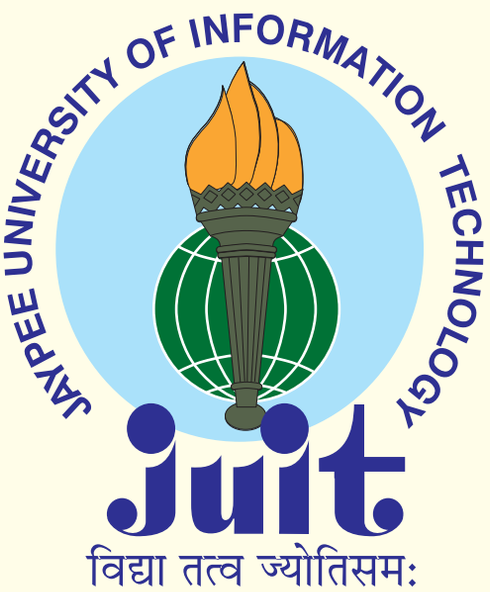
Jaypee University Of Information Technology

(Established by the H.P. Government Vide Act No. 14 of 2002)

Waknaghat, Himachal Pradesh



Annual Report

2022-2023

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
WAKNAGHAT
Himachal Pradesh

ANNUAL REPORT
2022-2023

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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 Shiv Pratap Shukla Hon'ble Governor of Himachal Pradesh
Pro-Chancellor	:	Shri Manoj Gaur Executive Chairman, Jaiprakash Associates Ltd
Vice Chancellor	:	Prof (Dr) Rajendra Kumar Sharma
Registrar	:	Maj Gen Rakesh Bassi, SM (Retd)

Tele/Website

Vice Chancellor	:	(O) 01792-239201 (R) 01792-239250
Registra	:	(O) 01792-239203 (R) 01792-239272
EPBAX	:	01792-257999 (30 lines)
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 by the JSS in the emerging areas of technology – the Jaypee University of Information Technology (JUIT) at Waknaghat, 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 BTech degrees in Biotechnology, Bioinformatics, Computer Science & Engineering, Electronics & Communication Engineering, Information Technology and Civil Engineering. Post Graduate and Doctoral programmes leading to award of MTech and PhD 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 objective of the University is 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. Responsibility for the general superintendence, direction and control of the affairs of the university is vested with the Governing Council. The composition of the Governing Council for the year 2022-23 is given at **Appendix A**.

Executive Council and Finance Committee

The Executive Council is responsible for the general management and administration of the University. The composition of Executive Council and Finance Committee for the year 2022-23 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 implementation 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 for the year 2022-23 is listed at **Appendix D.**

Meetings of Various Statutory Bodies:

- Academic Council 28 June 2023
- Executive Council 28June 2023
- Finance Committee 28 June 2023

Location and Area of Land

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

Infrastructure

JUIT has been developed as a modern world-class campus, in serene and lush green environment. The state of the art campus covers a total built up area of around 74,372.56 sqm. 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 environment for students in an eco-friendly campust. 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 along with 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 up to 29 October 2022 with B+ Grading.

The NIRF Ranking of the University is 138 among all Engineering Institutes in the country in the year 2021-22.

The Biotechnology undergraduate programme of the University was accredited by National Board of Accreditation (NBA) under Washington Accord up to 30th June 2022.

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

PROGRAMMES OF STUDY

1. **UG Programmes**

JUIT offerered following Undergraduate programmes to award BTech degrees in the respective discipline during the year: -

BTech

a) Bioinformatics
b) Biotechnology
c) Civil Engineering
d) Computer Science & Engineering
e) Information Technology
f) Electronics & Communication Engineering
g) Electronics & Computer Engineering
h) Civil Engineering with Computer Application

BSc (Hons.) Mathematics & Computing

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 the undergraduate 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 December) and Even Semester (January to June).

Admission

1. The admissions to BTech 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 in the Admission Brochure.

3. Minimum qualification for admission to the first year BTech 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 BTech in accordance with directives of the MHRD/UGC.

5. 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/BE/BTech-1st year in related branch of engineering is eligible for admission to BTech – 2nd year through Lateral Entry. 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.

7. Admission to BSc (Hons.) in Mathematics & Computing is based on the merit of the qualifying examination i.e. 10+2 examination. The minimum eligibility criteria for admission to the program is minimum 60% marks with Mathematics as a compulsory subject at 10+2 level or equivalent. Candidates having qualified CUET-UG Score / Rank are also eligible for admission to the program in order of merit.

2. Post Graduate Programs

JUIT offers Post Graduate Programs towards the award of MSc and MTech Degrees in following disciplines:-

MSc

a) Biotechnology
b) Microbiology

MTech

a) Biotechnology
b) Civil Engineering (Construction Management)
e) Civil Engineering (Environmental Engineering)
f) Civil Engineering (Structural Engineering)
g) Computer Science & Engineering
h) Computer Science & Engineering (Information Security)
i) Computer Science & Engineering (Data Science)
j) Electronics & Communication Engineering
k) Electronics & Communication Engineering – Internet of Things

a) MSc (Biotechnology) & (Microbiology)

One of the major objectives of MSc Biotechnology program is to generate human resource in the 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 (MSc)

1. The University offers regular fulltime MSc Program through classroom teaching.

2. Minimum qualification for applying to the first year MSc is Bachelor's Degree in the concerned subject or equivalent with at least 55% aggregate marks or its equivalent CGPA from any recognized University / Institution or any other qualification as per UGC norms of eligibility.

3. Admission shall be done in the University based on merit list prepared on the basis of marks / grades obtained in the qualifying degree.

4. The specific admission process and eligibility for admission to the MSc Program is available in the Admission Brochure of the respective year.

b) **MTech (Biotechnology)**

The Masters in Technology 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.

c) **MTech Civil Engineering with Specialisation in Construction Management**

This two year program aims to impart knowledge in areas like construction techniques, equipment, 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.

d) **MTech Civil Engineering with Specialization in Environmental Engineering**

The MTech 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.

e) **MTech 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.

f) **MTech (Computer Science & Engineering) & MTech (CSE with Specialization in Information Security) & MTech (CSE with Specialization in Data Science)**

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.

g) **MTech (Electronics and Communication Engineering) & (Internet of Things)**

This program covers a number of areas like mobile, wireless, satellite, optical and computer communication systems and networks; signal processing, spread spectrum communication and error control coding techniques; microelectronics and VLSI design and information and communication theory through suitable core/compulsory and elective subjects and extensive project and thesis work. The program also focuses on developing analytical skills to enable fluent use of mathematical techniques as a tool for engineering research.

Admission (MTech)

1. 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.

2. 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. The specific admission process and eligibility for admission to the MTech Program is available in the Admission Brochure of the respective year.

3. Doctor of Philosophy (PhD) Programs

The University offers regular full time / part time PhD Programmes in following disciplines:

a) Bioinformatics
b) Biotechnology
c) Civil Engineering
d) Computer Science & Engineering
e) Electronics & Communication Engineering
f) Humanities & Social Sciences
g) Mathematics
h) Physics and Materials Science

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 PhD 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 PhD degree.

a) **PhD Biotechnology, Bioinformatics**

The department runs PhD 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 academicians and researchers. The Dept. has PhD scholars in different areas of biotechnology such as medical biotechnology, plant biotechnology, agriculture biotechnology, environmental biotechnology, food technology, industrial biotechnology, computational drug discovery, bioinformatics tools development, medicinal chemistry, neuropharmacology, pharmaceutics, etc. The DRDO, DIHAR, Leh have registered their JRFs/SRFs in PhD through a MoU. Fifteen PhDs have been awarded by the Department and a few are in their final stages of Thesis writing and submission.

b) **PhD Civil Engineering**

The Department carries out research and development activities in the areas of 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) **PhD 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) **PhD 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) **PhD 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) **PhD 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 BTech programs. The Department is well equipped with software like MATLAB, SPSS, Lingo and Lindo.

g) **PhD 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 PhD 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) MTech Degree of a University or equivalent for PhD 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 PhD 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 that 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 that 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 PhD Entrance Test. Non-NET / SLET candidates' admission is subject to meeting the marks requirement of PhD Entrance Test and performance in interview.

f) The specific admission process and eligibility for admission to the PhD Program is available in the Admission Brochure of the respective year.

ACADEMIC DEPARTMENTS

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Department Vision and Mission

- **Vision**

  To be a creative driving force, within the university and worldwide, of the highest scholarly and entrepreneurial quality.

- **Mission**

  M1. To provide a thorough grounding in electronics & communication engineering and computer engineering through investigative laboratory work and classroom lectures and field demonstrations.

  M2. To promote the establishment of centres of excellence in niche technology areas to nurture the spirit of innovation and creativity among faculty and students.

  M3. To discover and disseminate new findings from rigorous research that advances and improves the overall quality of life.

- **Faculty Details**

S No	Faculty	Qualification	Specializations
1.	Rajiv Kumar	PhD	Fault-Tolerance, Network Reliability & Networked Control Systems
2.	Shruti Jain	PhD	Bio Medical Signal Processing, VLSI Design
3.	Emjee Puthooran	PhD	Medical Instrumentation and Signal Processing, Image Processing, Soft Computing Techniques
4.	Harsh Sohal	PhD	VLSI Design, FPGA based Algorithm Implementation
5.	Naveen Jaglan	PhD	Microwave Communication, Planar and Conformal Microstrip Antennas
6.	Nafis Uddin Khan	PhD	Signal and Image Processing
7.	Salman Raju	PhD	RF & Microwave Engineering, Digital Filter Design
8.	Shweta Pandit	PhD	Cognitive Radio, Wireless Communication
9.	Sunil Datt Sharma	PhD	Signal Processing & Applications
10.	Nishant Jain	PhD	Biomedical Signal Processing, Image Processing

11.	Vikas Baghel	PhD	Radar Signal Processing, Adaptive Signal Processing, Soft and Evolutionary Computing
12.	Alok Kumar	PhD	Communication Systems, Cognitive Radio, Wireless Sensor Networks
13.	Pradeep Garg	PhD	Genomic Signal Processing
14.	Pragya Gupta	MTech	Communication Engineering, Image Processing
15.	Munish Sood	MTech, MBA (HR)	Computer Vision, Deep Learning

- **Programs**

  Undergraduate Programs

  The department offers a comprehensive BTech 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. A new program named Electronics and Computer Engineering has been started in the year 2021-22. The candidates are selected for admission to BTech through JEE and 10+2 basis. 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.

- **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. In the month of March 2023, Ansys Academic HFSS software has been acquired to facilitate the research in the domain of RF and Microwave Engineering. Apart from this, Cadence VLSI Design Lab (2023 Latest Edition) also been installed to facilitate research in VLSI systems design. Department has taken an initiative to establish a lab for Drone applications.

- **Placement**

  For the academic year 2022-23, 100+ Companies including Electronic Industries, Software Companies, Financial and Management Organizations visited as centralized Campus Placements. In addition to this, various companies visited JUIT Waknaghat as in house

Campus Placements. There were 37 eligible participating students for placement and 28 students got placed in various companies like Infosys, Wipro, Cognizant, IBM, GreyB, BYJU'S, TCS etc. There were a total of 49 offers to these students. A significant number of ECE students every year opted for higher studies in abroad like University of Florida USA, TAMK Finland through foreign exchange program. 3 students from M.Tech (IoT) 2023 passing out batch received placements with an average package of 4.5 LPA. Many students opted for higher studies in India as well through GATE and other competitive examinations.

- **New Courses introduced during the year** : NIL

- **Post Graduate Programs**

The department offers two MTech programmes in Electronics and Communication Engineering and Electronics and Communication Engineering with specialization in IoT. The candidates are selected based on the GATE score or an entrance test (PGET). The program covers a number of areas like next generation wireless systems, IoT architecture and protocols; Industrial automation; Robotics; Computer communication systems and networks; Signal and image processing; Machine learning for IoT; Microelectronics and VLSI Design; embedded system 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.

- **PhD Program**

The Department of ECE offers PhD program in Electronics & Communication Engineering. The research specialization includes Digital Signal and Image Processing, Microwave Engineering, VLSI Design, Speech Processing, Digital and Data Communication, Wireless and Mobile Communication Systems, Automation, Robotics and Control. ANSYS HFSS and Cadence software are available for research activities on 5G/6G communication and Chip manufacturing.

- **PhD Completed** One student completed her PhD in the academic year 2022-23.

SNo	Name	Title of Thesis
1	Garima Thakur	Energy - Efficient Approximate Architecture For Error Tolerant Applications

- **PhD Enrolled** For the academic year 2022-23, two new scholars enrolled in Ph.D. program.

SNo	Roll No.	Name
1	228040001	Sandeep Khantwal
2	228040002	Sandeep Thakur

- **Lab Facilities**

- **New Labs** Following new labs were established in the academic year 2022-23

  - **MITSUBISHI AUTOMATION LAB**

    The department of ECE has signed a MoU with Mitsubishi Electric India Private Limited. Under this MoU, students will be trained in the area of Industrial Automation by the experts from Mitsubishi Electric India Private Limited. This will enable the students to acquire the skill set required for the industry 4.0.

    In addition Ansys HFSS Software and Cadence VLSI Design Lab have been installed in ECL6 (Mitsubishi Automation Lab).

- **Lab Staff with qualification**

S. No	Name	Qualification	Designation
1	Dr Ajay Kumar Singh	PhD	Sr. Lab Engineer
2	Dhirendra Kumar Singh	BTech	Sr. Lab Engineer
3	Jyotsna Bajaj	MTech	Sr. Lab Engineer
4	Kamlesh Kumar Srivastava	B Sc, BTech	Lab Engineer
5	Shambhoo Nath	ITI Diploma in ECE	Lab Technician

- **Patent Filed and Granted:**

S No	Title of Patent	Members	Application No
1	Shoes	Saransh Rohilla, Saanidhya Yadav**, Dr. Nishant Jain**, Dr. Anurag Vijay Agrawal	Granted 378538-001
2	An IoT-Based Automated DIY Drip Irrigation And Pest Control	**Shruti Jain**, Yugal Kumar, Jagpreet Sidhu , Arvinder kaur	Published 202311008596
3	Method of Fabrication and arrangement of Anti-Glare Glass for Avoiding accidents of Road	Archit Kaushal, **Shruti Jain**, Sudhir Kumar, Aman Sharma, Saurabh Rawa	Published, 202311029769
4	Water Heaters	**Shruti Jain**, Meenakshi Sood and Pramod Kumar	Filed, 387868-001 Cbr no : 207133

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

Conferences

- **Conferences Organised**

Dates	Subject	Venue	Participation Faculty Name	Remarks
Sept. 23-24, 2022	Conference Advisor: 2nd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2022)	Jaypee University of Information Technology, Waknaghat	Prof. Rajiv Kumar	Jointly organized by Dept. of ECE and Physics and material Science
Sept. 23-24, 2022	General Chair: 2nd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2022)	Jaypee University of Information Technology, Waknaghat	Prof. Shruti Jain	Jointly organized by Dept. of ECE and Physics and material Science
Sept. 23-24, 2022	Conference Chair : 2nd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2022)	Jaypee University of Information Technology, Waknaghat	Dr. Vikas Baghel	Jointly organized by Dept. of ECE and Physics and material Science
Oct. 07-09, 2021	Conference organizing committee members: 2nd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2022)	Jaypee University of Information Technology, Waknaghat	All faculty and lab staff members	Jointly organized by Dept. of ECE and Physics and material Science
May 15-17, 2023	Principal General Chair: 3rd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2023)	Jaypee University of Information Technology, Waknaghat	Prof. Rajiv Kumar	Jointly organized by Dept. of ECE and CSE
May 15-17, 2023	Conference General Chair: 3rd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2023)	Jaypee University of Information Technology, Waknaghat	Prof. Shruti Jain	Jointly organized by Dept. of ECE and CSE
May 15-17, 2023	Conference Chair: 3rd International Conference on Emergent Converging	Jaypee University of Information	Dr. Vikas Baghel	Jointly organized by Dept. of ECE

	Technologies and Biomedical Systems (ETBS 2023)	Technology, Waknaghat		and CSE
May 15-17, 2023	Conference Secretary: 3rd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2023)	Jaypee University of Information Technology, Waknaghat	Dr. SunilDatt Sharma, Dr. Pardeep Garg	Jointly organized by Dept. of ECE and CSE
May 15-17, 2023	Conference organizing committee members: 3rd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2023)	Jaypee University of Information Technology, Waknaghat	All faculty and lab staff members	Jointly organized by Dept. of ECE and CSE
August 05-06, 2022	Conference General Chair: International Conference in Mobile Radio Communications and 5G Networks MRCN-2022	University Institute of Engineering and Technology, Kurukshetra University, Kurukshetra,	Prof. Shruti Jain	

- **Conferences Attended-**

Dates	**Subject**	**Venue**	**Participation Faculty Name**	**Remarks**
07-08, 2022	International Conference on Machine Learning and Data Engineering	UPES Dehradun, India, September	Prof. Shruti Jain	
August 05-06, 2022	International Conference in Mobile Radio Communications and 5G Networks MRCN-2022 (Springer)	University Institute of Engineering and Technology, Kurukshetra University, Kurukshetra	Prof. Shruti Jain	
May 15 – 17, 2023	3rd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS-2023)	Jaypee University of Information Technology, Solan, India	Dr. Nafis Uddin Khan	

November 25 – 27, 2022	IEEE International Conference on Parallel, Distributed and Grid Computing (PDGC 2022)	Jaypee University of Information Technology, Solan, India	Dr. Nafis Uddin Khan	
May 15-17, 2023	2nd Emergent Converging Technologies and Biomedical Systems (ETBS 2023)	Jaypee University of Information Technology, Solan, India	Dr. Rajiv Kumar	May 15-17, 2023
Sept 23-24,, 2022	2nd Emergent Converging Technologies and Biomedical Systems (ETBS 2022)	Jaypee University of Information Technology, Solan, India	Dr. Rajiv Kumar	Sept 23-24,, 2022
November 25 – 27, 2022	IEEE International Conference on Parallel, Distributed and Grid Computing (PDGC 2022)	Jaypee University of Information Technology, Solan, India	Dr. Rajiv Kumar	November 25 – 27, 2022

Workshops

- **Workshops Organized**

Dates	Subject	Venue	Participation	Remarks
September 19-25, 2022	One week national level Workshop on IoT entitled "GALACTECH"		**Coordinator:** Prof. Shruti Jain	By IEEE R10 Region, SAC IEEE Delhi Section, JUIT SB and JCBUST YMCA SB powered by Educlouds.
August 22-26, 2022	Cyber Security workshop on 'CyberVerse 2.0' by		**Coordinator:** Prof. Shruti Jain	By IEEE R10 Region in collaboration with SAC IEEE Delhi Section, JUIT SB AND JCBUST YMCA SB (Interuniversity/ Collaborative activity)

March 15-16, 2023	Two days workshop on Intellectual Property Rights (IPR) Awareness Programme by the IPR cell,	JUIT	**Coordinator:** Prof. Shruti Jain	Jaypee University of Information Technology (JUIT) in collaboration with Himachal Pradesh Council for Science Technology and Environment (HIMCOSTE) under National Intellectual Property Awareness Mission (NIPAM 2.0) by Office of Controller General of Patents, Designs and Trademarks (CGPDTM), Department for Promotion of Industry and Internal Trade (DPIIT)
April 26, 2023	One day seminar on Sensitization of UG/PG students in occasion of World IPR day by IPR cell.	JUIT	**Coordinator:** Prof. Shruti Jain	
June 05-06, 2023	Workshop on VLSI using Cadence Design Tools	JUIT	**Coordinator:** Dr. Harsh Sohal	

- **Workshops Attended**

Dates	Subject	Venue	Faculty Name	Remarks
23-24 Feb, 2023	Training for JUIT students by MEI perspnnel Ms. Himanshi Bhardwaj	The Department of Electronics and Communication, JUIT, Solan	Dr Rajiv Kumar	02 days
1-15 July, 2022	FA Focussed training to ECE lab staff	The Department of Electronics and Communication, JUIT, Solan	Dr Rajiv Kumar	15 days
Feb. 28, 2023	Second National Science Day Symposium (NSDS)-2023,	JUIT	Dr. Shweta Pandit	01 day
23 February 2023-24 February 2023	Factory Automation Set-Up of Mitsubishi Electric India	ECE Department, JUIT Waknaghat	All Faculty and Lab Staff	02 days
17 December 2022	Workshop on Overview of Layer 2 & Layer 3 Protocols and Algorithms for Open-RAN based 5G Base Station	IIITB COMET Foundation	Dr. Pardeep Garg	01 day
June 05-06, 2023	Workshop on VLSI using Cadence Design Tools	The Department of Electronics and Communication, JUIT, Solan	All faculty members and Lab staff	02 days

- **Faculty Development Programs Organized**

Dates	Name	Organized by	Faculty Name
Aug. 28-Sept. 10, ,2022	Online Faculty Development Programme on Computational Genomics and Proteomics (Under the E&ICT Academy, IIITDM Jabalpur)	Jointly organized by IIITDM Jabalpur and department of ECE, JUIT.	Dr. Sunil Datt Sharma (Coordinator)
December 22 - 23, 2022	2 Day FDP focussed on Leadership and Excellence	Jaypee University of Information Technology, Solan, India	Nafis Uddin Khan (Coodinator)

- **Faculty Development Programs Attended**

Dates	Name	Organized by	No. of participants
March 14-March 20, 2023	Machine Learning: Concepts and Applications	Department of Computer Science & IT, Kathua Campus, University of Jammu, J&K (India)	Dr. Nishant Jain
Dec. 22-23, 2022	UTKARSH-Take Flight" focussed on Leadership and Excellence	JUIT	Dr. Harsh Sohal, Dr. Naveen Jaglan, Dr. Pardeep Garg, Dr. Sunil Datt Sharma, Dr. NafisUddin Khan, Dr. Shweta Pandit
01-10 May, 2023	Ten days FDP on "Artificial Intelligence and its Role in Future Communications, Signal Processing and Computing Applications"	Jointly organized by Electronics and ICT Academy NIT Warangal and University of Kashmir(J&K) IIT Guwahati sponsored by the MeitY, Government of India.	Dr. Shweta Pandit
05-09 June, 2023	One-week FDP on '"Teaching and Research Practices".	BT & BI department, JUIT Waknaghat	Dr. Pardeep Garg
28 Aug.-10th Sept., 2022	Faculty Development Program on "Computational Genomics and Proteomics" (Under E & ICT Academy of IIITDM Jabalpur)	Jointly Organized by IIITDM Jabalpur and JUIT Solan	Dr Rajiv Kumar

- **Publications**

  - **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Rajiv Kumar	Multi-Objective Optimization of Smart Grid Based on Ant Colony Algorithm.	*Electrica*	*22* (3), pp. 395-402, DOI: http://dx.doi.org/10.5152/electrica.2022.21181	
Rajiv Kumar	Alleviation of Delay in Tele-Surgical Operations Using Markov Approach-Based Smith Predictor	*International Journal of Business Analytics*	*9* (3), pp. 1-14, DOI: 10.4018/IJBAN.292057	
Rajiv Kumar	Performance Accretion in Delay Compensation of Networked Control System using Markov Approach based Randomness Estimation in Smith Predictor	*International Journal of System Dynamics Applications (IJSDA)*	*11* (1), pp. 1-17, DOI: 10.4018/IJSDA.302634	
Rajiv Kumar	Understanding of Network Resiliency in Communication Networks with its Integration in Internet of Things - A Survey	*Electrica*	*23* (2), pp. 318-328, DOI: 10.5152/electrica.2023.22126	
Shruti Jain	Ensemble Architecture for Prediction of Grading of Diabetic Retinopathy.	*Cybernetics and Systems, Online*	pp. 1-12, DOI: https://doi.org/10.1080/01969722.2022.2151176	
Shruti Jain	Computational Model for Prediction of Foxo Protein Employing Ensemble Learning Algorithm.	*Current Signal Transduction Therapy*	*17* (3), pp. 1-12, DOI: 10.2174/1574362417666220527091755	

Shruti Jain	Novel Discrete Component Wavelet Transform for Detection of Cerebrovascular diseases.	*Sadhana*	*47* (2022), pp. 237-1-237-15, DOI: https://doi.org/10.1007/s12046-022-02016-9Sadhana	
Harsh Sohal, Shruti Jain	Low-power Approximate Arithmetic Circuits for IoT devices.	*Recent Advances in Electrical and Electronic Engineering*	*15* (5), pp. 421-428, DOI: 10.2174/2352096515666220627124337	
Shruti Jain	Classification of Multimodal Brain Images employing a novel Ridgempirical Transform.	*Neuro Quantology*|	*20* (6), pp. 2871-2882, DOI: 10.14704/nq.2022.20.6.NQ22286	
Shruti Jain	A Non-Invasive IoT-Based Glucose Level Monitoring System.	*Current Signal Transduction Therapy*	*17* (2022), pp. 1-10, DOI: 10.2174/1574362417666220524085231	
Shruti Jain, Harsh Sohal	Power Optimization using Current-mode signaling technique for IoT Applications.	*Measurement: Sensors*	*24* (2022), pp. 1-10, DOI: https://doi.org/10.1016/j.measen.2022.100494	
Shruti Jain	Robust multimodal fusion network employing novel Empirical Riglit Wavelet Transform for brain images.	*Measurement: Sensors*	*24* (December 2022), pp. 1-15, DOI: https://doi.org/10.1016/j.measen.2022.100529	
Shruti Jain, Harsh Sohal	Current issues and emerging techniques for VLSI testing - A review.	*Measurement: Sensors*	*24* (December 2022), pp. 1-16, DOI: https://doi.org/10.1016/j.measen.2022.100497	
Shruti Jain	Automated System for Movie Review Classification using BERT.	*Recent Advances in Computer Science and Communications*	pp. 0-0, DOI:	

Shruti Jain	Robust Computational Model for Diagnosis of Mitogenic Activated Protein Kinase Leading Neurodegenerative Diseases.	*Current Signal Transduction Therapy*	pp. 1-10, DOI: 10.2174/1574362418666230321152206	
Shruti Jain	Novel predictive model of cell survival/death related effects of Extracellular Signal-Regulated kinase protein.	*Artificial Cells, Nanomedicine, and Biotechnology*	*51* (1), pp. 158-169, DOI: https://doi.org/10.1080/21691401.2023.2189460	
Shruti Jain	Classification and Pathologic Diagnosis of Gliomas in MR Brain Images.	*Procedia Computer Science*	*218* (2023), pp. 706-717, DOI: https://doi.org/10.1016/j.procs.2023.01.051	
Shruti Jain	Design of filters using current amplifiers for removal of noises from ECG signal.	*Procedia Computer Science*	*218* (2023), pp. 1888-1904, DOI: https://doi.org/10.1016/j.procs.2023.01.166	
Shruti Jain	Detection of Cerebrovascular diseases using Novel Discrete Component Wavelet Cosine Transform.	*Current Computer-Aided Drug Design*	*19* (2), pp. 137-149, DOI: 10.2174/1573409919666221209151534	
Naveen Jaglan	Design and demonstration of a 2.5D frequency-selective surface for sub-6□GHz 5G wireless communication.	*Microwave and Optical Technology Letters*	pp. 1-6, DOI: https://doi.org/10.1002/mop.33486	
Naveen Jaglan	Metal-rimmed eight-element tri-band multiple-input multiple-output system with high efficiency for modern 5G smartphones.	*International Journal of Microwave and Wireless Technologies*	pp. 1-11, DOI: https://doi.org/10.1017/S1759078723000661	

Naveen Jaglan	A Secure and Trusted Mechanism for Industrial IoT Network Using Blockchain.	*IEEE Transactions on Industrial Informatics*	*19* (2), pp. 1894-1902, DOI: DOI 10.1109/TII.2022.3182121	
Nafis uddin Khan, Sunil Datt Sharma	An efficient fuzzy inference system based approximated anisotropic diffusion for image de-noising.	*Cluster Computing*	*25* (July), pp. 4303-4323, DOI: https://doi.org/10.1007/s10586-022-03642-y	
Sunil Datt Sharma	Performance Evaluation of the Signal Processing Based Transfer Learning Algorithm for the Fault Classification at Different Datasets.	*Journal of Failure Analysis and Prevention*	pp. 1-11, DOI: https://doi.org/10.1007/s11668-023-01648-1	
Shweta Pandit, Alok Kumar	SEE-MAC: Spectrum and Energy Efficient-Medium Access Control Protocol for Internet of Things.	*International Journal of Communication Systems*	*35* (15), pp. 1-28, DOI: https://doi.org/10.1002/dac.5291	
Vikas Baghel , Salman Raju Talluri	A dual beam adaptive beamforming algorithm with sidelobe suppression.	*Measurement: Sensors*	*24* (100514), pp. 1-8, DOI: https://doi.org/10.1016/j.measen.2022.100514	

- **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Shruti Jain		Emergent Converging Technologies and Biomedical Systems	ISBN : 978-981-99-2271-0	Springer Nature
Shruti Jain		Proceedings of MRCN 2021, Lecture Notes in Networks and Systems	ISBN : 978-981-16-7017-6	Springer: Singapore

Shruti Jain		Paradigms in Computational Intelligence and Data Sciences.	ISBN : 9781032123134	U.K. : CRC, Taylor & Francis Group.
Shruti Jain		Emergent Converging Technologies and Biomedical Systems.(2nd)	ISBN : 978-981-99-2271-0	Springer Nature
Shruti Jain		Mobile Radio Communications and 5G Networks Proceedings of Third MRCN 2022.(3rd)	ISBN : 978-981-19-7981-1	Springer Nature
Shruti Jain, Harsh Sohal	Approximate Arithmetic Circuit for Error-Resilient Application.	Mobile Radio Communications and 5G Networks.	ISBN : 978-981-19-7981-1	Singapore: Springer.
Nafis uddin Khan		Digital Image Enhancement and Reconstruction.	[ISBN : 9780323983709	Singapore India : Elsevier
Nafis Uddin Khan, Vikas Baghel	Brain tumor image segmentation using K-means and fuzzy C-means clustering	*Digital Image Enhancement and Reconstruction*	ISBN : 9780323985789	India: Elsevier Science

- **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Shruti Jain	Neural Network and DEA Model for Evaluation of Operational Efficiency of Co-operative Banks.	Proceedings of the International Conference on Parallel, Distributed and Grid Computing	pp.313-318	25-27 November 2022
Shruti Jain	Comparison of SVM and Naïve Bayes for Sentiment Classification using BERT data.	Proceedings of the International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT), Aligarh, India	pp.1-5	26-27 November 2022

Shruti Jain	Data Envelopment Analysis and Kendell's Coefficient of Concordance for Efficiency Evaluation of State Co-operative Banks.	Proceedings of the International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT), Aligarh, India	pp.1-6	26-27 November 2022
Shruti Jain	Detection of Email Spam using Machine Learning Algorithms: A Comparative Study.	Proceedings of the International Conference on Signal Processing and Communication (ICSC)	pp.349-352	1-3 December 2022
Shruti Jain	Design of Plat Leaf Diseases Detection System employing IoT.	Proceedings of the International Conference on Computer, Electronics and Electrical Engineering and Their Applications (IC2E3)		8-9 June , 2023
Shruti Jain, Rajiv Kumar	Indigenous Development of Water Quality Monitoring System for Urban Areas using IoT & ML.	Proceedings of the International Conference on Computer, Electronics and Electrical Engineering and Their Applications		8-9 June , 2023

- **<u>Guest Speakers/Lectures/ Visits</u>**
  - **Guest Speakers**

Name of Guest Speaker	Designation of speaker	Topic of Lecture	Date
Mr Shivansh Sethi	CEO of AIOTIZE	Drones and Emerging Technologies In Drones	18th March, 2023
Mr. Mukund Mitra	PhD scholar and Prime Minister Research Fellow at Robert Bosch Centre	Robotics & Automation: Industry 4.0	21st Dec , 2022
Dr. Dhruv Chandel	Senior Team lead with the education team at Mathworks, the creators of MATLAB and Simulink software	MATLAB and its Industrial Applications	23rd Aug 2022

- **Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Prof. Shruti Jain	Professor	Efficient Energy Harvester Design From Waste Heat	November 26, 2022	2nd International Conference on Electronic Information Engineering and Computer Communication, Xian, China
Prof. Shruti Jain	Professor	Recent trends in VLSI applications in signal processing	November 02-03, 2022	University Institute of Engineering and Technology (UIET) Kurukshetra, India.
Prof. Shruti Jain	Professor	Energy Harvesting Systems	December 01-02, 2022.	J.C.Bose University of Science & Technology, YMCA, India
Prof. Shruti Jain	Professor	Idea to Product : A Research Pathway to Students	Dec 17, 2022	IGDTUW
Dr. Sunil Dutt Sharma	Associate Professor	Computational Genomics & Proteomics	July 24-30, 2022	Delivered a lecture in a DST/SERB-funded High-End workshop (Karyashala: under the Accelerated Vigyan Scheme of DST) on "Computational Genomics & Proteomics" during 24-30 July 2022 at IIITDM, Jabalpur (M.P.).
Dr. Nishant Jain	Assistant Professor	Machine Learning Applications in Biomedical signal and image processing	Dec 13, 2022	Delivered an expert lecture in AICTE-ATAL FDP on "Machine Learning Applications to Optimization Based Control". Title of a lecture was "Machine Learning Applications in Biomedical signal and image processing"

Dr. Nishant Jain	Assistant Professor	Machine Learning: Concepts and Applications	16th March 2023	Delivered a Lecture on “CNN Models for the classification of Images” in One-Week Online Faculty Development Programme on “Machine Learning: Concepts and Applications”, organized by the Department of Computer Science & IT, Kathua Campus, University of Jammu, J&K (India), scheduled from March 14, 2023 – March 20, 2023
Dr. Nishant Jain	Assistant Professor	Workshop on Python	5-10 June 2023	6 Days Workshop on Python organized by UIT, Himachal Pradesh University, Shimla,
Prof. Shruti Jain		Efficient Energy Harvester Design From Waste Heat	November 26, 2022	2nd International Conference on Electronic Information Engineering and Computer Communication, Xian, China

- **Composition of Various Bodies**

  - **Board of Studies (BOS)**

S No	Name	Designation	Institution
1.	Prof Rajiv Kumar	HOD, Dept of ECE (Chairperson)	JUIT
2.	Prof AK Gupta	Dean Academics and Research	JUIT
3.	Prof Rakesh Kumar Bajaj	HOD Mathematics	JUIT
4.	Prof P.B Barman	HOD PMS	JUIT
5.	Prof. Vivek Kumar Sehgal	HOD CSE	JUIT
6.	Prof. Ashish Kumar	HOD CE	JUIT
7.	Prof Sudhir Kumar	HOD BT/BI	JUIT
8.	Dr Amit Srivastava	HOD HSS	JUIT
9.	Prof (Dr) Debashish Ghosh	HOD ECE	IIT Roorkee
10.	Prof (Dr) CC Tripathi	Prof. & HOD, ECE	University Institute of Engineering & Technology Kurukshetra University, Kurukshetra
11.	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
12.	Prof Shruti Jain	Professor and Associate Dean, Dept. of ECE	JUIT
13.	Dr. Salman Raju Talluri	Asst Professor, Dept of ECE	JUIT
14.	Dr. Vikas Baghel	Asst Professor, Dept of ECE	JUIT
15.	Dr. Shweta Pandit	Asst Professor, Dept of ECE	JUIT
16.	Dr. Sunil Datt Sharma	Associate Professor, Dept of ECE	JUIT

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING & INFORMATION TECHNOLOGY

- **Department Vision and Mission**

  - **Vision:**

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

  - **Mission:**

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

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

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

- **Faculty Details**

  All faculty, their qualification and specialization as Appendix B

Name	Qualification	Specialization
Prof.Dr. Vivek Sehgal	PhD	Embedded Systems, Advanced Computer Architecture
Dr Pradeep Kumar Gupta	PhD, Post-Doctorate	Internet-of-Things, Sustainable Computing
Dr Pardeep Kumar	PhD	Computational and Machine Intelligence
Dr Rajni Mohana	PhD	Software engineering, Sentiment analysis , Health informatics
Dr Ravindara Bhatt	PhD	Sensor Networks, Deployment modeling, communication and energy efficient algorithms.
Dr Yugal Kumar	PhD	meta heuristic algorithms, swarm intelligence, pattern recognition
Dr Aman Sharma	PhD	Machine learning, bioinformatics, artificial intelligence, deep learning and data analytics
Dr Amit Kumar	PhD	Software Effort Estimation, Defect Prediction
Dr Amol Vasudeva	PhD	Various attacks in MANETs, VANETs and Sensor Networks and their detection
Dr. Deepak Gupta	PhD	Big Data Analytics, Cyber Security, Machine/Deep Learning, and Programming Languages
Dr Ekta Gandotra	PhD	Malware Threat Profiling, Cyber Threat Intelligence, Machine Learning

Dr Hari Singh	PhD	Distributed and Parallel Computing, Grid Computing
Dr Himanshu Jindal	PhD	Wireless Sensor Networks, Efficient Data Transmission, Digital Image Processing, Internet of Things
Dr Jagpreet Sidhu	PhD	Distributed computing, Grid Computing, Cloud Computing
Dr Kapil Sharma	PhD	Data Center Network, Software defined network
Dr Monika Bharti	PhD	Cloud computing, Networking, and Internet-of-Things
Dr Mrityinjay Singh	PhD	Database system, Dataspace System and PAY-AS-YOU-GO data Integration
Dr Rajinder Sandhu	PhD, Post Doctorate	Cloud computing, fog computing, machine learning
Dr Rakesh Kanji	PhD	Personalized medicine, Natural language processing
Dr Ruchi Verma	PhD	Information systems, social networks
Dr Shubham Goel	PhD	Machine Learning, Pattern Recognition and Data Mining
Dr. Vipul Sharma	PhD	Computer Vision, Deep learning, Steganography & Pattern Recognition.
Dr. Pankaj Dhiman	PhD	Cryptography, Network Security, Employing secure communication techniques in IoT and Cloud Computing
Dr. Kushal Kanwar	PhD	Complex Networks, Artificial Intelligence, Machine Learning, Modelling & Simulation, and Quantum Computation
Dr. Diksha Hooda	PhD	
Dr. Nancy Singla	PhD	Image processing, Biometrics and forensics, Information Security
Dr. Simran Setia	PhD	Human Computer Interaction, Collective Intelligence, Social Computing, and E-learning
Dr. Abhilasha Sharma	PhD	Wireless Networks, Vehicular Ad Hoc Networks, Fuzzy Logic Systems, Software-Defined Networks, and Image Watermarking
Dr. Sahil Sharma	PhD	
Dr. Nishant Sharma	PhD	Wireless Sensor Network, Internet of Things and Vehicular Networks
Ms. Aditi	PhD (Pursuing)	
Mr Arvind Kumar	PhD (Pursuing)	Internet of Things, Computer Networks, Algorithms
Mr Surjeet Singh	PhD (Pursuing)	Computer Networks, Mobile Computing
Mr Praveen Modi	PhD (Pursuing)	Data Mining with Statistical Analysis
Mr Prateek Thakral	M.Tech.	Graph theory, discrete mathematics

- **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	20B1WCI531
2	Data Science and Visualization Lab	20B1WCI571
3	Big Data using Hadoop	19B1WCI531
4	Big Data using Hadoop Lab	19B1WCI571
5	Image Analysis and Pattern Recognition	19B1WCI532
6	Image Analysis and Pattern Recognition Lab	19B1WCI572
7	Cloud Computing: Concepts, Technology & Architecture	20B1WCI532
8	Cloud Computing: Concepts, Technology & Architecture Lab	20B1WCI572
9	Human-Computer Interaction	19B1WCI533
10	Human-Computer Interaction Lab	19B1WCI573
11	Social Media	19B1WCI534
12	Computer Vision	18B1WCI840
13	Introduction to Deep Learning	19B1WCI738
14	Ethics and Information Technology	19B1WCI831
15	Social and Information Network Analysis	18B1WCI832
16	Probabilistic Graphical Models	19B1WCI832
17	Information Modelling	19B1WCI833
18	Information Visualization	19B1WCI834
19	Cloud Computing Security	19B1WCI835
20	Knowledge-Based AI: Cognitive Systems	19B1WCI836
21	Game Development and Design	19B1WCI732
22	Game Development Lab	9B1WCI772
23	Computational Data Analysis	19B1WCI731
24	Computational Data Analysis lab	19B1WCI771

- **PhD Program**

  The award of the PhD 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 Datamining.

- **Lab Facilities**

New Labs

Lab No.	Lab Name
NIL	NIL

Equipments

Lab No.	Equipment Name
CL3	2 Nos. Logitech Web Cam 2 Nos. Headphones 61 Nos. Desktop with Processor intel® Core™ i5-6500 CPU @3.20GHz 3.20 GHz RAM 8GB 64 bit OS
CL4	1 Nos. Logitech Web Cam 1 Nos. Headphone 49 Nos. Processor intel® Core™ i5-6500 CPU @3.20GHz 3.20 GHz RAM 8GB 64 bit OS
CL5	Webcam- 02 no. Headphone- 02 no. 62 Nos. Desktop with Processor Intel(R) Core(TM) i3 @ 2.90GHzRAM 2.00 GB, HDD - 250 GB OS - Windows 7 Professional
CL6	Webcam- 01 no. Headphone- 01 no. 49 Nos. Processor Intel(R) Core(TM) i5 @6500 3.00GHz RAM 8.00 GB, HDD - 1 TB OS - Windows 10 Pro
CL7	Head Phone (Qty 1), Camera(Qty 1) 43 Nos. Desktop with Processor P-4 (31),Core 2 Duo (03), I3-(09)
CL8	Head Phone (Qty 1), Camera(Qty 1) 71 Nos. Desktop with Processor I3- (70) , Intel Xeon (01)
CL9	Webcam- 02 no. Headsets- 01 no. 60 Nos. Desktop with Processor intel® Core™ i5-6500 CPU @3.20GHz 3.20 GHz RAM 8GB 64 bit OS
CL10	Head Phone (Qty 1), Camera(Qty 1) 78 Nos. Desktop with Intel(R) Core i5 7400 cpu @ 3.00 GHZ,3.00 GHz 64-bit, 1 TB Hard disk, 8GB RAM (65), 16 GB RAM (13)
CL11	Head Phone (Qty 1), Camera(Qty 1) 30 Nos. Nos. Desktop with Intel(R) Core i5 7400 cpu @ 3.00 GHZ,3.00 GHz 64-bit, 1 TB Hard disk, 8GB RAM
CL12	Tablet writing Pad- 1Nos Webcam- 01 no. Headsets- 01 no. Creative Speaker A235- 01 Nos. 12 Nos. Desktop with Core i5 5 7400 cpu @ 3.00 GHZ,3.00 GHz 64-bit, 1TB Hard disk, 8GB RAM

- **Lab Staff with qualification**

S. No.	Name	Qualification	Designation
1.	Sh Shiv Kumar Gupta	Pre PhD Course (CS), MPhil. (CS), MCA, MSc(Mathematics)	Sr. Lab Engineer
2.	Sh Ashok Kishtwal	MTech (CSE)	Sr. Lab Engineer
3.	Sh Rohit	MPhil(CS), MCA, MSc(IT), PGDCA, PGDBI, GNIIT	Lab Engineer
4.	Sh Vijay Kumar	MCA, A LEVEL, APGDIT	Sr. Lab Technician
5.	Sh Hardeep Singh	Diploma in Computer Engg, B.com, MS-CIT,MCA Pursuing	Sr. Lab Technician
6.	Sh Mohan Sharma (Associated with ECE Dept)	BCA, Diploma in H/N,CCNA	Lab Technician
7.	ShRanvijai Singh	MA, ADCA,PGDCA	Lab Technician
8.	Sh Ravi Raina	3 Years Diploma in Computer, BCA, MCSE and Network+: Concepts and Application Complete	Lab Assistant
9.	Sh Rajesh Kumar Sahu (Associated with Civil Dept)	3 Years Diploma in Computer Science and Engg., BCA	Lab Assistant
10.	Sh Vineet Paliwal	Diploma In Computer H/W and Networking, BCom	Lab Assistant
11.	Sh Arun Kumar Guleria	BTech CSE, 3-Years Diploma in Computer Engg	Jr. Lab Assistant
12.	Sh. Pramod Kumar	B. Tech.	Sr. Lab Engineer
13.	Sh. Deep Narayan Tripathi	Three Year Diploma in ECE, COPA (Computer Operator and Programming Assistant)	Lab Assistant

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

S.No.	Project Title	Principal Investigator (PI)	Co-PI	Sponsored Agency	Amount
1.	Development and Promotion of Crop Surveillance System for forecasting Leaf Diseases and Protection against Wild Animals using Artificial Intelligence and IoT	Dr. Pradeep Kumar Gupta	Dr. Ravindara Bhatt	HIMCOSTE	6,20,000
2.	S&T Communication Reseach for Community Knowledge Sharing Informatics and Risk Communication based on Block Chain Technology	Dr. Ruchi Verma	Dr. Pradeep Kumar Gupta	NCSTC	34,87,011
3.	IT based Intervention to enhance access to quality care at doorstep to improve adhrerence of care and reduce adverse events in patients with CVD in model district Shimla	Dr. Ruchi Verma	Dr. P. C Negi	HIMCOSTE	5,70,000
4.	Automated Attendance Monitoring System	Dr. Ekta Gandotra	Dr. Nancy Singla Dr. Deepak Gupta	DRID, JIIT NOIDA	40,000

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

Seventh International Conference on Parallel, Distributed and Grid Computing (PDGC-2022)

Summary of Conference: The Seventh IEEE International Conference on Parallel, Distributed and Grid Computing 2022 has been organized by department of Computer Science and Engineering and Information Technology at Jaypee University of Information Technology, Waknaghat, Solan, Himachal Pradesh during November 25-27, 2022.The Vice-Chancellor, Prof.Rajendra Kumar Sharma;Dean Academics & Research, Prof. Ashok Kumar Gupta; Principal General Chair, Dr. Vivek Kumar Sehgal;Conference General Chair, Dr. Hari Singh;Conference Chair, Dr. RavindaraBhatt;Technical Program Committee Chair, Dr. Pradeep Kumar Gupta; Conference Co-Chair, Dr. RajniMohana; TPC Co-Chairs, Dr. Himanshu Jindal and Mr. PrateekThakral; Technical support team, Mr. Ravi Raina, Mr. Ashok Kistwal, Mr. Rohit Sharma; Faculty Coordinators, Lab staff Coordinators and IEEE Student Chapter students put their experience and efforts to make the organization of PDGC-2022 Conference a huge success.

The conference provided a platform to researchers, academicians and students of six countries and the premier institutes and universities in India to exchange ideas through five keynote talks and 136 paper presentations. Five keynote talks were presented in the Conference by Prof. RajkumarBuyya, Melbourne University, Australia; Prof. Martin Berzins, University of Utah, Utah, USA; Prof. Jitendra Chhabra, NIT Kurukshetra; Prof. Jinzhu Gao, ProfessorStockton, USA and Prof. Seema Bawa, Thapar University, Patiala.The Conference witnessed presentation of 136 accepted and registered papers with an acceptance ratio of 28%in five parallel sessions in three days.

- **List of Attendees**

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Dr.AV.KARTHICK	1570843809	Artificial Intelligence: Trends and Challenges
Softya Sebastian	1570844073	Augmenting Scalability in ARACNe and CLR for Inferring Large Gene Regulatory Networks from Expression Profiles
Girish Biswas	1570845851	An Efficient Reduced-Memory GPU-Based Dynamic Programming Strategy for Bounded Knapsack Problems
Parul Chhabra	1570849371	Multiple Feature Based Classification for the Prediction of Brain Tumor
Mandeep Kumar	1570856491	High Performance Scalable Recursive Block Matrix Inverse for Multicore Architectures
Shivani Gaba	1570814566	An Analysis of Internet of Things (IoT) Malwares and Detection Based on Static and Dynamic Techniques
Zuber Khan	1570815389	A Survey Paper on Computer Aided Detection of Tuberculosis
Vandana Devi	1570826565	Sentiment Analysis Approaches, Types, Challenges, and Applications: An Exploratory Analysis
Vandana Devi	1570833054	Enigmas in Emotion Detection Techniques Tools: Challenges and Concerns
Tridiv Swain	1570837204	Machine Learning Based Data Classification Methods in Cloud Security Using CloudLightining Framework
Richa Verma	1570842608	Security Issues and Challenges of Big Data Analytics

Vanshit Gupta	1570845748	Amalgamation of Cloud Computing with Big Data
E.Murali	1570847616	A Survey on Organic Agro Data Towards Agriculture Using Data Mining
Ankit Agarwal	1570853400	Detection of DOS Attack Using Pearson Correlation Coefficients with Bi-LSTM and LZW Compression
Bhavana	1570853457	DeNet_SVM: Product Based Recommendation System Using Deep Learning and Web Usage Mining
Navdeep Sharma	1570869303	An Optimal Architecture for Feature Optimization for Skin Lesion Detection
Ruchi Verma	1570869367	Analyzing the Machine Learning Models for Seizure Detection Using EEG Frequencies
Sorabh Gupta	1570853956	Multi-Modality Recommender Systems: A Review
Monika sharma	1570853961	Security Issues in IoT: A Review
VIJENDRA SINGH	1570858786	Customer Insights Analysis Using Deep Learning
Mamta	1570843143	A Novel Conceptual Model of Trust for Online Matchmaking Portals
PRAVEEN MODI	1570846816	Augmentation Based Diabetic Retinopathy System Using Fundus Images
Rajdeep Biswas	1570847055	A Comparative Study on Improving Word Embeddings Beyond Word2Vec and GloVe
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Bhawnesh Kumar	1570849698	User Story Splitting in Agile Software Development Using Machine Learning Approach
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Surjeet Singh	1570852575	Image Forgery Detection Model Using CNN Architecture with SVM Classifier
Shiv Ashish Dhondiyal	1570853102	Diagnosis, Treatment and Containment of Epilepsy Disease
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Aarti Sharma	1570850012	Analysis of Offloading Computation in Mobile Edge Computing (MEC): A Survey
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Sakshi Indolia	1570850554	Integration of Transfer Learning and Self-Attention for Spontaneous Micro-Expression Recognition
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Ashutosh Sharma	1570866194	Hand Gesture to Character Recognition using Convolutional Neural Network
Righa Tandon	1570866566	RVTN: Recommender System for Vehicle Routing in Transportation Network
Amit Chauhan	1570867048	Implementing LDA Topic Modelling Technique to Study User Reviews in Tourism

Meenu Gupta	1570834043	Analysis of Apple Plant Leaf Diseases Detection and Classification: A Review
Shailza Sharma	1570841141	Engagement Measurement of a Learner During e-Learning: A Deep Learning Architecture
Mitu Sehgal	1570846237	Comparative Study on Energy-Efficiency for Wireless Body Area Network usingMachine Learning Approach
Kapil Mehta	1570846959	Securing Cyber Infrastructure of IoT-Based Networks Using AI and ML
Pradip Kumar Barik	1570848809	UAV-Assisted Surveillance Using Machine Learning
Sakshi Goel	1570848859	Gold and Silver Price Prediction Using Hybrid Machine Learning Models
Vijaita Kashyap	1570849841	Nature Inspired Meta-Heuristic Algorithms Based Load Balancing in Fog Computing Environment
Ankit Bansal	1570850024	Applying Neural Imaging and ML to OCD Severity Prediction
Sanjeev Kumar	1570850528	Comparative Analysis of Security Techniques in Internet of Things
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Dr. Amit Chaurasia	1570836810	Implementation of Energy Efficient Blockchain Using RUST
Tejaswi Sapala	1570839443	A Survey on VANET Attacks and Its Security Mechanisms
Doddi Bhagya Sri	1570840880	An Analysis of Deep Learning Models for Detection of COVID-19 Diseases
Meenu Khurana	1570844457	Exploring 5G for Vehicular Networks
Gurtej Kaur	1570844475	Clustering Techniques in Vehicular Adhoc Networks-A Survey
Ritu Aggarwal	1570849086	MLPPCA: Heart Disease Detection Using Machine Learning

Palakpreetkaur	1570849986	Machine Transliteration for Indian Languages: Survey
Parul	1570850128	Machine Translation System for Indian Language: Survey
Amrin Maria Khan Adawadkar	1570850499	EAARL: Enhanced Adaptive Authentication Based on Reinforcement Learning
Dr. Vandana MohindruSood	1570853059	Deep Learning Algorithms for Detecting Alzheimer's Disease Using WBSN
Damanpreet Kaur	1570834804	Credit Card Fraud Detection Using Machine Learning, Deep Learning and Ensemble of the Both
Harendra Singh Negi	1570841774	Machine Learning Enabled Smart Farming, the Demand of the Time
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Muhammed Ashiq Abdul Khader	1570847507	IoT Based Smart Crop Recommendation Using Macro Nutrient Analysis of Soil
Dr Biswajit R Bhowmik	1570855843	IoT-Enabled Driver Drowsiness Detection Using Machine Learning
RajanSaluja	1570847682	Analysis of Existing ML Techniques for Students Success Prediction
KanavSandhir	1570851223	Privacy Preserving Ensemble Learning Classification Model for Mental Healthcare
Devika Rani Roy	1570847964	Big Data Analytics Based Recommender System for Tele-Communication Industry
Ankur Gupta	1570847986	Suspicious Activity Detection and Classification in IoT Environment Using Machine Learning Approach
Ankur Gupta	1570847989	Accuracy Enhancement in Machine Learning During Blockchain Based Transaction Classification
Amogh Shukla	1570847995	Role of Hybrid Optimization in Improving Performance of Sentiment Classification System
Munish Bhardwaj	1570848048	Improved Road Crack Detection Using Histogram Equalization Based Fuzzy-C Means Technique
Amogh Shukla	1570848066	Molecular Dynamics Simulation for Serial and Parallel Computation Using Leaf Frog Algorithm
Perumandla Harsha	1570848202	Machine Learning Based Comparative Analysis and Prediction for Sustainable Additive Manufacturing

Aamir ShafiBanday	1570848204	Regression and Classification-Based Model Predictive Maintenance of Aircrafts Using Machine Learning
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Suman De	1570847054	Evolution of Analytics in Product Management for Data-Driven Feature Prioritization
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Rahul Makade	1570843609	Development of the Empirical Model and Optimization of Parameters for Prediction of Condenser Vacuum
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Bhavuk Kalra	1570850180	Generalized Agent for Solving Higher Board States of Tic Tac Toe Using Reinforcement Learning
Umang Rastogi	1570851099	Feature Extraction in Arabic Sign Language Using a Hand and Wrist Localization Techniques
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Praveen Modi	1570850833	Grading of Diabetic Retinopathy Using CNN-MLP Based Prediction Model
Richa Choudhary	1570851711	Automatic Speaker Verification System Substantiating Children's Dialects in School Settings
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Kumari Monika	1570852608	A Comparison of Various Machine Learning Algorithms for Automated Fever Detection

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1570850499	EAARL: Enhanced Adaptive Authentication Based on Reinforcement Learning	Amrin Maria Khan Adawadkar; Nilima Kulkarni
1570853059	Deep Learning Algorithms for Detecting Alzheimer's Disease Using WBSN	Vandana Mohindru; Hitakshi; Moushumi Das; Sushil Kumar Narang
1570834804	Credit Card Fraud Detection Using Machine Learning, Deep Learning and Ensemble of the Both	Damanpreet Kaur; Anjali Saini; Deepti Gupta
1570841774	Machine Learning Enabled Smart Farming: The Demand of the Time	Harendra Singh Negi; Sushil Chandra Dimri

1570847273	GeoRSA: Geospatial Recommendation System Using Sentimental Analysis	FitsumMesfinDejene; Abhaya Kumar Sahoo; Rabindra Kumar Barik; Bhabani Shankar Prasad Mishra
1570847507	IoT Based Smart Crop Recommendation Using Macro Nutrient Analysis of Soil	Saranya Kavileswarapu; Muhammed Ashiq Abdul Khader; Suhail Ahmed; R. Radha
1570855843	IoT-Enabled Driver Drowsiness Detection Using Machine Learning	MrinmoyGuria; Biswajit Bhowmik
1570847682	Analysis of Existing ML Techniques for Students Success Prediction	RajanSaluja; Munishwar Rai
1570851223	Privacy Preserving Ensemble Learning Classification Model for Mental Healthcare	Nisha Chaudhary; Vidushi Gupta; KanavSandhir; Rishabh Gupta; Sakshi Chhabra; Ashutosh Singh
1570847964	Big Data Analytics Based Recommender System for Tele-Communication Industry	Devikarani Roy; Sitesh Kumar Sinha; S. Veenadhari
1570847986	Suspicious Activity Detection and Classification in IoT Environment Using Machine Learning Approach	Veera Talukdar; Dharmesh Dhabliya; Bhupendra Kumar; Suryansh Bhaskar Talukdar; Shahanawaj Ahamad; Ankur Gupta
1570847989	Accuracy Enhancement in Machine Learning During Blockchain Based Transaction Classification	Vipin Jain; Shehab Mohamed Beram; Veera Talukdar; Trupti Patil; Dharmesh Dhabliya; Ankur Gupta
1570847995	Role of Hybrid Optimization in Improving Performance of Sentiment Classification System	Amogh Shukla; Vinit Juneja; Sonakshi Singh; Utpal Prajapati; Ankur Gupta; Dharmesh Dhabliya
1570848048	Improved Road Crack Detection Using Histogram Equalization Based Fuzzy-C Means Technique	Munish Bhardwaj; Nafis Uddin Khan; Vikas Baghel
1570848066	Molecular Dynamics Simulation for Serial and Parallel Computation Using Leaf Frog Algorithm	Debangan Mandal; Amogh Shukla; Aditya Ghosh; Ankur Gupta; Dharmesh Dhabliya
1570848202	Machine Learning Based Comparative Analysis and Prediction for Sustainable Additive Manufacturing	PerumandlaSri Harsha; Jasgurpreet Singh Chohan; Harjot Singh Gill
1570848204	Regression and Classification-Based Model Predictive Maintenance of Aircrafts Using Machine Learning	Aamir ShafiBanday; Jasgurpreet Singh Chohan; Raman Kumar
1570845829	An Empirical Analysis of Cyber Crimes, Their Preventive Measures, and Laws in India	Nitisha Aggarwal; Mitu Sehgal; Ashima Arya
1570847500	D-KAP: A Deep Learning-Based Kashmiri Apple Plant Disease Prediction Framework	Himanshu Sharma; DevanandPadha; Nahida Bashir
1570848314	A Hybrid Threat Assessment Model for Security of Cyber Physical Systems	Zakir Ahmad Sheikh; Yashwant Singh
1570852179	WoS Bibliometric-Based Review on Serverless Computing Model	Ajay Kumar; Rohan Gupta; Rahul Bhandari

1570856656	A Novel and Secure Framework to Detect Unauthorized Access to an Optical Fog-Cloud Computing Network	Kiran Deep Singh; Prabhdeep Singh; Vikas Tripathi; Vikas Khullar
1570850540	Enabling Cost-Effective Inspection and Failure Detection of Spare Parts in Industry 4.0	Suman De
1570853092	Cryptocurrency Stock Prediction Using Deep Learning	Monika Bharti; Jyoti Sarpal; Tanisha Ranta
1570847054	Evolution of Analytics in Product Management for Data-Driven Feature Prioritization	Suman De; Ivy Baroi
1570852848	Physiological Parameter Analysis for Type-1 Diabetes and ML Approach for Insulin Prediction	Sutirtha Roy; GarvitaBhateja; Geetanshi Gulati; Sahaj Saxena
1570852754	Machine Learning-Based Crop Prediction: A Way Towards Smart Farming	Sai Jeevan Puchakayala; Sai Sreenidhi Harsha Kanaparthi; Prakash Kalari; Lekshmi R Chandran; Angel T S
1570853295	Analysis of Various Smart Healthcare Technologies	Rashi Rastogi; Mamta Bansal
1570853308	Dynamic Tracing of DoS Attack over Software-Defined Networks Using Machine Learning	Amit Chopra; Dinesh Chander Verma
1570853360	Traffic Monitoring and Management System for Congestion Control Using IoT and AI	Anamika Larhgotra; Rakesh Kumar; Meenu Gupta
1570853421	IoT-Based Smart Water Tank Supply Management System Using MQTT Protocol	Ancy Jenifer J; GetziJebaLeelipushpamPaulraj; Immanuel John Jebadurai; JebaveerasinghJebadurai
1570848593	A Machine Learning Model for Predicting Employees Retention: An Initiative Towards HR Through Machine	Bobbinpreet Kaur; Ayush Dogra
1570849315	Solar Powered Garden Monitoring System	Vaishali B. Niranjane; Ashish Bhagat; Krushil.M.Punwatkar; PornimaNiranjane
1570851289	DL Based System for On-Board Image Classification in Real Time, Applied to Disaster Mitigation	Amogh Shukla; ShubhAlmal; Ankur Gupta; Rinisha Jain; Rishabh Mishra; Dharmesh Dhabliya
1570853545	Application of Machine Learning in the Classification of Data over Social Media Platform	Harinder Singh; Shahanawaj Ahamad; G. Taviti Naidu; VenkataramanaArangi; Ashok Koujalagi; Dharmesh Dhabliya
1570855788	Thingspeak-Based Environmental Monitoring System Using IoT	Nidhi Sindhwani; Rohit Anand; Rashmi Vashisth; Sudhir Chauhan; Veera Talukdar; Dharmesh Dhabliya
1570869402	Comparison of Classification Algorithms for Alzheimer's Disease Prediction	Harshit Saxena, Divyansh Joshi, Hari Singh; Rohit Anand

1570856060	Investigating Scope of Energy Efficient Routing in Adhoc Network	Vivek Veeraiah; Rohit Anand; Krishna Nand Mishra; Dharmesh Dhabliya; Supriya Sanjay Ajagekar; Reshma Kanse
1570839712	A Review on Sentiment Analysis of Twitter Data for Diabetes Classification and Prediction	Amudala Meghana Shree Akhila; Chitluri Gayathri; B. Srinivas; B.S. Kiruthika Devi
1570841297	Study on IOT based Smart Disease Detection Model on Machine Learning Techniques for Healthcare Application	Priyanka Dhaka; Ruchi Sehrawat
1570843609	Development of the Empirical Model and Optimization of Parameters for Prediction of Condenser Vacuum pressure in Thermal Power Plant	Rahul Makade; Siddharth Chakrabarti; Basharat Jamil; R. D. Katre; R. D. Patidar
1570845583	FHSINet: A Hybrid Model for the Analysis of Hyperspectral Images	Dhirendra Prasad Yadav; Deepak Kumar; Anand Singh Jalal
1570850180	Generalized Agent for Solving Higher Board States of Tic Tac Toe Using Reinforcement Learning	Bhavuk Kalra
1570851099	Feature Extraction in Arabic Sign Language Using a Hand and Wrist Localization Techniques	Umang Rastogi; Sushil Kumar; Gaurav Rawat
1570845233	Cuckoo Search Optimized Histogram Equalization for Low Contrast Image Enhancement	Niveditta Thakur; Nafis Uddin Khan; Sunil Datt Sharma
1570846923	Non-Linear Behavior of CNN Model Interpretation Using Saliency Map	Sudhanshu Saurabh; P.K. Gupta
1570850833	CNN-MLP Based Prediction Model for Grading of Diabetic Retinopathy	Praveen Modi; Yugal Kumar
1570851711	Automatic Speaker Verification System Substantiating Children's Dialects in School Settings	Virender Kadyan; Puneet Bawa; Richa Choudhary; Bhushan Dua
1570852603	Localization and Semantic Segmentation of Polyp in an Effort of Early Diagnosis of Colorectal Cancer from Wireless Capsule Endoscopy Images	Jothiraj S; JayanthyAnavaiKandaswami
1570852608	A Comparison of Various Machine Learning Algorithms for Automated Fever Detection	Kumari Monika; Himanshu Jindal

- **Link of proceedings**

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IEEE
2022 SEVENTH INTERNATIONAL CONFERENCE ON
PARALLEL, DISTRIBUTED AND GRID COMPUTING (PDGC)
IEEE CONFERENCE RECORD NUMBER #56933

- **Keynote details with invited speakers**

Keynote Speaker #1: Prof. RajkumarBuyya, The University of Melbourne, Australia

Biography: Dr.RajkumarBuyya is a Redmond Barry Distinguished Professor and Director of the Cloud Computing and Distributed Systems (CLOUDS) Laboratory at the University of Melbourne, Australia. He is also serving as the founding CEO of Manjrasoft, a spin-off company of the University, commercializing its innovations in Cloud Computing. He has authored over 850 publications and seven textbooks including "Mastering Cloud Computing" published by McGraw Hill, China Machine Press, and Morgan Kaufmann for Indian, Chinese and international markets respectively. Dr.Buyya research interests includesoftware technologies for grid and cloud computing.

Title: Neoteric Frontiers in Cloud, Edge, and Quantum Computing

Abstract: This keynote presentation will cover (a) 21st century vision of computing and identifies various IT paradigms promising to deliver the vision of computing utilities; (b) innovative architecturefor creating elastic Clouds integrating edge resources and managed Clouds, (c) Aneka 5G, a Cloud Application Platform, for rapid development of Cloud/Big Data applications and their deployment on private/public Clouds with resource provisioning driven by SLAs, (d) a novel FogBus software framework with Blockchain-based data-integrity management for facilitating end-to-end IoT-Fog/Edge-Cloud integration for execution of sensitive IoT applications, (e) experimental results on deploying Cloud and Big Data/IoT applications in engineering, and health care (e.g., COVID-19), deep learning/Artificial intelligence (AI), satellite image processing, and natural language processing (mining COVID-19 research literature for new insights)on elastic Clouds, (f) QFaaS: A Serverless Function-as-a-Service Framework for Quantum Computing, and (g) directions for delivering our 21st century vision along with pathways for future research in Cloud and Edge/Fog computing.

Keynote Speaker #2: Prof. (Dr.) Martin Berzins, The University of Utah, Public University in Salt Lake City, Utah, USA

Biography: Martin Berzins is a multi-disciplinary Computational Science researcher whose research cuts across applied mathematics, computer science, and engineering and is focused on developing mathematical methods and computer software for solving challenging science and engineering problems from various applications on extreme-scale computers. He is a Professor of Computer Science at the School of Computing and the Scientific Computing Imaging Institute, an Adjunct Professor of Mathematics at the University of Utah, and a Visiting Professor at the University of Leeds. The focus of his research in Utah has been related totheUintah software and its parallel computing, algorithmic, andapplications aspects. In particular, hehas focused on achieving parallel performance at extreme scales.

Title: Porting Uintah to Heterogeneous Systems at Exasccale

Abstract: The talk addresses the challenge of porting large complex codesto heterogeneous exsacale Computers.The Uintah Computational Framework is being prepared to makeportable use of forthcoming exascale systems, initially the DOEAurora system through the Aurora Early Science Program. Thispaper describes the evolution of Uintah to be ready for such architectures. A key part of this preparation has been the adoptionof the Kokkos performance portability layer in Uintah. The sheersize of the Uintah codebase has made it imperative to have a representative benchmark. The design of this benchmark and the use ofKokkos within it is discussed.Results are shown for two benchmarks executingworkloads representative of typical Uintah applications. These results demonstrate single-source portability across the DOE Summitand NSF Frontera systems with good strong-scaling characteristics.The challenge of extending this approach to anticipated exascalesystems is also considered.

Keynote Speaker #3: Prof. (Dr.) Jitender Kumar Chhabra, Department of Computer Engineering

NIT Kurukshetra, Haryana, India

Biography: Professor (Dr.) Jitender Kumar Chhabra is associated with Department of Computer Engineering at NIT Kurukshetra, Haryana, India. He has teaching along with researchexperience of approximately 28 years. Having more than 140 publications in total including 46 SCI papers, he is the reviewer for many journals such as IEEE Transactions, ACM Transactions, Elsevier, Springer, Wiley, Taylor & Francis, Inderscience etc. His completed research project includes"Design and Development of a Novel Approach (non-cryptographic) for Secure Storage on External Media and Lossless Retrieval". His research interest includes Soft Computing, Software Engineering, Software Metrics, Object-oriented systems, Software development, Computational Intelligence, Soft Computing, and Clustering. He is the founder of HP-Chair by Hewelett Packard (HP) for collaborative work at NIT Kurukshetra.

Title: Developing Intelligent Systems using Machine Learning and Optimization

Abstract: The 21st century has seen an unprecedented growth of Information and Communication Technologies (ICT). Computing has become a core component now for all discipline of engineering. Almost all activities of the human being and society have now an direct or indirect dependency on computing due to some form of automation. In coming years, almost all automations will be augmented by intelligence, which is being enable through various means including Machine Learning (ML) and Optimization. In the last decade, Machine Learning has become a reality and has brought a transformation change in the area of ICT as well as other areas. A strong backbone of parallel and distributed computing at the level of hardware as well as software is must to support all such computationally intensive decisions. So the boundaries of hardware and software are blurred now and world is progressing towards developing intelligent systems comprising of multi-processing hardware, smart parallel/distributed algorithms, IOT devices and sensors and complex software taking intelligent decisions. All such systems internally use lot of structured and unstructured data, ML algorithms, soft computing techniques, and optimization methodologies. So there is a tremendous scope for the researchers to contribute innovatively in developing such intelligent systems.

Keynote Speaker #4: Prof. (Dr.) Jinzhu , School of Engineering and Computer Science, University of the Pacific, Stockton, California, USA

Biography: Dr.Jinzhu Gao received a Ph.D. degree in Computer Science from The Ohio State University in 2004. From June 2004 to August 2008, she worked at the Oak Ridge National Laboratory as a research associate and then the University of Minnesota, Morris, as an Assistant Professor of Computer Science. She joined the University of the Pacific (Pacific) in 2008 and is currently a Professor of Computer Science there. Her main research focus is on intelligent data analytics and innovative computer science education. Over the past sixteen years, Dr. Gao has been working closely with educators, researchers, application scientists and Silicon Valley technology companies to develop online data visual analytics and deep learning platforms to support collaborative science and education, mobile health, IoT data analytics, business operational visibility, and visual predicative analysis for industries. Her work has been published in top journals such as IEEE Transactions on Visualization and Computer Graphics, IEEE Transactions on Computers, and IEEE Computer Graphics and Applications. Dr.Jinzhu Gao research interests includes Data Analysis and Visualization, Parallel and Distributed Computing.

Title: Intelligent Data Analytics.

Abstract: The advance in computing technology allows applications and simulations to produce a tremendous amount of data that should be shared, managed, and analyzed in an effective and timely manner. However, the enormous growth in the size and complexity of data places a big challenge for both domain scientists and data scientists. Developing an integrated, scalable, easily accessible, and intelligent data analytics solution has become a critical research focus in many fields. In this talk, Dr. Gao will highlight some of her work in intelligent data visual analytics. This will include her previous work on scalable data management, analysis, and visualization in distributed environments as well as her ongoing efforts in virtual reality enhanced data analysis, video information analysis for mobile health, finance data analysis, and visual predictive analysis for industries.

Keynote Speaker #5: ,Professor (Dr.) Seema Bawa, Computer Science and Engineering , epartment

Thapar University, Patiala, Punjab, India

Biography: Dr. Seema Bawa, holds M.Tech (Computer Science) degree from IIT Khargpur and Ph.D. from Thapar Institute of Engineering & Technology, Patiala. She is currently Professor of Computer Science & Engineering and Professor InCharge Nava Nalanda Central Library at Thapar Institute of Engineering & Technology, Patiala. She is working in Thapar Institute of Engineering & Technology since 1999. She is Former Dean (Student Affairs) and Former-Head of Computer Sc. &Engg. Department.

She has also been managing the entire network of Thapar Institute of Engineering & Technology Campus since 1999 upto 2010 as Network Manager and Head CISH. Before joining Thapar Institute of Engineering & Technology, she worked in software industry as Project Manager, Project Leader and Sr. Software Engineer for about six years. Her areas of research interests include Parallel, Distributed and Cloud Computing, Big Data Analytics and Machine Learning.

Title: Keynote Title: Paradigm shift in distributed computing.

Abstract: Keynote Abstract: Evolution of distributed computing systems from mainframes to current state has been actually revolutionising. We will see how things started, progressively improved to the current state. The distributed computing systems are mainly about evolution from centralization to decentralisation. Centralised systems gradually but continuously evolved towards decentralization. We used to have centralized system like mainframe in early 1955, MPI, PVM, Harness etc were used then in master~slave mode to create distributed VM environment. The early to mid 1990s mark the emergence of the early metacomputing or grid environments. Cloud computing is all about renting computing services. This idea first came in the 1950s. In making cloud computing what it is today, five technologies played a vital role: distributed systems and its peripherals; virtualization, web 2.0, service orientation, and utility computing. Currently decentralized systems like fog and edge computing, containers etc. are being used to Big IoT data Analytics.

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Dr. Jitendra Chhabra, Professor, National Institute of engineering, Kurukshetra, INDIA
Dr. Seema Bawa, Professor, Thapar University, Patiala, INDIA
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3rd International Conference on Emergent Converging Technologies and Biomedical Systems

(ETBS–2023)May15-17,2023

3rd Emergent Converging Technologies and Biomedical Systems (ETBS 2023) was organized by the Department of Electronics & Communication Engineering and Department of Computer Sciences and Engineering & Information Technology, Jaypee University of Information Technology (JUIT) in collaboration with DST iHub-AWaDH and Indian Institute of Technology Ropar at JUIT from May 15-17, 2023. The conference was sponsored by the Council of Scientific & Industrial Research (CSIR) and the Biomedical Engineering Society of India (BMESI). Jaypee Education System always supports such types of events where academicians, researchers, and industry professionals meet together to discuss the quality and productive research because JUIT Solan has been known for excellence in academics, research, and distinguished faculty since its inception.

We would like to express our special gratitude to our Chief Patron Hon'ble Shri Jay Prakash Gaur ji (Founder Chairman, Jaypee Group) and Hon'ble Pro-chancellor of JUIT Shri Manoj Gaur ji, whogave their blessings to organizing this conference. We extend our sincere gratitude to our Patrons Hon'ble VC JUIT Solan Prof. Rajendra Kumar Sharma ji, Hon'ble Director IIT Ropar Prof. Rajeev Ahuja ji who encouraged us to organize this conference, Conference advisors: Prof Dinesh Kumar ji (RMIT University, Australia), Prof, C.C. Tripathi ji (Director NITTR Bhopal), and Prof. Ashok Kumar Gupta ji (Dean R&D, JUIT Solan), who gave their valuable suggestions to organize this conference, Principal General Chair: Prof. Pushpendra P. Singh Director Awadh Innovation Hub, IIT Ropar, Prof. Vivek Kumar Sehgal, HoD CSE, and Prof. Rajiv Kumar HoD ECE for their continuous support to organize this conference ETBS-23, General Chair: Prof, Sudarshan Iyenger(IIT Ropar), Prof. Sunil Kumar Khah (JUIT Solan), and Prof. Shruti Jain (JUIT Solan) for their continuous and blind support at ground level for conducting the conference ETBS-23, Conference Chair: Dr. Nitin Auluck(CSE IIT Ropar), Dr. Vikas Baghel (ECE JUIT Solan), and Dr. Himanshu Jindal (CSE,JUIT Solan) for their effort with honesty and hard work to organize ETBS- 23, and Finance chairMajor Gen, Rakesh Bassi for managing the financial permissions related to the ETBS-23. Conference secretary: Dr. Nikhil Marriwala, ECE, UIET, Kurukshetra University, Kurukshetra, Dr. Sunil Datt Sharma, ECE, Dr. Pardeep Garg, ECE, and Dr. Nishant Sharma, CSE of Jaypee University of Information Technology, India for their sincere efforts to successful completion of the conference.The aim of the ETBS is to serve researchers, developers, and educators working in the area of signal processing, computing, control, and their applications to present and future work as well as to exchangeresearch ideas. 2023 ETBS invites authors to submit their original and unpublished work that demonstrates current research in all areas of emergent converging technologies, signal/ image processing, computing, and their applications. ETBS 2023 solicits full length original and unpublished papers, based on theoretical and experimental contributions, related, but not limited to the following tracks, are solicited for presentation and publication in the conference: Engineering in Medicine and Biology, Signal Processing and Communication, Emerging Smart Computing Technologies, Internet of Things for emerging Engineering Applications, Next Generation

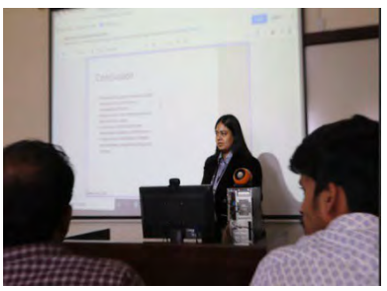
Computational Technologies This conference is one of the premier venues for fostering international scientific and technical exchange across research communities working in multiple domains. The 3rd ETBS 2023 technical program committee put together a program, consisting of 13 technical sessions and 8 invited talks.

We have received over 310 research papers, including international research papers from the countries (Australia, United Kingdom, Jordan, Malaysia, Denmark, South Korea, Bangladesh, Saudi Arabia, Malaysia), National research papers from the states (Tamil Nadu, Telangana, Andhra Pradesh, Bangalore, Karnataka, nearby states, etc.), and also Research papers from top institutes (IITs, NITs, IIITs, Central Universities, & others). Out of 310 received research papers, 57 papers have been accepted and registered for the presentation with an acceptance ratio 18.3%. All accepted and presented research papers will be published in proceedings with Springer in their prestigious book series “Lecture Notes in Electrical Engineering”The conference started with the inauguration ceremony with lamp-lighting and vandana of Goddess Sarawati. We are thankful to our Chief Guest Prof. Rajeev Ahuja, Director IIT Ropar and Guest of Honors: Mr. Bharat Kumar Sharma, Director and GPU advocate NVIDIA AI Tech Centre India, and Dr Narayan Panigrahi, Scientist-'G', Group Head GIS Centre for Artificial Intelligence & Robotics Bangalore for. gracing the inaugural session of ETBS 2023. During the ceremony, our Hon’ble VC Prof Rajendra Kumar Sharma focused on the interdisciplinary research and academic collaborations. Chief Guest Prof. Rajeev Ahuja concentrated on academic and industrial collaborations. Guest of honor Mr. Bharat Kumar Sharma focused to reduce the gap between industry and academia. Another Guest of Honor Dr. Narayan Panigrahi focused on collaborations between academic institute and research laboratories. Dean Academics & Research Prof. Ashok Kumar Gupta also emphasized on interdisciplinary research collaborations.We are also thankful to the speakers Professor Sharath Sriram, Coordinator, Functional Materials and Microsystems Research Group, RMIT University, Melbourne, Australia, Dr. Vishal Sharma, School of Electronics, Electrical Engineering and Computer Science, Queen's University, Belfast, UNITED KINGDOM, Mr. Bharat Kumar Sharma, Director and GPU advocate NVIDIA AI Tech Centre India, Dr Narayan Panigrahi, Scientist-'G', Group Head GIS Centre for Artificial Intelligence & Robotics Bangalore, Prof. Sanjeev Narayan Sharma, Dean Academics, IIITDM, Jabalpur, Madhya Pradesh, India, Prof. Ram Bilas Pachauri, Electrical Engineering Department, IIT Indore, Madhya Pradesh, India, Mr. Ashish P. Kuvelkar, Senior Director (HPC-Tech) C-DAC, Pune, Ms. KamiyaKhatter, Editor - Applied Sciences & Engineering who spared time to share their knowledge, expertise and experience spite of their busy schedules.

The paper presentation session has been divided into 13 sessions and in these sessions, 57 research papers have been presented and their evaluation was done by the session chairs by asking queries about the proposed idea of the presenters. Each author was given 10 minutes for the paper presentation, which was followed by a question and answer session for 5 minutes. The conference was structured to foster discussion between participants. Each theme started with a keynote lecture by an eminent personality in the domain. The glimpses of the sessions are as follows

The three-day Conference ended with a valedictory session. In the valedictory session, the certificates have been distributed to the participants and volunteers by

Prof. Sunil Kumar Khah, Prof. Shruti Jain, and Prof. Rajiv Kumar. The session ended with a vote of thanks to the participants and session chairs for their technical contribution. A vote of thanks also extends to the conference organizing team and student volunteers for their contribution to making this conference successful.






- **CONFERENCES**

  - **Conferences Attended**

Dates	Subject	Venue	Faculty Name	Remarks
26-28 May 2023	International Conference on Secure Cyber Computing and Communication (ICSCCC)	NIT Jalandhar India	DrMrityunjay Singh	Attended
26-28 May 2023	International Conference on Secure Cyber Computing and Communication (ICSCCC)	NIT JalandharIndia	Dr. Amit Kumar	Attended
08-09 April 2023	International Conference on Communication Systems and Network Technologies (CSNT)	Bhopal India	Pradeep Kumar Gupta	Attended
25-27 November, 2022	International Conference on Parallel, Distributed and Grid Computing (PDGC)	Department of CSE & IT, JUIT, Waknaghat, Solan	Ravindara Bhatt	Attended
25-27 November, 2022	International Conference on Parallel, Distributed and Grid Computing (PDGC)	Department of CSE & IT, JUIT, Waknaghat, Solan	Ruchi Verma	Attended
25-27 November, 2022	International Conference on Parallel, Distributed and Grid Computing (PDGC)	Department of CSE & IT, JUIT, Waknaghat, Solan	Hari Singh	Attended
26-27 November 2022	International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT)	AMU, Aligarh, India	Pradeep Kumar Gupta	Attended
25-27 November, 2022	International Conference on Parallel, Distributed and Grid Computing (PDGC)	Department of CSE & IT, JUIT, Waknaghat, Solan	Vivek Kumar Sehgal	Attended
24-26 November 2022	IEEE 19th India Council International Conference (INDICON)	Kochi, India	Vivek Kumar Sehgal	Attended

  - **Seminars Attended**

Dates	Subject	Venue	Faculty Name	Remarks
11 JANUARY 2023	Managing AI risks: national and International initiatives	Artificial Intelligence Council of Europe	Dr. Vivek Kumar Sehgal	Online
1 February	AI and Environment:	Artificial	Dr. Vivek Kumar	Online

2023,	Opportunities and challenges for sustainable development	Intelligence Council of Europe	Sehgal	
19 APRIL 2023	AI and Gender: Preventing bias, promoting equality	Artificial Intelligence Council of Europe	Dr. Vivek Kumar Sehgal	Online
31 May 2023	AI Sandboxes: striking a balance between regulation and innovation	Artificial Intelligence Council of Europe	Dr. Vivek Kumar Sehgal	Online
Sep. 2022	Resolving Cross Hospital Variation Effects in AI based Pathology Image Analysis	IEEE Computational Intelligence Society	Dr. Vivek Kumar Sehgal	Online
Jan. 2023	Introducing Immersive Articles and How to Write Them	IEEE Computational Intelligence Society	Dr. Vivek Kumar Sehgal	Online
Jan. 2023	The Explainability Challenge in Descriptive Analytics: Do We Understand the Data?	IEEE Computational Intelligence Society	Dr. Vivek Kumar Sehgal	Online
Feb. 2023	Autonomous Bootstrapping of Collective Motion Behaviours for Swarming Robots	IEEE Computational Intelligence Society	Dr. Vivek Kumar Sehgal	Online
Feb. 2023	Computational Intelligence for Disaster Planning and Mitigation	IEEE Computational Intelligence Society	Dr Jagpreet Sidhu	Online
Mar. 2023	Webinar on IEEE Standards on Deep Learning-based Assessment for Virtual Experiences	IEEE Computational Intelligence Society	Dr Jagpreet Sidhu	Online
Mar. 2023	Webinar on Armenia: Echoing to World Community and Building a New Heritage in Computer Science and Engineering	IEEE Computational Intelligence Society	Dr. Vivek Kumar Sehgal	Online
April 2023	Using DevOps for Building Reliable & Secure Systems including Application Build, Package, and Deployment	IEEE Computer Society	Dr Jagpreet Sidhu	Online

April. 2023	Trusted Data Smart Manufacturing	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
May. 2023	The Emerging Technologies of World Compression Standards	IEEE Computer Society	Dr Jagpreet Sidhu	Online
May. 2023	Knowledge Graphs Standards: Unifying Data Representation	IEEE Computer Society	Dr Jagpreet Sidhu	Online
May. 2023	IEEE Standards on Deep Learning-based Assessment for Virtual Experiences	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
June. 2023	Ethics within Systems and Software Engineering of Autonomous and Intelligent Systems	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online
June. 2023	Insight of Blockchain Standards	IEEE Computer Society	Dr. Vivek Kumar Sehgal	Online

- **Workshops/MOOCs**

- **Workshops Organized**

Dates	Subject	Venue	Participation	Remarks
21 Mar 2023	Deep Learning Demystified [S51930]	JUIT Solan	Faculty of CSE&IT	Department of CSE&IT JUIT
21 Mar 2023	AI Models Made Simple Using TAO [S52456]	JUIT Solan	Faculty of CSE&IT	Department of CSE&IT JUIT
22 Mar 2023	Introduction to Autonomous Vehicles [S51168]	JUIT Solan	Faculty of CSE&IT	CSE & IT Department at JUIT
22 Mar 2023	Solving MLOps: A First-Principles Approach to Machine Learning Production [S51116]	JUIT Solan	Faculty of CSE&IT	CSE & IT Department at JUIT
24 Mar 2023	Fireside Chat with Ilya Sutskever and Jensen Huang: AI Today and Vision of the Future [S52092]	JUIT Solan	Faculty of CSE&IT	CSE & IT Department at JUIT

- **Summer Schools**

Dates	Subject	Venue	Participation	Remarks
11th - 30th June, 2023	2022-23: Summer School on Artificial Intelligence, Machine Learning and Data Science	JUIT	Organized	By Dept of CSE&IT with ACM Chapter

- **Publications**

- **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference
Ravindara Bhatt	Source location privacy preservation in IoT-enabled event-driven WSNs	International Journal of Pervasive Computing and Communications	https://doi.org/10.1108/IJPCC-05-2022-0214
Ekta Gandotra	Comparative analysis of machine learning based methods for the prediction of NLR protein	International Journal of Health Sciences	https://sciencescholar.us/journal/index.php/ijhs/article/view/13445
Rajni Mohana, Aman Sharma	Ensemble Framework for Red Wine Quality Prediction	Food Analytical Methods	https://link.springer.com/article/10.1007/s12161-022-02367-3
Pardeep Kumar	A hybrid model for the identification and classification of thyroid nodules in medical ultrasound images	International Journal of Modelling, Identification and Control	https://doi.org/10.1504/IJMIC.2022.127095
Pardeep Kumar	Addressing Stock Market Time Series Trends and Volatility Using Optimized DE-LSTM Model	International Journal of Operational Research	DOI: 10.1504/IJOR.2021.10044472
Aman Sharma	Ensemble framework for cardiovascular disease prediction	Computers in Biology and Medicine	https://doi.org/10.1016/j.compbiomed.2022.105624
Vivek Kumar Sehgal	Intelligent Solutions for Earthquake Data Analysis and Prediction for Future Smart Cities	Computers and Industrial Engineering	https://doi.org/10.1016/j.cie.2022.108368
Jagpreet Sidhu	A correlation-based investigation of VM consolidation for cloud computing	International Journal of Cloud Computing	https://doi.org/10.1504/IJCC.2022.124153
Jagpreet Sidhu, Rajni Mohana	Distributed PEP–PDP Architecture for Cloud Databases	Wireless Personal Communications	https://doi.org/10.1007/s11277-022-10017-4
Jagpreet Sidhu, Rajni Mohana	Insider threat prevention in distributed database as a service cloud environment	Computers and Industrial Engineering	https://doi.org/10.1016/j.cie.2022.108278

Pradeep Kumar Singh, Jagpreet Sidhu	Robust and secure watermarking method through BEMD, SVD and Arnold transform in wavelet domain	International Journal of System Assurance Engineering and Management	https://doi.org/10.1007/s13198-022-01732-z
Pardeep Kumar	GSO-CNN-based model for the identification and classification of thyroid nodule in medical USG images	Network Modeling Analysis in Health Informatics and Bioinformatics	https://doi.org/10.1007/s13721-022-00388-w
Ekta Gandotra, Deepak Gupta	Detection of Improperly Worn Face Masks using Deep Learning A Preventive Measure Against the Spread of COVID-19	International Journal of Interactive Multimedia and Artificial Intelligence	https://www.ijimai.org/journal/bibcite/reference/3016
Vivek Kumar Sehgal	A deep neural network based context-aware smart epidemic surveillance in smart cities	Library Hi Tech	https://doi.org/10.1108/LHT-02-2021-0063
Prof. (Dr.) P.K. GUPTA	An effective multi-criteria decision-making approach for allocation of resources in the fog computing environment	International Journal of Information Technology & Decision Making	https://doi.org/10.1142/S0219622023500712
Prof. (Dr.) P.K. GUPTA	Detection and Prediction of Breast Cancer Using Improved Faster Regional Convolutional Neural Network Based on Multilayer Perceptron's Network	Optical Memory and Neural Networks	https://doi.org/10.3103/S1060992X23020054
Prof. (Dr.) P.K. GUPTA	MVI and Forecast Precision Upgrade of Time Series Precipitation Information for Ubiquitous Computing	Informatica	https://doi.org/10.31449/inf.v47i5.4152
Prof. (Dr.) P.K. GUPTA	Deep Learning-Based Modified Bidirectional LSTM Network for Classification of ADHD Disorder	Arabian Journal for Science and Engineering	https://doi.org/10.1007/s13369-023-07786-w

Prof. (Dr.) P.K. GUPTA	Cost-Effective Scheduling in Fog Computing: An Environment Based on Modified PROMETHEE Technique.	JUCS: Journal of Universal Computer Science	https://web.p.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=0948695X&AN=163771804&h=3m0%2bM94JtXJWr0%2f0RsFDhcCmnQXupXv%2fQp3LzJbqDKk1YkBvvLfuStGQlYVYhBhZmwmo8DjVlDxGRo4DjLg5WA%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNoProfile&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d0948695X%26AN%3d163771804
Prof. (Dr.) P.K. GUPTA	A Hybrid Security Scheme for Inter-vehicle Communication in Content Centric Vehicular Networks	Wireless Personal Communications	https://doi.org/10.1007/s11277-023-10175-z
Prof. (Dr.) P.K. GUPTA	Lung Disease Classification using Dense Alex Net Framework with Contrast Normalisation and Five-Fold Geometric Transformation	International Journal on Recent and Innovation Trends in Computing and Communication	10.17762/ijritcc.v11i2.6133
Prof. (Dr.) P.K. GUPTA	Optimization of IoT-Fog Network Path and fault Tolerance in Fog Computing based Environment	Procedia Computer Science	https://doi.org/10.1016/j.procs.2023.01.224
Dr. Ekta Gandotra	Binary and multi-class classification of Android applications using static features	International Journal of Applied Management Science	https://doi.org/10.1504/IJAMS.2023.131670
Dr. Ekta Gandotra	COMPARISON OF MACHINE LEARNING TECHNIQUES FOR PREDICTING NLR PROTEINS	Biomedical Engineering: Applications, Basis and Communications	https://doi.org/10.4015/S1016237222500508
Dr. Pardeep Kumar	Development of a PVA-starch Antioxidant Film Incorporating Beetroot Stem Waste Extract for Active Food Packaging	Journal of Polymers and the Environment	https://doi.org/10.1007/s10924-023-02840-y

Dr. Pardeep Kumar	Novel temperature-sensitive label based on thermochromic ink for hot food packaging and serving applications	Journal of Thermal Analysis and Calorimetry	https://doi.org/10.1007/s10973-023-12147-8
Dr. Pardeep Kumar	An efficient reversible data hiding using SVD over a novel weighted iterative anisotropic total variation based denoised medical images	Biomedical Signal Processing and Control	https://doi.org/10.1016/j.bspc.2022.104563
Dr. Pardeep Kumar	Active edible coating based on guar gum with mint extract and antibrowning agents for ber (Ziziphus mauritiana) fruits preservation	Journal of Food Measurement and Characterization	https://doi.org/10.1007/s11694-022-01609-6
Dr. Rajni Mohana	A framework for scheduling IoT application jobs on fog computing infrastructure based on QoS parameters	International Journal of Pervasive Computing and Communications	https://www.emerald.com/insight/content/doi/10.1108/IJPCC-08-2020-0108/full/html
Dr. Rajni Mohana	Distributed PEP–PDP Architecture for Cloud Databases	Wireless Personal Communications	https://doi.org/10.1007/s11277-022-10017-4
Dr. Rajni Mohana and Dr. Aman Sharma	Prediction of student academic performance based on their emotional wellbeing and interaction on various e-learning platforms	Education and Information Technologies	https://doi.org/10.1007/s10639-022-11573-9
Dr. Rajni Mohana and Dr. Aman Sharma	Ensemble Framework for Red Wine Quality Prediction	Food Analytical Methods	https://doi.org/10.1007/s12161-022-02367-3
Dr.Yugal Kumar	Bug Severity Classification in Software Using Ant Colony Optimization Based Feature Weighting Technique	Expert Systems with Applications	https://doi.org/10.1016/j.eswa.2023.120573
Dr.Yugal Kumar and Praveen	Smart Detection and Diagnosis of Diabetic Retinopathy Using	Computers & Industrial Engineering	https://doi.org/10.1016/j.cie.2023.109364

Modi	Bat Based Feature Selection Algorithm and Deep Forest Technique		
Dr.Yugal Kumar	Fog-based framework for diabetes prediction using hybrid ANFIS model in cloud environment	Personal and Ubiquitous Computing	https://doi.org/10.1007/s00779-022-01678-w
Dr.Yugal Kumar	Cloud-Based Advanced Shuffled Frog Leaping Algorithm for Tasks Scheduling	Big Data	https://doi.org/10.1089/big.2022.0095
Dr. Aman Sharma	On some new aggregation operators for T-spherical fuzzy hypersoft sets with application in renewable energy sources	International Journal of Information Technology	https://doi.org/10.1007/s41870-023-01258-y
Dr. Aman Sharma and Rajni Mohana	Improving Sentiment Analysis in Social Media by Handling Lengthened Words	IEEE Access	10.1109/ACCESS.2023.3238366
Dr. Amit Kumar	SELF: a stacked-based ensemble learning framework for breast cancer classification	Evolutionary Intelligence	https://doi.org/10.1007/s12065-023-00824-4
Dr. Amit Kumar	User authentication of industrial internet of things (IIoT) through Blockchain	Multimedia Tools and Applications	https://doi.org/10.1007/s11042-022-14154-7
Dr. Amol Vasudeva	An Era of Mobile Data Offloading Opportunities: A Comprehensive Survey	Mobile Networks and Applications	https://doi.org/10.1007/s11036-023-02116-8
Dr. Himanshu and Dr. Monika Bharti	An ensemble mosaicing and ridgelet based fusion technique for underwater panoramic image reconstruction and its refinement	Multimedia Tools and Applications	https://doi.org/10.1007/s11042-023-14594-9

Dr Pankaj and Dr Vipul	Improved traffic sign recognition algorithm based on YOLOv4-tiny	Journal of Visual Communication and Image Representation	https://doi.org/10.1016/j.jvcir.2023.103774
Dr Pankaj and Dr Vipul	A Supervised Learning-Based Framework for Predicting COVID-19 in Patients	International Journal of Distributed Systems and Technologies (IJDST)	DOI: 10.4018/IJDST.317412

- **Books**

Name of Faculty	Title of Book	Reference (ISBN)	URL
Pradeep Kumar Gupta	Advances in Computing and Data Sciences (Part 2)	ISBN : 978-3-031-12641-3	https://doi.org/10.1007/978-3-031-12641-3
Pradeep Kumar Gupta	Advances in Computing and Data Sciences (Part 1)	ISBN : 978-3-031-12638-3	https://doi.org/10.1007/978-3-031-12638-3
Pradeep Kumar Gupta	Artificial Intelligence and Data Science	ISBN : 978-3-031-21385-4	https://doi.org/10.1007/978-3-031-21385-4
Hari Singh, Ravindara Bhatt, Pradeep Kumar Gupta, Vivek Kumar Sehgal	2022 Seventh International Conference on Parallel, Distributed and Grid Computing (PDGC).	ISBN : 978-1-6654-5400-1	https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=10053141&tag=1

- **Book Chapters**

Name of Faculty	Title of Article	Name of Book	Reference
Pradeep Kumar Gupta	Preface	Artificial Intelligence and Data Science	ISBN : 978-303121384-7
Pradeep Kumar Gupta	Preface	Advances in Computing and Data Sciences Part 1	ISBN : 978-303112640-6
Hari Singh	A Study of Big Data	Large-Scale Data Streaming,	ISBN : 9781799834441

	Processing for Sentiments Analysis	Processing, and Blockchain Security	
Prof. (Dr.) P.K. GUPTA	Developing MCDM-Based Technique to Calculate Trustworthiness of Advertised QoE Parameters in Fog Computing Environment	Machine Learning, Image Processing, Network Security and Data Sciences	https://doi.org/10.1007/978-981-19-5868-7_52
Dr. Ekta Gandotra and Dr. Deepak Gupta	Comparative Analysis of Feature Selection Methods for Detection of Android Malware	Convergence of Deep Learning and Internet of Things: Computing and Technology	10.4018/978-1-6684-6275-1.ch013
Dr. Aman Sharma	Face Mask Detection Alert System for COVID Prevention Using Deep Learning	Applications of Machine Learning and Deep Learning on Biological Data	https://books.google.co.in/books?hl=en&lr=&id=3IqtEAAAQBAJ&oi=fnd&pg=PA57&dq=info:haHwMTqOBKkJ:scholar.google.com&ots=bW64NCP2jk&sig=wZ9fUMDd2Wtz2kAn1lYP6tWjTag&redir_esc
Dr. Kushal Kanwar	An Analysis of Data Sparsity Resolution Algorithms Used in Recommender Systems	Advances in Information Communication Technology and Computing: Proceedings of AICTC 2022	https://doi.org/10.1007/978-981-19-9888-1_17

- **Conference Publications**

Name of Faculty	Title of Article	Name of Conference
Aman Sharma	Comparison of Machine Learning Models for predicting Covid-19 patients' recovery in India	Proceedings of the International Conference on Parallel, Distributed and Grid Computing (PDGC)
Aman Sharma	Brain Tumor Classification using Machine Learning and Deep Learning Algorithms: A Comparison: Classifying brain MRI images on thebasis of location of tumor and comparingthe various Machine Learning and Deep LEARNING models used to predict best performance	Proceedings of the International Conference on Contemporary Computing

Pradeep Kumar Gupta	A Secure Framework Based on Nature-Inspired Optimization for Vehicle Routing	Proceedings of the International Conference on Advances in Computing and Data Sciences
Pradeep Kumar Gupta	2D-CNN Model for Classification of Neural Activity Using Task-Based fMRI	Proceedings of the International Conference on Advances in Computing and Data Sciences
Pradeep Kumar Gupta	ACHM: An Efficient Scheme for Vehicle Routing Using ACO and Hidden Markov Model	Proceedings of the International Conference on Artificial Intelligence and Data Science
Pradeep Kumar Gupta	An Efficient Mobility Aware Scheduling Algorithm	Proceedings of the International Conference on Artificial Intelligence and Data Science
Ekta Gandotra	Detecting Android Malicious Applications using Dynamic Malware Analysis and Machine Learning	Proceedings of the Fourteenth International Conference on Contemporary Computing
Ekta Gandotra, Deepak Gupta	Diagnosis of Covid-19 using Deep Learning.	Proceedings of the International Conference on Contemporary Computing
Prateek Thakral	A Novel Approach for Detecting the Malignant Features of Breast Cancer using Algorithms of ML	Proceedings of the 2022 IEEE International Conference on Data Science and Information System (ICDSIS)
Prof. (Dr.) P.K. GUPTA	Nature-inspired whale optimization technique for efficient information exchange in vehicular networks	2023 IEEE 12th International Conference on Communication Systems and Network Technologies (CSNT)
Dr. Pardeep Kumar	Behaviour-constrained support vector machines for FMRI data analysis	AIP Conference Proceedings
Dr. Rajni Mohana	Implementing LDA Topic Modelling Technique to Study User Reviews in Tourism	2022 Seventh International Conference on Parallel, Distributed and Grid Computing (PDGC)
Dr. Amit Kumar	Machine Learning Based Framework for Cryptocurrency Price Prediction	2023 Third International Conference on Secure Cyber Computing and Communication (ICSCCC)
Dr. Amol Vasudeva	Open-Source Simulators for Drone-Assisted Vehicular Ad Hoc Networks	Proceedings of Data Analytics and Management
Dr. Kushal Kanwar	Attribute Selection, Sampling, and Classifier Methods to Address Class Imbalance Issues on Data Set Having Ratio Less Than Five	Proceedings of Third International Conference on Computing, Communications, and Cyber-Security
Prof. (Dr.) Vivek Kumar Sehgal	Image Forgery Detection Model using CNN Architecture with SVM Classifier	International Conference on Parallel, Distributed and Grid Computing (PDGC)

Prof. (Dr.) Vivek Kumar Sehgal	A framework for IoT based on Blockchain and Edge Computing in Cyber Physical Systems	2022 IEEE 19th India Council International Conference (INDICON)
Prof. (Dr.) Vivek Kumar Sehgal	A Comprehensive Study: Image Forensic Analysis Traditional to Cognitive Image Processing	2022 8th International Conference on Signal Processing and Communication (ICSC)

- **Composition of Various Bodies**

Composition of Board Of Studies: Dept of CSE and IT

S No	Category	Nomination		Name	Profession	Affiliation	Date of Constitution
1	Head of the Department	Chairperson	1	Prof. Dr. Vivek Kr.Seghal	Professor	JUIT Waknaghat	Nov 10, 2021
2	Faculty members at different levels covering different specializations. At least five faculty members at different levels covering different specializations, to be nominated by the Academic Council	Members	2	Dr. Hemraj Saini	Associate Prof	JUIT Waknaghat	
			3	Dr. P. K. Gupta	Associate Prof	JUIT Waknaghat	
			4	Dr. Ravindra Bhatt	Associate Prof	JUIT Waknaghat	
			5	Dr. Pardeep Kumar	Associate Prof	JUIT Waknaghat	
			6	Dr. Rajni Mohana	Associate Prof	JUIT Waknaghat	
			7	Dr. Amol Vasudeva	Asst Prof	JUIT Waknaghat	
			8	Dr. Yugal Kumar	Asst Prof	JUIT Waknaghat	
			9	Dr. Ekta Gupta	Asst Prof	JUIT Waknaghat	
			10	Dr. Rajinder Singh Sandhu	Asst Prof	JUIT Waknaghat	
			11	Dr. Hari Singh	Asst Prof	JUIT Waknaghat	
			12	Dr. Jagpreet Sidhu	Asst Prof	JUIT Waknaghat	
			13	Dr. Mrityunjay Singh	Asst Prof	JUIT Waknaghat	

3	Subject experts from outside the University nominated by the Academic Council. Two experts in the subject from outside the University to be nominated by the Academic Council	Members	14	Prof. Dr Manu Sood	Professor	HP University, Shimla	Nov 10, 2021
			15	Prof. Dr. Suchita Upadhyay	Professor	Kurukshetra University Kurukshetra	
			16	Prof. Dr. Himanshu Aggarwal	Professor	Punjabi University, Patiala	
4	Representatives from industry/corporate sector/allied area relating to placement by Academic Council. One representative from industry/corporate sector/allied area relating to placement, to be nominated by the Academic Council	Members	17	Dr. Dheeraj Chahal	Research team lead R&D and Consultant at TCS Innovation Lab	TCS Innovation Lab Pune, India	Nov 10, 2021
			18	Mr. Saurabh Sud	Manager - Cyber Security	UBER, Hyderabad	
5	Postgraduate meritorious alumnus nominated by the VC. One postgraduate meritorious alumnus to be nominated by the VC.	Members	19	Dr. Rajkumar Tekchandani	Asst Prof	Thapar University	Nov 10, 2021

6	Co-opted members. The Chairperson, Board of Studies May with the approval of the VC, Co-opt as member, Experts from outside the University/members of the same faculty, whenever special courses of studies are to be formulated	Members	20	Prof. Dr. Ashish Kumar	Professor &HoD	Dept of CE, JUIT	Nov 10, 2021
			21	Prof. Dr. Karanjeet Singh	Professor &HoD	Dept of Maths, JUIT	
			22	Prof. Dr. P B Burman	Professor &HoD	Dept of Physics & Material Science, JUIT	
			23	Prof. Dr. Sudhir Syal	Professor &HoD	Dept of BT/BI, JUIT	
			24	Dr. Rajiv Kumar	Associate Prof &HoD	Dept of ECE, JUIT	
			25	Dr. Anupriya Kaur	Associate Prof &HoD	Dept of HSS, JUIT	

Details Of Professional Membership

Name of Membership	Senior Member	Member
IEEE	Prof . Vivek Kumar Sehgal	Dr. P.K. Gupta Dr.Ravindara Bhatt Dr.Abhilasha Sharma Dr. Amol Vasudeva Dr. Hari Singh Arvind Kumar
ACM	Prof . Vivek Kumar Sehgal Dr. Pardeep Kumar	Dr. P.K. Gupta Dr.Ravindara Bhatt Dr.Yugal Kumar Dr. Amol Vasudeva Mr. Arvind Kumar Dr. Amit Kumar
SIAM		Prof . Vivek Kumar Sehgal Dr. Pankaj Dhiman Dr. Vipul Sharma
CSI	Prof . Vivek Kumar Sehgal Dr. P.K. Gupta	Dr.Ravindara Bhatt Dr. Amol Vasudeva Dr. Hari Singh Prateek
IEEE Exe. Com. Delhi Section		Prof . Vivek Kumar Sehgal Dr. P.K. Gupta

IAENG	Prof . Vivek Kumar Sehgal Dr. Pardeep Kumar	Dr.Yugal Kumar Dr. Himanshu Jindal Dr. Amit Kumar Prateek
IEEE Computer Society	Prof . Vivek Kumar Sehgal	
Internet Society (ISOC)		Dr.Yugal Kumar
Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (ICST)		Dr.Yugal Kumar
Computer Science Teacher Association		Dr.Yugal Kumar Dr. Nancy Singla
IACSIT (International Association of Computer Science & Information Technology)		Dr.Yugal Kumar
UACEE (Universal Association of Computer and Electronics Engineers)		Dr.Yugal Kumar
International Association of Engineers		Dr. Aman Sharma
The Indian Society for Technical Education (ISTE)		Dr. Hari Singh

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 – Bioremediation, Biofuels
2.	Prof. (Dr.) Jata Shanker	Ph.D.	Fungal biology, Functional genomics
3.	Prof. (Dr.) Tiratha Raj Singh	Ph.D.	Bioinformatics, Functional genomics, Molecular Evolution and Systems Biology
4.	Dr. Anil Kant Thakur	Ph.D.	Plant Biotechnology, Molecular Biology
5.	Dr. Gopal Singh Bisht	Ph.D.	Medicinal Chemistry, Peptides and Peptidomimetics
6.	Dr. Hemant Sood	Ph.D.	Plant Biotechnology and IPR
7.	Dr. Jitendraa Vashistt	Ph.D.	Bacterial Resistance, Clinical Proteomics
8.	Dr. Poonam Sharma	Ph.D.	Chemistry
9.	Dr. Rahul Shrivastva	Ph.D.	Microbial Pathogenesis, Mycobacteriology
10.	Dr. Saurabh Bansal	Ph.D.	Protein engineering, Enzymology, Industrial Biotechnology
11.	Dr. Udayabanu M.	Ph.D.	Neuropharmacology
12.	Dr. Vijay Kumar Garlapati	Ph.D.	Bioprocess Engineering
13.	Dr. Abhishek Chaudhary	Ph.D.	Nanobiotechnology
14.	Dr Ashok Nadda	Ph.D.	Bioenergy/Biopolymer/Enzyme Technology/Biocatalysis
15.	Dr. Raj Kumar	Ph.D.	Bioinformatics
16.	Dr. Shikha Mittal	Ph.D.	Bioinformatics, Next generation Sequencing

- **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 and Material Sciences, Electronics & Communication, Computer Science Engineering, Humanities & Social Sciences.
- Elective modules, proficiencies and minor specializations are offered in the course curriculumto 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 running 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 1stJuly 2017 to 30thJune 2021 for the B.Tech.Biotechnology programme.The B.Tech. Biotechnology programme got extended NBA accreditation till 30 June 2022.

Course Structure

The scheme of Biotechnology and Bioinformatics was revised in 2018 (160 credits), detailed course structure is as:-

S No	Course Name	Course Code
B.TECH. (BIOTECHNOLOGY\BIOINFORMATICS) 1st SEMESTER		
1	English and Technical Communication	18B11HS111
2	English and Technical Communication Lab	18B17HS171
3	Basic Mathematics -1 OR	18B11MA112

4	Fundamental Biology	18B11BT111
5	Fundamental Biology lab	18B17BT171
6	Basic Engineering Physics-I	18B11PH112
7	Programming for Problem Solving	18B11CI111
8	Engineering Graphics	18B17GE173
9	Basic Engineering Physics Lab-I	18B17PH172
10	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) 4thSEMESTER		
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) 5thSEMESTER		
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	18B1WBT733
8	Intellectual Property Rights & Commercialization	18B1WBT734
9	Genetic Counselling	18B1WBT831
10	Traditional Bioprocessing & Their Up Scaling	18B1WBT832
11	Diagnostics & Vaccine Manufacture	18B1WBT833
12	NGS Data Analysis & Applications	18B1WBI834
OPEN ELECTIVES		
13	Biology for Engineers	18B1WBT635
14	Industrial Chemistry	18B1WBT636
15	Sustainable Technologies for Waste Management	19B1WBT731
16	Food Nutrition & Health Care	19B1WBT732
BIOINFORMATICS		
1st & 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	Bioinformatics Data Management	20B11BI311
4	Microbiology & Immune System	18B11BI312
5	Biological Computation	18B11BI313
6	Bioinformatics Data Management Lab	20B17BI371
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	Datawarehousing and Mining for Bioinformatics	18B1WBI632
6	Bioenergy & Biofuels	18B1WBT634
7	Computational Systems Biology	18B1WBI731
8	Intellectual Property Rights & Commercialization	18B1WBT734
9	Genetic Counselling	18B1WBT831
10	Computational Molecular Evolution	18B1WBI831
11	Diagnostics & Vaccine Manufacture	18B1WBT833
12	NGS Data Analysis & Applications	18B1WBI834

- **Post Graduate Programs**

  - **M.Tech. Biotechnology**
  - **M.Sc. Biotechnology**
  - **M.Sc. Microbiology**

M.Tech. Biotechnology Course Curriculum (76 credits)		
S. No.	**Course Name**	**Course Code**
1st SEMESTER		
1	Advances in Molecular Cell Biology	13M11BT111
2	Advances in Molecular Cell Biology Lab	13M17BT171
3	Research Methodology and Ethics	18M11BT113
4	Patenting in Biotechnology	18M11BT114
5	Advanced Bioinformatics	13M11BT112
6	Advanced Bioinformatics Lab	13M17BT172
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	Bioentrepreneurship Management	14M11BT214
6	Functional Genomics	14M11BT213
7	Functional Genomics Lab	14M17BT273
8	Metabolic Engineering	14M11BT215
9	DE-III	-
10	DE-IV	-

3rd SEMESTER		
1	Seminar-I	14M19BT392
2	Project- Thesis Part I	14M19BT391
4th SEMESTER		
1	Seminar-II	21M19BT491
2	Project- Thesis Part II	15M19BT491
M. Tech. Biotechnology Electives courses:		
1	Food Processing & Engineering	20M1WBT131
2	Plant Tissue Culture Technologies	20M1WBT132
3	Advances in Computational System Biology	18M1WBT133
4	Microbial Ecology	18M1WBT134
5	Vaccine Production	20M1WBT133
6	QC Analysis and Management	20M1WBT231
7	Clinical Diagnostics	20M1WBT234
8	Plant Biotechnology	11M1WBT433
9	Advances in Gene manipulations	20M1WBT134
10	Industrial Enzyme Technology	20M1WBT232
11	Nano Biotechnology	11B1WBT840

M.Sc. Biotechnology Course Structure (94 credits)		
S.No.	**Course Name**	**Course Code**
1st SEMESTER (MS1)		
1	Biochemistry-MI	20MS1BT111
2	Cell and Molecular Biology-MI	20MS1BT112
3	Plant and Animal Biotechnology-MI	20MS1BT113
4	Microbiology-MI	20MS1BT114
5	Genetics-MI	20MS1BT115
6	Basics of Mathematics and Statistics-MI	20MS1MA111
7	Basics of Chemistry and Physics-MI	20MS1PH111
8	Laboratory I: Biochemistry and Analytical Techniques-MI	20MS7BT171
9	Laboratory II:Microbiology-MI	20MS7BT173
10	Laboratory III: Plant and Animal Biotechnology-MI	20MS7BT172
2nd SEMESTER (MS2)		
1	Genetic Engineering-MII	20MS1BT211
2	Immunology-MII	20MS1BT212
3	Bioinformatics-MII	20MS1BT213
4	Genomics and Proteomics-MII	20MS1BT214
5	Molecular Diagnostics-MII	20MS1BT215
6	Research Methodology and Scientific Communication Skills-MII	20MS1BT216
7	Elective-I-MII	
8	Seminar-I-MII	20MS9BT211
9	Laboratory IV: Molecular Biology and Genetic Engineering-MII	20MS7BT271
10	Laboratory V: Immunology-MII	20MS7BT272
3rd SEMESTER (MS3)		
1	Bioprocess Engineering and Technology-MIII	20MS1BT311
2	Emerging Technologies-MIII	20MS1BT312

3	Critical Analysis of Classical Papers-MIII	20MS9BT312
4	Bioentrepreneurship-MIII	20MS1BT314
5	Intellectual Property Rights, Biosafety and Bioethics-MIII	20MS1BT315
6	Project Proposal Preparation and Presentation-MIII	20MS9BT313
7	Seminar-II-MIII	20MS9BT311
8	Laboratory VI: Bioprocess Engineering and Technology–MIII	20MS7BT371
9	Laboratory VII: Bioinformatics-MIII	20MS7BT372
10	Dissertation-MIII	20MS9BT391
4th SEMESTER (MS4)		
1	Dissertation-MIV	20MS9BT491
2	Elective-II-MIV	
M.Sc. Biotechnology Electives courses:		
1	Nanobiotechnology-MII	20MSWBT231
2	Environmental Biotechnology-MII	20MSWBT232
3	Protein Engineering-MII	20MSWBT233
4	Vaccines-MIV	20MSWBT431
5	Drug Discovery and Development-MIV	20MSWBT432
6	Computational Systems Biology-MIV	20MSWBT433

M.Sc. Microbiology Course Structure (75 credits)		
S.No.	**Subject**	**Course Code**
1stSEMESTER (MB1)		
1	General Microbiology and Bacteriology	21MS1MB111
2	Basics of Mathematics and Statistics	20MS1MA111
3	Biochemistry	21MS1BT111
4	Molecular Biology	21MS1MB112
5	Virology	20B1WBI831
6	Fungal Biology	21MS1MB113
7	General Microbiology and Bacteriology Lab	21MS7MB171
8	Biochemistry Lab	21MS7BT171
9	Molecular Biology Lab	21MS7MB172
10	GLP and Bioinstrumentation Lab	21MS7MB173
2ndSEMESTER (MB2)		
1	Immunology and Immunotechnology	18MS1BT211
2	Enzymes and Bioprocess Technology	21MS1MB211
3	Microbial Genetics and Physiology	21MS1MB212
4	Recombinant DNA Technology	18MS1BT313
5	Bioinformatics	20MS1BT213
6	Immunology and Immunotechnology Lab	18MS7BT211
7	Enzymes and Bioprocess Technology Lab	21MS7MB271
8	Basic Bioinformatics Lab	18MS7BI214
9	Recombinant DNA Technology lab	18MS7BT373
10	Masters Research Review seminar	18MS9BI211
3rdSEMESTER (MB3)		

1	Environmental Microbiology	21MS1MB311
2	Diagnostic Microbiology and vaccines	21MS1MB312
3	Elective-I	
4	Master's Dissertation &Thesis Part-I	21MS9MB311
4thSEMESTER (MB4)		
1	Food & Dairy Microbiology MBIV	21MS1MB411
2	Plant and Agricultural Microbiology MBIV	21MS1MB412
3	Elective-II	
4	Master's Research Thesis Part-II	21MS9MB411
M.Sc.Microbiology Electives courses		
1	IPR, Biosafety and Bioethics	21MS2MB311
2	Biosensors: Principles & Applications	21MS2MB312
3	Computational Systems Biology	21MS2MB411
4	Protein Engineering	21MS2MB314
5	Microbial Toxicology	21MS2MB313
6	Experimental models in microbial Research	21MS2MB412
7	Nano-Biotechnology	21MS2MB413
8	QC Analysis and Management	21MS2MB414

Ph.D. Program

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

The following courses are available for Ph.D. students

S. No.	Course Title	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
8	Bioprocess Engineering and Technology	20MS1BT311
9	Bioprocess Engineering and Technology Lab	20MS7BT371
10	Microbiology	20MS1BT114
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

Ph.D. Completed (2022-2023)

S.No.	Name& Enrollment No.	Program	Title of Thesis
1.	Rohit Shukla 186501	PhD Bioinformatics	Identification and inhibition mechanism analysis of novel multi-target inhibitors for Alzheimer's disease using polypharmacology and Systems pharmacology approaches
2.	Arvind K Yadav 176502	PhD Bioinformatics	Development of machine learning based prediction methods for commercially useful proteins
3.	Neha Kumari 176551	PhD Biotechnology	Isolation, production of fungal phytase of Himachal origin and its application in Food.
4.	Deepak Sharma 166555	PhD Biotechnology	Development of smart nanomaterials for drug delivery and biosensors
5.	Ayushi Sharma 176553	PhD Biotechnology	Biofilm associated drug-target identification of *Mycobacterium fortuitum*

New Ph.D. Students Enrolled

S.No.	Roll No.	Name
1	228011001	Sakshi

- **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 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 (Biogas, vermicompost, biomass Briqquets) to the rural people in an integrated sustainable mode of rural development.
- To make rural people aware about education especially vocational trainings to make earnings other than 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 2022-2023/ In Progress**

S No	Name of Faculty	Project title	Funding Agency	Amount sanctioned (In Lakhs)	Duration	Current Status
1	Dr. Anil Kant	Postgraduate teaching program	DBT	130	2020-25	Ongoing
2	Dr. Sudhir Kumar	Pine needles' conversion to biofuel for rural empowerment	DRID-JES	7	2022-24	Ongoing
3	Dr. Poonam Sharma	Synthesis and physicochemical characterization of ethosomes as an effective carrier for transdermal delivery of antifungal agents	SERB (DST- Core Research Grant)	30.25132	2022-25	Ongoing

4	Dr. Ashok Kumar Nadda	Extraction of keratin from poultry waste biomass of and its application in the production of value added products	DEST Himachal Pradesh	7.6	2021-23	Ongoing
5	Dr. Ashok Kumar Nadda	CO2-phillic nanotextured surface immobilized enzymes for expedited microalgal biomass production through CO2 enrichment and production of eco-friendly pigments	HIMCOSTE Himachal Pradesh Govt	6.8		Ongoing
6	Dr. Sudhir Kumar	Pine needles based dark fermentation towards biohydrogen production	DRID-JES	1.5		Ongoing
7	Dr. Sudhir Kumar	Production and phyco-upgradation of biogas from pine straw co-digested with food waste	DRID-JES	0.5		Ongoing
8	Dr. Tiratha Raj Singh	AI-based effective and adaptive learning	DRID-JES	1	2022-23	Ongoing
9	Dr Hemant Sood	Herbal formulation for the treatment and prevention of Dementia	DRID-JES	20,000 for phase 1	2023-2024	Ongoing

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

Conferences:

- **Conferences Organized:** Nil

- **Conferences Attended**

Dates	Subject	Venue	Faculty Name	Remarks
10-02-2023 to 12-02-2023	Rural Science Congress, UCOST, Dehradun	Uttarakhand State Council for S&T, Dehradun	Prof. Sudhir Kumar	Resource Person
29-09-2023 to 01-10-2023	9th International conference of GAMS	PCCOE, Pune	Prof. Tiratha Raj Singh	Resource Person
22-09-2022 to 23-09-2023	International conference on Interdisciplinary Research In Cancer Biology	UPES University Dehradun	Dr. Abhishek	Participated

16-03-2023 to 18-03-2023	7th Edition of Global Congress on Plant Biology and Biotechnology virtual event organized by Magnus group,USA	Magnus group,USA	Dr Hemant Sood	Resource Person
28-04-2023 to 30-04-2023	International Conference on Strategies and Challenges on Agricultural & Life Science for Food Security and Sustainable Environment (SCALFE 2023)	HPU, Shimla	Dr Hemant Sood	Poster
18-01-2023 to 20-01-2023	6th International Conference on Advances in Biosciences and Biotechnology (ICABB2023)	JIIT,Noida	Dr Hemant Sood	Oral
14-01-2023 to 15-01-2023	Sustainable India International Conference on Future Innovation and sustainable development for Asian Countries	Sri Aurobindo Yoga & Knowledge Foundation, India in association with by Dhonburi Rajbhat University Thailand and Navvikon and International Women in Tech,Dublin,Ireland	Dr Hemant Sood	Oral
23-09-2022 to 24-09-2022	2nd Emergent Converging Technologies and Biomedical Systems (ETBS 2022)	ECE and PMS Deptt., JUIT Waknaghat	Dr. Saurabh Bansal	Participated
12-06-2023 to 14-06-2023	International Symposium on Advances in Algal Research (AAR-2023)	IIT Guwahati, Guwahati, Assam	Dr.Garlapati Vijay Kumar	Oral

- **Seminars**

- **Seminars Organized**

Dates	Speaker Name, Affiliation, Subject	Venue	Participation (Nos.)	Remarks
6-Jul-2022	Awareness Programme for Skill Vigyan Training	Gram Panchayat, Chausa	80	Coordinator: Dr. Sudhir Kumar
8-Aug-2022	Remembering the legendary biochemist on his birth centenary, Dr. Har Gobind Khorana	Department of BT & BI, JUIT	75	Coordinators: Dr. Shikha Mittal, Dr. Poonam Sharma
6-Feb-2023	Dr. Prakhar Srivastava Post-doc, Pusan National University, South Korea Quorum Sensing mechanism in enhancing the antibiotic resistance pattern of *Pseudomonas aeruginosa* Organized by Department of Biotechnology and Bioinformatics, JUIT Alumni Cell	Online, Department BT & BI, at JUIT Waknaghat	50	Coordinator: Dr. Saurabh Bansal
28-Feb-2023	Prof. PB Barman, Prof. Sudhir Kumar and Prof. Tiratha Raj Singh, JUIT, Solan Second National science Day Symposium	Department of BT & BI, JUIT	200+	Coordinators: Dr. Shikha Mittal, Dr. Tiratha Raj Singh

- **Seminars Attended**

Date	Subject	Venue	Faculty Name	Remarks
23-12-2022 to 24-12-2022	National Seminar on "Digital India: Concept and Implications	Government College, Sanjauli	Dr. Shikha Mittal	Resource Person
26 -04-2023	Seminar on Sensitization Program for UG/PG student	JUIT Waknaghat	Dr. Sudhir Kumar	Resource Person
12-06-2023	Bioinformatics and its applications in healthcare	JUIT Waknaghat	Dr. Tiratha Raj Singh	Resource Person
28-02-2023	National Science Day Symposium (NSDS-2023)	JUIT Waknaghat	Dr. Raj Kumar	Attendee

- **Workshops**

  - **Workshops Organized**

Dates	Subject	Venue	Participation (Nos.)	Remarks
02-05-2023	One Day workshop on Biotechniques organized by Department of Biotechnology & Bioinformatics, JUIT Waknaghat	Department of Biotechnology, Khalsa College, Patiala	30	Coordinators: Dr. Rahul Shrivastava Dr. Saurabh Bansal
08-12-2022 to 14-12-2022	DST STUTI ICT workshop "A hands-on training program on approaches for screening and characterization of pre-clinical drug candidates"	Department of Biotechnology & Bioinformatics, JUIT, Waknaghat	30	Coordinators: Dr. Raj Kumar, Co-coordinators: Dr. Shikha Mittal, Dr. Rahul Shrivastava
20-03-2023 to 24-03-2023	Hands on Workshop on "Next Generation sequencing data analysis"	Department of Biotechnology & Bioinformatics, JUIT, Waknaghat	28	Coordinators: Dr. Shikha Mittal, Prof. Jata Shankar
15-03-2023 to 16-03-2023	Workshop on "Intellectual Property Rights (IPR) Awareness Programme under National Intellectual Property Awareness Mission (NIPAM 2.0)", in collaboration with HIMCOSTE and IPR cell JUIT.	JUIT, Waknaghat	75	Coordinator: Dr. Sudhir Kumar
21-09-2022	One day workshop on" Intellectual Property Rights in Scientific and Engineering Disciplines"	JUIT, Waknaghat	80	Coordinator: Dr. Sudhir Kumar
14-9-2022-21-09-2022	An event "Business out of Used Plastics"by IPR Cell.	JUIT, Waknaghat	19	Coordinator: Dr. Sudhir Kumar
16-08-2022 to 05-09-2022	An Innovation, Research and Development (IRD) Competition by IPR Cell & TIEDC	JUIT, Waknaghat	9	Coordinator: Dr. Sudhir Kumar
24-02-2023	One day workshop on Molecular biology & Biotechnological Techniques	JUIT, Waknaghat	60	Coordinators: Dr. Sudhir Kumar, Dr. Rahul Shrivastava

- **Workshops Attended**

Dates	Subject	Venue	Faculty Name	Remarks
21-09-2022	Intellectual Property Rights in Scientific and Engineering Disciplines	Department of BT & BI, JUIT, Waknaghat	Dr. Shikha Mittal	Attendee
05-12-2022 to 09-12-2022	Next Generation Sequencing and its Implications in Agriculture and Human Health	JIIT, Noida	Dr. Shikha Mittal	Resource Person
05-12-2022 to 09-12-2022	Next Generation Sequencing and its Implications in Agriculture and Human Health	JIIT, Noida	Dr. Tiratha Raj Singh	Resource Person
20-03-2023 to 24-03- 2023	Hands on Workshop on "Next Generation sequencing data analysis"	Department of BT & BI, JUIT, Waknaghat	Dr. Jitendraa Vashistt	Resource Person
08-12-2022 to 14-12-2022	DST STUTI ICT workshop "A hands-on training program on approaches for screening and characterization of pre-clinical drug candidates"	Department of BT & BI, JUIT, Waknaghat	Dr. Jitendraa Vashistt	Resource Person
08-12-2022 to 14-12-2023	DST STUTI ICT workshop "A hands-on training program on approaches for screening and characterization of pre-clinical drug candidates"	Department of BT & BI, JUIT, Waknaghat	Dr Hemant Sood	Resource Person
16-03-2023	IP training programme under National Intellectual property Mission	JUIT,Waknagaht by Intellectual property Office,India	Dr Hemant Sood	Attendee
7-11-2022 to 18-11-2022	Online training program on RESEARCH TRAINING Organized by MSME-Technology Development Centre, PPDC Agra, Ministry of MSME, Govt. of India Society	MSME-Technology Development Centre, PPDC Agra, Ministry of MSME, Govt. of India Society	Dr Hemant Sood	Attendee
29-08-2022	Online workshop on bioinformatics-with research orientation towards drugs and vaccines	SAGE University, Indore, MP	Dr. Raj Kumar	Guest of Honor
20-03-2023 to 24-03-2023	Hands on Workshop on "Next Generation sequencing data analysis"	Department of BT & BI, JUIT, Waknaghat	Dr. Raj Kumar	Resource Person
08-12-2022 to 14-12-2022	DST STUTI ICT workshop "A hands-on training	Department of BT & BI, JUIT,	Dr. Saurabh	Resource Person

	program on approaches for screening and characterization of pre-clinical drug candidates"	Waknaghat	Bansal	
20-03-2023 to 24-03-2023	Hands on Workshop on "Next Generation sequencing data analysis"	Department of BT & BI, JUIT, Waknaghat	Dr.Garlapati Vijay Kumar	Attendee

- **Faculty Development Programs**

  - **Faculty Development Programs Organized:**

Dates	Subject	Venue	Participation (Nos.)	Remarks
05-06-2023 to 10-06-2023	One Week Faculty Development Programme on “Teaching and Research Practices” in Hybrid mode	Department of Biotechnology and Bionformatics, Jaypee University of Information technology Waknaghat	93	Coordinators: Dr. Hemant Sood & Dr. Saurabh Bansal Co-Coordinator: Dr. Rahul Shrivastava

  - **Faculty Development Programs Attended**

Dates	Subject	Venue	Faculty Name	Remarks
22-12-2022 to 23-12-2022	Faculty Development programme- Utkarsh	JUIT, Waknaghat	Dr. Shikha Mittal	Attendee
05-06-2023 to 09-06-2023	One week FDP on Teaching and Research Practices	Department of Biotechnology & Bioinformatics, JUIT, Waknaghat	Dr. Shikha Mittal, Dr. Tiratha Raj Singh, Dr. Udaybhanu, Dr. Ashok K Nadda, Dr. Abhishek Chaudhary, Dr. Jitendraa Vashishtt, Dr. Poonam Sharma, Dr. Anil Kant, Dr. Garlapati, Dr. Raj Kumar	Attendee

28-08-2022 to 10-09-2022	Computational Genomics and Proteomics' organized by the Electronics and ICT Academy at PDPM IIITDM Jabalpur in association with JUIT Waknaghat under Scheme of Financial Assistance for Setting up Electronics and ICT Academics of the Ministry of Electronics and Information Technology (Meity), Government of India.	JUIT Waknaghat	Dr Jata Shankar	Attendee
22-12-2022 to 23-12-2022	Faculty Development programme- Utkarsh	JUIT Waknaghat	Dr Jata Shankar	Attendee
05-06-2023 to 09-06-2023	One week FDP on Teaching and Research Practices	Department of Biotechnology & Bioinformatics, JUIT, Waknaghat	Dr. Sudhir Kumar	Resource person
22-12-2022 to 23-12-2022	Faculty Development programme- Utkarsh	JUIT Waknaghat	Dr. Tiratha Raj Singh	Attendee
22-12-2022 to 23-12-2022	Faculty Development programme- Utkarsh	JUIT, Waknaghat	Dr. Hemant Sood	Attendee
22-12-2022 to 23-12-2022	Faculty Development programme- Utkarsh	JUIT, Waknaghat	Dr. Jitendraa Vashistt	Attendee
25-07-2022 to 30-07-2022	FDP on Innovations in Drug Delivery Technologies.	JIIT, Noida	Dr Hemant Sood	Attendee
11-07-2022 to 15-07-2022	FDP on Computer Diligence in Civil Engineering and Applications for Sustainable Development	Dept. of Civil Engineering, JUIT, Waknaghat	Dr Hemant Sood	Attendee
2022-10-10 - 2022-10-15 to 2022-10-17 - 2022-10-21	AICTE Training And Learning (ATAL) Academy Blended/Hybrid FDP on "Computational Biology in Therapeutics and Theranostics"	Indian Institute of Information Technology, Allahabad	Dr. Raj Kumar	Attendee
22-12-2022 to 23-12-2022	Faculty Development programme- Utkarsh	JUIT, Waknaghat	Dr. Rahul Shrivastava	Attendee
13-02-2023 to 17-02-2023	Faculty Development Program on Advanced Excel with Data Visualization	E & ICT Academy, IIT Kanpur	Dr. Rahul Shrivastava	Attendee

- **Publications**

  - **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation (Since publication)
Dr. Saurabh Bansal	Enhancing the Production of Therapeutic Enzyme Arginase from *Lactobacillus acidophilus* Using Response Surface Methodology	Brazilian Archives of Biology and Technology	2022, 65: e22210041, IF: 1.18, Scopus, SCIE	0
Dr. Shikha Mittal	G-DIRT: a web server for identification and removal of duplicate germplasms based on identity-by-state analysis using single nucleotide polymorphism genotyping data	Briefings in Bioinformatics	2022, 23(5), IF: 13.994, SCI, SCIE, Scopus	2
Dr. Shikha Mittal	Host-pathogen protein-nucleic acid interactions: A comprehensive review	Computational and Structural Biotechnology Journal	2022, 20:4415-4436, IF:6.155, SCI, SCIE , Scopus	5
Dr. Shikha Mittal	Genetic diversity, population structure, and genome-wide association study for the flowering trait in a diverse panel of 428 moth bean (*Vigna aconitifolia*) accessions using genotyping by sequencing	BMC Plant Biology	2023, 23, IF:5.260, SCI, SCIE, Scopus	1
Dr. Sudhir Kumar	Co-metabolism of 4-bromophenol by Pseudomonas sp. EN-4 and toxicity evaluation of biotransformed samples	Journal of Environmental Chemical Engineering	2022, 10 (5), 108223, IF: 7.9, SCIE, Scopus	1
Dr. Sudhir Kumar	Enhanced Biogas Production from Pine Litter Codigestion with Food Waste, Microbial	Journal of Environmental Engineering	2022, 149(1), https://doi.org/10.1061/(ASCE)EE.1943-	1

	Community, Kinetics, and Technoeconomic Feasibility		7870.0002080 Scopus	
Dr. Sudhir Kumar	Exploring bioleaching potential of indigenous *Bacillus sporothermodurans* ISO1 for metals recovery from PCBs through sequential leaching process	Waste Management & Reserch	2023, 41(7),https://doi.org/10.1177/0734242X231155102 SCIE, Scopus	0
Dr. Poonam Sharma	Development, characterization and in vitro antimicrobial evaluation of novel flavonoids entrapped micellar topical formulations of neomycin sulfate	Journal of Pharmaceutical Sciences	2022, 111 (12), pp. 3287-3296, DOI: 10.1016/j.xphs.2022.08.013 SCI, Scopus	1
Dr. Poonam Sharma	A review on the physicochemical and biological applications of biosurfactants in biotechnology and pharmaceuticals	Heliyon	[2022]8 (8), pp. e10149-, DOI: https://doi.org/10.1016/j.heliyon.2022.e10149 Scopus, SCI	5
Dr. Jata shankar	Insight into the metabolic changes during germination of *Aspergillus niger*conidia using nLC-qTOF	Biologia	2022 77, 2701-2714 https://doi.org/10.1007/s11756-022-01115-6 IF-1.5 SCI and Scopus	2
Dr. Jata Shankar	Integrated Bioinformatics Analysis to Study Gallic Acid-Mediated Inhibition of Polyketide Synthase A from Aflatoxin Biosynthesis Pathway of *Aspergillus flavus*. Chemistry Africa	Chemistry Africa	2023 https://doi.org/10.1007/s42250-023-00589-4 Scopus, ESCI	0
Dr. Jata Shankar	Allyl-2-methoxyphenol Modulates the Expression of Genes Involved in Efflux Pump, Biofilm Formation and Sterol Biosynthesis in Azole Resistant *Aspergillus fumigatus*	Frontier in Cellular Infection Microbiology	2023 1.13: 1103957 - | https://doi.org 10.3389/fcimb.2023.1103957 IF: 6.02, Scopus, SCI	0

Dr. Jata Shankar	A natural compound mediated alpha-synuclein aggregation inhibition leads to neuroprotection in *Caenorhabditis elegans* models	Journal of Neurochemistry	2023 Accepted IF: 5.5, Scopus, SCI	0
Dr. Ashok Kumar Nadda	Chicken Feather Waste Hydrolysate as a Potential Biofertilizer for Environmental Sustainability in Organic Agriculture Management	Waste and Biomass Valorization	2023, https://doi.org/10.1007/s12649-023-02123-6, IF - 3.5, SCI	1
Dr. Ashok Kumar Nadda	Plasmonic Au nanoparticles anchored 2D WS2@RGO for high-performance photoelectrochemical nitrogen reduction to ammonia	Chemical Engineering Journal	2023, 465, 143040 IF 16.74. SCI	0
Dr. Ashok Kumar Nadda	Engineered biochar for the effective sorption and remediation of emerging pollutants in the environment	Journal of Environmental Chemical Engineering	2023, 11(2):109590 IF: 7.96, Scopus,	0
Dr. Ashok Kumar Nadda	Protein inorganic hybrid nanoflowers of a microbial carbonic anhydrase as efficient tool for the conversion of CO2 into value added product	Journal of Chemical Technology & Biotechnology	2023, 95(5): 1303-1311, IF 3.70, SCI	0
Dr. Ashok Kumar Nadda	A State-of-The-Art Review on the Latest trends in Hydrogen production, storage, and transportation techniques	Fuel	2023, 340(10):127574, IF: 6.60, SCI	7
Dr. Ashok Kumar Nadda	Microbial community profiling in bio-stimulated municipal solid waste for effective removal of organic pollutants containing endocrine disrupting chemicals	Microbiological Research	2022, 267(4):127273, IF: 5.07, SCI	2
Dr. Ashok Kumar	A review of sensor applications towards	Renewable and Sustainable Energy	2022, 169:112915,	12

Nadda	precise control of pyrolysis of solid waste and biomasses	Reviews	IF: 16.95, SCI	
Dr. Ashok Kumar Nadda	Enzyme mediated transformation of CO2 into calcium carbonate using purified microbial carbonic anhydrase	Environmental Research	2022, 212:113538, IF: 8.431, SCI	1
Dr. Ashok Kumar Nadda	Emerging chemo-biocatalytic routes for valorization of major greenhouse gases (GHG) into industrial products: A comprehensive review	Journal of Industrial and Engineering Chemistry	2022, 109, 1- 20, IF: 6.76, SCI	6
Dr. Ashok Kumar Nadda	Artificial neural network and statistical modelling of biosorptive removal of hexavalent chromium using macroalgal spent biomass	Chemosphere	2022, 296:133965, IF: 5.278, SCI	34
Dr. Tiratha Raj Singh	Pharmacoinformatics based screening of combined synthetic and natural compounds to identify novel and in silico potential Bcl-2 inhibitors	Journal of Molecular Liquids	2022, 366 (2022), pp. 1-15, IF: 6.63, SCI	0
Dr. Tiratha Raj Singh	A bioinformatics approach to the identification of novel deleterious mutations of human TPMT through validated screening and molecular dynamics	Scientific Reports	2022, 12 (18872), pp. 1-21, IF: 4.99, SCI	1
Dr. Tiratha Raj Singh	Comprehensive analysis of non-synonymous missense SNPs of human galactose mutarotase (GALM) gene: an integrated computational approach	Journal of Biomolecular Structure and Dynamics	2022, 1-5, IF: 5.23, SCI	0
Dr. Tiratha Raj Singh	Disruption of DYRK1A-induced hyperphosphorylation of amyloid-beta and	Front. Mol. Biosc.	2023, 9, 1-12, IF: 6.11, SCI	0

	tau protein in Alzheimer's disease: An integrative molecular modeling approach			
Dr. Tiratha Raj Singh	Curative anti-typhoid effect of Detarium microcarpum Guill. & Perr.(Leguminosae) hydroethanolic extract root bark based-on in vivo and molecular docking analyses		2023, 307, 116209, IF: 5.19, SCI	0
Dr. Abhishek	Nanocatalysts as potential candidates in transforming CO2 into valuable fuels and chemicals: A review	Journal of Environmental Nanotechnology,Monitoring and management	2022,18, 1100671,SCI	11
Dr Hemant Sood	Emerging Technologies for the Production of In Vitro Raised Quality Rich *Swertia chirayita* by Using LED Lights	Sustainability	2023,15(2),1-14, IF: 3.86, SCI	1
Dr Hemant Sood	Artificial seed production and cryopreservation by encapsulation dehydration for medicinal herb of Himalayan region, *Swertia chirayita*	Cryoletters	43(5)pp295-302. IF: 0.89, SCI	0
Dr Hemant Sood	Optimizing nutrient media conditions for continuous production of shoot biomass enriched in major medicinal constituents, amarogentin and mangiferin of endangered medicinal herb, Swertia chirayita	Vegetos.	DOI:10.1007/s42535-022-00464-6. Scopus	
Dr Hemant Sood	ABC Transporters Mined Through Comparative Transcriptomics Associate With Organ-Specific Accumulation of Picrosides in a Medicinal Herb, *Picrorhiza kurroa*.	Protoplasma	DOI : 10.1007/s00709-022-01786-7, IF: 3.36, SCI	1

Dr. Jitendraa Vashistt	Eugenol and geraniol Impede Csu-pilus Assembly and Evades Multidrug-resistant *Acinetobacter baumannii* biofilms: In-vitro and In-silico evidence.	Biochemical and Biophysical Research Communications	2022,636 (2), pp. 10-17, https://doi.org/10.1016/j.bbrc.2022.10.095 IF: 3.3, SCOPUS, SCI , UGC Care	
Dr. Jitendraa Vashistt	*Acinetobacter baumannii*Biofilm Formation: Association with Antimicrobial Resistance and Prolonged Survival under Desiccation.	Current Microbiology	2022,79 (Article number: 361), pp. 1-9, https://doi.org/10.1007/s00284-022-03071-5 IF: 2.3, Scopus, SCI , UGC Care	1
Dr. Raj Kumar	Identification of Activated Cdc42-Associated Kinase Inhibitors as Potential Anticancer Agents Using Pharmacoinformatic Approaches	Biomolecules	13 (2), pp. 217-238, 2023, DOI: https://doi.org/10.3390/biom13020217, IF: 6.06, SCIE	0
Dr Anil Kant	A waste-based circular economy approach for phycoremediation of X-ray developer solutions.	Environmental Pollution	316 (1), pp. 120530-, DOI: https://doi.org/10.1016/j.envpol.2022.120530 IF: 9.98.	0
Dr Anil Kant	Exploration of Indian Traditional recipe “Tarvaani” from the drained rice gruel for nutritional and probiotic potential.	International Journal of Gastronomy and Food Science	2023, Volume 31,100670, https://doi.org/10.1016/j.ijgfs.2023.100670 IF: 3.194	0
Dr. Rahul Shrivastava	Eugenol and geraniol Impede Csu-pilus Assembly and Evades Multidrug-resistant *Acinetobacter baumannii* biofilms: In-vitro and In-silico evidence.	Biochemical and Biophysical Research Communications	2022,636 (2), pp. 10-17, https://doi.org/10.1016/j.bbrc.2022.10.095 IF: 3.3, Scopus, SCI , UGC Care	0
Dr. Rahul Shrivastava	*Acinetobacter baumannii* Biofilm Formation: Association with Antimicrobial Resistance and Prolonged Survival under Desiccation.	Current Microbiology	2022,79 (Article number: 361), pp. 1-9, https://doi.org/10.1007/s00284-022-03071-5 IF: 2.3, Scopus, SCI , UGC Care	0

Dr.Garlapati Vijay Kumar	Plant microbial fuel cells as an versatile agro-technology for green energy generation combined with wastewater treatment and food production	Biomass & Bioenergy	2022, 167:106626, IF:5.774, Scopus, SCIE	5
Dr.Garlapati Vijay Kumar	Role of Electrode and Proton Exchange Membrane Configurations on Microbial Fuel Cell Performance towards bioelectricity generation integrated wastewater Treatment	Journal of Toxicology and Environmental Health, Part A	2023, 58(1):13-23, IF:2.527, Scopus, SCIE	0
Dr.Garlapati Vijay Kumar	Exploration of Indian Traditional recipe "Tarvaani" from the drained rice gruel for nutritional and probiotic potential	International Journal of Gastronomy and Food Science	2023, 31: 100670, IF:3.194, Scopus, SCIE	0
Dr.Garlapati Vijay Kumar	Interference of Nanoparticulates in seed invigoration of Green gram	Plant Physiology and Biochemistry	2023, 195: 256-265, IF:5.437, Scopus, SCIE	0
Dr.Garlapati Vijay Kumar	Valorization of Environmental-burden Waste towards Microalgal Metabolites Production	Environmental Research	2023, 227: 115320, IF:8.431, Scopus, SCIE	0
Dr.Garlapati Vijay Kumar	A waste-based circular economy approach for phycoremediation of X-ray developer solution	Environmental Pollution	2023, 316(1): 120530, IF:9.988, Scopus, SCIE	0
Dr. Gopal Singh Bisht	Synergistic effects of short peptides and antibiotics against bacterial and fungal strains	Journal of Peptide Science	2022, Aug 5; e3446. doi: 10.1002/psc.3446. IF 2..048	0
Dr. Gopal Singh Bisht	Nanodelivery Systems as Therapeutics in Cancer	Current Cancer Therapy Reviews	2022,18(2), 80-86 DOI: 10.2174/1573394718666220329184532	0
Dr. Gopal Singh Bisht	A Mini-Review on Potential of Neuropeptides as Future Therapeutics	International Journal of Peptide Research and Therapeutics,	2022, 39,477 IF: 2.19	0

Patents

S. No.	Patent No. and Date of Grant	Application No.	Title	Department and Inventors
1	2022/08660 26-10-2022		A composition and a method for investigating intermolecular interactions of bioactive molecule and surfactant	Vikrant Abbot, Poonam Sharma,
2	319983-001, 13-01-2023	Cbr no: 14079	Movable biogas reactor	Karam Dass, Ankur Choudhary, Ashish Kumar, Sudhir Kumar
3		202311039260	Machine Learning-based method for classifying Alzheimer's disease-associated genes	Rohit Shukla and Tiratha Raj Singh
4	404438, Aug, 2022	1161/DEL/2014 A	Non-Natural Short Cationic Antimicrobial Lipopeptides	Gopal Singh Bisht, Sandeep Lohan

- **Books/Book Chapters Published**

Books

Name of Faculty	Name of Book	Reference	Publisher	Remark
Dr. Saurabh Bansal	Human-Gut Microbiome: Establishment and Interactions	2022, Gunjan Goel, Teresa Requena, Saurabh Bansal [978-0-323-91313-3]	Academic Press (Elsevier), USA	
Dr. Poonam Sharma	Interaction Surfactants with antimicrobial drug Itraconazole: analysis of surfactant micelles and their interaction with antimicrobial drug itraconazole.	2022, Anubhav Jamwal, Anmol Bansal, Poonam Sharma [9786204745213]	Moldova: Lambert.	
Dr. Ashok Kumar Nadda	Microbes for Natural Food Additives	2023, Ashok Kumar Nadda, Gunjan Goel [9789811957109]	Springer, Nature Singapore	
Dr. Ashok Kumar Nadda	Membranes for Water Treatment and Remediation	2023, Ashok Kumar Nadda, Dr. Priya Banerjee, Swati Sharma, Phuong Nguyen-Tri [9789811991752]	Springer-Nature	
Dr. Ashok Kumar Nadda	Biopolymers Recent updates, challenges and opportunities	2022, Ashok Kumar Nadda, Swati Sharma, Rajeev Bhat [978-3-030-98392-5]	Springer Cham	
Dr. Ashok Kumar Nadda	Development in Wastewater Treatment Research and Processes Bioelectrochemical Systems for Wastewater Management	2022, Achlesh Daverey, Ashok Kumar Nadda, Maulin P Shah, Susana Rodriguez-Couto [0323904416]	Elsevier	

Book Chapters

Name of Faculty	Book Chapter Title	Name of Book	Reference	Remark
Dr. Saurabh Bansal	An Introduction to human gut microbiome	Human-Gut Microbiome: Establishment and Interactions	3-14, 2022, Gunjan Goel, Teresa Requena, Saurabh Bansal, [978-0-323-91313-3]	Academic Press (Elsevier), USA
Dr. Saurabh Bansal	Techniques and Challenges in Studies related with human gut microbiome	Human-Gut Microbiome: Establishment and Interactions	37-57, 2022, Gunjan Goel, Teresa Requena, Saurabh Bansal, [978-0-323-91313-3]	Academic Press (Elsevier), USA
Dr. Saurabh Bansal	Green Technologies for Reduction of Toxins in Food Production and Processing	Green Chemistry in Agriculture and Food Production	224-244, 2023, Vinay Kumar, Kleopatra Tsatsaragkou, Nilofar Asim, [978-0429-28953-8]	Taylor &Francis, USA (CRC Press), Boca Raton
Dr. Jata Shankar	Aflatoxins: Occurrence, Biosynthetic Pathway, Management and Impact on Health	Fungal Resources for Sustainable Economy	565-596 2023 I. Singh et al. (eds.) [978-981-19-9102-8]	Springer Nature Singapore Pte Ltd.
Dr. Jata Shankar	Bioinformatics Integration to Biomass Waste Biodegradation and valorization.	Next-Gen Technological Advances for Sustainable Development of Enzyme based Biorefinery edition-1	177-204 2022 Ed Pradeep Verma [9781032035208]	CRC Press, Boca Raton
Dr. Ashok Kumar Nadda	Sustainable Biodegradation and Extraction of Keratin with Its Applications	Handbook of Biopolymers	1-35, 2023, Sabu Thomas, Ajitha AR, Cintil Jose Chirayil, Bejoy Thomas [9811907102]	Springer Nature Singapore
Dr. Ashok Kumar Nadda	Polymeric Membranes for Water Treatment	Membranes for Water Treatment and Remediation	1-22, 2023, Phuong Nguyen Tri, Swati Sharma, Priya Banerjee, Ashok Kumar Nadda [9811991766]	Springer Nature Singapore
Dr. Ashok Kumar Nadda	Biopolymers for CO2 capture	CO_2-philic Polymers, Nanocomposites And Solvents Capture, Conversion and Industrial Products	289-313, 2023, Ashok Kumar Nadda, Susheel Kalia, Swati Sharma [032385821X]	Elsevier Science
Dr. Ashok Kumar Nadda	Potential of nanomaterials and biomolecules for CO2 conversion	CO2-philic Polymers, Nanocomposites and Chemical Solvents	321-338, 2023, Ashok Kumar Nadda, Susheel Kalia, Swati Sharma[032385821X]	Elsevier Science
Dr. Ashok Kumar	Microbial Food Additives: Types,	Microbes for Natural Food Additives	1-12, 2023, Ashok Kumar Nadda, Gunjan	Springer Nature

Nadda	Functions, and Challenges		Goel[9811957118]	Singapore
Dr. Ashok Kumar Nadda	Design of Nanostructured Lipid Carriers and Hybrid Lipid Nanoparticles	Concepts and Design of Materials Nanoarchitectonics	2022, Katsuhiko Ariga, Omar Azzaroni[1788019628]	Royal Society of Chemistry
Dr. Ashok Kumar Nadda	Advances in the Resources to Augment Microalgal Genetic Engineering: Omics-based Resources, Mutant Libraries, and High-throughput Screening Techniques	Microalgae for Sustainable Products	2022, Ajam Shekh, Santanu Dasgupta[1839167513]	Royal Society of Chemistry
Dr. Ashok Kumar Nadda	C1 Chemistry: An Overview	C1 chemistry	2022, Saeed Sahebdelfar, Maryam Takht Ravanchi, Ashok Kumar Nadda[1000593673]	CRC Press
Dr. Ashok Kumar Nadda	C1 Interconversions	C1 chemistry	2022, Saeed Sahebdelfar, Maryam Takht Ravanchi, Ashok Kumar Nadda[1000593674]	CRC Press
Dr. Ashok Kumar Nadda	Biopolymers and Environment	Biopolymers, recent updates, challenges and opportunities	19-33, 2022, Ashok Kumar Nadda, Swati Sharma, Rajeev Bhat[978-3-030-98392-5]	Springer
Dr. Abhishek	Protein Sequence Analysis	Basic Biotechnique for Bioprocess and Bioentrepreneurship	2023,Arvind Bhatt, Ravi Bhatia, Tek Bhalla[9780128161098]	Elsevier Science
Dr. Raj Kumar	Computational strategies and tools for protein tertiary structure prediction	Basic Biotechniques for Bioprocess and Bioentrepreneurship	2023,Arvind Bhatt, Ravi Bhatia, Tek Bhalla[9780128161098]	Elsevier Science
Dr. Rahul Shrivastava	Techniques and challenges in studies related with human gut microbiome	Human-Gut Microbiome: Establishment and Interactions	3-14, 2022, Gunjan Goel, Teresa Requena, Saurabh Bansal [978-0-323-91313-3]	Academic Press (Elsevier), USA
Dr. Rahul Shrivastava	Emergence of antibiotic resistance in gut microbiota and its effect on human health	Human-Gut Microbiome: Establishment and Interactions	3-14, 2022, Gunjan Goel, Teresa Requena, Saurabh Bansal [978-0-323-91313-3]	Academic Press (Elsevier), USA

- **Conference Publications**

Name of Faculty	Title of Articlepresented	Name of conference	Reference	Dates
Dr Hemant Sood	An integrated in silico approach to identify bioactive Phytochemicals in Bauhinia variegata plant as potential lead candidates against SARS-CoV-2 transmission target	European Journal of Molecular and Clinical Medicine	10(1)pp 570-580 , ISSN: 2515-8260 (WOS)	Jan 2023
Dr Anil Kant	Spray induced RNAi: A promising approach towards Plant disease and Pest management,	Invited talk in 7th International Conference of Indian Network for Soil Contamination Research (INSCR) on Modulating Environment with Microbes, 8-11		Nov. 2022
Dr Anil Kant	CRISPR based detection of Tomato Leaf Curl New Delhi Virus (ToLCNDV) in Potato,	National Symposium on Novel Strategies in Plant Stress Diagnosis and Management, at Dr YS Parmar University of Horticulture & Forestry Nauni -173230 Solan (HP) INDIA, Organized by Himalayan Phytopathological Society & Department of Plant Pathology		May 6-7, 2022
Dr.Garlapati Vijay Kumar	Bioprocess Engineering Laboratory- Algal Research 2023	International Symposium on Advances in Algal Research (AAR-2023)", IIT Guwahati, Guwahati, India		June 12 - 14, 2023

- **Guest Speakers/Lectures**

  - **Guest Speakers**

Name	Affiliation	Title	Date
Dr. Amit Kumar Singh	Senior Scientist, Division of Genomic Resources, ICAR-National bureau of Plant Genetic Resources, New Delhi)	Genomics assisted characterization of germplasm and trait mapping in crops	20-03-2023
Mr. Pawan Verma	Senior, Bioinformatiocs Scientist, Elucidata Data Consulting pvt. Ltd.	NGS Data Processing at Scale: Perspectives from Academia and Industry	21-03-2023
Mr. Sachin Kumar Gupta	Senior, Bioinformatiocs Scientist, Elucidata Data Consulting pvt. Ltd.	NGS Data Processing at Scale: Perspectives from Academia and Industry	21-03-2023
Dr. Manoj Kumar	Principal Scientist and Head, Virology Unit Bioinformatics Centre CSIR-Institute of Microbial Technology, Chandigarh	Viral next-generation sequencing data analysis	23-03-2023
Ms. Neha Kapoor	Paraxel, Chandigarh	Academic-Industry Relationship	25-11-2022
Dr. Omesh Kumar Bharti	State Epidemiologist, State Institute of Health & Family Welfare, Parimahal, Shimla, Himachal Pradesh	Breaking the barriers to introduce Intra-dermal ARV	08-12-2022
Dr. Prosenjit Mondal	Associate Professor, School of Basic Sciences, IIT Mandi, Himachal Pradesh	A new strategic plan to combat diabetes	09-12-2022
Dr. Hemraj Nandanwar	Chief Scientist, CSIR-Institute of Microbial Technology, Chandigarh	Triedecaptin M: A preclinical candidate against colistin resistant Gram negative bacteria	10-12-2022
Dr. Deepak Kumar	Professor, School of Pharmaceutical Science, Shoolini University, Himachal Pradesh	Design, synthesis, characterization of heterocyclic compounds and their biological activity	10-12-2022
Dr. Mahesh Kulharia	Associate Professor & Director, Centre for Computational Biology & Bioinformatics, CUHP, Himachal Pradesh	Computer Aided Drug Discovery	11-12-2022
Dr. Rajnish Sharma	Associate Professor & Head, Department of Biotechnology, YSP UHF Nauni, Himachal Pradesh	Biotechnological interventions in medicinal plants: Conservation and bioactive compound extraction	11-12-2022

Dr. Shamsher Singh Kanwar	Professor, Department of Biotechnology, Himachal Pradesh University	MMT assay	12-12-2022
Dr. Umender Sharma	Founder, CorMic Biotechnologies Pvt Ltd., Dharampur, HP	Genetic validation of drug targets in Mycobacterium tuberculosis	13-12-2022
Dr. Wamik Azmi	Professor & Chairperson, Department of Biotechnology, Himachal Pradesh University	Nanopharmaceuticals and nanomedicines	14-12-2022
Dr. Inderjeet Kaur	Assistant Professor, Department of Biotechnology, Department of Biotechnology, Central University of Haryana, Haryana		14-12-2022
Dr. Omesh Kumar Bharti	Principal, State Institute of Health and Family Welfare, Kasumpti Shimla	Breaking the barriers to introduce Intra-dermal ARV	05-06-2023
Dr. Meenakshi Sood	Associate Professor in CDC & ECE, National Institute of Technical Teachers Training & Research, Chandigarh	Implementation of Outcome-Based Education Framework	05-06-2023
Dr. Meenakshi Sood	Associate Professor in CDC & ECE, National Institute of Technical Teachers Training & Research, Chandigarh	Key Insights into NEP 2020 for Technical HEIs	06-06-2023
Prof. (Dr.) O. P. Sharma	Emeritus Scientist at CSIR-Institute of Himalayan Bioresources Technology Palampur	Striving for Excellence in Academic and Research	07-06-2023
Prof. (Dr.) O. P. Sharma	Emeritus Scientist at CSIR-Institute of Himalayan Bioresources Technology Palampur	Soft Skills for Professional Development	07-06-2023
Mr. Amit Kumar	Faculty cum Trainer of Computer Science with NVS, (MoE), Govt. of India. National Awardee Teacher 2022 from Hon'ble President of India	Innovation in Teaching and learning Practices	07-06-2023

Prof. R. K. Sani	Professor, Departments of Chemical and Biological Engineering & Chemistry and Applied Biological Sciences, South Dakota School of Mines and Technology, USA	How to write an effective proposal?	08-06-2023
Prof. Vijay Kumar Thakur	Head, Biorefining& Advanced Materials Research Centre SRUC UK	Grant Opportunities in the UK-Europe and An Overview of Research Proposal Writing	08-06-2023
Dr. Naren Aggarwal	Editorial Director of books in Asia, Springer Nature Group	How to Write and Publish a Book	08-06-2023
Ms. Reema Sahni Mediratta	Senior Project Manager at Innovation Technology Transfer Office, FITT, IIT Delhi	Nuances of IPR and its translation	09-06-2023

- **Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Dr Jata Shankar	Professor	Biology of Aspergilli: Application of omics during Host-Pathogen Interactions	15-10-2022	JUIT Waknaghat
Dr Jata Shankar	Professor	Genomics in Human Health and Medicine	16-05-2023	JUIT Waknaghat
Dr Jata Shankar	Professor	RNA-seq data analysis of Aspergillosis in mice model	22-03-2023	JUIT Waknaghat
Dr. Shikha Mittal	Assistant professor	Next-geneeration sequencing by denovo assembly and annotation	08-12-2022	JIIT, Noida
Dr. Shikha Mittal	Assistant professor	Digitalization in the healthcare sector/e-health	24-12-2022	Govt. College, Sanjauli
Dr. Shikha Mittal	Assistant professor	Denovo and Reference based assembly using linux based pipelines	22-03-2023	JUIT, Waknaghat
Dr Jata Shankar	Professor	Application RT-PCR in validation of drug targets	09-12 2022	DST STUTI ICT workshop "A hands-on training program on approaches for screening and

				characterization of pre-clinical drug candidates" JUIT Waknaghat
Dr. Sudhir Kumar	Professor & HOD	Joy of Teaching	15-02-2023	Teachers' Training Program of Pinegrove school, Subathu, Himachal Pradesh
Dr. Sudhir Kumar	Professor & HOD	Social Relevance of Bitechnology & Bioinformatics	25-05-2023	Online webinar, RKMV Shimla
Dr. Tiratha Raj Singh	Professor	Bioinformatics: Multimodal Applications in Biological and Health Sciences	29-09-2022	9th International conference of GAMS at PCCOE, Pune, India
Dr. Tiratha Raj Singh	Professor	Systems Genomic Approaches for their Applications in Animal and Plant Sciences	08-12-2022	JIIT, Noida
Dr. Tiratha Raj Singh	Professor	Bioinformatics and its applications in healthcare	12-06-2023	JUIT Waknaghat
Dr Hemant Sood	Associate Professor	Trends and Prospects in Plant Biotechnology	19-06-2023	JUIT Waknaghat
Dr Hemant Sood	Associate Professor	Intellectual property Rights &Building Knowledge economy	10-06-2023	JUIT Waknaghat
Dr Hemant Sood	Associate Professor	Intellectual property Rights	31-03-2023	Department of education & UGC-Human Resource development Centre HPU, Shimla
Dr Hemant Sood	Associate Professor	IPR for building knowledge economy	16-02-2023	UGC-Human Resource development Centre HPU,Shimla
Dr Hemant Sood	Associate Professor	Production of medicinal compounds from medicinal plants by using tissue culture technologies	09-12 2022	DST STUTI ICT workshop "A hands-on training program on approaches for screening and characterization of pre-clinical drug candidates" JUIT Waknaghat
Dr Hemant Sood	Associate Professor	Effects of UV Radiations in Crops	16-09-2022	World Ozone Day organized by HIMCOSTE in collaboration with JUIT Waknaghat

Dr. Raj Kumar	Assistant Professor	Computational drug repurposing for COVID-19 treatment	29.08.2022	SAGE University, Indore, MP
Dr. Raj Kumar	Assistant Professor	Linux basic commands	20.03.2023	JUIT, Waknaghat
Dr Anil Kant	Associate Professor	Wonderful Products of Genetic Engineering	03-06-2023	Online webinar
Dr. Saurabh Bansal	Associate Professor	Enzymes in Diagnosis and Therapy	13-12-2022	DST STUTI ICT workshop "A hands-on training program on approaches for screening and characterization of pre-clinical drug candidates" JUIT Waknaghat
Dr.Garlapati Vijay Kumar	Associate Professor	Phycoremediation of X-ray developer solution towards silver removal using waste as a nutrient media of *Desmodesmus armatus*	June 12 - 14, 2023	International Symposium on Advances in Algal Research (AAR-2023)", IIT Guwahati, Guwahati, India
Dr.Garlapati Vijay Kumar	Associate Professor	Classification of Biofuels and Introduction to 2G Bioethanol	01-01-2023	Online Training Programme under the aegis of IDP-NAHEP organized by The Department of Renewable & Bioenergy Engineering, College of Agricultural Engineering & Technology, CCS HAU Hisar,India.
Dr.Garlapati Vijay Kumar	Associate Professor	Pretreatment Technologies	Jan 2023	Online Training Programme under the aegis of IDP-NAHEP organized by The Department of Renewable & Bioenergy Engineering, College of Agricultural Engineering & Technology, CCS HAU Hisar,India.

- **Recognition & Awards**

  - **By Faculty**

Name of Faculty	Designation of Faculty	Award in full details	Date	Achievement
Dr. Shikha Mittal	Assistant professor	Best poster award, Indian Society of Pulses Research and Development (ISPRD), Kanpur ICAR-Indian Institute of Pulses Research (IIPR), Kanpur Indian Council of Agricultural Research (ICAR), New Delhi	12-Feb-2023	Best Poster Award in ICPulses 2023 (An International conference on Pulses: Smart Crops for Agricultural Sustainability and Nutritional Security)
Dr. Tiratha Raj Singh	Professor	Bioclues Innovation Research and Development (BIRD) award	Sept., 2022	BIRD award from the Largest Bioinformatics Society of India. Only 4 Academicians/Scientists were selected from PAN India. The award becomes even more special when it was special choice of the jury.
Dr Hemant Sood	Associate Professor	CII nominated Dr Hemant Sood among 125 women luminaries in STEM and showcased her success stories and achievements along with 125 women luminaries who have made a significant mark in the arena of Science, Technology, Engineering and Mathematics and released compendium Women in STEM: Vanguards of India@75 on 22nd July 2022, at Women	22-July-2022	CII nominated Dr Hemant Sood among 125 women luminaries in STEM

		in STEM Summit organized by Confederation of Indian Industry (CII) N.Delhi with Govt partners		
Dr.Garlapati Vijay Kumar	Associate Professor	Listed in"Top 2% World's Scientists 2022" by Stanford University, USA	17-Nov-2022	Featured in the List
Dr.Garlapati Vijay Kumar	Associate Professor	Listed in "AD Scientific index 2022: World Scientist and University Rankings 2022".	24-Nov-2022	Featured in the List

- **Students**

Name of Students, Enrolment No.	Semester	Award in full details	Date	Achievement
Rohit Shukla, 186501	Ph.D.	Post doctoral fellowship from Center of Excellence in Aging and Brain Repair, University of South Florida, Tampa, USA	Feb., 2023	Prestigious fellowship from South Florida University
Ipshita Dutta,181810	B. Tech	Screening of Phytochemicals in Shoot Cultures of Endangered Herb- Gentiana kurroo Royle" has been awarded as the "Best Paper Award " by 23rd AAACU Biennial Conference with International Forum on Agricultural Innovation, Sustainability, Entrepreneurship and Networking (i-FAISEN) held at Chiang Mai, Thailand	4th-8th July 2022	Best Paper Award in International conference held in Thailand

- **Composition of 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 (Retd.), 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	Prof. G .P. S. Raghava,	Prof and Head, Dept of Computational Biology	IIIT-Dehli
7	Mr. Aditya Sahni	Alumni, Dept. of BT & BI	JUIT Waknaghat
8	Dr. Tiratha Raj Singh	Professor, Dept. of BT & BI	JUIT Waknaghat
9	Dr. Saurabh Bansal	Associate Professor, Dept. of BT & BI	JUIT Waknaghat
10	Prof. (Dr.) Vivek Sehgal	Head Dept. of CSE and IT	JUIT Waknaghat
11	Dr. Rajiv Kumar	Head, Dept. of ECE	JUIT Waknaghat
12	Prof. (Dr.) P.B. Barman	Professor and Head, Dept. of PMS	JUIT Waknaghat
13	Prof. (Dr.) Rakesh Kumar Bajaj	Professor and Head, Dept. of Mathematics	JUIT Waknaghat
14	Prof. (Dr.) Ashish Rohilla	Professor and Head, Dept. of CE	JUIT Waknaghat
15	Dr. Amit Shrivastava	Associate Professor and Head, Dept. of HSS	JUIT Waknaghat

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 zealthus, to be recognized internationally as one of the best centers 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**

S No	Faculty	Qualification	Specializations
1	Ashish Kumar	PhD	Scouring around Hydraulic Structures, Fluvial Hydraulics
2	Ashok Kumar Gupta	PhD	Constitutive Modeling of Geological Materials, Rock Mechanics and FEM
3	Saurabh Rawat	PhD	Slope Stability problems (including Seismic), Soil-nailing, Landfill Design
4	Amardeep	PhD	Transportation Engineering, Traffic Operation and Analysis, Pedestrian Behavior, Pavement Materials
5	Rishi Rana	PhD	Environmental Engineering, Solid Waste Management, Life Cycle Assessment
6	Saurav	PhD	Concrete Rheology, Development of HPC with Alcofine
7	Sugandha Singh	PhD	Structural dynamics, Earthquake engineering, Structural analysis, Multi-hazard risk assessment.

8	Tanmay Gupta	PhD	Structural behavior of RCC and Composite Bridges, FEA of Concrete Structures, Seismic behavior of Concrete bridges.
9	Chandra Pal Gautam	MTech, PhD (Pursuing)	Rehabilitation of Structure, Concrete Technology, Fracture Mechanics
10	Kaushal Kumar	MTech, PhD (Pursuing)	Structural Dynamics and Earthquake Engineering; Service Life Assessment of Structures, Structural Modeling and Analysis
11	Niraj Singh Parihar	MTech, PhD (Pursuing)	Liquefaction, Slope Stability, Hazard Assessment
12	Akash Bhardwaj	MTech, PhD (Pursuing)	Urban Planning, Transportation Planning, Urban Housing, Water Treatment Processes

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. The department offers two programs in Civil engineering; BTech in Civil Engineering and BTech in Civil Engineering with Computer Application. The department of Civil Engineering is offeringcutting-edgeinterdisciplinary 4-year BTech degree program in civil engineering with computer application, which is a new emerging trend from session 2022-23. Present day practice of civil engineering applications in real life includes design of smart highway systems, sensor-based technology for monitoring of pollution, cyber security of buildings, use of data analysis techniques to check feasibility of construction projects, use of AI systems for predicting soil and rock properties, use of ML in identifying hydrological responses in a catchment after precipitation and many more applications. The purpose of this program is to produce undergraduates who are fully prepared to work in an engineering position requiring expertise in the field of computer applications to apply the same in the infrastructure industry.

- **Post Graduate Programs**

  - **MTech (Construction Management)**

    The 2-year MTech program provides preparation for effective leadership in the field which includes light (residential and small office buildings) and heavy (large office buildings and facilities, infrastructure) projects. It aims to educating the students with regulatory, insurance, management, safety, planning tools, estimation, and environmental aspects of management necessary forthe overall planning and control of construction projects. The course helps in gaining innovative problem-solving skills to

determine costs and apply time-value-of-money concepts to effectively evaluate alternatives. With a curriculum developed in collaboration with the University of Florida (USA), the programme assures relevant and global standards of education.

- **MTech (Environmental Engineering)**

  MTech in Environmental Engineering is a two-year post-graduate program aimed to give insights on the topics of advanced process of environmental policy planning and how to ensure efficient and timely implementation of sustainable environment projects. Students are imparted advanced learning in Process design in Environment Engineering, Industrial wastewater treatment, Environmental law and Policy, Risk Management, Optimisation Techniques, Environmental Policy Management and treatment facilities. The students are exposed to practical learning through Industry-academia interaction as well as research work, by working on real-world projects in the field of environmental engineering.

- **MTech (Structural Engineering)**

  This 2-year program is designed for students who wish to pursue their career as Structural Engineer. Under this course, the study is focused on scientific principles to design and build various structures such as multi-storey buildings, bridges, tunnels, dams etc. The course introduces numerically demanding research and design exercises relating to a wide-range of structures using simulation, modelling and computational software programs such as STAAD pro, Abaqus, Ansys, SAP, Revit etc. The program lays equal emphasis on laboratory work, industrial visits, and research-based dissertation. MTech program in Structural Engineering provides basic preparation for professional careers and anunderstanding of design, comprehension of the commercial world and competence in transferable skills.

- **PhD Program**

  The Department carries out research anddevelopment activities in the three broad thrust area: Ground Improvement and Slope Stability, Municipal Solid Waste Management&Air Quality Monitoring, and Construction Materials& Structural Dynamics. The main area of research isSoil Nailing and Helical Soil Nailing, slope Stability Analysis and Mitigation, Stone Columns for Ground Improvement, Assessment of Methane and energy Potential from different types of Biodegradable Waste, Environmental Monitoring and Pollution, Enhancing the Strength Properties of Recycled Aggregate Concrete, Innovative Solution to Prevent the Dampness in Concrete Structure, Analysis of Special Geometrical Layout for Bridges, Seismic Behaviour of Concrete Bridges, Low–Cost Material Utilization in Construction Blocks, 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.

- **Lab Facilities**

New Equipment

SNo	Name of Apparatus	Supplier Name	Quantity	Lab
1	Stone cutter	Axis Technologies Dehradun	1	Project

- **Lab Staff**

S.No.	Name	Designation	Qualification
1.	Mr Jaswinder Singh	Lab Technician	Diploma, Civil Engineering
2.	Mr Amar Kumar	Lab Technician	Diploma, Civil Engineering
3.	Mr Rajesh Sahu	Lab Technician	Diploma, CSE
4.	Mr Itesh Kumar Singh	Lab Assistant	B.Tech-Civil Engineering
5.	Mr Pradeep Kumar	Jr Lab Assistant	BSc
6.	Mr Ashish	Lab Boy	

- **Labs**

1	Chemistry Laboratory
2	Civil 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	Fluvial Hydraulics & Research Lab

- **List of Major Equipments**

1. Triaxial Shear Test Apparatus
2. Los angles Abrasion testing machine
3. Ductility testing machine
4. Laboratory C.B.R. Apparatus
5. Aggregate crushing value Apparatus 30 cm
6. Concrete flow table
7. Direct Shear Test Apparatus
8. Benkelman Beam, Digital

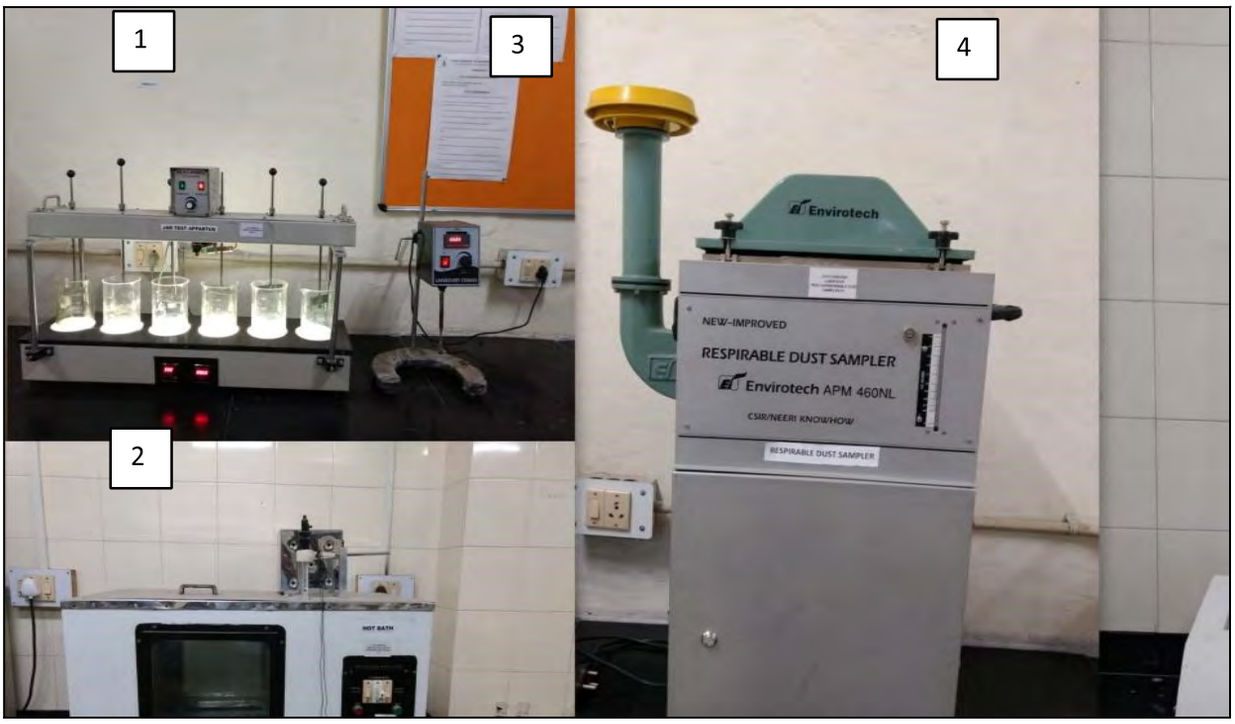
9. Marshall Test Apparatus (Digital)
10. Automatic Compactor for Marshall mould of 100mm diameter
11. Digital Humidity Chamber/Cabinet
12. Electronic Total Station SET 610
13. Accelerated Curing Tank
14. Universal Testing Machine
15. Respirable Dust Sampler
16. Total Station
17. Spectrophotometer
18. Multiparameter Testing Apparatus (pH/BOD)
19. Unconfined Compression test Apparatus
20. Dynamic Cone Penetration Test Apparatus (DCPT)
21. Triaxial Electronic Conversion Kit
22. Hobart Mixer MADE IN U.S.A./GERMANY
23. Flexural Testing Machine capacity – 20 ton (Electrically operated)
24. Compression Testing Machine capacity – 200-ton Digital (Electrically Operated)
25. Lathe Machine 4.5 Feet Long.
26. Milling Machine
27. Furnace (Maximum Temperature 1200 °C)
28. 10m long 0.75m wide and 0.6m deep rectangular open channel flume
29. Uniaxial Shake Table
30. Acoustic Doppler velocimeter
31. Triaxial Test Pure Pressure and Saturation Tester
32. Core Cutter Diesel engine Operated
33. Dell Workstation
34. Ultrasonic Pulse Velocity Tester
35. Concrete Test Hammer
36. Air Flow Meter
37. Cover Meter / Rebar
38. Half Cell Potential Tester

- **List of Software**

S No.	Name of Software	Version
1	AutoCAD Student	2022
2	Autodesk Revit	2022
3	Autodesk Software Suite includes about 100 Software	2020 or later
4	STAAD.pro	CONNECT Edition V22
5	STADD Foundation/ Advance Foundation	CONNECT Edition V22
6	Bentley S/W Suite includes about 200 software's like Water Gams, Water CAD etc.	CONNECT Edition V22
7	MX ROAD / OPEN ROADS	CONNECT Edition V22
8	PRIMAVERA	P6.1

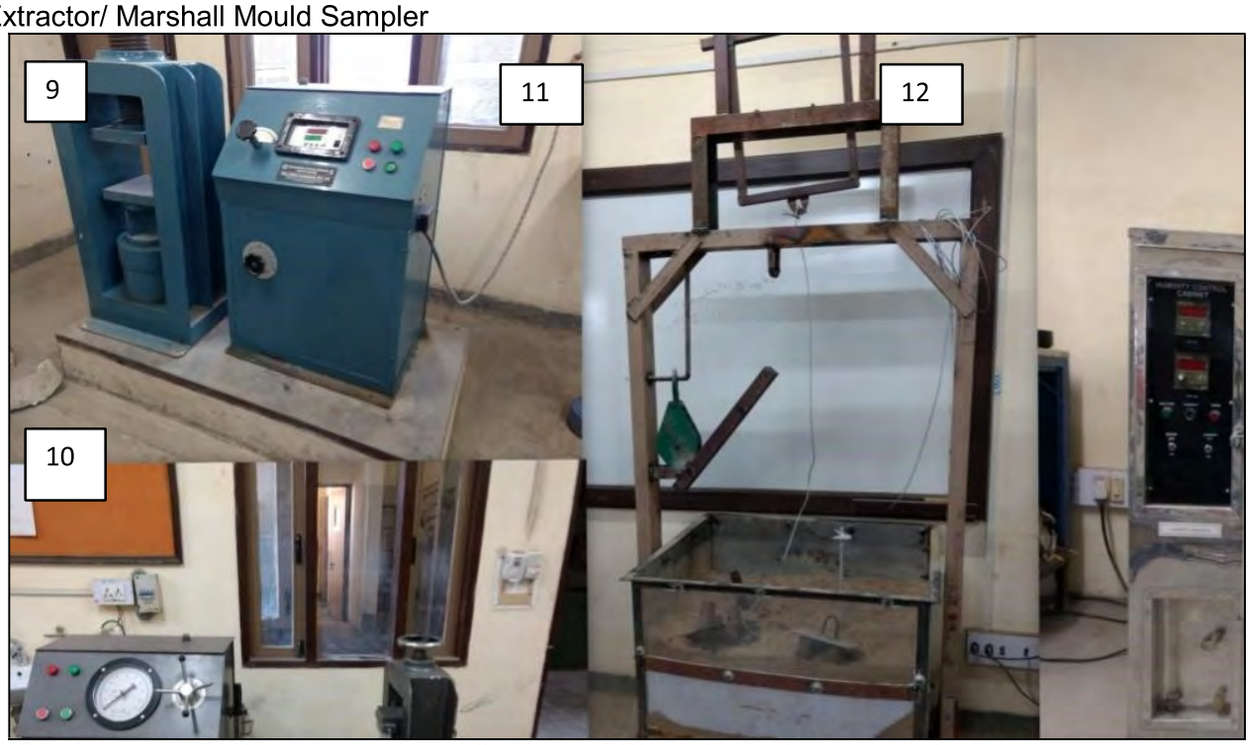
9	Geo5	V18
10	ESTIMATOR	2
11	ANSYS	12.1
12	PLAXIS 2D	2010
13	SIMULIA Academic includes SIMULIA Abaqus, SIMULIAInsight, SIMULIA Tosca & SIMULIA fe-Safe	2019
14	MS PROJECT	2003

- **Equipments**



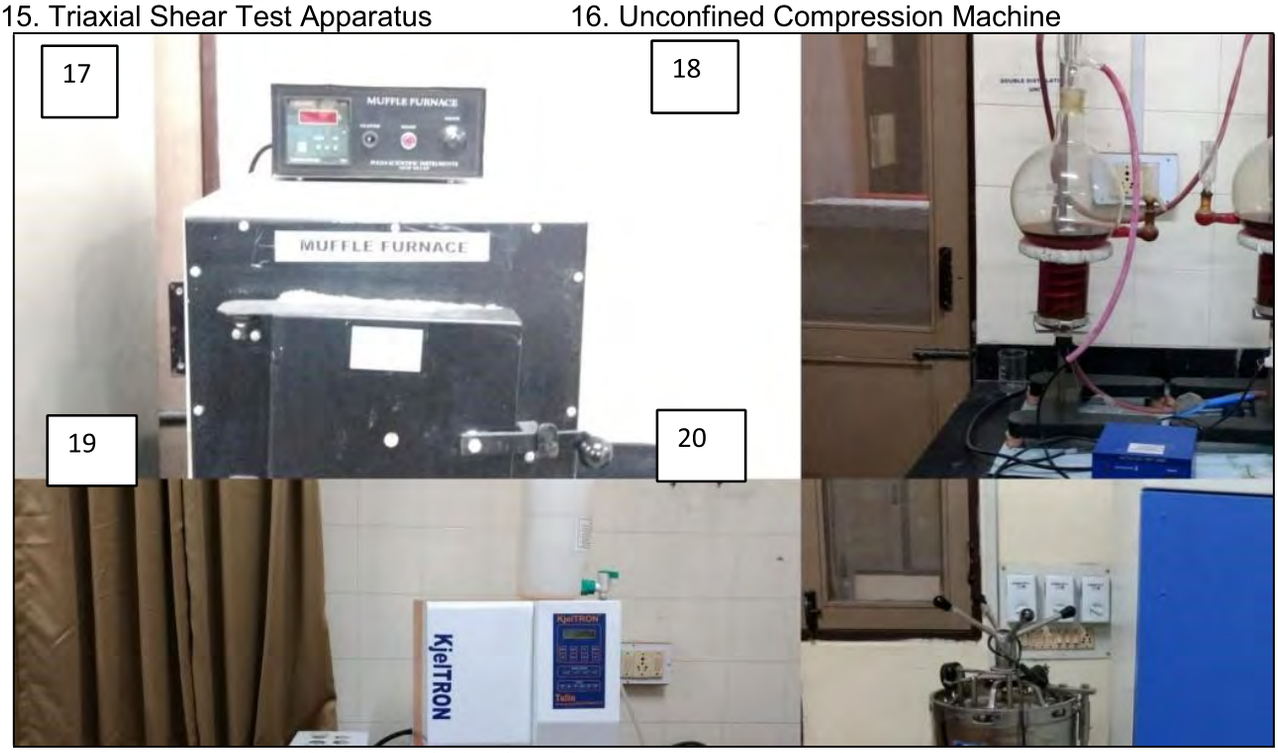
1. Jar Test Apparatus 2. Hot Bath Apparatus 3.Respirable Dust Sampler 4. COD Digester

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

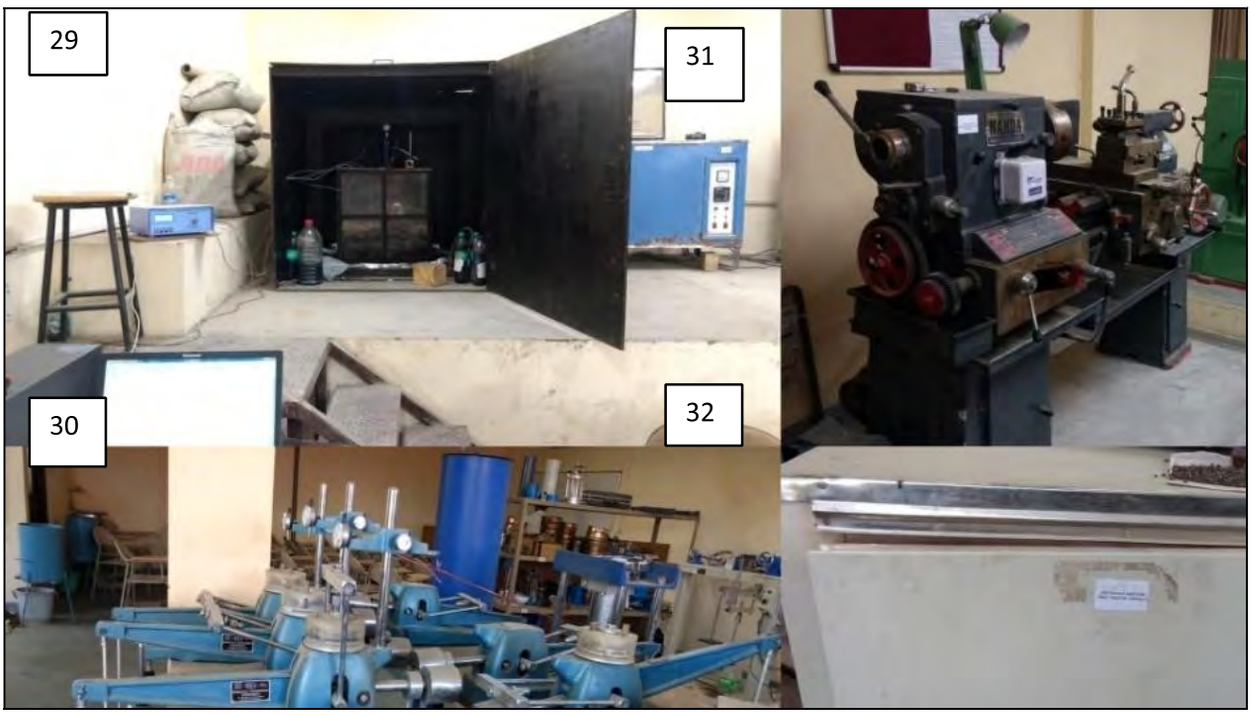
13. Civil Engineering Software Lab 14. Direct Shear Test Apparatus
15. Triaxial Shear Test Apparatus 16. Unconfined Compression Machine



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

21. Bitumen Mixer/ Impact Testing Machine 22. Hobart Mixer
23. Los angles Abrasion testing machine 24. Marshall Testing Apparatus

25. Open Channel Flume 26. Universal Testing Machine
27. Apparatus for conducting orifice experiments (Cd, Cc, Cv)
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

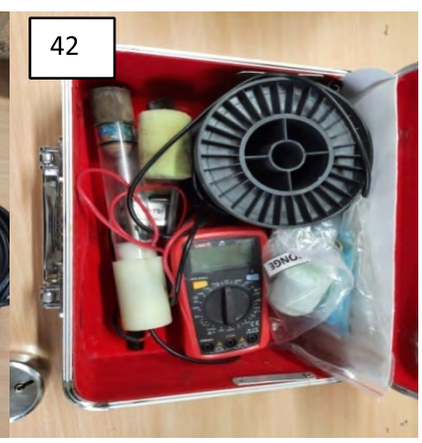
37. Core Cutter Diesel Engine pressure and saturation tester

38. Impact of jet

39. Triaxial test pure

40. Cover meter/ rebar

41. Ultrasonic pulse velocity tester



42. Half cell potential tester

- **Patents**

S.No.	Patent No. and Date of Grant	Application No.	Title	Department and Inventors
1	124895/319983-001 and 12.01.23	CBR No.: 14079	Movable Biogas Reactor	Civil Engineering, Biotechnology & Bioinformatics Inventors: Mr Karam Dass, Ankur Choudhary, DrAshish Kumar, Dr Sudhir Kumar
2	Published and 18-04-2023	202311028088	An Apparatus for testing of a helical soil nail	Civil Engineering Inventors: Dr Saurabh Rawat, Dr Ashok Kumar Gupta, Pankaj Sharma
3	Filed date - 04.03.2023	202311014587	Microfine slag amended blue leather waste ash as a novel material of treating expansive soils	Civil Engineering Inventors:Mr Niraj Singh Parihar, Dr Ashok Kumar Gupta
4	Filed date – June 07, 2023	202311038969	Landslide Prediction System Using IOT and Machine Learning	Civil Engineering, Computer Science and Engineering Inventors:Dr Ashok Kumar Gupta, Dr Vivek Kumar Sehgal, Dr Tanmay Gupta and MrArush Kaushal

- **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 Ashok Kumar Gupta, Dr Saurabh Rawat, Dr Tanmay, Sh Chandra Pal Gautam Gupta, Dr Vivek Sehgal, Dr EmjeePuthoor an	Development of Landslide prediction sensors and Landslide Mitigation Technique" under the Centre of Excellence for Intelligent Evaluation and Rehabilitation of Structures.	Directorate of innovation, Research and Development , Jaypee Group	38 lakhs	1years (2022-2023)	In progress
2.	Dr Ashok Kumar Gupta, Dr Tanmay Gupta, and Dr Saurabh Rawat	Geological Hazards mitigation using stone concrete block retaining walls and helical soil nailing"	District Disaster Management Authority Solan, HP	25 lakhs	3 years (2021-2024)	In progress
3.	Dr Ashish Kumar &Dr Sudhir Kumar	Pine Needles conversion to biofuel for rural empowerment.	Directorate of Innovation, Research and Development , Jaypee Group	7 lakhs	1 year (2022-2023)	In progress
4	Dr Sudhir Kumar, Dr Garlapati Vijay Kumar and Dr Ashish Kumar	Production and Phyco-upgradation of Biogas from pine straw co-digested with food waste.	Directorate of Innovation, Research and Development , Jaypee Group	0.5 lakhs	1 year (2023-2024)	In progress

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

- **Conferences Organized**

Dates	Subject	Venue/Participations	Faculty Name	Remarks
Nil				

- **Conferences Attended**

Dates	Subject	Venue	Faculty Name	Remarks
10th to 15th July, 2022	Structural Mechanics in Reactor Technology	Potsdam/Berlin, Germany	Dr Sugandha Singh	Paper Presented and Published
14th to 17th November, 2022	Symposium on Earthquake Engineering	Indian Institute of Technology, Roorkee	Dr Sugandha Singh	Paper Presented and Session Chair
11th-13thNovember, 2022	3rd International Conference on Futuristic and Sustainable Aspects in Engineering and Technology (FSAET-2022)	GLA University, Mathura, UP	Mr Kaushal Kumar	Attended and Paper Presented
9th-10thNovember, 2022	International Conference on Advances in Civil Engineering, East West Institute of Technology (ICACE-EWIT 2022)	EWIT, Bangalore	Dr Tanmay Gupta	Attended and Papers have been accepted
27th-28thMay, 2023	National Conference on Sustainable development of smart cities infrastructure SDSCI-2023	NIT Kurukshetra	Dr Tanmay Gupta	Attended

- **Seminars**

  - **Seminars Organized**

Dates	Subject	Venue	Faculty Name	Remarks
2nd March, 2023	Technical seminar for Civil engineering student	JUIT Waknaghat	DrSaurav	Organized in collaboration with Indian Oil and Patel Engineering Ltd

- **Webinars Organized**

Dates	Subject	Venue	Faculty Name	Remarks
28th April, 2023	The State of India's Natural Ecosystem	JUIT, Waknaghat	Dr Tanmay Gupta	Online Mode
24th January, 2023	Green Talks with Radiant Cooling Systems for High Performance Building	JUIT, Waknaghat	Dr Tanmay Gupta	Online Mode
14th September, 2022	Latest Trends in Green Building Design	IGBC Student Chapter, JUIT	Dr Tanmay Gupta	Online Mode
24th November, 2022	Green Talks with Experts on Efficient Rainwater Harvesting Technologies	JUIT, Waknaghat	Dr Tanmay Gupta	Online Mode

- **Seminars Attended**

Dates	Subject	Venue	Faculty Name	Remarks
23rd June 2023	Unlocking the Archimedes Principle-The strength of immersed tunnels	Royal Haskoning DHV and CVC	Mr Niraj Singh Parihar	Attended
31st May, 2023	Importance and Benefits of Sustainable Homes	UltraTech Cement Ltd.	Dr Tanmay Gupta	Attended online
28th April, 2023	The State of India's Natural Ecosystem	JUIT, Waknaghat	DrAshish Kumar	Online Mode
17th March, 2023	Eco-museums and the changing trends	National Institute of Disaster Management, Ministry of Home affairs GOI & ASSR	Dr Tanmay Gupta	Attended online
31st January, 2023	Emergency Operations Centers	National Institute of Disaster Management, Ministry of Home affairs GOI	Dr Tanmay Gupta	Attended online
24th January, 2023	Green Talks with Radiant Cooling Systems for High Performance Building	CE Department JUIT Waknaghat	Mr Niraj Singh Parihar	Attended

24th January, 2023	Green Talks with Radiant Cooling Systems for High Performance Building	CE Department JUIT Waknaghat	MrAkash Bhardwaj	Attended
21st January, 2023	Green Homes – A Way of Life	UltraTech Cement Ltd.	Dr Tanmay Gupta	Attended online
23rd December, 2022	Global Outreach Programme of Mission life for Building Community Resilience	National Institute of Disaster Management, Ministry of Home affairs GOI & zone4solution	Dr Tanmay Gupta	Attended online
16th December, 2022	Effects of Climate Change on Cultural Heritage	National Institute of Disaster Management, Ministry of Home affairs GOI &Mirasy Heritage Management	Dr Tanmay Gupta	Attended online
24th November, 2022	Green Talks with Experts on Efficient Rain Water Harvesting Technologies	CE Department JUIT Waknaghat	MrAkash Bhardwaj	Attended
24th November, 2022	Green Talks with Experts on Efficient Rain Water Harvesting Technologies	CE Department JUIT Waknaghat	Mr Niraj Singh Parihar	Attended
29th October, 2022	Newly Abandoned Railway Station from Substructure to Superstructure	UltraTech Cement Ltd.	Dr Tanmay Gupta	Attended online
8th October, 2022	Effect of Magnetic Water in Concrete	UltraTech Cement Ltd.	Dr Tanmay Gupta	Attended online
24th September, 2022	Scientific Writing for Research Publication	ECE Department JUIT Waknaghat	Mr Niraj Singh Parihar	Attended
24th September, 2022	Scientific Writing for Research Publication	ECE Department JUIT Waknaghat	MrAkash Bhardwaj	Attended
14th September, 2022	Latest trends in Green Building	CE Department JUIT Waknaghat	MrAkash Bhardwaj	Attended

14th September, 2022	Latest trends in Green Building	CE Department JUIT Waknaghat	Mr Niraj Singh Parihar	Attended
14th September, 2022	Latest Trends in Green Building Design	JUIT, Waknaghat	MrKaushal Kumar	Attended online
3rd September, 2022	Relevance and Importance of ESG for Sustainable Development Goals of Organization	UltraTech Cement Ltd.	Dr Tanmay Gupta	Attended online
17th August, 2022	Urban Fire Risk Mitigation in Delhi – Experiences and Initiatives	National Institute of Disaster Management, Ministry of Home affairs GOI	Dr Tanmay Gupta	Attended online
20th August, 2022	The critical Foundations of Signature Bridge, Delhi	UltraTech Cement Ltd.	Dr Tanmay Gupta	Attended online
6th August, 2022	Net Zero Building	UltraTech Cement Ltd.	DrTanmay Gupta	Attended online
23rd July, 2022	A Case Study on Construction of Jamalpur-Ratanpur Tunnel in Connection with Doubling Work of Eastern Railway	UltraTech Cement Ltd.	Dr Tanmay Gupta	Attended online
20th July, 2022	Need for a comprehensive repair and rehab code in India and some Advanced Techniques and Case Studies for Retrofitting Bridges	UltraTech Cement Ltd.	Dr Tanmay Gupta	Attended online
15th July, 2022	Cyclone Monitoring and Forecasting Using Earth Observation Technologies	National Institute of Disaster Management, Ministry of Home affairs GOI	Dr Tanmay Gupta	Attended online
02nd July, 2022	Quality Control & Quality Assurance in Concrete Construction	UltraTech Cement Ltd.	Dr Tanmay Gupta	Attended online

- **Workshops**

- **Workshops Organized**

Dates	Subject	Venue	Participation	Faculty Name	Remarks
Nil					

- **Workshops Attended**

Dates	Subject	Venue	Faculty Name	Remarks
16th-17th June, 2023	Geosynthetics for sustainable infrastructure	IIT Bhubaneshwar	Mr Niraj Singh Parihar	Attended online
29th May – 03rd June, 2023	One Week STC on Emerging Technologies in Infrastructure Development	P.R. Pote Group of Education and Welfare Trust's College of Engineering & Management, Amravati	Dr Tanmay Gupta	Attended online
22nd-24th May, 2023	Nature Based Solutions - A Need for Integration in the Development Plans	National Institute of Disaster Management, Ministry of Home affairs GOI and Pondicherry University	Dr Tanmay Gupta	Attended online
29th-31st March, 2023	Community Based Disaster Risk Reduction and Management	National Institute of Disaster Management, Ministry of Home affairs GOI & Alagappa University	Dr Tanmay Gupta	Attended online
16th March, 2023	IPR awareness/training program under the special mission called "National Intellectual Property Awareness Mission (NIPAM)	JUIT Waknaghat	MrKaushal Kumar	Attended
4th February, 2023	One day Indo-UK International workshop on 'Design of Foundation System for Offshore Wind Turbines – Indian Perspective'	IIT Jodhpur in collaboration with IGS Jodhpur Chapter	Dr Saurabh Rawat	Attended online
7th-11th January, 2023	Construction Project Management CPM and REVIT	Kakatiya Institute of Technology and Science, Warangal	Dr Tanmay Gupta	Attended online
27th-29th December, 2022	DisasterRisk Reduction and Resilience	National Institute of Disaster Management, Ministry of Home affairs GOI & Amity University Lucknow	Dr Tanmay Gupta	Attended online

14th September, 2022	Physical Seed Fund Scheme Handholding Workshop	Himachal Pradesh University Shimla	Dr Ashish Kumar	Attended
24th - 25thAugust, 2022	Energy Simulation to make the building ECBC/ENS Compliant	Conference Hall, Zila Parishad Bhawan, Saproon, Solan	Mr Akash Bhardwaj	Attended
22nd-28th August, 2022	Building Resilient Communities across global landscape and their technological advancements, 7 days international lecture series	Department of Geography Sophia Girl's College, Ajmer	Dr Tanmay Gupta	Attended online
25th-27th July,2022	Observing Geohazards from Space	National Institute of Disaster Management, Ministry of Home affairs GOI	Dr Tanmay Gupta	Attendedon line
5th-7th July, 2022	Capacity Building on Ecosystem Restoration and Disaster Management	National Institute of Disaster Management, Ministry of Home affairs GOI	Dr Tanmay Gupta	Attended online

- **Faculty Development Program –**

  - **FDPs Organized**

Dates	Subject	Venue	Participation	Faculty Name	Remarks
11th– 15thJuly, 2022	Computer Diligence in Civil Engineering and Application for Sustainable Development	Civil Engineering Department, JUIT	63	Dr Rishi Rana and Dr Saurav	Conducted Online

  - **FDPs Attended**

Dates	Subject	Venue	Faculty Name	Remarks
19th -23rd June, 2023	Technological advancements in civil engineering	Mangalam College of Engineering. Kottayam	Dr Tanmay Gupta	Attended online
3rd-8th April, 2023	Leveraging Research Challenges in Information Technology for Teaching Learning Process	Presidency University & Association of Indian Universities, Bengaluru	Dr Tanmay Gupta	Attended online

16th-20th January, 2023	Current Research Trends in Field of Civil Engineering	OP Jindal University Rajgarh	Dr Tanmay Gupta	Attended online
5th-6th January, 2023	New Generation Construction Materials and Technologies	Sir M. Visvesvaraya Institute of Technology, Bengaluru	Dr Tanmay Gupta	Attended online
22th - 23th December, 2022	"UTKARSH – TAKE FLIGHT" focused on leadership and excellence in quality education	Auditorium of JUIT, Waknaghat	Dr Saurav	Attended
22nd - 23rd December,2022	"UTKARSH – TAKE FLIGHT" focused on leadership and excellence in quality education	Auditorium of JUIT, Waknaghat	Dr Amardeep	Attended
22nd - 23rd December, 2022	"UTKARSH – TAKE FLIGHT" focused on leadership and excellence in quality education	Auditorium of JUIT, Waknaghat	Dr Saurabh Rawat	Attended
22nd - 23rd December, 2022	"UTKARSH – TAKE FLIGHT" focused on leadership and excellence in quality education	Auditorium of JUIT, Waknaghat	MrChandra pal Gautam	Attended
22nd - 23rd December, 2022	"UTKARSH – TAKE FLIGHT" focused on leadership and excellence in quality education	Auditorium of JUIT, Waknaghat	Mr Akash Bhardwaj	Attended
28th November - 2nd December, 2022	Project Management for Organizational Excellence	Vellore Institute of Technologies, Chennai	Dr Tanmay Gupta	Attended online
26th-20th September, 2022	Taking Research to Next Level	SVCE Bengaluru in association with IQAC, ISNT and IIC Cell	Dr Tanmay Gupta	Attended online
9th-12th August, 2022	Building Resilience at Workplace	Amity School of Engineering and Technology, Amity University Mumbai	Dr Tanmay Gupta	Attended online
11th –15thJuly, 2022	One Week Online Faculty Development	Civil Department, JUIT, Waknaghat	MrKaushal Kumar	Attended

	Program on Computer Diligence in Civil Engineering and Application for Sustainable Development			

- **Publications**

- **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Dr Saurabh Rawat, and DrAshok Kumar Gupta	Effect of underreamed pervious concrete columns on load-carrying capacity of loose cohesionless soils.	International Journal of Geomechanics, ASCE	23, No. 3 (2023): 04022304.	DOI: 10.1061/IJGNAI.GMENG-7659
Dr Saurabh Rawat, and DrAshok Kumar Gupta	Sustainable remediation of failed slope using helical soil nails	Journal of Mountain Science	20, No. 6 (2023): 1742-1758	DOI: https://doi.org/10.1007/s11629-023-7913-0
Dr Saurabh Rawat, and Dr Ashok Kumar Gupta	Performance of under-reamed pervious concrete columns in loose cohesionless soils: experimental and analytical solution.	Arabian Journal of Geosciences	15, No. 18 (2022): pp.1-15	DOI: 10.1007/s12517-022-10784-1
Dr Ashish Kumar	Enhanced Biogas Production from Pine Litter Co-digestion with Food Waste, Microbial Community, Kinetics, and Technoeconomic Feasibility	Journal of Environmental Engineering, ASCE	149, No. 1 (2023)	https://doi.org/10.1061/(ASCE)EE.1943-7870.0002080
Dr Rishi Rana	Internet of Things (IoT) Technologies for Shimla City-A Case Study	Journal of Software Engineering and Simulation	8, No. 7 (2022): 117-121	DOI: https://www.questjournals.org/jses/papers/Vol8-

				issue-7/O0807117121.pdf
Dr Tanmay Gupta	Effect of High-Rise buildings on urban land use in Kabul	High Technology Letters	28, No. 7 (2022): 595-605	DOI: https://doi.org/10.37896/HTL28.07/6154
Dr Ashok KumarGupta and Dr Rishi Rana	Toxicity analysis and behavior of nano-particles in leachate from non-engineered landfill sites of Chandigarh, Mohali, and Panchkula cities Tricity	Nanotechnology for Environmental Engineering	(2023), 1-12	DOI: https://doi.org/10.1007/s41204-023-00322-z
DrAshok Kumar Gupta and Dr Amardeep Boora	Effect of Industrial Waste and Polyester Fiber on Geotechnical Characteristics of Local Clay	IOP Conference Series: Earth and Environmental Science	1110 (2023),1-8	DOI: 10.1088/1755-1315/1110/1/012043
Dr Ashok Kumar Gupta and Dr Amardeep Boora	A Review on Utilizing Municipal Solid Waste Incineration (MSWIA) in Construction Activates	IOP Conference Series: Earth and Environmental Science	1110 (2023),1-7	DOI: 10.1088/1755-1315/1110/1/012042

- **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Dr Saurav	Soil Conservation and Land Management	Soil Conservation and Land Management	AGPH publishers ISBN: 9789395468978	Book
Dr Saurav	Energy and Environmental Engineering	Energy and Environmental Engineering	AGPH publishers ISBN: 9789395936361	Book
Ashish Kumar	Possible Reuse of Excavated Material from Old Open Municipal Dump Sites	Advances in Sustainable Materials and Technology	Nova Science Publishers ISBN: 978-1-68507-967-3	Book Chapter
DrAshok Kumar Gupta and	Recent Advances in Structural Engineering and	Recent Advances in Structural	Springer [ISBN: 978-981-19-4040-8]	Book

Dr Tanmay Gupta	Construction Management	Engineering and Construction Management		
Mr Akash Bhardwaj and DrAshok Kumar Gupta	Tourism Sustainability in Hilly Regions—A Review for Shimla	Lecture Notes in Civil Engineering Volume 277	Singapore: Springer [ISBN 978-981-19-4039-2] pp. 873-882	Book Chapter
Dr Tanmay Gupta	Air Quality Assessment During Festivities in Shimla City, India	Recent Advances in Structural Engineering and Construction Management	Singapore: Springer [ISBN: 978-981-19-4040-8] pp. 883-894	Book Chapter
Dr Tanmay Gupta	Assessment of Response Reduction Factor for Ordinary RC Frames by IS Code and PSPD Method	Recent Advances in Structural Engineering and Construction Management	Singapore: Springer. [ISBN: 978-981-19-4040-8] pp. 275-278	Book Chapter
Dr Tanmay Gupta	Influence of Skewness on Deflection Response of Horizontally Curved RC Box-Girder Bridges	Recent Advances in Structural Engineering and Construction Management	Singapore: Springer [ISBN: 978-981-19-4040-8] pp. 23-34	Book Chapter
Dr Rishi Rana	Potential for use of treated wastewater for industrial reuse in India	Wastewater Assessment, Treatment, Reuse and Development in India,Earth, and Environmental Sciences	Switzerland AG.: Springer Nature. [ISBN: 978-3-030-95785-8] pp. 73-85	Book Chapter
Dr Amardeep Boora	Experimental Analysis of Micro-Silica Fume and Steel Fibers on the Strength of Concrete Mix	Recent Advances in Structural Engineering and Construction Management	Singapore: Springer. [ISBN: 978-981-19-4040-8] pp. 523-530	Book Chapter
Dr Amardeep Boora	Experimental Analysis the Effect of Silica Fume on the	Recent Advances in Structural Engineering	Singapore: Springer. [ISBN: 978-981-19-4040-8] pp. 541-550	Book Chapter

	Mechanical Properties of Concrete Mix.	and Construction Management		
Dr Saurabh Rawat and Dr Ashok Kumar Gupta	Investigation of Pullout Capacity of Helical Soil Nail in Clay	Recent Advances in Structural Engineering and Construction Management	Singapore: Springer. [ISBN: 978-981-19-4040-8] pp. 737-743	Book Chapter
Dr Saurabh Rawat and Dr Ashok Kumar Gupta	Consolidation and Slope Stability Study of Embankment Made of Ash Fill Supported by Hybrid Stone Columns: 3D Numerical Investigation	Recent Advances in Structural Engineering and Construction Management	Singapore: Springer. [ISBN: 978-981-19-4040-8] pp. 727-736	Book Chapter

- **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Dr Sugandha Singh	Coupled Nonlinear Analysis for Evaluation of Seismic Demands on Electrical Equipment Subjected to High–Frequency Ground Motions	International Conference on Structural Mechanics in Reactor Technology	https://www.smirt26.com/Portals/smirt26/BB-Smirt26/Inhalt/th-2-a.htm	10th to 15th July, 2022
Dr Sugandha Singh	Understanding the Effect of Localized Impacts in Seismic Response of Electrical Cabinets and Control Panels	17th Symposium on Earthquake Engineering	Proceedings of 17th Symposium on Earthquake Engineering (Vol. 2) https://link.springer.com/book/10.1007/978-981-99-1604-7	November 14 – 17, 2022
Dr Tanmay Gupta	Review of the properties, constituent materials and preparation methods of foamed concrete	International Conference on Advances in Civil Engineering, East West Institute of Technology (ICACE-EWIT 2022)	ICACE-EWIT 2022, 9-10 November http://ewit.edu.in/wp-content/uploads/2022/10/DOC-20220926-WA0005.pdf	November 9-10, 2022, Bengaluru, India
Dr Tanmay Gupta	Comparative Analysis of Gravity Retaining wall Design in hilly Terrain	International Conference on Advances in Civil Engineering, East West Institute of Technology (ICACE-EWIT 2022)	ICACE-EWIT 2022, 9-10 November http://ewit.edu.in/wp-content/uploads/2022/10/DOC-20220926-WA0005.pdf	November 9-10, 2022, Bengaluru, India
Dr Tanmay Gupta	Utilization of stone masonry in historic and modern structures	International Conference on Advances in Civil Engineering, East West Institute of Technology (ICACE-EWIT 2022)	ICACE-EWIT 2022, 9-10 November http://ewit.edu.in/wp-content/uploads/2022/10/DOC-20220926-WA0005.pdf	November 9-10, 2022, Bengaluru, India

Dr Tanmay Gupta, Ashish Kumar	Static analysis of stone-concrete block	International Conference on Advances in Civil Engineering, East West Institute of Technology (ICACE-EWIT 2022)	ICACE-EWIT 2022, 9-10 November http://ewit.edu.in/wp-content/uploads/2022/10/DOC-20220926-WA0005.pdf	November 9-10, 2022, Bengaluru, India

- **Guest Speakers/Lectures/ Visits**

- **Guest Speakers**

Name of Guest Speaker	Designation of speaker	Topic of Lecture	Date
MrSheerdharRamamurthi	Earth Scientist and Managing Trustee Environics Trust	The State of India's Natural Ecosystems	28th April 2023

- **Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Dr Sugandha Singh	Assistant Professor	B Tech aspirants in Civil Engineering: the real application of your coding skills	1st June, 2023	Jaypee University of Information Technology (online)
Dr Ashish Kumar	Prof and Head of Department	Startup ecosystem and Role of HEI	5th – 9thJune, 2023	Jaypee University of Information Technology
Mr Akash Bhardwaj	Assistant Professor	Remote Sensing & GIS	25th April 2023	Government Polytechnic College Seobagh, Kullu
Dr Saurav	Assistant Professor	Applications of Prestressed concrete structures	25thApril 2023	Government Polytechnic College Seobagh, Kullu
Dr Tanmay Gupta	Assistant Professor	Roles and responsibilities of authorities and Professionals to provide seismically safe build environment to the citizens	28th September 2022	HIPA, Shimla (online)
Dr Amardeep Boora	Assistant Professor	Identification of followers on two lane highways under heterogeneous traffic condition	31st October 2022	MM Engineering College Mullana, Ambala (online)

- **Visits Organized**

1. Visit to landslide Site at Chandigarh – Shimla Highway -

Name of the faculty - Akash Bhardwaj
Site - Visit at MauzhaShamlech (Shimla-Chandigarh Highway) NH-5
Date of visit- 24th August 2022
City - Solan

Details of the event (In brief) - Students of BTech 3rd year, Civil Engineering, JUIT visited Landslide site at MauzhaShamlech (Shimla-Chandigarh Highway) NH-5 along with faculty coordinator Mr Akash Bhardwaj, Assistant Professor, Civil Engineering Department, JUIT. They visited the portion of collapsed road at Shamlech village. The 50-metre massive chunk of the newly constructed four-lane highway was collapsed due to heavy rains on 11th August 2022.

Industrial visit to "BAROT DAM AND SHANAN HYDEL PROJECT", Joginder Nagar, Mandi, Himachal Pradesh on 30th and 31st NOVEMBER 2022 for Civil Engineering Students

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1. Visit to Barot Dam and Shanan Hydel Project

- Date of Visit: 30th -31st November, 2022
- Venue: Barot Dam and Shanan Power House, Joginder nagar, Mandi, Himachal Pradesh
- Batch: BTech 5th, 7th and MTech (Structural Engg.) first semester students [38 Students]
- Faculty Coordinator: Dr Amardeep and Sh Amar Kumar (CED)

2. Sewage Treatment Plant Visit, Jaypee University, Waknaghat

- Date of Visit: 22nd September 2022
- Venue: JUIT STP, Waknaghat
- Batch: BTech 5th Semester Students [29 Students]
- Faculty Coordinator: Prof. Ashish Kumar (HCED)
- Organizer: Department of Civil Engineering, JUIT Waknaghat

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Details of the event (In brief) - BTech 3rd Year Students of Civil Engineering Department visited Sewage Treatment Plant, which is located at Jaypee University of Information Technology, Waknaghat on 22nd September 2022. The purpose of the site visit was to make students understand and visualize the theory that is being taught in the class. Students explored the treatment process at sewage treatment plant. Engineer Sh. Manoj Sharma explained various process of treatment plant.

This plant is a combination of Trickling Filter and extended aeration. Extended aeration has process screening, aeration, clarifier, activated caron and chlorination. The preliminary treatment is very complex which are primary screening, secondary screening, grit chamber, oil and grease removal because of large tank. At the site, we needed to abide by the rules for our safety because it was very dangerous.

- **Recognition & Awards**

  - **By Faculty**

Name of Faculty	Designation of Faculty	Award	Date	Achievement
Dr Saurabh Rawat	Associate Professor	IGS-Best Doctoral Thesis Award from Non-Premier Institutions	15th December, 2022	PhD student Dr Pankaj Sharma (176606) received the best Ph.D. Thesis award in "Geotechnical Engineering" for his PhD thesis titled "Behavior of Helical Soil Nails: An Experimental and Theoretical Study"

- **Composition of Various Bodies**

  - **BOS Members**

Sr. No.	Name	Designation	Institution
1	Dr Ashish Kumar	Head of the Department, Civil Engineering	Jaypee University of Information Technology, Waknaghat
2	Dr A.K. Gupta	Professor& Dean (Academics and Research)	Jaypee University of Information Technology, Waknaghat
2	Dr B.R. Gurjar	Professor, Civil Engineering	IIT Roorkee
3	Dr Arun Goel	Professor, Civil Engineering	NIT Kurukshetra
4	Dr Ashish Dhamaniya	Associate Professor, Civil Engineering	Sardar Vallabhbhai National Institute of Technology Surat, Gujarat
5	Er Kapil Dutt Sharma	Sr. Manager (Civil)/Executive Engineer	HPPCL Dadahu, District Sirmour, (HP)
6	MrRijul Bajaj	Asst. Manager, PT&DIC	Larsen & Toubro Ltd, Delhi Regional office, Gurgaon, India
7	Dr Saurabh Rawat	Assistant Professor, Civil Engineering	Jaypee University of Information Technology, Waknaghat

8	Dr Saurav	Assistant Professor, Civil Engineering	Jaypee University of Information Technology, Waknaghat
9	Dr Amardeep	Assistant Professor, Civil Engineering	Jaypee University of Information Technology, Waknaghat
10	Dr Rajiv Kumar	Head of Department, ECE	Jaypee University of Information Technology, Waknaghat
11	Dr Vivek Sehgal	Head of Department, CSE &IT	Jaypee University of Information Technology, Waknaghat
12	Dr Sudhir Kumar	Head of Department, BT&BI	Jaypee University of Information Technology, Waknaghat
13	Dr P.B. Burman	Head of Department, PMS	Jaypee University of Information Technology, Waknaghat
14	DrRakesh Bajaj	Head of the Department, Mathematics	Jaypee University of Information Technology, Waknaghat
15	Dr Amit Srivastava	Head of the Department, HSS	Jaypee University of Information Technology, Waknaghat

- **BOS Members (Reframed) w.e.f. 8th February, 2023**

Sr. No.	Name	Designation	Institution
1	Dr Ashish Kumar	Head of the Department, Civil Engineering	Jaypee University of Information Technology, Waknaghat
2	Dr Ashok Kumar Gupta	Professor& Dean (Academics and Research)	Jaypee University of Information Technology, Waknaghat
3	Dr B.R. Gurjar	Professor, Civil Engineering	IIT Roorkee
4	Dr Arun Goel	Professor, Civil Engineering	NIT Kurukshetra
5	Dr Ashish Dhamaniya	Associate Professor, Civil Engineering	Sardar Vallabhbhai National Institute of Technology Surat, Gujarat
6	Er Kapil Dutt Sharma	Sr. Manager (Civil)/Executive Engineer	HPPCL Dadahu, District Sirmour, (HP)
7	MrRijul Bajaj	Asst. Manager, PT&DIC	Larsen & Toubro Ltd, Delhi Regional office, Gurgaon, India
8	Dr Sunil Kumar Khah	Professor, PMS	Jaypee University of Information Technology, Waknaghat

9	Dr Saurabh Rawat	AssociateProfessor, Civil Engineering	Jaypee University of Information Technology, Waknaghat
10	Dr Hemant Sood	Associate Professor, BT&BI	Jaypee University of Information Technology, Waknaghat
11	Dr Amardeep	Assistant Professor, Civil Engineering	Jaypee University of Information Technology, Waknaghat
12	Dr Rajiv Kumar	Head of Department, ECE	Jaypee University of Information Technology, Waknaghat
13	Dr Vivek Sehgal	Head of Department, CSE &IT	Jaypee University of Information Technology, Waknaghat
14	Dr Sudhir Kumar	Head of Department, BT&BI	Jaypee University of Information Technology, Waknaghat
15	Dr P.B. Burman	Head of Department, PMS	Jaypee University of Information Technology, Waknaghat
16	DrRakesh Bajaj	Head of the Department, Mathematics	Jaypee University of Information Technology, Waknaghat
17	Dr Amit Srivastava	Head of the Department, HSS	Jaypee University of Information Technology, Waknaghat

- **List of Various Departmental Coordinators/Committee**

Sr. No.	Coordinator/Committee	Name
1	PhD Coordinator	Dr Rishi Rana
2	MTech Coordinator	1. MTech EE: Dr Rishi Rana 2. MTech SE: Mr Chandra Pal Gautam 3. MTech CM: Dr Saurav
3	BTech Project Coordinator	Dr Saurav
4	Training and Placement Coordinator	Mr Kaushal Kumar
4	BOS Coordinator	Dr Amardeep
5	NAAC Coordinator	Dr Saurabh Rawat Mr Akash Bhardwaj (member)
6	NBA Coordinator	Dr Saurabh Rawat Mr Akash Bhardwaj(member)

7	Program Assessment and Quality Improvement Committee	Dr Ashish Kumar (Convenor) Dr Ashok Kumar Gupta (member) Dr Sugandha Singh (member) Dr Tanmay Gupta (member) Dr Saurav (member) Mr Chandra Pal Gautam (Coordinator)
8	MOOC/SWAYAM courses Coordinator	Dr Amardeep
9	Academically Weak Students Committee/feedback/mentorship	Mr Niraj Singh Parihar
10	Website Maintenance Coordinator	Dr Sugandha Singh
11	Lab Coordinator	Mr Niraj Parihar
12	Lab In charge	Fluid Mechanics - Mr Kaushal Kumar Concrete Lab. - Dr Saurav Highway Lab - Dr Amardeep Engineering Drawing Lab- MrChandrapal Workshop Lab - Mr Kaushal Kumar CAD Lab - MrChandrapal Geotechnical Eng. Lab - Mr Niraj Parihar Surveying lab- Akash Bhardwaj Structural Mechanics Lab- Dr Sugandha Singh Environmental Lab- Dr Rishi Rana
13	Research Publications, Patents and IPR, Faculty project Proposal Coordinator	Dr Amardeep
14	Attendance Review Coordinator	Mr Aakash Bharadwaj
15	Event data Coordinator	Dr Sugandha SinghMr Akash Bhardwaj (member)
16	Hilly Ramblings Coordinator	Dr Rishi Rana
17	Stock Verification	Mr Niraj Singh Parihar
18	Alumni Affairs	Dr Saurabh Rawat (Coordinator) Mr Kaushal Kumar (member)
19	Department Annual Report Coordinator	Dr Ashish Kumar Dr Rishi Rana
20	Outreach Team	DrSaurav (Coordinator) Dr Tanmay Gupta, Dr Rishi Rana Dr Sugandha Singh Mr Akash Bhardwaj Mr Amar MrItesh Kumar Singh
21	Consultancy Coordinator	Dr Tanmay Gupta
22	Proficiency Coordinator	Dr Tanmay Gupta

23	Department Club Coordinator (CEC)	Mr Chandra Pal Gautam
24	Mock Interviews Committee	Dr Tanmay Gupta (Coordinator) Dr Sugandha Singh (member) Mr Kaushal Kumar (member)

Civil Engineering Department- Consultative Committee(teacher-student interaction)

Faculty members:

Dr Saurav, Assistant Professor [SG]
Dr Rishi Rana, Assistant Professor [SG]
Dr Tanmay Gupta, Assistant Professor [SG]
Mr Niraj Parihar, Assistant Professor [Gr-II]
Mr Kaushal Kumar, Assistant Professor [Gr-II]

Student members:

Mr Lalkapthanh, Representative BTech Ist year Civil Engineering
Mr Ayush Gupta, Representative BTech IInd year Civil Engineering
Mr Rachit Sheetal, Representative BTech IInd year Civil Engineering
Mr Dechen Wangmo, Representative BTech IIIrd year Civil Engineering
Mr Sharad Singh, Representative BTech IIIrd year Civil Engineering
Mr Ronit Mahajan, Representative BTech IVth year Civil Engineering
Mr YeshiJatsho, Representative BTech IVth year 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 the 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 promote outcome based education to prepare students for variegated challenges in industry and academia.
- To provide a panorama of courses imparting teaching, research and mentoring opportunities for graduate students.
- The Department is dedicated to provide teaching and encourage collaborative learning in Physics & Materials Science in a performance based active academic environment.

Faculty Details

S.No.	Name	Qualification	Specialization
1.	Prof (Dr) P B Barman	PhD	III-V compound semiconductors
2.	Prof (Dr) Sunil K. Khah	PhD	Microstrip Antennas
3.	Prof (Dr) Vineet Sharma	PhD	Amorphous Semiconductors
4.	Dr S K Hazra	PhD	Gas Sensors
5.	Dr R R Singh	PhD	Quantum-Dots, Magnetic nanoparticles
6.	Dr S K Tiwari	PhD	Optical & Magnetic studies/ZnO
7.	Dr Santu Baidya	PhD	Computational Physics

Programs

Undergraduate Program

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

Core Courses

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	Science & Technology of Materials	18B1WPH531
9	Applied Materials Science	18B1WPH532

Elective Courses

S No	Title of Course	Course Code
1	Nanotechnology	18B1WPH731
2	Optical Fiber Network Design	18B1WPH732
3	Optoelectronic Devices	18B1WPH831
4	Biosensors	21B1WPH831

PhD Program

The award of the PhD 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. 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, etc.

Laboratory Facilities

❖ **Laboratory Staff with Qualification**

1.	Kamlesh Kr Mishra	Sr. Lab Engineer	M.Tech.
2.	Ravendra Kr Tiwari	Lab Technician	BSc (PCM)
3.	Ghanshyam	Lab Assistant	Diploma in Electronics

❖ **Laboratories with major equipments**

i) 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.

ii) 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.

iii) Nanotechnology Laboratory

The nanotechnology laboratory is well equipped with

- Muffle furnace
- Hot air oven
- Spin coating unit
- Single pan highly sophisticated balance
- Magnetic stirrers

iv) 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.

iv) **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

v) **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: 01

S. No.	Name of Faculty	Project title	Funding Agency	Amount sanctioned	Duration	Current Status
1	Sanjiv K. Tiwari (P.I) & Sunil Kumar Khah (Co-PI)	Development of ZnO-based nanogenerator for small electrical devices	HP Council for Science, Technology and Environment	6,55,000.00	Two years	Ongoing

Conferences, Seminars and Workshops/Faculty development program

Conferences

- **Conferences Organized :02**
- **Conferences Attended : 00**
- **Session Chaired: 12**

Dates	Subject	Venue	Faculty Name	Remarks
23-09-2022 to 24-09-2022	2nd Emergent Converging	JUIT	All	Participation from faculty,

	Technologies and Biomedical Systems (ETBS 2022)			research scholars and industry persons
01-03 December, 2022	2022 8th International Conference on Signal Processing and Communication (ICS)	JUIT	P. B. Barman	Session Chaired
23-09-2022 to 24-09-2022	2nd Emergent Converging Technologies and Biomedical Systems (ETBS 2022)	JUIT	All faculty of PMS	Session chaired
May 15-17, 2023	3rd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2023):	JUIT	Prof. (Dr). Sunil Khah	Conference General Chair
May 15-17, 2023	3rd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2023):	JUIT	Prof. (Dr). Vineet Sharma	Session Chair
May 15-17, 2023	3rd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2023):	JUIT	Dr. Ragini Raj Singh	Session Chair
May 15-17, 2023	3rd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2023):	JUIT	Dr. Surajit Hazra	Session Chair
May 15-17, 2023	3rd International Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2023):	JUIT	Dr. Sanjiv Tiwari	Session Chair
January to March 2023	Successfully Completed 8 Weeks NPTEL-AICTE FDP & Course on Millimeter wave technology.	Online on NPTEL platform	Prof. (Dr.)	Certificate Awarded

Seminars

- **Seminars Organized :01**
- **Seminars Attended : 02**

Dates	Subject	Venue	Faculty Name	Remarks
February, 25-28, 2023	National Science Day Symposium (NSDS-2023)	JUIT	Ragini Raj Singh	Coordinator
2nd March, 2023	Technical Seminar on Tunnel Engineering using NATM and Dam construction organized by Department of Civil Engineering at Jaypee University of Information Technology in collaboration with Indian Oil Corporation Ltd.	JUIT	P. B. Barman	Attended
28th April 2023	Webinar on "Automating and Simplifying NAAC/NBA Accreditation and NIRF Data Submission for Institutions" on	JUIT	P. B. Barman	Attended

Workshops

- **Workshops Organized :05**
- **Workshops Attended :04**

Dates	Subject	Venue	Faculty Name	Remarks
29-12-2022 to 03-01-2023	One week hands-on workshop on computational methods for physics and material Science	JUIt	Dr. Santu Baidya Dr. Ragini Raj Singh Dr. Surajit Hazra	Workshop for learning different areas of computational physics
28-02-2023 to 4-03-2023	Technology Enablement training for the School heads	JUIT	Ragini Raj Singh	Workshop for school Principals
06-03-2023 to 10-03-2023	Technology Enablement training for the School heads	JUIT	Ragini Raj Singh	Workshop for school Principals

14-03-2023 to 18-03-2023	Technology Enablement training for the School heads	JUIT	Ragini Raj Singh	Workshop for school Principals
21-03-2023 to 24-03-2023	Technology Enablement training for the School heads	JUIT	Ragini Raj Singh	Workshop for school Principals
29-12-2022 to 03-01-2023	One week hands-on workshop on computational methods for physics and material Science	JUIT	Sanjiv Kumar Tiwari	Attended
28-02-2023 to 4-03-2023	Technology Enablement training for the School heads	JUIT	Sanjiv Kumar Tiwari	Attended
05-06-2023 to 10-06-2023	One week faculty development program on teaching and research practice	JUIT	Sanjiv Kumar Tiwari	Attended
22-12-2022 to 23-12-2022	Utkarsh-Take a fight , leadership and excellence in quality education	JUIT	Sanjiv Kumar Tiwari	Attended

Publications

- **Journal Publications=14**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Ragini Raj Singh	Evaluation of biogenic zinc oxide nanoparticles from Tinospora cordifolia stem extract for photocatalytic, anti-microbial, and antifungal activities	*Materials Chemistry and Physics*	297 (2023) 127382	-
Ragini Raj Singh	Development of High Coercivity/High Fluorescence Hybrid nanostructures	*Letters in Applied nanobiosecience*	12/2 (2023) 48	
Ragini Raj Singh	Optical Properties of ZnS Quantum Dots: Applications in Solar cells and Biomedicine	*Bio Interface Research in Applied Chemistry*	13/2 (2023) 158	5
Ragini Raj Singh	Phytochemically stabilized chitosan encapsulated Cu and Ag nanocomposites to remove cefuroxime axetil and pathogens from the environment	*International Journal of Biological Macromolecules*	212 (2022) 451-464	
Surajit Kumar Hazra	Probing the electronic properties of chemically synthesised reduced Graphene oxide and Nitrogen-doped reduced Graphene oxide	*Materials Science & Engineering B*	287 (2023) 116145	0

Surajit Kumar Hazra	Response of rGO and Pd Decorated rGO to Carbon Monoxide Gas	*J. Electron. Mater.*	52 (2023) 1999–2011	0
Surajit Kumar Hazra	A novel approach to impart selective response in palladium decorated reduced graphene oxide gas sensors	*Mater. Lett.*	338 (2023) 134043	0
Santu Baidya	Stripe helical magnetism and two regimes of anomalous Hall effect in NdAlGe	*Physical Review Materials*	7 (2023) 034202 https://doi.org/10.1103/PhysRevMaterials.7.034202	1
Santu Baidya	Magnetism and unconventional topology in LaCoO3/SrIrO3 heterostructure	*Applied Physics Letters*	122 (2023) 021602	0
Sanjiv Kumar Tiwari	Temporal Growth and Aging of ZnO Nanoparticles in Colloidal Solution: Phase Field Model	*Journal of Cluster Science*	34 (2023)1381–1389 https://doi.org/10.1007/s10876-022-02309-3	0
Sanjiv Kumar Tiwari	Abnormal red shift in photoluminescence emission of ZnO nanowires Fluorescence Hybrid nanostructures	*Journal of Luminescence*	251 (2022)119231 https://doi.org/10.1016/j.jlumin.2022.119231	
Sanjiv Kumar Tiwari	Polaron and bipolaron mediated photocatalytic activity of polypyrrole nanoparticles under visible light	*Colloids and Surfaces A: Physicochemical and Engineering Aspects*	667 (2023) 131380 https://doi.org/10.1016/j.colsurfa.2023.131380	
Sunil Kumar Khah	Compact Y- Shaped Antenna with partial and meandered ground for WLAN/Wi-Max Applications.	*Scientia Iranica*	(2022) doi: 10.24200/sci.2022.59299.6163	
Sunil Kumar Khah	Neelam Kumari, Meenakshi Sood, Salman Raju Talluri & Sunil Kumar Khah (2022) Numerical model & design of wideband band reject filter with closed loop rectangular resonator	*International Journal of Electronics Letters*	(2022) DOI: 10.1080/21681724.2022.2087910	

Books/Book Chapters Published: 04

Name of Faculty	Title of Chapter	Name of Book	Reference	Citation
Ragini Raj Singh	Characterization techniques of magnetic quantum dots	Magnetic Quantum dots for Bioimaging,	CRC Press, Taylor & Francis Group, (2023) 1: 133-152 ISBN: 9781003319870	-
Ragini Raj Singh	Fluorescent magnetic quantum dots in bioimaging	Magnetic Quantum dots for Bioimaging	CRC Press, Taylor & Francis Group, (2023) 1: 133-152 ISBN: 9781003319870	-
Ragini Raj Singh	Effect of Substitution on the Electric and Magnetic Properties of SrFe12O19 Hexa Hard Ferrites	Materials Research Foundations	(2023) 142: 93-120 ISBN: 1644902303	-
Ragini Raj Singh	Ferrite Nanoparticles for Telecommunication Application	Materials Horizons: From Nature to Nanomaterials Engineered Ferrites and Their Applications	(2023) Springer Nature Singapore Pvt Ltd. ISBN 978-981-99-2582-7 ISBN 978-981-99-2583-4 (eBook)	-

- **Conference Publications=02**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Surajit Kumar Hazra	Low-temperature selectivity study of chemically treated graphene oxide for detection of hydrogen gas	ICAMN2022	Materials Today: Proceedings, 2023; https://doi.org/10.1016/j.matpr.2023.04.241	22-24 Dec 2022
Sanjiv Kumar Tiwari	Structural endorsement of iron oxide residue incorporated in polypyrrole and TiO_2/Polypyrrole composite	Materials Today Proceedings	https://doi.org/10.1016/j.matpr.2023.05.556	

- **Guest Speakers/Lectures/ Visits**

  - **Guest Speakers: 01**

Department of Physics and Materials Science and Centre of Excellence In Healthcare Technologies and Informatics **(CEHTI),** Department of Biotechnology and Bioinformatics, Jaypee University of Information Technology, Waknaghat organized an expert talk and interaction of faculty, lab staff and research Scholar with Prof. Yosi Shacham Diamand, Emeritus Professor, Tel Aviv University Israel, on 4th March 2023, Saturday at 11:00 AM. The title of the talk was "Startups failure: A road to success".

- **Lectures Delivered by Faculty: 02**

  i) Prof. (Dr.) P. B. Barman Delivered an invited talk on "Studies on Pd decorated reduced graphene oxide gas sensors for selective gas detection" at AMRP 2023 in SLIET, Longowal on 18.5.2023.

  ii) Prof. (Dr.)Sunil Kumar Khah delivered an invited lecture on National Science Day in Govt PG College, Solan, on 25-02-2023; the talk topic was "Need to Study Science".

- **Visits Organized=04**

Institution visited	Dates	Aim of visit	Participation	
			Students	**Faculty**
Govt College Sanjauli, Shimla	24-04-2023	Science awareness and discussions with students for career Opportunities	100	15
Rajiv Gandhi Govt. Degree College Chaura Maidan Shimla	02-05-2023	Science awareness and discussions with students for career Opportunities	65	10
Shree Guru Gobind Singh Ji Government College, Paonta Sahib, H.P.	24-04-2023	Science awareness and discussions with students for career Opportunities	25	5
Dr. Y.S Parman Government Post Graduate College, Nahan, Himachal Pradesh	24-04-2023	Science awareness and discussions with students for career Opportunities	30	01

Recognition & Awards

- **By Faculty :**

  Pro. (Dr.) Sunil Kumar Khah judged the event SLSMEE 2022-23 at SCERT HP Solan on 26-04-2023

- **Students :**

  Rahul Singh, PhD Scholar of the PMS department, won the Best Poster Award in National Science Day Symposium (NSDS-2023) during February 25-28, 2023, held at JUIT, Waknaghat.

Composition of Various Bodies

Board of Studies (BOS)

(a) Chairman: Prof (Dr.) P. B. Barman (Head of the Department)

(b) Professors / Associate Professors & one Assistant Professor of the Dept. by rotation:

1. Dr. Ragini Raj Singh (Associate Professor) Member Secretary
2. Prof. (Dr.) Sunil Kumar Khah
3. Prof. (Dr.) Vineet Sharma
4. Dr. Surajit Hazra (Associate Professor)
5. Dr. Sanjiv Kumar Tiwari (Assistant Professor)

(c) Members co-opted by the BoS from other Departments of JUIT nominated by the Dean (A&R) in consultation with Head of Department:

1.	Prof. Rakesh K. Bajaj	HOD, Mathematics
2.	Prof. Sudhir Kumar	HOD, BT &BI
3.	Prof. Ashish Kumar	HOD, Civil
4.	Prof. Vivek Kumar Sehgal	HOD, CSE & IT
5.	Prof. Rajiv Kumar	HOD, ECE

(d) Member from IQAC

1. Dr. Vikas Baghel (Senior Grade)

(e) Subject expert (ACADEMIC) nominated by the Dean (A&R) on the recommendation of the Head of concerned Department:

Members from Academic Institutions

1. Prof. (Dr.) K. L. Yadav Prof K L Yadav [Higher Academic Grade (HAG)]
Department of Physics
Indian Institute of Technology Roorkee
Roorkee - 247667, Uttrakhand

2. Dr. Pushpendra P. Singh Associate Professor - Experimental Nuclear Physics
Department of Physics
Associate Dean (R & D)
Project Director, DST Technology Innovation Hub - AWaDH
Indian Institute of Technology Ropar
Rupnagar - 140 001, Punjab, India

Members from R&D and Industry

1. Dr. Shovit Bhattacharya Scientific Officer (G)
Thin Film Devices Division, Technical Physics Division
Bhabha Atomic Research Centre (BARC), MUMBAI
(Subject expert from R&D)

2. Dr. Diksha Painuly Scientist E (Analytical and Instrumentation)
Corporate R & D Centre
HLL Lifecare Ltd.(Govt. of India Enterprise)
Akkulam,Thiruvananthapuram-695017, Kerala, India
(Subject expert from Industry**)**

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:

M1. To provide an environment to students where they can learn and be competent users of mathematics and its applications
M2. To strive by introducing the students to main ideas and methods of Mathematics for building up their reasoning and analytical skills.
M3. To provide quality Mathematics education to enhance the capability and competence in assimilating, dissecting and distilling information for engineering and technology applications.

- **Faculty Details**

S.No.	Name	Qualification	Specialization
1.	Prof. Rakesh K. Bajaj	PhD	Fuzzy Information Measures& Decision Making
3.	Prof. Karanjeet Singh	PhD	Nonlinear Differential Equations
4.	Dr R S Raja Durai	PhD	Algebraic Coding Theory
5.	Dr Neel Kanth	PhD	Mathematical Modeling
6.	Dr Pradeep Kumar Pandey	PhD	Differential Geometry
7.	Dr Saurabh Srivastava	PhD	Nonlinear Programming (Operations Research)
8.	Dr Mandeep Singh	PhD	Nonlinear Boundary Value Problems
9.	Dr Bhupendra Kumar Pathak	PhD	Evolutionary Computation Methods, Soft Computing Techniques & Machine Learning.

- **PhD 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, Applied Statistics, and Soft Computing Techniques.

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

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

- **Conferences**

- **Conferences Organized**

Dates	Subject	Venue	No. of participants	Remarks
Nil	Nil	Nil	Nil	Nil

- **Conferences Attended**

Dates	Subject	Venue	Faculty Name	Remarks
23-24, September, 2022	2nd Emergent Converging Technologiesand Biomedical Systems (ETBS 2022)	Jaypee University of Information Technology, Waknaghat	Dr. Saurabh Srivastava	
23-24, September, 2022	2nd Emergent Converging Technologies and Biomedical Systems (ETBS 2022)	Jaypee University of Information Technology, Waknaghat	Dr. Mandeep Singh	
23-24, September, 2022	2nd Emergent Converging Technologies and Biomedical Systems (ETBS 2022)	Jaypee University of Information Technology, Waknaghat	Dr. R. S. Raja Durai	

- **Seminars**

- **Seminars Organized**

Dates	Subject	Venue	Faculty Name	No. of participants
10 January 2023	Alumni Seminar/Webinar on"**Advantages of Numerical Computation**".	Online	Pradeep Kumar Pandey	40
22 Dec 2022	Organized "**National Mathematics Day 2022**"	JUIT, Waknagha t	All Faculty of Department	200
14 Nov 2022	Organized **Community Learning Programme** for children in a near-by Village School	Govt. Sr. Sec. School, Domehar, Solan (HP)	Dr Saurabh Srivastava, Dr B K Pathak, Dr R K Bajaj	68

- **Seminars Attended**

Dates	Subject	Venue	Faculty Name	Remarks
19 November 2022	Webinar on "**Ethics in Science**"	JUIT, Waknaghat	Pradeep Kumar Pandey	Ethics committee, JUIT, Solan

- **Workshops Attended**

Dates	Subject	Venue	Faculty Name	Remarks
22-23 December 2022	FDP programme "UTKARSH-Take Flight".	JUIT, Waknaghat	Dr. Pradeep Kumar Pandey	
22-23 December 2022	FDP programme "UTKARSH-Take Flight".	JUIT, Waknaghat	Dr. Saurabh Srivastava	
25-30 July 2022	FDP on Mathematical Foundations of Machine Learning	JIIT, Noida	Dr. Saurabh Srivastava	
14th-15th & 21st -22nd January 2023	Workshop on Data Analytics with Rprogramming	LM Thapar School of Management, Derabassi, Punjab	Dr. Saurabh Srivastava	

22-23 December 2022	FDP programme “UTKARSH-Take Flight”.	JUIT, Waknaghat	Dr. Mandeep Singh	
25-30 July 2022	FDP on Mathematical Foundations of Machine Learning	JIIT, Noida	Dr. Mandeep Singh	
26-28 April, 2023	International workshop on Mathematical Computations Using Softwares (IWMCS-2023)	Akal University, Talwandi Sabo, Bathinda, Punjab	Dr. R S Raja Durai	
22-23 December 2022	FDP programme “UTKARSH-Take Flight”.	JUIT Solan	Dr. Bhupendra Kumar Pathak	
25-30 July 2022	FDP on Mathematical Foundations of Machine Learning	JIIT, Noida	Dr. Bhupendra Kumar Pathak	
5-9 June 2023	One Week Faculty Development Programme on “Teaching and Research Practices”	JUIT, Waknaghat	Dr Rakesh K Bajaj	
1-9 February, 2023	Outcome based Education	IQAC & Deptt of Mech Engg, PPG Institute of Tech, Coimbatore	Dr Rakesh K Bajaj	
22-26 August, 2022	FDP on “Research Methodology and Tools”	ABES Engg College, Ghaziabad	Dr Rakesh K Bajaj	
12-18 Sept 2022	Advanced Tools and Techniques for Scientific Research Writing and Publication	University of Engg and Mgmt, Jaipur	Dr Rakesh K Bajaj	

- **Workshops Organized**

Dates	Subject	Venue	Faculty Name	No of Participants
15-27 May 2023	Two weeks NCM workshop on "**Advanced topics in PDEs**" in joint collaboration with TIFR and IIT Bombay.	JUIT, Waknaghat	Dr Pradeep KPandey (Co-coordinator) Dr R S Raja Durai (Co-ordinator) Dr Rakesh K Bajaj (Organizer)	45

- **Publications**

  - **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
Dr. Saurabh Srivastava	An inventory model for perishables with fixed storage life and diminishing ability to buy in their life expectancy.	International Journal of Operational Research	DOI: 10.1504/IJOR.2021.10040828	NA
Dr Mandeep Singh	An iterative technique based on HPM for a class of one dimensional Bratu's type problem	Mathematics and Computers in Simulation	Volume 200, 2022, Pages 50-64, ISSN 0378-4754	NA
Dr Mandeep Singh& Dr Karanjeet Singh,	An efficient technique based on higher order Haar wavelet method for Lane–Emden equation	Mathematics and Computers in Simulation	Volume 206, 2023, Pages 21-39, ISSN 0378-4754	NA
Dr Mandeep Singh,	An iterative technique for a class of Dirichlet nonlinear BVPs: Troesch's problem.	Computational and Applied Mathematics	volume 42, Article number: 163 (2023)	NA
Dr BK Pathak	Understanding of Network Resiliency in Communication Networks with its Integration in Internet of Things-A Survey.	Electrica	23(2), 318-328, 2023	NA

Dr Karanjeet Singh	Symmetry analysis of the (3+1) dimensional Kadomtsev-Petviashvili equation with variable coefficients and an arbitrary nonlinear term	Int. J. Dyn.Sys and Diff. Eqns.	Vol.13 (1), 2023 , 1-21	NA
Dr Neel Kanth	Analytical and Numerical Calculation of Heat Transfer Inside the Hard Nip calendar	Int.J. of Applied and Computational Mathematics	Vol.8(5),2022 pp.230(1-30),	NA
Dr Rakesh K Bajaj	On prioritization of hydrogen fuel cell technology utilizing bi-parametric picture fuzzy information measures in VIKOR & TOPSIS decision-making approaches	International Journal of Hydrogen Energy	October 2022.	7
Dr Rakesh K Bajaj	On Renewable Energy Source Selection Methodologies Utilizing Picture Fuzzy Hypersoft Information with Choice and Value Matrices	Scientia Iranica	December 2022.	4
Dr Rakesh K Bajaj	On Cohesive Fuzzy Sets, Operations and Properties with Applications in Electromagnetic Signals and Solar Activities	Symmetry	Symmetry, vol. 15, 595, 2023.	NA
Dr Rakesh K Bajaj	Modified EDAS method for MCDM in robotic agrifarming with picture fuzzy soft Dombi aggregation operators	Soft Computing	vol. 27, no. 8, 5077-5098, March 2023.	3
Dr Rakesh K Bajaj	On Complex Fuzzy Matrix with Algebraic Operations, Similarity Measure and its Application in Identification of Reference Signal	Journal of Information Science & Engineering	vol. 39, no. 3, pp. 593-607, May, 2023.	NA
Dr Rakesh K Bajaj	On Assembly Robotic Design Evaluation Problem Using Enhanced Quality Function Deployment with q-Rung Orthopair Fuzzy Set Theoretic Environment	Journal of Information Science & Engineering	vol. 39, no. 3, 623-636, May, 2023.	7

Dr Rakesh K Bajaj	On Novel Hellinger Divergence Measure of Neutrosophic Hypersoft Sets in Symptomatic Detection of COVID-19	Neutrosophic Sets & Systems	vol. 55, pp. 265-284, April, 2023.	
Dr Rakesh K Bajaj	On various aggregation operators for picture fuzzy hypersoft information in decision making application	Journal of Intelligent & Fuzzy Systems	vol. 44, no. 5, 7419-7447, May 2023.	NA
Dr Rakesh K Bajaj	On some new aggregation operators for T-spherical fuzzy hypersoft sets with application in renewable energy sources	International Journal of Information Technology	May, 2023.	NA
Dr Rakesh K Bajaj	On utilizing modified TOPSIS with R-norm q-rung picture fuzzy information measure green supplier selection	International Journal of Information Technology	June, 2023	NA

- **Books/Book Chapters Published**

Name of Faculty	Title of Article	Name of Book	Reference	Citation
Dr Rakesh K Bajaj	Solving Multi-objective Linear Fractional Programming Problem Utilizing (α,β)-Cut in Triangular Intuitionistic Fuzzy Setup	Real Life Applications of Multiple Criteria Decision-Making Techniques in Fuzzy Domain, Springer	Sahoo, L.,Senapati, T., Yager, R.R. (eds) Real Life Applications of Multiple Criteria Decision Making Techniques in Fuzzy Domain. Studies in Fuzziness and Soft Computing, vol 420. 2022	1

- **Conference Publications**

Name of Faculty	Title of Article	Name of Conference	Reference	Citation
Dr.Neel kanth	Heat Transfer model for Silk finishing Calendar	FIAM-2021	Springer Proceedings in Mathematics and Statistics,Vol 410, pp. 309-320	NA

Dr Rakesh K Bajaj	On Green Supplier Selection Problem Utilizing Modified TOPSIS with R-norm Picture Fuzzy Discriminant Measure	IMPACT-2022	5th International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT), Aligarh2022, pp. 1-5	1
Dr Rakesh K Bajaj	On T-Spherical Fuzzy Hypersoft Sets and Their Aggregation Operators with Application in Soft Computing	IMPACT-2022	5th International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT), Aligarh2022, pp. 1-6.	1
Dr Rakesh K Bajaj	On Banking Site Selection Decision Making Problem Utilizing Similarity Measures of Picture Fuzzy Soft Sets	IMPACT-2022	5th International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT), Aligarh2022, pp. 1-5.	1
Dr Rakesh K Bajaj	On Banking Site Selection Problem Utilizing Novel Picture Fuzzy Discriminant Measure	SCEECS-2023	2023 IEEE International Students Conference on Electrical, Electronics and Computer Science (SCEECS), NIT Bhopal, India, 2022, pp. 1-5.	NA
Dr Rakesh K Bajaj	On Medical Diagnosis Problem Utilizing Parametric Neutrosophic Discriminant Measure	SCEECS-2023	2023 IEEE International Students Conference on Electrical, Electronics and Computer Science (SCEECS), NIT Bhopal, India, 2022, pp. 1-5.	NA
Dr Rakesh K Bajaj	On Parametric Picture Fuzzy Information Measure in Pattern Recognition Problem	SCEECS-2023	2023 IEEE International Students Conference on Electrical, Electronics and Computer Science (SCEECS), NIT Bhopal, India, 2022, pp. 1-5.	NA

- **Guest Lectures**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Dr Rakesh K Bajaj	Professor & HoD	Relations and Functions	13 Sept 2022	SCERT, Solan

- **Lectures Delivered by Faculty**

Name of Faculty	Designation of Faculty	Topic of Lecture	Date	Venue
Nil	Nil	Nil	Nil	Nil

- **Composition of Various Bodies**

- **Board of Studies (BoS)**

S No	Name	Designation	Institution
1.	Prof. Rakesh Kumar Bajaj	Professor & HoD (Maths)	JUIT
2.	Prof. Karanjeet Singh	Professor of Maths	JUIT
3.	Prof. R S Raja Durai	Professor of Maths	JUIT
4.	Dr Bhupendra K Pathak	Assistant Prof. of Maths	JUIT
5.	Dr Surajit Kumar Hazra	Associate Prof. of Physics	JUIT
6.	Prof P. B. Barman	Prof. & HoD PMS	JUIT
7.	Prof Sudhir Syal	Prof. & HoD BT/BI	JUIT
8.	Prof Ashish Kumar	Prof. & HoD CE	JUIT
9.	Prof Vivek Sehgal	Prof. & HoD CSE&IT	JUIT
10.	Prof Rajiv Kumar	Prof & HoD ECE	JUIT
11.	Dr. Amit Srivastava	Associate Prof. & HoD, HSS	JUIT
12.	Prof. M K Sharma	Prof. & HoD Maths	TIET Patiala
13.	Dr. Gaurav Mittal	Scientist	DRDO Delhi
14.	Mr. Abhinav Anand	SRQ Researcher	NatWest Markets London, UK

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**

Faculty Name	Qualification	Specialization
Prof. AnupriyaKaur	PhD	Marketing
Dr. Amit Srivastava	PhD	Finance and International Business
Dr. Tanu Sharma	PhD	HRM
Ms. TriambicaGautam	MBA	Banking and Finance
Dr. Neena Jindal	PhD	Good Governance, Human rights
Dr. Deler Singh	PhD	Professional Communication Skills and Literature in English

- **PhD 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 i5-7400-7th Gen@3.00Ghz,RAM-8Gb,HDD-1TB Windows 1 0Pro (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. Mahender Thakur	Junior lab Assistant	**MCA**

- **Conferences Organized – NIL**

- **Conferences Attended**

Dates	Subject	Venue	Faculty Name	Remarks
April 17-18, 2023	National Conference on Outcome Based Education –Perspectives and practices	Thapar Institute of Engineering and Technology, Patiala	DrTanu Sharma	
Nov 26-27, 2022	5th International Conference on Multimedia, Signal Processing and Communication Technologies	Aligarh Muslim University (Online)	Triambica Gautam	
Nov25th – 27th, 2022	International Conference on Parallel, Distributed and Grid Computing	Jaypee University of Information Technology	Triambica Gautam	
April 17-18, 2023	National Conference on Outcome Based Education –Perspectives and practices	Thapar Institute of Engineering and Technology, Patiala	DrDeler Singh	

Nov 26-27, 2022	5th International Conference on Multimedia, Signal Processing and Communication Technologies	Aligarh Muslim University (Online)	Anupriya kaur	
Nov25th – 27th, 2022	International Conference on Parallel, Distributed and Grid Computing	Jaypee University of Information Technology	Dr Amit Srivastava	
Sept 27, 2022	InternationalSeminar onAccounting,Finance, andBusiness Management(ISAFBM-2022)	Dept of Business Administration, Assam University, Silchar (Online)	Dr Amit Srivastava	
Aug 5-6, 2022	Post-PandemicPerspectives: Reflectionsand Realities(PPPRR-2022)	Dept of MHSS, NIT Agartala, Tripura (Online)	Dr Amit Srivastava	
Nov 26-27, 2022	5th International Conference on Multimedia, Signal Processing and Communication Technologies	Aligarh Muslim University (Online)	Dr Amit Srivastava	

- **Seminars Organized**

Dates	Subject	Venue	Faculty Name	Remarks
October 8, 2022	Insights on Market Research and Interdisciplinary Opportunities	CR3, JUIT	Anupriya kaur	Institute Lecture Series

- **Workshops Attended**

Dates	Subject	Venue	Faculty Name	Remarks
October 2-4,2022	Three Day International Virtual WorkshopOnSoft Skills and Effective Classroom Management	Lavender Literary Club, India, Cape Comorin Trust, India, Malaysian Industrial Relations &Human Resource Association (MIRHA), Malaysia	DrTanu Sharma	
June 5-9, 2023	One Week Faculty Development Programme on “Teaching and Research Practices” (Hybrid Mode)	Jaypee University of Information Technology, Waknaghat	DrTanu Sharma	
September 23-24	2nd Emergent Technologies and Biomedical Systems	Jaypee University of Information Technology,	DrTanu Sharma	

	(ETBS 2022)	Waknaghat		
December 22-23 2022	Two days Faculty Development Programme Titled' "UTKARSH-Take flight" on Leadership and Excellence	Jaypee University of Information Technology, Waknaghat	DrTanu Sharma	
June 5-9, 2023	One Week Faculty Development Programme on "Teaching and Research Practices" (Hybrid Mode)	Jaypee University of Information Technology, Waknaghat	TriambicaGautam	
December 22-23 2022	Two days Faculty Development Programme Titled' "UTKARSH-Take flight" on Leadership and Excellence	Jaypee University of Information Technology, Waknaghat	TriambicaGautam	
December 22-23 2022	Two days Faculty Development Programme Titled' "UTKARSH-Take flight" on Leadership and Excellence	Jaypee University of Information Technology, Waknaghat	Neena Jindal	
October 2-4,2022	Three Day International Virtual WorkshopOnSoft Skills and Effective Classroom Management	Lavender Literary Club, India, Cape Comorin Trust, India, Malaysian Industrial Relations &Human Resource Association (MIRHA), Malaysia	DrDeler Singh	
September 21-27, 2022	Seven Day International Virtual Faculty Development Program on Ethics in Research and Publication	Department of English, Mohamed Sathak College of Arts and Science, Sholinganallur, Chennai, Tamilnadu, India in collaboration with Cape Comorin Trust	DrDeler Singh	
September 23-24	2nd Emergent Technologies and	Jaypee University of Information	DrDeler Singh	

	Biomedical Systems (ETBS 2022)	Technology, Waknaghat		
December 22-23 2022	Two days Faculty Development Programme Titled' "UTKARSH-Take flight" on Leadership and Excellence	Jaypee University of Information Technology, Waknaghat	DrDeler Singh	
August 23-September 3, 2022	Faculty Development Program on Professional Communication & Soft Skills	Electronics and ICT Academy at PDPM IIITDM Jabalpur	DrDeler Singh	
December 22-23 2022	Two days Faculty Development Programme Titled' "UTKARSH-Take flight" on Leadership and Excellence	Jaypee University of Information Technology, Waknaghat	Anupriya Kaur	
June 5-9, 2023	One Week Faculty Development Programme on "Teaching and Research Practices" (Hybrid Mode)	Jaypee University of Information Technology, Waknaghat	Anupriya Kaur	
December 22-23 2022	Two days Faculty Development Programme Titled' "UTKARSH-Take flight" on Leadership and Excellence	Jaypee University of Information Technology, Waknaghat	Dr Amit Srivastava	
June 5-9, 2023	One Week Faculty Development Programme on "Teaching and Research Practices" (Hybrid Mode)	Jaypee University of Information Technology, Waknaghat	Dr Amit Srivastava	

- **Publications**

  - **Journal Publications**

Name of Faculty	Title of Article	Name of Journal	Reference	Citation
DrDeler Singh	A Course on English Communication Skills for Indian Engineering Students in Industry 4.0 Era: A Proposal	European Chemical Bulletin	Volume 12, Special Issue 6, pp. 1564-1573, June 2023.	
Anupriya Kaur	Online Teaching and Emotional Intelligence of School Instructors.	Journal of Positive School Psychology	Volume 6 (4), pp. 101713-101717,2022	
Anupriya Kaur	Perceived Website Efficacy for Life Insurance Companies: Insights From a Best-Worst Method.	International Journal of Information Technology Project Management (IJITPM)	Volume 13 (3), pp. 1-21, 2023	
Anupriya Kaur	Predicting complaint voicing or exit amidst Indian consumers: A CHAID analysis.	Journal of Advances in Management Research	Volume 20 (1), pp. 55-78, 2022	
Anupriya Kaur	Indian Consumers Tendency to Exit amidst a Complaint- A SEM Approach.	International Journal of Management Practice	Forthcoming and Online First Articles (2022)	
Anupriya Kaur	Relationship between Consumers Attitude toward Complaining and Demographic Characteristics: A Study of Indian Consumers.	Journal of Positive School Psychology	Volume 6 (4), pp. 10813-10823 (2022)	
Anupriya Kaur	Empirical Evaluation of Indian Tourism Websites.	International Journal of Computer Science and Network Security	Volume 22 (9), pp. 63-68,2022	
Amit Srivastava	Does Economic Growth Act As A	International Journal of	Volume 13, issue 1, pp 1-16, June 2023	

	Mediator Between Government Spending And Human Development? An Insight from Northeastern India	Development and Conflict		
Amit Srivastava	Impact of different dimensions of globalisation on firms' performance: an unbalanced panel-data study of firms operating in India	World Review of Entrepreneurship, Management and Sustainable Development	Vol. 19, No. 3-5, pp 360-378	

- **Books/Book Chapters Published**

Name of Faculty	Title of Book Chapter	Name of Book	Reference	Remark
Dr Amit Srivastava	State of Human Well-Being in South Asia: A Human Development Index Perspective,	Post Pandemic Perspectives: Public Health, Management and Socioeconomics,	Ed. Dr. Gyanabati Khuraijam Dr. Kaju Nath, (pp.41-53) Authorspress, New Delhi, [ISBN 978-93-5529-783-9].	
Dr Amit Srivastava	Dimensional Assessment of the Human Development Index with Special Reference to India,	Research Issues in Business and Finance,	Ed. Taufeeque Ahmad Siddiqui and Saif Siddiqui (pp.186-200), Bloomsbury Publishers [ISBN: 978-93-56400-00-9].	
Dr Amit Srivastava	"Assessing Indirect Effect of Economic Growth among Government Expenditure and Human Development: A Study of Northern Region of India,	Global Business and Societal Reset,	Ed. Sanjay Rastogi, Chabi Gupta, Nitika Sharma and Harpreet Kaur,Weser Books, Germany [ISBN:978-3-96492-479-7].	

- **Conference Publications**

Name of Faculty	Title of Article presented	Name of conference	Reference	Dates
Triambica Gautam	Data Envelopment Analysis and Kendell's Coefficient of Concordance for Efficiency Evaluation of State Co-operative Banks.	5th International Conference on Multimedia, Signal Processing and Communication Technologies	Department of Electronics Engineering, AMU, Nov 26-27, 2022	
Triambica Gautam	Neural Network and DEA Model for Evaluation of Operational Efficiency of Co-operative Banks	International Conference on Parallel, Distributed and Grid Computing		
Anupriya Kaur	Multivariate Analysis on Employee Competencies	5th International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT), Aligarh, India, 2022,.	2022 5th International Conference on Multimedia, Signal Processing and Communication Technologies, IMPACT 2022	
Dr Amit Srivastava	Data Envelopment Analysis and Kendell's Coefficient of Concordance for Efficiency Evaluation of State Co-operative Banks.	5th International Conference on Multimedia, Signal Processing and Communication Technologies	Department of Electronics Engineering, AMU, Nov 26-27, 2022	

- **Guest Lectures - Nil**
- **Recognition & Awards: Nil**
- **Composition of Various Bodies**

  - **Board of Studies (BOS)**

Sr. No	Name	Designation	Institution
1	Dr AmitSrivastava	Chairman & Head	HSS, JUIT
2	Dr AnupriyaKaur	Professor	HSS, JUIT
3	Dr Tanu Sharma	Associate Professor	HSS, JUIT
4	DrDeler Singh	Assistant Professor	HSS, JUIT
5	Dr A Vinay Kumar	Professor	IIM Lucknow
6	Dr Purva Kansal	Professor	UBS, Chandigarh
7	Dr Kamal Kumar Chaudhary	Head, HSS	IIT Ropar
8	Mr Neelabh Singh	Principal Project Manager	ST Microelectronics
9	Ms Ana Agarwal	Senior Director	Treebo Hotel
10	Dr. Sunil Kumar Khah	Professor	PMS, JUIT
11	Dr. Vikas Baghel	IQAC Representative	ECE, JUIT
12	Dr Rajiv Kumar	Professor & Head	ECE, JUIT
13	Dr Vivek Sehgal	Professor & Head	CSE&IT, JUIT
14	Dr Sudhir Kumar	Professor & Head	BT&BI, JUIT
15	Dr. Ashish Kumar	Professor & Head	CE, JUIT
16	Dr PB Barman	Professor & Head	PMS, JUIT
17	Dr RK Bajaj	Professor & Head	Maths, JUIT

CENTRES

LEARNING RESOURCE CENTRE (LIBRARY)

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

LRC is a separate block of three storied building embedded to main academic block which accommodates 260 students at a time in order to carry any activity related to study and research. The LRC has 42764 volumes of books and 1401 back (bound) 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, Competitive Exams and other general subject areas. The Collection comprises of Print monograph such as Textbooks, Reference Books, Encyclopedias, Handbooks, Dictionaries, Theses, Standards, etc. It has been subscribing to 73 periodicals (journals and magazines) in print format in order to supplement teaching and research activities of the university. It also has a collection of Non-book materials include audio/video cassettes, CD-ROM discs, DVD-ROM discs etc.

LRC is subscribing to various online databases such as, ASCE, IEEE, Springer+1Nature Journal, SIAM E-Books, ProQuest, research statistical and plagiarism tools, These e-resources accommodate full-text of e-books, and other electronic resources such as Journals, Conference Proceedings, Transactions, Magazines and Reports which 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. There are 60 dedicated computer nodes and are fully connected with LAN & WiFi Internet facility. Students, faculty, research scholars can use computer facility for the purpose of browsing internet, accessing journals, reading course materials. The library is fully computerized and bar-coded with latest version of Library Management Software known as ‘Liberty’ software & Koha ~ an open source integrated library management system. The collection of the library can be browsed, searched and explored with the help of OPAC (Online Public Access Catalogue) over Internet (Koha OPAC) and Intranet (Liberty OPAC). Library has been providing dedicated terminals to access OPAC throughout the library premises. Furthermore, it has a separate dynamic website.

LRC remains open from 8.45 AM to 12:00 PM [midnight] except the holidays specified in the University’s academic calendar. It has implemented an integrated electromagnetic security system from 3M, USA for keeping a check on print materials movement. It has also developed an institutional repository by using Dspace an Open Source Software for maintaining scholarly output of the university. Library is extending various quality services such as subject support, research support, maintaining JUIT publications database, providing anti~plagiarism detection by using Turnitin & Ouriginal (erstwhile Urkund) 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 the institute. It is also participating actively in Shodhganga (a reservoir of Theses), Shodhgangotri- a repository of Synopses/Research Proposals for PhD) and ESS-an e-resources subscription consortium of INFLIBNET. LRC has also become an active member of National Digital Library of India (NDL) which offers free access to educational contents.

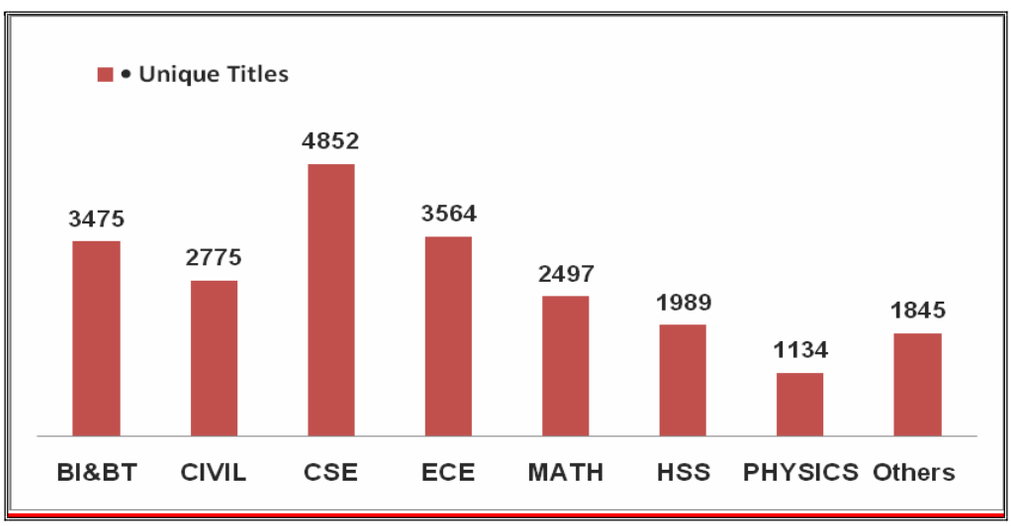
Resource Collections

- **Unique Titles : 22131**
- **Total Volume : 42764**

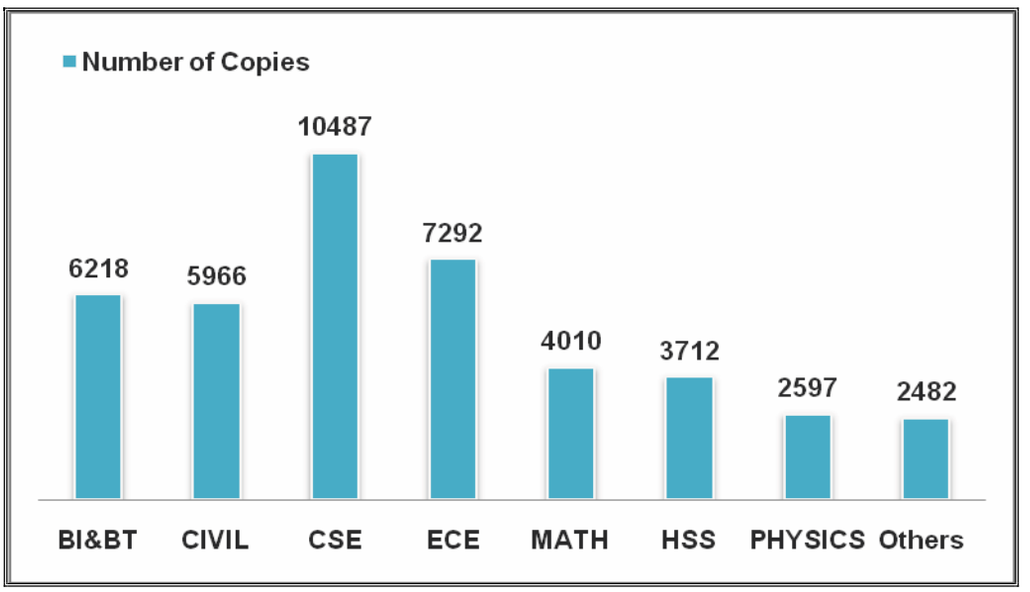
Department-wise collection (Books):

Department	Titles	Copies
Biotechnology and Bioinformatics	3475	6218
Civil Engineering	2775	5966
Computer Science & Engineering and Information Technology	4852	10487
Electronics & Communication Engineering	3564	7292
Humanities & Social Sciences	2497	4010
Mathematics	1989	3712
Physics and Materials Science	1134	2597
Other General Collections	1845	2482
Total Collection	**22131**	**42764**

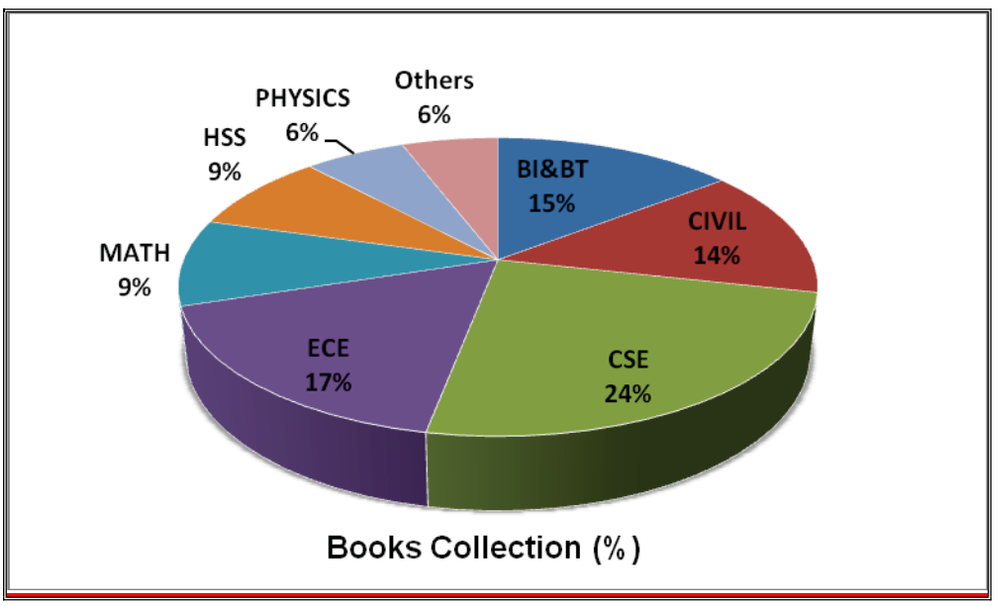
Subject-wise unique titles in the library collection (Books):



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



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



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; 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 Collections	Total
1	ASCE (American Society of Civil Engineers)	-	37	-	37
2	IEEE (Institute of Electrical and Electronics Engineers)	-	216	-	216
3	Springer Link	-	1713	-	1713
4	Nature Journal		1		1
5	ProQuest	29	4460	4085	4786
6	SIAM E-Books	372	-	-	372
Other Research/Statistical Tools					
1	Statistical Package for Social Science (SPSS)	2	Online Assessment Platform for Test & Exam (Mercer Mettl)		
3	English Language Tools (Clarity English)	4	Turnitin & Ouriginal (Text-matching solution & Plagiarism prevention)		
5	DELNET	6	Shodhganga		

Other Collections (in Print):

Type of Resource	Number
Print Journals (National)	33
Print Magazines	40
Back Volume Journals	1401
BIS/IRC Code	527
Ph.D. Theses	262
Dissertations (M.Tech. & M.Sc.)	803
Project Reports (B.Tech.)	3521
Newspapers (14 Titles)	32

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 91 printers with 16 heavy duty Network Printers.

- **Hardware configuration**

SERVER DETAILS			
S.No	Server	Configuration	Quantity
1	IBM System X 3400	Intel® XEON 2.0 GHz 4 GB RAM 956.32 GB SCIC HDD with RAID Support.	4
2	Lenovo workstation	Lenovo workstation E5-1603	1
3	IBM X Series 3500	Intel® XEON 2.26 GHz 6 GB DDR III RAM 1200 GB SCIC HDD with RAID 5 Support , 17 inch TFT monitor	3
4	IBM Server X3100	IBM Server intel XEON X3100 with 8 GB DDR3 ,500 GB HDD and TFT screen	3
5	IBM x-3400 M3	Server IBM Model x-3400 M3 with intel xeon quad core processor,8 GB RAM,300 GB X 4 HDD,18.5 inch TFT	1

6	HP	HP ML 110G6 Server Intel Xeon Quad Core X3430 Processor with 4 gb RAM ,250 GB Sata HDD and 18.5 TFT Screen	2
7	IBM X3300	IBM server x3300 m4 server 16 gb ram,1200 gb hdd with raid 5 card	1
8	Dell workstation	Dell Precision Tower 3420 with Intel Xeon E3-1225 3.3 ghz,8gb ddr4,19 inch tft and mouse	10
9	HP	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	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	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	Media server	UFO Media server with v-sat for movie	1
13	Lenove	Lenovo data center solution think system sr530 with win server 2016. Intel xeon silver 4114 with 2.2 ghz processor (2 Nos) 64 gb ddr 4 ram,6 tb HDD *4 ,3 year onsite warranty	3
14	sophos	XG450 rev.2 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+ Power cable	2
15	Dell	Dell r550 with intel Xeon silver 4314,16 core,32X2 GB ram,480 X 4 ssd HDD LMS Server	1
		Total Number Of Servers	**36**

DESKTOP DETAILS

S.No	Brand	CONFIGURATIONS	QTY
1	IBM	Dule core 1.8 Ghz,80 GB HDD ,1 GB RAM & 17 inch Monitor	4
2	IBM	INTEL CORE 2 DUO,160 GB HDD,2 GB RAM & 17 inch Monitor	50
3	IBM	INTEL CORE 2 DUO,160 GB HDD,2 GB RAM & 17 inch Monitor	125
4	IBM	core i3-530 (2.92 GHz) with 2 GB RAM ,250 GB Sata HDD,18.5 inch TFT Monitor	90

5	IBM	Core I3- 2100 3.10 GHz with 2 GB RAM ,320 GB Sata HDD,18.5 inch TFT Monitor	80
6	IBM	Core I3- 2100 3.10 GHz with 4 GB RAM ,500 GB Sata HDD,dvd rom,18.5 inch TFT Monitor	120
7	HP	Intel core i5-6500 3.2 G 6M 2133 4C CPU with 18.5 inch TFT ,KB and Mouse	190
8	Dell	Desktop Dell i5 7th gen,8 gb ram,1 tb HDD with 18.5 inch tft	300
9	HP	HP 280 G3 MT desktop	10
10	HP	Desktop Model HP 280 G4 MT	10
11	Dell	dell Desktop intel core i7-8700,8 gb dd4 ram,19 inch led,win10 pro 64 bit. 1tb hdd	10
12	Dell	Dell optiplex 3060 Minitower intel core i7 8700 with 8 gb ddr4 ram ,1 tb hdd ,TFT and win 10 pro preloded	5
13	Dell	dell optiplex 5080 intel core i7 with 16 gb ddr4 ram ,1 tb hdd ,TFT and win 10 pro preloded with 5 year warranty	70
14	Dell & Lenovo	Laptop lenovo i7 + Dell i5 (1 each)	2
15	Dell	Dell optiplex 5000 12 gen core i7,16 gb dd4 ram,512 gb ssd hdd,KB Mouse ,1925 inch tft with win 11 pro preloded.	50
		Total Number of computers	1116

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	MS Office Professional Plus 2007	100
4	Windows Server Enterprises 2003	3
5	Adobe Premier Pro Ver 7.0	20
6	Cold Fusion MVLP Ver 6.1	10

7	Flash MX 2004 MVLP	20
8	Micro Media Director Shockwave Studio for windows English AE	10
9	SQL Server 2000 Standard Edtn	1
10	Windows Server CAL 2003 English OLP NL AE Device CAl	4
11	VStudio .Net Pro 2003 Win32 English OLP NL AE	15
12	Office XP Pro Win 32 English	20
13	VStudio .Net Pro 2002 Win32 English	9
14	ISA Server 2000 English	1
15	Windows Advanced Svr 2000 English.	1
	Windows CAL 2000 English OLP NL AE	23
16	DB2 UBD Enterprise Server Edition .	1
17	IBM Tivoli Storage Managed Processor	1
18	Cyberoam software for internet	1
19	Schrodinger For Biotech	1 user 25 Token
20	Lotus Domain	100
21	AutoCad 2005 Education	5
22	A'Desk 3 ds Max 6 (Edu)	20
23	Rational suit Enterprise Software	20
24	Mathematica Ver 5.0	10
25	Autocad 2004 Network User	10
26	Maple 9.5	1
27	Sun Solrix Ver 8	35
28	Window XP Proffesional	20
29	Oracle 9i	10
30	Visual Prolog ver 6.1	15
31	Soft image xsi Ver 4.0	20
32	Staad Pro	5
33	SPSS Base 16.0	15
34	Oracle 11g	1
35	Clarity Digital Multimedia Language Lab	31
	Clarity English Teaching Software from U.K	
	1. Sky Pronunciation Suite	5
	2. Connected Speech	5
	3. Tense Buster Compilation	5
36	NI Lab View Academic Site License 2010	50
37	Pasw Amos 18.0	3
38	Windows Server Enterprise 2008 with media	10
39	Bentley Civil of perpetual network based software a.Mx Road V8 b.Power Civil c.Power Map	5

40	Ansys release 12.1	1
41	HyperLynx 3d EM Super Structure Designer V 15.2	3
42	Auto CAD 2013	30
43	Matlab ver 10	50
	Simulink	10
	Filter Design Toolbox	10
	Communications Blockset	10
	Communications Toolbox	10
	Signal Processing Toolbox	10
	Video and Image processing Blockser	10
44	Window server standard 2012	4
45	Geo 5 suit of Software with various modules	50
46	Xilinx UEF-VIVADO_SYSTEM	25
	Base2 100	7
	Atlys Spartan-6 FPGA Development Board	1
47	8.1 V Clarity Snet Language Lab software 1 teacher + 30 User	30 user
	Tense Buster V9 for 20 user	20 user
	Business writing for 30 user	30 user
48	SPSS Base 24.0	1
	SPSS Advance Statistics	**1**
	SPSS regression	**1**
	SPSS Neural Network	**1**
	SPSS conjoint	**1**
	SPSS Amos 24.0	**1**
	SPSS Categories	**1**
49	Acrobat Pro 2017	10
50	Windows server 2016 pro	4
51	SIMULIA Academic Teaching Suite Q9T for 20 user civil department	1
	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

52	Full guard Subscriptions for XG450 (3 years) Full guard subscription includes Network Protection, web protection, mail protection, Web server protection and Enhanced Support	2
53	windows 10 enterprise E3	5
54	Norton Antivirus	5

Switches and Access point			
S.NO	**NAME OF EQUIPMENT**	**Quantity**	**MAKE**
1	M220 Access Point	10	HP
2	V1910-24G POE switch	2	HP
3	Cisco air ap 1041 n a k9 wifi	10	cisco
4	Cisco air ap 1131 ag a k9	4	Cisco
5	5 port Dlink switch	5	Dlink
6	Catalyst 2960 48 port switch	15	cisco
7	AIR AP 1131AG-A-K9	5	cisco
8	Cisco Catalyst 9400 Series 7 slot core switch	1	Cisco
9	Catalyst 2960 24 10/100	4	Cisco
10	wifi router d link	20	dlink
11	16 Port Switch D link	1	D Link
12	Cisco 2921 w/3 GE,4 512 MB DRAM Router	1	Cisco
13	Catalyst 2960 48 10/100	5	Cisco
14	Cisco 2811 Router	1	Cisco
15	Switch 4210 26 Port 3 COM	5	3 COM
16	Core Switch 3 com 4060	1	3 COM
17	Router Cisco 2600 series	1	cisco
18	3 COM 4400 series 48 Port	28	3 COM
19	3COM 4400 Series 24 Port	2	3 COM
20	HP switch 24 G	5	HP
21	Cisco S business Switch 8 Port	3	cisco
22	cisco catalyst 2960 24 port 10/100	2	cisco
23	cisco catalyst 2960 48 port 10/100	5	cisco
24	Aruba switch 2530 48 G	11	Aruba
25	Fiber switch 48 port core	2	Ruckus
26	WAN Controller	1	
27	Fiber switch 48 port with 12 port POE	2	
28	POE switch 8 Port	1	
29	ruckus Access Points r510	361	Ruckus
30	cisco switch cbs350-24t-4g-in	5	cisco

31	Cisco switch 48 port 1 G	2	cisco
32	Ruckus Smart zone 100	2	Ruckus
33	Cisco 9200 L 48 T - 4x - E	2	cisco
	Total Number of switches and Access point	521	
	Total Number of Router	3	
	Cisco Core switch 9400 series	1	

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 2003/2008.

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 118 switches, 3 Cisco Routers, and 335 access point. Entire college campus including academic block, Faculty residence, SOR and all hostels is wifi and internet is provided in every room of student's hostel, faculty & staff residence, JUIT hospital, mess, laboratories and SOR.

We have 1 Gbps (1: 1) internet lease line circuit from BSNL and 500 Mbps (1:1) from Railtel on OFC. Apart from internet and intranet many more services including mail, web, and library book search, domain name, antivirus and software upgrades are being provided over this network.

JUIT is using Sophos XG 450 security Appliance to manage internet bandwidth and mailing services. Sophos is consists of software firewall, anti spam controller, content filtering and antivirus protection at gateway level. Lotus Domino is being used by JUIT for official mailing services.

INTERNATIONAL LINKAGES 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. Professor Entian's Group at the Institute of Microbiology, Johann Wolfgang Goethe, University of Frankfurt, Germany
2. The Finnish Universities of Applied Science, Finland
3. University of Nebraska, USA
4. South Dakota School of Mines and Technology, USA
5. SAP AG, Germany
6. National School of Applied Sciences (ENSATg), Morocco
7. University of Florida, USA
8. Southern Federal University, Russia
9. G.K. Skryabin Institute of Biochemistry and physiology of microorganisms of Russian Academy of Sciences, Russia
10. Tel Aviv university, Israel
11. Pokhara University, Kaski, Nepal.
12. University of Missouri, USA

ACADEMIC ADMINISTRATION

Admission Process

- **UG Program**

  During the academic session 2022-23, admissions were carried based on JEE (Mains) and on the basis of 10+2 marks merit basis.

  In BTech 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 BTech 2nd year under (Lateral Entry) were made on the merit marks of three year diploma / BE / BTech 1st year in related branch of engineering.

- **PG Program**

  Admission to PG programs (MTech) were offered to the eligible candidates having valid GATE score and through PGET-2022 conducted by University for Non GATE qualified candidates followed by an interview by the PG programme Selection Board.

- **Doctoral Programme**

  Admission to the PhD programs were offered to the eligible candidates having UGC/CSIR NET/SLET and through PhD 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.

- **Students Enrollment**

  The status of student strength as on 30 Nov 2022 is given below.

Year of Study	UG Prog.	PG Prog.
6th Year	02	
5th Year	07	
4th Year	387	
3rd Year	367	
2nd Year	404	37
1st Year	456	40
PhD Scholars Registered during the Academic Session 2022-23 were 108.		

- **Faculty**

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

- **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. However, they have to pay Hostel charges as applicable to other students.

4. **Teaching Assistantship for MTech Students**

GATE qualified students admitted to MTech program are eligible for Teaching Assistantship of Rs. 8000/- per month. However, continuation of above fellowship is subject to meeting the desired criteria as the terms of JUIT Regulations & Ordinances.

5. **Research Fellowship for PhD Students**

Full time PhD scholars may be awarded Research Fellowship of Rs. 12000/- per month for the maximum duration of 03 years. The above fellowship is subject to approval and availability of funds.

JUIT YOUTH CLUB (JYC)

ABOUT JYC

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

Orientation

13th September 2022

The JUIT Youth Club's orientation event for the academic year 2022–2023 took place on 15th September, 2022 at LT1. The main goal of the orientation was to present the club to new students and members, familiarise them with its mission, principles, and priority areas, and lay out the planned activities for the academic year. The ex-president of the club, Aditya Singh, gave a hearty welcome to the gathering before introducing the new club officers and outlining their responsibilities. Thereafter, the new President, Angel Singh took over the part and continued. A thorough presentation was given, emphasising the club's dedication to inclusion, community service, and personal and professional development. Participants were introduced to the new Council Members and then the Council Members themselves introduced the numerous clubs and committees within the JYC to the students present there, establishing a sense of community and inspiring them to assume leadership positions.

To promote active engagement, the future events and activities—including workshops, seminars, and social initiatives—were also made known. The orientation activity was essential in fostering a welcoming and inclusive atmosphere, promoting the club's mission, and motivating students to actively participate in club events all year long.

Hindi Diwas
14th September 2022

The Synapse Club of BT/BI at JUIT commemorated Hindi Diwas with an engaging Hindi Debate and Declamation contest on the topic With the addition of poetry readings, the event attracted ardent participants who articulately voiced their opinions. The ceremony, which took place in CR 3, started with an invocation and was attended by distinguished dignitaries such as Major General Rakesh Bassi (Retd.), the Registrar and Dean of Students, and Prof. (Dr.) Rajendra Kumar Sharma, Vice Chancellor of JUIT. Prof. Sudhir Syal (Head of Department BT/BI) and Dr. Amit Srivastasva (JYC faculty in charge) provided the event's welcome speeches. Following the gripping Declamation battle, a stimulating Debate discussion held the interest of almost 100 guests. Aditya Sharma, Bhumika Gupta, Vatsal Singh, and Anushree were awarded prizes for their great performances, and all participants received certificates of participation. Ragini Mishra, president of the Synapse Club, gave a vote of appreciation at the end of the evening, which was an educational and enjoyable tribute to Hindi language and culture.

Ozone Day
16th September 2022

The Environment and Health Club, JYC, in collaboration with HIMCOSTE, organized an inspiring event to mark International Ozone Day at JUIT. The theme "Ozone layer depletion: Cause, Effects, and Solution" drove enthusiastic student participation in Poster Making and Declamation contests held in CR-3. The Chief Guest, Shri Sat Pal Dhiman (Joint Member Secretary, HIMCOSTE, India), was warmly welcomed and honored by Prof.(Dr.) Rajendra Kumar Sharma, Vice Chancellor JUIT, followed by the ceremonial lamp lighting. Dr. Gopal Singh Bisht shed light on ozone's significance and vulnerability to global warming, and Shri Sat Pal Dhiman emphasized human activity's impact on the ozone and environment. Dr. Hemant Sood presented strategies to combat UV radiation's effects and highlighted scientists' role. The Declamation contest winners were Aditya Sharma (1st), Samridhi Chauhan (2nd), and Vision Srivastava (3rd), while Gaurav Anand (1st), Drishti Awasthi (2nd), and Purva Kundu (3rd) excelled in the Poster Making contest. Mr. Ravi Sharma delivered closing remarks, congratulated participants, and distributed prizes, concluding the successful awareness-filled event. The Ozone Day Celebration successfully instilled a sense of responsibility among the students, encouraging them to actively contribute to environmental conservation and sustainable practices.

Diksha
1st October 2022

JUIT has a rich tradition of welcome new students by hosting an occasion called DIKSHA where they can perform, have fun, and show off their skills to their seniors and professors. The welcoming reception for the students kicked off with a succinct description of the occasion, accompanied by cheery grins and good vibes. Vice-Chancellor Dr. Rajendra Kumar Sharma officiated at a lamp-lighting ceremony before giving a moving speech. The baton was handed off to the incoming JYC Council for 2022–2023 in the traditional manner.The audience was riveted by the musical performances, rhythm twisters, Apocalypse, and theatrical productions. First-year students engaged in a ramp walk for Mr. and Mrs. Fresher's. The girls did a mysterious classical dance that joyfully captivated the audience's undivided attention after they displayed their talent to the crowd. DNR, PAKKE PAHADI, and UBC were able to execute their most anticipated dances by drawing energy from the enormous audience. Dr. Ruchi Verma, a professor in JUIT's CSE/IT department, finally made the announcement of the outcomes.

Aditya Dwivedi won Mr. Fresher's, and Mrs. Fresher's went to Kumari Ganguli. DNR also took home the prize for best dance group. Numerous JUIT students, as well as the university's registrar and dean of students, Major General (Ret.) Rakesh Bassi, as well as the heads of several departments and faculty members, including Dr. Gopal Singh Bisht of the department of biotechnology and bioinformatics and Dr. Amit Srivastava, the faculty advisor for JYC, attended the event.

The ceremony was finally brought to a close with the unmistakable message that seniors have a duty to welcome their juniors to their new location and environment with great happiness so they can be firmly placed on the path to success. To maintain a healthy atmosphere on the entire JUIT campus, juniors should acquire the Indian custom of honouring their seniors and elders.


SENTS
FRESHER'S
FRESHER'S NIGHT
MR. FRESHER
MISS FRESHER

Parakram
7th October to 9th October 2022

PARAKRAM, the annual sports fest celebrated at Jaypee University of Information Technology (JUIT), Waknaghat, showcased the true spirit of sportsmanship among participating students from various colleges. The event commenced with a grand opening ceremony, graced by Prof.(Dr.) Rajendra Kumar Sharma, Vice Chancellor JUIT, who introduced the participating colleges and the sports competitions.

A total of 6 sports - Chess, Volleyball, Table Tennis, Football, Badminton, and Basketball - engaged students from Manipal University, Jaipur, Baddi University, IIT Ropar, JUIT (A/B), and Chitkara University, HP. Both boys and girls from all universities participated in the sport events. Throughout the fest, participants displayed determination and pride in their performance, regardless of the match outcomes. The first day saw fierce competition and strong team spirit from all sides.

On the second day, exciting matches unfolded, with the girls' volleyball teams from IIT Ropar and Chitkara University securing victories. The day also witnessed intense basketball matches between JUIT and Manipal University, where Manipal University emerged victorious with a one-point margin. Football saw Chitkara University advance to the finals, but they were defeated by Bahra University, who claimed the championship.

The third day featured all the finals, with Chitkara University, Rajpura, and IIT Ropar emerging as winners in boys' and girls' volleyball, respectively. In football, Bahara University took the top spot. Manipal University, Jaipur, and JUIT secured victories in table tennis, while Chitkara University, Baddi, and Manipal University, Jaipur, excelled in chess. In basketball, JUIT triumphed in the boys' category, while Manipal University, Jaipur, dominated the girls' competition. JUIT shined in badminton, winning both the boys' and girls' divisions.

Prof.(Dr.) Rajendra Kumar Sharma and Major General Rakesh Bassi (Retd.), Dean of Students, distributed prizes to the winners during the closing ceremony. With the dedication of the JUIT Youth Club organizing team and the enthusiastic participation of all students, PARAKRAM concluded as a successful celebration of sportsmanship and unity among young athletes.

Master Chef
12th November 2022

To appreciate and enhance the cooking skill and innate talent of the students of JUIT and to keep them engaged in extracurricular activities, the " Master Chef " event was organised by the Environment and health club. The event started at 03:00 PM with the lamp lighting by the faculty coordinator of JYC Dr. Amit Srivastava and Mrs.Sagrika Srivastava and JYC president. A total of 11 teams participated in the event to show their skills, then the teams began the competition with a time limit of 3 hours for the teams to prepare the food of their choice and put all their efforts into it. A lot of spectators were also present there cheering up for their favourite teams and enjoying the event, for whom some fun games along with the event were also organised. After the completion of the event the prizes were awarded to the winners in the presence of: Registrar and dean of students Major General Rakesh Bassi and Mrs Vibha Bassi, Vice Chancellor Dr. Rajendra Kumar Sharma, Dean of academics Prof. Ashok Kumar Gupta and Mrs. Mamta Gupta. First position holder was team yaarana, second position went to the team Masaledar bawarchi, and third position was grabbed by the team Captain cooks. The winners from the spectators of the games were, for 'don't let it down' - Prakhar and Anurag, for 'gamboge race' - Ayush Singh, for 'dice game' - Tanishq Gupta. The event was a success and fun and was organised and maintained by Dr. Hemant Sood as well as Dr. Naveen Jaglan and Dr. Ashok Kumar Nadda, faculty coordinators of the Environment and Health club and equally by the student members of the Environment and Health club.

Youth Parliament and Lit Fest
26th - 27th November 2022

A vibrant Youth Parliament event was organised by the Jaypee University of Information Technology (JUIT), Solan, in partnership with the JUIT Youth Club (JYC), with a focus on youth empowerment and engaged civic involvement. The gathering provided a forum for stimulating conversations and debates on significant social and political topics among the next generation of thinkers. On, 26th November, 2022 Youth Parliament gathered together the passionate students from diverse academic fields to represent various political parties. The purpose of the activity was to encourage among the attendees a greater understanding of the parliamentary procedure and a sense of democracy. Distinguished faculty members and distinguished guests graced the opening session of the day, which stressed the importance of young participation in determining the future of the country.

The day began with an opening session attended by distinguished faculty members and special

guests who emphasised the importance of young involvement in determining the future of the country. The participants were guided and given insightful advice by professors and facilitators from the university, which helped to prepare them for the subsequent debates. The event was divided into several segments that mimicked a real parliamentary discussion. The attendees engaged in spirited discussion on a wide range of subjects, including gender equality, environmental sustainability, school reform, and other urgent social challenges. All attendees were thanked and cheered for their active participation during the closing ceremony, which brought the event to a close. The top speakers and participants received certificates of gratitude in recognition of their excellent contributions to the Youth Parliament .The event's success and influence highlighted how important it is to provide such platforms for young people to actively participate in the growth and progress of the country.

Veer Bal Diwas
26nd December 2022

In remembrance of the great sacrifices made by the four sons of the 10th Sikh guru, Shri Guru Gobind Singh Ji, Jaypee University of Information Technology (JUIT) observed Veer Bal Diwas on December 26. During the crucial days of December 21–27, 1704 AD, Sahibzada Ajit Singh, Sahibzada Jujhar Singh, Sahibzada Zorawar Singh, and Sahibzada Fateh Singh showed unflinching fortitude and valour. This day is extremely significant in Sikh history because it represents their unwavering adherence to their beliefs and morals in the face of difficulty. By serving as a reminder of the sacrifices made by these young soldiers, Veer Bal Diwas encourages future generations to uphold the principles of valour, righteousness, and selflessness. A variety of cultural performances, hymn readings, and speeches highlighting the historical importance of this day distinguished the celebrations at JUIT. The institution wanted to build a sense of pride and cohesion among the participants and students by raising knowledge of and understanding for Sikh history through this event.

Dhun
28th March 2023

Music has always been a source of bliss for our minds and hearts. It pacifies us and motivates us to do more of whatever we want. Jaypee University of Information Technology, Waknaghat organized a music event called DHUN on 28th of March, 2023. Dhun was a unique singing competition where members of different choirs competed together. Approximately 50 students participated in the event and mesmerized the audience. With the motivation of all the other students, the participants were able to sing in front of such a large crowd. The performances were held in Basket Ball Court , with a light sound system and lighting rig providing the perfect atmosphere for the musicians to shine. In the presence of Neena Jindal, Rakesh Bajaj, Amit Shrivastava, Sunil Dutt, Gopal Bisht, Ekta Gandotra, Deepak Gupta and other teachers, this was an opportunity to motivate all students.Overall, Dhun'23 was a great success because of the contribution of all the attendees. It was a resounding success, and the credit goes to the organizers, participants, judges, and audience. The event was a showcase of the university's commitment to promoting cultural activities and enable students to showcase their talents.

Murious
24th - 26th February 2023

The JUIT Youth Club (JYC) organized the 17th edition of the annual technical fest "Murious" from 24th to 26th February 2023. The three-day event included a total of 17 different events and activities for the participants.

On Day 1, the event started with the Stock Simulation, where students participated in a trading competition on the StockGro app. The day also featured events like Frame-By-Frame, Picture Perfect, and eSports. The main attraction of the day was "The Expanse 2.0," a 20-hour-long coding event with a prize pool of over 18,000 Rs.

Day 2 of the event started with Code Chaos, a problem-solving competition for computer language skills. The day also featured events like Tech Talk, Web-o-fiesta, and Bridge Making. The day ended with another eSports competition with games like Mini-militia, Valorant, and Fifa.

On the final day, the event featured four main activities, including Mysterious Conduct, Knives Out, Code Relay, and Synchrotron. The day also included a cultural night with ramp walks, pahari nati, bhangra, and performances by bands. The Vice Chancellor of the university awarded prizes to the winners of the Hackathon and Codeathone competitions.

Overall, the event provided a platform for students to showcase their technical, creative, and cultural skills. The organizing committee did an excellent job of planning and executing the event, which was enjoyed by all the participants and appreciated by the faculty and the university administration.

Le Fiestus
27th -29th April 2023

Le Fiestus, the annual festival at Jaypee University of Information Technology (JUIT), showcased a vibrant display of cultural diversity and artistic talent from across the country. The festival, held on April 27, provided students with an exciting platform to exhibit their skills and celebrate various cultural practices and traditions. The festival's inauguration took place at the college BBC, where the primary guest and JYC students participated in a traditional lamp-lighting ceremony. The event featured captivating dance performances, melodious music, and thought-provoking comedic skits, all aimed at promoting cultural awareness. One of the highlights of the festival was a fusion dance performance that skillfully combined western, folk, and classical dance styles, leaving the audience mesmerized. The skits, addressing important themes like gender equality, environmental preservation, and mental health awareness, were well-written and left a lasting impact on the

spectators. The DJ night was a crowd favorite, keeping the students entertained and on their feet throughout the evening. The contagious energy and enthusiastic participation made the event a grand success.

The second day of Le Fiestus was equally thrilling, offering students a much-needed break from academics and providing opportunities for relaxation and socializing.

TRAINING & PLACEMENT

Training and Placement (T&P) 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 the FY 2022-23 is attached as **Appendix I**

Appendix A

GOVERNING COUNCIL

1. Pro-Chancellor

Shri Manoj Gaur — Chairman
Executive Chairman
Jaiprakash Associates Ltd.

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

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

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

3. Two Representatives of the Collaborating Universities

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

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

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

a) Prof. Onkar Singh — Member
Vice Chancellor
Uttarakhand Technical University

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

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

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

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

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

6. **Vice Chancellor of the University**

Prof. (Dr.) Rajendra Kumar Sharma — Member

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

Prof. S.C. Saxena — Member
Pro-Chancellor, JIIT, Noida

8. **Two Deans of the University by Rotation**

a) Prof. Ashok Kumar Gupta — Member
Dean (Academics & Research)
JUIT, Waknaghat

b) Vacant

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 — Member
Head, HR Department
Jaiprakash Associates Ltd.

b) Sh. C.S. Verma — Member
Former Chairman
Steel Authority of India
4086, Pocket C4, Vasant Villas, Vasant Kunj,
New Delhi – 110070)

c) Sh. B. Prasada Rao — Member
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

Appendix B

EXECUTIVE COUNCIL

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

Prof. (Dr.) Rajendra Kumar Sharma

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

a) Sh. Sunil Sharma — Member
Executive Vice Chairman
Jaiprakash Associates Ltd.

b) Sh. S.S. Mittal — Member
Advocate
Shimla

3. One Dean of the University

Prof. Ashok Kumar Gupta — Member
Dean (Academics& Research)

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

Prof. S.C. Saxena — Member
Pro-Chancellor
Jaypee Institute of Information Technology (JIIT)
Noida

5. Non- Member Secretary

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

Appendix C

FINANCE COMMITTEE

1.	**The Vice Chancellor of the University**	**Chairman**
	Prof. (Dr.) Rajendra Kumar Sharma	
2.	**One Nominee of the Pro-Chancellor**	
	Sh. Sunil Sharma Executive Vice Chairman Jaiprakash Associates Ltd	Member
3.	**One Nominee of the Governing Council**	
	Maj Gen Rakesh Bassi, SM (Retd) Registrar & Dean of Students JUIT Waknaghat	Member
4.	**One Dean (by rotation) on the basis of Seniority**	
	Prof. Ashok Kumar Gupta Dean (Academics& Research)	Member
5.	**Non Member Secretary**	
	The Finance Officer of the University Sh. Hemant Vyas Chief Finance Officer	

Appendix D

ACADEMIC COUNCIL OF THE UNIVERSITY

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

   Prof. (Dr.) Rajendra Kumar Sharma

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.) Vineet Sharma - Physics & Materials Science

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

   a) Dr. Satish Kumar — Member
   Ex-Director
   NIT Kurukshetra

   b) Prof. Lalit Kumar Awasthi — Member,
   Director,
   NIT, Srinagar, Uttarakhand

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 — Member
   Vice Chancellor
   Jaypee Institute of Information Technology (JIIT), Noida

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

   a) Prof. Ashok Kumar Gupta — Member
   Dean (Academics & Research)

   b) Vacant

7. Heads of the Departments/Centres of the University

a) Prof. (Dr.) P.B. Barman, HOD, Department of Physics & Materials Science

b) Prof. (Dr.) Sudhir Kumar, HOD, Department of BT&BI

c) Prof. (Dr.) Ashish Kumar, HOD, Department of Civil Engineering

d) Prof. (Dr.) Vivek Sehgal, HOD, Department of CSE/IT

e) Prof. (Dr.) Rajiv Kumar, HOD, Department of ECE

f) Prof. (Dr.) Rakesh Kumar Bajaj, HOD, Department of Mathematics

g) Dr. Amit Srivastava, HOD, Department of HSS

8. Non-Member Secretary

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

Appendix E

DETAILS OF LAND

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY				
Waknaghat Solan (H.P.)				
Summary (Plinth Area)				**17.04.2021**
Sl. No.	**Particulars**	**Area (In sqm)**	**Ground Coverage Area (in sqm)**	**Total No. of Floor**
1	**Institution and administrative area**			
	Academic Block -3 Level	442.63	4846.80	1 Floor
	Academic Block -2 Level	798.98		1 Floor
	Academic Block -1 Level	1298.53		1 Floor
	Academic Block 0 Level	2510.19		1 Floor
	Academic Block +1 Level	3093.40		1 Floor
	Academic Block +2 Level	2868.87		1 Floor
	Academic Block +3 Level	2307.04		1 Floor
	Academic Block +4 Level	1086.34		1 Floor
	Total	**14405.98**		
	Auditorium & Stage	1324.50		1 Floor
	Animal House Lab	256.00	128.00	2 Floor
	Civil Lab	614.23	153.71	3 Floor
	Civil Deptt. administrative Area	723.75	241.25	3 Floor
	G.TOTAL	**17324.46**		
2	**Faculty housing**			
	Faculty Block A Type	1787.97	442.93	9
	Faculty Block B Type	0		
	B01	1231.43	293.68	8+Mumty
	B02	1353.16	293.68	8+Mumty
	B03	1231.06	293.68	8+Mumty
	B04	1353.16	293.68	8+Mumty
	Faculty Block C Type	0		
	C01	1073.64	259.01	8+Mumty
	C02	1079.76	259.01	8+Mumty
	C03	1015.07	259.01	7+Mumty
	Guest House	1427.59	774.16	4 Floor
	Total	**11552.84**		
	E Type Faculty (A Block)		246.28	
	Ground Floor	66.34		

	First Floor	66.34		
	Typical Floor	469.20		4 Floor
	E Type Faculty (B Block)			
	Ground Floor	66.40		1 Floor
	Typical Foor	357.60		3 Floor
	Total Of E Faculty	**1025.88**		
	D Type Faculty (A Block)			10 Floor
	Ground Floor	67.56		1 Floor
	First Floor	80.83		1 Floor
	Typical Floor	900.8		8 + Mumty
	D Type Faculty (B Block)		215.14	
	Ground Floor	55		
	First Floor	77.6		
	Typical Foor	900.8		8 + Mumty
	Total	**2082.59**		
	TOTAL	**14661.31**		
3	**Student housing (HOSTEL)**			
	H-1	1209.04	132.62	8+Mumty
	H-2	1159.24	182.80	7+Mumty
	H-3	624.93	137.17	5+Mumty
	H-4	1326.84	192.37	8+Mumty
	H-5	2118.40	184.94	12+Mumty
	H-6	1152.61	192.37	8
	H-7	1044.23	192.37	7+Mumty
	H-8	916.85	192.37	6+Mumty
	H-9	911.71	183.05	6+Mumty
	H-10	927.88	183.05	6+Mumty
	H-11	1321.16	192.37	8+Mumty
	Girls Hostel 12A	2190.70	192.37	10+Mumty
	Girls Hostel 12B	1718.85	192.37	9+Mumty
	Girls Hostel 12C	1909.04	192.37	9+Mumty
	Girls Hostel 12D	1648.14	192.37	9+Mumty
	H-14A	865.69	192.37	9
	H-14B	1302.54	192.37	8+Mumty
	H-14C	2253.75	192.37	11
	H-14D	1859.50	192.37	10+Mumty
	H-15A	1832.76	192.37	11

	H-15B	1361.51	192.37	8+Mumty
	H-15C	1715.35	192.37	10
	H-15D	1510.54	192.37	8+Mumty
	Student Lounge	132.63	132.62	2
	TOTAL	**33013.89**		
4	**Dormitory (For supporting staff/Worker)**			
	Worker Dormitory-1		350.00	
	Basement	288.23		1 Floor
	Ground Floor	574.11		1 Floor
	First Floor	405.03		1 Floor
	Second Floor	350.17		1 Floor
	Total	**1617.54**		
	Worker Dormitory-2 (F Block)	673.20	241.63	4 Floor
	TOTAL	**2290.74**		
5	**Miscellaneous Structures**			
	Annapurna	2016.64		1Floor
	Uploading Bay (Annapurna)	189.14	90.14	2 Floor
	Telephone Exchange	913.31	216.91	5 Floor
	ESS	1999.76	724.90	5 Floor
	Plant Room / Green Room	591.46	194.98	1 Floor
	Mandir	281.66	281.59	1 Floor
	Dispensary	251.96	90.61	3 Floor
	S.T.P	92.55	92.55	1 Floor
	Store	326.43	326.43	1 Floor
	Security Room	17.50	17.50	1 Floor
	Garbage Room	64.28	32.14	2 Floor
	Laundry	193.63	193.63	1 Floor
	TOTAL	**6938.32**		
	G Total	**74228.71**	**16259.58**	

TOTAL PLOT AREA = 114.10 BIGHA

TOTAL PLOT AREA IN SQMTR. 114.10 X 753 = 85917.3 SQMTR.

APPENDIX F

DETAILS OF TEACHING STAFF

ELECTRONICS & COMMUNICATION ENGINEERING			
S.No.	**Name**	**Designation**	**Qualifications**
1	Rajiv Kumar	Professor & HOD	Ph.D
2	Shruti Jain	Professor & Dean Associate	Ph.D
3	Harsh Sohal	Associate Professor	Ph.D
4	Emjee Puthooran	Associate Professor	Ph.D
5	Naveen Jaglan	Associate Professor	Ph.D
6	Sunil Datt Sharma	Associate Professor	Ph.D
7	Shweta Pandit	Assistant Professor (SG)	Ph.D
8	Nafis uddin khan	Assistant Professor (SG)	Ph.D
9	Vikas Baghel	Assistant Professor (SG)	Ph.D
10	Salman Raju Talluri	Assistant Professor (SG)	Ph.D
11	Nishant Jain	Assistant Professor (SG)	Ph.D
12	Alok Kumar	Assistant Professor (SG)	Ph.D
13	Pardeep Garg	Assistant Professor (SG)	Ph.D
14	Pragya Gupta	Assistant Professor (GR-II)	M.Tech
15	Munish Sood	Assistant Professor (GR-II)	M. Tech
16	Anuj Kumar Maurya	Assistant Professor (GR-I)	M. Tech
17	Pankaj Kumar	Assistant Professor (GR-I)	M. Tech
COMPUTER SCIENCE & ENGINEERING/INFORMATION TECHNOLOGY			
S.No.	**Name**	**Designation**	**Qualifications**
1	Vivek Sehgal	Professor & HOD	Ph.D
2	Pradeep Kumar Gupta	Professor	Ph.D
3	Pardeep Kumar	Associate Professor	Ph.D
4	Rajni Mohna	Associate Professor	Ph.D
5	Ravindara Bhatt	Associate Professor	Ph.D
6	Yugal Kumar	Associate Professor	Ph.D
7	Ekta Gandotra	Associate Professor	Ph.D
8	Kapil Sharma	Assistant Professor (SG)	Ph.D
9	Avani Vyas	Assistant Professor (SG)	Ph.D
10	Sahil Sharma	Assistant Professor (SG)	Ph.D
11	Jagpreet	Assistant Professor (SG)	Ph.D
12	Hari Singh	Assistant Professor (SG)	Ph.D
13	Ruchi Verma	Assistant Professor (SG)	Ph.D
14	Amit Kumar	Assistant Professor (SG)	Ph.D
15	Himanshu Jindal	Assistant Professor (SG)	Ph.D

16	Monika Bharti	Assistant Professor (SG)	Ph.D
17	Amol Vasudeva	Assistant Professor (SG)	Ph.D
18	Aman Sharma	Assistant Professor (SG)	Ph.D
19	Rakesh Kanji	Assistant Professor (SG)	Ph.D
20	Deepak Gupta	Assistant Professor (SG)	Ph.D
21	Nancy Singla	Assistant Professor (SG)	Ph.D
22	Kushal Kanwar	Assistant Professor (SG)	Ph.D
23	Abhilasha Sharma	Assistant Professor (SG)	Ph.D
24	Shubham Goel	Assistant Professor (SG)	Ph.D
25	Vipal Sharma	Assistant Professor (SG)	Ph.D
26	Pankaj Dhiman	Assistant Professor (SG)	Ph.D
27	Diksha Hooda	Assistant Professor (SG)	Ph.D
28	Simarn Setia	Assistant Professor (SG)	Ph.D
29	Surjeet Singh	Assistant Professor (GR-II)	M.Tech
30	Aditi Sharma	Assistant Professor (GR-II)	M.Tech
31	Prateek	Assistant Professor (GR-II)	M.Tech
32	Arvind Kumar	Assistant Professor (GR-II)	M.Tech
33	Nishant Sharma	Assistant Professor (GR-II)	M.Tech
34	Praveen Modi	Assistant Professor (GR-II)	M.Tech
DEPARTMENT OF BIOTECHNOLOGY / BIOINFORMATICS			
S.No.	**Name**	**Designation**	**Qualifications**
1	Sudhir Syal	Professor & HOD	Ph.D
2	Jata Shankar	Professor	Ph.D
3	Tiratha Raj Singh	Professor	Ph.D
4	Anil Kant	Associate Professor	Ph.D
5	Rahul Shrivastava	Associate Professor	Ph.D
6	Hemant Sood	Associate Professor	Ph.D
7	Gopal Singh Bisht	Associate Professor	Ph.D
8	Poonam Sharma	Associate Professor	Ph.D
9	Jitendraa Vashistt	Associate Professor	Ph.D
10	Garlapati Vijay Kumar	Associate Professor	Ph.D
11	Udaybanu M	Associate Professor	Ph.D
12	Saurabh Bansal	Associate Professor	Ph.D
13	Ashok Kumar Nadda	Assistant Professor (SG)	Ph.D
14	Abhishek Chaudhary	Assistant Professor (SG)	Ph.D
15	Raj Kumar	Assistant Professor (GR-II)	Ph.D
16	Shikha Mittal	Assistant Professor (GR-I)	Ph.D

DEPRTMENT OF CIVIL ENGINEERING			
S.No.	**Name**	**Designation**	**Qualifications**
1	Ashok Kumar Gupta	Professor & Dean (Academics & Research)	Ph.D
2	Ashish Kumar	Professor & HOD	Ph.D
3	Saurabh Rawat	Associate Professor	Ph.D
4	Rishi Rana	Assistant Professor (SG)	Ph.D
5	Amardeep	Assistant Professor (SG)	Ph.D
6	Saurav	Assistant Professor (SG)	Ph.D
7	Tanmay Gupta	Assistant Professor (SG)	Ph.D
8	Sugandha Singh	Assistant Professor (SG)	Ph.D
9	Chandrapal Gautam	Assistant Professor (GR-II)	M. Tech
10	Niraj Singh Parihar	Assistant Professor (GR-II)	M. Tech
11	Kaushal Kumar	Assistant Professor (GR-II)	M.Tech
12	Akash Bhardwaj	Assistant Professor (GR-II)	M.Tech
13	Rohan Singhal	Assistant Professor (GR-II)	M.Tech
14	Akhilesh Gandhi	Assistant Professor (GR-II)	M.Tech
DEPARTMENT OF PHYSICS & MATERIALS SCIENCE			
S.No.	**Name**	**Designation**	**Qualifications**
1	Partha Bir Barman	Professor & HOD	Ph.D
2	Sunil Kumar Khah	Professor & CoE	Ph.D
3	Vineet Sharma	Professor	Ph.D
4	Ragini Raj Singh	Associate Professor	Ph.D
5	Surajit Kumar Hazra	Associate Professor	Ph.D
6	Sanjiv Kumar Tiwari	Assistant Professor (SG)	Ph.D
7	Santu Baidya	Assistant Professor (GR-I)	Ph.D
DEPARTMENT OF MATHEMATICS			
S.No.	**Name**	**Designation**	**Qualifications**
1	Rakesh Kumar Bajaj	Professor & HOD	Ph.D
2	Karanjeet Singh	Professor	Ph.D
3	R S Raja Durai	Professor	Ph.D
4	Neel Kanth	Associate Professor	Ph.D
5	Pradeep Kumar Pandey	Assistant Professor (SG)	Ph.D
6	Saurabh Srivastava	Assistant Professor (SG)	Ph.D
7	Dr. Bhupendra Kumar Pathak	Assistant Professor (SG)	Ph.D
8	Mandeep Singh	Assistant Professor (SG)	Ph.D

DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES			
S.No.	**Name**	**Designation**	**Qualifications**
1	Amit Srivastava	Associate Professor & HOD	Ph.D
2	Anupriya Kaur	Professor	Ph.D
3	Tanu Shrma	Associate Professor	Ph.D
4	Papiya Lahiri	Assistant Professor (SG)	Ph.D
5	Triambica Gautam	Assistant Professor (GR-II)	MBA, UGC Net
6	Neena Jindal	Assistant Professor (GR-II)	Ph.D
7	Deler Singh	Assistant Professor (GR-II)	Ph.D

Appendix G

RESULTS OF PAST FOUR YEARS

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

RESULT OF THE BATCH 2016-2020 – BTECH

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%

RESUSLTS BTECH 2017-21 – BTECH

CSE	166	161	96.99%
IT	28	28	100%
ECE	66	63	95.45
CE	76	66	86.84%
BT	33	33	100%
BI	18	18	100%

RESUSLTS BTECH 2018-22 – BTECH

CSE	222	219	98.64%
IT	25	24	96%
ECE	21	20	95.23%
CE	53	49	92.45%
BT	40	39	97.5%
BI	6	6	100%

RESUSLTS BTECH 2019-23 – BTECH

CSE	237	228	96.2%
IT	50	47	94.0%
ECE	43	41	95.3%
CE	34	30	88.2%
BT	28	27	96.4%
BI	07	07	100%

RESULTS OF BATCH 2020-2022 – MTECH

Construction Management	03	03	100%
Structural Engineering	05	05	100%

RESULTS OF BATCH 2021-2023 – MTECH

Internet of Things	05	05	100%
Structural Engineering	05	04	80%
Biotechnology	07	07	100%

RESULTS OF BATCH 2020-2022 – MSc

MSc	23	19	82.6%

RESULTS OF BATCH 2021-2023 – MSc

Biotechnology	25	23	92.0%
Microbiology	04	04	100%

Appendix H

TRAINING & PLACEMENT DATA

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 28/July/2022					
Branch	**Total 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%	106	144%
IT	22	21	95%	38	173%
BT/BI	17	12	71%	12	71%
CIVIL	27	11	41%	12	44%
Total	**283**	**248**	**88%**	**407**	**144%**

For 2021 Batch

- Highest Salary –30 Lacs by Amazon
- 2nd Highest Salary – 17.5 Lacs by Amazon (Non Tech)

PLACEMENT STATUS : JUIT Solan 2017-21 as on 28/June/2022					
Branch	**Total Eligible Participating Students**	**No. of Absolute Offers**	**% of Absolute Offers**	**No. of Total Offers**	**% of Total Offers**
CSE	124	124	100%	214	173%
ECE	45	45	100%	59	131%
IT	26	24	92%	41	158%
BT/BI	19	15	79%	17	89%
CIVIL	15	8	53%	9	60%
Total	**229**	**216**	**94%**	**340**	**148%**

For 2022 Batch

On Campus	Off Campus
Highest Salary –32 Lacs by Amazon	Highest Salary –50 Lacs by Microsoft
2nd Highest Salary – 31.5 Lacs by Amazon	2nd Highest Salary – 45 Lacs by Adobe

PLACEMENT STATUS : JUIT Solan 2018-22 as on 28/Jun/2022					
Branch	**Total Eligible participating Students**	**No. of Absolute Offers**	**% of Absolute Offers**	**No. of Total Offers**	**% of Total Offers**
CSE	201	193	96%	381	190%
ECE	16	13	81%	22	138%
IT	23	23	100%	43	187%
BT/BI	33	26	79%	31	94%
CIVIL	28	17	61%	18	64%
Total	**301**	**272**	**90%**	**495**	**164%**

For 2023 Batch

- Highest Salary – 44.14 Lacs by Amazon
- 2nd Highest Salary – 20 Lacs by Fantaclaus

PLACEMENT STATUS : JUIT Solan 2019-23 as on 05/June/2023					
Branch	**Total Eligible participating Students**	**No. of Absolute Offers**	**% of Absolute Offers**	**No. of Total Offers**	**% of Total Offers**
CSE	217	201	92%	361	166%
ECE	37	28	75%	49	132%
IT	40	34	85%	45	112%
BT/BI	24	17	70%	25	104%
CIVIL	18	7	39%	8	44%
Total	**336**	**287**	**85%**	**488**	**145%**

Appendix I

BALANCE SHEET FOR THE FINANCIAL YEAR 2022-23

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

INDEPENDENT AUDITORS' REPORT

To,
THE MEMBERS OF THE GOVERNING BODY
JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
P.O. WAKNAGHAT, THE. KANDAGHAT
DISTT. SOLAN - 173234, HIMACHAL PRADESH

REPORT ON THE FINANCIAL STATEMENTS

WE HAVE AUDITED THE ATTACHED BALANCE SHEET OF JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY (HERE IN AFTER REFERRED AS UNIVERSITY) AS AT 31ST MARCH 2023 AND THE ANNEXED INCOME & EXPENDITURE ACCOUNT FOR THE YEAR THEN ENDED, AND A SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND OTHER EXPLANATORY INFORMATION.

MANAGEMENT'S RESPONSIBILITY FOR THE FINANCIAL STATEMENTS

MANAGEMENT IS RESPONSIBLE FOR THE PREPARATION OF THESE FINANCIAL STATEMENTS THAT GIVE A TRUE AND FAIR VIEW OF THE FINANCIAL POSITION AND FINANCIAL PERFORMANCE OF THE UNIVERSITY IN ACCORDANCE WITH THE INCOME TAX ACT 1961("THE ACT"). THIS RESPONSIBILITY ALSO INCLUDES MAINTENANCE OF ADEQUATE ACCOUNTING RECORDS IN ACCORDANCE WITH THE PROVISIONS OF THE ACT FOR SAFEGUARDING THE ASSETS OF THE UNIVERSITY AND FOR PREVENTING AND DETECTING FRAUDS AND OTHER IRREGULARITIES; SELECTION AND APPLICATION OF APPROPRIATE ACCOUNTING POLICIES; MAKING JUDGMENTS IN THE ESTIMATES THAT ARE REASONABLE AND PRUDENT; AND DESIGN, IMPLEMENTATION AND MAINTENANCE OF ADEQUATE INTERNAL FINANCIAL

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

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

CONTROLS, THAT WERE OPERATING EFFECTIVELY FOR ENSURING THE ACCURACY AND COMPLETENESS OF THE ACCOUNTING RECORDS, RELEVANT TO THE PREPARATION AND PRESENTATION OF THE FINANCIAL STATEMENTS THAT GIVE A TRUE AND FAIR VIEW AND ARE FREE FROM MATERIAL MISSTATEMENT, WHETHER DUE TO FRAUD OR ERROR.

AUDITOR'S RESPONSIBILITY

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

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

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

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

a. In our opinion and to the best of our information and according to the explanations given to us, the said accounts with significant accounting policies and other notes thereon give a true and fair view:

(i) In the case of Balance Sheet, of the state of affairs of the University as at 31st March 2023; And

(ii) In the case of Income & Expenditure Account, of the Surplus for the year ended on that date.

Report on Other Legal and Regulatory Requirements

b. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit.

c. In our opinion proper books of account as required by law have been kept by the University so far as appears from our examination of those books;

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

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

d. THE BALANCE SHEET AND STATEMENT OF INCOME & EXPENDITURE ACCOUNT DEALT WITH BY THIS REPORT ARE IN AGREEMENT WITH THE BOOKS OF ACCOUNT;

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

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

DASS GUPTA & ASSOCIATES * CHARTERED ACCOUNTANTS * DELHI

CA ASHOK KUMAR JAIN
(PARTNER)
MEMBERSHIP No. 090563
UDIN : 23090563BGYEVN3837

DATE: 26.10.2023
PLACE: NEW DELHI

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

Balance Sheet as on 31.03.2023

Amount (₹) 31.03.2022	LIABILITIES	Schedule	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022	ASSETS	Schedule	Amount (₹) 31.03.2023
	CORPUS FUND				**FIXED ASSETS**		
5,00,00,000	For University		5,00,00,000	72,02,89,881	Opening Balance		73,13,16,424
1,01,55,000	For Research Promotion (UBSK)		1,01,55,000	1,10,97,543	Addition during the year		1,71,71,684
6,01,55,000			6,01,55,000	(71,000)	Disposed off during the current period		(16,00,000)
				73,13,16,424	Gross Block	"A"	74,68,88,108
	GENERAL FUND			56,71,38,180	Less : up to date Depreciation		59,30,42,321
22,28,90,457	Opening Balance		16,23,36,002	16,41,78,244	**Net Block**		15,38,45,787
(6,05,54,455)	**Add - Surplus/ (Deficit) brought from Income & Expenditure A/C**		11,28,40,777				
16,23,36,002			27,51,76,779				
	RESEARCH PROJECT'S FUND			22,50,185	**CAPITAL WORK IN PROGRESS**	"B"	54,29,937
84,64,405	Opening Balance		67,93,344		**CURRENT ASSETS, LOANS & ADVANCES**		
10,94,488	Add : Received during the year		60,45,406				
(25,55,975)	Less : Expenses during the year		(66,69,974)	17,35,14,321	Cash & Bank Balance	"C"	31,82,09,187
(2,09,574)	Less : Refund during the year		(7,47,625)				
67,93,344			54,21,151	10,25,17,028	Advances and Receivables in Cash or in Kind	"D"	10,59,61,082
	CURRENT LIABILITIES & PROVISIONS			50,60,614	Prepaid Expenses	"E"	59,84,547
2,28,24,727	Sundry Creditors	"H"	1,97,48,425	23,83,452	Security Deposits	"F"	24,18,452
18,88,92,900	Other Liabilities	"I"	22,07,11,538	88,32,579	Stock- in- Hand	"G"	79,68,852
	CAUTION MONEY						
1,73,44,322	Opening Balance		1,77,34,450				
46,55,000	Add : Received during the year		46,20,000				
(42,64,872)	Less : Refund during the year		(37,49,500)				
	(Due for payment during next one year Rs.43,15,000/-)						
1,77,34,450			1,86,04,950				
45,87,36,423	**Total Liabilities**		59,98,17,844	45,87,36,423	**Total Assets**		59,98,17,844

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

For DASS GUPTA & ASSOCIATES
CHARTERED ACCOUNTANTS
REG. NO. 000512N
(CA [illegible])
PARTNER
M. NO. [illegible]
UDIN NO. 23090563
PLACE:-New Delhi
DATE : 26-10-2023

PROF RAJENDRA KUMAR SHARMA
VICE CHANCELLOR

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

MAJ GEN RAKESH BASSI,SM (RETD)
REGISTRAR

HEMANT VYAS
CHIEF FINANCE OFFICER

Jaypee University of Information Technology
Waknaghat, Distt. Solan, H.P.
Income & Expenditure Account for the year ended on 31.03.2023

Amount (₹) 31.03.2022	EXPENDITURE	Schedule	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022	INCOME	Schedule	Amount (₹) 31.03.2023
14,30,63,776	Education Expenses	"J"	23,60,55,482	33,73,33,078	Collection from Students	"L"	60,57,06,612
23,26,02,799	Salary & Allowances	"K"	24,17,87,678	58,38,779	Interest received	"M"	93,85,298
2,94,92,958	Depreciation	"A"	2,59,04,141	14,33,221	Receipt Incidental to Education	"N"	14,96,169
40,51,59,533	Total Expenditure's		50,37,47,301	34,46,05,078	Total Income's		61,65,88,079
(6,05,54,455)	Surplus Transferred to General Fund A/C.		11,28,40,777				
34,46,05,078	TOTAL		61,65,88,079	34,46,05,078	TOTAL		61,65,88,079

Significant Accounting policies and notes on accounts as per **Schedule 'O'** forming part of Income & Expenditure Account.
As per our report of even date attached

For DASS GUPTA & ASSOCIATES
CHARTERED ACCOUNTANTS
REG.NO. 000112N
(ASHOK KUMAR JAIN)
PARTNER
M.NO. 081083
PLACE: New Delhi
DATE 26-10-2023

PROF RAJENDRA KUMAR SHARMA
VICE CHANCELLOR

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

MAJ GEN RAKESH BASSI (RETD)
REGISTRAR

HEMANT VYAS
CHIEF FINANCE OFFICER

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
Details of Fixed Assets as on 31.03.2023

SCHEDULE : "A"

Amount (₹)

Block of Assets	Rate of Dep.	GROSS BLOCK					DEPRECIATION			NET BLOCK	
		Op. Balance as on 01.04.2022	Addition during the year		Disposed off during the year	As on 31.03.2023	Op. Balance as on 01.04.2022	For the Year	Up to 31.03.2023	As on 31.03.2022	As on 31.03.2023
Classification of Assets			180 Days or more	Less than 180 Days							
Buildings	10%	14,55,81,037		30,91,210		14,86,72,247	8,68,43,529	60,28,311	9,28,71,840	5,87,37,508	5,58,00,407
Library Books	15%	6,88,28,550	34,745	95,813		6,89,59,108	5,78,72,690	16,55,777	5,95,28,467	1,09,55,860	94,30,641
Electronic Lab Equipments	15%	2,00,85,220	-	-		2,00,85,220	1,70,79,430	4,50,869	1,75,30,299	30,05,790	25,54,921
Bio Informatics Lab Equipments	15%	2,73,99,771	-	11,79,717		2,85,79,488	2,36,07,273	6,57,353	2,42,64,626	37,92,498	43,14,862
Physics Lab Equipments	15%	1,15,45,265		2,08,860	-	1,17,54,125	96,37,052	3,01,896	99,38,948	19,08,213	18,15,177
Computer Lab Equipments	40%	14,88,46,392	4,04,740	49,06,407		15,41,57,539	13,81,08,299	54,38,415	14,35,46,714	1,07,38,093	1,06,10,825
Imported Bio Lab Equipments	15%	2,20,31,080				2,20,31,080	1,99,12,867	3,17,732	2,02,30,599	21,18,213	18,00,481
Imported Electronic Lab Equipments	15%	33,58,810				33,58,810	32,19,693	20,868	32,40,561	1,39,117	1,18,249
Imported Computer Lab Equipments	40%	7,37,191				7,37,191	7,37,190	-	7,37,190	1	1
Imported Office Equipments	15%	87,905				87,905	80,226	1,152	81,378	7,679	6,527
[illegible] Lab Equipments	15%	1,30,36,735	2,40,345			1,32,77,080	98,15,469	5,19,242	1,03,34,711	32,21,266	29,42,369
Software-Computer	40%	45,04,269		-		45,04,269	42,64,470	95,920	43,60,390	2,39,799	1,43,879
Software -Math	40%	3,24,350				3,24,350	3,18,508	2,337	3,20,845	5,842	3,505
Software-Civil	40%	22,64,478				22,64,478	21,98,004	26,590	22,24,594	66,474	39,884
Software -Language Lab	40%	11,37,938				11,37,938	10,93,711	17,691	11,11,402	44,227	26,536
Software -Biotech Lab	40%	19,44,888				19,44,888	18,71,863	29,210	19,01,073	73,025	43,815
Software -Electronics Lab	40%	40,82,695		19,41,100		60,23,795	37,47,958	5,22,115	42,70,073	3,34,737	17,53,722
Software -Library	40%	2,73,000				2,73,000	2,65,474	3,010	2,68,484	7,526	4,516
Software -Physics Lab	40%	4,35,123				4,35,123	4,19,599	6,210	4,25,809	15,524	9,314
Software -PD Lab	40%	4,66,390		-		4,66,390	4,37,374	11,606	4,48,980	29,016	17,410
Office Equipments	15%	2,43,05,408	3,33,999	2,12,270		2,48,51,677	1,61,29,967	12,92,336	1,74,22,303	81,75,441	74,29,374
Miscellaneous Assets	15%	54,91,876	1,82,005	1,79,093		58,52,974	43,28,561	2,15,230	45,43,791	11,63,315	13,09,183
Gymnasium Equipments	15%	61,59,595	36,108	-		61,95,703	38,24,072	3,55,745	41,79,817	23,35,523	20,15,886
Furniture & Fixtures	10%	5,95,09,008	48,970			5,95,57,978	4,35,72,753	15,98,523	4,51,71,276	1,59,36,255	1,43,86,702
Vehicles	15%	3,12,64,570	-	-	16,00,000	2,96,64,570	1,69,89,223	19,01,302	1,88,90,525	1,42,75,347	1,07,74,045
Imported Kitchen Equipments	15%	2,78,308				2,78,308	2,49,706	4,290	2,53,996	28,602	24,312
Kitchen Equipments	15%	86,60,971	1,01,180	5,19,139		92,81,290	63,08,035	4,07,053	67,15,088	23,52,936	25,66,202
Plant & Machinery	15%	7,13,53,706	5,82,727	16,37,429		7,35,73,862	5,66,38,923	24,17,434	5,90,56,357	1,47,14,783	1,45,17,505
Electrical Equipments	15%	1,01,81,426	6,65,222	5,70,605		1,14,17,253	79,47,056	4,77,734	84,24,790	22,34,370	29,92,463
Mechanical Lab Equipments	15%	27,37,255				27,37,255	23,39,410	59,677	23,99,087	3,97,845	3,38,168
Research Equipments	15%	3,44,03,214		-		3,44,03,214	2,72,79,795	10,68,513	2,83,48,308	71,23,419	60,54,906
GROSS TOTAL		73,13,16,424	26,30,041	1,45,41,643	16,00,000	74,68,88,108	56,71,38,180	2,59,04,141	59,30,42,321	16,41,78,244	15,38,45,787
PREVIOUS YEAR		72,02,89,881	81,18,133	29,79,410	71,000	73,13,16,424	53,76,45,222	2,94,92,958	56,71,38,180	18,26,44,659	16,41,78,244

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Vice Chancellor

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

Chief Finance Officer

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23

Capital Work in Progress

SCHEDULE - "B"

Amount (₹)

Particulars	Opening Balance as on 01.04.2022	Addition during the Year	Capitalized during the Year	Expensed Out during the Year	Closing Balance as on 31.03.2023
Material In Transit	10,05,360	-	-	10,05,360	-
Capital Goods in Store	63,605	-	46,920	16,685	-
Capital Work in Progress	11,81,220	63,26,601	20,77,884	-	54,29,937
Gross Total	**22,50,185**	**63,26,601**	**21,24,804**	**10,22,045**	**54,29,937**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Vice Chancellor

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

Jaypee University of Information Technology Chief Finance Officer

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
Cash and Bank Balance

SCHEDULE - "C"

S.No	Particulars	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
I	**Cash in Hand**	1,30,231	93,956
II	**Balance with Schedule Banks**		
	In Current Account :		
	- State Bank of India, Waknaghat	3,11,153	32,702
	- Punjab National Bank, Shimla	11,59,963	1,12,627
	- Punjab National Bank, Solan	19,868	25,298
	- Punjab National Bank, Waknaghat	97,43,778	23,92,926
	- Yes Bank Ltd., Noida	59,782	59,783
	- Cheque / DD in hand	17,05,008	13,825
	Balance with Schedule Banks		
	In Saving Account :		
	- Punjab National Bank, Waknaghat A/c No. 15239	3,962	8,65,139
	- Punjab National Bank, Waknaghat A/c No. 14461	35,35,848	28,47,359
III	**Fixed Deposits with Banks**		
	- Punjab National Bank, Shimla	3,72,500	3,72,500
	- Punjab National Bank, Waknaghat	26,90,00,000	13,85,00,000
	- Interest Accrued but not due	48,30,612	21,46,959
IV	**Earmarked Deposits with Banks**		
	- Canara Bank UBSK, Noida (C/A)	83,238	83,238
	- Canara Bank UBSK, Noida (FDR)	2,51,61,480	2,51,61,480
	- Interest Accrued on FDR	20,91,763	8,06,529
	TOTAL	**31,82,09,187**	**17,35,14,321**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

Jaypee University of Information Technology Chief Manager Officer

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

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Vice Chancellor

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
ADVANCES AND RECEIVABLES IN CASH OR IN KIND

SCHEDULE - "D"

Particulars		Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
Advances To:-			
- Staff		3,74,333	11,112
- Suppliers/Agencies/Capital Goods/Property		8,87,22,992	8,63,29,008
Receivables From:-			
- Students		6,14,581	12,16,187
- Interest Accured on HPSEB Deposit		1,12,623	-
- Income Tax Department as on 31.03.23		21,91,207	25,01,795
- Assessment Year 2010-11	Rs. 6,61,804		
- Assessment Year 2011-12	Rs. 97,434		
- Assessment Year 2013-14	Rs. 1,09,376		
- Assessment Year 2015-16	Rs. 3,71,907		
- Assessment Year 2023-24	Rs. 9,50,686		
- Excise & Taxation Department (VAT)		38,17,348	38,17,348
- Income Tax Department Appeal		99,89,173	86,37,753
- Receivable of TCS		1,38,825	3,825
TOTAL		**10,59,61,082**	**10,25,17,028**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Vice Chancellor

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

Jaypee University of Information Technology Chief Finance Officer

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
PREPAID EXPENSES

SCHEDULE - "E"

Particulars	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
AMC for Equipments	42,11,960	21,75,554
Insurance	3,67,554	6,77,456
Subscription for Journals & Digital Library	14,05,033	22,07,604
TOTAL PREPAID EXPENSES	**59,84,547**	**50,60,614**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

UNIVERSITY OF INFORMATION TECHNOLOGY JAYPEE Vice Chancellor

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

Jaypee University of Information Technology Chief Finance Officer

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
SECURITY DEPOSITS

SCHEDULE - "F"

Particulars	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
For Electricity -HPESBL	22,40,280	22,40,280
For LPG	1,19,800	1,19,800
For Labour Office Solan	12,000	12,000
For Telephones	11,372	11,372
For Deep Fridge	5,000	-
For SUPDT of Post Office	30,000	-
TOTAL SECURITY DEPOSITS	**24,18,452**	**23,83,452**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Vice Chancellor

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

University of Information Technology Chief Finance Officer

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
STOCK-IN-HAND

SCHEDULE - "G"

Particulars	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
Annapurna Grocery & Eatables	30,24,434	34,29,682
Housekeeping	52,020	51,417
Medicines	1,34,930	61,799
Diesel	9,18,754	13,11,413
General Hardware Items	18,39,864	17,97,358
Electrical Items	19,44,816	20,17,616
Spares for Vehicles	54,034	1,63,294
TOTAL STOCK IN HAND	**79,68,852**	**88,32,579**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Vice Chancellor

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

Chief Finance Officer

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
SUNDRY CREDITORS

SCHEDULE - "H"

Particulars	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
- For Goods Supplied	56,21,597	74,09,406
- For Services Rendered	1,34,67,781	1,43,92,094
- For Retention	6,59,047	10,23,227
TOTAL SUNDRY CREDITORS	**1,97,48,425**	**2,28,24,727**

DASS GUPTA & ASSOCIATES ★ NEW DELHI ★ CHARTERED ACCOUNTANTS

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY ★ Vice Chancellor

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

Jaypee University of Information Technology ★ Chief Finance Officer

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
OTHER LIABILITIES

SCHEDULE - "I"

Particulars	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
For Statutory Liabilities	5,86,82,303	5,41,05,366
Uncleared Cheques	20,13,348	9,14,109
Fee in Advance	13,74,69,107	10,09,95,525
JYC Students Fund	20,39,979	14,14,070
Expenses Payable	32,27,654	98,44,522
T.D.S. Payable	37,99,899	32,49,002
Salary Payable	1,34,79,248	1,83,70,306
TOTAL OTHER LIABILITIES	**22,07,11,538**	**18,88,92,900**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Vice Chancellor

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

Jaypee University of Information Technology Chief Finance Officer

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
EDUCATION EXPENSES

SCHEDULE - "J"

Particulars	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
Admission Exps. including Advertisement	98,74,104	73,00,431
Audit Fee	3,54,000	3,54,000
Conference & Seminar Expenses	2,88,569	47,018
Convocation Expenses	-	33,475
Dispensary Expenses	56,90,682	45,93,944
E-Journals & Periodicals	22,49,344	31,32,962
Electricity Expenses	2,01,52,827	1,22,25,421
Grocery & Eatables Consumed	5,67,40,112	1,56,01,332
Honorarium to Faculty & Remuneration of Visiting Faculty	7,74,609	6,74,279
Institute Promotional Expenses	10,94,851	8,19,195
Insurance Expenses	1,26,101	6,04,102
Internet Charges	10,02,620	10,82,950
Laboratory Expenses	36,24,071	28,01,265
Laundry Expenses	34,23,600	10,22,912
Lease Rent	23,796	23,784
Legal & Professional Charges	7,80,497	8,32,462
Messing Staff Expenses	1,91,38,122	89,52,585
Misc. Expenses	1,21,623	2,15,635
Payment to Technical Personnel	1,32,66,354	1,29,53,309
Placement Expenses	1,50,391	66,497
Postage & Telegram	87,121	86,949
Prior Period Exps.	3,597	73,414
Printing & Stationery	9,79,268	9,32,237
Recruitment Expenses	2,69,689	1,93,318

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Vice Chancellor

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

University of Information Technology Chief Finance Officer

SCHEDULE - "J" (Continued)

Particulars	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
Scholarship to Students	15,08,049	31,39,332
Security Expenses	2,38,92,812	1,78,09,239
Staff Welfare	18,42,717	18,92,135
Students Welfare Expenses	17,33,035	8,35,908
Telephone Expenses	5,49,047	6,43,633
Travelling & Conveyance	6,33,525	6,04,946
Water Expenses	1,05,11,933	59,57,986
Repair & Maintenance		
- Civil Maintenance	1,25,04,718	1,07,16,186
- Equipment & Machinery	66,19,152	53,91,575
- Furniture & Fixture	6,57,415	4,32,356
- Horticulture Exps.	36,86,565	26,97,213
- House Keeping	2,29,91,790	1,45,49,191
- Others	46,42,077	9,34,168
- Vehicles	37,71,356	25,40,637
- Water Supply Scheme	2,95,343	2,95,795
TOTAL EDUCATION EXPENSES	**23,60,55,482**	**14,30,63,776**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Vice Chancellor

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

Jaypee University of Information Technology Chief Finance Officer

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
SALARY & ALLOWANCES

SCHEDULE - "K"

Particulars	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
Teaching Staff :		
Salary	10,32,48,002	10,37,59,638
Conveyance Allowance	71,32,405	69,45,266
H.R.A.	54,85,178	58,18,761
Medical Reimbursement	43,02,043	41,66,403
Leave Travel Assistance	39,66,889	37,62,568
Contribution to Provident Fund	1,29,94,662	1,25,86,259
Provision for Gratuity	42,81,635	15,41,113
Other Allowances	3,66,91,548	3,55,12,856
Sub - Total	**17,81,02,362**	**17,40,92,864**
Non-Teaching Staff :		
Salary	4,16,52,879	3,85,08,089
Conveyance Allowance	20,34,738	19,36,890
H.R.A.	32,15,809	30,43,937
Medical Reimbursement	14,65,180	13,48,542
Leave Travel Assistance	14,11,105	13,92,656
Contribution to Provident Fund	47,23,744	43,97,049
Provision for Gratuity	18,34,986	6,29,469
Other Allowances	73,46,875	72,53,303
Sub - Total	**6,36,85,316**	**5,85,09,935**
TOTAL SALARY & ALLOWANCES	**24,17,87,678**	**23,26,02,799**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

Vice Chancellor

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

Jaypee University of Information Technology Chief Finance Officer

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
COLLECTIONS FROM STUDENTS

SCHEDULE - "L"

Particulars	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
Fee From Students:		
Tuition Fee	35,58,31,750	29,23,17,605
Hostel Fee	22,65,19,259	3,57,94,279
Sub Total :	**58,23,51,009**	**32,81,11,884**
Other Collection:-		
Sundry Charges	22,31,720	3,86,961
Admission Form Charges	48,04,150	36,05,650
Mess & Other Charges	1,63,19,733	52,28,583
Sub Total :	**2,33,55,603**	**92,21,194**
TOTAL COLLECTIONS FROM STUDENTS	**60,57,06,612**	**33,73,33,078**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Vice Chancellor

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

Jaypee University of Information Technology Chief Finance Officer

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
INTEREST RECEIVED

SCHEDULE - "M"

Particulars	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
Punjab National Bank - Shimla	13,177	11,795
Punjab National Bank - Waknaghat	78,57,762	41,77,767
State Bank of India - Waknaghat	-	61,378
Canara Bank -UBSK	14,28,038	14,70,368
Interest received on Income Tax refund	86,321	1,17,471
TOTAL INTEREST RECEIVED	**93,85,298**	**58,38,779**

DASS GUPTA & ASSOCIATES ★ CHARTERED ACCOUNTANTS ★ NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY ★ Vice Chancellor

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

Jaypee University of Information Technology ★ Chief Finance Officer

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
FINANCIAL YEAR 2022-23
RECEIPT INCIDENTAL TO EDUCATION

SCHEDULE - "N"

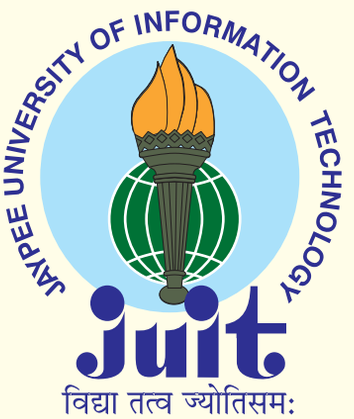
Particulars	Amount (₹) 31.03.2023	Amount (₹) 31.03.2022
Receipt of Research & Development	5,66,440	-
Notice Pay Recovery from Employee's	7,51,260	13,59,308
Overhead Charges for Research Projects	1,78,469	38,700
Sundry Balance Written Back	-	35,213
TOTAL OTHER INCOME	**14,96,169**	**14,33,221**

DASS GUPTA & ASSOCIATES CHARTERED ACCOUNTANTS NEW DELHI

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Vice Chancellor

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

Jaypee University of Information Technology Chief Finance Officer



JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

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