in vitro grown medicinal plants. National Seminar on Strategies for Conservation & Sustained utilization for Biodiversity	Department of BT, School of Applied and Life sciences, Uttaranchal Univ., Dehradun and Uttarakhand Science Education and Research Centre, DST (Government Of Uttarakhand).	Dr. Hemant Sood	
14 Nov 2019	Webinar on How universities can leverage Artificial Intelligence to accelerate Innovation and Commercialization of Patents	XLPAT Labs		
2 June 2020	Webinar on Effective Use of Subscribed e-Resources' organized by Knimbus Digital Library	Online		

	Platform in association with Learning Resource Center (LRC) JUIT, Solan			
10 June 2020	Webinar on 'Online Training on Turnitin Originality Check' organized by 'Turnitin India Education Pvt. Ltd in association with Learning Resource Center (LRC) JUIT, Solan	Online		
26 May-23 Jun 2020	Alumni Champion Talks (6 Sessions on each Tuesday) organized by Givgaphere	Alma Shines, Webinar Series, Solan	Dr. Saurabh Bansal	

• **Workshops**

• **Workshops Organised**

Dates	Subject	Venue	Participation	Remarks
15-17 July, 2019	Training workshop on fabrication and installation of biogas reactors	KFCL, Kanpur, UP	60 KFCL employees	Coordinator Dr Sudhir Kumar Dr Ashish Kumar (CE Dept)
09 Aug, 2019	Training workshop on Organic Farming	JUIT, Solan	40 from Govt. Degree College, Solan	Coordinator Dr Sudhir Kumar
13 Sept, 2019	Outreach workshop for Science Students and faculty	JUIT, Solan	27 students and 03 faculty members, Pinegrove School, Solan	Coordinator Dr Sudhir Kumar
1st Oct, 2019	Poster and model presentation on Swatch Bharat Mission of school students on 150 th Birth Anniversary of Mahatma Gandhi.	Department of BT & BI in JUIT campus	14	Coordinator Dr Sudhir Kumar Dr Hemant Sood Dr Jata Shankar

04-09 Nov, 2019	Sustainable Technologies	JUIT, Solan	More than 200 students in one week from Khalsa. College, Patiala, Degree college Samana, YS Parmar University students and students of DAV school, Totu, Shimla, and students of Dagshai Army Public School	
20 Nov, 2019	Sustainable Technologies	Army Public school, Ambala Cantt.	150	CSTRD Team as organisers
10 - 12 Feb, 2020	Perception towards IPR workshop organized by IPR cell of JUIT and Himachal Pradesh Council for Science Technology & Environment (HIMCOSTE)	JUIT, Solan	45	Coordinator Dr Sudhir Kumar Dr Shruti Jain (ECE Dept)
15 -17 June 2020	Webinar Series on Admission coordinated by Dr Hemant Sood	JUIT, Solan	59	

• **Workshops Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
28-29 Sept 2019	Annual Entrepreneurship Summit (E-summit'19)	TIEDC, JUIT, Solan	Dr. Hemant Sood	
10 - 12 Feb 2020	Perception towards IPR workshop organized by IPR cell of JUIT and Himachal Pradesh Council for Science Technology & Environment (HIMCOSTE)	JUIT, Solan	Dr Anil Kant, Dr. Hemant Sood, Dr. Poonam Sharma, Dr. Udayabanu, M., Dr. Saurabh Bansal, Dr. Rahul Shrivastava	

27 Apr 2020 - 01 May 2020	Wokshop on 'Nanomaterials and Devices'	Online by NITTR	Dr. Poonam Sharma	
26 June 2020	DBT Skill Vigyan launch workshop organized by HIMCOSTE, Shimla	HP secretariat, Chhota Shimla	Dr. Sudhir Kumar	

- **Faculty Development Programs**

- **Faculty Development Programs Organised:** Nil
- **Faculty Development Programs Attended**

Dates	Subject	Venue	Faculty Name	Remarks
24-28 Feb 2020	AICTE recognised FDP on Deep Learning for Image Processing: Overview, Challenges and Future	NITTR, Chandigarh	Dr. Jitendraa Vashisht	
20 -24 Apr 2020	FDP on Quantum and Energy Materials: Potential & Applications	Online by NITTR	Dr. Poonam Sharma	
28 Apr – 02 May 2020	Faculty Development Programme on & “R”	Spoken Tutorial Project, IIT Bombay (National Mission on Education through ICT, MHRD, Govt. of India). Organized by JUIT Solan	Dr. Rahul Shrivastava	
15- 20 June 2020	FDP on Transforming Education with Industry 4.0	JUIT Solan		
01-06 July 2019	FDP on Recent Trends in Industrial Biotechnology	Jaypee Institute of Information Tecnology, Noida	Dr. Saurabh Bansal	
08 - 13 Jun 2020	One week Webinar cum FDP on Current Progress and Future Prospects of Biotechnology	Chaitanya Bharathi Institute of Technology, Hyderabad		

- **Publications**

- **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Dr Anil Kant	Effect of Salinity Stress on Lipid Accumulation in <i>Scenedesmus</i> sp. And <i>Chlorella</i> sp.: Feasibility of Stepwise Culturing	Current Microbiology	77: 779–785	1
	<i>Effect of Altitude on the Phenology and Fruit Quality Attributes of Apricot (Prunus armeniaca L.) Fruits</i>	Defence Life Science Journal	5 (1): 18-24	-
Dr. Ashok Kumar	Improved production of lipid contents by cultivating <i>Chlorella pyrenoidosa</i> in heterogeneous organic substrates	Clean Technologies and Environmental Policy.	21: 1969-1978	6
	EPS bound flavins driven mediated electron transfer in thermophilic <i>Geobacillus</i> sp.	Microbiological Research	229: 1-6	
	Combined biochar vertical flow and free-water surface constructed wetland system for dormitory sewage treatment and reuse.	Science of the Total Environment	713: 1-29	
	Highly alkali-stable and cellulase-free xylanases from <i>Fusarium</i> sp. 21 and their application in clarification of orange juice mutagenesis	International Journal of Biological Macromolecules	155: 572-580	

	The Realm of Biopolymers and Their Usage: An Overview.	Journal of Environmental Treatment Techniques	8: 1005-1016	
	Application of response surface method for Total organic carbon reduction in leachate treatment using Fenton process	Environmental Technology & Innovation.	19: 1-26	
	Microbial lipolytic enzymes – promising energy-efficient biocatalysts in bioremediation.	Energy	192: 1-37	2
	Energizing the Carbon Dioxide utilization by chemo-enzymatic approaches and potentiality of carbonic anhydrases: A review	Journal of cleaner production	247: 1-40	3
	Facile fabrication of chitosan-cl-poly(AA)/ZrPO ₄ nanocomposite for remediation of Rhodamine B and antimicrobial activity	Journal of King Saud University	32: 1359-1365	
	Whey peptide-encapsulated silver nanoparticles as a colorimetric and spectrophotometric probe for palladium(II)	<i>Microchimica Acta</i>	186: 1-9	1
Dr. Harish Changotra	The autophagy gene <i>ATG16L1</i> (T300A) variant is associated with the risk and progression of HBV infection.	<i>Infection, Genetics and Evolution</i>	84: 104404	
	The Beclin 1	<i>Biochimie</i>	175: 34	

	interactome: modification and roles in the pathology of autophagy-related disorders.			
	Identification of nsSNPs of transcription factor E2F1 predisposing individuals to Lung Cancer and Head and Neck Cancer.	<i>Mutation Research: Fundamental and Molecular Mechanisms of Mutagenesis</i>	821: 111704	
Dr. Hemant Sood	Elicitation of salidroside under tissue culture conditions in the Trans-Himalayan plant <i>Rhodiola imbricate</i>	WSCAS Transaction on Biology and Biomedicine.	16:75-89	
	Effect of LEDs on micropropagated shoots of <i>Picrorhiza kurroa</i> vis-a-vis biosynthesis of Picroside-1. WSCAS Transaction on Biology and Biomedicine	WSCAS Transaction on Biology and Biomedicine	16 (1): 90-96	
Dr. Jata Shankar	Exploration of Mycelial Proteins from <i>Aspergillus terreus</i> Revealed Ribosome Biogenesis and Antioxidant Enzymes	Current Proteomics	17 (5): 1-8	
	SEM and qRT-PCR revealed quercetin inhibits morphogenesis of <i>Aspergillus flavus</i> conidia via modulating calcineurin-Crz1 signalling pathway.	Mycology	11 (2): 118-125	

	Molecular mechanisms of floral biology of <i>Jatropha curcas</i> : opportunities and challenges as an energy crop	Frontiers in Plant Science	11 (609): 1-6,	
	cis-9-Hexadecenal, a Natural Compound Targeting Cell Wall Organization, Critical Growth Factor, and Virulence of <i>Aspergillus fumigatus</i>	ACS Omega	5 (17): 10077-10088	
	Anti-melanogenic activity of <i>Myristica fragrans</i> extract against <i>Aspergillus fumigatus</i> using phenotypic based screening	BMC Complementary Medicine and Therapies	20 (67): 1-13	
	Proteomic analysis revealed ROS-mediated growth inhibition of <i>Aspergillus terreus</i> by shikonin	Journal of Proteomics	224 (103849): 1-12	
Dr. Gopal Singh Bisht	Recent Updates on Antifungal Peptides	Mini Rev Med Chem	20 (4): 260-268	0
	In vivo infection and In vitro stress survival studies of acid susceptible mutant of <i>Mycobacterium fortuitum</i> .	International Journal of Mycobacteriology,	8 (4): 390-396	1
	Random insertion transposon mutagenesis of <i>Mycobacterium fortuitum</i> identified mutant defective in biofilm formation.	Biochemical and Biophysical Research Communications	521 (4): 991-996	3
	Cationic antimicrobial peptide and its poly-N-substituted glycine congener: Antibacterial and antibiofilm	Biochemical and Biophysical Research Communications	518 (3): 472-478	1

	potential against <i>A. baumannii</i> .	ons		
Dr. Jitendraa Vashistt	Random insertion transposon mutagenesis of <i>Mycobacterium fortuitum</i> identified mutant defective in biofilm formation.	Biochemical and Biophysical Research Communications	521 (4): 991-996	3
	Cationic antimicrobial peptide and its poly-N-substituted glycine congener: Antibacterial and antibiofilm potential against <i>A. baumannii</i> .	Biochemical and Biophysical Research Communications	518 (3): 472-478	1
	Structural, luminescent and antimicrobial properties of ZnS and CdSe/ ZnS quantum dot structures originated by precursors	Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy	229: 117962	1
Dr. Rahul Shrivastava	In vivo infection and In vitro stress survival studies of acid susceptible mutant of <i>Mycobacterium fortuitum</i> .	International Journal of Mycobacteriology,	8 (4): 390-396	1
	Random insertion transposon mutagenesis of <i>Mycobacterium fortuitum</i> identified mutant defective in biofilm formation.	Biochemical and Biophysical Research Communications	521 (4): 991-996	3
	Cationic antimicrobial peptide and its poly-N-substituted glycine congener: Antibacterial and antibiofilm potential against <i>A. baumannii</i> .	Biochemical and Biophysical Research Communications	518 (3): 472-478	1

Dr. VK Garlapati	Circular Economy Aspects of Lignin: Towards a Lignocellulose Biorefinery	Renewable and Sustainable Energy Reviews	130: 109977	-
	The role of renewable chemicals and biofuels in building a bio-economy.	Biofuels, Bioproducts and Biorefining	14: 830–844	3
	Effect of salinity stress on Lipid accumulation in <i>Scenedesmus</i> sp. and <i>Chlorella</i> sp.: Feasibility of stepwise culturing.	Current Microbiology	77(5): 779-785	1
	Biosensing capabilities of Bioelectrochemical Systems towards sustainable water streams: Technological implications and Future prospects	Journal of Bioscience and <i>Bioengineering</i>	129 (6): 647 -656	-
	Production of microbial enzyme triacylglycerol acyl hydrolase by <i>Aspergillus sydowii</i> JPG01 in submerged fermentation using agro-residues.	Asian Journal of Microbiology, Biotechnology and Environmental Sciences	21 (4): 269-273	1
	Microalgae at niches of Bioelectrochemical Systems: A new Platform for Sustainable Energy Production coupled Industrial Effluents.	Bioresource Technology Reports	7C: 100290	10
Dr. Sudhir Kumar	Adaptive Enrichment of a Thermophilic <i>Bacterial Isolate for Enhanced Enzymatic Activity</i> . (Published on 09 June, 2020)	Microorganisms	8 (6): 1-16	-
	MINES: method for genomic DNA extraction from deep biosphere biofilms.	Journal of Microbiological Methods	167: 105730	-

	Sustainable Production of Biogas in Large Bioreactor under Psychrophilic and Mesophilic Conditions.	Journal of Environmental Engineering	146 (3)	2
Dr. Poonam Sharma	Investigation of interactions between quercetin and Tween 80 through electrolyte induced thermodynamic approach.	Materials Today: Proceedings	28: 61-64	
Dr. Raj Kumar	Martini Coarse-Grained Model of Hyaluronic Acid for the Structural Change of Its Gel in the Presence of Monovalent and Divalent Salts	International Journal of Molecular Sciences	21(13): 4602	
Dr. Saurabh Bansal	Increased thermal tolerance in <i>Cronobacter sakazakii</i> strains in reconstituted milk powder due to cross protection by physiological stresses	Journal of Food Safety	-	
	Structure and Sequence Based Analysis of Pullulanases: understanding dual catalytic mechanism	Protein and Peptide Letters	26 (12): 893-903	
Dr. Tiratha Raj Singh	Virtual screening, pharmacokinetics, molecular dynamics and binding free energy analysis for small natural molecules against cyclin-dependent kinase 5 for Alzheimer's disease	Journal of Biomolecular Structure and Dynamics	38 (1):248-262	
	Identification of novel small molecules..for Alzheimer's disease using	Journal of Molecular Graphics and Modelling	91: 91-104	

	chemoinformatics approach			
	ABCD: Alzheimer's disease Biomarkers Comprehensive Database	3 Biotech	10: 351	
	<i>In silico</i> screening of deleterious single nucleotide polymorphisms (SNPs) and molecular dynamics simulation of disease associated mutations in gene responsible for oculocutaneous albinism type 6 (OCA 6) disorder	Journal of Biomolecular Structure and Dynamics	13: 3513-3523	
Dr. Udayabanu Malairaman	Design, synthesis and evaluation of Coumarin-Phenylthiazole conjugates as cholinesterase inhibitors	Chemical Biology Letters	6, 2	3

Patents

S. No.	Patent No. and Date of Grant	Application no.	Title	Department and Inventors
1	Patent No. 327618 and 18 Dec 2019	Application No. 551/DEL/2012	Isolation and purification of Picoside-I and Picoside-II	Department of Biotechnology and Bioinformatics and Hemant Sood, Varun Kumar and RS Chauhan
2	Patent No. 329887 And 22 Jan 2020	Application No. 1940/DEL/2012	An economical and improved isolation process of antitumor triterpenoid Lantadene B from weed <i>Lantana camara</i> L	Department of Biotechnology and Bioinformatics and Manu Sharma, S. Sharad Kumar
3	Patent No. 339128 and 23 June	Application No. 362/DEL/2013	A process of preparation of nutrient medium useful in	Department of Biotechnology and Bioinformatics

	2020		enriching medicinal constituents in shoot culture of Swertia chirayita	and Hemant Sood, S Gulati, S Bakshi, BS Sandhu, V Kumar and RS Chauhan
4	Patent No. 339610 and 29 June 2020	Application No. 1865/DEL/2010	A halotolerant and thermostable Lipase enzyme from <i>Staphylococcus arlettae</i>	Department of Biotechnology and Bioinformatics and RS Chauhan, Tamanna Anwar, Ashwani Mathur, Ashutosh Malhotra & Garima Mathur
5	Design Registration	319983-001 Date of Filing 25 August 2019	Portable Biogas Reactor	Department of Biotechnology and Bioinformatics and Karam Dass, Sudhir Kumar, Ankur Chudhary, Ashish Kumar

• **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference No.	Remark
Dr. Abhishek Chaudhary	Microbial Cell Factories in Nanotechnology	Microbial Diversity, Interventions and Scope	978-981-15-4099-8	
Dr. Ashok Kumar		Microbes and Enzymes in Soil Health and Bioremediation	978-981-13-9117-0	
		Lignin Biosynthesis and transformation into industrial products	978-3-030-40663-9	
		Chemo-enzymatic systems for CO ₂ utilization	9780367321932	
		Advances in Probiotics for Sustainable Food and Medicine	https://www.springer.com/gp/book/9789811567940	

	Extremophiles for hydrolytic enzymes productions: biodiversity and potential biotechnological applications	Bioprocessing for Biomolecules Production	97-1-119-43432-0].	
	Microbial Degradation of Phenolic Compounds	Microbes and Enzymes in Soil Health and Bioremediation	978-981-13-9117-0	
	Microalgae Cultivation Using Various Sources of Organic Substrate for High Lipid Content.	Green Energy and Technology	978-3-319-99866-4. 893-898	
	Palm Oil Mill Effluent as an Environmental Pollutant.	Palm oil	978-1-78923-427-5. 13-28	
	Let's Protect Our Earth: Environmental Challenges and Implications	Microbes and Enzymes in Soil Health and Bioremediation	978-981-13-9116-3	
	Lignin as Potent Industrial Biopolymer: An Introduction.	Lignin.	978-3-030-40663-9 1-15	
Dr. Garlapati VK	Microfluidics in Lipid Extraction	Handbook on Miniaturization in Analytical Chemistry	9780128197639 21-34	
	Miniatured Microfluidics Heuristics towards the detection of polluting molecules in the environment.	Handbook on Miniaturization in Analytical Chemistry	9780128197639 221-235	
	Bioethanol Production from lignocellulosic/Algal Biomass: Potential Sustainable Approach	Algal Biofuel: sustainable solution (Kothari R, Pathak VV, and Tyagi VV, Eds.).	9789386530943 1-14	
	Oil and petrochemical industries wastewater	Integrated Microbial Fuel Cells for	9780128174937	

	treatment in bioelectrochemical systems.	Wastewater Treatment	157-173	
	Role of Mathematical and Statistical Modelling in Food Engineering.	Mathematical and Statistical Applications in the Food Engineering,	97811383476701-4	
	Evolutionary optimization techniques as effective tools for process modelling in food processing	Mathematical and Statistical Applications in the Food Engineering	97811383476705-19	
	Scalable Technologies for Lignocellulosic Biomass Processing into Cellulosic Ethanol.	Horizons in Bioprocess Engineering	978303029068973-90	
	Microalgae in Bioelectrochemical Systems: Technological Interventions.	Biovalorisation of Wastes to Renewable Chemicals and Biofuels	9780128179512361-371	
Dr. Hemant Sood		Analysis of Diosgenin Content and Pharmacological Explorations (Endangered medicinal herb <i>Trillium govaniianum</i>)	978-620-0-30926-6	
	Production of Medicinal Compounds from Endangered and Commercially Important Medicinal Plants Through Cell and Tissue Culture Technology for Herbal Industry	Bioactive Compounds. Intechopen, London, UK	978-1-83880-887-7	

Dr. Rahul Shrivastava	Bioinformatics Database Resources	Biotechnology: Concepts, Methodologies, Tools, and Applications	13: 9781522589037 84-119	
Dr. Tiratha Raj Singh	Modeling and Optimization of Molecular Biosystems to Generate Predictive Models.	Essentials of Bioinformatics, Volume I: understanding bioinformatics: genes to proteins	978-3-030-02634-9 373-387	
	Principles and Analysis of Biological Networks: Biological Pathways and Network Motifs.	Data Analytics in Medicine: Concepts, Methodologies, Tools, and Applications	9781799812043 551-564.	

- **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Dr. Garlapati VK	Microalgae-based Bioremediation of the radiographic waste solution	International Conference on Application of Biotechnology in Industry and Society -2019 (ABIS-2019)	NIT Jalandhar - 144011, Punjab, India.	14-16 Nov 2019
	Screening of microalgae towards tolerance of various concentrations of radiographic waste solutions”	International Conference on recent trends in Biotechnology and Bioinformatics (ICBAB-2019)	JUIT, Wagnaghat - 173234, HP, India.	1-3 August 2019
Dr. Harish Changotra	Identification of deleterious non-synonymous single nucleotide polymorphisms in human becn1 gene by <i>in silico</i> analysis	International Conference on Recent Trends in Biotechnology and Bioinformatics (ICBAB-2019)	Jaypee University of Information Technology, Solan	1-3 August 2019

Dr. Hemant Sood	Cryopreservation and regeneration of <i>Picrorhiza kurroa</i> .	International Conference on Advances in Biosciences and Biotechnology(I CABB-2020)	Department of Biotechnology , JIIT,Noida	30 Jan - 01 Feb 2020
	Evaluation of plant extracts as possible phytotherapeutics for the treatment of asthma- A review	International Conference on Advances in Biosciences and Biotechnology(I CABB-2020)	Department of Biotechnology , JIIT,Noida	30 Jan - 01 Feb 2020
	Effect of Polychromatic Light Emitting Diodes on micropropagated shoots and metabolite production in <i>Swertia chirayita</i>	2 nd Global Conference on Plant Science and Microbiology Ecology	Scient Global Conferences, At Dubai, UAE	14 Oct - 16 Oct 2019
	Biosynthesis and accumulation of medicinal compounds in different development stages of <i>Swertia chirayita</i> – the endangered medicinal herb of Himalyas "" organized at	International Conference on Recent Trends in Biotechnology and Bioinformatics	Jaypee University of Information Technology, Wagnaghat	1-3 Aug 2019
Dr. Jata Shankar	Proteomic profiling of morphotypes of <i>Aspergillus terreus</i> and during interaction with lung epithelial cells revealed stage specific response	ICABB-2020) International Conference on Advances in Biosciences and Biotechnology -	Abstract published in conference proceeding	31 Jan 2020
Dr. Rahul Shrivastava	Acid stress based Mycobacterium fortuitum surrogate model for Mycobacterium tuberculosis persistent infection.	60 th Annual Conference of Association of Microbiologists of India (AMI) & International Symposium on Microbial Technologies in Sustainable	Central University of Haryana, Mahendergar, India pp.319-319	15-18 Nov, 2019

		Development of Energy, Environment, Agriculture and Health		
	Identification and in-silico structure modeling of <i>Mycobacterium fortuitum</i> homolog of Mycobacterium tuberculosis Lipase U.	International Conference on Recent Trends in Biotechnology and Bioinformatics (ICBAB-2019)	Jaypee University of Information Technology, Solan, India	01-03 Aug, 2019
	Synthesis, characterisation and evaluation of antibacterial activity of a 12 residue peptide A-12.	International Conference on Recent Trends in Biotechnology and Bioinformatics (ICBAB-2019)	Jaypee University of Information Technology, Solan, India	01-03 Aug, 2019
	Antimicrobial potential of quercetin and curcumin against antibiotic resistant strains of <i>Acinetobacter baumannii</i> .	International Conference on Recent Trends in Biotechnology and Bioinformatics (ICBAB-2019)	Jaypee University of Information Technology, Solan, India	01-03 Aug, 2019
	High throughput screening of <i>Mycobacterium fortuitum</i> proteome for discovery of novel drug targets.	2 nd International Conference on Recent Advances in Agricultural, Environmental and Applied Sciences for Global Development (RAAEASGD-2019)	Dr. Y.S. Parmar University of Horticulture and Forestry, Solan, India	27-29 Sept, 2019
Dr. Sudhir Kumar	Adaptive enrichment of an extremophilic bacterial isolate results	International Conference on Recent Trend in	At JUIT	01-03 Aug 2019

	in increased enzymatic activity.	Biotechnology and Bioinformatics (ICBAB- 2019)		
	Copper: A key in regulation and expression of particulate methane monooxygenase enzyme.	International Conference on Recent Trend in Biotechnology and Bioinformatics (ICBAB- 2019)	At JUIT	01-03 Aug 2019
	Improved Bioconversion of Corn Stover into Polyhydroxyalkonate (PHA) using Geobacillus sp. Biofilm	International Conference on Recent Trend in Biotechnology and Bioinformatics (ICBAB- 2019)	At JUIT	01-03 Aug 2019
	Comparative study of the effects of cold plasma and electroporation on bacterial cells to enhance the substrate utilization.	International Conference on Recent Trend in Biotechnology and Bioinformatics (ICBAB- 2019)	At JUIT	01-03 Aug 2019
	Bioleaching metals from obsolete electronic products.	International Conference on Recent Trend in Biotechnology and Bioinformatics (ICBAB- 2019)	At JUIT	01-03 Aug 2019
Dr. Abhishek Choudhary	"Waste: A silent contributor to climate change", A Recent Advances in Agricultural, Environmental & Applied Sciences for Global Development	A Recent Advances in Agricultural, Environmental & Applied Sciences for Global Development	Dr. Y.S. Parmar University of Horticulture and Forestry, Nauni, Solan,	27-29 Sept 2019
	Current practices, future strategies, energy prospect, global warming potential and economic aspect of municipal solid waste: Himachal Pradesh	In 9th IconSWM	Kalinga Institute of Information and Technology, Bhubaneswar Odisha,	27-30 Nov 2019

	Greenhouse gases Inventorying: Estimation of Carbon dioxide and methane from municipal solid waste in Shimla	10th Indian climate congress on Climate change & world peace 2019 at	Orissa University of Agriculture & Technology, Bhubaneswar	27-29 Dec 2019
	Bio-methane potential and modeling studies of cow dung, food waste and pine needles at low mesophilic temperature	In 9th IconSWM	Kalinga Institute of Information and Technology, Bhubaneswa Odisha,	27-30 Nov 2019
Dr. Saurabh Bansal	Optimization of Cultural Parameters and Extraction Process for Recovery of Phytase Enzyme from <i>Aspergillus niger</i> NT7 in Solid State Fermentation.	2 nd International Conference on Applications of Biotechnology in Industry and Society (ABIS-2019)	Dr. B. R. Ambedkar National Institute of Technology (NIT) Jalandhar	14-16 Nov 2019
	Optimization of cultural parameters by X6 fungal isolate in solid-state fermentation by OVAT (One Variable at A Time) approach.	International Conference on Recent Trends in Biotechnology and Bioinformatics (ICBAB-2019)	Jaypee University of Information Technology Waknaghat	01-03 Aug, 2019

- **Guest Speakers/Lectures/ Visits**

- **Guest Speakers**

Name of Guest Speaker	Designation of speaker	Topic of Lecture	Date
Dr. R.K. Sani	Department of Chemical and Biological Engineering And Applied Biological Sciences South Dakota School of Mines and Technology Rapid City, SD 57701, USA	Biocommodity Engineering: Roles of Extremophilic Deep Biosphere Microbes	01 Aug 2019

Dr. S.S. Kanwar	Professor, Department of Biotechnology, Director IPRCC, Coordinator Bioinformatics Centre Himachal Pradesh University, Summer Hill, Shimla-171 005	Basic sciences to translational biotechnology: Microbial lipases in the synthesis of commercially important compounds	01 Aug 2019
Dr. Bishwajit Kundu	Professor, Indian Institute of Information Technology, Delhi	Insights of amyloid interaction network and designing structure-based antiamyloidogenic Biomolecules	02 Aug 2019
Dr. Prashanth N Suravajhala	Department of Biotechnology and Bioinformatics, Birla Institute of Scientific Research (BISR), Jaipur	Grand Challenges in Systems Genomics of Urogenital Diseases: A Peep Into Our Case Studies	02 Aug 2019
Dr. Debasis Dash	Scientist, IGIB, New Delhi	Detecting False Discovery Rates in Proteogenomics,	10 Aug 2019
Prof. Baljinder Singh	Professor, Nuclear Medicine, PGI Chandigarh	Targetted Nuclear medicine Imaging and therapy-Paving the way to personalize medicine	30 Sept 2019
Dr. Sundaresha, S	Scientist Division of Plant Protection, Central Potato Research Institute, Bemloe, Shimla	IPR in Plants Technology	2 Feb 2020

• **Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Dr. Hemant Sood	Associate Professor	Scopes of applied biology in biotechnology and bioinformatics.	28 Feb 2020	Govt College Solan on the eve of National Science Day
		Production of medicinal compounds for Commercial and Endangered Medicinal Plants through Cell and Tissue Culture Technology for Herbal Industry	29 Aug 2019	HFRI, Panthaghati, Shimla

Dr. Sudhir Kumar	Prof. and Head	Biotechnology and Bioinformatics - Webinar	16 June 2019	JUIT
		Biogas production using one stage portable reactor - In National Symposium on Biotechnology: Trends and Innovations	08 Feb 2020	Department of Biotechnology SD College, Chandigarh.
Dr. Tiratha Raj Singh	Associate Professor	Alzheimer's disease and its serious impact on the society at global level	29 Sept 2019	Loreto Convent Tara Hall School, Shimla
Dr. Udayabanu M.	Associate Professor	Pharmacy profession and future opportunities	24th August 2019	Govt. Pharmacy College, Seraj, H.P.

- **Visits Organized**

Institution visited	Dates	Aim of visit	Participation
NABI, Chandigarh	07 th Oct, 2019	Educational Tour	M.Sc. 1 st Year

- **Recognition & Awards**

- **By Faculty**

Name of Faculty	Designation of Faculty	Award	Date	Achievement
Dr. Garlapati Vijay Kumar	Assistant Professor (Senior Grade)	Editorial Board Member	September, 2019	In "The Open Biotechnology Journal (Scopus/SCI-Indexed)"
		Editorial Board Member	December, 2019	In "Recent Patents On Biotechnology (Scopus/SCI-Indexed)" Journal
		Editorial Board Member	February	In "Current Proteomics

			2020	(Scopus/SCI-Indexed)" Journal
Dr. Harish Changotra	Associate Professor	Editorial Board Member	Dec 2019	World Journal of Medical Genetics The Open Biology Journal

- **Students**

Name of Student	Semester	Award	Date	Achievement
Ayushi Sharma	PhD Scholar	International Conference on Recent Advances in Agricultural, Environmental and Applied Sciences for Global Development (RAAEASGD-2019). [Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Solan	27-29 September 2019	Best Poster Award
Vikrant Abbot	PhD Scholar	Royal Society of Chemistry (RSC) to attend " <i>Faraday Joint Interest Group Conference 2020</i> " at University of Sheffield, United Kingdom	11 Nov 2019	International Travel Grant
Rohit Shukla	PhD Scholar	Indo-French 'Raman-Charpak Fellowship	23 Oct 2019	France Visit for three months for carrying out his PhD work

- **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. Vinay Bhardwaj	Head Division of Crop Improvement	CPRI, Shimla
6	Dr. Tiratha Raj Singh	Associate Professor, Dept. of BT & BI	JUIT
7	Dr. Harish Changotra	Associate Professor, Dept. of BT & BI	JUIT
8	Dr. Jayashree Ramana	Assistant Professor (Senior Grade), Dept. of BT & BI	JUIT
9	Dr. Saurabh Bansal	Assistant Professor (Sr. Grade) Dept. of BT & BI	JUIT
10	Prof. (Dr.) Satya Prakash Ghrera	Professor, Brig (Retd.) and Head, Dept. of CSE and IT	JUIT
11	Prof. (Dr.) M. J. Nigam	Professor and Head, Dept. of ECE	JUIT
12	Prof. (Dr.) P.B. Barman	Professor and Head, Dept. of PMS	JUIT
13	Prof. (Dr.) Karanjeet Singh	Professor and Head, Dept. of Maths	JUIT
14	Prof. (Dr.) Ashok Kumar Gupta	Professor and Head, Dept. of CE	JUIT
15	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 (Sr. Grade) Dept. of BT & BI	JUIT
6	Ms. Diksha	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	Mr. Manoj	M.Sc. Biotech 1 st Year	JUIT
10	Ms. Aditi Sharma	4 th Yr. BT	JUIT
11	Ms. Medhavi Pokhriyal	4 th Yr. BI	JUIT

12	Ms. Nainika	3 rd Yr. BT	JUIT
13	Ms. Chhavi Thakur	3 rd Yr. BI	JUIT
14	Ms. Janki	2 nd Yr. BT	JUIT
15	Ms. Bhoomi	2 nd Yr. BI	JUIT
16	Ms. Ishita	1 st Yr. BT	JUIT
17	Mr. Raghav Luthra	1 st Yr. BI	JUIT

DEPARTMENT OF CIVIL ENGINEERING

- **Department Vision and Mission**

- **Vision**

To strive for excellence, knowledge creation and research contribution in 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>Specialization</u>
1.	Prof. (Dr) Ashok Kumar Gupta	Ph.D.	Geotechnical Engineering
2.	Prof. (Dr) Ashish Kumar	Ph.D.	Hydraulic Engineering
3.	Dr. Rajiv Ganguly	Ph.D.	Environmental Engineering

4.	Dr. Amardeep	Ph.D.	Transportation Engineering
5.	Dr. Tanmay Gupta	Ph.D.	Structural Engineering
6.	Dr. Rishi Rana	Ph.D.	Environmental Engineering
7.	Dr. Saurav	Ph.D.	Structural Engineering
8.	Dr. Saurabh Rawat	Ph.D.	Geotechnical Engineering
9.	Dr. Aakash Gupta	Ph.D.	Transportation Engineering
10.	Dr. Abhilash Shukla	Ph.D.	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. Akash Bhardwaj	M.Tech	Urban Planning

Programs

- **Undergraduate Programs**

The undergraduate program has been specially designed keeping in view of 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 practical and industry oriented without losing its academic focus.

- **Post Graduate Programs**

M.Tech (Construction Management)

This 2-year program aims to impart domain specific knowledge in areas like Construction Techniques, Construction Equipment's, 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 multifaceted 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 program 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 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, and Solid-waste management, Pavement Materials, Design and Maintenance, Optimization Techniques, and development of mini-standard penetration test.

- **Lab Facilities**

- **New Equipment's**

SI No	Name of Apparatus	Supplier Name	Quantity	Lab
1	Soil sampling tube	Quality Instruments, Roorkee	5	Geotech Lab
2	Sieve (Pan and cap)-8"	Quality Instruments	1	Geotech Lab
3	Vicat's apparatus	Quality Instruments	1	Concrete Lab

4	Gauging Trowel(Long)	Quality Instruments	3	Geotech Lab/ Concrete Lab
5	Gauging Trowel(Short)	Quality Instruments	5	Geotech Lab/ Concrete Lab
6	GI Tray (Small)	Quality Instruments	2	Concrete Lab
7	Borosilicate glass Measuring Cylinder (50 ml and 25 ml)	Quality Instruments	02 each	Environment Lab
8	Borosilicate glass Measuring Cylinder 100ml	Quality Instruments	3	Environment Lab
9	pH meter	Quality Instruments	1	Environment Lab
10	Dial Gauges(at least 20 mm)	Quality Instruments	5	Geotech Lab
11	Hydraulic Oil(Sample extruder)	Quality Instruments	5L	Geotech Lab
12	Evaporating Dish (100ml)	Quality Instruments	5	Geotech Lab
13	Test Tube (40 ml Borosilicate)	Quality Instruments	30	Environment Lab
14	Borosilicate glass Beaker (1000 ml)	Quality Instruments	5	Geotech Lab/ Environment Lab
15	Borosilicate glass Beaker (250 ml)	Quality Instruments	10	Environment Lab
16	Conical Flask	Quality Instruments	10	Environment Lab
17	Rubber Membrane for Triaxial	Quality Instruments	8	Geotech Lab
18	O ring for triaxial	Quality Instruments	10	Geotech Lab
19	Sensor for Furnace	JSR Instruments, Roorkee	1	Geotech Lab
20	Neoprene Gasket Rubber Circle	Aimil Ltd., New Delhi	4	Geotech 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 laboratory
3	Engineering Graphics laboratory
4	Workshop Practices Laboratory
5	Fluid Mechanics Laboratory
6	Concrete Technology Laboratory
7	Highway Engineering Laboratory
8	Environmental Engineering Laboratory (shared with Chemistry Laboratory)
9	Geotechnical Engineering Laboratory
10	Structural Mechanics Laboratory
11	Survey Laboratory (storage only)
12	Research laboratories - Fluvial Hydraulics Lab
13	Computational Research Lab

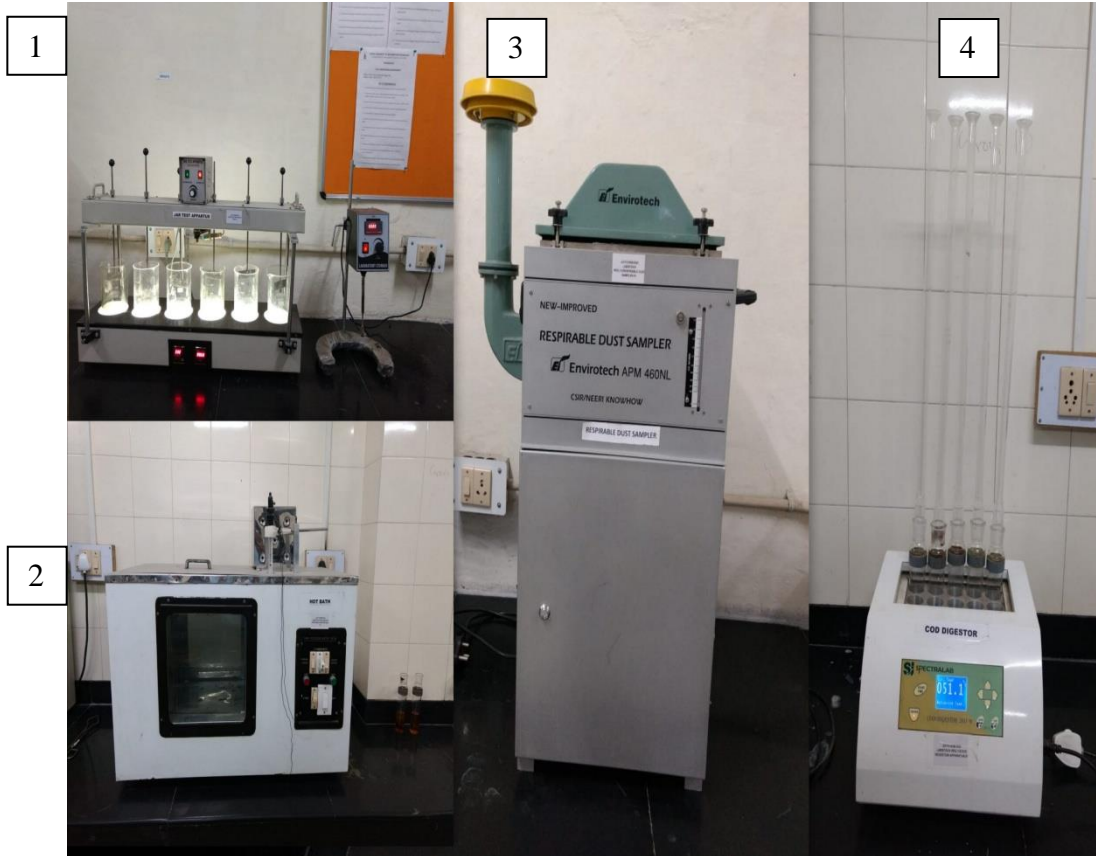
- **List of Major Equipment's**

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 diameter
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 (Maximum Temperature 1200 °C)
- 30. 10m long 0.75m wide and .06m deep rectangular open channel flume

• **List of Software**

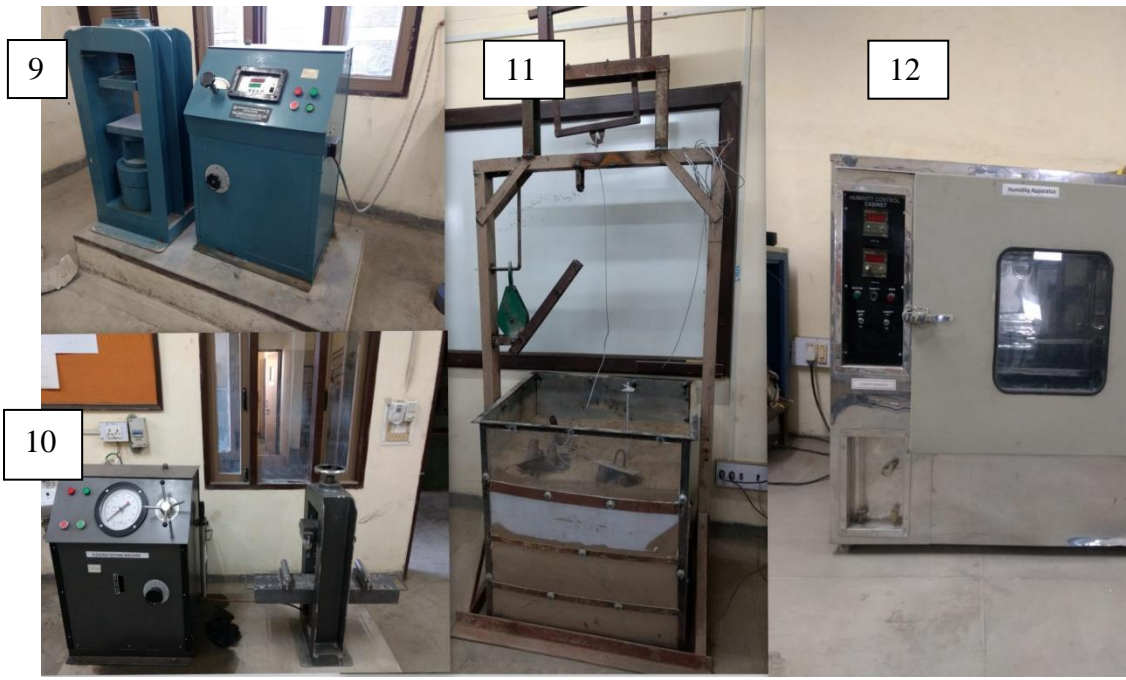
Name of Software	Version	Number of Licenses
MX Roads	V8i	5
Geo 5	V18	50
STAAD Pro 2008	V8i	5
AutoCAD 2014 Student	2013	20
ETABS	V11	10
ANSYS Acad. Adv.	12.1	5
Microsoft Office	2007	20
Primavera	P6.1	5
Microsoft Project	2003	20
PLAXIS 2D	2010	1
Estimator	2	Unlimited
SAP2000	V9.4.1	10
Bentley Academic 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. Civil Engineering Software Lab 14. Direct Shear Test Apparatus
 15. Triaxial Shear Test Apparatus 16. Unconfined Compression Machine



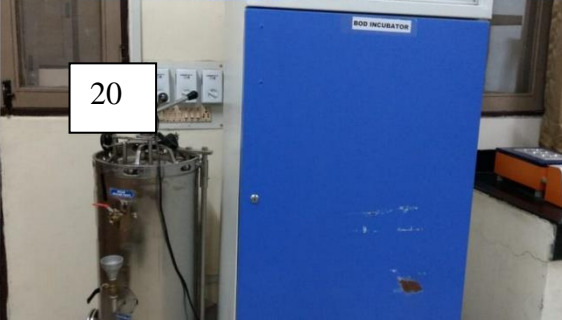
17



19



18



20

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



21



23



22



24

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

Patents

S.N o.	Patent No. and Date of Grant	Application no.	Title	Department and Inventors
1	Applied on 25-07-2019	Application No. 319983-001)	Movable biogas digester CBR Number 14079	Ankur Choudhary Research Scholar, Civil Engineering Ashish Kumar Dept. of Civil Engineering

• **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>
October 10-12,	Conference on Signal Processing,	JUIT Solan	Dr. Rishi	

2019	Computing and Control (ISPCC 2k19)		Rana	
November 27-30, 2019	International Conference on Sustainable Waste Management towards Circular Economy (9th IconSWM-CE 2019)	Kalinga Institute of Industrial Technology (KIIT), New Bhubaneswar, Odisha, India	Dr. Rishi Rana	

Seminars

• Seminars Organized

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
	NIL			

• Seminars Attended

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
May 12, 2020	Recycling Construction & Demolition Waste: Conversion of Waste to Wealth	Students Chapter of the Institution of Engineers (India) at Central University of Haryana	Dr Amardeep	
November 28-29, 2019	National Seminar on Unnat Bharat Abhiyan: Prospects and Challenges	NITTTTR, Chandigarh	Dr Rishi Rana	
June 18- June 24, 2020	Poorly designed afforestation projects can actually decrease carbon storage	Centre of Science and Environment, New Delhi	Dr Rishi Rana	
June 11, 2020	Farmer-Led Irrigation Development Mini-Series, Session	Daugherty Water for Food Global Institute (DWFI), the International	Dr Rishi Rana	

	I: Accelerating inclusive FLI and reaching scale: Key things to consider	Water Management Institute (IWMI), The World Bank, and the Global Water Partnership (GWP)		
June 16, 2020	WASH (Workplace Assessment for Safety & Hygiene)	Centre of Assessment for Excellence (COAE), Noida	Dr Rishi Rana	
June 10	Pandemics and Industrial food animal farming	Centre of Science and Environment, New Delhi	Dr Rishi Rana	
June 8, 2020	Plastic pollution in the ocean: Scenario in the post COVID-19 world	Waste Warriors, Himachal Pradesh, Plastic for Change and Sagar Shakti, India	Dr Rishi Rana	
June 7, 2020	COVID-19 Looking Beyond for Better Health and Herd Immunity	Department of Biotechnology, School of Basic & Applied Sciences, Maharaja Agrasen University, Baddi, HP	Dr Rishi Rana	
June 9, 2020	Water Resources: Challenges and Research Need	Department of Civil Engineering and the Student's Chapter of Indian Water Resource Society (IIT Roorkee) of Central University of Haryana	Dr Rishi Rana	
June 6, 2020	Recent Progress in Therapeutic Interventions for COVID-19	Department of Zoology and Environmental Sciences, SBAS, Maharaja Agrasen University, Baddi, HP	Dr Rishi Rana	

June 5, 2020	An environmental agenda for the future	Centre of Science and Environment, New Delhi	Dr Rishi Rana	
April 29, 2020	Ultra-high performance concrete and its applications in buildings and infrastructure	ACC cements	Dr Abhilash Shukla	
May 23, 2020	Post Covid-19 infrastructure development strategies and innovations	Prism Johnson Limited (Cement Division)	Dr Abhilash Shukla	
June 20, 2020	High performance concrete: its role in emerging construction arena	Prism Johnson Limited (Cement Division)	Dr Abhilash Shukla	
January 30-31, 2020	Training of Master trainers under the scheme- training for masons on Hazard resistant construction	HPDDMA, New DC office Solan	Dr Tanmay Gupta	
April 28 – May 2, 2020	Course on ‘R-Training’	IIT Bombay(sponsor) held at JUIT Wagnaghat	Mr. Niraj Singh Parihar	
April 26, 2020	Webinar on ‘RS Wall’	Earthcon Systems	Mr. Niraj Singh Parihar	
April 30, 2020	Webinar on ‘Construction and Quality Control of Reinforced Soil wall’	IGS Guntur	Mr. Niraj Singh Parihar	
May 9, 2020	Webinar on ‘Earthquake Engineering and Technology’	Indian Society of Earthquake Technology	Mr. Niraj Singh Parihar	
May 23, 2020	Webinar on ‘Relevance of Site Effect on Earthquake Resistant Construction’	Indian Society of Earthquake Technology	Mr. Niraj Singh Parihar	
May 8 – 19, 2020	Indo-China Research Webinar series in Civil and Environmental Engineering	Indian Geotechnical Society (Surat chapter), SVNIT Surat, Shantou University, China and Qingdao University, China	Mr. Niraj Singh Parihar	

May 14 – 16, 2020	Webinar on ‘Slope Stabilization and Ground Improvement Techniques’	Genstru India Pvt. Ltd and IGS	Mr. Niraj Singh Parihar	
May 14 – 17, 2020	National Workshop on ‘recent advances in Geotechnics for infrastructure (RAGI-2020)’	IGS(Bangluru), ACCE, Mysore and RAMCO Cements Ltd.	Mr. Niraj Singh Parihar	
May 18, 2020	Webinar on ‘Liquefaction associated damage during earthquake’	IGS Guntur	Mr. Niraj Singh Parihar	
June 8 – 13, 2020	Indo-Japanese Webinar Series on ‘Geotechnics for Disaster Mitigation’	IGS Surathkal and NIT Surathkal	Mr. Niraj Singh Parihar	
June 10 - 14, 2020	Webinar Series on ‘Remote Sensing, Water Resources and On-shore structures’	IGS Guntur	Mr. Niraj Singh Parihar	
June 22-27, 2020	Webinar Series on ‘Geotechnical Structures and Stresses’	IGS Guntur	Mr. Niraj Singh Parihar	
April 2020	Weekly iGrip Webinar Series	iGrip, IIT Gandhinagar	Mr. Niraj Singh Parihar	
June 30, 2020	Webinar on ‘Use of geogrids in flexible pavements’	IGS Agartala	Mr. Niraj Singh Parihar	
June 30 - July 4, 2020	Webinar Series on ‘Geosynthetics in Geotechnical Engg’	IGS Guntur	Mr. Niraj Singh Parihar	

Workshops

- **Workshops Organized**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
September 02-07, 2019	Six Day Workshop on “Mix-Design methodology for Concrete and Bitumen	JUIT Waknaghat	Junior Engineer and Assistant Engineer from HPPWD and faculty member from other technical institutions	
September 23-28, 2019	Six Day Workshop on	JUIT Waknaghat	Junior Engineer and Assistant Engineer	

	“Mix-Design methodology for Concrete and Bitumen		from HPPWD and faculty member from other technical institutions	
February 25-27, 2019	Three days training programme on “Training for masons on Hazard resistant construction” in collaboration with HPDDMA, Solan	JUIT Waknaghat	Junior Engineer and Assistant Engineer from HPPWD and faculty member from other technical institutions	

- **Workshops Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
June 23 - 27, 2020	Emerging Trends in Highway Engineering and Infrastructure Development	Dr. B R Ambedkar National Institute of Technology Jalandhar Department of Civil Engineering	Dr Amardeep	
June 16 - 18, 2020	#Zero waste	DAV College, Bathinda, Central University of Punjab, Bathinda and Indian National Young Academy of Sciences, New Delhi	Dr Rishi Rana	
June 22- 28, 2020	Science Leadership Program	University of Punjab, Bathinda	Dr Rishi Rana	
June 7- 9, 2020	Virtual Workshop on “#Blue Planet	Indian National Young Academy of Sciences and Department of Geology, Central University of Punjab, Bathinda, India in	Dr Rishi Rana	

		connection with World Oceans Day.		
May 31 - June 5, 2020	Workshop on "Tangled Bank"	Indian National Young Academy of Sciences and Department of Botany, Central University of Punjab, Bathinda, India in connection with World Environment Day	Dr Rishi Rana	

- **Faculty Development Program**

Attended

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
June 15 - 20, 2020	Transforming Education with Industry 4.0	Jaypee University of Information Technology, Wanknaghat, Solan	Dr Rishi Rana	
Jan - April, 2020	e- Waste Management	NPTEL	Dr Rishi Rana	
July - Oct, 2019	Wastewater Treatment and Recycling	NPTEL	Dr Rishi Rana	
Feb - April, 2019	Plastic Waste Management	NPTEL	Dr Rishi Rana	
June 24 - 26, 2020	Faculty Development Program on Recent Advancements in Civil Engineering	CMRIT Bangalore	Anirban Dhulia	
June 24 - 26, 2020	Faculty Development Program on Recent Advancements in Civil Engineering	CMRIT Bangalore	Dr Rajiv Ganguly	

- **Publications**

- **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Dr. Rishi Rana	Life Cycle Assessment of MSW in Tricity”.	Journal of Material Cycle and Waste Management , Springer Publication, 2019	Journal of Material Cycle and Waste Management, Springer Publication, 2019, 21 (3), 606-623	
Dr Abhilash Shukla	Review on Mechanical properties of Ultra-high performance fiber reinforced concrete (UHPFRC)	International Journal of Current advanced research	International Journal of Current advanced research (IJCAR), 9(5),2020: 22069-22076	
Dr Abhilash Shukla	Performance assessment of steel concrete composite bonded specimen under slant shear	International Journal of Current advanced research	International Journal of Current advanced research (IJCAR), 9 (5), 2020: 22341-22344	
Dr Abhilash Shukla	Utilization of waste foundry sand in concrete paver blocks	International Journal of advances in engineering and management	International Journal of advances in engineering and management, 2(1), 2020: 89-96.	
Dr. Tanmay Gupta	Free vibration analysis of bridges having combined skewness and curvature	Test Engineering and Management	Test Engineering and Management , Volume 83 Page Number: 610 – 619. March 2020	
Dr Saurabh Rawat	Performance Evaluation of Geosynthetic	Test Engineering and	Test Engineering and Management , Volume 83, Page	

	Encased Stone Columns	Management	Number: 5986 – 5998, Publication Issue: March - April 2020 [SCOPUS]	
Dr Saurabh Rawat	Horizontal Pullout Behavior of Novel Open-Ended Pipe Helical Soil Nail in Frictional Soil	International Journal of Civil Engineering	https://doi.org/10.1007/s40999-020-00535-2 [SCI/ IF = 1.446]	
Dr Rajiv Ganguly,	Impact Assessment of Leachate Pollution Potential on Groundwater: An Indexing Method	Journal of Environmental Engineering,	(ASCE Publications, SCI Indexed, IF (2019/20) – 1.657), 146(3), Article ID: 05019007 https://ascelibrary.org/doi/full/10.1061/%28ASCE%29EE.1943-7870.0001647	
Dr Rajiv Ganguly	Application of Decision Making Tool to Determine Effluent Quality Index of Existing Sewage Treatment Plants	'Journal of Institution of Engineers (Series A),	(Springer Publications, Scopus Indexed), 101(1), 207-219 https://link.springer.com/article/10.1007/s40030-019-00416-5	
Dr Rajiv Ganguly	Trend analysis of observational PM ₁₀ concentrations in Shimla city, India	Sustainable Cities and Society,	(Elsevier Publications, SCI Indexed, IF (2018/19) – 4.624), 51(C), Article ID: 101719. https://www.sciencedirect.com/science/article/pii/S2210670719306985?via%3Dihub	
Dr Rajiv Ganguly,	Effect of Municipal Solid Waste disposal on the Engineering Properties of soil from a Non-Engineered Landfill	International Journal of Innovative Technology and Exploring Engineering	(Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP), Scopus Indexed), 8(12), 2378-2388 https://www.ijitee.org/wp-content/uploads/papers/v8i12/L29841081219.pdf	

Dr Rajiv Ganguly,	Geotechnical Properties of Fresh and Degraded MSW in the Foothills of Shivalik Range Una, Himachal Pradesh	International Journal of Recent Technology and Engineering	(Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP), Scopus Indexed), 8(2), 363-374 https://www.ijrte.org/wp-content/uploads/papers/v8i2/B1479078219.pdf	
Niraj Singh Parihar	Chemical stabilization of expansive soil using liming leather waste ash	International Journal of Geotechnical Engineering, 14(5), 2020:1-13.	International Journal of Geotechnical Engineering, 14(5), 2020:1-13.	
Niraj Singh Parihar	Effect of potassium chloride on efficiency of fine slag used for treatment of expansive soil".	Bulletin of the Tomsk Polytechnic University, Geo Assets Engineering, 331(7), 2020	Bulletin of the Tomsk Polytechnic University, Geo Assets Engineering, 331(7), 2020	
Prof Ashok K Gupta	Chemical stabilization of expansive soil using liming leather waste ash	International Journal of Geotechnical Engineering, 14(5), 2020:1-13.	International Journal of Geotechnical Engineering, 14(5), 2020:1-13.	
Prof Ashok K Gupta	Effect of potassium chloride on efficiency of fine slag used for treatment of expansive soil".	Bulletin of the Tomsk Polytechnic University, Geo Assets Engineering, 331(7), 2020	Bulletin of the Tomsk Polytechnic University, Geo Assets Engineering, 331(7), 2020	
Prof Ashok K Gupta	Effect of Municipal Solid Waste disposal on the Engineering Properties of soil from a Non-Engineered Landfill	International Journal of Innovative Technology and Exploring Engineering	(Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP), Scopus Indexed), 8(12), 2378-2388 https://www.ijitee.org/wp-content/uploads/papers/v8i12/L29841081219.pdf	
Prof Ashok K Gupta	Geotechnical Properties of Fresh and	International Journal of Recent	(Blue Eyes Intelligence Engineering and Sciences Publication	

	Degraded MSW in the Foothills of Shivalik Range Una, Himachal Pradesh	Technology and Engineering	(BEIESP), Scopus Indexed), 8(2), 363-374 https://www.ijrte.org/wp-content/uploads/papers/v8i2/B1479078219.pdf	
Prof Ashok K Gupta	Performance Evaluation of Geosynthetic Encased Stone Columns	Test Engineering and Management	Volume 83, Page Number: 5986 – 5998, Publication Issue: March - April 2020 [SCOPUS]	
Prof Ashok K Gupta	Horizontal Pullout Behavior of Novel Open-Ended Pipe Helical Soil Nail in Frictional Soil	International Journal of Civil Engineering	https://doi.org/10.1007/s40999-020-00535-2 [SCI/ IF = 1.446]	
Prof Ashok K Gupta	Impact Assessment of Leachate Pollution Potential on Groundwater: An Indexing Method	Journal of Environmental Engineering,	(ASCE Publications, SCI Indexed, IF (2019/20) – 1.657), 146(3), Article ID: 05019007 https://ascelibrary.org/doi/full/10.1061/%28ASCE%29EE.1943-7870.0001647	
Prof Ashok K Gupta	Life Cycle Assessment of MSW in Tricity” .	Journal of Material Cycle and Waste Management , Springer Publication, 2019	Springer Publication, 2019, 21 (3), 606-623	
Prof Ashish Kumar	Techno-economic analysis, kinetics, global warming potential comparison and optimization of a pilot-scale unheated semi-continuous anaerobic reactor in a hilly area: For north Indian hilly states.”	Renewable Energy, 155, 1181–1190	Renewable Energy, 155, 1181–1190	

Prof Ashish Kumar	National municipal solid waste energy and global warming potential inventory: India	Journal of Hazardous, toxic and radioactive waste. DOI: 10.1061/(ASCE) HZ.2153-5515.0000521	Journal of Hazardous, toxic and radioactive waste. DOI: 10.1061/(ASCE) HZ.2153-5515.0000521	
Dr Aakash Gupta	Pollution status and water quality assessment in pre-monsoon season: A case study of rural villages in Allahabad district, Uttar Pradesh, India.	Materials Today: Proceedings	Materials Today: Proceedings, In Press	
Dr Aakash Gupta	Development of Maintenance Management System by Functional Evaluation for Rural Roads in Himachal Pradesh.	International Journal of Recent Technology and Engineering, 8 (1), 1682-1690	International Journal of Recent Technology and Engineering, 8 (1), 1682-1690	
Dr Aakash Gupta	Influence of Nanomaterials on Properties of Bituminous Concrete Mixes.	International Journal of Recent Technology and Engineering, 7 (6), 937-943	International Journal of Recent Technology and Engineering, 7 (6), 937-943	
Prof Ashok K Gupta	Development of Maintenance Management System by Functional Evaluation for Rural Roads in Himachal Pradesh.	International Journal of Recent Technology and Engineering, 8 (1), 1682-1690	International Journal of Recent Technology and Engineering, 8 (1), 1682-1690	

- **Books/Book Chapters Published**

Name of Faculty	Title of Book/Chapter	Name of Book	Reference	Remark
Dr Rishi	From Waste to Wealth: Solid Waste Management for Enhancement of Agricultural Productivity in Himachal Pradesh, India.	Springer Nature Book		
Dr Abhilash Shukla	Influence of the packing density of fine particles in ternary, quaternary and quinary blends on High Performance Concrete	Innovative Technologies for Clean and Sustainable Development	Singh B., Pathania A., Gupta M., Saini A., Shukla A. "Influence of the packing density of fine particles in ternary, quaternary and quinary blends on High Performance Concrete" Rilem book series (indexed in scopus) (Accepted on 27 May 2020 and under production)	
Dr Abhilash Shukla	Influence of bacillus megaterium over the mechanical properties of concrete	Innovative Technologies for Clean and Sustainable Development	Attri R., Shukla A. "Influence of bacillus megaterium over the mechanical properties of concrete" Rilem book series (indexed in scopus) (Accepted on 27 May 2020 and under production)	
Dr Rajiv Ganguly	Evaluation of Existing Solid Waste Management System in Una Town, India	Ghosh S. (eds) Sustainable Waste Management : Policies and Case Studies.	Chapter 33, pp. 367-381. https://link.springer.com/chapter/10.1007/978-981-13-7071-7_33	

		Springer, Singapore [ISBN: 9789811370 700],		
Dr Rajiv Ganguly	Aspects of E- waste Management in India	M.Z. Hashmi and A.Verma (eds) Electronic Waste Pollution, Soil Biology 57. Springer Nature Switzerland [ISBN: 978-3- 030-26614-1, 978-3-030- 26615-8 (eBook)]	Chapter 17, Page 253- 265. https://doi.org/10.1007/ 978-3-030-26615-8_17	
Dr Rajiv Ganguly	Indexing Method for Assessment of Air Quality: A Case Study for Dharamshala City in India	In: Venkatesan and Thiruman. (eds) Global Perspective on Air Pollution Prevention and Control System Design. IGI Global Publications [ISBN:978152 2572893]	Chapter 3, Page 68- 85. https://www.igi- global.com/chapter/ind exing-method-for- assessment-of-air- quality/231943	
Dr Saurav	Experimental and Numerical Study to Improve Lateral Load Resistance of Masonry Stack.	Advances in Structural Engineering and Rehabilitation : Lecture Notes in Civil Engineering	Advances in Structural Engineering and Rehabilitation: Lecture Notes in Civil Engineering, vol 38. (pp. 1-13). Singapore: Springer. [ISBN : 978-981-13- 7615-3]	

Prof Ashok K Gupta	Evaluation of Existing Solid Waste Management System in Una Town, India	Ghosh S. (eds) Sustainable Waste Management : Policies and Case Studies. Springer, Singapore [ISBN: 9789811370700],	Chapter 33, pp. 367-381. https://link.springer.com/chapter/10.1007/978-981-13-7071-7_33	
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- **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Dr Rishi	Evaluation of Heavy Metal Pollution Index (HPI) for Ground Water in Tricity.	Proceedings of the International Conference on Sustainable Waste Management towards Circular Economy	Proceedings of the International Conference on Sustainable Waste Management towards Circular Economy (9th IconSWM-CE 2019) [9th : Kalinga Institute of Industrial Technology (KIIT), New Bhubaneswar, Odisha, India. : November 27-30, 2019]	November 27-30, 2019
Dr. Rishi	From Waste to Wealth: Solid Waste Management for Enhancement of Agricultural Productivity in Himachal Pradesh, India.	Proceedings of the International Conference on Sustainable Waste Management towards Circular Economy	Proceedings of the International Conference on Sustainable Waste Management towards Circular Economy (9th IconSWM-CE 2019) [9th : Kalinga Institute of Industrial Technology (KIIT), New	November 27-30, 2019

			Bhubaneswar, Odisha, India. : November 27-30, 2019]	
Dr. Rishi	Mapping of MODIS satellite data with ground level particulate matter concentration - a case study for Shimla," 2019	Fifth International Conference on Image Information Processing (ICIIP)	Fifth International Conference on Image Information Processing (ICIIP), Shimla, India, 2019, pp. 497-502, doi: 10.1109/ICIIP47207.2019.8985875.	2019
Dr Rishi	Quality Assessment of Surface and Groundwater in parts of District Patiala, Punjab, India.	Proceedings of National Seminar on Unnat Bharat Abhiyan: Prospects and Challenges,	Proceedings of National Seminar on Unnat Bharat Abhiyan: Prospects and Challenges, NITTTTR, Chandigarh, 28-29 November, 2019.	28-29 November, 2019
Dr Tanmay Gupta	Modal analysis of Reinforced Concrete Skew-Curve Box-Girder Bridges.	8 th International Conference on Advancements in Engineering andTechnology.	8 th International Conference on Advancements in Engineering andTechnology. 20 th and 21 st March 2020. Bhai Gurdas Institute of Engineering, Sangrur,Punjab, India	20 th and 21 st March 2020
Dr Tanmay Gupta	Free vibration analysis of bridges having combined skewness and Curvature.	International conference on recent trends and innovations in multidisciplinary research ICRTIMR	International conference on recent trends and innovations in multidisciplinary research ICRTIMR 14 th March 2020. IEC university, Baddi, Himachal Pradesh, India	14 th March 2020
Dr Rajiv Ganguly	Design of Landfill Systems in Hilly Regions of Himachal Pradesh	3 rd International Conference on Waste Management (RECYCLE 2020)	February 13-14, 2020 at IIT Guwahati, Guwahati, Assam, India.	February 13-14, 2020

Dr Rajiv Ganguly	Water Quality and Designated Best Use (DBU) Determination of BhimTaal Lake of Panchkula, Haryana	1 st International Conference on Water Security and Sustainability (ICWSS 2019)	December 13-14, 2019 at Sikkim Manipal Institute of Technology, Sikkim, India.	December 13-14, 2019
Dr Rajiv Ganguly	Evaluation of Heavy Metal Pollution Index (HPI) for Ground Water in Tricity	9 th International Conference on Sustainable Waste Management towards Circular Economy (9 th IconSWM-CE 2019)	November 27-30, 2019 at Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar, Odisha, India	November 27-30, 2019
Dr Rajiv Ganguly	Settlement Analysis of Municipal Solid Waste in Non-Engineered Landfill in Himachal Pradesh	9 th International Conference on Sustainable Waste Management towards Circular Economy (9 th IconSWM-CE 2019)	November 27-30, 2019 at Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar, Odisha, India	November 27-30, 2019
Dr Rajiv Ganguly	Mapping of MODIS satellite data with ground level particulate matter concentration – a case study for Shimla	Fifth International Conference on Image Information processing (ICIIP 2019)	November 15-17, 2019 at Jaypee University of Information Technology, Wagnaghat, Himachal Pradesh, India. pp. 497-502. (Scopus Indexed). 10.1109/ICIIP47207.2019.8985875 http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8985875&isnumber=8985664	November 15-17, 2019
Dr Rajiv Ganguly	Design of Landfill Systems in Hilly Regions of Himachal Pradesh	3 rd International Conference on Waste Management (RECYCLE 2020)	February 13-14, 2020 at IIT Guwahati, Guwahati, Assam, India.	February 13-14, 2020

Prof Ashish Kumar	Biogas Production using one stage single portable reactor	National Symposium, Biotechnology trends and Innovations, Star college scheme of Department of Biotechnology, Govt. of India, New Delhi, Page no. 15.	National Symposium, Biotechnology trends and Innovations, Star college scheme of Department of Biotechnology, Govt. of India, New Delhi, Page no. 15.	Feb. 7-8, 2020
Prof Ashish Kumar	Waste: A silent contributor to climate change	Recent Advances in Agricultural, Environmental & Applied Sciences for Global Development	Recent Advances in Agricultural, Environmental & Applied Sciences for Global Development, at Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Nauni, Solan, Himachal Pradesh, India, Page no. 33	Sept. 27-29, 2019
Prof Ashish Kumar	Current practices, future strategies, energy prospect, global warming potential and economic aspect of municipal solid waste: Himachal Pradesh	9th IconSWM 2019	9th IconSWM 2019 at Kalinga Institute of Information and Technology, Bhubaneswar, Odisha, India during November 27-30, 2019, Page no. 113.	Nov. 27-30, 2019
Prof Ashish Kumar	Bio-methane potential and modeling studies of cow dung, food waste and pine needles at low mesophilic temperature	9th IconSWM 2019	9th IconSWM 2019 at Kalinga Institute of Information and Technology, Bhubaneswar, Odisha, India during November 27-30, 2019. Page no 16.	Nov. 27-30, 2019
Prof Ashish Kumar	Greenhouse gases Inventorying:	10th Indian climate congress on	10th Indian climate congress on Climate change &	Dec. 27-29, 2019

	Estimation of Carbon dioxide and methane from municipal solid waste in Shimla	Climate change & world peace 2019	world peace 2019 at Orissa University of Agriculture & Technology, Bhubaneswar, India during December 27-29, 2019	
Prof Ashish Kumar	Critical Shear Stress of Sand Particles in Non-Uniform Sediments	Proceedings of XXIV Hydro2019 International Conference	proceedings of XXIV Hydro2019 International Conference- 18-20 Dec, 2019, pp1035-1040, ISBN: 978-93-8935-484-3	18-20 Dec, 2019
Prof Ashok K Gupta	Design of Landfill Systems in Hilly Regions of Himachal Pradesh	3 rd International Conference on Waste Management (RECYCLE 2020)	February 13-14, 2020 at IIT Guwahati, Guwahati, Assam, India.	February 13-14, 2020
Prof Ashok K Gupta	Evaluation of Heavy Metal Pollution Index (HPI) for Ground Water in Tricity	9 th International Conference on Sustainable Waste Management towards Circular Economy (9 th IconSWM-CE 2019)	November 27-30, 2019 at Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar, Odisha, India	November 27-30, 2019
Prof Ashok K Gupta	Settlement Analysis of Municipal Solid Waste in Non-Engineered Landfill in Himachal Pradesh	9 th International Conference on Sustainable Waste Management towards Circular Economy (9 th IconSWM-CE 2019)	November 27-30, 2019 at Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar, Odisha, India	November 27-30, 2019
Prof Ashok K Gupta	Design of Landfill Systems in Hilly Regions of Himachal Pradesh	3 rd International Conference on Waste Management (RECYCLE 2020)	February 13-14, 2020 at IIT Guwahati, Guwahati, Assam, India.	February 13-14, 2020

- **Guest Speakers/Lectures/ Visits**

- **Guest Speakers**

Name of Guest Speaker	Designation of speaker	Topic of Lecture	Date
Nil			

- **Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Dr. Amardeep	Assistant Professor	Bitumen Mix Design	June 15, 2019	JUIT Waknaghat
Dr. Amardeep	Assistant Professor	Bitumen Mix Design	June 29, 2019	JUIT Waknaghat
Dr. Amardeep	Assistant Professor	Performance Evaluation for Intercity Roads	October 17, 2018	JUIT Waknaghat
Dr. Amardeep	Assistant Professor	Level of Service on Two-Lane Highways	January 14, 2019	JUIT Waknaghat
Dr. Tanmay Gupta	Assistant Professor Gr-2, CED	Concrete mix-design overview	June 24 - , September 2, 2020	JUIT Waknaghat
Dr. Tanmay Gupta	Assistant Professor Gr-2, CED	Concrete mix-design overview	September 23, 2020	JUIT Waknaghat
Dr. Tanmay Gupta	Assistant Professor Gr-2, CED	Disaster Resistant construction practices	February 25, 2020	JUIT Waknaghat
Dr Saurabh Rawat	Assistant Professor [SG]	Specification for Proctor and CBR Method as per BIS	September 2 - 7, 2019	CED, JUIT

Dr Saurabh Rawat	Assistant Professor [SG]	Specification for Proctor and CBR Method as per BIS	September 23 - 28, 2019	CED, JUIT
Dr Aaksh Gupta	Assistant Professor [II]	Design of Flexible Pavement using IRC 37, 2018	September 2 - 7, 2019	CED, JUIT
Dr Aaksh Gupta	Assistant Professor [II]	Benkelman Beam Deflection Studies using IRC 81, 1997	September 2 - 7, 2019	CED, JUIT
Dr Aaksh Gupta	Assistant Professor [II]	Design of Flexible Pavement using IRC 37, 2018	September 23 - 28, 2019	CED, JUIT
Dr Aaksh Gupta	Assistant Professor [II]	Benkelman Beam Deflection Studies using IRC 81, 1997	September 23 - 28, 2019	CED, JUIT

- **Visits Organized** Nil

Recognition & Awards

- **By Faculty**

Name of Faculty	Designation of Faculty	Award	Date	Achievement
Dr Rishi Rana	Assistant Professor (Senior Grade)	Young Scientist of the Year, 2019, National Environment Science Academy, New Delhi	20 th December, 2019	Young Scientist of the Year, 2019,
Dr Saurabh Rawat	Assistant Professor [SG]	IGS-Shri R.N. Prasad Biennial Award-2019	December 19th, 2019	Paper titled, "Testing and Modeling of Screw Nailed Soil

				Slopes” by Saurabh Rawal and Ashok Kumar Gupta published in Indian Geotechnical Journal, Vol. 48, Issue 1, March 2018 (pp. 52-71) has been adjudged as the best paper on “ Slope Stability and Land Slides ” published through Indian Geotechnical Society.
Dr. Tanmay Gupta	Assistant Professor Gr-2, CED	MIAENG	12-08-2019	Member of International Association of engineers (IAENG) Membership number 244960

- **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, Wagnaghat
2	Prof. S. K. Singh	Professor	PEC Chandigarh
3	Prof. S. P. Ghera	Head of the Department, CSE/IT	Jaypee University of Information Technology, Wagnaghat
4	Prof. Karanjeet Singh	Head of the Department, Mathematics	Jaypee University of Information Technology, Wagnaghat
5	Prof. Sudhir Kumar	Head of the Department, BT/ BI	Jaypee University of Information Technology, Wagnaghat

6	Dr. Anupriya Kaur	Head of the Department, HSS	Jaypee University of 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 FLuival 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. Chandra 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>Specialization</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.	Optical & Magnetic studies/ZnO

- **Programs**

- **Undergraduate Program**

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

- **Core**

S No	Title of 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
9	Science & Technology of Materials	18B1WPH531
10	Applied Mat. Science	18B1WPH532

- **Elective**

S No	Title of Course	Course Code
1	Nanotechnology	18B1WPH731
2	Optical Fiber Networks	18B1WPH732
3	Optoelectronic Devices	18B1WPH831

- **Post Graduate Programs**

Department of Physics and Materials Science offers the **M.Sc. (Physics)** program to student with B.Sc/B.Sc (Honours) degree having "Physics" as the main subject. After successful completion of Master Degree, deserving candidates may have opportunity to either register in Ph.D program with the University fellowship or financial assistance from research projects. Syllabi of M.Sc Program have been designed to help students in preparation of competitive exams like GATE, NET also.

- **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.

- **Laboratory Facilities**

- **Laboratory Staff with Qualification**

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

- **Laboratories with major equipments**

- Material Science Laboratory

The Materials Science laboratory is equipped with

- Thermal/E-Beam Vapour deposition unit
- Hydraulic press
- High temperature two probe set-up with TPX-600°C PID controller, 1500 V EHT power supply, high resolution picoammeter, and Dielectric constant measurement setup.

- CVD Laboratory

CVD laboratory is equipped with

- Microprocessor controlled furnace used for annealing thin films upto 1400°C in presence of specific gases such as argon, nitrogen etc. Also it is used to prepare carbon nanotubes (CNT).
- Specially designed chamber to synthesize thin films in the presence of magnetic field by using vapour technique.

- Nanotechnology Laboratory

The nanotechnology laboratory is well equipped with

- Muffle furnace
- Hot air oven

- Spin coating unit
 - Single pan highly sophisticated balance
 - Magnetic stirrers
- Characterization Laboratory

Characterization laboratory is equipped with various characterization techniques:

 - Perkin Elmer Lambda 750 UV-visible-NIR spectrophotometer having range 190-3300 nm
 - LS-55 spectrophotometer (Perkin Elmer) to record photoluminescence spectra in the range of 200-900 nm.
 - STM
 - Keithley's Picoammeter and gas sensor setup.
- EM Analysis Laboratory

The electromagnetic analysis laboratory is equipped with adequate software and hardware facilities. The laboratory has antenna design softwares like

 - HFSS
 - IE3D
 - EMPIRE EXCEL.

Also, the laboratory has the facility for fabrication and analysis of antenna by using

 - PCB Design Machine
 - Vector Network Analyzer
- 2D growth Laboratory

2-dimensional (2-D) growth laboratory is equipped with

 - Advanced Chemical vapour deposition unit for thin film fabrication which provides an option to grow materials in low pressure and atmospheric pressure.
 - **Specially designed chamber** for testing hydrogen gas storage in materials.

• **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. Rajesh Kumar (Principal Investigator)	Formation of room temperature Ferrite thin films for the Application of Spintronic devices	DST-DAAD (Indo-German)	11.72 Lacs	2017-2019	Completed
2	Dr. Surajit Kumar Hazra (Principal Investigator) Prof. P.B. Barman (Co-PI)	Hydrogen storage using 2D chalcogenide and graphene layered materials	DST-SERB	32.00 Lacs	2017-2020	In Progress
3	Prof. P.B. Barman (Principal Investigator) Dr. Surajit K. Hazra (Co-PI)	Catalytic nanoparticles based graphene devices for selective detection of industrial gases	HIMCO STE	8.00 Lacs	2017-2019	Completed
4	Dr. Pankaj Sharma (Co-PI)	IoT enabled fencing systems to control monkey menace in Shimla (Urban Areas of Himachal Pradesh)	HIMCO STE	7.50 Lacs	2017-2019	Completed
5	Dr. Vineet Sharma (Principal Investigator)	Enhancing the thermal stability of Chalcogenide Phase-change materials for switching and memory applications	DST-SERB	20.06 Lacs	2017-2020	In Progress

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

Conferences

- **Conferences Organised : Nil**
- **Conferences Attended : 02**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
1-3 August 2019	International conference on recent trends in biotechnology and bioinformatics	Jaypee University of Information Technology	Ragini Raj Singh	Chaired a session
May 15-16, 2020	Developing a new method to form free standing magnetic films	C.C.S. University, Meerut	Rajesh Kumar	Attended e-conference

Seminars

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

Workshops

- **Workshops Organised : Nil**
- **Workshops Attended : 02**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
20-04-2020 to 24-04-2020 (One Week)	<i>Online AICTE Recognized Faculty Development Programme on Quantum and Energy Materials: Potential & Applications Organized by Applied Science Department, NITTTR, Chandigarh</i>	Online	Vineet Sharma	--
27-04-20 to 01-05-20 (One Week)	<i>Online AICTE Recognized Faculty Development Programme On Nanomaterials and Devices Organized by Applied Science Department, NITTTR, Chandigarh</i>	Online	Vineet Sharma	--

- **Publications**

- **Journal Publications=13**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Partha Bir Barman, Rajesh Kumar	Magnetic field and temperature-dependent studies of structural and magnetic properties of NiFe ₂ O ₄ films	Applied Physics A	126 (2020) 456	--
Vineet Sharma, Pankaj Sharma	Study of amorphous Sn-Se-Bi-Te semiconducting materials at an average coordination number=2.4.	Materials Research Express,	6(7),(2019) 075209 (1-9)	--
Vineet Sharma, Pankaj Sharma	Chemical Ordering and Electronic Properties of Lone Pair Chalcogenide Semiconductors	Progress in Solid State Chemistry,	54 (2019), 31-44.	06
Vineet Sharma, Pankaj Sharma	Alloyed Ag ₂ Se _x S _{1-x} quantum dots with red to NIR shift: The band gap tuning with dopant content for energy harvesting applications.	Infrared Physics and Technology,	105 (2020), 103162	--
Vineet Sharma	Improvement in stability of GST PCMs on Sm addition for memory devices	Journal of Non-Crystalline Solids,	532 (2020), 119887(1-5)	--
Vineet Sharma, Pankaj Sharma	Transformation in the structural and optical properties with the phase change from hematite (Fe ₂ O ₃) to pure spinel structure in Mn-Zn nanoferrites	Physica B: Condensed Matter,	584, (2020) pp. 412107	--
Pankaj Sharma	Optical properties of (Se ₈₀ Te ₂₀) _{100-x} Zn _x (2≤x≤6) amorphous thin films	Journal of Non-Crystalline Solids	531(1) (2020) 119848	--
Pankaj Sharma	Photoinduced Effects for Amorphous Chalcogenide Semiconductors	Applied Materials Today	17 (2019) 142-158	2

Pankaj Sharma	Optical constants of Ge-Sb-Se-I chalco-halide glasses using a single reflectance spectrum	Infrared Physics & Technology	102 (2019) 102997	2
P.B. Barman Ragini Raj Singh	Corroboration and efficacy of Magneto-Fluorescent (NiZnFe/CdS) Nanostructures Prepared using Differently Processed Core	Scientific Reports	9 (2019) 15138	--
P.B. Barman Ragini Raj Singh	Experimental and theoretical verification of cations distribution and spin canting effect via structural and magnetic studies of $Ni_{0.6-x}Zn_{0.4}Co_xFe_2O_4$ nanoparticles	International Journal of Minerals, Metallurgy and Materials	https://doi.org/10.1007/s12613-020-2005-4	--
Ragini Raj Singh	Structural, luminescent and antimicrobial properties of ZnS and CdSe/ZnS quantum dot structures originated by precursors	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	229 (2020) 117962 https://doi.org/10.1016/j.saa.2019.117962	1

- **Books/Book Chapters Published: 01**

Name of Faculty	Title of Chapter	Name of Book	Reference	Citation
Partha Bir Barman and Surajit Kumar Hazra	Nano Layers of 2D Graphene Versus Graphene Oxides for Sensing Hydrogen Gas	Multilayer Thin Films - Versatile Applications for Materials Engineering	DOI: http://dx.doi.org/10.5772/intechopen.88538 . Publisher: IntechOpen <u>ISBN 978-1-78985-4374</u>	--

- Conference Publications=05**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Rajesh Kumar	Formation of hierarchical porous interlaced 3-D nanostructured (Ni-Co)(OH) ₂ and NiCo ₂ O ₄ films simultaneously using a novel technique	International conference on Advanced Materials and Nanotechnology (AMN-2020)	https://doi.org/10.1016/j.matpr.2020.01.442	Feb. 20-22, 2020
Pankaj Sharma	Applicability of different models of energy bandgap and refractive index for chalcogenide thin films	International Conference on Advanced Materials and Nanotechnology, (AMN-2020)	Materials Today: Proceedings, 28(1) (2020) 92-95	Feb. 20-22, 2020
P.B. Barman and S.K. Hazra	Shape dependent hydrogen response in palladium nanoparticle based sensors	International Conference on Advanced Materials and Nanotechnology, (AMN-2020)	Materials Today: Proceedings, 28 (2020) 218–222	Feb. 20-22, 2020
Pankaj Sharma	A study of ac conductivity of nano TiO ₂ –polyaniline based film	International Conference on Materials Processing and Characterization	Materials Today: Proceedings 26(2) (2020) 341-343	21-23 Feb. 2020
Pankaj Sharma	Study of Tauc gap, optical density and penetration depth of vacuum evaporated Pb ₁₅ Se _{85-x} Ge _x (x = 0, 3, 6 at. %) thin films supported by chemical bond approach and physical parameters	1 st International Conference on Recent Advances in Materials & Manufacturing Technologies	Materials Today: Proceedings 28(2) (2020) 402-407	Sep 12-14, 2019

- Guest Speakers/Lectures/ Visits**

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

- **Visits Organized=02**

Institution visited	Dates	Aim of visit	Participation	
			Students	Faculty
GIST, South Korea	June-July 2019	Research Collaboration	--	Rajesh Kumar
Thapar Institute of Engineering and Technology, Patiala	26 and 27th January 2020	International meeting and workshop with delegates from Israel	--	Ragini Raj Singh

- **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. Ghrera	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 (Operations Research)
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.

Research Projects Sanctioned during the Academic Year/In Progress

S No	Name of Faculty	Project title	Funding Agency	Amount sanctioned	Duration	Current Status
1	(a) Dr. R. S. Raja Durai (co-investigator) (b)Dr. Meenakshi Devi (Principal investigator)	Construction of T-Direct Codes using an Almost Self Dual Basis	ABSA (South Africa)	R50000/- (INR 2.5 Lac)	1 year (JAN 2020-DEC 2020)	A result on T-Direct code is obtained and Mathematica programming on generating supportive data over GF(3 ⁷) & GF(5 ⁵) is being carried on.

Conferences

- **Conferences Organized - Nil**
- **Conferences Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
07-11 June 2020	IEEE International Conference on Communications (ICC) 2020	Attended the IEEE ICC 2020 on virtual mode during June 7-11, 2020.	Dr. R. S. Raja Durai	Online
21-22 Dec 2019	Second International Conference on Frontiers in Industrial and Applied Mathematics	GEC Greater Noida	Dr. Neel Kanth	Presented paper and chair the session

Seminars

- **Seminars Organized – Nil**
- **Seminars Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
11/06/2020	The Universe and Mathematical Modelling.	JSS Mahavidtapeetha, JSS Academy of Technical Education, Noida, (U.P.)	Saurabh Srivastava	Webinar
11/06/2020	Gender Equality, Women Empowerment & Women Right	VEC, Lakhapur (C.G.)	Pradeep Kumar Pandey	Webinar
18-19 June 2020	Geodesics on unit sphere: A differential Geometry approach.	Dept. of Mathematics, CBP Computer College (Gujrat)	Pradeep Kumar Pandey	Webinar

- **Workshops Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
30th May to June 1, 2020	Three days "SCRS Lecture Series on Soft Computing" organized by Soft Computing Research Society, New Delhi	Online	Rakesh K Bajaj	QR Code:QPJXR0-CE000042
10th Feb - 12th Feb 2020	Three days workshop on "Perception Towards IPR"	JUIT	Rakesh K Bajaj	Offline

Publications

- **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Preeti Devi and K. Singh	Classical Lie symmetries and similarity reductions of the $(2 + 1)$ -dimensional dispersive long wave system	Asian-European Journal of Mathematics	https://doi.org/10.1142/S1793557121500522	Scopus, web of science
Swati, Karanjeet Singh, Amit Kumar Verma, Mandeep Singh	Higher order Emden-fowler type equations via uniform Haar wavelet resolution technique	Journal of Computational and Applied Mathematics	vol-376, 112836, 2020	SCI
R. S. Raja Durai, Meenakshi Devi and Ashwini Kumar	Design of T-Direct codes over $GF(2^N)$ with increased users.	Applicable Algebra in Engineering, Communication and Computing (Springer)	<u>DOI:</u> https://doi.org/10.1007/s00200-020-00435-x	SCIE, Scopus
Abhishek Guleria, Rakesh K Bajaj	<i>On Pythagorean Fuzzy Soft Matrices, Operations and their Applications in Decision Making and Medical Diagnosis</i>	Soft Computing (Springer)	Vol 23 (17), 2019 pp. 7889 – 7900, 2019	SCI, Scopus
Abhishek Guleria, Rakesh K Bajaj	Dimensionality Reduction Technique in Decision Making Using Pythagorean Fuzzy Soft Matrices	Recent Patents on Computer Science	12 (4), 1-12, 2020	Scopus
Ashutosh Sharma, Rajiv Kumar, Rakesh K Bajaj	On Energy-constrained Quickest Path Problem in Green Communication Using Intuitionistic Trapezoidal Fuzzy Numbers	Recent Patents on Computer Science	(2020) 13: 1. https://doi.org/10.2174/2213275911666181025125224	Scopus

Tanuj Kumar, Rakesh K Bajaj, Dilshad Ansari	Credibility distribution based R -norm fuzzy information measures in noiseless coding theorems	International Journal of General Systems	48 (3), 302-320, 2019	SCI, Scopus,
Abhishek Guleria, Rakesh K Bajaj	Technique for Reducing Dimensionality of Data in Decision-Making Utilizing Neutrosophic Soft Matrices	Neutrosophic Sets and Systems	29, 129-141, 2019	WoS, Scopus
Abhishek Guleria, Saurabh Srivastava, Rakesh K Bajaj	On Parametric Divergence Measure of Neutrosophic Sets with its Application in Decision-making Models	Neutrosophic Sets and Systems	29, 101-120, 2019	WoS, Scopus
Abhishek Guleria, Rakesh K Bajaj	T-Spherical Fuzzy Graphs: Operations and Applications in Various Selection Processes	Arabian Journal of Science and Engineering	45 (3), 2177-2193, 2020	SCI, Scopus
Abhishek Guleria, Rakesh K Bajaj	Pythagorean fuzzy (R, S) -norm discriminant measure in various decision making processes	Journal of Intelligent & Fuzzy Systems	38, 761-777, 2020	SCI, Scopus
Neelam Gupta, Neel Kanth	Analytical Approximate Solution of Heat Conduction Equation Using New Homotopy Perturbation Method	Matrix Science Mathematic	pp.1-7, Vol 3(2), 2019	Nil
Neelam Gupta, Neel Kanth	Study of Heat Conduction inside Rolling Calender Nip for Different Roll Temperatures	Journal of Physics (CS)	pp.1-9, Vol1276(1), 2019	Scopus

Neel Kanth, A.K Ray	Analysis of Heat Conduction Inside the Nip of Machine Calender for the Same and Different Roll Temperatures	Heat Transfer-Asian Research	pp.3557-3573 Vol.48(8), 2019	Scopus
Neelam Gupta, Neel Kanth	Numerical Solution of Diffusion Equation Using Method of Lines	Indian Journal of Industrial and Applied Mathematics	pp.194-203 Vol.10(2), 2020	Nil
Pradeep Kumar Pandey and Sameer Mohammad	Magnetic and slant curves in Kenmotsu manifold	Surveys in Mathematics and its Applications	Vol. 15, p. 139-151, 2020.	Scopus
Ashutosh Sharma, Rajiv Kumar, Manar Wasif Abu Talib, Saurabh Srivastava, Razi Iqbal	Network modelling and computation of quickest path for service-level agreements using bi-objective optimization.	International Journal of Distributed Sensor Networks	https://doi.org/10.1177/1550147719881116	Nil
Amit K Verma, Nazia Urus, Mandeep Singh	Monotone Iterative Technique for a Class of Four Point BVPs with Reversed Ordered Upper and Lower Solutions	International Journal of Computational Methods (World Scientific)	DOI: 10.1142/S021987621950066X, 2019	SCIE
Amit K Verma, Mandeep Singh, Ravi P Agarwal	Regions of existence for a class of nonlinear diffusion type problems	Applicable Analysis and Discrete Mathematics	Vol. 14, 106-121, 2020	SCIE
Vishal Mehta, H. P. Singh and S. K. Pal	A general procedure for estimating finite population mean using ranked set sampling	Revista Investigation Operational	Vol. 41 (1), 80-92, 2020	Scopus

- **Books/Book Chapters Published** Nil

- **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Preeti Devi and K. Singh	Exact solutions of the (2+1)-dimensional Boiti-Leon-Pempinelli system by first integral method	RAMSA, AIP Conference Proceedings	vol. 2061, 020029	2019
Preeti Devi and K. Singh	Exact traveling wave solutions of the (2+1)- dimensional Boiti-Leon-Pempinelli system using (G'/G^2)- expansion method	RAMSA, AIP Conference Proceedings	vol. 2214, 020030	2020
M.Poonia and K. Singh	Exact traveling wave solutions of diffusive predator prey system using the first integral method	RAMSA, AIP Conference Proceedings	Vol. 2214. No. 1. AIP Publishing LLC, 2020.	2020
Swati, Karanjeet Singh, Mandeep Singh	Uniform Haar wavelet collocation method for three-point boundary value problem	RAMSA, AIP Conference Proceedings	2214(1):0 20015	2020
Neelam Gupta, Neel Kanth	Analysis of Heat Conduction Inside the Calender Nip Used in Textile Industry	RAMSA, AIP Conference Proceedings	Vol.2214 (1)	2020
Sameer, and Pradeep Kumar Pandey	Copper differential geometry	RAMSA, AIP Conference Proceedings	Vol. 2214, 020012	2020

- **Guest Lectures :**

Name of Guest Speaker	Designation of speaker	Topic of Lecture	Date
R. S. Raja Durai	Resource Person Delivered the talk (Google meet) at the one-day national level webinar on ``New Directions in	Probability Models	29 th June 2020

	Pure & Applied Mathematics" hosted by Govt. Ats College, Kumbakonam, Tamil Nadu (India) on 29 th June 2020.		
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- Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Rakesh K Bajaj	Associate Professor	Sets, Functions and Relations	12/07/2019	SCERT, Solan
Neel Kanth	Assistant Professor	Linear Programming	11/07/2019	SCERT Solan
Saurabh Srivastava	Assistant Professor (Grade-II)	Point set topology and analytic functions in complex analysis (Webinar).	08/06/2020	Hindustan College of Science and Technology, Farah, Mathura, U.P.

- 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, Chd
11.	Prof Rama Bhargava	Prof of Maths	IIT Roorkee

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
MsTriambica Gautam	MBA	Banking and Finance
Dr PapiyaLahiri	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	Interpersonal Dynamics Values and Ethics	18B11WHS311
2	Finance and Accounting	18B11WHS411

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, Human rights, 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 i5-7400-7thGen@3.00Ghz, RAM-8Gb,HDD-1TB Windows 10Pro (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)
4. Cyber client, office 2007

Lab Staff with Qualification

Name	Designation	Qualification
Mr Mahinder	Junior lab Assistant	MCA

Conferences Organized – NIL**Conferences Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
9Nov,2019	Business Transformation through Sustainability, Entrepreneurship and Digitalization	IMS Ghaziabad University Campus	Dr Tanu Sharma	

Seminars Organized – NIL**Seminars Attended**

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
17 June,2020	Developing Social Intelligence for Workplace Success,	Vashisht, Business School , Indore	Dr Tanu Sharma	
15 June,2020	Getting Economic Growth Back Amidst Covid '19 Pandemic,	Vashisht, Business School , Indore	Dr Tanu Sharma	
11 June,2020	The Impact of Covid-19 on HR Strategies and Industrial Relations Practices	Amity Business School of Management , Noida	Dr Tanu Sharma	

May7,2020	The Design of Analytics: When Behavioral Economics Makes Sense of Emotions in Product Design	-Amity Business School of Management , Noida	Dr Tanu Sharma	
27May,2020	Virtual Education Training though Microsoft Teams	Online	Dr. Sakshi Khanna	
28 April, 2020-02 May, 2020	R training	Online	Dr. Sakshi Khanna	
10-13 February, 2020	Perception towards IPR	JUIT	Triambica Gautam	
27-29 February 2020.	Certificate of Attendance in English Language Teaching on Global Skills, Assessment of Learning, Vocabulary, Digital Skills by OUP (Oxford University Press)	Online Conference 2020 (ELTOC)	Dr. Papiya Lahiri	
15 June 2020	Presented a paper entitled "Trajectory of Tolerance and Triumph: A Short Study of Ambedkar's <i>Waiting for Visa</i> "	Online SymposiumInstitute of Language Studies and Applied Social Sciences, VallabhVidyanagar	Dr. Papiya Lahiri	
13June,2020	Participated in a National level "William Shakespeare and the 21st Century Reader with Special Reference to Hamlet"	Online Seminar English Literary Society of RKSD College, Kaithal, Haryana affiliated to Kurukshetra University and The Shakespeare Association of India	Dr. Papiya Lahiri	

13 June 2020	Participated in National Webinar III on "Skill Enhancement Techniques Amidst Covid-19" by Sh. Raj Nehru, Vice Chancellor, Shri Vishwakarma Skill University, Haryana	Daulat Ram College, University of Delhi, under the aegis of IQAC on.	Dr. Papiya Lahiri	
15 June,2020	Participated in a national level webinar on "Globalisation of Swadeshi" by Prof. ADN Bajpayi	Rayat Institute of Management &Rayat Public Sr. Sec. School, Ropar Campus, Punjab.	Dr. Papiya Lahiri	
26-27 June 2020	Participated in a 2-Days National Webinar on "Yogic and Naturopathic Remedies to Save Humanity from Covid-19 pandemic"	Department of Philosophy (Moolji Jaitha College, Jalgaon) and Bharatiya Mahila Darshanik Parishad.	Dr. Papiya Lahiri	
20-21 June 2020	Participated in an International Webinar on "Relevance of Yoga in Present World Crisis" on organized by	JagatTaran Girls' PG College (A Constituent College of University of Allahabad) Dept. of Sanskrit Prayagraj, Uttar Pradesh	Dr. Papiya Lahiri	

Workshops Organized:

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Participation</u>	<u>Remarks</u>
June 27,2019- July3,2019	Developing Emotional Intelligence	SRM Contractors Pvt Ltd, Engineers and Developers, Jammu	Dr Tanu Sharma Organizer and Resource Person	

Workshops Attended

<u>Dates</u>	<u>Subject</u>	<u>Venue</u>	<u>Faculty Name</u>	<u>Remarks</u>
April 28 – May 02, 2020	Faculty Development Programme of R	Online FDP organized by Spoken Tutorial, IIT Bombay	Dr. Amit Srivastava	
27 June 2020	Attended and participated in a training programme by Microsoft. Awarded certificate of recognition as a certified Microsoft Innovative Educator.	Online By Microsoft	Dr. Papiya Lahiri	
	<i>The ARPIT Course for Career Advancement Scheme(CAS) promotion Annual Refresher Programme in English Language Teaching from Gujarat University</i>	16 Weeks course with 40 lectures. 2019-2020 (Part of MOOCS)	Dr. Papiya Lahiri	

Publications

Journal Publications

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Dr Tanu Sharma	Role of Emotional Intelligence in Enhancing Leadership Skills in Higher Education	KAAV International Journal of economics, Commerce and Business management,.	2019, Vol6(1), Pg 136-139	
Dr Tanu Sharma	Technology and Automation-A Threat To Human resource management?	KAAV International Journal of economics, Commerce and Business	2019, Vol6(1), Pg 77-81	

		management,		
Dr Tanu Sharma	“Role of Cultures in Socio-Economic Development: Case study of India and China	KAAV International Journal of economics, Commerce and Business management,	2019, Vol6(1), Pg 119-128	
Dr. Papiya Lahiri	“When your Temporary House becomes your Permanent Home”	The Criterion: An International Journal in English,	October 2019, Vol.10, Issue-5, Editor-In-Chief Dr. Vishwanath Bite. ISSN 0976 8165	
Dr. Papiya Lahiri	“Apartheid and Scarred Consciousness in Toni Morrison’s <i>The Bluest Eye</i> ”	Contemporary Literary Review of India	February 2020, Vol. 7, No. 1 Online ISSN 2394-6075 / Print ISSN 2250-3366	
Dr. Papiya Lahiri	Article entitled “Memory Revisited: Struggle and Survival in Sharon Pollock’s <i>Constance</i> ”	Literary Voice: A Peer Reviewed Journal of English Studies	UGC Care approved Group ‘A’ Journal,	Indexed with Web of Sciences, ESCI, Cosmos, ESJI, 12OR, Cite Factor. Vol. 1, No. 12, March 2020. ISSN 2277-4521
Dr Anupriya Kaur	Using Correspondence Analysis to Map Online Purchase Criteria of Different Product Categories”,	International Journal of Electronic Commerce Studies	11(1), 45-74.	Scopus, ISSN 2073-9729

Books/Book Chapters Published

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Neelam Sharma, Amit Srivastava and Sakshi Khanna	The Mediating Effects of Economic Growth on Public Expenditure and Human Development	19th Global Conf on Flexible System Manage	ISBN: 978-93-83893-10-2	

	in India	ment		
Dr. Papiya Lahiri	“Tagore’s Artistic Rendering of Spiritual Realism in <i>DakGhar</i> ”	Rabindranath Tagore’s Drama in the Perspective of Indian Theatre	Eds. Mala Reganathan and Arnab Bhattacharya. Anthem: New Delhi, 2020. Released on 29 June 2020.	

Conference Publications

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Balraj Verma and Amit Srivastava	Impact of Different Dimensions of Globalization on Firms’ Performance: An Unbalanced Panel-Data Study of Firms Operating in India	International Conference on “Business Agility in Volatile Times” during management conclave 2019	Organized by Mittal School of business, Lovely Professional University, Punjab in association with Curtin University, Australia.	7th-9th November 2019
Balraj Verma and Amit Srivastava	Dimensions of Globalization and Economic Growth of India: Exploring Causal Linkages	International Conference on “Business Agility in Volatile Times” during management conclave 2019	Organized by Mittal School of business, Lovely Professional University, Punjab in association with Curtin University, Australia.	7th-9th November 2019

Guest Lectres

1. Guest Lecture By Advocate Shweta Vyas on legal awareness camp with respect to women rights, Organized by the Department of HSS on 14 November 2019 from 10:00-12:00.

Lectures Delivered by Faculty

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Dr. Tanu Sharma	Assistant professor(senior Grade)	“Emotional Intelligence and creativity”	September 21 to 23,2019	Aakriti Kala Sansthan, Bhilwara,

				Rajasthan.
Dr. Neena Jindal	Assistant professor(Grade II)	“ Role and Importance of Creativity in Society”	September 21 to 23,2019	Aakriti Kala Sansthan, Bhilwara, Rajasthan.

Visits Organised

Institution visited	Dates	Aim of visit	Participation	
			Students	Faculty

Recognition & Awards: Nil

Composition of Various Bodies

Board of Studies (BOS)

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

Student Consultative Committee

1.	Dr. Anupriya Kaur	HoD, HSS
2.	Triambica Gautam	Faculty In charge
3.	Dr. Sakshi Khanna	Faculty In charge

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 three storied building embedded in academic block which accommodates 275 students at a time. The LRC has 41032 volumes of books and 1394 volumes 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. It 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.

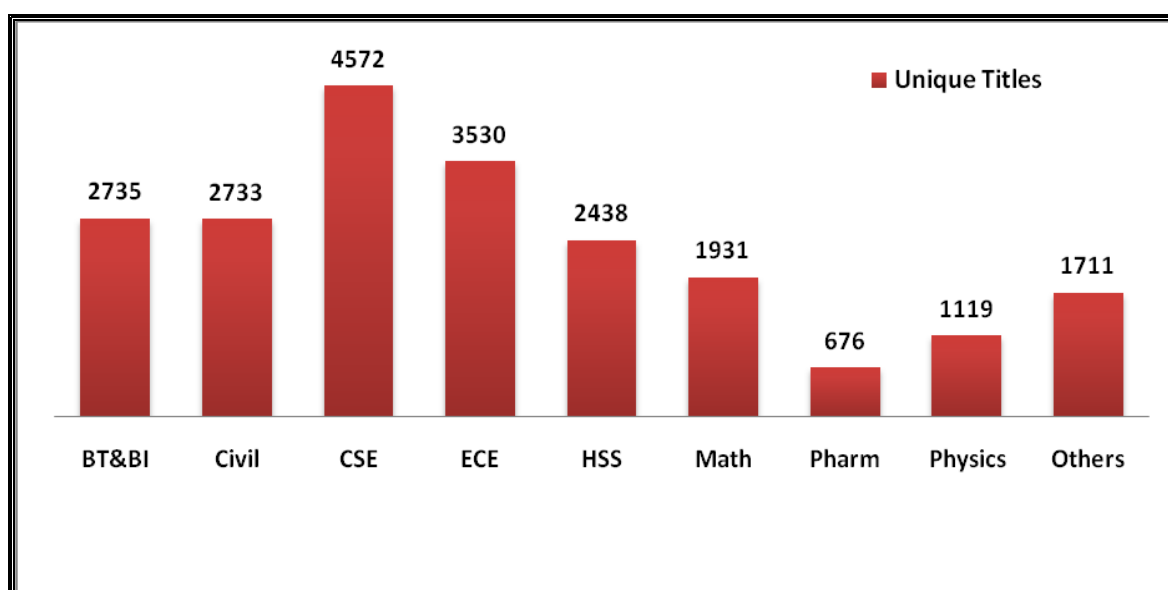
Resource Collection

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

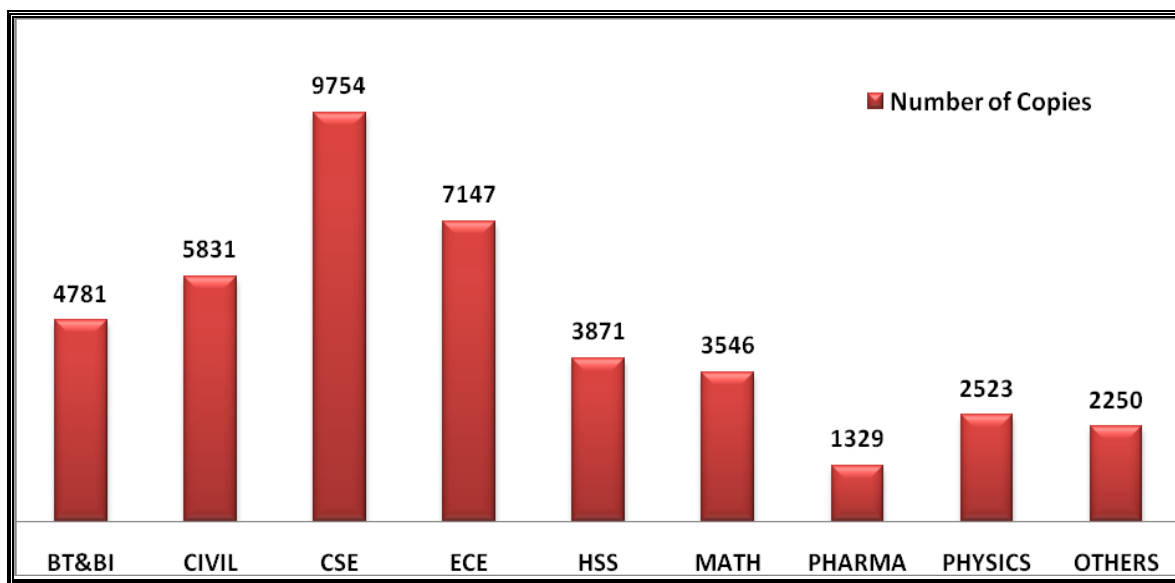
Subject-wise Book Collection:

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

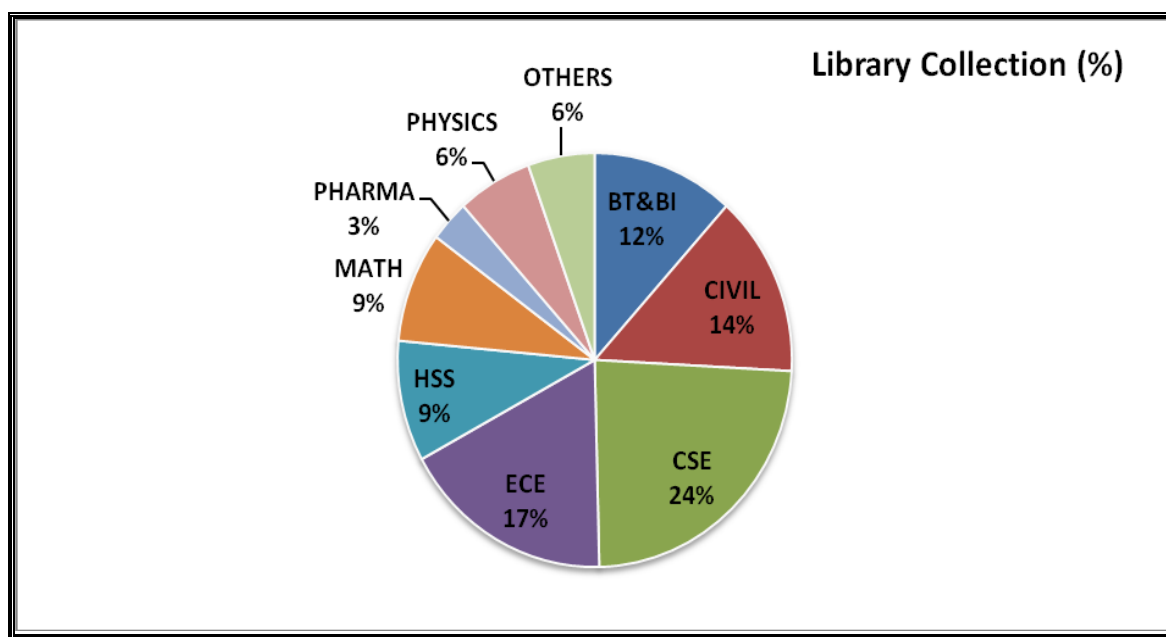
Subject-wise unique titles (Books) in the library collection:



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 and HP rack 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	Sophos XG 450	HW Appliance with 8 GE ports,2 SFP+ ports,2 expansion bays for optional Flexi Port modules,2XSSD + Base License (inc FW,VPN & wireless)for unlimited users	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 HDD sata , 18.5 inch TFT monitor	2
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 &	40

		17 inch Monitor	
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 AE	15
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 Professional	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	1
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. Entire college campus including academic block, Faculty residence, SOR and all hostels are wifi with total 295 Ruckus AP and OFC ring of 144 Core.

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 51 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.

Video conferencing facility provided in Board room with Polycom latest hardware including Eagle Eye IV-12x camera, mic, Panasonic LED Monitor 55"

INTERNATIONAL LINKAGES OF THE UNIVERSITY:

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

1. University of Florida, International Center, Florida, USA.
2. College of Informtion Science & Technology, University of Nebraska at Omaha.
3. 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.
6. Tampere University of Applied Sciences, Finland.
7. MoU with Defence Institute of High Altitude Research (Formerly Field Research Laboratory) of DRDO, Govt. of India
8. Department of Industries, Government of Himachal Pradesh
9. Pushchino State Natural Science Institute, Russia.
10. The Institute of Electrical & Electronics Engineers, Incorporated, (IEEE) New York.

ACADEMIC ADMINISTRATION

Admission Process

1) UG Program

During the academic session 2019-20, 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-2019 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 2019 is given below.

<u>Year of Study</u>	<u>U.G. Prog.</u>	<u>P.G. Prog.</u>	<u>Integrated Degree Prog.</u>
6 th Year	01		
5 th Year	08		
4 th Year	425		03
3 rd Year	388		
2 nd Year	369	12	
1 st Year	406	36	

Ph.D. Scholars Registered during the Academic Session 2019-20 are 145

FACULTY AND SCHOLARSHIPS

The Unique feature of the University is the high quality of faculty on its rolls. The Faculty details with their terminal qualification is at **Appendix-F**.

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)

ABOUT JYC

Having been through school life we all imagine that college life would be the same, if not more stressful; same never-ending classes, exams and uncountable assignments; leaving us with no time to enjoy life as we did in school. But this is not true. College life in itself is an adventure that one embarks on from the moment they enter the college which has its fair share of new experiences. But the main highlights to anyone's college life are events that happen within the college that are full of life and enthusiasm. Our college has lots of events each academic year and all are planned by the JUIT Youth Club (JYC).

The JUIT Youth Club (JYC) is an autonomous student body, responsible for organising various events throughout the year. The JYC team works hard in planning events to the tiniest of details and then executing these plans with perfection. Student members of the JYC put in their efforts to ensure everything from event arrangements, proceedings to inviting guests and faculty goes on smoothly. These guys work really hard, without any inhibitions regarding time or effort to make these events successful.

JYC OFFICE BEARERS

FACULTY INCHARGE



Dr. Amit Srivastava

JUIT Youth Club (JYC) is the name of enthusiasm, development, consistency and effort. We at JYC, ensure the overall development of a student by helping them go beyond the academic horizons and strive to provide them a nurturing climate, a trusting environment, and a soil of celebrations. We are not just a club, rather we are a community which aims at bridging the gap between the students and the endless opportunities available to them. With a number of fests around the year, we constantly aim at helping students to carve out a niche for themselves in their respective fields of interest like technical, sports, literary, cultural and many more. At JYC, we highly value the efforts that each and every student member puts in with great zeal and fervour to make sure that every event is a success. We hope to see you there so that we can make this event a successful one together!



Pradyumn Agarwal
President



Nayanika Sharma
Secretary



Prashasti Dwivedi
Treasurer

JYC CLUBS

Literary and Dramatics Club

Literary & Dramatics Club is home to all the literature enthusiasts, theatre lovers and street play artists. This club focuses on the holistic development of a student and encourages them to develop self-confidence for public speaking and helps to enhance their writing skills. Its main aim is to nurture an individual and shape them to have an overall admirable and inspirational personality that enables them to flourish in the corporate world. All these activities conducted by the club help to develop special skill sets like leadership, cooperation and patience. The club also manages all the independent Dramatic societies in the college.

Events Conducted – ‘Alfaaz’ - The Literary Fest, Model United Nations, JUIT Youth Parliament

Club Co-ordinators – Tarini Thakur, Piyush Kumar Singh

Faculty Co-ordinator – Dr.PapiyaLahiri

HINDI DIWAS

Organised for the first time in JUIT, this event organised by the Literary and Dramatics Club of JYC was an effort of the students to celebrate the national language, Hindi. The event, held on 14th September 2019, saw a long line-up of students eager to put forward their thoughts, opinions and views. Students from all years participated in the Hindi debate, presenting their stand. Not only did the celebration promote the Hindi language, but it also pushed the participants to think out of the box and do an in-depth research in-depth on topics that impact us. The poetry from the judges made everyone's day as did the gleaming faces of the winners.



JUIT YOUTH PARLIAMENT

The JYP (JUIT Youth Parliament) encapsulates the Indian parliamentary bodies, providing young minds to express their opinions of national interests. Our college hosted students from a few other institutions like Chitkara University, Thapar University etc. and held conference for two days to allow student delegates to present their views and debate extensively on agendas of national importance. The executive board for the event comprised of three members who conducted and monitored the entire event. These individuals, experienced in national and international level of youth parliaments and MUN, shared their insightful views on the topics of discussion. The event has delegates as well as the press. The press members worked on the JYP newsletter called “Caravan”, while also drawing marvellous caricatures of various participants and recording every important bit of the event.

This year, the event was conducted by full enthusiasm and had a selection of experienced delegates. Every participant was keen to compete and win the prizes for best delegates.



MUN (Model United Nations)

This event is a culmination of intellect, public speaking and world issues. Students discuss major socio-political issues faced by the world today and in the end, come up with solutions to fix these issues. It is one of the most highly regarded forms of debating with a panel of executives who are rating your every action during the debates and proceedings.

This year, the JUITMUN was very well-planned and ready to be organised on the 21st and 22nd March 2020 but due to the coronavirus pandemic, the exceptional plans of the JYC for this event could not be put into action. The Literary and Dramatics Club had worked tirelessly for the publicity and registration. The stage was ready, the podium was set, banners done and the invitations had been sent out as well. All the hard work and sincerity had built up great expectations and excitement among the students, which unfortunately later turned out to be a disappointment.

Cultural and Music Club

The Cultural Club aims at moulding the personality of students and exposes them to a wide range of cultural events throughout the year. The students also get a first-hand experience of organizing and managing the events which caters to the intellectual and social skills of the students. The Club also aims at developing the creativity of the students by providing and managing a multitude of themes and decorations throughout the campus during the fests. Various skills like leadership, team work, sharing, accepting responsibility etc are implicit in the working of the club. The club also manages all the independent dance societies in the college.

Events Conducted – ‘Diksha’ - The Fresher’s Night, ‘Le Fiestus’ - The Annual Cultural Fest, ‘Dhun’ – The Acoustic Music Night, Hasta la Vista – The farewell

Club Co-ordinators – Adhishree Bansal, Akshay Pathania

Faculty Co-ordinator – Dr. Ruchi Verma

DIKSHA 2019

The first major event of the academic year was the Fresher’s, ‘DIKSHA 2K19’, held on the 17th August 2019. The event ran beautifully, owing to the wonderful performances of the first-year students and the hard work senior students had put in to make sure every performance was a success. The various dance clubs of the college set the stage on fire. The vocals of music performances made everyone sway to the beats and the MIME performance by the Literary & Dramatics Club left everyone mesmerized. The first-year students blew everyone away with the confidence they walked the ramp and it was clearly the highlight of the entire night. The Cultural Club of JYC in coordination with other teams of JUIT worked hard to ensure that the entire function proceeded flawlessly.



DHUN

'DHUN' is that event of year, where a lot of the students sway harmoniously to beautiful music. And this year was no exception. With the students showcasing their lyrical and musical talent, the event was loved by all present. The event started around the sundown and the remaining orange hues of the sunlight giving an aesthetic beauty to the venue. The venue i.e. the 'DhyaanKaksh' was soon filled by a big crowd, with the tune and beats of the music filling everyone with joy.



DANDIYA NIGHT

This year this event was held for the first time in college during the 'Navratri' period and it included a mesmerizing night of dressing up, dancing to the beat of 'Gujrati' songs and a night full of playing 'Dandiya'. This event was organised by the Cultural Club of JYC and prizes were given to the best dressed and the best dancers. This event was enjoyed by students and faculty alike.

Health and Environment Club

Environment and health club is responsible for organising events in the college that are not only counted as extracurricular activities but also help to maintain peace within our body and the environment. It helps to make the already green and environmentally friendly campus more in tune with nature and helps to create a balance between the environment and humanity. It teaches the students to treat their body as a temple and helps them to maintain their physical and mental well-being. The club aims at providing an overall development of the students for the future.

Events Conducted – MasteChef, Wellness Week, 'Halla Bol' – The Nukkad Natak Competition

Club Co-ordinators – Asmita Prajapati, Pranav Agarwal

Faculty Co-ordinator – Dr. Naveen Jaglan, Dr. Saurav

MASTER CHEF 2019

Most consider the Master Chef to be a small affair usually organised in the Open Cafeteria of the college, but it wasn't just a tiny event this year. A big hit with students of all years, it was organised on the 17th of September 2019 in our huge basketball court. The student participants, ready to showcase their culinary skills, created some very exquisite dishes with a great taste and mouth-watering aromas. And to take the competition up a notch, students also plated their dishes beautifully. This wonderful line-up of delicacies was judged by the wives of our dear faculty who were impressed by the cooking prowess of the students.



Technical, Movies and Photography Club

This club is a composition of Movie, Photography and 'Createch', the Technical Club of JUIT. It promotes personal growth, creativity, leadership and innovation. It helps to create learning opportunities for students in coding, hacking, programming, photoshop, photography and design. The responsibility of the club includes telecasting cricket matches and movies for students, the photography club captures all the events. They are responsible for all major events held at JUIT.

Events Conducted – 'Murious' – The Technical Fest, Movies, Farewell Documentary

Club Co-ordinators – Ishan Goyal, Lokesh, Nimesh Bansal

Faculty Co-ordinator – Dr. Shruti Jain

MURIOUS TECH FEST 2019

The JUIT's annual tech fest, 'MURIOUS', was organised on 8th and 9th February this year. This fest had various events including coding challenges, Robo-Wars, discussions, conferences, hackathons, video game competitions etc. The discussions and conferences allowed students to understand coding better and increase their knowledge, whereas the coding challenges and Robo-Wars allowed students to exhibit their technical proficiency.

The 'HACKATHON' had our students working on finding solutions to national problems and also pitch their innovative ideas to the judges, comprising of experts and faculty. The overnight event helped students interact with other participants and grow while learning from those projects. In the end, cash prizes are also given to the

top 3 ideas. Experts were called in to judge and give talks on entrepreneurship, start-up and coding.



SYNCHROTRON

The cultural night of 'MURIOUS', which marks the opening ceremony of the tech fest is known as 'SYNCHROTRON' is one of the most eventful evenings filled with dance and musical performances by students from various clubs. This year this event too was a great success due to the constant effort of the entire JYC team.



Sports Club

The Sports Club at JUIT, allows to explore and enjoy the thrill of sports. It aims to increase the camaraderie through the medium of sports whereas, providing a healthy sporting habit. The club also facilitates the participation in various sports festivals and tournaments organized across various technological colleges. 'Parakram', the sports-fest of JUIT, is held annually with great zeal and enthusiasm. Where hundreds of participants share one thing in common - the hunger to become the best. They aim high, believe in themselves and if they have their downfalls, they bounce back and achieve better #GameLiesWithin. It also conducts Inter/Intra college tournaments of diverse sports to take their mind off the strenuous academic schedule and offers equal opportunities to all the students to play and showcase their ability.

Events Conducted – 'Parakram' – The Sports Fest

Club Co-ordinators – Mehul Bandlish, Garima Kanwar

Faculty Co-ordinator – Mr. Munish Sood, Dr. Rishi Rana

PARAKRAM 2019

LA SERENE This was the grand opening cultural night for 'PARAKRAM 2019' filled with musical and dance performances that entertained and impressed the teams from various colleges before the start of the games. The night was successful in lifting up the spirits of the participants and helped them feel rejuvenated before the stressful weekend of sports and competition ahead.

The annual sports fest of the college was held on the 4th and 5th October 2019. Players from multiple colleges from around the area, including Chitkara Rajpura, IIT Mandi, Chitkara Baddi, APJ University etc. participated to compete with each other and showcase their athletic prowess. These various sports were conducted over a span of 2 days, in which teams from various colleges went head to head in basketball, volleyball, chess, badminton, and table tennis.

This year, Chitkara Rajpura swept the podium with victory in various categories and students from JUIT clinched the second position. The matches were nerve-wracking as the performances of all the teams were phenomenal. The matches were filled with moments involving high tension and adrenaline rushes. The JYC made sure that the living arrangements of the teams, their refreshments, equipment, the various banners, and sport schedules were made impeccable. All the clubs under the JYC worked together day and night with a lot of cooperation and passion to make this event a huge success.



JYC COMMITTEES

Event Management Committee

A successful event is never an accident it is always the result of a commitment of excellence, intelligent planning, focused efforts and team work. And all members of the Events Committee know this. They work like a family to ensure that all events are organized successfully. They handle everything big and small to make sure all JYC events are conducted smoothly. They manage the backstage and work behind the scenes so that nothing goes wrong. The work of the events committee begins right from the time an event is announced and it goes on till the event concludes successfully.

Committee Co-ordinators – Aditya Abrol, Akanksha Pandey

Faculty Co-ordinators – Dr. Monika Bharti, Dr. Geetanjali

Registration and Hospitality Committee

The Hospitality & Registration committee is responsible for receiving guests with goodwill. Its primary goal is to ensure smooth registration of participants, provide refreshments, prepare accommodations and maintain all the hospitality equipment and supplies. The committee has always been at the forefront of managing all the major events of the JYC. This student body of the committee is devoted to provide a warm stay to anyone visiting the college for an event. The H&R committee has always been praised by visitors for their hard work and dedication.

Committee Co-ordinators – Yukti, Ashish Gupta, Ishan Shekhri

Faculty Co-ordinators – Dr. Himanshu Jindal, Dr. Shweta Pandit

Publicity and Sponsorship Committee

The Publicity Committee spreads the word on the what's and when's of every event, big or small. Their responsibility is to market all events, offline as well as online on various platforms. The committee members also coordinate with local businesses and bring in sponsors all through the year for any and all events that take place within the college. They write Sponsorship proposals, travel and reach out to business owners that would be interested in the college fests. Moreover they the main social media handle of the JUIT Youth Club. They also create the beautiful graphics you see online, the email invitations that rake in participants from around the country and call near and far to make an event success.

Committee Co-ordinators – Umang Maheshwari, Kriti Varma

Faculty Co-ordinators – Dr.Tiratha Raj Singh

Sanctions and Procurement Committee

The Sanctions and Procurement committee plays a crucial role in the success of any event. This promising committee formed in August 2019, has delivered all demands and have stood up to the expectations of requirements needed for any event. Its work is to provide supplies to other JYC committees during college fests and programs. They are the ones who provide anything and absolutely everything that is required to organize an event. The lighting, the stationery and all the decorations that make the college events look systematic, and attractive are all provided to us by the sanctions and procurement committee.

Committee Co-ordinators – Shikhar Agarwal, Abhinav Sharma

Faculty Co-ordinators – Dr. Jitendra Vashist, Dr.Ragini Raj Singh

Disciplinary Committee

The Disciplinary Committee of the JUIT Youth Club has been entrusting the task of maintaining the discipline during the colleges. The members of this committee work with determination to make certain that no misconducts of any kind take place during any event. They ensure that no scuffles happen and the events go on smoothly without any hinderances.

Committee Co-ordinators – Saurabh Thakur, Pawas Soni, Shantanu Bhargava, Falaq Shahraj Khan, Khushi Maheshwari, Shivani Chaturvedi

Faculty Co-ordinators –Dr. Vivek Sehgal, Dr. Gopal Singh Bisht, Dr. Neena Jindal, Mr. Surjit Singh.

Other Events Scheduled that could not take place due to the Pandemic

In April, the coronavirus pandemic shook the world and our college was shut down just like the rest of the world. Various events, scheduled to happen during this time like the annual NukkadNatak competition called as 'HALLA BOL' and the 'WELLNESS WEEK' were called off, despite the pre-arrangement of the entire festivities by the students and JYC members.

Due to this pandemic, we also missed out on organising the annual cultural fest, the 'LE FIESTUS'. Filled with cultural performances, ramp walks, dance competitions, the battle of the bands and many more fun activities, this event is something students look forward to every year. Special celebrities like Honey Singh, Guru Randhawa, The Local Train etc. are also invited to perform for this event which fills the entire college with a happy and energetic vibe.

These were the great efforts made by the JYC, but ended up in vain due to this "new normal". No doubt, the various fests of JUIT had left everyone with amazing memories they can cherish in this time of social distancing. And this was only made possible by the constant efforts and hard work of the JUIT Youth Club (JYC).



NCC EVENTS REPORT

(Jan 2020 to June 2020)

1HP Girls Bn/ Boys Bn, JUIT,

Waknaghat Event-1 Republic

Day

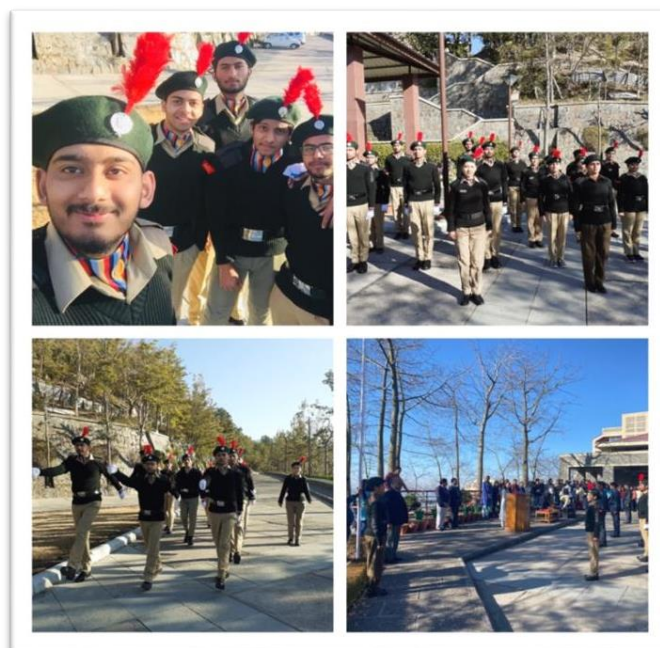
Date: 26th January, 2020

Location: In front of Vivekanand statue at JUIT

Time: 10:00 A.M.

Overview:

On the auspicious morning of 26th Jan, 2020, our University celebrated 71st Republic Day in JUIT campus in front of Vivekanand statue. It was a matter of great pride for all of us. The dignitaries, teachers and the students did not want to leave any stone unturned in making this monumental day a memorable one. Hon'ble Vice Chancellor then unfurled the National Flag. Everyone stood straight for National Anthem which was sung by students. This was followed by the review NCC guard of honor by Hon'ble Vice Chancellor and pinning of flags. After this the Vice Chancellor addressed the teachers, staff and students. University students also presented cultural items which includes Poems and Nukkad Natak. The republic day function ended with group photography followed by tea and snacks arranged by university administration.



Event-2 World Water Day

Date: 22nd March, 2020

Category: Poster making and slogan writing

Mode: Social Networking sites like Facebook, WhatsApp and Instagram

Overview:

Every year world water day is celebrated on 22nd March through mass volunteer participation of NCC cadets pan India. It was instructed by DGNCC to organize some activities like awareness rallies, lectures/ Seminars, theme based poster making or slogan writing competition etc. This year's theme was "Water and Climate change" but because of COVID-19 outbreak all the activities which was going to held on 22nd March has canceled. Cadets of our university came forward with an idea to use social networking sites to spread the awareness on save water. They have prepared posters on save water and posted it on social networking sites like FB, WhatsApp, Instagram etc.



Awareness initiative by Cdt. Ria Mahajan



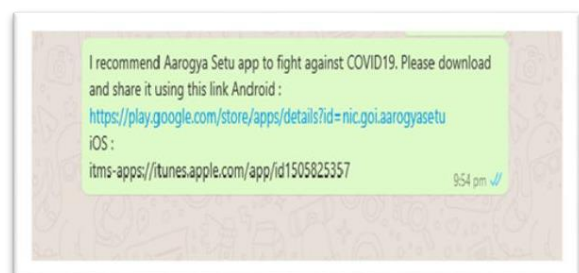
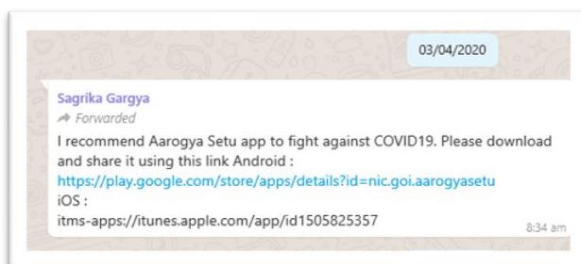
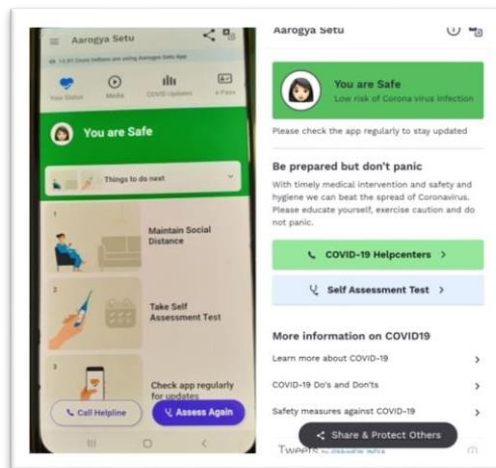
Awareness initiative by Cdt Sagrika Gargaya

Event-3 Aarogya Setu App. Awareness

Time: April, 2020 **Mode:** online

Overview:

To combat the corona virus pandemic, the government of India has launched an application called Aarogya Setu. It is a mobile application developed to spread the awareness of COVID-19 and to connect essential COVID-19 - related health services to the people of India. Since at this time of COVID-19 outbreak the cadets couldn't step out of their houses unless told, they came out with the concept related to AROGYA SETU APP. The ANO and each cadet of JUIT downloaded this application on their smart phones. Further, each cadet forwarded the link of the app to 50 more people. And to make sure that each one of these 50 people has downloaded the app on their phones, they asked for screenshots. The total number of downloads that the JUIT cadets gathered sums up to approx. 1000 downloads. And this is how their small initiative contributed towards the nation for its betterment.



Event-4 Online training session on COVID-19

Date: 22nd April, 2020

Time: 12:00 Noon

Mode: Online

Overview:

An online training session on COVID-19 was organized by State health and Family Welfare Training Center, Shimla for NCC Cadets, NSS, Asha workers and Anganwadi workers. Total duration of the webinar was one and half hour. Total five doctors were present in this webinar. Following topics were covered in the webinar-

1. What is COVID-19 and how to control towards community spread.
2. Corona virus Safety measures and precautions
3. About Aarogya setu app.
4. How can NCC and NSS cadets, Asha workers and Anganwadi workers can help to spread the awareness about the corona virus.



Event-5: COVID-19 iGOT Health Training

Mode of Training: Online (on Diksha app) **No. of**

Participants: 1 ANO and 28 cadets

Overview:

India is fighting against COVID-19 Pandemic and India's first line of workers is already engaged in COVID relief and doing commendable job. However, a larger force will be needed to replace the first line and to tackle the exponential or geometric increase in positive COVID cases in the subsequent stages of the pandemic. The platform, Integrated Government Online Training (iGOT) provides the training module on flextime and on site basis so that the COVID response can be delivered at scale for the workforce needed to tackle the pandemic. As a part of NCC training, the cadets of 1HP Girls Bn and 1HP Boy Bn, NCC, JUIT have completed their training of iGOT health and got the certificates .The training included videos on basics of COVID-19, distribution of relief material, distribution of food and FAQ's. Such training helps COVID warriors to respond to current and emerging situations by updating themselves in real-time. The platform is easy to use and can be accessed via desktop and mobile phones, making it accessible to everyone. Thus, it makes it possible to learn anytime, anywhere.



Event-6: Quiz on COVID-19 and BASICS OF NCC/NSS

Date (Slot wise)

Slot 1: 1st June, 2020

Slot 2: 3rd June, 2020

Slot 3: 5th June, 2020

Time: 11:00 AM (For all three slots)

Duration: 20 minutes

Mode: Online

Overview:

Vivekananda Global University had made sincere efforts to conduct an Awareness Program about COVID-19 and basics of NCC/NSS. They organized an online NCC/NSS quiz in association with 1 Raj Air Sqn NCC and 1 Raj Armed Sqn NCC with the motto of 'Stay home, Stay safe'. Its main aim was to help the students, researchers, scientists, and teachers to enlighten their knowledge about COVID-19 and to create a 'Work from Home Opportunity'. There were thirty Multiple Choice questions and to get the E-Certificate the participants had to get minimum 85% answers correct.



Event-7: Video Blogging contest (#MyLifeMyYoga)

Date: 15th June, 2020

Category: Video Blog Mode: Online

No of Participants: 2 (Cadet Sahil Thakur, Cadet Sagrika Gargaya)

Overview:

The observation of IDY in the past years has been marked by thousands of harmonious mass demonstrations of Yoga in public places. Due to the contagious nature of COVID-19, no mass gathering was advisable this year. Hence, this year the Ministry encouraged people to practice Yoga at their homes, with participation from the entire family.

Through the My Life – My Yoga (also called “Jeevan Yoga”) video blogging competition, the Ministry of AYUSH and Indian council of cultural relation (ICCR) seeks to raise awareness about Yoga and to inspire people to prepare for and become active participants in the observation of IDY 2020 on 21st June 2020. The contest was supported by participation via MyGov and the social media platforms of Facebook, Twitter, YouTube and Instagram.

The video Blog contest is for general public, wherein participants are supposed to make a 3 minute video Blog about yoga and upload it on social media platform with hashtag #MyLifeMyYoga and also hashtag #country and tag it to Ayush ministry.

Event-8: International Day against Drug Abuse and illicit Trafficking

Date: 26th June, 2020

Category: Slogan writing, Poster making Mode: Online

No of Participants: 9 (8SW and 1SD cadet)

Overview:

Himachal Pradesh Police celebrated international day against drug abuse and illicit trafficking in on 26th June 2020 in association with department of social justice: To sensitize public against drug abuse and illicit trafficking of drugs. Due to ongoing COVID-19 pandemic the occasion was celebrated by undertaking an online campaign and making use of social media and other online platforms. Online event having two categories: 1. Slogan writing, 2. Painting /drawing competition. Total nine cadets of JUIT have participated in the competition.

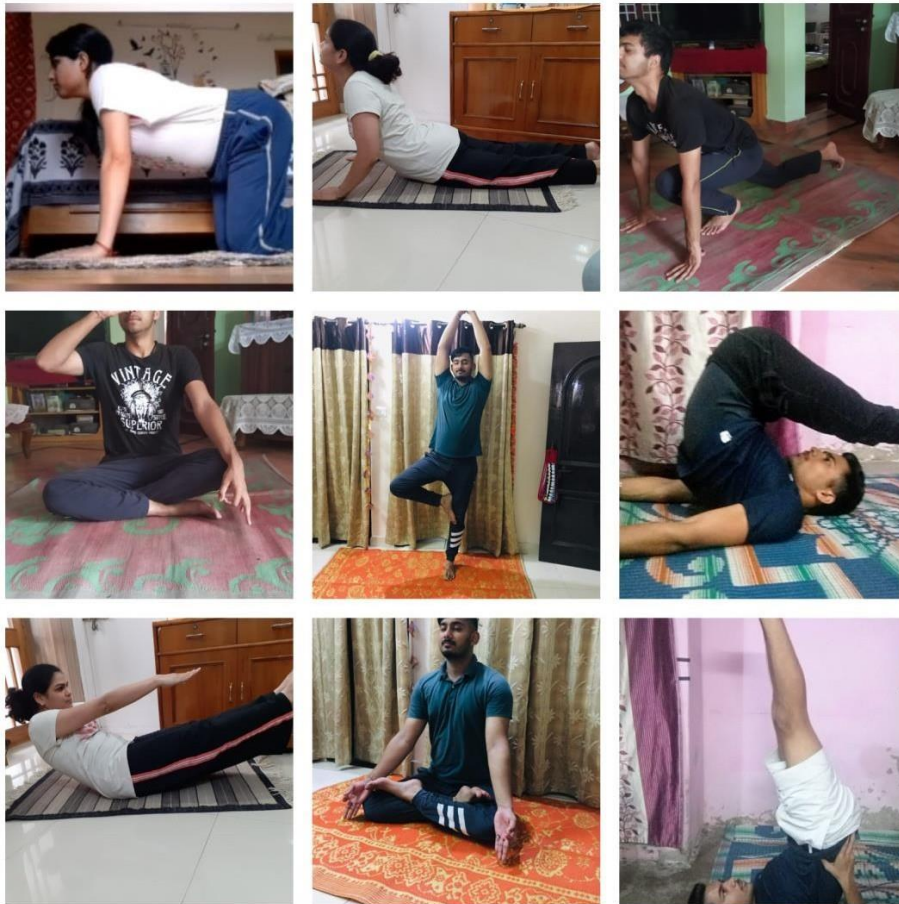


Event-9: International Day of Yoga

Date: 21 June, 2020

Overview:

International yoga day, this idea was proposed by our Prime Minister Mr. Narendra Modi. He said " *Yoga is a valuable gift of India's ancient tradition*". This day was celebrated by NCC cadets of Jaypee University with great enthusiasm. All the cadets shared their photographs performing Yoga Asanas. The theme for International Yoga Day 2020 is "*Yoga for Health - Yoga at Home*". According to the United Nations, while social distancing measures to fight the COVID-19 pandemic. So the cadets decided to practice yoga at home. The theme highlights that yoga is a powerful tool to deal with stress of uncertainty and isolation and helps maintaining physical well-being. This event was a major part of our NCC team and unity of all the cadets made this event successful.



The Cadet Program:

Other than these activities all the SD cadets have registered themselves for The CADET Program (Comprehensive All-Round Development and Employability Training Program). Objective of CADET Program is “**To develop confident and articulate cadets**”. Originally it was initiated under the guidance of Cmdr C. Rajeev, then DDG, NCC, Karnataka and Goa Dte. The training program and curriculum, designed by a team of professors and psychologists from Bangalore University, has the reputation of covering over two thirds of the areas needed for SSB selection.

Submitted By:

Lt. Pragya Gupta

Associate NCC

Officer

**1 HP Girls Bn,
JUIT, Waknaghat**

TRAINING & PLACEMENT

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.

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.

The Placement summary for last three years is attached at **Appendix-H**

FINANCIAL STATUS

The Audited Balance Sheet of thye FY 2019-20 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
Executive Vice Chairman
Jaiprakash Associates Ltd. Member

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

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
Distinguished Professor
University of Florida at Gainesville, USA Member

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

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

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

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

- 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, Wagnaghat 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 (Academics)
- 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 (Academics)

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) Dr. Satish KUMar Member
Director
NIT Kurukshetra
 - b) Prof. Lalit Kumar Awasthi Member,
Director
NIT, Jalandhar
- 4. Two Industry Professionals to be nominated by the Pro-Chancellor**
 - a) Sh. Sunil Sharma Member
Executive Vice Chairman
Jaiprakash Associates Ltd.
 - b) Lt. Gen Ravindra Mohan Chadha, PVSM, AVSM (Retd) Member
Director
Jaiprakash Power Ventures 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 (Academics)
- 7. Heads of the Departments/Centres of the University**
 - a) Prof. (Dr.) Samir Dev Gupta, HOD-CSE/IT
 - 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.) Ashok Kumar Gupta, HOD, Civil
 - f) Dr Anupriya Kaur, HOD, Dept. of HSS
 - g) Dr. Rajiv Kumar, HOD, Dept of ECE
- 8. Non-Member Secretary**
Maj Gen Rakesh Bassi, SM (Retd)
Registrar & Dean of Students

DETAILS OF LAND

Sl. No.	Particulars	Area (In Sqft)	Area (In Sqm)	Total No. of Floor
1	Institution and administrative area			
	Academic Block -3 lvl	4762.70	442.63	1 Floor
	Academic Block -2 lvl	8597.02	798.98	1 Floor
	Academic Block -1 lvl	13972.18	1298.53	1 Floor
	Academic Block 0 lvl	27009.61	2510.19	1 Floor
	Academic Block +1 lvl	33284.98	3093.40	1 Floor
	Academic Block +2 lvl	30869.04	2868.87	1 Floor
	Academic Block +3 lvl	24823.75	2307.04	1 Floor
	Academic Block +4 lvl	11689.02	1086.34	1 Floor
	Total	155008.31	14405.98	
	Auditorium & Stage	14251.66	1324.50	1 Floor
	Animal House Lab	2754.56	256.00	2 Floor
	Civil Lab	14396.66	1337.98	3 Floor
	G.TOTAL	186411.19	17324.46	
2	Faculty housing			
	Faculty Block A Type	19238.51	1787.97	9
	Faculty Block B Type	0	0	
	B01	13250.22	1231.43	8+Mumty
	B02	14559.96	1353.16	8+Mumty
	B03	13246.25	1231.06	8+Mumty
	B04	14559.96	1353.16	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
	Total	124308.51	11552.84	
	E Type Faculty (A Block)			
	Ground Floor	713.82	66.34	
	First Floor	713.82	66.34	
	Typical Floor	5048.59	469.20	4 Floor
	E Type Faculty (B Block)	0.00		
	Ground Floor	714.46	66.40	1 Floor
	Typical Floor	3847.78	357.60	3 Floor
Total Of E Faculty	11038.47	1025.88		
D Type Faculty (A Block)			10 Floor	

	Ground Floor	726.9456	67.56	1 Floor
	First Floor	869.7308	80.83	1 Floor
	Typical Floor	9692.608	900.8	8 + Mumty
	D Type Faculty (B Block)	0		
	Ground Floor	591.8	55	
	First Floor	834.976	77.6	
	Typical Floor	9692.608	900.8	8 + Mumty
	Total	22408.6684	2082.59	
	G. TOTAL	157755.64	14661.31	
3	Student housing (HOSTEL)			
	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			
	Basement	3101.35	288.23	1 Floor
	Ground Floor	6177.42	574.11	1 Floor
	First Floor	4358.12	405.03	1 Floor
	Second Floor	3767.83	350.17	1 Floor
	Total	17404.73	1617.54	
	Worker Dormitory-2 (F Block)	7243.63	673.20	4 Floor
	TOTAL	24648.36	2290.74	
5	Miscellaneous Structures			
	Annapurna	21699.04	2016.64	1Floor
	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
	Security Room	188.12	17.50	1 Floor
	Garbage Room	691.65	64.28	2 Floor
	Laundry	2083.45	193.63	1 Floor
	TOTAL	74656.13	6938.32	
	G Total	798700.92	74228.71	

DETAILS OF TEACHING STAFF

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

COMPUTER SCIENCE & ENGINEERING/INFORMATION TECHNOLOGY			
20	Brig. S.P. Ghrera (Retd.)	Professor & HoD	Ph.D.
21	Vivek Kumar Sehgal	Associate Professor	Ph.D.
22	Hemraj Saini	Associate Professor	Ph.D.
23	Pradeep Kumar Gupta	Associate Professor	Ph.D.
24	Pardeep Kumar	Associate Professor	Ph.D.
25	Rajni Mohana	Associate Professor	Ph.D.
26	Ravindara Bhatt	Assistant Professor (SG)	Ph.D.
27	Suman Saha	Assistant Professor (SG)	Ph.D.
28	Pradeep Kumar Singh	Assistant Professor (SG)	Ph.D.
29	Yugal Kumar	Assistant Professor (SG)	Ph.D.
30	Ruchi Verma	Assistant Professor (SG)	Ph.D.
31	Ekta Gandotra	Assistant Professor (SG)	Ph.D.
32	Rajinder Sandhu	Assistant Professor (SG)	Ph.D.
33	Geetanjali	Assistant Professor (SG)	Ph.D.
34	Hari Singh	Assistant Professor (SG)	Ph.D.
35	Jagpreet	Assistant Professor (SG)	Ph.D.
36	Amit Kumar	Assistant Professor (SG)	Ph.D.
37	Kapil Sharma	Assistant Professor (SG)	Ph.D.
38	Ramanpreet Kaur	Assistant Professor (SG)	Ph.D.
39	Dr. Amol Vasudeva	Assistant Professor (GR-II)	Ph.D.
40	Dr. Himanshu Jindal	Assistant Professor (GR-II)	Ph.D.
41	Aman Sharma	Assistant Professor (GR-II)	Ph.D.
42	Arvind Kumar	Assistant Professor (GR-II)	M. Tech
43	Rizwan Ur Rehman	Assistant Professor (GR-II)	M. Tech
44	Nitin Kumar	Assistant Professor (GR-II)	M. Tech
45	Monika Bharti	Assistant Professor (GR-II)	M. E.
46	Prateek	Assistant Professor (GR-II)	M. Tech
47	Arijit Das	Assistant Professor (GR-II)	M. E.
48	Praveen Modi	Assistant Professor (GR-I)	M. Tech
49	Surjeet Singh	Assistant Professor (GR-I)	M. Tech

<u>DEPARTMENT OF BIOTECHNOLOGY & BIOINFORMATICS</u>			
50	Sudhir Kumar	Professor & HoD	Ph.D.
51	Harish Changotra	Associate Professor	Ph.D.
52	Jata Shankar	Associate Professor	Ph.D.
53	Anil Kant	Associate Professor	Ph.D.
54	Hemant Sood	Associate Professor	Ph.D.
55	Rahul Shrivastava	Associate Professor	Ph.D.
56	Gopal Singh Bisht	Associate Professor	Ph.D.
57	Tiratha Raj Singh	Associate Professor	Ph.D.
58	Poonam Sharma	Assistant Professor (SG)	Ph.D.
59	Udayabanu M	Assistant Professor (SG)	Ph.D.
60	Jayashree Ramana	Assistant Professor (SG)	Ph.D.
61	Jitendraa Vashistt	Assistant Professor (SG)	Ph.D.
62	Garlapati Vijay Kumar	Assistant Professor (SG)	Ph.D.
63	Saurabh Bansal	Assistant Professor (SG)	Ph.D.
64	Narendra Kumar	Assistant Professor (GR-II)	Ph.D.
65	Ashok Kumar	Assistant Professor (GR-II)	Ph.D.
66	Abhishek Chaudhary	Assistant Professor (GR-I)	Ph.D.

<u>DEPARTMENT OF CIVIL ENGINEERING</u>			
67	Ashok Kumar Gupta	Professor & HoD	Ph.D.
68	Ashish Kumar	Professor	Ph.D.
69	Rajiv Ganguly	Associate Professor	Ph.D.
70	Amardeep	Assistant Professor (SG)	Ph.D.
71	Saurabh Rawat	Assistant Professor (SG)	Ph.D.
72	Saurav	Assistant Professor (SG)	Ph.D.
73	Rishi Rana	Assistant Professor (SG)	Ph.D.
74	Pankaj Kumar	Assistant Professor (SG)	Ph.D.
75	Chandra Pal Gautam	Assistant Professor (GR-II)	M. Tech
76	Abhilash Shukla	Assistant Professor (GR-II)	M. E.
77	Niraj Singh Parihar	Assistant Professor (GR-II)	M. Tech
78	Kaushal Kumar	Assistant Professor (GR-II)	M. Tech
79	Tanmay Gupta	Assistant Professor (GR-II)	M. E.
80	Aakash Gupta	Assistant Professor (GR-II)	M. Tech
81	Anirban Dhulia	Assistant Professor (GR-II)	M. Tech

<u>DEPARTMENT OF PHYSICS & MATERIALS SCIENCE</u>			
82	Partha Bir Barman	Professor & HoD	Ph.D.
83	Sunil Kumar Khah	Professor & CoE	Ph.D.
84	Vineet Sharma	Associate Professor	Ph.D.
85	Pankaj Sharma	Associate Professor	Ph.D.
86	Rajesh Kumar	Associate Professor	Ph.D.
87	Dheeraj Sharma	Assistant Professor (SG)	Ph.D.
88	Surajit Kumar Hazra	Assistant Professor (SG)	Ph.D.
89	Ragini Raj Singh	Assistant Professor (SG)	Ph.D.
90	Sanjiv Kumar Tiwari	Assistant Professor (SG)	Ph.D.

<u>DEPARTMENT OF MATHEMATICS</u>			
91	Karanjeet Singh	Professor & HoD	Ph.D.
92	R S Raja Durai	Associate Professor	Ph.D.
93	Rakesh Kumar Bajaj	Associate Professor	Ph.D.
94	Neel Kanth	Assistant Professor (SG)	Ph.D.
95	Pradeep Kumar Pandey	Assistant Professor (SG)	Ph.D.
96	Saurabh Srivastava	Assistant Professor (GR-II)	Ph.D.
97	Mandeep Singh	Assistant Professor (GR-I)	Ph.D.
98	Vishal Mehta	Assistant Professor (GR-I)	Ph.D.

<u>DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES</u>			
99	Anupriya Kaur	Associate Professor & HoD	Ph.D.
100	Amit Srivastava	Associate Professor	Ph.D.
101	Tanu Sharma	Assistant Professor (SG)	Ph.D.
102	Triambica Gautam	Assistant Professor (GR-II)	MBA
103	Papiya Lahiri	Assistant Professor (GR-II)	Ph.D.
104	Neena Jindal	Assistant Professor (GR-I)	Ph.D.
105	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 2013-2017 – B.TECH

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

RESULT OF THE BATCH 2014-2018- B.TECH

<u>Branch</u>	<u>No. of Students</u>	<u>No. of students Passed</u>	<u>Pass%</u>
ECE	91	82	89%
CSE	164	162	99%
IT	46	45	99%
BI	13	12	92%
BT	46	28	93%
CE	92	85	92%

RESULT OF THE BATCH 2015-2019 – B.TECH

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

RESULT OF THE BATCH 2016-2020 – B.TECH

ECE	99	99	100%
CSE	175	174	99.4%
IT	25	25	100%
BI	15	15	100%
BT	33	33	100%
CE	75	75	100%

RESULTS OF BATCH 2017-2019 – M.TECH

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

RESULTS OF BATCH 2018-2020 – M.TECH

CSE	01	01	100%
Construction Management	04	03	75%
Structural Engineering	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%

For 2020 Batch

- Highest Salary – 28.00 Lacs by Amazon
- 2nd Highest Salary – 13 Lacs by Zscaler

PLACEMENT STATUS : JUIT Solan 2016-20 as on 18/August/2020					
Branch	Eligible Participating Students	No. of Absolute Offers	% of Absolute Offers	No. of Total Offers	% of Total Offers
CSE	143	131	92%	239	167%
ECE	74	73	99%	105	142%
IT	22	21	95%	38	173%
BT/BI	17	12	71%	12	71%
CIVIL	27	4	15%	4	15%
Total	283	241	85%	398	141%

**BALANCE SHEET FOR
THE
FINANCIAL YEAR 2019-20**

FORM NO. 10B

[See rule 17B]

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

We have examined the balance sheet of **JAYTEE UNIVERSITY OF INFORMATION TECHNOLOGY, AAATJ4059Q** [name and PAN of the trust or institution] as at **31/03/2020** and the Profit and loss account for the year ended on that date which are in agreement with the books of account maintained by the said trust or institution.

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

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

(i) in the case of the balance sheet, of the state of affairs of the above named trust as at **31/03/2020** and

(ii) in the case of the profit and loss account, of the profit or loss of its accounting year ending on **31/03/2020**

The prescribed particulars are annexed hereto.

Place **NEW DELHI**

Date **28/10/2020**

Name **ASHOK KUMAR JAIN**
 Membership Number **090563**
 FRN (Firm Registration Number) **0000112N**
 Address **Delhi Gulmohar Park B-4, NEW DELHI DELHI 110049 INDIA**

ANNEXURE
 Statement of particulars
I. APPLICATION OF INCOME FOR CHARITABLE OR RELIGIOUS PURPOSES

1.	Amount of income of the previous year applied to charitable or religious purposes in India during that year (₹)	483853325
2.	Whether the trust has exercised the option under clause (2) of the Explanation to section 11(1) ? If so, the details of the amount of income deemed to have been applied to charitable or religious purposes in India during the previous year (₹)	No
3.	Amount of income accumulated or set apart for application to charitable or religious purposes, to the extent it does not exceed 15 per cent of the income derived from property held under trust wholly for such purposes. (₹)	No
4.	Amount of income eligible for exemption under section 11(1)(c) (Give details)	No
5.	Amount of income, in addition to the amount referred to in item 3 above, accumulated or set apart for specified purposes under section 11(2) (₹)	0
6.	Whether the amount of income mentioned in item 5 above has been invested or deposited in the manner laid down in section 11(2)(b) ? If so, the details thereof.	Not Applicable
7.	Whether any part of the income in respect of which an option was exercised under clause (2) of the Explanation to section 11(1) in any earlier year is deemed to be income of the previous year under section 11(1B) ? If so, the details thereof (₹)	No
8.	Whether, during the previous year, any part of income accumulated or set apart for specified purposes under section 11(2) in any earlier year-	
(a)	has been applied for purposes other than charitable or religious purposes or has ceased to be accumulated or set apart for application thereto, or	No
(b)	has ceased to remain invested in any security referred to in section 11(2)(b)(i) or deposited in any account referred to in section 11(2)(b)(ii) or section 11(2)(b)(iii), or	No
(c)	has not been utilised for purposes for which it was accumulated or set apart during the period for which	No

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

II. APPLICATION OR USE OF INCOME OR PROPERTY FOR THE BENEFIT OF PERSONS REFERRED TO IN SECTION 13(3)

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

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

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

Place
Date

NEW DELHI
28/10/2020

Name
Membership Number
FRN (Firm Registration Number)
Address

ASHOK KUMAR JAIN
090563
0000112N
Delhi Gulmohar Park B-4, NEW
DELHI DELHI 110049 INDIA

Form Filing Details

Revision/Original Original

FORM NO. 10BB

[See rule 16CC]

Audit report under section 10(23C) of the Income-tax Act, 1961, in the case of any fund or trust or institution or any university or other educational institution or any hospital or other medical institution referred to in sub-clause (iv) or sub-clause (v) or sub-clause (vi) or sub-clause (via) of section 10(23C).

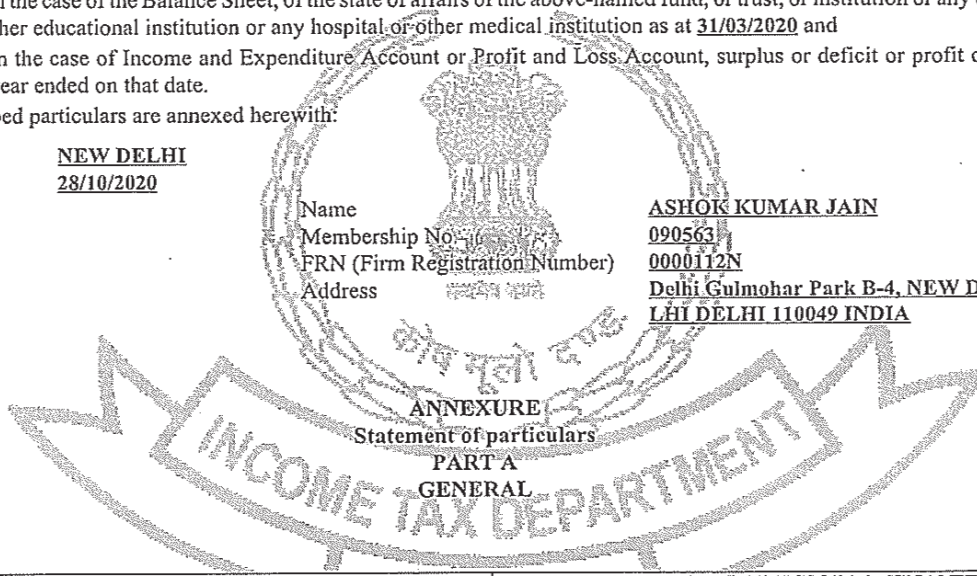
- (i) We have examined the Balance Sheet as at 31/03/2020 and the Income and Expenditure or Profit and Loss Account for the year ended on that date attached herewith of JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY , AAATJ4059Q (name and PAN of fund or trust or institution or any university or other educational institution or any hospital or other medical institution).
- (ii) We certify that the Balance Sheet and the Income and Expenditure Account or Profit and Loss Account are in agreement with the books of account maintained by the head office at HIMACHAL PRADESH and branches.
- (iii) Subject to comments below
- (a) We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of the audit.
- (b) In our opinion, proper books of account have been kept by the head office and branches of the above-named fund, or trust, or institution or any university or other educational institution or any hospital or other medical institution so far as appears from our examination of the books of account.
- (c) In our opinion and to the best of our information and according to the information given to us, the said accounts read with notes thereon, if any, give a true and fair view -
- (1) In the case of the Balance Sheet, of the state of affairs of the above-named fund, or trust, or institution or any university or other educational institution or any hospital or other medical institution as at 31/03/2020 and
- (2) In the case of Income and Expenditure Account or Profit and Loss Account, surplus or deficit or profit or loss for the year ended on that date.

The prescribed particulars are annexed herewith:

Place NEW DELHI
Date 28/10/2020

Name ASHOK KUMAR JAIN
Membership No. 090563
FRN (Firm Registration Number) 0000112N
Address Delhi Gulmohar Park B-4, NEW DELHI DELHI 110049 INDIA

Comments



1.	Name of the fund or trust or institution or any university or other educational institution or any hospital or other medical institution.	JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
2.	Address	
	Flat/ Door/ Block No.	JUIT
	Name of premises/ Building/ Village	
	Road/ Street /Post Office	
	Area/ Locality	Waknaghat, Solan
	Town/ City / District	Himachal Pradesh
	State	HIMACHAL PRADESH
	Pin Code	173234
3.	Permanent Account Number	AAATJ4059Q
4.	Assessment Year	2020 - 21
5.	Sub-clause of section 10(23C) under which the fund or trust or institution or any university or other educational institution or any hospital or other medical institution is seeking exemption.	(via)
6.	Number and date of notification/approval of the fund or trust or institution or any university or other educational institution or any hospital or other medical institution.	
	Number of notification /approval	Date of notification/approval
	CCIT/HP/10(23C)03/2008-09	2009-09-18

APPLICATION OF INCOME FOR CHARITABLE OR RELIGIOUS OR EDUCATIONAL OR PHILANTHROPIC PURPOSE

7.	Nature of charitable/ religious/ educational/ philanthropic activity [as referred to in sub-clauses (iv),(v),(vi) or (via) of section 10(23C)]	State Private University functioning for the promotion and furtherance of education in the state of Himachal Pradesh
8.	Total income of the previous year of the fund or trust or institution or any university or other educational institution or any hospital or other medical institution (₹)	483853325
9.	Amount of income of the previous year applied during the year wholly and exclusively to the objects for which it is established (₹)	483853325
10.	Amount of income of the previous year accumulated for application, wholly and exclusively, to the objects for which it is established, to the extent it does not exceed 15% of income of that year. (₹)	0
11.	Amount of income, exceeding 15% of income of the year, accumulated in accordance with clause (a) of the third proviso to section 10(23C). (₹)	0
12.	(a) Whether, during the previous year, any part of the income, not exceeding 15% of income accumulated in any earlier year, was applied for purposes other than to the objects for which it is established or has ceased to be accumulated for application thereto?	No
	(b) If the answer to (a) above is 'yes', then give details of income so applied or ceased to be so accumulated	
13.	(a) Whether, during the previous year, any part of the income of any earlier year exceeding 15% of the income, that was accumulated in accordance with clause (a) of the third proviso to section 10(23C) in that year, was applied for purposes other than to the objects for which it is established or has ceased to be accumulated for application thereto?	No
	(b) If the answer to (a) above is 'yes', then give details of income so applied or ceased to be so accumulated	
14.	(a) Whether, during the previous year, any part of the income of any earlier year exceeding 15% of the income, that was accumulated in accordance with clause (a) of the third proviso to section 10(23C) in that year, was not utilised for purposes for which it was accumulated during the period for which it was to be accumulated?	No
	(b) If the answer to (a) above is 'yes', then give details thereof, together with amount of income not so utilised.	

**PART C -
OTHER INFORMATION**

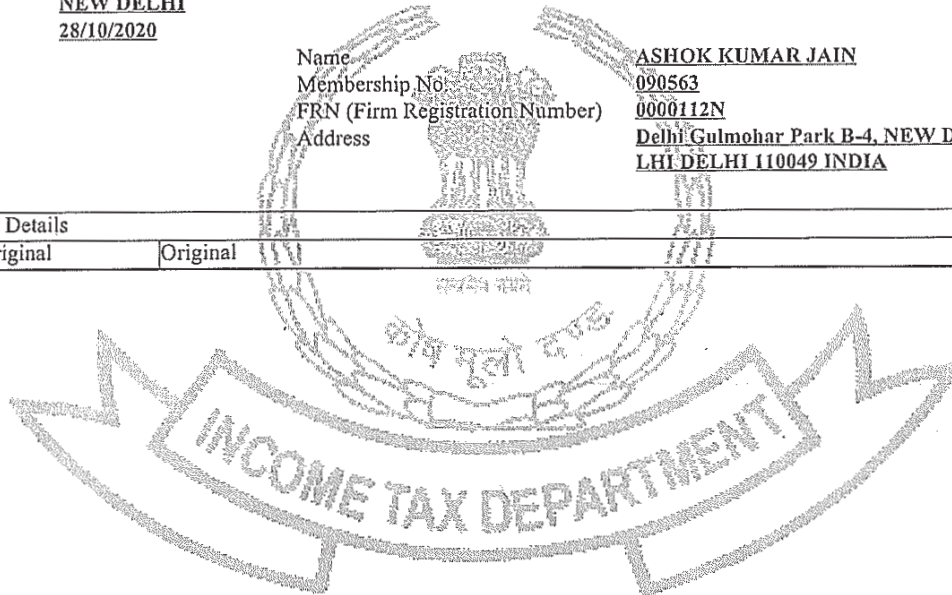
15.	(a) Whether any funds, other than the assets or voluntary contributions referred to in clause (b) of the third proviso to section 10(23C), were invested or deposited for any period during the previous year, otherwise than in the forms and modes specified in sub-section (5) of section 11.	No
	(b)	
16.	In relation to any income being profits and gains of business, -	
	(a) whether the business was incidental to the attainment of the objectives of the fund or trust or institution or university or other educational institution or hospital or other medical institution?	Not Applicable
	(b) whether separate books of account were maintained in respect of such business?	Not Applicable
	(c) if the answer to (a) and/or (b) above is 'no', then state the amount of such income. (₹)	
17.	(a) whether during the previous year, any part of the accumulated income was paid or credited to any trust or institution registered under section 12AA or to any fund or trust or institution or any university or other educational institution or any hospital or other medical institution referred to in sub-clause (iv) or sub-clause	No

	(v) or sub-clause (vi) or sub-clause (via) of clause (23C) of section 10?	
	(b) if the answer to (a) above is 'yes', then give details thereof, together with the amount of income so paid or credited.	
18	(a) Whether any voluntary contribution, other than voluntary contribution in cash or voluntary contribution of the nature referred to in clause (b) of the third proviso to section 10(23C), was held during the previous year, otherwise than in any of the forms or modes specified in sub-section (5) of section 11, after the expiry of one year from the end of the previous year in which such voluntary contribution was received?	No
	(b) if the answer to (a) above is 'yes', then give details thereof, including the amount of such voluntary contribution.	
19	(a) whether any anonymous donation referred to in section 115 BBC was received during the year? (See notes 2 & 3)	No
	(b) if the answer to (a) above is 'yes', then state the amount of such anonymous donation. (₹)	

Place **NEW DELHI**
Date **28/10/2020**

Name **ASHOK KUMAR JAIN**
Membership No: **090563**
FRN (Firm Registration Number) **0000112N**
Address **Delhi Gulmohar Park B-4, NEW DELHI DELHI 110049 INDIA**

Form Filing Details	
Revision/Original	Original



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

Balance Sheet as on 31.03.2020

Amount (₹) 31.03.2019	LIABILITIES	Amount (₹) 31.03.2020	Amount (₹) 31.03.2019	ASSETS	Amount (₹) 31.03.2020
5,00,00,000	CORPUS FUND	5,00,00,000	65,51,63,546	FIXED ASSETS	
1,01,55,000	For University	1,01,55,000	1,90,52,078	Opening Balance	67,37,88,624
6,01,55,000	For Research Promotion (UBSK)	6,01,55,000	(4,27,000)	Addition during the year	3,87,08,295
				Disposed off during the current period	3,35,000
			67,37,88,624	Gross Block	SCH. "A" 71,21,61,919
27,62,96,746	GENERAL FUND	28,49,85,192	46,56,71,106	Less : up to date Depreciation	50,35,94,872
86,88,446	Opening Balance	(2,74,89,993)	20,81,17,518	Net Block	20,85,67,047
	Add - Surplus brought from Income & Expenditure A/C	25,74,95,199			
28,49,85,192			1,15,71,717	CAPITAL WORK IN PROGRESS	SCH. "B" 10,43,148
65,31,757	RESEARCH PROJECT'S FUND	24,75,130		CURRENT ASSETS, LOANS & ADVANCES	
62,86,771	Opening Balance	69,60,769		Cash & Bank Balance	SCH. "C" 21,10,93,841
(1,02,08,029)	Add : Received during the year	(37,13,908)	31,09,35,164	Advances and Receivables in Cash or in Kind	SCH. "D" 7,33,69,383
(1,35,369)	Less : Expenses during the year	(3,59,482)	57,95,820	Prepaid Expenses	SCH. "E" 53,73,509
24,75,130	Less : Refund during the year	53,62,509	7,27,69,508	Security Deposits	SCH. "F" 23,83,452
				Stock-in- Hand	SCH. "G" 90,10,169
9,52,64,263	SECURED LOAN				
	Term Loan Yes Bank Ltd.-Noida		24,85,686		
6,10,94,129	CURRENT LIABILITIES & PROVISIONS	SCH. "H" 7,11,36,796	96,68,198		
10,08,59,960	Sundry Creditors	SCH. "I" 10,04,90,115			
	Other Liabilities				
1,79,88,161	CAUTION MONEY	1,65,09,940			
36,10,000	Opening Balance	44,70,000			
(50,88,221)	Add : Received during the year	(47,79,010)			
	Less : Refund during the year				
	(Due for payment during next one year Rs.41,21,315/-)				
1,65,09,940		1,62,00,930			
62,13,43,613	Total Liabilities	51,08,40,549	62,13,43,613	Total Assets	51,08,40,549

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

OFFICE: New Delhi

VICE CHANCELLOR
VICE CHANCELLOR

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


MAJ GEN RAKESH BASSI (RETD)
REGISTRAR

CHIEF FINANCE OFFICER
HEMANT VYAS
CHIEF FINANCE OFFICER


**Jaypee University of Information Technology
Waknaghat, Distt. Solan, H.P.
Income & Expenditure Account for the year ended on 31.03.2020**

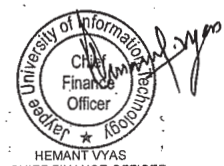
Amount (₹) 31.03.2019	EXPENDITURE	Amount (₹) 31.03.2020	Amount (₹) 31.03.2019	INCOME	Amount (₹) 31.03.2020
9,84,41,582	Institutional Expenses SCH. "J"	9,08,05,855	48,52,56,447	Collection from Students SCH. "M"	46,96,37,666
22,11,02,881	Salary & Allowances SCH. "K"	24,31,76,137	1,60,61,642	Interest received on FDs SCH. "N"	1,21,88,424
13,90,81,195	Students Hostel Expenses SCH. "L"	13,94,37,560	19,11,152	Other Income SCH. "O"	20,27,235
3,59,15,137	Depreciation SCH. "A"	3,79,23,766			
49,45,40,795	Total Expenditure	51,13,43,318			
86,88,446	Surplus Transferred to General Fund A/C.	(2,74,89,993)			
50,32,29,241	TOTAL	48,38,53,325	50,32,29,241	TOTAL	48,38,53,325

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. 009/12V/G

(ASHOK KUMAR JAIN)
PARTNER
MEMBERSHIP NO.: 090553
NEW DELHI


Vice-Chancellor
VINOD KUMAR
VICE CHANCELLOR


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


Chief Finance Officer
HEMANT VYAS
CHIEF FINANCE OFFICER

PLACE:- New Delhi
DATE : 27.10.2020

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
Details of Fixed Assets as on 31.03.2020

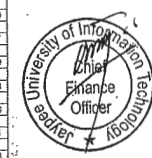
SCHEDULE : "A"

Block of Assets	Rate of Dep.	GROSS BLOCK					DEPRECIATION			NET BLOCK	
		Op. Balance as on 01.04.2019	Addition during the year		Disposed off during the year	As on 31.03.2020	Op. Balance as on 01.04.2019	For the Year	Up to 31.03.2020	As on 31.03.2019	As on 31.03.2020
			180 Days or more	Less than 180 Days							
Classification of Assets											
Buildings	10%	13,53,58,494	91,81,445	10,41,098	14,55,81,037	6,50,66,162	79,99,433	7,30,65,595	7,02,92,332	7,25,15,442	
Library Books	15%	6,79,34,798	1,00,729	7,65,858	6,39,01,385	5,10,70,021	26,02,265	5,36,72,286	1,68,64,777	1,51,29,099	
Electronic Lab Equipments	15%	2,00,85,220			2,09,85,220	1,51,90,193	7,34,164	1,59,24,957	48,94,427	41,80,283	
Bio Informatics Lab Equipments	15%	2,73,71,505			2,73,71,505	2,12,35,178	9,20,449	2,21,55,627	61,36,328	52,15,879	
Physics Lab Equipments	15%	1,12,44,205	98,019		1,13,42,425	85,24,368	4,22,709	89,47,077	27,20,038	23,95,348	
Computer Lab Equipments	40%	2,20,09,044	76,67,335	1,30,26,200	14,29,02,579	11,09,98,428	1,01,56,420	12,11,54,848	1,10,10,616	2,17,47,731	
Imported Bio Lab Equipments	15%	2,20,31,080			2,20,31,080	1,85,61,925	5,17,373	1,90,99,298	34,49,155	29,31,782	
Imported Electronic Lab Equipments	15%	33,58,810			33,58,810	31,32,282	33,979	31,66,261	2,26,528	1,92,549	
Imported Computer Lab Equipments	40%	7,37,191			7,37,191	7,37,190		7,37,190		1	
Imported Office Equipments	15%	87,905			87,905	75,402	1,875	77,277	12,503	10,629	
Civil Lab Equipments	15%	1,24,95,508	30,287	1,59,330	1,26,85,095	79,40,555	5,59,733	86,40,289	45,54,952	40,44,852	
Software-Computer	40%	45,04,269			45,04,269	33,94,069	4,44,072	38,38,161	11,10,180	6,66,139	
Software -Math	40%	3,24,350			3,24,350	2,97,305	10,818	3,08,123	27,045	18,227	
Software -Civil	40%	22,64,478			22,64,478	19,56,728	1,23,100	20,79,828	3,07,750	1,84,855	
Software -Language Lab	40%	11,37,935			11,37,938	9,33,187	81,900	10,15,087	2,04,761	1,22,851	
Software -Biotech Lab	40%	19,44,888			19,44,888	16,08,812	1,35,230	17,42,042	3,38,076	2,02,846	
Software -Electronics Lab	40%	40,82,895			40,82,895	25,32,986	6,19,884	31,52,870	15,49,709	9,29,825	
Software -Library	40%	2,73,000			2,73,000	2,38,158	13,937	2,52,095	34,842	20,905	
Software -Physics Lab	40%	4,35,123			4,35,123	3,63,255	28,747	3,92,002	71,888	43,121	
Software -PD Lab	40%	4,66,390			4,66,390	3,32,057	53,733	3,85,790	1,39,824	80,500	
Office Equipments	15%	2,08,57,424	17,12,142	3,20,284	2,28,89,850	1,74,59,933	16,90,616	1,31,49,549	83,98,491	97,48,301	
Miscellaneous Assets	15%	30,87,729	1,60,310	51,200	32,89,439	36,83,582	2,37,042	39,20,604	14,04,187	13,66,835	
Gymnasium Equipments	15%	36,77,835	4,81,560		61,59,595	23,36,586	5,70,451	29,27,037	33,21,049	32,32,558	
Furniture & Fixtures	10%	5,94,98,658		10,150	5,95,09,008	3,78,49,140	21,83,479	3,99,34,619	2,18,49,718	1,96,74,389	
Vehicles	15%	2,11,53,278	11,38,435		2,19,56,913	1,16,83,078	16,41,075	1,32,24,153	84,70,400	87,32,760	
Imported Kitchen Equipments	15%	2,78,308			2,78,308	2,31,735	6,985	2,38,721	46,573	39,587	
Kitchen Equipments	15%	85,61,441	99,530		56,60,971	48,29,607	5,74,705	54,04,312	37,31,834	32,56,659	
Plant & Machinery	15%	6,87,29,932	4,41,489	10,52,295	7,92,23,716	4,78,60,986	32,75,497	5,11,38,473	2,08,68,946	1,90,87,243	
Electrical Equipments	15%	86,58,257	7,42,423	2,37,608	96,38,288	68,17,251	4,05,035	72,22,286	18,39,006	24,14,000	
Mechanical Lab Equipments	15%	27,37,255			27,37,255	20,89,430	97,174	21,86,604	6,47,825	5,50,651	
Research Equipments	15%	3,44,03,214			3,44,03,214	2,26,03,915	17,39,895	2,45,43,811	1,15,99,298	98,59,403	
GROSS TOTAL		67,37,88,624	2,20,44,304	1,66,63,991	3,35,000	71,21,61,919	46,56,71,106	3,78,23,766	50,35,94,872	20,81,17,518	20,85,67,047



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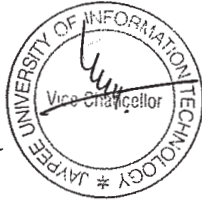


JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
Capital Work in Progress

SCHEDULE - "B"

Amount (₹)

Particulars	Opening Balance as on 01.04.2019	Addition during the Year	Capitalized during the Year	Expensed Out during the Year	Closing Balance as on 31.03.2020
Capital Goods In Store	88,019	1,89,160	1,89,160	88,019	-
Capital Work in Progress	1,14,83,698	-	1,04,40,550	-	10,43,148
Gross Total	1,15,71,717	1,89,160	1,06,29,710	88,019	10,43,148



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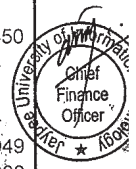
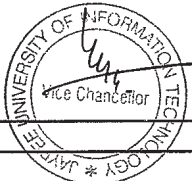
REGISTRAR,
 Jaypee University of Information Technology
 Waknaghat, Distt. Solan (H.P.)



JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
Cash and Bank Balance

SCHEDULE - "C"

S.No	Particulars	Amount (₹)	
		31.03.2020	31.03.2019
I	Cash in Hand	1,00,285	1,11,479
II	Balance with Schedule Banks		
	<u>In Current Account :</u>		
	- State Bank of India, Wagnaghat	25,996	2,84,065
	- Punjab National Bank, Shimla	4,57,951	6,96,869
	- Oriental Bank of Commerce, Solan	35,463	1,73,138
	- Punjab National Bank, Wagnaghat	43,02,963	49,02,676
	- Yes Bank Ltd., Noida	59,782	8,43,663
	- Cheque / DD in hand	5,00,00,000	5,10,95,298
	Balance with Schedule Banks		
	<u>In Saving Account :</u>		
	- Punjab National Bank, Samirpur	-	1,60,450
	- Punjab National Bank, Wagnaghat	6,36,185	-
III	Fixed Deposits with Banks		
	- State Bank of India, Wakanaghat	4,00,00,000	-
	- Punjab National Bank, Shimla	11,75,949	11,75,949
	- Punjab National Bank, Wagnaghat	8,35,00,000	16,95,00,000
	- Oriental Bank of Commerce, Solan	-	5,00,00,000
	- Punjab National Bank, Samirpur	-	24,86,863
	- Interest Accrued but not due	75,36,909	74,60,693
IV	Earmarked Deposits with Banks		
	- Syndicate Bank UBSK, Noida (C/A)	83,972	1,51,746
	- Syndicate Bank UBSK, Noida (FDR)	2,22,89,702	1,81,87,613
	- Interest Accrued on FDR	8,88,682	37,04,662
	TOTAL	21,10,93,841	31,09,35,164



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
ADVANCES AND RECEIVABLES IN CASH OR IN KIND**

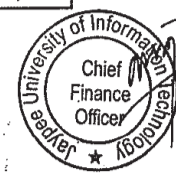
SCHEDULE - "D"

Particulars	Amount (₹)	
	31.03.2020	31.03.2019
Advances To:-		
- Staff	8,890	1,40,046
- Suppliers/Agencies	7,54,527	4,48,212
- Other Educational Trust	5,86,15,565	5,68,31,084
Receivables From:-		
- Students	4,12,250	3,60,000
- Income Tax Department as on 31.03.20	41,76,238	55,16,328
- 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 2019-20	Rs. 16,16,319	
- Assessment Year 2020-21	Rs. 12,25,488	
- Excise & Taxation Department (VAT)	38,17,348	38,17,348
- Income Tax Department Appeal	55,73,000	55,73,000
- Receivable of TCS	11,565	83,490
TOTAL	7,33,69,383	7,27,69,508



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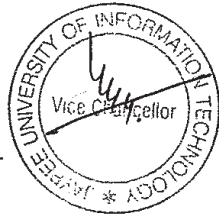
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**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
PREPAID EXPENSES**

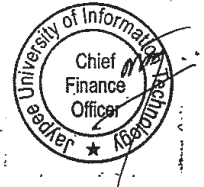
SCHEDULE - "E"

Particulars	Amount (₹)	Amount (₹)
	31.03.2020	31.03.2019
AMC for Equipments	36,33,777	6,26,918
Insurance	5,10,483	5,05,231
Subscription for Journals & Digital Library	12,29,249	46,63,671
TOTAL PREPAID EXPENSES	53,73,509	57,95,820



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**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
SECURITY DEPOSITS**

SCHEDULE - "F"

Particulars	Amount (₹)	Amount (₹)
	31.03.2020	31.03.2019
For Electricity HPSEBL	22,40,280	23,44,514
For LPG	1,19,800	1,19,800
For Labour Office Solan	12,000	10,000
For Telephones	11,372	11,372
TOTAL SECURITY DEPOSITS	23,83,452	24,85,686



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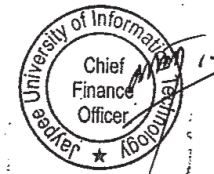
**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
STOCK-IN-HAND**

SCHEDULE - "G"

Particulars	Amount (₹)	Amount (₹)
	31.03.2020	31.03.2019
Annapurna Grocery & Eatables	28,39,556	22,77,580
Medicines	1,05,829	54,617
Diesel	10,22,647	10,58,819
General Hardware Items	22,57,717	21,60,113
Electrical Items	27,24,392	32,05,661
Material in Transit	7,434	8,62,126
Spares for Vehicles	52,594	49,282
TOTAL STOCK IN HAND	90,10,169	96,68,198



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**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
SUNDRY CREDITORS**

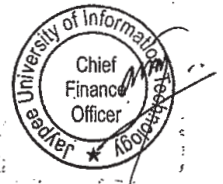
SCHEDULE - "H"

Particulars	Amount (₹)	Amount (₹)
	31.03.2020	31.03.2019
- For Goods Supplied	42,18,268	71,11,626
- For Services Rendered	1,31,10,044	95,00,742
- For Retention	12,28,048	10,69,104
- For Statutory Liabilities	5,25,80,436	4,34,12,657
TOTAL SUNDRY CREDITORS	7,11,36,796	6,10,94,129



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**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
OTHER LIABILITIES**

SCHEDULE - "I"

Particulars	Amount (₹)	Amount (₹)
	31.03.2020	31.03.2019
Uncleared Cheques	24,45,996	12,42,185
Fee in Advance	8,83,74,572	8,99,34,121
JYC Students Fund	15,96,814	14,73,354
Expenses Payable	46,30,439	51,93,423
T.D.S. Payable	34,42,294	30,16,877
TOTAL OTHER LIABILITIES	10,04,90,115	10,08,59,960



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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
INSTITUTIONAL EXPENSES

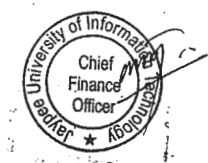
SCHEDULE - "J"

Particulars	Amount (₹)	Amount (₹)
	31.03.2020	31.03.2019
Admission Exps. including Advertisement	89,79,744	56,26,229
Audit Fee	3,00,000	3,54,000
Conference & Seminar Expenses	1,60,569	2,86,976
Convocation Expenses	31,415	43,775
Contribution towards Research & Development	-	87,925
E-Journals & Periodicals	46,64,004	56,73,182
Electricity Expenses	45,77,484	58,12,069
Honorarium to Faculty & Remuneration of Visiting Faculty	7,74,781	8,54,295
Institute Promotional Expenses	5,80,825	2,12,716
Insurance Expenses	1,13,694	1,91,609
Internet Charges	11,79,274	6,41,789
Interest & Finance Charges	46,57,756	91,35,295
Laboratory Expenses	25,66,841	30,45,210
Lease Rent	22,651	22,651
Legal & Professional Charges	8,38,528	4,66,389
Misc. Expenses	2,25,896	10,60,985
Payment to Technical Personnel	85,08,897	93,10,009
Placement Expenses	6,91,978	10,27,442
Postage & Telegram	1,21,854	1,40,498
Prior Period Exps.	1,39,641	75,941
Printing & Stationery	19,97,441	19,30,485
Recruitment Expenses	1,03,798	4,24,087



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SCHEDULE - "J" (Continued)

Particulars	Amount (₹)	Amount (₹)
	31.03.2020	31.03.2019
Scholarship to Students	1,62,66,464	1,49,40,523
Security Expenses	54,15,468	50,81,161
Staff Welfare	13,35,331	15,80,553
Telephone Expenses	6,83,380	6,26,809
Travelling & Conveyance	10,19,756	14,01,789
Water Expenses	18,84,303	27,70,883
Repair & Maintenance		
- Civil Maintenance	41,81,690	53,07,284
- Equipment & Machinery	59,99,729	58,60,474
- Furniture & Fixture	6,68,872	15,77,138
- Horticulture Exps.	24,20,354	21,32,478
- Institute House Keeping	43,28,600	38,98,204
- Others	15,96,832	28,20,281
- Vehicles	34,48,526	37,92,682
- Water Supply Scheme	3,19,479	2,27,766
TOTAL INSTITUTIONAL EXPENSES	9,08,05,855	9,84,41,582



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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
SALARY & ALLOWANCES

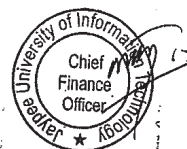
SCHEDULE - "K"

Particulars	Amount (₹)	Amount (₹)
	31.03.2020	31.03.2019
Teaching Staff :		
Salary	10,52,50,564	10,06,14,665
Conveyance Allowance	71,54,514	73,34,688
H.R.A.	64,91,949	67,01,694
Medical Reimbursement	41,35,157	40,53,938
Leave Travel Assistance	39,48,802	37,82,981
Contribution to Provident Fund	1,24,97,598	1,23,01,699
Provision for Gratuity	53,69,399	39,52,938
Other Allowances	3,61,54,941	2,86,55,875
Sub - Total	18,10,02,924	16,73,98,478
Non-Teaching Staff :		
Salary	3,69,36,410	3,40,48,256
Conveyance Allowance	19,77,610	19,29,195
H.R.A.	27,49,002	27,69,074
Medical Reimbursement	13,14,161	12,77,797
Leave Travel Assistance	12,72,658	12,07,351
Contribution to Provident Fund	44,14,007	41,71,521
Provision for Gratuity	60,67,420	36,48,866
Other Allowances	74,41,945	46,52,343
Sub - Total	6,21,73,213	5,37,04,403
TOTAL SALARY & ALLOWANCES	24,31,76,137	22,11,02,881



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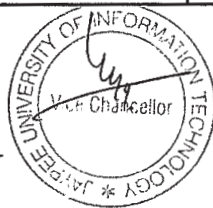
Chief Finance Officer,
Jaypee University of Information Technology,
Solan, Distt. Solan (H.P.)



**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
STUDENTS HOSTEL EXPENSES**

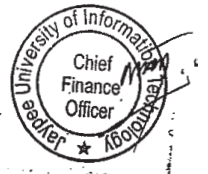
SCHEDULE - "L"

Particulars	Amount (₹)	Amount (₹)
	31.03.2020	31.03.2019
Grocery & Eatables Consumed	4,43,13,090	4,38,51,011
Security Expenses	1,26,36,095	1,18,56,026
Electricity Charges	1,62,64,416	1,58,71,100
Water Charges	69,61,594	89,06,034
Housekeeping Expenses	1,23,56,788	1,12,90,552
Dispensary Expenses	70,15,743	60,99,013
Students Welfare Expenses	8,67,699	7,44,103
Messing Staff Expenses	1,35,03,968	1,22,23,802
Salary Annapurna & Technical Staff	77,41,696	71,48,481
Repair & Maintenance	1,42,37,434	1,74,17,031
Laundry Expenses	35,39,037	36,74,042
TOTAL STUDENTS HOSTEL EXPENSES	13,94,37,560	13,90,81,195



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**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
COLLECTIONS FROM STUDENTS**

SCHEDULE - "M"

Particulars	Amount (₹)	Amount (₹)
	31.03.2020	31.03.2019
Fee From Students:		
Tuition Fee	31,02,36,087	32,40,63,014
Hostel Fee	14,36,79,489	14,41,87,141
Sub Total :	45,39,15,576	46,82,50,155
Other Collection:-		
Misc.Charges	11,11,353	16,95,198
Admission Form Charges	27,27,870	20,32,125
Tuck Shop Charges	31,08,741	37,70,898
Mess Charges	87,74,126	95,08,071
Sub Total :	1,57,22,090	1,70,06,292
TOTAL COLLECTIONS FROM STUDENTS	46,96,37,666	48,52,56,447



(Signature)
J. S. SIRAK,
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)



JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
INTEREST RECEIVED ON FDRs

SCHEDULE - "N"

Particulars	Amount (₹)	Amount (₹)
	31.03.2020	31.03.2019
Oriental Bank of Commerce - Solan	15,94,085	33,87,013
Punjab National Bank - Shimla	73,219	1,93,503
Punjab National Bank - Wagnaghat	82,51,958	1,07,61,738
State Bank of India - Wagnaghat	7,42,087	23,542
Syndicate Bank - Noida (UBSK)	14,29,010	15,34,608
Punjab National Bank - Samirpur	93,928	1,61,238
Punjab National Bank - Samirpur Saving A/C	4,137	-
TOTAL INTEREST RECEIVED	1,21,88,424	1,60,61,642



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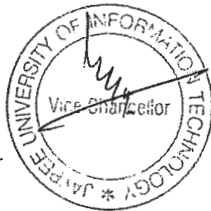
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**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2019-20
OTHER INCOME**

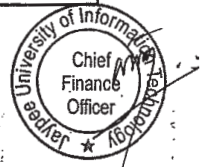
SCHEDULE - "O"

Particulars	Amount (₹)	Amount (₹)
	31.03.2020	31.03.2019
Other Miscellaneous Income	8,87,210	7,49,001
Notice Pay Recovery	9,08,211	3,85,133
Overhead Charges for Research Projects	1,58,200	4,03,443
Registration Charges for Conference & Seminars	-	10,683
Sundry Balance Written Off	73,614	3,62,892
TOTAL OTHER INCOME	20,27,235	19,11,152



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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
WAKNAGHAT, SOLAN, HIMACHAL PRADESH

FINANCIAL YEAR 2019-20

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.

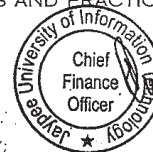
II. SIGNIFICANT ACCOUNTING POLICIES

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




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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.

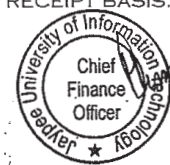
E) INVENTORY: INVENTORY OF CONSUMABLES LIKE GROCERY & EATABLES, STATIONARY, MEDICINES, LABORATORY CONSUMABLES, STORES & SPARE ARE VALUED AT COST OR NET REALIZABLE VALUE WHICHEVER IS LESS. INVENTORY OF DIESEL IS VALUED AT YEARLY WEIGHTED AVERAGE BASIS.

F) CLAIMS

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




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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.

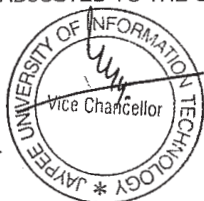
BORROWING COST: BORROWING COST INCURRED DURING CONSTRUCTION PERIOD IS DIRECTLY CHARGED TO PROFIT & LOSS A/C.

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.



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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.

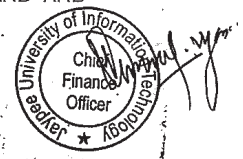
3. FUNDS RECEIVED FROM VARIOUS GOVERNMENT AUTHORITIES/RESEARCH FUNDING AGENCIES FOR UTILIZATION IN VARIOUS PROJECTS AS DIRECTED BY THAT AUTHORITIES/AGENCIES ON THEIR BEHALF HAS BEEN SHOWN UNDER "RESEARCH PROJECT FUND". DETAILS OF UTILIZATION OF RESEARCH PROJECT FUND DURING THE YEAR IS AS FOLLOWS:-

PARTICULARS	OPENING BALANCE AS ON 01.04.2019 (RS)	RECEIVED DURING THE YEAR* (RS)	REFUND DURING THE YEAR (RS)	UTILIZATION DURING THE YEAR			CLOSING BALANCE AS ON 31.03.2020 (RS)
				REVENUE EXPENDITURE (RS)	CAPITAL EXPENDITURE (RS)	TOTAL (RS)	
DST/DBT/HIMCOST-PROJECTS	19,13,290	61,43,941	3,59,482	29,17,175	-	29,17,175	47,80,574
OTHER PROJECTS	5,61,840	8,16,828	-	7,96,733	-	7,96,733	5,81,935
TOTAL	24,75,130	69,60,769	3,59,482	37,13,908	-	37,13,908	53,62,509

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) PAID OFF DURING THE YEAR.



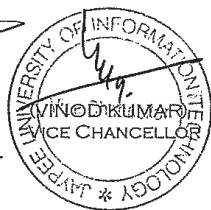
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- 5. PREVIOUS YEAR FIGURES HAVE BEEN REGROUPED/ REARRANGED OR RECLASSIFIED WHEREVER FOUND NECESSARY TO CONFIRM WITH CURRENT YEAR'S CLASSIFICATION.
- 6. FIGURES HAVE BEEN ROUNDED UP TO NEAREST RUPEES.

FOR DASS GUPTA & ASSOCIATES
 CHARTERED ACCOUNTANTS
 REGISTRATION No. 2000112N

(ASHOK KUMAR GUPTA)
 PARTNER
 MEMBERSHIP No: 090563



FOR JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

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

MAJ GEN RAKESH BASSI, SM (RETD.)
 REGISTRAR

Hemant Vyas
 (HEMANT VYAS)
 CHIEF FINANCE OFFICER

PLACE: NEW DELHI
 DATE: 27.10.2020