

# **PAPERS TO BE LAID ON THE TABLE OF LOK SABHA / RAJYA SABHA**

**ANNUAL REPORT & ANNUAL ACCOUNTS  
2024-25**



**(AUTHENTICATED)**

**MINISTER OF STATE IN THE MINISTRY OF EDUCATION,  
GOVERNMENT OF INDIA,  
NEW DELHI**

**Dated:-**

**NATIONAL INSTITUTE OF TECHNOLOGY  
HAMIRPUR (H.P) - 177005**

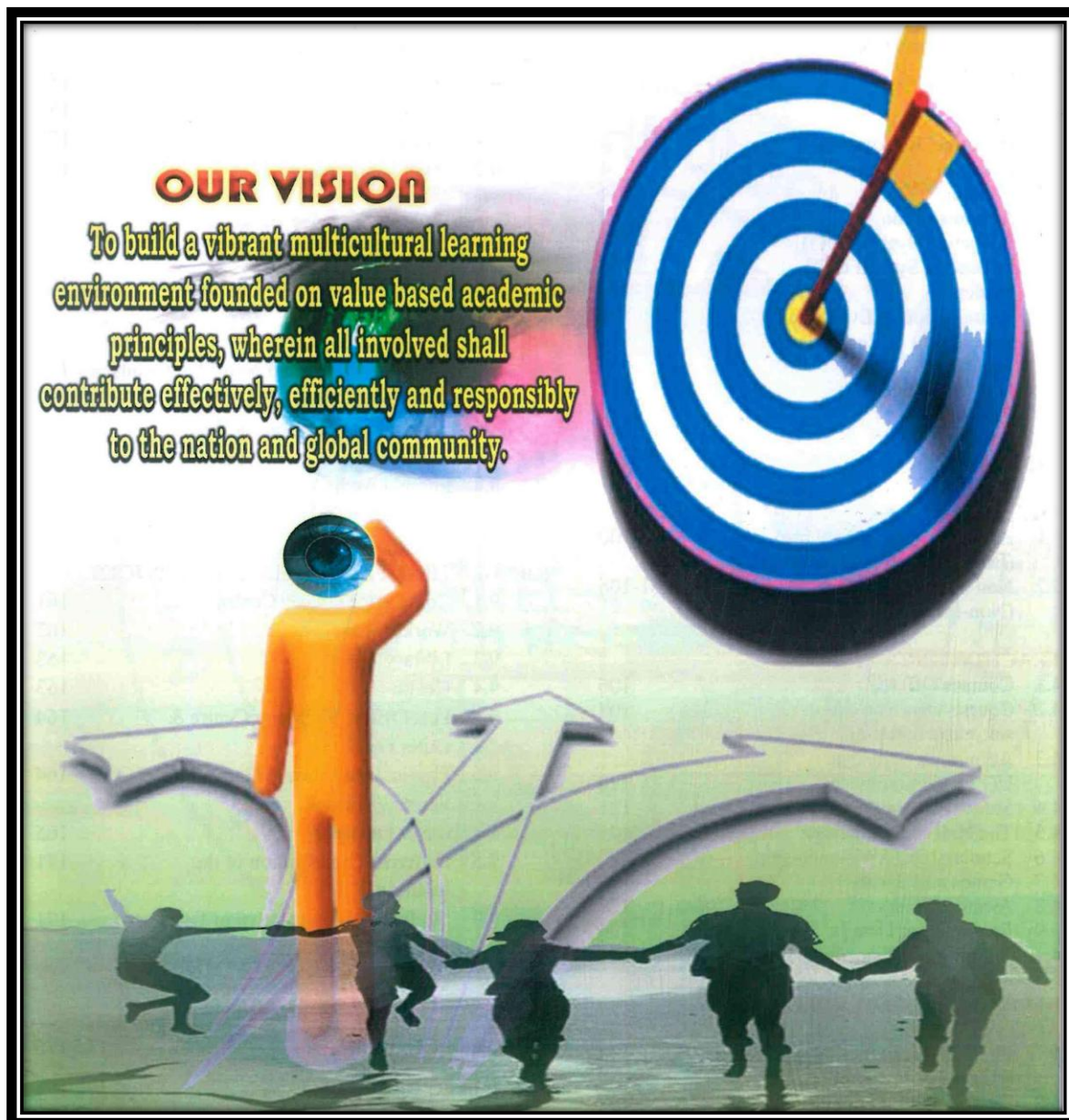


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## 1.0 Introduction

### 1.1 Vision



## 1.2 Mission

- To achieve academic excellence in engineering, technology, architecture and science by imparting quality and value based education.
- To inspire our students to become responsible citizens and competent professionals with high ethical values.
- To meet the expectations of technical human resource at national and international level.

## 1.3 Goals

**To realize the vision and mission of the Institute following goals are set.**

- Attracting best talent and collaborate globally
- Advance frontiers of knowledge
- Build world class infrastructure to support multi/inter/trans disciplinary research.
- Enhance engagement with Society and Industry
- To take initiatives to achieve financial sustenance
- Outreach activities of National and International level
- To be among top 40 in NIRF ranking of Engineering Institutes
- To develop eco-friendly and green campus
- To continuously evaluate and improve programmes, services and policies.

## 1.4 Core Values

**The core values adopted by the Institute as enduring principles are Integrity, Excellence, Unity, Accountability, Inclusivity and Empathy.**

**Integrity:** To be honest in intension, fair in evaluation, transparent in deeds and adhere to highest standards of ethics in all its activities.

- Excellence:** An unfailing commitment for continuous Improvement and passion to innovate in an environment, encompassing best practices where achievement and merit is duly recognized and acknowledged.
- Unity:** Capacity building through trust in other's abilities and cultivating respect for others as cornerstone of collective efforts.
- Accountability:** To be accountable to the people of India (Through NIT Council and BOG) and all stake holders for the funds it receives from Govt. of India.
- Inclusivity:** No one left behind, no one ignored and decimated, none forgotten in the resolve for nation building through higher learning.
- Empathy:** To identify due space to the problems faced by weaker sections of the society in Research and Educational programmes of the institute.

## **2.0 AN OVERVIEW**

### **2.1 HISTORICAL BACKGROUND**

National Institute of Technology Hamirpur is one of the thirty-one NITs of the country, which came into existence on 7<sup>th</sup> August, 1986 as Regional Engineering College, a joint venture of the Govt. of India and Govt. of Himachal Pradesh.

On 26<sup>th</sup> June 2002, REC Hamirpur was awarded the status of Deemed University and upgraded to National Institute of Technology. NIT Hamirpur is an institute of National importance set up by an act of Parliament namely the National Institute of Technology Act 2007 which received the accent of the President of India on 5<sup>th</sup> June, 2007. The provisions of Act came into force with effect from 15<sup>th</sup> August, 2007 as per notification S.O. 1384 (E) dated 9<sup>th</sup> August, 2007 of the Department of Higher Education, MHRD, New Delhi. The Central Govt issues its First Statutes vide Notification dated 23/04/2009 and since then the Institute is governing under the NITSER Act & Statutes as a Central Technical Institute (CFTI).

The goals of the Institute as embodied in logo are truly remarkable in their scope and vision. The Institute offers Bachelor, Master and Doctoral programmes in Engineering, Sciences, Architecture, Management and Humanities. The Institute spares no effort to foster the spirit of national integration among students, a close interaction with industry and laying strong emphasis on research. The institute has the flexibility to evolve and change in response to requirements of the Industry and happenings in technical world. Various programmes serve the purpose of building a comprehensive foundation of knowledge and of enhancing confidence, creativity and innovation in its students.

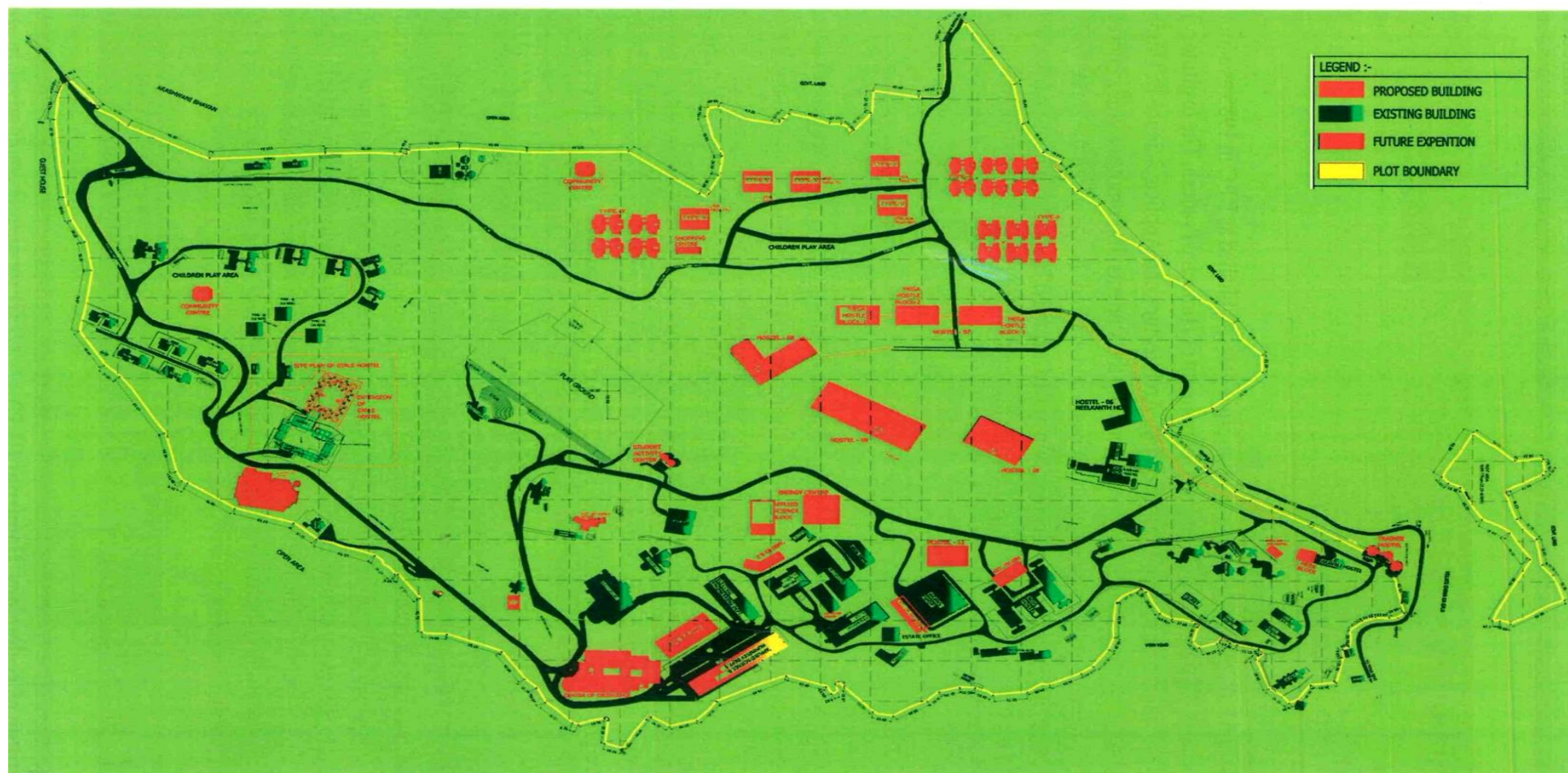
### **2.2 LOCATION**

The Institute campus is located on Hamirpur-Awah Devi Road on the outskirts of the Hamirpur town, at a distance of about four (04) kilometer from the bus stand Hamirpur. It is well connected by road from Shimla, Dharmashala, Delhi, Chandigarh, Jalandhar and nearby cities by all weather road. The nearest broad gauge head is at Una (Himachal Pradesh), which is eighty (80) kilometer from Hamirpur. It is about nine hours' journey by train from Old Delhi to Una and frequent bus services are available from Una to Hamirpur. From Hamirpur bus stand to NIT Campus, taxi services are also available. The nearest airport is at a distance of about eighty five (85) kilometer at Gaggal Kangra at Dharamshala and has direct airlink from Delhi and Chandigarh.

### **2.3 CAMPUS**

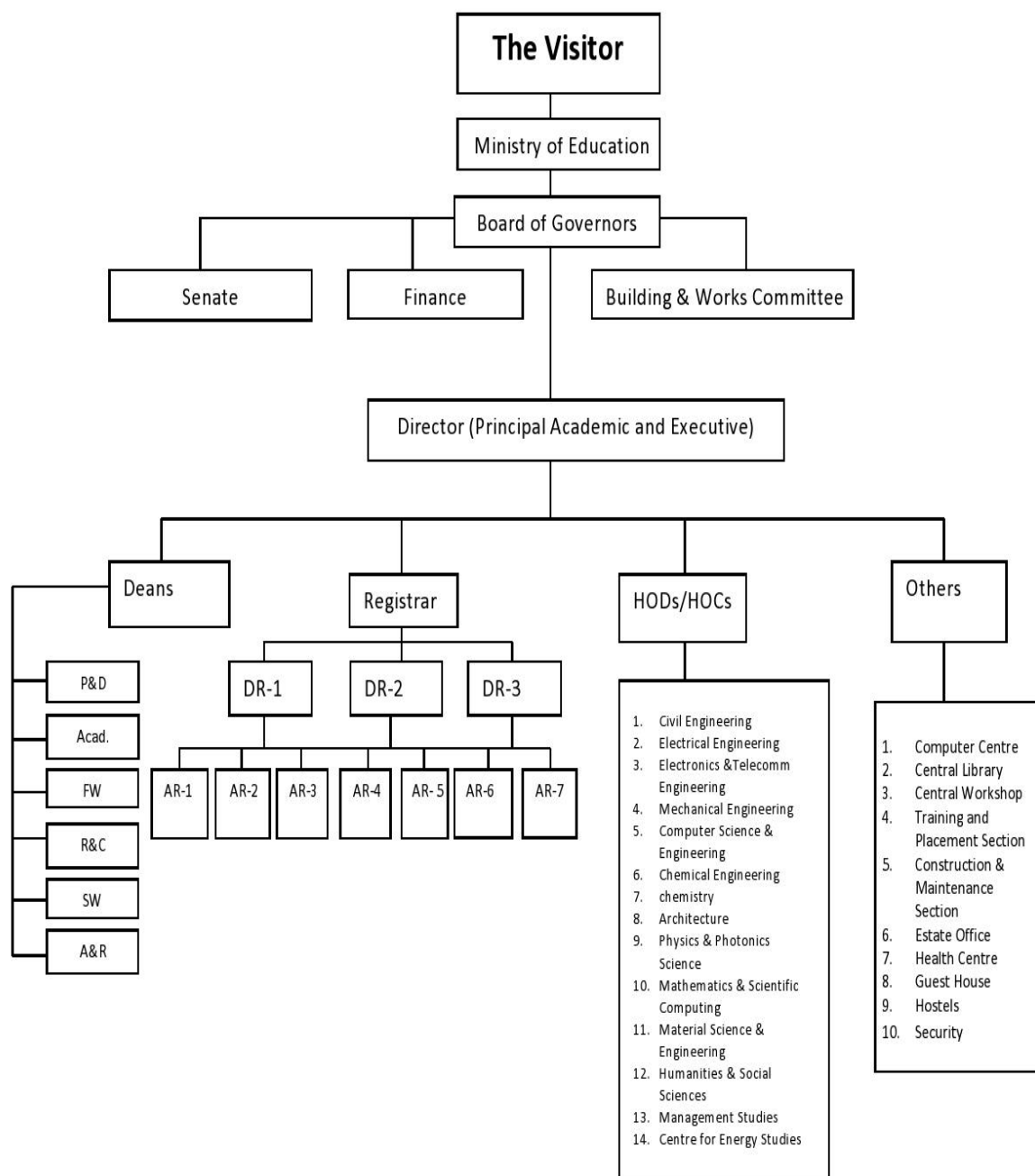
The campus has an area of 177.1 Acres in the picturesque surrounding with lush green pine trees, facing snow clad Dhauladhar mountain ranges. The place has healthy climate with moderate temperature ranging from 4° to 40° at an altitude of 900 meter. It presents a spectacle of harmony in architecture and natural beauty. The land for the Institute has been acquired from the State Government and on this various instructional, administrative, residential buildings, hostels and students' activity centres, openair theatre, auditorium etc. have been constructed.

## Campus Site Plan



## 2.4 ADMINISTRATION

The Director of the Institute is the Principal Academic and Chief Executive Officer and is responsible for proper Administration under the supervision of Board of Governors. He is assisted in day-to-day work by the Deans, HODs, Registrar and other Officers and Committee Coordinators of the Institute. The system has been made fully transparent & powers and responsibilities have been abdicated and de-centralized.



## 2.5 Academic Section

The office of the Dean (Academic), called the Academic Section, is responsible for the implementation of the decisions taken on academic matters by the SENATE and other Academic bodies. Its functions are as follows:

- i. Receives processes and maintains all records relating to Bachelor, Master and Doctoral Programmes including curricula, courses offered, academic calendar, registration, leave, examinations, grades and award of degrees and prizes.
- ii. Disseminates information pertaining to all relevant academic matters.
- iii. Issues necessary Memoranda/Orders related to Academics.
- iv. Acts as a channel of communication between the students, Departments and other Academic bodies of the Institute.

Academic Section also assists the Academic bodies and its subcommittees in their functioning. Dean (Academic) is the main functionary who ensures the smooth functioning of the academic programmes as approved by the SENATE, executes the policies and decisions of the SENATE and other Academic bodies, and ensures that all records and files are maintained.

## 2.6 Academic Departments

The Institute has following Academic Departments:

S. No.	Name of Department/Centre
1.	Civil Engineering
2.	Electrical Engineering
3.	Mechanical Engineering
4.	Electronics & Communication Engineering
5.	Computer Science & Engineering
6.	Chemical Engineering
7.	Architecture
8.	Mathematics & Scientific Computing
9.	Physics & Photonics Science
10.	Chemistry
11.	Management Studies
12.	Humanities & Social Sciences
13.	Materials Science & Engineering
14.	Centre for Energy Studies

## 2.7 Academic Session and Academic Calendar

### Academic Session

The Academic Session of the Institute is divided into two semesters each of approximately eighteen weeks duration.

The semester timeline is defined in the Academic Calendar and is broadly the following:

**Semester I (Odd Semester):** July to December.

**Semester II (Even Semester):** January to June.

Each regular semester (odd and even) shall be for thirteen weeks for academic instructions. Generally, the last two weeks of each semester shall be earmarked for the End Semester Examination (ESE) and one week during the semester for Mid Semester Examination (MSE).

### Academic Calendar

The exact dates of all the important events, such as orientation, registration, late registration, commencement and end of the classes, submission of documents, examinations, submissions of grades, vacation, mid-semester break, etc., during the Academic Session shall be specified in the Academic Calendar of the Institute. The SENATE shall approve the Academic Calendar prior to start of each Academic Session.

## 2.8 Programmes Offered

The Institute offers undergraduate, postgraduate and doctoral programmes in various academic Departments/Centres leading to the award of degree of B.Tech., B.Arch., Dual Degree, M.Tech., MBA, MSc and Ph.D. in the disciplines of Engineering, Architecture, Sciences, Social Sciences and Management.

### 2.8.1 UG Programmes

The following UG Programmes are offered:

#### B.Tech. Programmes (8 Semesters)

1. Chemical Engineering
2. Civil Engineering
3. Computer Science and Engineering
4. Electrical Engineering
5. Electronics and Communication Engineering
6. Materials Science and Engineering
7. Mechanical Engineering
8. Mathematics & Computing
9. Engineering Physics

#### Dual Degree Programmes (10 Semesters)

1. Computer Science and Engineering
2. Electronics and Communication Engineering

#### B.Arch. Programme (10 Semesters)

1. Architecture

### 2.8.2 PG Programmes

The following PG Programmes are offered:

#### M.Tech./M.Arch. Programmes (04 Semesters)

S.No.	Department/Centre	M.Tech. /M.Arch. Programme
1.	Civil Engineering	Geotechnical
		Structures
		Transportation

		Water Resources
		Environment
2.	Electrical Engineering	Power System
		Signal Processing & Control
		Condition Monitoring of Power Apparatus
3.	Mechanical Engineering	Design
		Computational Thermal Engineering
		Manufacturing & Automation
4.	Electronics & Communication Engineering	VLSI Design
		Communication Systems & Networks
5.	Computer Science & Engineering	Computer Science & Engineering
		Artificial Intelligence
6.	Materials Science & Engineering	Materials Science & Engineering
7.	Chemical Engineering	Chemical Engineering
8.	Architecture	M. Arch., (Sustainable Architecture)
9.	Centre for Energy Studies	Energy Technology

### MSc Programmes (04 Semesters)

Sr. No.	Department	M.Sc.
1.	Physics & Photonics Science	M.Sc. in Physics
2.	Chemistry	M.Sc. in Chemistry
3.	Mathematics & Scientific Computing	M.Sc. in Mathematics & Computing

### MBA Programmes (04 Semesters)

Master of Business Administration programme is offered by the Department of Management Studies.

### 2.8.3 Ph.D. Programmes

The Ph.D. programmes are offered by the following Departments in various areas of research specialization:

S.No.	Department	Area of Research
1.	Architecture	<p>Architecture and Planning, Housing, ICT and Built environment, Sustainable built environment in Hill Towns, Landscape Architecture, Developmental regulations and Disaster Resilience, Vernacular and Traditional Architecture, Urban, Rural and Regional Planning, Thermal Comfort, Sustainable Architecture, Energy Efficient Architecture, Solar Passive</p> <p>Architecture, Sustainable Architecture, Urban Design, Sustainable Tourism, Eco-tourism. Resilience, Urban Transportation, Sustainable built indoor environment, Climate Responsive Architecture, Sustainable Habitat, Green Infrastructure, Application of GIS in Architecture and Planning. Sustainable Development planning, Designing Hill areas, GIS Applications and Quantitative Analysis, Consumer Behaviour, Urban Conservation, Regional Dynamics, Infrastructure Planning.</p>

2.	Civil Engineering	Water Resources, Environment Engg., Remote Sensing, Geotechnical Engg., Geology, Structural Engg., Transportation Engg., Earthquake Engg., Structural Dynamics and Earthquake Engineering, Performance of Materials and Structures under impact loading & Construction Management
3.	Computer Science & Engineering	Computer Networks, IoT, Cloud Computing, Network Security, Distributed Computing, Artificial Intelligence, Machine Learning, Natural Language Processing, Information Retrieval, Image Processing, Speech Processing
4.	Electronics & Communication Engineering	VLSI Design, Communication Systems, Microwave, MEMS, Embedded System, Signal Processing, Nanoelectronics, RF, THz, Devices, Antenna.
5.	Electrical Engineering	Power System, Signal Processing, Control and Automation, Instrumentation, Power Electronics & Drives, High Voltage Engineering & Condition Monitoring.
6.	Mechanical Engineering	<p>Thermal Engineering: Heat Transfer, Multiphase flow, Boiling heat transfer, Micro and nano scale heat transfer, Phase change materials, Solar Thermal Energy, Solar Evaporation, Hydrophobic/hydrophilic coating, Fluid Flow and Heat Transfer in Solar Thermal Systems, Renewable Energy, Turbomachines, Solar Thermal Heating, Cooling and dehumidification using Rotary dehumidifier, Exergy Analysis of systems, Alternate fuels, Thermal Management, CFD.</p> <p>Design Engineering: Design and Development of novel metamaterial structures, Smart Structures and their applications, Tribology, Condition monitoring, Vibrations, Design of Machine elements, Fracture Mechanics, Finite Element Analysis, Numerical modelling</p> <p>Industrial and Production Engineering: Computer Integrated Manufacturing, Automation, Supply chain and logistics, Operations management Industry 4.0/5.0. Manufacturing Engineering, Composite Materials.</p>
7.	Chemical Engineering	Kinetic Modelling to design reactors, Desalination Wastewater treatment, Nanomaterials for environmental applications, Renewable Energy, Biofuels, Waste-to-Wealth, Hydrogen Production, Plastic waste management, Process Intensification, Hydrogen storage, Bio electrochemistry, Gas Hydrates, Biomass Valorisation, Carbon capture, Sequestration and Storage, Earth air Heat Exchanger, Green composites, Coal Beneficiation Computational Fluid Dynamics in Bioprocesses, Chemical Analysis using Microfluidics, AI/ML assisted Chemical Process Modelling and Design, CFD in Circular economy, Gas explosion modelling, Smart polymer, Dynamics of complex fluids, Drug Delivery, Nanocomposites and Their Applications, Biosurfactants, Novel Coatings for Implants CO <sub>2</sub> flooding and sequestration, Phase Equilibria, Statistical Thermodynamics
8.	Materials Science & Engineering	Functional Oxide materials, Polymer Composites/ Nanocomposites, Metal-Matrix Composites, Dielectric/ electrical properties of materials, Surface Engineering, Physical

		metallurgy, Thin Film Magnetism, Nano Magnetism, Alloy Design, Severe Plastic Deformation of Alloys
9.	Chemistry	Vitrimers, smart materials, self-healing materials, drug delivery agent, Molecular Architecture: Design and Development of Natural Product Mimics as Bioactive, Molecules with diverse applications, Molecular Structural Analysis: Spectrophotometric and computer aided study of Bioactive, Molecules with G-Quadruplexes as potential anticancer agents, Synthesis of organic supramolecular chemosensors and their environmental applications, Molecular-level interaction studies with biomacromolecules, Coordination Chemistry, synthesis of metallo-drugs and their pharmacological potential, Nanomaterials/ Physical chemistry, Photochemistry and Photophysics
10.	Physics & Photonics Science	Theoretical high energy physics, Experimental Condensed Matter Physics, Energy Conversion and Storage Devices, High Energy Physics Phenomenology, Higgs Physics at the LHC and Future Colliders, Beyond the Standard Model (BSM) Physics, Optoelectronics, high-quality growth of single crystals of topological materials, magneto-transport, and quantum oscillation, Hydrogen evolution study, Photodetectors, Gas sensing, Theoretical Nuclear Physics, Material Science  Liquid crystals, Photonic Crystal, Semiconductor Physics
11.	Mathematics & Scientific Computing	Real Complex and functional analysis, Solid and Fluid Mechanics, Integral Transforms, Harmonic Analysis, Pseudo-Differential Operators, and Wavelet Transforms, Numerical Analysis, Numerics of Partial Differential Equations, Computational Methods, Probability and Statistics, Operations Research, Optimization Methods in Finance, Interval optimization, Artificial Intelligence, Machine learning, Mathematical Image Processing, Cryptography and Network Security, Blockchain Technology, Internet of Things.
12.	Management Studies	Marketing Management, Human Resource Management.
13.	Humanities & Social Sciences	Health Economics and Health Technology Assessment, Pharmacoeconomics. Population Economics, Development Economics, Applied Economics, Translation and Intercultural studies, English Literary Studies, English Language Education (ELE), Technology Integrated Language Learning, Deleuze and Guattarian Studies, Psychoanalysis and Popular Culture, American Literature, Comic Studies, Health Humanities, Gender Studies  Applied Psychology, Cognitive Psychology, Health Psychology, Social Psychology, Social Work and Community Counselling Behavioural and Social Sciences Sociology
14.	Centre for Energy Studies	Solar energy, Bio energy, Biofuels, Environment, Wind energy, Energy management, Energy storage, Energy policy and economics, Bioremediation, Renewable energy, Sustainability, Environmental microbiology, Algal Biotechnology.

## 2.9 Admissions

Number of students admitted during 2024-25 are as follows:

Programme	Number of Students Admitted
UG Programmes (B.Tech./B.Arch./Dual Degree)	932
PG Programmes (M.Tech./M.Arch./MSc/MBA)	335
PhD Programmes	95

Number of students registered (For all Semesters) in different programmes are:

Programme	Number of Students Registered
B.Tech.[All Semesters]	3318
B.Arch. [All Semesters]	274
Dual Degree [All Semesters]	278
M.Tech. [All Semesters]	411
M.Arch. [All Semesters]	19
MSc. [All Semesters]	126
MBA [All Semesters]	67
Ph.D. [All Semesters]	314
<b>Total</b>	<b>4807</b>

### 2.9.1 UG Programmes

The admissions to various UG Programmes (B.Tech., B.Arch. and Dual Degree) are made once in a year normally during June-July. The admission details (2024-25) are as under:

S.No.	Programme	Sanctioned Intake	Actual Admission
<b>B.Tech. Programmes</b>			
1.	Chemical Engineering	76	76
2.	Civil Engineering	123	120
3.	Computer Science and Engineering	124	132
4.	Electrical Engineering	125	122
5.	Electronics and Communication Engineering	117	116
6.	Mechanical Engineering	125	123
7.	Materials Science and Engineering	40	39
8.	Mathematics & Computing	50	50
9.	Engineering Physics	50	49
<b>Dual Degree Programmes</b>			
1.	Computer Science and Engineering	28	28
2.	Electronics and Communication Engineering	28	28
<b>B.Arch. Programme</b>			
1.	Architecture	58	49
<b>Total:</b>		<b>944</b>	<b>932</b>

## 2.9.2 PG Programmes

The admission to PG programmes are made once in an academic year in the beginning of Odd Semester. The students admitted in various PG programmes during 2024-25 are as follows:

SNo	M.Tech./M.Arch. Programme	Sanctioned Intake			Actual Admission
		CCMT	Self Finance	Total	
1.	Civil Engineering (Geotechnical)	19	6	25	15
2.	Civil Engineering (Structures)	19	6	25	21
3.	Civil Engineering (Transportation)	19	6	25	17
4.	Civil Engineering (Water Resources)	19	6	25	13
5.	Civil Engineering (Environment)	19	6	25	16
6.	Electrical Engineering (Power System)	19	6	25	18
7.	Electrical Engineering (Signal Processing & Control)	19	6	25	12
8.	Electrical Engineering (Condition Monitoring of Power Apparatus)	19	6	25	10
9.	Mechanical Engineering (Computational Thermal Engineering)	19	6	25	02
10.	Mechanical Engineering (Design)	19	6	25	06
11.	Mechanical Engineering (Manufacturing & Automation)	19	6	25	05
12.	Electronics & Communication Engineering (VLSI Design)	19	6	25	23
13.	Electronics & Communication Engineering (Communications Systems & Networks)	19	6	25	11
14.	Computer Science & Engineering (Artificial Intelligence)	19	6	25	23
15.	Computer Science & Engineering	19	6	25	24
16.	Chemical Engineering	19	6	25	0
17.	Material s Science & Engineering	19	6	25	0
18.	Energy Technology	19	6	25	03
19.	Sustainable Architecture	19	6	25	12
<b>Total</b>		<b>361</b>	<b>114</b>	<b>475</b>	<b>231+1(ICCR)=232</b>

SNo	MSc Programme	Sanctioned Intake	Actual Admission
1.	M.Sc. in Physics	25	23
2.	M.Sc. in Chemistry	25	20
3.	M.Sc. in Mathematics and Computing	25	24
<b>Total</b>		<b>75</b>	<b>67</b>

SNo	MBA Programme	Sanctioned Intake	Actual Admission
1.	Master of Business Administration	40	36

## 2.9.2 Ph.D. Programmes

The admissions to the Ph.D. programmes are made in either or both of the two regular semesters as per decision of SENATE from time to time. Admission shall normally be made in May-June for the Odd Semester and in November-December for the Even Semester. The numbers of students admitted during 2024-25 in various Departments are as follows:

S.No.	Department	Candidates Admitted with MHRD Fellowship	Candidates Admitted Under Other Schemes
1.	Architecture	04	05
2.	Civil Engineering	09	09
3.	Computer Science & Engineering	09	05
4.	Electronics & Communication Engineering	01	02
5.	Electrical Engineering	03	01
6.	Mechanical Engineering	04	01
7.	Chemical Engineering	00	00
8.	Materials Science & Engineering	00	00
9.	Chemistry	04	02
10.	Physics & Photonics Science	04	03
11.	Mathematics & Scientific Computing	05	05
12.	Management Studies	04	05
13.	Humanities & Social Sciences	02	05
14.	Centre for Energy Studies	01	02
<b>Total</b>		<b>50</b>	<b>45</b>

## 2.10 Results

The summary of results is as follows:

Programme	Students Passed in 2024-25
UG Programmes (B.Tech./B.Arch./Dual Degree) [Final Year]	953
PG Programmes (M.Tech./M.Arch./MSc/MBA) [Final Year]	496
PhD Programmes	49

The results of various programmes are as follows:

### 2.10.1 UG Programmes

Sr. No.	Programme	Students Admitted in 2020-21	Students Passed in 2024-25
<b>B.Tech. Programmes</b>			
1.	Chemical Engineering	76	60
2.	Civil Engineering	122	117

3.	Computer Science and Engineering	124	122
4.	Electrical Engineering	125	118
5.	Electronics and Communication Engineering	117	116
6.	Mechanical Engineering	123	115
7.	Material Science & Engineering	38	23
8.	Physics & Photonics Science	50	37
9.	Mathematics & Scientific Computing	50	49
<b>Total</b>		<b>825</b>	<b>757</b>
<b>Dual Degree Programmes</b>			
		<b>Students Admitted in 2019-20</b>	<b>Students Passed in 2024-25</b>
1.	Computer Science and Engineering	78	78
2.	Electronics and Communication Engineering	73	64
<b>B.Arch. Programme</b>			
1.	Architecture	52	54
<b>Total</b>		<b>52</b>	<b>54</b>
<b>Grand Total</b>		<b>1028</b>	<b>953</b>

### 2.10.2 PG Programmes

S. No.	M.Tech./M.Arch. Programme	Students Admitted 2022-23	Students Passed 2024-25
1.	Civil Engineering (Geotechnical)	20	20
2.	Civil Engineering (Structures)	24	22
3.	Civil Engineering (Transportation)	24	21
4.	Civil Engineering (Water Resources)	17	18
5.	Civil Engineering (Environmental Engineering)	21	21
6.	Electrical Engineering (Power System)	22	22
7.	Electrical Engineering (Signal Processing & Control)	7	06
8.	Electrical Engineering (Condition Monitoring of Power Apparatus)	6	06
9.	Mechanical Engineering (Thermal)	4	04
10.	Mechanical Engineering (Design)	12	12
11.	Mechanical Engineering (Manufacturing)	12	11
12.	Electronics & Communication Engineering (Communication Systems & Networks)	17	17
13.	Electronics & Communication Engineering (VLSI Design)	17	20
14.	Computer Science & Engineering (Computer Science & Engineering)	22	22
15.	Computer Science & Engineering	17	16

	(Artificial Intelligence)		
16.	Chemical Engineering (Chemical Engineering)	02	02
17.	Materials Science & Engineering (Material Science & Engineering)	01	01
18.	Centre for Energy Studies	10	08
19.	M.Arch. (Sustainable Architecture)	17	17
<b>Total</b>		<b>276</b>	<b>267</b>
<b>Dual Degree</b>			
1	Computer Science & Engineering	78	78
2	Electronics and Communication Engineering	64	64
<b>Total</b>		<b>142</b>	<b>142</b>
<b>S.No.</b>	<b>M.Sc. Programme</b>	<b>Students Admitted 2022-23</b>	<b>Students Passed 2024-25</b>
1.	Physics	23	19
2.	Chemistry	23	22
3.	Mathematics & Computing	23	20
<b>Total</b>		<b>66</b>	<b>61</b>

<b>S.No.</b>	<b>MBA Programme</b>	<b>Students Admitted 2022-23</b>	<b>Students Passed 2024-25</b>
1.	Management Studies	29	27
<b>Total</b>		<b>29</b>	<b>27</b>

### 2.10.3 Ph.D Programmes

<b>S.No.</b>	<b>Department</b>	<b>PhDs Awarded</b>
1.	Architecture	02
2.	Civil Engineering	10
3.	Computer Science & Engineering	04
4.	Electronics & Communication Engineering	07
5.	Electrical Engineering	03
6.	Mechanical Engineering	07
7.	Chemical Engineering	00
8.	Materials Science & Engineering	01
9.	Chemistry	03
10.	Physics & Photonics Science	01
11.	Mathematics & Scientific Computing	06
12.	Management Studies	05
13.	Humanities & Social Sciences	00
14.	Centre for Energy Studies	00
<b>Total</b>		<b>49</b>

## 2.11 Convocation:-

The Institute conducted 15<sup>th</sup> Convocation on 28 October, 2024 and conferred 1498 degrees (UG-953/PG-496/Ph.D-49) upon the students graduated during 2023-24 with Director Medal to best All Rounder and Gold/Silver Medal to the UG/PG toppers.

### AWARD AND MEDALS

#### MEDALS 2024

##### DIRECTOR MEDAL TO THE BEST ALL ROUNDER

Roll No.	Name	CGPI	Branch
196032	Vishaliny V	9.07	Architecture

##### GOLD MEDAL TO 1<sup>ST</sup> BRANCH TOPPERS B.TECH/ DUAL DEGREE / B. ARCH

Roll No.	Name	CGPI	Branch
20BCE024	Nikhil Rana	9.59	Civil Engineering
20BEE035	Vivek Chambial	9.50	Electrical Engineering
20BME064	Arjun Singh	9.45	Mechanical Engineering
20BEC058	Priya	9.28	Electronics & Communication Engineering
194555	Paksham Mahajan	9.71	Electronics & Communication Engineering (Dual Degree)
20BCS017	Akshat Aggarwal	9.66	Computer Science & Engineering
195509	Shivam Pathak	9.51	Computer Science & Engineering (Dual Degree)
195554	Ranpariya Amish Hareshbhai	9.51	
20BCH001	Ankit Maurya	9.76	Chemical Engineering
20BMS035	Shruti Dhiman	9.41	Materials Science & Engineering
20BPH013	Shivansh Sharma	9.61	Engineering Physics
20BMA014	Disha Gupta	9.37	Mathematics & Computing
196028	Ashish Kumar Sharma	9.42	Architecture

##### SILVER MEDAL TO B.TECH/ DUAL DEGREE / B. ARCH

Roll No.	Name	CGP I	Branch
20BCE014	Pavini Arora	9.56	Civil Engineering
20BEE020	Sourabh Parmar	9.46	Electrical Engineering
20BME011	Harshit Gupta	9.44	Mechanical Engineering
20BPH012	Aryan	9.20	Electronics & Communication Engineering
194535	Garima Goyal	9.44	Electronics & Communication Engineering (Dual Degree)
20BCS025	Kshitij Roodkee	9.62	Computer Science & Engineering
195510	Vani Sharma	9.44	Computer Science & Engineering (Dual Degree)

20BCH036	Pratibha Bharat Sharma	9.39	Chemical Engineering
20BMS001	Shubham Agarwal	9.37	Materials Science & Engineering
20BPH008	Udit Chauhan	9.52	Engineering Physics
20BMA002	Areeb Islam	9.33	Mathematics & Computing
196023	Manvi Mahajan	9.17	Architecture

**BRONZE MEDAL TO WINNERS IN B.TECH/ DUAL DEGREE / B. ARCH**

Roll No.	Name	CGP I	Branch
20BCE088	Abneet Kumar	9.45	Civil Engineering
20BEE007	Gopanshu Thakur	9.41	Electrical Engineering
20BME017	Purav Mokta	9.39	Mechanical Engineering
20BEC016	Priya Pahwa	9.17	Electronics & Communication Engineering
194540	Ishan Agarwal	9.43	Electronics & Communication Engineering (Dual Degree)
20BCS081	Akshit Kaushal	9.58	Computer Science & Engineering
195505	Akshay Kumar	9.41	Computer Science & Engineering (Dual Degree)
20BCH064	Kanchan	9.30	Chemical Engineering
20BMS004	Snigdha Shukla	9.31	Materials Science & Engineering
20BPH011	Gurmehar Kaur	9.51	Engineering Physics
20BMA006	Vidushi Mittal	9.25	Mathematics & Computing
196009	Gaurav	9.15	Architecture

**GOLD MEDAL TO M.TECH./DUAL DEGREE (PG)/M.ARCH./ MSC./ MBA**

Branch	Specialization	Name	Roll No.	CGPI
<b>Civil Engineering</b>	Geotechnical	Pramjeet	22MCE001	8.76
	Structures	Karan Kumar	22MCE118	9.94
	Transportation	Anshul Kumari	22MCE214	9.29
	Water Resources	Aditya Chaudhary	22MCE301	9.82
		Ankita Devi	22MCE308	9.82
	Environment	Akanksha Thakur	22MCE409	9.85
<b>Electrical Engineering</b>	Power System	Nishant Thakur	22MEE005	8.94
		Sachin Sharma	22MEE006	8.94
	Signal Processing & Control	Aman Thakur	22MEE104	9.53
	Condition Monitoring of Power Apparatus	Yelpale Prashant Dilip	22MEE201	9.21
<b>Mechanical Engineering</b>	Design	Saurabh Dhiman	22MME101	8.76
	Manufacturing	Ajay Choudhary	22MME212	9.00
<b>Electronics &amp; Communication Engineering</b>	VLSI Design	Megha Deogharia	22MEC003	9.62
	Communication Systems & Networks	Shristy	22MEC104	9.12
	Electronics & Communication	Paksham Mahajan	194555	9.80

	Engineering (Dual Degree)			
<b>Computer Science &amp; Engineering</b>	Computer Science & Engineering	Aleena Ariz	22MCS003	9.65
	Artificial Intelligence	Subramanyam Sahoo	22MCS107	9.38
	Computer Science & Engineering (Dual Degree)	Shivam Pathak	195509	9.60
<b>Centre For Energy Studies</b>	Energy Technology	Rajat Rajnish	22MES001	9.50
<b>Architecture</b>	Sustainable Architecture	Pragya Singh	22MAR004	9.44
<b>Master of Science</b>	Physics	Mahendra Sinwar	22MPH010	9.32
	Chemistry	Mathivathani. J.R	22MCY012	9.52
	Mathematics & Computing	Sameer Rai	22MMA019	9.63
<b>Management Studies</b>	Master of Business Administration	Movin Sharma	22MMB020	9.51

### 2.11 Placement:

The Training & Placement Cell was established in this Institute in the year 1995. Since then lot of activities are being conducted within the ambit of this cell for the benefit of the students and faculty.

### 2.12 Games & Sports:

National Institute of Technology, Hamirpur is one of the premier technical institutes in Northern India. The Institute presently provides sports facilities for both indoor and outdoor activities. A standard size stadium with the provision of pavilion has been provided to the students where the games like Cricket, Football, Hockey, Basket Ball, Lawn Tennis and Athletics are played. The facilities of separate Basket ball and lawn tennis court with the provision of flood lights have also been provided to our students. We have got the provision of indoor hall for Badminton and other indoor games and gymnasium facilities with latest physical fitness machines for both boys and girls separately. The facilities of Billiards and pool table for our students and staff have also been provided.



**2.13 Staff Position:****a) Head of the Institute:**

Sr. No.	Name of the post	Sanctioned strength	In position
1	Director	01	01-Prof. Hiralal Murlidhar Suryawanshi

**b) Faculty:**

S.N.	Cadre	Sanctioned Posts	In-position					
			Total	SC	ST	OBC	EWS	UR
1	Professor	261	18	--	--	--	--	18
2	Associate Professor		65	04	--	2	--	59
3	Assistant Professor Grade-I		62	10	04	20 (1 PwD)	--	28
4	Assistant Professor Grade-II		35	06	01	02	01	25 (1 PWD)
Total		261	180	20	05	24	01	130

**c) Officers/Administrative Staff:**

			Sanctioned	In Position						Vacancy
Sr. No.	Cadre	Post		Total	SC	ST	OBC	UR	EWS	Total
1	Officer	Registrar, Level-14	1	1	0	0	0	1	0	0
2		Deputy Registrar, Level-12	3	2	0	0	0	2	0	1
3		Assistant Registrar, Level-10	7	6	0	0	1	5	0	1
4		SSO/ STO, Level-12	4	3	0	0	0	3	0	1
5		SO/TO, Level-10	4	1	0	0	0	1	0	3
6		Asst Librarian, Level-10	2	1	0	0	0	1	0	1
7		Exec Engg Level 10	2	1	0	0	0	1	0	1
8		Exec Engg Level 11	1	0	0	0	0	0	0	1
9		Sr. Medical Officer, Level-12	1	1	0	0	0	1	0	0
10		Medical Officer, Level-10	1	0	0	0	0	0	0	1
11	Ministerial Higher Cadre	Superintendent SG I, Level-9	2	1	0	0	0	1	0	1
12		Superintendent SG II, Level-8	4	1	0	0	0	1	0	3
13		Sr. Superintendent,	5	0	0	0	0	0	0	5

		Level-7								
14		Superintendent, Level-6	7	6	0	0	1	5	0	1
15		Sr. PA, Level-7	1	1	0	0	0	1	0	0
16		PA, Level-6	2	2	0	0	0	2	0	0
17		Private Secretary, Level-8	0	2	0	0	0	2	0	-2
18	<b>Ministerial Lower Cadre</b>	Stenographer SG I, Level-7	1	0	0	0	0	0	0	1
19		Stenographer SG II, Level-6	1	2	1	0	0	1	0	-1
20		Sr. Stenographer, Level-5	1	0	0	0	0	0	0	1
21		Stenographer, Level-4	1	0	0	0	0	0	0	1
22		ASG I, Level-6	4	3	0	0	0	3	0	1
23		ASG II, Level-5	8	8	1	0	0	7 [1 PwD]	0	0
24		Sr. Assistant, Level-4	11	11	1	0	1	9	0	0
25		Jr. Assistant, Level-3	18	17	2 [1 PwD]	2	3	9	1	1

**d) Technical and Supporting Staff:-**

Sr. No.	Cadre	Post	Sanctioned	In Position						Vacancy
				Total	SC	ST	OBC	UR	EWS	
1	<b>Technical Higher</b>	Technical Assistant SG-I	5	2	0	0	0	2	0	3
2		Technical Assistant SG-II	10	7	2	0	0	5	0	3
3		Senior Technical Assistant	15	1	0	0	0	1 [PwD]	0	14
4		Technical Assistant	26	1	0	0	0	1	0	25
5		Assistant Engineer SG-I	1	0	0	0	0	0	0	1
6		Assistant Engineer SG-II	2	1	0	0	0	1	0	1
7		Assistant Engineer	2	1	0	0	0	1	0	1
8		Junior Engineer	2	0	0	0	0	0	0	2
9		SAS Assistant SG-I	1	0	0	0	0	0	0	1
10		SAS Assistant SG-II	2	0	0	0	0	0	0	2
11		Senior SAS Assistant	2	0	0	0	0	0	0	2
12		SAS Assistant	2	0	0	0	0	0	0	2
13		Library Information Asstt. SG-I	1	0	0	0	0	0	0	1
14		Library Information Asstt. SG-II	2	0	0	0	0	0	0	2
15		Sr. Library Information Assistant	2	0	0	0	0	0	0	2

16		Library Information Assistant	2	0	0	0	0	0	0	2
17		Pharmacist SG II	1	0	0	0	0	0	0	1
18	Technical Lower	Technician SG-I	8	1	0	0	0	1	0	7
19		Technician SG-II	16	15	2	2	0	11	0	1
20		Senior Technician	23	15	3	0	2	9	1	8
21		Technician	30	24	4	2	4	12	2 [1-PwD]	6
22		Pharmacist	1	0	0	0	0	0	0	1
23	Supporting Staff	Office/Lab Attendant SG-I	4	7	2	0	0	5	0	0
24		Office/Lab Attendant SG-II	8	16	4	0	0	12	0	0
25		Senior Office/Lab Attendant	12	6	2	0	0	4	0	5
26		Office/Lab Attendant	15	0	0	0	0	0	0	5
Total			195	97	19	4	6	65	3	98

### 3.1 DEPARTMENT OF CHEMICAL ENGINEERING



#### 1. ACADEMIC STAFF:-

**Head of the Department:** Dr. Alok Garg

**Faculties:-**

Professor	Associate Professor	Assistant Professor
-----	1. Dr. Alok Garg 2. Dr. Amit Arora 3. Dr. Tapas Palai	1. Dr. Radhe Shyam 2. Dr. Subhajit Majumder 3. Dr. Arvind Kumar Gautam 4. Dr. Pooja Thakur 5. Dr. Rahul Saha 6. Dr. Hammad Siddqi 7. Dr. Manish Kumar Dhiman 8. Dr. Niloy De

#### Technical Staff:-

1. Mr. Akash Sharma (Senior Technician)
2. Mr. Mukesh Chawla (Senior Technician)

#### 2. DISTINCTION ACHIEVED:

##### a) **International Conference : “Recent Trends in Transport Processes ” (RTTP 2024)**

Co-Patron- Dr. Alok Garg

Chairman- Dr. Subhajit Majumder

Co-Chairman- Dr. Amit Arora

Organising Secretary & Treasurer- Dr. Pooja Thakur

Organising Secretary- Dr. Hammad Siddiqi

Organising Secretary- Dr. Niloy De

**b) FDP/STC/Workshops organized**

S.No.	Name of Faculty	FDP/STC/Workshops organized
1.	Dr. Alok Garg	e-STC-ANEEA-2025 (March 3-7, 2025)
2.	Dr. Alok Garg	e-STC - Recent Trends in Energy and Environmental Engineering Applications (Aug 19-23, 2024)
3.	Dr. Alok Garg	STC- Computational Techniques using AI/ML for Social Science and Engineering Applications (Dec 2-6, 2024)
4.	Dr. Amit Arora	e-STC-ANEEA-2025 (March 3-7, 2025)
5.	Dr. Arvind Kumar Gautam	e-STC-ANEEA-2025 (March 3-7, 2025)
6.	Dr. Subhajit Majumder	e-STC- STPC 2025 (Jan 20-24, 2025)
7.	Dr. Pooja Thakur	e-STC- STPC 2025 (Jan 20-24, 2025)
8.	Dr. Manish Kumar Dhiman	e-STC - Recent Trends in Energy and Environmental Engineering Applications (Aug 19-23, 2024)
9.	Dr. Manish Kumar Dhiman	STC- Computational Techniques using AI/ML for Social Science and Engineering Applications (Dec 2-6, 2024)
10.	Dr. Tapas Palai	e-STC - SDCBP 2024(Apr 11-15, 2024)
11.	Dr. Arvind Kumar Gautam	e-STC - SDCBP 2024(Apr 11-15, 2024)
12.	Dr. Rahul Saha	e-STC - SDCBP 2024(Apr 11-15, 2024)
13.	Dr. Radhe Shyam	e-STC -Future Prospects in Chemical Engineering(Apr 01-05, 2024)
14.	Dr. Hammad Siddiqi	e-STC -Future Prospects in Chemical Engineering(Apr 01-05, 2024)
15.	Dr. Niloy De	e-STC -Future Prospects in Chemical Engineering(Apr 01-05, 2024)

**3. Research Publication****Papers published by Faculties:**

S.No.	Name of Faculty	Title of the paper	Name of Journal/Conference in which paper published
1.	Dr. Tapas Palai	Amine-functionalized polymer membrane for the electrochemical reduction of CO <sub>2</sub> to hydrocarbons	Sustainable Energy & Fuels (Accepted), RSC Publication; SCI-2024
2.	Dr. Tapas Palai	CO <sub>2</sub> to Fuel: Role of Polymer Electrolytes on Efficiency and Selectivity	Carbon Capture Science & Technology, 13, 100289, Elsevier Publication; SCOPUS-2024
3.	Dr. Tapas Palai	Bioelectrochemical Reduction of CO <sub>2</sub> into Formic Acid using Escherichia coli Whole-cell Biocatalyst	Journal of Applied Electrochemistry, 55, 1201–1212, Springer Nature Publication; SCI-2025
4.	Dr. Tapas Palai	Biotransformation of Hexavalent Chromium from Wastewater using Bacillus	Journal of Water Chemistry and Technology, 47 (3), 245-254, Allerton

		firmus	Press Inc. & Springer Publication; SCI-2025
5.	Dr. Tapas Palai	Insight into the Sunlight-driven Photocatalytic Activity of ZnO and ZnO/Ag Hybrid Nanostructures	Next Materials, 8, 100733, Elsevier Publication; SCOPUS-2025
6.	Dr. Amit Arora	Investigation of methane gas bubble dynamics and hydrate film growth during hydrate formation using 4-D time-lapse synchrotron X-ray computed tomography	Frontiers in Earth Science; SCI-2024
7.	Dr. Amit Arora	Cassia fistula seeds as a natural coagulant for turbidity reduction: efficacy and optimization via central composite design	Biomass Conversion and Biorefinery;SCI-2024
8.	Dr. Amit Arora	Effect of Isotropic and Anisotropic Permeability on Gas Production Behavior of Site NGHP-01-10D in Krishna-Godavari Basin	Energies; SCI-2024
9.	Dr. Amit Arora	Sustainable production of biohydrogen: Feedstock, pretreatment methods, production processes, and environmental impact	Fuel Processing Technology; SCI-2024
10.	Dr. Amit Arora	Numerical Assessment of gas production potential via depressurization: Impact of Production interval and Bottom hole pressure at site NGHP-01-10D in the Krishna Godavari basin hydrate reservoir"(NGIB-D-24-00132)	Natural Gas Industry B.;SCI-2025
11.	Dr. Radhe Shyam	CFD study of heat transfer in power-law fluids over a corrugated cylinder , DOI: 10.1002/htj.23108	Heat Transfer; SCOPUS-2024
12.	Dr. Arvind Kumar Gautam	Molecular dynamic study to investigate the system size effects on tetrahedral materials in supercooled region	Materials Today: Proceedings; SCI-2024
13.	Dr. Arvind Kumar Gautam	Molecular dynamics study on relaxation of supercooled liquid water at different cooling rates	Materials Today Communications; SCI-2024
14.	Dr. Arvind Kumar Gautam	A computational analysis on thermodynamic changes in liquid and solid states of carbon at liquid-liquid phase coexistence temperature	International Journal of Modern Physics B; SCI-2024
15.	Dr. Arvind Kumar Gautam	Molecular dynamic study on silicon by using different force field models in supercooled region: A comparative analysis	International Journal of Modern Physics B; SCI-2025
16.	Dr. Arvind Kumar Gautam	Thermal conductivity analysis on computationally designed single-walled carbon nanotubes (SWCNTs) by chirality variations	Indian Chemical Engineers, SCI-2025
17.	Dr. Subhajit Majumder	Energy integration of hydrodealkylation	Materials Today: Proceedings, 111,

		(HDA) of toluene	60-68, 2024, SCOPUS
18.	Dr. Subhajit Majumder	Numerical study on the flow of Bingham plastic fluids around an array of cylinders	Materials Today: Proceedings, 111, 78-85, 2024, SCOPUS
19.	Dr. Rahul Saha	Enhanced oil recovery using chemical and nanoparticles for heavy oil sandstone reservoirs: Chemical vs nanofluid flooding	Journal of Molecular Liquids, 431, 127707, Elsevier, SCI - 2025
20.	Dr. Rahul Saha	Adsorption behavior of surfactants on sandstone reservoir rocks with carbonate cements and its influence on wettability alteration	Journal of Surfactants and Detergents, 27, 393-408, AOCS, SCI - 2024
21.	Dr. Manish Kumar Dhiman	Numerical investigation for the flow past a single, and in-line stick-slip cylinder in a planar flow	Progress in CFD, an International Journal; SCIE., SCOPUS-2025
22.	Dr. Hammad Siddiqi	A Comprehensive Analysis of Removal of Hazardous Dust Particulates from Chemical and Process Industries Off Gases by Advanced Wet Scrubbing Techniques-A Review, Vol. 91, pp. 105406.	Journal of Loss Prevention in the Process Industries;SCI-2024

### **Book Chapter**

- A Kumar, A Verma, T Palai, LM Aeshala, Electrochemical CO<sub>2</sub> Reduction to Value-added Chemicals in From Waste to Wealth, Springer Nature Singapore Pte Ltd., 978-981-99-7552-5, 2024.
- Kshitij Tewari, Devyani Thapliyal, Chitresh Kumar Bhargava, Sarojini Verma, Anshi Mehra, Snehil Rana, Arvind K. Gautam, George D. Verros, Raj K. Arya, Innovative Coating Methods for the Industrial Applications, John Wiley & Sons, Inc., 9781394207305, 2024.
- Sarojini Verma, Devyani Thapliyal, Arvind K. Gautam, Chitresh Kumar Bhargava, Kshitij Tewari, Avinash Chandra, Pramita Sen, George D. Verros, Raj K. Arya, Coatings Research Institutes, Organizations, Associations, Societies, Academic Departments, and Centers, John Wiley & Sons, Inc., 9781394207305, 2024.
- Mamta Awasthi, Kumar Vaibhav, Abhay Kumar Choudhary, Arvind K. Gautam, Avinash Chandra, Pradeep Kumar, E-Waste Management: An Essential Deed to Safeguard Future, Wiley: Scrivener Publishing, 9781119879688, 2024.
- Pankaj Kumar, Saurabh Yadav, Hansnath Tiwari, Arvind Kumar Gautam, Suantak Kamsonlian, Electrochemical Approaches in Treatment of Waste Water, IIP Publisher, Michigan, USA, 9781685765033, 2024.
- Arvind Kumar Gautam, Nandlal Pingua, Udisha Pathak, Kumud Pandey, Avinash Chandra, Sudeep Yadav, Variation of chirality cause significant thermodynamic changes in multi walled carbon nanotubes: A computational study, Springer Proceedings, 9789811903564, 2025.
- Nandlal Pingua, Avinash Chandra, Arvind Kumar Gautam, Raj Kumar Arya and Akash Kumar, Nanotechnology in Chemical Engineering, Chemical Engineering Essentials, Volume 2: Advanced Processes, Materials, and Sustainability, John Wiley & Sons, Inc., 9781394372362, 2025.
- Rahul Saha, Devanshi Raman, Ranjan Phukan, hydrogen production using different methods, Subsurface Hydrogen Energy Storage, 63-90, Elsevier, 2025.

**Conference Publication**

1. Pragatisheel, A Kumar, LM Aeshala, T Palai, "Biotransformation of Hexavalent Chromium from Wastewater Using *Bacillus firmus*", presentation in International Conference on Sustainable Development in Chemical and Environmental Engineering (SDCEE-2024), February 22-24, 2024, Thapar Institute of Engineering and Technology, Patiala, Punjab, India.
2. D Raman, A Kumar, PA Reddy, T Palai, "Functionalized Rice Husk for Removal of Rhodamine-B Dye from Wastewater", presentation in International Conference on Recent Trends in Transport Processes (RTTP 2024), May 20-22, 2024, NIT, Hamirpur.
3. Nikhil Singh Jadon, Dheeraj Chauhan, Ajay Sharma, Sakshi Sagar, Pooja Thakur, Subhajit Majumder, "Discovery of Novel Catalysts for Oxidative Coupling of Methane using AI/ML Techniques", presentation in 77th Annual Session Indian Institute of Chemical Engineers (CHEMCON 2024), NIT Jalandhar.
4. Nikhil Singh Jadon, Dheeraj Chouhan, Ajay Sharma, Sakshi Sagar, Pooja Thakur, Subhajit Majumder "Machine Learning-Enhanced Optimization of Catalytic Processes in Petrochemical Engineering: A Focus on Fischer-Tropsch Synthesis" presentation in 77th Annual Session Indian Institute of Chemical Engineers (CHEMCON 2024), NIT Jalandhar.
5. Arvind K. Gautam "Stability dependency of tetrahedral materials on dynamic fluctuations in supercooled region" presentation in NMTE2A-2024, BITS Hyderabad, India.
6. Gautam, A. K., Pathak U., Chandra A. "Comparative study on supercooled silicon by using different force field model" presentation in SDCEE-2024, TIET Patiala, Punjab, India.
7. Pratibha Sharma, Arvind Kumar Gautam, Mamta Awasthi "Molecular dynamics study on TiO<sub>2</sub> to investigate the thermal and mechanical behavior for selected energy conversion applications" presentation in SDCEE-2024, TIET Patiala, Punjab, India.
8. Arvind K. Gautam "Identification of uniform thermodynamic equilibrium in tetrahedral liquids at liquid-liquid phase transition temperature" presentation in SDCEE-2024, TIET Patiala, Punjab, India.
9. Arvind K. Gautam, Nandlal Pingua, Udisha Pathak, Kumud Pandey, Avinash Chandra "Variation of chirality cause significant thermodynamic changes in multi walled carbon nanotubes: A computational study" presentation in SDCEE-2024, TIET Patiala, Punjab, India.
10. Arvind Kumar Gautam, Gautam Jangir, Yash Wane, Mayank Dogra, Akash Kumar, Prediction of interfacial properties of water and air mixture by using molecular simulation approach, CHEMCON-2024, NIT Jalandhar, Punjab, India (27-30, December, 2024).
11. Arvind Kumar Gautam, Yogesh K. Ratawal, Ekta Bhardwaj, Kumud Pandey, Comparative analysis on MWCNTs by variation of length scale and chirality through molecular simulation approach, STEEM –2025, SVNIT Surat, Gujarat, India (6-7, June, 2025).

- i) **Patent: 01**
- ii) **Doctoral Programme:** This department is running Doctoral Programme.
- iii) **Master Thesis completed: 02**
- iv) **Ph.D. Degree awarded: 1**
- v) **Popular Lectures by outside experts: 01**
- vi) **Expert Lecturer delivered by faculty: 06**

**Invited Talk/Expert Lecture Delivered**

- Expert Lecture on "Cross Cultural Management & International HR Practices", on 22.11.2024 by Dr. Shrilekha Gaur, Director, RRS HR Services Indore.
- Expert Lecture on "Concurrent Removal of Ternary Metal Ions (Cr<sup>6+</sup>, Cu<sup>2+</sup>, Zn<sup>2+</sup>) from Wastewater using Indigenous Bacterial Consortium" at Online Short-Term Course entitled

Frontiers in Sustainable Chemical Processes (FSCP-2021) organized by Department of Chemical Engineering, NIT Hamirpur during January 20-24, 2025.

- Expert Lecture on “Challenges for modelling explosion #Hydrogen” at Online Short-Term Course (e-STC) on “e-STC-Advanced Computational methodologies in Industrial Applications, NIT Hamirpur, 2024.
- Expert Lecture on “Gas explosion Modelling using PDRFOAM” at e-STC International Conference on "Sustainable Development in Chemical and Environmental Engineering" International Conference, Thapar University Patiala, 2023.
- Expert Lecture on “Clean & Green Pathways for Waste-to-Energy Conversion: A Case study on Pyrolysis of Rice Straw to eliminate stubble Burning” at Online Short Term Course on "Recent Trends in Energy and Environmental Engineering Applications (RTEEA-2024)" organized by Department of Chemical Engineering NIT Hamirpur.
- Expert Lecture on “Sustainable Energy Generation from Waste” at Online Short Term Course on "Sustainable Power Generation and Advanced Energy Storage System" organized by Department of Chemical Engineering, NIT Durgapur, 2024.

#### 4. Equipment Purchase

Sr. No.	Name of Equipment	Qty	Name of Manufacturer / Supplier	Cost in Rs.
1.	ICE-PLANT TEST RIG	01	M/s QUALITY ENGINEERS, AMBALA CANTT	Rs. 3,60,000.00
2.	FERMENTER	01	M/s BIOAGE EQUIPMENT & SERVICES, MOHALI, PUNJAB	Rs. 4,97,900.00
3.	ULTRASONIC PROBE SONICATOR	01	M/s RAJ JI SCIENTIFIC SURGICO, PALAMPUR, 176061	Rs. 4,39,667.00
4.	WORKSTATION	01	M/s SPL INFO PATHWAY PVT LTD, H.P.	Rs. 4,87,359.00

#### 5. DETAILS OF LABORATORIES:

- Fluid Mechanics Lab
- Chemical Reaction Engineering Lab
- Process Dynamic and Control Lab
- Mechanical Unit Operation Lab
- Mass Transfer Lab
- Process Simulation Lab
- Chemical Technology Lab
- Heat Transfer Lab
- Industrial Pollution Abatement Lab-I
- Industrial Pollution Abatement Lab-II
- Thermodynamics Lab.
- Research Lab-I
- Research Lab-II
- Energy Technology Lab

## 3.2 DEPARTMENT OF CIVIL ENGINEERING



### INTRODUCTION

The National Institute of Technology, Hamirpur was established in the year 1986 and the Civil Engineering Department is part of the institute since its inception. Civil Engineering is the most versatile branch among all the engineering branches. It is the branch with lot of diversity right from structural to transportation engineering, environmental to hydrology to hydraulics engineering, geology to geo-technology to earthquake engineering; Civil Engineering can be considered as a single largest branch among all the engineering branches. Being one of the primary Engineering Departments of the Institute, the Department of Civil Engineering offers B. Tech., M. Tech. and Ph.D. degrees programmes, accredited by National Board of Accreditation for five years since January 2008 and has been imparting quality education to its students.

### OBJECTIVE

- To provide quality education and training to our graduates to cope up with international standards.
- To conduct regular continuing education and community development programmes.
- To provide extension and consultancy services to Government, private, public, and industrial sectors.
- To excel in Industrial Research and consultancy with appropriate national and international linkages and to maintain highest standards in the field of Civil Engineering.
- To be the best-rated departments in India and world in terms of teaching and quality, research contributions, high-end consultancy, and academic leadership.

**Head: Dr. V.K. Bansal, Associate Professor**

**I. FACULTY OF CIVIL ENGINEERING DEPARTMENT:**

Sr. No.	Name of Faculty	Designation
<b>PROFESSOR</b>		
1.	Dr. R.K.Sharma	Professor
2.	Dr. Raman Parti	Professor
3.	Dr. R.K.Dutta	Professor
<b>ASSOCIATE PROFESSOR</b>		
1.	Dr. Pardeep Kumar	Associate Professor
2.	Dr. R.S.Banshtu	Associate Professor
3.	Dr. V.S.Dogra	Associate Professor
4.	Dr. V.K.Bansal	Associate Professor
5.	Dr. Amrit Kumar Roy	Associate Professor
6.	Dr. Umesh Kumar Pandey	Associate Professor
7.	Dr. Chander Prakash	Associate Professor
8.	Dr. Sunil Sharma	Associate Professor
9.	Dr. Hemant Kumar Vinayak	Associate Professor
<b>ASSISTANT PROFESSOR Gr.I &amp; II</b>		
1.	Dr. Dharmendra	Assistant Professor Grade-I
2.	Dr. K. Nallasivam	Assistant Professor Grade-I
3.	Dr. Manendra Singh	Assistant Professor Gr-I
4.	Dr. Ray Singh Meena	Assistant Professor Gr-I
5.	Dr. Vimal Kumar	Assistant Professor Gr-I
6.	Dr. Meghna Sharma	Assistant Professor, Gr.II
7.	Dr. Aditi Chauhan	Assistant Professor, Gr.II
8.	Dr. Kunjri Mog	Assistant Professor, Gr.II
9.	Dr. Swaraj Chowdhury	Assistant Professor, Gr.II
10.	Dr. Kirti Mahajan	Assistant Professor, Gr.II
<b>TEMPORARY FACULTY ON CONTRACT BASIS</b>		
1.	Dr. Rajat Kango	Guest Faculty
2.	Dr. Abhishish Chandel	Guest Faculty
3.	Dr. Ibaiahun Nongbet	Guest Faculty
4.	Dr. M. Uma Maheswar Rao	Guest Faculty
5.	Dr. Sumit Kumar	Guest Faculty
6.	Dr. Anita Sharma	Guest Faculty

**II. RESEARCH PUBLICATIONS**

Year	Author (s)	Title & Vol. No.	Journal Name	Indexing (SCI) Web of Science/ Scopus
2024	Himanshu Yadav, Amrit Kumar Roy	Study of wind-induced forces on high-rise buildings under interference conditions	Asian Journal of Civil Engineering	SCOPUS
2024	Mohammad Mohsin Khan,	Interference effect of buildings on high rise power station	Innovative Infrastructure Solutions	SCOPUS

	Amrit Kumar Roy	chimney subjected to wind: a numerical Modelling approach		
2024	Mohammad Mohsin Khan, Amrit Kumar Roy	Numerical investigation of interference effects on tall power station chimney subjecting varying wind incident angles	Journal of Building Pathology and Rehabilitation	SCOPUS
2024	Munish Kumar, Himanshu Yadav, Amrit Kumar Roy	Assessment of impact loads on structures due to LPG gas leakage and explosion—a numerical modelling approach	Asian Journal of Civil Engineering	SCOPUS
2024	Niraj Sharma, Himanshu Yadav, Amrit Kumar Roy	Wind-driven oscillation and dynamic response of a Y-plan shaped tall building under interference	Structures	SCI
2024	Himanshu Yadav, Amrit Kumar Roy	Wind-Induced Aerodynamic Responses of Triangular High-Rise Buildings with Varying Cross-Section Areas	Buildings	SCI
2024	Ankit Sharma, Himanshu Yadav & Amrit Kumar Roy	Wind induced vibrations and dynamic response of a balanced cantilever box girder bridge", Journal of Vibration Engineering & Technologies.	Journal of Vibration Engineering & Technologies	SCI
2024	Gyanendra Kumar Chaturvedy & Umesh Kumar Pandey	Investigating the effect of graphene oxide on the physical and mechanical properties of high-strength rubberized concrete using RStudio	Journal of Multiscale and Multidisciplinary Modeling (Springer), Vol-7(3), 1605-1623	SCOPUS,SCI
2024	Gyanendra Kumar Chaturvedy & Umesh Kumar Pandey	Influence of Graphene oxide on the long term durability behavior of high-strength rubberized concrete	Fullerenes, Nanotubes and Carbon Nanostructures	SCOPUS,SCI
2024	Mohit Kansotia; Gyanendra Kumar Chaturvedy & Umesh Kumar Pandey	Influence of nano-silica and crumb rubber on the physical and durability characteristics of concrete	Journal of Multiscale and Multidisciplinary Modeling	SCOPUS,SCI
2024	Raman Saini; Gyanendra Kumar Chaturvedy & Umesh Kumar Pandey	Examining the effect of nano iron oxide on the physical and mechanical characteristics of rubberized concrete	Journal of Innovative Infrastructure Solutions	SCOPUS,SCI
2024	Sanchit Dhiman; Gyanendra Kumar	Seismic behavior and stability analysis of an embankment	Journal of Civil and Environmental	SCI

	Chaturvedy & Umesh Kumar Pandey	dam on a permeable foundation	Engineering Reports	
2024	Gyanendra Kumar Chaturvedy, Nurool Bashar & Umesh Kumar Pandey	Incorporating multi-walled carbon nanotubes in rubberized concrete: Impact on physical, mechanical, and fire resistance	Fullerenes, Nanotubes and Carbon Nanostructures	SCOPUS,SCI
2024	Anita Sharma, Vansheika Thakur, Chander Prakash, Amol Sharma & Rajat Sharma	Deep Learning-Based Glacial Lakes Extraction and Mapping in the Chandra-Bhaga Basin	Journal of the Indian Society of Remote Sensing	SCIE, Scopus
2024	Anita Sharma, Chander Prakash, Divyansh Thakur	Deep Learning-Based Glacial Lakes Extraction and Mapping in the Chandra-Bhaga Basin	Applied Geomatics	Scopus
2025	Anita Sharma, Chander Prakash	Quantifying Glacial Lake Changes Using Deep Learning Models in the Northwestern Himalayan Region from 1992 to 2020	International Journal of Environmental Research	SCIE, Scopus
2025	Vansheika, Chander Prakash	Machine Learning-Based Downscaling of Glacier Surface Temperature to 10-m Resolution Using NDSI-Driven Emissivity Correction	IEEE Geoscience and Remote Sensing Letters	SCIE, Scopus
2024	Khair Ul Faisal Wani and Nallasivam K	Modal analysis of rigid pavement resting on two-parameter soil foundation model using finite element framework", Vol. 21 No. 4, pp. 793-806. <a href="https://doi.org/10.1108/WJE-11-2022-0461">https://doi.org/10.1108/WJE-11-2022-0461</a> .	World Journal of Engineering	Scopus
2024	Kashyap Shukla and Nallasivam .K	"Effective Location of Shear Walls in High-Rise RCC Buildings Subjected to Lateral Loads",2024, 57(1): 103-117 DOI:10.22059/CEIJ.2023.350020.1879	Civil Engineering Infrastructures Journal	Scopus
2024	Ashutosh Ranjan and Nallasivam.K	"Response of railway sub-track system subjected to railway trains loading by finite element technique", (2024),9(34),pp.1-19, <a href="https://doi.org/10.1007/s41062-023-01336-x">https://doi.org/10.1007/s41062-023-01336-x</a>	Innovative Infrastructure Solutions	SCIE, Scopus

2024	Mohd Ibrar and Nallasivam.K	Free Vibration Analysis of Airfield Runway Rigid Pavement by Finite Element Technique	Innovative Infrastructure Solutions	SCIE, Scopus
2024	Khair Ul Faisal Wani and K.Nallasivam	"Static and Free Vibration Analysis of Rigid Pavement Based On Winkler and Pasternak Foundation, (2024),24(1),pp. 49–60.	Structural Integrity and Life	Scopus
2024	Aniket Chaudhary and Nallasivam.K	Modal Analysis of a Coupled Ballastless Railway Track Surrounding a Horse Shoe Shape Shield Tunnel Linked to a Box-Girder Bridge with Substructure Using Finite Element Method	Innovative Infrastructure Solutions	SCIE, Scopus
2024	Sougata Mukherjee and K. Nallasivam	The Free Vibration Characteristics of a Concrete Arch Gravity Dam Using Finite Element Technique	Civil Engineering Infrastructures Journal	Scopus
2024	Mitresh Kaul and K.Nallasivam	Prediction of the free vibration characteristics of liquid-storage elevated tanks using finite element techniques",	Asian Journal of Civil Engineering	Scopus
2024	Khair Ul Faisal Wani and Nallasivam .K	Finite Element Algorithm for Rigid Pavement Resting on Pasternak Elastic Foundation Model under Aircraft Loading.	World Journal of Engineering	Scopus
2024	Sougata Mukherjee and Nallasivam .K	Dynamic Analysis of Concrete Arch Dam due to Earthquake Force	Journal of Rehabilitation in Civil Engineering	Scopus
2024	Abhishek Sharma and Nallasivam .K	Modal analysis of concrete gravity dam incorporating pre-stress condition along with soil structure interaction	World Journal of Engineering	Scopus
2024	Saket Kumar and Nallasivam .K	Modal analysis of natural dynamic frequency for a double deck cable-stayed steel bridge by using finite element method	Discover Engineering Civil	Scopus
2025	Saket Kumar and K.Nallasivam	"Dynamic Response of Double Deck Cable-Stayed Bridge Subjected to Train Load on Lower Deck	Journal of Vibration Engineering & Technologies	SCIE, Scopus
2025	Sandeep Bharti	Modal Analysis of Multi-	Journal of Vibration	SCIE, Scopus

	and Nallasivam .K	Panelled Concrete Pavement Airport Runway Using Finite Element Technique	Engineering & Technologies	
2025	Sahil Kumar and Nallasivam .K	Dynamic response of a PSC box-girder bridge impacted by high-speed train load using the finite element approach	Innovative Infrastructure Solutions	SCIE, Scopus
2025	Surbhi Aswal and K. Nallasivam	Evaluation of modal performance in a multi-span suspension bridge implementing a finite element approach	Innovative Infrastructure Solutions	SCIE, Scopus
2025	Mitresh Kaul and Nallasivam.K	Modal and Dynamic Response of Elevated Water Tanks of Different Shapes to Earthquakes	Journal of Vibration Engineering & Technologies	SCIE, Scopus
2025	Aniket Chaudhary and Nallasivam.K	"Dynamic Analysis of a Coupled Ballastless Railway Track and Horse Shoe Shape Shield Tunnel Linked to a Box-Girder Bridge with Substructure Using Finite Element Method	Innovative Infrastructure Solutions	SCIE, Scopus (Springer)
2025	Khair Ul Faisal Wani and Nallasivam .K	"Dynamic simulation of aircraft vehicle-rigid pavements interaction on Pasternak foundation using finite element based MATLAB algorithm"	Innovative Infrastructure Solutions	SCIE, Scopus
2025	Abhishek Sharma, Sahil Thakur and Nallasivam .K	Seismic response assessment of concrete gravity dam with dam-foundation-reservoir interaction by adopting finite element technique	Journal of Vibration Engineering & Technologies	SCIE, Scopus
2024	Shakya, R., Singh, M.,	Three Dimensional Elasto-Plastic Analysis of Delhi Metro Underground Tunnels under the seismic loading	Journal of Mining and Environment	ESCI, Scopus, Web of Science
2024	Bashir, M., Singh, M., Kotiyal, K	Behaviour of Horizontally Reinforced Stone Column in a Layered Soil: Enhancing Ground Improvement	Journal of Mining and Environment	ESCI, Scopus, Web of Science
2024	M Amin, M Singh	A numerical study on effect of liquefaction on ring footings during 2001 Bhuj earthquake at Kutch (Gujarat), India	Discover Civil Engineering (Springer)	Google Scholar

2024	Singh M, Singh S and Shakya R	Mitigating liquefaction risks for buildings on circular footings: a numerical modeling approach	Innovative Infrastructure Solutions	ESCI, Scopus
2025	Singh M. Zargar MM, Sharma VK, Nath RR	Non-Structural Slope Stabilization Using Biopolymers	Journal of Mining and Environment	ESCI, Scopus, Web of Science
2025	Singh M, Bashir I, Kotiyal, K, Shakya R	Response of isolated square footing on jointed rock mass under eccentric inclined loading	Bulletin of Engineering Geology and the Environment	Science Citation Index Expanded (SCIE)
2024	Chander Kant, Avinash Kumar, Ray Singh Meena	Exploring Climate Variables and Drought Patterns: A Comprehensive Trend Analysis and Evaluation of Beas Basin in Western Himalaya Earth Systems and Environment (2024).	Earth Systems and Environment	Scopus, ESCI
2024	Chander Kant and Ray Singh Meena	Integrated modeling of snow-covered areas and hydrological processes in the Larji Sub-Basin, Himachal Pradesh, India, using SRM and SWAT models.	Water Practice and Technology	SCIE
2024	Chander Kant and Ray Singh Meena	Projection of Future Rainfall Events over Beas River Basin, Western Himalaya using Shared Socioeconomic Pathways	Journal of Water and Climate Change	SCI
2024	Chander Kant, Kaiser Roy, Ray Singh Meena, Brijesh Kumar, Venkatarman Lakshmi	Deciphering Snow-Cover Dynamics: Terrain Analysis in the Mountainous River Basin, Western Himalayas.	Water Conservation and Engineering	ESCI, Scopus
2024	Deus Michael, Ray Singh Meena and Brijesh Kumar	A Comparative Study of High-level Classification Algorithms for Land Use and Land Cover Classification and Periodic Change Analysis over Transboundary Ruvu River Basin, Tanzania	Remote Sensing in Earth Systems Sciences	ESCI, Scopus
2025	Chander Kant, Ray Singh Meena and Sudhir Kumar Singh	A critical appraisal on various hydrological and hydrodynamic models.	Water Conservation and Engineering	ESCI, Scopus
2025	Saksham Rana,	Heat wave Magnitude Impact	Environmental Quality	ESCI, Scopus

	Chander Kant, Ray Singh Meena and Sudhir Kumar Singh	and Projected Changes Over Himachal Pradesh: CMIP6 Projections	Management	
2024	Naresh, M., Kumar, V. & Pal, J.	A convolution neural network-based technique for health monitoring of connections of a multi-story 3D steel frame structure.	Multiscale and Multidisciplinary Modeling, Experiments and Design	ESCI/SCOPUS
2024	Maloth Naresh, Vimal Kumar, Joy Pal, Shirsendu Sikdar, Sauvik Banerjee, and Pradipta Banerji	A comprehensive review on health monitoring of joints in steel structures	Smart Materials and Structures	SCI
2024	Meghna Sharma	Potential of Bio-mediated Calcite Precipitation Methods for Heavy Metal Immobilization and Strength Enhancement of Contaminated Soils	Indian Geotechnical Journal, Springer (Q2)	SCI
2025	C Sagar, Chauhan, A., and Sharma U.K	Synergistic effect of carbonation and cast-in-chlorides on corrosion initiation in reinforced concrete	Structures (Elsevier)	SCI
2025	P. Anbazhagan, Kunjari Mog, Mir Zeeshan Ali, B Sai Laxman	Experimental and empirical shear modulus reduction curves for a wide range of strains	Soil Dynamics and Earthquake Engineering	SCI/SCIE
2024	K Mahajan, SSB Masud, A Kondyli	Navigating the landscape of automated truck platooning: A systematic review on stakeholder perspectives, employment implications, and regulatory challenges, Vol. 23	Transportation Research Interdisciplinary Perspectives	6.3

**(III). M. Tech Dissertation Guidance:****M.Tech Completed in 2024-25:**

Sr. No.	Name of Student	Father's Name	Roll No./Regn. No.	Mode of Admission
<b>GEOTECHNICAL ENGINEERING</b>				
1	Zuha Kanji	Mohammad Muzaffar Kanji	23MCE002	GATE
2	Vivek Deepak	Sh. Hans Raj	23MCE003	GATE
3	Ankush Choudhary	Sh. Hari Singh	23MCE004	GATE
4	Bharti Kumari	Sh. Tulsi Ram	23MCE005	Self

5	Yogitrika Thakur	Sh. Paras Ram	23MCE006	Self
6	Sahil Thakur	Sh. Kamlesh Thakur	23MCE007	Self
7	Abhinandan Thakur	Sh. Harish Thakur	23MCE008	Self
8	Hansa Devi	Sh. Gopal Chand	23MCE009	Self
9	Anuj Kumar	Sh. Parveen Kumar	23MCE010	Self
10	Mayank Raj Singh Bisht	Sh. Rajender Kumar	23MCE011	Self
11	Prabal Dhiman	Sh. Pravesh Kumar	23MCE012	Self
12	Jailalita	Sh. Kirpa Ram	23MCE013	Self
13	Ankit Kumar	Sh. Raj Kumar	23MCE014	Self
14	Yashika	Sh. Mahender Kumar	23MCE015	Self
15	Adarsh Thakur	Sh. Joginder Singh	23MCE016	Self
16	Rakesh Kumar	Sh. Birbal Singh	23MCE018	Self

**STRUCTURES ENGINEERING**

1	Sagar	Sh. Somnath	23MCE101	GATE
2	Sahil Thakur	Sh. Narender Thakur	23MCE102	GATE
3	Survesh Sharma	Sh. Chuni Lal	23MCE103	GATE
4	Paras Krishna Kothari	Sh. Radha Krishna Kothari	23MCE104	GATE
5	Himanshu Bansal	Sh. Hari Ram Bansal	23MCE105	GATE
6	Koj Jarbo	Sh. Koj Lassa	23MCE106	GATE
7	Akshit Kaundal	Sh. Ashwani Kumar	23MCE108	GATE
8	Saurav Patiyal	Sh. Balvant Singh	23MCE109	GATE
9	Sakshi Raghav	Sh. Dinesh Raghav	23MCE110	GATE
10	Jatin Sharma	Sh. Binder Sharma	23MCE111	GATE
11	Abhijeet Singh Yadav	Sh. Rishipal Singh Yadav	23MCE112	GATE
12	Harish Kumar	Sh. Gian Chand	23MCE113	Self
13	Shubhansu Sharma	Sh. Rajeev Kumar	23MCE114	Self
14	Vedant Jamwal	Sh. Sukhdev Jamwal	23MCE115	Self
15	Shivansh	Sh. Hem Raj	23MCE116	Self
16	Abhishek	Sh. Rajesh Kumar	23MCE117	Self
17	Anurag Kapoor	Sh. Santosh Kumar	23MCE118	Self

**TRANSPORTATION ENGINEERING**

1	Komal	Sh. Lal Singh	23MCE201	GATE
2	Satyendra Prakash Singh	Sh. Puran Singh	23MCE202	GATE
3	Kush Kaushik	Sh. Ramesh Kumar	23MCE203	GATE
4	Firdous Ahmad Telli	Abdul Majeed	23MCE204	GATE
5	Harsh Bareth	Sh. Ram Kumar Bareth	23MCE205	GATE
6	Sanchita	Sh. Vinod Kumar	23MCE206	Self
7	Kismat Kumar Bhardwaj	Sh. Ashwani Kumar Bhardwaj	23MCE207	Self
8	Rizul Walia	Sh. Rakesh Kumar	23MCE208	Self
9	Abhishek Singh Parihar	Sh. Bhupal Singh Paihar	23MCE209	Self
10	Ayush Thakur	Sh. Ranjeet Singh	23MCE212	Self

11	Saksham Banyal	Sh. Pawan Kumar	23MCE213	Self
12	Saijal	Sh. Ranjeet Singh	23MCE215	Self
13	Shahwaz Khan	Mohammad Sadik Khan	23MCE217	Self
14	Sakshya	Sh. Deo Narain Yadav	23MCE218	Self
15	Akshay Chaudhary	Sh. Man Singh	23MCE219	Self
16	Guneet Singh	Inderjeet Singh	22MCE201	Part Time
17	Mohd. Ibrar	Mohd. Yousif	22MCE211	Part Time

**WATER RESOURCES ENGINEERING**

1	Surajbhai Vartha	Sh. Lahnubhai	23MCE301	GATE
2	Sourabh Prasher	Sh. Santosh Kumar	23MCE302	Self
3	Anuj Chauhan	Sh. Raj Kumar	23MCE303	Self
4	Aakrit Bhatia	Sh. Pawan Kumar	23MCE304	Self
5	Apurav Dhiman	Sh.Vipan Dhiman	23MCE305	Self
6	Arvind Kumar	Sh.Gian Chand	23MCE306	Self
7	Sushant Kaundal	Sh.Ravi Kant Kaundal	23MCE307	Self
8	Vaibhav Dhiman	Sh. Sudesh Dhiman	23MCE308	Self
9	Ritika Dhiman	Sh. Madan Lal	23MCE309	Self
10	Rajat Kumar	Sh. Trilok Chand	23MCE310	Self
11	Anuj	Sh. Krishan Chand	23MCE311	self

**ENVIRONMENT ENGINEERING**

1	Abhishek Guleria	Sh. Rajesh Guleria	23MCE401	GATE
2	Akshit Thakur	Sh. Jai Ram Thakur	23MCE402	Self
3	Komal Rana	Sh. Kuldeep Kumar	23MCE403	Self
4	Tushar Diwan	Sh. Surinder Diwan	23MCE404	Self
5	Vishesh Choudhary	Sh. Shailender Singh	23MCE405	Self
6	Hanshika	Sh. Shiv Kumar	23MCE406	Self
7	Nikhil Kumar	Sh. Dev Raj	23MCE407	Self
8	Varun Vaidya	Sh. Baldeep Kumar	23MCE408	Self
9	Rishabh	Sh. Roop Lal	23MCE409	Self
10	Priya Sharma	Sh. Sarwan Kumar	23MCE410	Self
11	Pranav Shukla	Sh. Partap Shukla	23MCE411	Self
12	Srikant Bhatia	Sh. Rattan Chand Bhatia	23MCE412	Self
13	Aditi	Sh. Bir Dass	23MCE413	Self
14	Diksha Kumari	Sh. Sanjeev Kumar	23MCE414	Self
15	Gaurav Saharan	Sh. Vinod Kumar Saharan	23MCE415	Self

**(IV) Ph.D. Admission in 2024-25:**

S. No.	Name of Student	Roll No.	Status	Name of Guide
1	Ms. Ayushi Gupta	24RCE001	FT-02	Dr. Manendra Singh
2	Mr. Abhishek Pandit	24RCE002	FT-01	Dr. Vijay Shankar

3	Mr. Sachin Sharma	24RCE003	FT-01	Dr. Raman Parti
4	Mr. Pramjeet Singh	24RCE004	FT-01	Dr.R.K Dutta
5	Ms. Karishma	24RCE005	FT-01	Dr. A.K Roy
6	Mr. Shivam Sharma	24RCE006	FT-01	Dr. Pardeep Kumar
7	Mr. Nitin Kumar	24RCE008	FT-01	Dr.Vijay Shankar
8	Ms. Anshul Kumari	24RCE009	FT-01A	Dr.V.K Bansal
9	Mr. Rishabh Sankhyan	24RCE010	FT-01A	Dr.Vijay Shankar
10	Mr. Sumit Jaswal	24RCE011	PT-02	Dr.R.S Meena
11	Mr. Shashi Dhara	24RCE012	PT-02	Dr.H.K Vinayak
12	Mr. Rakesh Kumar ,	24RCE013	PT-02	Dr. Chander Prakash
13	Mr. Hardev Singh Thakur	25RCE001	FT01A	Dr.R.S Meena
14	Mr. Gagan Deep Singh	25RCE002	FT01A	Dr.A.K Roy
15	Mr. Suraj Patel	25RCE003	FT01	Dr. Meghana Sharma
16	Mr. Sahil Kumar	25RCE004	FT01	Dr. Kunjari Mog
17	Ms. Anamika Gandhi	25RCE005	PT02	Dr.H.K Vinayak
18	Mr. Pankaj Kumar	25RCE006	FT01	Dr. Swaraj Chowdhury
19	Mr. Satish Kumar	25RCE007	PT-02	Dr. Aditi Chauhan

**(V) Ph.D Awarded in 2024-25**

S. No.	Name of Student	Roll No.	Status	Name of Guide
1	Mr. Vivek Sharma	2K15 Ph.D CE-306	Awarded	Prof. R.K Sharma
2	Mr. Gaurav Juneja	2k19-Ph.D-CE-427	Awarded	Prof. R.K Sharma
3	Mr. Vaibhav Chaudhary	2k20-Ph.D-CE-498	Awarded	Prof. R.K Dutta
4	Ms. Japneet Sidhu	2k19-Ph.D-CE-419	Awarded	Dr.Pardeep Kumar
5	Mr. Gyanendra Kumar Chaturvedy	2k19-Ph.D-CE-422	Awarded	Dr.U.K Pandey
6	Ms. Anita Sharma	2k19-Ph.D-CE-428	Awarded	Dr. Chander Prakash
7	Ms. Smily Vishvakarma	2k19-Ph.D-CE-423	Awarded	Dr. Dharmendra
8	Mr. Chander Kant	2k20-Ph.D-CE-499	Awarded	Dr. R.S Meena
9	Mr. Maloth Naresh	2k20-Ph.D-CE-500	Awarded	Dr.Vimal Kumar

**(VI) RESEARCH PROJECTS FOR THE YEAR 2024-25**

Sr. No.	Title of Project	Funding Agency & Amount Sanctioned	Allotment Year & Time	Present Status of the Project/PI	Name of PI/ Co-PI
1	Monitoring and Assessment of Mountain Ecosystem and Services in North-West Himalaya (Phase-II): Monitoring and Modeling of Hydrological Processes in	Indian Institute of Remote-Sensing - ISRO	2022-2023	Ongoing	Dr. Vijay Shankar

	Glaciated and Non-Glaciated Watersheds of North-West Himalayas				
2	In-situ and Generic Applications of Microbially Induced Calcite Precipitation Technique	Department of Science and Technology (DST) under the scheme of Innovation in Science Pursuit for Inspired Research (INSPIRE) Faculty Fellowship	2023-2024	Ongoing	Dr. Meghna Sharma

**(VII) DETAIL OF LABORATORIES:**

Sr. No.	NAME OF LABORATORY
1	Geotechnical Laboratory
2	Structure Laboratory
3	Irrigation & Hydraulics Laboratory
4	Concrete Laboratory
5	Foundation Engineering Laboratory
6	Surveying Laboratory
7	Transportation Laboratory
8	Geology Laboratory
9	Remote Sensing & GIS Laboratory
10	Computation Laboratory
11	Environmental Engineering Laboratory

**(VIII) EQUIPMENT/ FURNITURE PURCHASED FOR THE YEAR 2024-25:**

Sr. No.	Name of Equipment	Amount	Name of Firm
1	GNSS System	2119400	M/s Skipper International, Hardwar
2	Supply & Installation of Industrial Oven	213580	M/s Veekay Industries 117,D-B, Gupta Market, Karol Bagh, New Delhi-110005 (India)
	Supply & Installation Electronic Weighing Machine		
	Supply & Installation Standard Penetration Test Apparatus		
	Supply & Installation Digital CBR Testing Machine		
3	Computer Controlled Servo Hydraulic Universal Testing Machine Capacity 20000KN	3447960	M/s Hydraulic & Engineering Instruments, HDB-59/34/ Nariana Industrial Area Estate Delhi
4	1.5 Tons Cold only Air Conditioner	146586	M/s Malhotra Refrigeration Works Kangra

5	(i) Giatec Care Package Gold and (ii) Giatec iCOR2™ Full Package {01 No. each}	2377700	M/s Aimil Ltd., 652, Industrial Area, Phase-9, Mohali, Punjab-160062
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**(IX) CONSULTANCY SERVICES FOR THE PERIOD 01/04/2024 TO 31/03/2025**

S. N.	Name of The Test	Sponsored Agency	Amount
1.	Routine Testing of Cement , Aggregate Samples	HPPWD, IPH, SJVNL, Power Grid Corporation of India, Unipro Techno, Oil Corporation, Govt. Contractors	<b>43429758.00</b>
2.	Field Testing of Soil Bearing Capacity and Testing of Various soil Samples	HPPWD,HP IPH, HPPCL, SJVNL, Power Grid Corporation of India, Unipro Techno, HP Cricket Association India, Oil Corporation, Govt. Contractors	
3.	Design of Multistoried building	HPPWD, IPH, SJVNL, Power Grid Corporation of India, Unipro Techno, Food Corporation of India	
4.	Routine testing of CBR, Bitumen , Coarse Aggregate	HPPWD, HP IPH, SJVNL, Power Grid Corporation of India, Unipro Techno, Oil Corporation, Govt. Contractors	
5.	STA for PMGSY	Ministry of Rural Roads Government of India	
6.	STA- for HP IPH	Himachal Pradesh Irrigation and Public Health Department, Shimla	

### 3.3 DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING



#### 1. ACADEMIC STAFF:

**Head of Department:** Dr. Siddhartha Chauhan

#### FACULTIES:

Professor	Associate Professor	Assistant Professor
Dr. Lalit Kumar Awasthi (Vice Chancellor Sardar Patel University Mandi) (on Lien)	<ol style="list-style-type: none"> <li>1. Dr. (Mrs.) Kamlesh Dutta</li> <li>2. Dr. T.P. Sharma</li> <li>3. Dr. Siddhartha Chauhan</li> <li>4. Dr. Naveen Chauhan</li> <li>5. Dr. Pardeep Singh</li> </ol>	<ol style="list-style-type: none"> <li>1. Dr. Rajeev Kumar</li> <li>2. Dr. Nitin Gupta</li> <li>3. Dr. Dharmendra Prasad Mahato</li> <li>4. Dr. Arun Kumar Yadav</li> <li>5. Dr. Priyanka</li> <li>6. Dr. Jyoti Srivastava</li> <li>7. Dr. Sangeeta Sharma</li> <li>8. Dr. Mohit Kumar</li> <li>9. Dr. Mohammad Khalid Pandit</li> <li>10. Dr. Preeti Soni</li> <li>11. Dr. Ajay Prakash Mallick</li> <li>12. Dr. Ram Prakash Sharma</li> <li>13. Dr. Robin Singh Bhadoria</li> </ol>

#### 2. DISTINCTION ACHIEVED:

##### a) By students:

- Adithya Srivastava, B.Tech student received an admission offer from University of Southern California in MS (Computer Engineering) course.

- b. Nivedita, B.Tech student received an admission offer from IIT Jodhpur in M.Tech. CSE course.
- c. Ashish Kumar, B.Tech Dual degree student received an admission offer for PhD from IIT Jodhpur.
- d. Anshul Kumar, M.Tech student received an admission offer for PhD from IIT Roorkee.
- e. Sonu and Bhavish Kapil, M.Tech students received an admission offer for PhD from IIT Mandi.
- f. Shubham Negi, B.Tech student secured rank 21st in a coding competition CodeRush organized by AlgoUniversity in NIT Hamirpur.
- g. Aryan Pathania, B.Tech student has secured an International Internship in Mercari, USA.
- h. Akshat Agarwal, B.Tech student was one of the National finalists in Code with Cisco hackathon organized by CISCO.
- i. Kshitij Roodkee, Aryan Koundal, Harsh, Yugal Kishore, and Eva Sharma B.Tech students have participated in Google Summer of Code
- j. Eva Sharma, B.Tech student has secured internship offers from Google and Microsoft.

**b) By Department:**

- a. Dr. T. P. Sharma (PI) and Dr. Naveen Chauhan (Co-PI) has received a grant of ₹2.16 crore for a project titled "Mobile Device Security" under Information Security Education and Awareness (ISEA) Project Phase II from Ministry of electronics and information technology (MeitY), Govt of India.
- b. Dr. Robin Singh Bhadoria has received a grant of ₹43.93 lacs for project titled "Generative Adversarial Networks based Framework for Multi-View Synthesis and Decision-Making in Autonomous Systems" under Prime Minister Early Career Research Grant from Anusandhan National Research Foundation (ANRF).

**Journals Publications: -**

1. Singh, N. K., Agarwal, A., Shrivastava, V., & Awasthi, L. K. (2025). A computational examination of lead free Cs<sub>2</sub>PtI<sub>6</sub> based perovskite solar cell with investigation of several carrier transport materials. *Solar Energy Materials and Solar Cells*, 282, 113430.
2. Singh, H., Deshmukh, M., & Awasthi, L. K. (2025). Secure healthcare data management using multimodal image fusion and dual watermarking. *Scientific Reports*, 15(1), 9047.
3. Attri, I., Awasthi, L. K., & Sharma, T. P. (2025). EQID: Entangled quantum image descriptor an approach for early plant disease detection. *Crop Protection*, 188, 107005.
4. Tewari, A., Goyal, N., Awasthi, L. K., & Priyanka. (2025). Efficient Workflow Scheduling in Cloud Computing Using Hybrid Algorithm. *IETE Journal of Research*, 1-12.
5. Naik, A. C., Awasthi, L. K., Rathee, P., Sharma, T. P., & Verma, A. (2025). Enhancing IoT security: A comprehensive exploration of privacy, security measures, and advanced routing solutions. *Computer Networks*, 111045.
6. Goyal, S., & Awasthi, L. K. (2024). EBWO-GE: An innovative approach to dynamic VM consolidation for cloud data centers. *Concurrency and Computation: Practice and Experience*, 36(28), e8295.
7. Verma, H., Chauhan, N., & Awasthi, L. K. (2024). Enhanced Hybrid Congestion Mitigation Strategy for '6LoWPAN-RPL based patient-centric IoHT'. *Computer Networks*, 255, 110862.

8. Kumain, S. C., Singh, M., & Awasthi, L. K. (2024). DBTSF-VSOD: a decision-based two-stage framework for video salient object detection. *International Journal of Multimedia Information Retrieval*, 13(4), 38.
9. Singh, R. M., Sikka, G., & Awasthi, L. K. (2024). A Modified Levy Flight Firefly-Based Approach to Optimize Turnaround Time in Fog Computing Environments. *IETE Journal of Research*, 70(12), 8378-8388.
10. Singh, R., Sharma, K. P., & Awasthi, L. K. (2024). A Decade Review of Authentication and Communication Methods in IoT Environment. *Wireless Personal Communications*, 1-29.
11. Vardhan, A., Kumar, P., & Awasthi, L. K. (2024). A Resilient Intrusion Detection System for IoT Environment Based on a Modified Stacking Ensemble Classifier. *SN Computer Science*, 5(8), 1020.
12. Singh, R., Sharma, K. P., & Awasthi, L. K. (2024). A machine learning-based ensemble model for securing the iot network. *Cluster Computing*, 27(8), 10883-10897.
13. Singh, H., Deshmukh, M., & Kumar Awasthi, L. (2025). Secure and robust dual watermarking for Western blot images. *IETE Journal of Research*, 71(2), 511-522.
14. Kumar, V., Pal, S., Singh, V., Goyal, B., Awasthi, L. K., & Prajapati, Y. K. (2024). On the Feasibility of Thallium Bromide in Long-Range Plasmonic Sensing for Enhancement of Performance. *IEEE Transactions on Plasma Science*, 52(9), pp. 4598 – 4605.
15. Singh, R. M., Sikka, G., & Awasthi, L. K. (2024). Energy Conscious Squirrel Search based Task Scheduling Mechanism in Fog Environment. *Transactions on Emerging Telecommunications Technologies*, 35(10), e5057.
16. Sharma, P., & Lalit Kumar Awasthi. (2024). Unveiling the hidden dangers: Security risks and forensic analysis of smart bulbs. *Forensic Science International Digital Investigation*, 50, 301794–301794.
17. Kashid, S., Awasthi, L. K., Berwal, K., & Saini, P. (2024). Spatiotemporal Feature Fusion for Video Summarization. *IEEE MultiMedia*, 31(3), 88–97.
18. Goyal, S., & Awasthi, L. K. (2024). An energy-efficient black widow-based adaptive VM placement approach for cloud computing. *Cluster Computing*, 27(4), 4659-4672.
19. Kaur, U., Mahajan, A. N., Kumar, S., & Dutta, K. (2024). Security Vulnerabilities in VANETs and SDN-based VANETs: A Study of Attacks. *International Journal of Computer Networks and Applications*, 11(6).
20. Rani, P., Dutta, K., & Kumar, V. (2024). Autoencoder-based drug synergy framework for malignant diseases. *Computational Biology and Chemistry*, 113, 108273
21. Lata, K., Singh, P., & Dutta, K. (2024). SMDDH: Singleton Mention Detection using Deep Learning in Hindi Text. *ACM Transactions on Asian and Low-Resource Language Information Processing*. ACM 2375-4699/2024/10-ART
22. Upinder Kaur, Aparna N. Mahajan, Sunil Kumar, and Kamlesh Dutta. (2024). Jellyfish Search Chimp Optimization Enabled Routing and Attack Detection in SDN based VANETs. *Wirel. Pers. Commun.* 138, 2, 819–859
23. A, S., Chauhan, N., Chandel, N., & Rajwade, Y. (2025). Water stress diagnosis in maize crop using enhanced extreme learning machine model for precision irrigation systems. *Engineering Review*, 45(1).
24. Subeesh, A., & Chauhan, N. (2025). Deep learning based abiotic crop stress assessment for precision agriculture: A comprehensive review. *Journal of Environmental Management*, 381, 125158.

25. Manjula, R., & Chauhan, N. (2025). ProACT: Probabilistic Analysis and Countermeasures Tool for Blockchain Supply Chains With Smart Contracts Composition. *Concurrency and Computation: Practice and Experience*, 37(4-5).
26. Manjula, R., & Chauhan, N. (2024). A secure and trusted consensus protocol for blockchain-enabled supply chain management system. *Peer-To-Peer Networking and Applications*. Peer-to-Peer 17, 3815–3840
27. Md. Ataullah, & Chauhan, N. (2024). Exploring security and privacy enhancement technologies in the Internet of Things: A comprehensive review. *Security and Privacy*. 7(6), e448.
28. Kumar, P., Chauhan, N., Chaurasia, N., Kant Agarwal, K., Vidyarthi, A., & Gupta, D. (2024). Benevolence Behavior-Based Message Forwarding Scheme for Consumer-Centric IoT Opportunistic Networks. *IEEE Transactions on Consumer Electronics*, 70(4), 6892–6900.
29. Sheikh, D., Verma, H., & Chauhan, N. (2024). Reduced lead ECG multi-label classification with higher generalization using 2D SEResnets with self attention. *Multimedia Tools and Applications*, 83(24), 65315–65339.
30. Singh, S., Maurya, M. K., Singh, N. P., & Kumar, R. (2024). Survey of AI-driven techniques for ovarian cancer detection: state-of-the-art methods and open challenges. *Network Modeling Analysis in Health Informatics and Bioinformatics*, 13(1), 56.
31. Rani, D., Kumar, R., & Chauhan, N. (2024). Study influencing factors of maternal health and the role of internet of things (iot) to improve maternal care. *SN Computer Science*, 5(6), 778.
32. Maloth, S., Hada, N. S., Jatoth, C., Gupta, N., Fiore, U., & Sharma, P. K. (2025). Minecrafter: A secure and decentralized consensus protocol for blockchain-enabled vaccine supply chain. *Peer-to-Peer Networking and Applications*, 18(4), 1-26.
33. Bulasara, P. K., Sahoo, S., Gupta, N., Han, Z., & Kumar, N. (2025). The Internet of Bio-Nano Things with Insulin-Glucose, Security and Research Challenges: A Survey. *ACM Computing Surveys*, 57(5), 1-42.
34. Jyoti, D., Mahato, D. P., & Srivastava, J. (2025). Deep Learning-Based Scientific Document Summarization Considering Citation. *SN Computer Science*, 6(4), 300.
35. Kumar, M., & Yadav, AK (2025). Speech signal's phase information based Alzheimer's disease detection using deep learning. *International Journal of Speech Technology*, 1-14.
36. Verma, A., & Yadav, A. K. (2025). FusionNet: Dual input feature fusion network with ensemble based filter feature selection for enhanced brain tumor classification. *Brain Research*, 1852, 149507.
37. Verma, A., & Yadav, A. K. (2025). Brain tumor segmentation with deep learning: Current approaches and future perspectives. *Journal of Neuroscience Methods*, 110424.
38. Kumar, M., Rana, A., Yadav, A. K., & Yadav, D. (2025). Leveraging Sentiment Analysis to Detect Fake Reviews Using Deep Learning. *SN Computer Science*, 6(3), 1-9.
39. Yadav, A. K., Gupta, T., Kumar, M., & Yadav, D. (2025). A Hybrid Model Integrating LDA, BERT, and Clustering for Enhanced Topic Modeling. *Quality & Quantity*, 1-28.
40. Rathod, D., Yadav, A. K., Kumar, M., & Yadav, D. (2025). Character-Level Encoding based Neural Machine Translation for Hindi language. *Neural Processing Letters*, 57(2), 23.

41. Verma, A., & Yadav, A. K. (2025). Improved multi-class brain tumor mri classification with ds-net: a patch-based deep supervision approach. *Multimedia Tools and Applications*, 1-34.
42. Verma, A., & Yadav, A. K. (2024). Residual learning for brain tumor segmentation: dual residual blocks approach. *Neural Computing and Applications*, 36, 22905-22921.
43. Yadav, A. K., Kumar, A., Kumar, M., & Yadav, D. (2024). Semantic proximity assessment in Bhojpuri and Maithili: a word embedding perspective. *Social Network Analysis and Mining*, 14(1), 130.
44. Verma, A., Priyanka, P., Khan, T., Singh, K., Yesufu, L. O., Ariffin, M. M., & Ahmadian, A. (2025). ScrutNet: a deep ensemble network for detecting fake news in online text. *Social Network Analysis and Mining*, 15(1), 21.
45. Firoz, F., Srivastava, J., Al-Abbasi, F. A., & Anwar, F. (2025). Real-Time Analysis of Sensitive Data Security in Manuscript Transition. *Recent Advances in Computer Science and Communications*, 18.
46. V., Kumar, M., & Yadav, A. K. (2025). 3D AIR-UNet: attention–inception–residual-based U-Net for brain tumor segmentation from multimodal MRI. *Neural Computing and Applications*, 1-22.
47. Geetanjali, Kumar, M. (2025). Exploring hate speech detection: challenges, resources, current research and future directions. *Multimedia Tools and Applications*, 1-37.
48. Kaushal, V., & Sharma, S. (2025). Weighted FedCOM: a communication efficient approach to federated learning. *Evolving Systems*, 16(1), 27.
49. Ranpariya, A., & Sharma, S. (2025). A digital twin solution for fault detection in time-critical IIoT applications. *Journal of Simulation*, 1-14.
50. Kaushal, V., & Sharma, S. (2025). Securing the collective intelligence: a comprehensive review of federated learning security attacks and defensive strategies. *Knowledge and Information Systems*, 1-39.
51. Kaushal, V., & Sharma, S. (2025). Fairness-driven federated learning-based spam email detection using clustering techniques. *Neural Computing and Applications*, 1-12.
52. Sharma, S., Verma, P., Bharot, N., Ranpariya, A., & Porika, R. (2024). PULSE: Proactive uncovering of latent severe anomalous events in IIoT using LSTM-RF model. *Cluster Computing*, 27(10), 13749-13762.

#### **Publications in Conferences:**

1. Kumar, D., Chauhan, S., & Awasthi, L. K. (2025, March). Dynamic Partitioning of 3D Scenes into User-Bounding Boxes for Immersive Metaverse Experience. In: 2025 3rd International Conference on Disruptive Technologies (ICDT) (pp. 1383-1388). IEEE.
2. Attri, I., Awasthi, L. K., & Sharma, T. P. (2025). TinyML for Plant Disease Detection: Efficient Edge AI Solutions for Apple and Mango Leaves. In: International Conference on Machine Learning and Data Engineering, *Procedia Computer Science*, 258, 2870-2877.
3. Prasad, D., Deshmukh, M., Kumar, P., & Awasthi, L. K. (2025, March). A Custom Features-Based Face Recognition using a Bag of Classifiers. In: 2025 IEEE 14th International Conference on Communication Systems and Network Technologies (CSNT) (pp. 486-492). IEEE.
4. Kumar, N., Kumar, R., Pal, S., Awasthi, L. K., & Goyal, B. (2025, March). D-Shaped PCF Based SPR Sensor for Cortisol Detection. In 2025 IEEE International

- Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI) (Vol. 3, pp. 1-6). IEEE
5. Vardhan, A., Kumar, P., & Awasthi, L. K. (2024, December). A Robust Intrusion Detection Mechanism Using Ensemble Approach for IoT Paradigm. In: 2024 12th International Conference on Intelligent Systems and Embedded Design (ISED) (pp. 01-06). IEEE.
  6. Kashid, S., Awasthi, L. K., Berwal, K., & Saini, P. (2024, October). Static Video Summarization Using Transfer Learning and Clustering. In: International Conference on Artificial Intelligence: Towards Sustainable Intelligence (pp. 68-76). Cham: Springer Nature Switzerland.
  7. Kumari, R., Kumar, S., Amandeep, Dutta, K., & Kumari, A. (2025). Cybersecurity for Industrial IoT: A Review on Vulnerabilities and Attacks. In: 8th International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech), Kolkata, India, 2025, pp. 1-8.
  8. Thakur, V., & Dutta, K. (2025). Machine Learning based Effort Estimation Models for Software Development Projects related Datasets with diverse features. In: 2nd International Conference on Computational Intelligence, Communication Technology and Networking (CICTN), Ghaziabad, India, 2025, pp. 807-813,
  9. Umesh, U., Kumar, S., Dutta, K., & Kumari, A. (2024). Securing Internet of Medical Things: Exploring Vulnerabilities and Attack Vectors. In: 2024 Eighth International Conference on Parallel, Distributed and Grid Computing (PDGC), 678–684.
  10. Goel, G., & Dutt, K. (2024). Comparative analysis of Katz and Eigen centrality metrics on word adjacency networks for the classification of poetry and prose. In: International Conference on Innovations in Computing & Applications (ICICA 2024) AIP Conference Proceedings, (Vol. 3253, No. 1).
  11. Sardana, J., Kumar, S., Kumar, D., & Dutta, K. (2024). Denial of Service (DoS) Attacks in SDN-Based VANETs: A Study. In: Eighth International Conference on Parallel, Distributed and Grid Computing (PDGC), Wagnaghat, Solan, India, 2024, pp. 669-677.
  12. S. Sahoo and K. Dutta (2024). DUNE: Decoding Unified Naive Bayes Explainability through Gaussian methods for a Heart Disease Diagnostic. In: 15th International Conference on Computing Communication and Networking Technologies (ICCCNT), Kamand, India, 2024, pp. 1-6
  13. Verma, U., & Singh, P. (2024, April). A Review on Sentiment Analysis and Opinion Mining. In: International Conference on Information and Communication Technology for Intelligent Systems (pp. 577-588). Singapore: Springer Nature Singapore.
  14. Kanwar, A., Singh, R. M., Lata, K., Dhiman, A., & Singh, P. (2025). An Effective Methodology for Identifying Adverse Drug Reactions using Firefly Algorithm. In: International Conference on Machine Learning and Data Engineering, Procedia Computer Science, 258, 4060-4069.
  15. Thakur, A., Singh, P., & Lata, K. (2025). Genetic Algorithm-Driven Random Forest Model for Predicting Acute Respiratory Distress Syndrome (ARDS). In: International Conference on Machine Learning and Data Engineering, Procedia Computer Science, 258, 1709-1718.
  16. Kumar, M., Singh, P., & Kashtriya, P. (2025). Enhanced Biomedical Named Entity Recognition Using SpaCy and BERT Models. In: International Conference on Machine Learning and Data Engineering, Procedia Computer Science, 258, 1954-1961.
  17. Gupta, N., Jadon, K. S., Soni, P., Gupta, N., & Dhurandher, S. K. (2024, September). Heart Disease Prediction Evaluation of Machine Learning Models with PSO-

- Optimized K-Fold Cross-Validation. In: 2024 IEEE Region 10 Symposium (TENSYP) (pp. 1-6). IEEE.
18. Kumar, V., Jadon, K. S., & Gupta, N. (2024, August). Mitigating IoT Security Risks: Enhanced Ransomware Attack Classification. In: 2024 IEEE 5th India Council International Subsections Conference (INDISCON) (pp. 1-6). IEEE.
  19. Verma, R., Jaswal, S., Abhay, & Mahato, D. P. (2025, April). Degree-Oriented Deterministic Approach for Maximum Independent Set. In: International Conference on Advanced Information Networking and Applications (pp. 280-290). Cham: Springer Nature Switzerland.
  20. Jyoti, D., Sharma, A., Gupta, S., Manhar, P., Srivastava, J., & Mahato, D. P. (2025, April). Abstractive Summarization Using Gated Graph Attention Networks. In: International Conference on Advanced Information Networking and Applications (pp. 95-106). Cham: Springer Nature Switzerland.
  21. Verma, R., & Prasad Mahato, D. (2025, April). Enhancing Search Strategies for Maximum Independent Set with Grey Wolf Optimization-Genetic Algorithm. In: International Conference on Advanced Information Networking and Applications (pp. 81-92). Cham: Springer Nature Switzerland.
  22. Thakur, S., Kumar, A., & Mahato, D. P. (2025, January). Efficient Dual-Hop Routing in Underwater Optical Wireless Networks Using Honey Bee Optimization. In: 2025 Fourth International Conference on Power, Control and Computing Technologies (ICPC2T) (pp. 1-6). IEEE.
  23. Kumar, A., Thakur, S., & Mahato, D. P. (2025, January). Bio-Inspired Adaptive Routing for Enhanced Data Transmission in Underwater Optical Wireless Networks. In: 2025 Fourth International Conference on Power, Control and Computing Technologies (ICPC2T) (pp. 1-6). IEEE.
  24. Jyoti, D., Srivastava, J., & Mahato, D. P. (2025, January). Implementing T5 for Text Summarization: An Algorithmic Approach. In: 2025 International Conference on Information Networking (ICOIN) (pp. 648-652). IEEE.
  25. Verma, R., & Mahato, D. P. (2025, January). Finding Maximum Independent Set using Particle Swarm Optimization. In: 2025 International Conference on Information Networking (ICOIN) (pp. 584-589). IEEE.
  26. Verma, R., & Mahato, D. P. (2024, December). Maximum Independent Set Using Hummingbird Optimization. In: International Conference on Advanced Network Technologies and Intelligent Computing (pp. 258-272). Cham: Springer Nature Switzerland.
  27. Akshat, Thakur, N. S., Thakur, S., Kumar, A., & Mahato, D. P. (2024, December). Enhancing Box Type Solar Cooker Performance with Optimal Reflecting Sidewall Angles Using Genetic Algorithm. In: International Conference on Advanced Network Technologies and Intelligent Computing (pp. 464-476). Cham: Springer Nature Switzerland.
  28. Sharma, A., Sharma, S., Thakur, S., Kumar, A., & Mahato, D. P. (2024, December). Task Scheduling in Distributed Real-Time Systems Using Hybrid Model Based on ACO-GA. In: International Conference on Advanced Network Technologies and Intelligent Computing (pp. 448-463). Cham: Springer Nature Switzerland.
  29. Gupta, A., Sharma, S. C., Jyoti, D., Verma, R., Azeem, M., & Mahato, D. P. (2024, December). Load Balanced Transaction Scheduling Using Gaussian Mixture Model-Ant Colony Optimization. In: International Conference on Advanced Network Technologies and Intelligent Computing (pp. 122-139). Cham: Springer Nature Switzerland.
  30. Jyoti, D., Srivastava, J., & Mahato, D. P. (2024, December). Citation Based Scientific Document Summarization Using Deep Learning. In: International

- Conference on Advanced Network Technologies and Intelligent Computing (pp. 309-324). Cham: Springer Nature Switzerland.
31. Sharma, H., Yadav, A. K., & Kumar, M. (2024, June). Video Emotion Recognition Using 3D-Convolutional Neural Network. In: International Conference on Data Analytics & Management (pp. 203-214). Singapore: Springer Nature Singapore
  32. Singh, H., Yadav, A. K., & Kumar, M. (2025, February). Neural Machine Translation for Punjabi-English language pair using word-based tokenization. In: 2025 3rd International Conference on Intelligent Systems, Advanced Computing and Communication (ISACC) (pp. 918-923). IEEE.
  33. Verma, A., & Yadav, A. K. (2025, January). Assessing U-Net Architectures for Effective Brain Tumor Segmentation in MRI. In: 2025 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS) (pp. 1-5). IEEE.
  34. Singh, V., & Srivastava, J. (2025). Enhancing Graph Based Models for Automatic Program Repair. In: International Conference on Soft Computing and its Engineering Applications (pp. 254-269). Springer, Cham.
  35. Kumar, A., & Srivastava, J. (2025). Enhancing Hindi Named Entity Recognition Using XLM-RoBERTa. In: International Conference on Soft Computing and its Engineering Applications (pp. 210-222). Springer, Cham
  36. Rather, S. A., Kandwal, A., Pandit, M. K., & Roy, P. P. (2025, April). Quantum-Behaved Particle Swarm Optimization for the Segmentation of Kidney Stone CT Images. In: ICASSP 2025-2025 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) (pp. 1-5). IEEE.
  37. Gupta, S., Kumar, P., & Pandit, M. K. (2024, October). Performance Analysis of Machine Learning Techniques in Plant Leaf Disease Detection. In: 2024 IEEE International Conference on Computer Vision and Machine Intelligence (CVMI) (pp. 1-6). IEEE.
  38. Sehra, U., Dutta, RR, & Pandit, MK (2024, September). Evaluating Neural Network Parameter Obliteration in Catastrophic Forgetting. In: 2024 IEEE Region 10 Symposium (TENSYP) (pp. 1-6). .
  39. Chaudhary, K., & Sharma, S. (2024, September). FareIQ: Intelligent Fare Optimization for Cab Drivers Using Reinforcement Learning. In: International Conference on Electrical and Electronics Engineering (pp. 573-588). Singapore: Springer Nature Singapore
  40. Tanuj, & Sharma, R. P. (2024). An evaluation study of non-contact fingerprint presentation attack detection. In: 2024 IEEE International Conference on Computer Vision and Machine Intelligence (CVMI), 1–6.
  41. Singh, U., Sood, M., & Bhadoria, R. S. (2025). Underpinning of Resource-Constrained IoT networks: analysis and countermeasures for attacks and vulnerabilities. In: 2025 IEEE 14th International Conference on Communication Systems and Network Technologies (CSNT), 467–473.
  42. V. Kumari and R. S. Bhadoria, "Exploring Denoising Diffusion Models for Realistic Anime Character Generation. In: 2024 IEEE 16th International Conference on Computational Intelligence and Communication Networks (CICN), Indore, India, 2024, pp. 862-866

#### **Books/Book Chapters Publications: -**

1. Singh, H., & Awasthi, L. K. (2025). Robust and imperceptible dual watermarking for watershed images. In Security Issues in Communication Devices, Networks and Computing Models (pp. 221-230). CRC Press.

2. Kumar, A., Gupta, R., Kumar, S., Dutta, K., & Rani, M. (2025). Securing IoMT-Based Healthcare System. In: Agrawal, R., Rathore, P.S., Devarajan, G.G., & Divivedi, R.R., (eds) Artificial Intelligence and Cybersecurity in Healthcare, Wiley, pp. 17–56.
3. Bhadoria, R.S., Thakur, V., Allahviranloo, T. (2025). Quantum Computing and GAN Aspect. In: Allahviranloo, T., Samanta, S. (eds) Quantum Theory and Fuzzy Systems: Traversing Uncertainty in Group Decision-Making and Social Networks. Studies in Computational Intelligence, vol 1186. Springer, Cham.
4. Sonu, Kumar, A., Bhadoria, R.S., Allahviranloo, T. (2024). Uncertainty Handling and Information Processing Capabilities of Granular Computing: A Deep Learning Aspect. In: Allahviranloo, T., Samanta, S. (eds) Management of Uncertainty Using Linguistic Z-Numbers. Studies in Fuzziness and Soft Computing, vol 434. Springer, Cham.
5. Sharma, S., Bhatia, M., Garg, A., & Yadav, A. (2024). Classification and Clustering Algorithms for Medical Data. In Predictive Data Modelling for Biomedical Data and Imaging (pp. 75-105). River Publishers.
6. Pathak, S., Bhatia, M., Yadav, A., & Hooda, M. (2024). Identification, Analysis, and Recommendation of the Sitting Posture of School Kids. In Predictive Data Modelling for Biomedical Data and Imaging (pp. 249-277). River Publishers.

### 3. SEMINAR, SYMPOSIA, SUMMER SCHOOL, WINTER SCHOOL, SHORT-TERM COURSE:

1. Organized e-short term course on “Research Applications of Deep Learning” during 01-05 July 2024 at Department of CSE, NIT Hamirpur (H.P).
2. Organized short term course on “Recent Trends in Networks and Communications” during 23-29 September 2024 at Department of CSE, NIT Hamirpur (H.P).
3. Organized 2nd International Conference on Artificial Intelligence, Machine Learning and Intelligent Systems (ICAMS 2025) during 07-8 Feb 2025 at Department of CSE, NIT Hamirpur (H.P).
4. Organized GIAN course on “Cyber-Physical System Security with Artificial Intelligence” during 03-15 Feb 2025 at Department of CSE, NIT Hamirpur (H.P).

#### (a) Conducted in the DoCSE:

Sponsoring Agency	Name of the Coordinator	Title of the Seminar/symposia	Duration
NIT Hamirpur	Rajeev Kumar (Convener) Ajay Kumar Mallick (Coordinator) Mohammad Khalid Pandit (Coordinator)	Research Applications of Deep Learning	01/07/2024 to 05/07/2024
NIT Hamirpur	Dr. T. P. Sharma (Convener) Dr. Priyanka (Coordinator) Dr. Robin Singh Bhadoria (Coordinator)	Recent Trends in Networks and Communications	23/09/2024 to 29/09/2024
SERB, Meity, NIT Hamirpur	Dr. Naveen Chauhan (General Chair) Dr. Mohammad Khalid Pandit (Organizing Secretary) Dr. Ajay Kumar Mallick (Organizing Secretary)	International Conference on Artificial Intelligence, Machine Learning and Intelligent Systems (ICAMS 2025)	07/02/2025 to 08/02/2025

GIAN, MOE	Dr. Sidhartha Chauhan (Convenor) Dr. Mohit Kumar (Coordinator) Dr. Arun Kumar Yadav (Coordinator)	Cyber-Physical System Security with Artificial Intelligence	03/02/2025 to 15/02/2025
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**(b) Expert Talks:**

1. Dr. Ram Prakash Sharma delivered an expert talk on “AI and its Applications in Architecture” in e-STC on Information Science for Building Design and Urban Planning held during 14-18 October 2024 at NIT Hamirpur.
2. Dr. Ram Prakash Sharma delivered an expert talk on “Advancements in Explainable Generative Adversarial Networks” in Generative AI workshop held during 10-15 March 2025 at The LNMIIT, Jaipur.
3. Dr. Mohit Kumar delivered an expert talk on “Introduction to Signal and Speech Processing” in e-STC on “Machine Learning and its applications in Information Security, Computer Vision and Natural Language Processing (MaLiCoN-2025)” held during 20-24 January 2025 at NIT Hamirpur.
4. Dr. Ajay Kumar Mallick delivered an expert talk on “Handcrafted and Deep Feature Based Image and Video Retrieval” , in Online Short Term Course (eSTC) Research Applications of Deep Learning held during 01-05 July 2024, Department of Computer Science and Engineering, National Institute of Technology, Hamirpur (H.P), India.
5. Dr. Ajay Kumar Mallick delivered an expert talk on “AI and its Applications in Architecture and Planning” in e-STC on Information Science for Building Design and Urban Planning held during 14-18 October 2024 at NIT Hamirpur.
6. Dr. Ajay Kumar Mallick delivered an expert talk on “AI and its Applications in Architecture and Planning” in e-STC on Information Science for Building Design and Urban Planning held during 14-18 October 2024 at NIT Hamirpur.
7. Dr. Robin Singh Bhadoria delivered an expert talk on “Artificial Intelligence in Education” in ATAL FDP on Advancement in AI: Trends, Tools and Techniques held on 07th August 2024 at Government Polytechnic Hamirpur, Himachal Pradesh.
8. Dr. Robin Singh Bhadoria delivered an expert talk on “ICT enabled Teaching & Learning” in Faculty Induction Programme (Guru Dakshata),” organized by the Malaviya Mission Teacher Training Centre (MMTTC) held on 21st November 2024 at Indira Gandhi National Tribal University (IGNTU), Amarkantak, Madhya Pradesh
9. Dr. Robin Singh Bhadoria delivered an expert talk on “Introduction to Internet of Things (Sensor & Wireless Sensor Networks)” in ONE WEEK (Offline) ATAL FDP on “Next Generation Robotics Enabled by IoT for Sustainable Development” held on 09th September 2024 at SD Bansal College of Technology, Indore, Madhya Pradesh
10. Dr. Preeti soni delivered an expert talk on “Remote User Authentication A cyber” in Faculty Development Programme on “Cyber Security held on 06-10 January 2025 at Computer Science and Engineering Department, Faculty of Technology, Veer Madho Singh Bhandari Uttarakhand Technical University, Dehradun, Uttarakhand.
11. Dr. Mohammad Khalid Pandit delivered an expert talk on “Generative AI” , in Online Short Term Course (eSTC) Research Applications of Deep Learning held during 01-05 July 2024, at Department of Computer Science and Engineering, National Institute of Technology, Hamirpur (H.P), India.
12. Dr. Mohammad Khalid Pandit delivered an expert talk on “Machine Learning in chemical engineering ” , in Recent Trends in Energy and Environmental Engineering Applications (RTEEA-2024) during 19-23 August 2024, at Department of Chemical Engineering, National Institute of Technology, Hamirpur (H.P), India.
13. Dr.(Mrs.) Kamlesh Dutta delivered an expert talk on “Artificial Intelligence powered Insight into Cyber Threat Intelligence: Challenges, Opportunities and Cyber

Landscape”, in 3rd Short Term Course on “Recent Trends in Networks & Communication: Cyber Security Challenges (RTNC-2024) during 23-28 sept 2024, at Department of Humanities and Social Sciences at NIT Hamirpur<sup>15</sup>.

14. Dr.(Mrs.) Kamlesh Dutta delivered an expert talk on “Cyber Security Awareness” , in Short Term Training Programme on Cyber Security and Procurement: Vigilance Awareness Week (VAW 2024), 29th November, at Department of Humanities and Social Sciences, National Institute of Technology, Hamirpur (H.P), India.
15. Dr.(Mrs.) Kamlesh Dutta delivered an expert talk on “Exploring Defect Detection Applications Leveraging Deep Learning Architectures” , in STC on Machine Intelligence and Vision Algorithms (MIVA 2024), during 12-16 Sept, at NIT Kurukshetra, India.

#### (c) Research Projects:

Title of the Scheme	Sponsored by	Assistance Received (Rs) in lakh	Investigator
Information Security Education & Awareness (ISEA) Phase-III	Ministry of Electronics & Information Technology, Govt. of India	INR 2,01,60,000	Dr. T.P. Sharma Dr. Naveen Chauhan
Prime Minister Early Career Research Grant	Anusandhan National Research Foundation (ANRF)	INR 43,93,440	Dr. Robin Singh Bhadoria

#### 4. Research Supervision: Master Thesis completed:

Sr. No	Title	Guide	Name of the students	Brief Report
1.	Efficient Net and Cross-Attention Based Multimodal Emotion Detection from Audio-Visual Data.	Dr. Arun Kumar Yadav	HARSH SHARMA	Completed
2.	Cyberbullying Detection in Hindi Text Using Multimodal Deep Learning Approach.	Dr. Arun Kumar Yadav / Dr. Mohammad Khalid Pandit	ANANT VERMA	Completed
3.	Improving Topic Modeling through a Hybrid Approach Utilizing LDA, BERT and Clustering Technique.	Dr. Arun Kumar Yadav	TUSHAR GPTA	Completed

4.	A Multimodal approach for cyberbullying detection in Social-Media Posts.	Dr. Arun Kumar Yadav	RISHABH DEO SINGH	Completed
5.	Instagram Fake Profile Detection Using Deep Learning.	Dr. Arun Kumar Yadav	ABHISHEK SURAJ	Completed
6.	Machine Translation for Low-Resource and Morphologically Rich Languages: Focusing on the Hindi-Kangri Pair.	Dr. Arun Kumar Yadav / Dr. Mohammad Khalid Pandit	VIJAY KUMAR	Completed
7.	A Multimodal Approach for Early Autism Spectrum Disorder Detection in Young Children.	Dr. Arun Kumar Yadav	AKSHAY KUMAR	Completed
8.	Landslide Detection using Deep Learning.	Dr. Arun Kumar Yadav	SHAHIL SHARMA	Completed
9.	Revolutionizing Tomato Agriculture: Leaf Disease Detection using CNN and its Variants	Dr. Jyoti Srivastava, Dr. Ajay Kumar Mallick	Malika Sood	Completed
10.	Enhancing Hindi Named Entity Recognition using XLM-RoBERTa	Dr. Jyoti Srivastava, Dr. Ajay Kumar Mallick	Ajay Kumar	Completed
11.	Deep Learning Based Watermarking for Electronic Health Records	Dr Mohit Kumar, Dr. Ajay Kumar Mallick	Sakshi	Completed
12.	Fine-Grained Birds Classification	Dr Mohit Kumar, Dr. Ajay Kumar Mallick	Nidhi Singh	Completed
13.	Speech Signal's Phase Information based Alzheimer's Disease Detection using Deep Learning	Dr Mohit Kumar	Sushant	Completed
14.	3D AIR-UNet: Attention-Inception-Residual based U-Net for Brain Tumor Segmentation from Multimodal MRI	Dr Mohit Kumar	Vani Sharma	Completed

15.	Text Summarization of Scientific Documents	Dr Mohit Kumar	Kriti Kinja	Completed
16.	Investigation of scalability of machine unlearning algorithms	Dr Mohit Kumar	Anmol Madaik	Completed
17.	Detection of Adversarial Attacks using Deep Learning Based Intrusion Detection System	Dr Mohit Kumar	Mohit Kumar	Completed
18.	Real-time Curve Lane Detection in Single and Multi-lane Roads	Dr Mohit Kumar	Jatin Khatri	Completed
19.	Multimodal 3D Object Detection for Autonomous Vehicles	Dr Mohit Kumar	Yuvraj Bhati	Completed
20.	Integration and Optimization of Large Language Models in Edge Computing Environments	Dr. Pardeep Singh / Dr. Mohammad Khalid Pandit	Sarthak Bhardwaj	Completed
21.	Framework for Traffic Sign Detection in Poor Weather based on Selective State Space Model	Dr. Sangeeta Sharma / Dr. Ram Prakash Sharma	Kirthika R	Completed
22.	Cardiovascular Diseases Detection Using Advanced Deep Learning Methods	Dr. Sangeeta Sharma / Dr. Ram Prakash Sharma	Avinash Kumar	Completed
23.	Encoder - Based Trusted Routing Algorithm for Underwater Wireless Sensor Networks	Dr. Sangeeta Sharma / Dr. Robin Singh Bhadoria	Aatreya Kapoor	Completed
24.	Task scheduling in distributed real-time systems using hybrid model based on Ant Colony Optimization & Genetic Algorithm	Dr. Sangeeta Sharma / Dr. Robin Singh Bhadoria	Anchal Sharma	Completed
25.	Next-Gen CAPTCHAs: Integrating Computer Vision for Enhanced Security	Dr. Priyanka / Dr. Robin Singh Bhadoria	Abhijeet Gupta	Completed

26.	BERT-based Meta-Stacked Ensemble Learning in Sentiment Analysis and Prediction	Dr. Priyanka / Dr. Robin Singh Bhadoria	Kishan Kumar	Completed
27.	Image Steganography Technique using Discrete Wavelet Transform and Genetic Algorithm	Dr. Priyanka / Dr. Robin Singh Bhadoria	Arpita	Completed
28.	Optimal relay node placement in WBANS using ant colony optimization with game theory	Dr. Priyanka / Dr. Robin Singh Bhadoria	Anshul Kumar	Completed
29.	Dynamic Cluster Head Replacement Algorithm for Energy Optimization in Wireless Sensor Network	Dr. Priyanka / Dr. Robin Singh Bhadoria	Abhishek Kapoor	Completed
30.	Enhancing Fog-based Caching in Information Centric Networks	Dr. Nitin Gupta	Sitaram Rathi	Completed
31.	CarBlock: Carbon Emission Detection Model and Blockchain based Carbon Credit Trading	Dr. Nitin Gupta	Mayur Kumar	Completed
32.	Detection Confidence Based Sensing Model for Visual Sensor Network Simulation	Dr. Nitin Gupta	Rudresh Patel	Completed
33.	Heart Disease Prediction Evaluation of Machine Learning Models with PSO-optimized K-fold Cross-validation	Dr. Nitin Gupta/ Dr. Preeti Soni	Nikita Gupta	Completed
34.	Mitigating IoT Security Risks: Enhanced Ransomware attack Classification	Dr. Nitin Gupta	Vaibhav Kumar	Completed
35.	Comparative Analysis of Deep Learning Architecture for Multi Class Classification of Kidney Pathologies and Kidney Stone Detection Using	Dr. Nitin Gupta/ Dr. Preeti Soni	Abhiraj Singh	Completed

	Yolo Nas			
36.	Enhanced Trust Evaluation in IoT with Shannon Entropy and Multi Attribute Decision Making	Dr. Nitin Gupta/ Dr Ram Prakash	Shubham Thakur	Completed
37.	Cache Optimization in Information Centric Network using Deep Q Network	DR. Nitin Gupta/Dr Ram Prakash	Ayush Dwivedi	Completed
38.	Enhancing IoT Security: Integrating and Analyzing Combined Attack Datasets Using Machine Learning Algorithms	Dr. Nitin Gupta	L.VAMSI	Completed
39.	Text Summarization of Legal Documents	Dr. Jyoti Srivastava	Adityan Gupta	Completed
40.	English-Hindi Neural Machine Translation	Dr. Jyoti Srivastava	Saket Thakur	Completed
41.	Text Classification for Indian Languages	Dr. Jyoti Srivastava	Shivam Pathak	Completed
42.	Enhancing Graph based Models for Automatic Program Repair	Dr. Jyoti Srivastava	Vaibhav Singh	Completed
43.	Sarcasm Detection: Leveraging Bi-LSTM Multihead Attention and Hybrid CNN-Bi-LSTM Networks with Pre-trained Embeddings	Dr. Jyoti Srivastava	Harish Thakur	Completed
44.	Extractive Text Summarization of Hindi Documents	Dr. Jyoti Srivastava	Saddam Hussain	Completed
45.	Evaluating and Optimizing Sentiment Analysis Techniques for Public Opinion	Dr. Jyoti Srivastava	Jatin	Completed

	on Climate Change			
46.	Identification and Classification of E-Waste Items through Deep Learning with Comparative Analysis of CNN Models	Dr. Mamta Awasthi, Dr. Jyoti Srivastava	Neha Sharma	Completed
47.	Machine Learning based Anxiety Detection using Physiological Signals and Context Features	Dr Rajeev Kumar	Arushi Jain	Completed
48.	A Comprehensive Study on Blockchain-based Healthcare Data Management with Off-chain Integration	Dr Rajeev Kumar	Kratika Mittal	Completed
49.	Multimodal based Approach to Identify Hate Content in Videos using Adaptive Multi-Scale Vision Attention Module	Dr Rajeev Kumar	Sudhansu Toppo	Completed
50.	Pitch Detection using Comprehensive Pitch Detection Model	Dr Rajeev Kumar	Lalit Kumar	Completed
51.	Vision Transformer Based Classification of Harmful Pests	Dr. Priyanka Rathee/ Dr. Preeti Soni	Kalash Rana	Completed
52.	Enhancing Healthcare Data Classification with CNN	Dr Rajeev Kumar	MD SOHAIB IQUBAL	Completed
53.	Hybrid Approach to Healthcare Data Management Using Blockchain and Machine Learning Algorithm	Dr Rajeev Kumar	Rohit	Completed
54.	YOLOv8 Driven Based Early Detection of Breast Cancer Using Mammography Imaging Analysis	Dr Rajeev Kumar	Ankita Thakur	Completed
55.	Advanced Candlestick Pattern Recognition in Financial	Dr Rajeev Kumar	Ankita Thakur	Completed

	Market Analysis Using a Modified YOLOv8 Deep Learning Mode			
56.	YOLOv8-Based Early Blight and Late Blight Disease Detection in Potato	Dr Rajeev Kumar	Ritika Rangotra	Completed
57.	CNN Based Internet of Things Intrusion Detection System Using Edge-IIoT Dataset	Dr. Naveen Chauhan	Mahima Singh	Completed
58.	Enhancing Skin Lesion Analysis: Leveraging UNet and VGG Architectures in Deep Learning Models	Dr. Naveen Chauhan	Mayank Choudhary	Completed
59.	FRPC: Faster Rate Pacing Cache for Next Generation Computers	Dr. Naveen Chauhan	Himesh Mishra	Completed
60.	Optimized Liver Segmentation in the Duke Dataset Using Ducknet	Dr. Naveen Chauhan	Vanshika Thakur	Completed
61.	Optimizing Prediction of Ejection Fraction from Heart Ultrasound Videos Using Deep Compression Model	Dr. Naveen Chauhan	Raman Sharma	Completed
62.	Designing a Snapshot Algorithm for Wireless Sensor Networks	Dr. Naveen Chauhan	Abhinav Mishra	Completed
63.	High Performance Hate Speech Detection with Hybrid Attention	Dr. Naveen Chauhan	Vineet Kaundal	Completed
64.	Precision Agriculture using Data Analysis	Dr. Naveen Chauhan	Harshit Sharma	Completed
65.	Smart Wearable for Early Detection of Cardiac Arrest	Dr. Siddhartha Chauhan	Aryan Pal	Completed
66.	Augmented Explainability in Brain Tumor Detection using Deep Learning Technique	Dr. Siddhartha Chauhan	Akhil Sharma	Completed

67.	Webot Detection using keyboard Behavioural Analysis	Dr. Siddhartha Chauhan	Vasvi Sharma	Completed
68.	Prediction of Alzheimer's Disease Progression using Deep Learning	Dr. Siddhartha Chauhan	Shama Devi	Completed
69.	Heart Disease Prediction using Data Mining Classification Algorithms	Dr. Siddhartha Chauhan	Deepanshu Sharma	Completed
70.	Pneumonia Detection using RESNET 50 Transfer Learning Technique	Dr. Siddhartha Chauhan	Kailash Rana	Completed
71.	Plant Disease Classification using Deep Learning	Dr. Siddhartha Chauhan	Aashish	Completed
72.	Task Partitioning and Offloading Optimization in Joining Coverage Scenario with Multiple VECS	Dr. Siddhartha Chauhan	Virendra	Completed
73.	Understanding and Reducing Hallucinations in Neural Machine Translation	Dr. Siddhartha Chauhan	Shorya Rajput	Completed
74.	Optimal Routing in Underwater sensor Networks	Dr. Dharmendra Prasad Mahato	Piyush	Completed
75.	Optimizing Fanet Routing with Ant Colony Optimization	Dr. Dharmendra Prasad Mahato	Shiksha Meena	Completed
76.	Underwater Wireless Sensor Network Based on Multi-hop Transmission using Ant Colony Optimization Algorithm	Dr. Dharmendra Prasad Mahato	Nitin Kowshik	Completed
77.	Reduced Competitive ratio of Sparse Semi-oblivious routing using social spider algorithm	Dr. Dharmendra Prasad Mahato	Abhishek Dhiman	Completed
78.	An Insider Threat Resilient Framework Based on Honey Traps in a Function-Based	Dr. Dharmendra Prasad Mahato	Kartikey Jangir	Completed

	Access Control Environment			
79.	Zero-day exploits framework of supply chain networks	Dr. Dharmendra Prasad Mahato	Abhi Khandelwal	Completed
80.	Honey Bee Inspired Routing Algorithm for Sparse Unstructured P2P Networks	Dr. Dharmendra Prasad Mahato	Aman Verma	Completed
81.	Advancing Multi-Writer Snapshots Algorithm	Dr. Dharmendra Prasad Mahato	Shudhanshu Sharma	Completed
82.	Adaptive Consensus: Enhancing Robustness in Dynamic Environments	Dr. Dharmendra Prasad Mahato	Khitij Mandyal	Completed
83.	Hop-Constrained Oblivious Routing using Prim's-Sollin's Algorithm	Dr. Dharmendra Prasad Mahato	Mehak	Completed

#### 5. DOCTORAL PROGRAMME:

Sr. No	Name of the student	Guide	Title	Brief Report
1.	Kuldeep Singh Jadon	Dr. Nitin Gupta	Towards IoT for Sustainable Computing	Ongoing
2.	Aschalew Tirulo Abiko	Dr. Siddhartha Chauhan	Machine Learning and Deep Learning methods for detecting stealthy cyber-attacks on Internet-of-Things (IoT) systems	Ongoing
3.	Deepa Rani	Dr. Rajeev Kumar	Energy Efficient and Secure Framework for IoT-based Healthcare	Ongoing
4.	Ishana Attri	Dr. T. P. Sharma	Plant disease detection using deep learning	Ongoing
5.	Sourav Mondal	Dr. Priyanka/ Dr. Prakash Chaudhary	Brain Stroke Prediction using Machine Learning	Ongoing

6.	Azmera Chandu Naik	Prof. Lalit Kumar Awasthi Dr. Priyanka	Design of An Efficient Trust-Aware Secure Routing Strategy For The Internet of Things (IoT) Network	Ongoing
7.	Pooja Rani	Dr. Kamlesh Dutta, Dr. Vijay Kumar	Drug Synergy for Malignant Disease Using Deep Learning	Degree Awarded
8.	Rakhi	Dr. T. P. Sharma	Improving Data availability in Large-Scale wireless sensor networks	Ongoing
9.	Vikas Kashtriya	Dr. Pardeep Singh	Knowledge Extraction from Medical Summary	Ongoing
10.	Vishal Kaushal	Dr. Sangeeta Sharma	Privacy-Preserving Efficient Federated Learning Model for Spam Email Detection	Ongoing
11.	Shobhit Tyagi	Dr. Divakar Yadav	Deep Learning Based Approaches for Fake Image Detection	Degree Awarded
12.	Tarun Agrawal	Dr. Prakash Choudhary	Classification and Segmentation of Chest Radiography Images Using Deep Convolutional Neural Network	Degree Awarded
13.	Shubhkirti Sharma	Dr. Vijay Kumar	Development of Dominance based Multi-Objective Algorithms for Engineering Problems	Ongoing
14.	Himanshu Verma	Dr. Naveen Chauhan	Resource-Constraint-6LoWPAN based 'Internet of Healthcare Things'	Degree Awarded
15.	Radha Rani	Dr. Dharmendra Prasad Mahato	Distributed Computing	Degree Awarded
16.	Poonam Kashtriya	Dr. Pardeep Singh	Knowledge Extraction	Ongoing
17.	Yogendra Kumar	Dr. Basant Subba	Intrusion Detection System frameworks using Machine Learning approaches	Degree Awarded

18.	K Susheel Kumar	Dr. Nagendra Pratap Singh	Medical image processing	Degree Awarded
19.	Piyush Rawat	Dr. Siddhartha Chauhan	Energy Efficient Protocols to Maximize the Lifetime of Wireless Sensor Networks	Degree Awarded
20.	Vishnu Kumar Prajapati	Dr. T. P. Sharma	An Efficient and Fault Tolerant Data Dissemination in IoT Enabled Systems	Ongoing
21.	M Sreenu	Dr. Nitin Gupta	A Novel resilient and responsive Pharmaceutical supply chain through Blockchain and Artificial Intelligence	Degree Awarded
22.	Namrata Kumari	Dr. Pardeep Singh	Text Summarization	Ongoing
23.	Chetan Agarwal	Dr. Kamlesh Dutta	Anaphora Resolution in English to Hindi Machine Translation	Ongoing
24.	Piyush Rawat	Dr. Siddhartha Chauhan	Energy efficient protocols in Wireless Sensor Networks	Degree Awarded
25.	Tanuj Wala	Dr Rajeev Kumar and Dr. Ajay Kumar Sharma	Efficient Handling of Big Data in Internet of Things	Degree Awarded
26.	Kusum Lata	Dr. Pardeep Singh	Coreference Resolution for Hindi language Text Using Deep Learning	Degree Awarded
27.	Nishant Sharma	Dr. Naveen Chauhan	Improving data availability in internet of vehicle environment	Degree Awarded
28.	Sourav Mondal	Dr Priyanka/Dr Prakash Choudhary	Brain Stroke Prediction using Machine Learning	Ongoing
29.	Himanshu Kumar	Dr. Kamlesh Dutta	Deep Learning for IoT in Healthcare	Ongoing
30.	Rangu Manjula	Dr. Naveen Chauhan	Developing Smart and Secure Agricultural Supply Chain System Based on BlockChain Technology.	Ongoing

31.	Md. Ataullah	Dr. Naveen Chauhan	Security and Privacy in Internet of Things	Ongoing
32.	Pranjal	Dr. Siddhartha Chauhan	Human Activity Recognition (HAR) using Deep Learning Models	Completed
33.	Ritika Verma	Dr. Dharmendra Prasad Mahato	Maximal Independent sets in Distributed System	Ongoing
34.	Ranjeet Chaudhary	Dr. Mohit Kumar	Cyberbullying detection in low resource languages	Ongoing
35.	Ramakrishna Miryala	Dr. (Mrs.) Kamlesh Dutta	Fabric Detect Detection using DL	Ongoing
36.	Vandana	Dr. Arun Kumar Yadav	Application of Machine Learning and Natural Language Processing in Low Resource Language	Ongoing
37.	Smriti Guleria	Dr. Nitin Gupta	Issues in Edge Computing	Ongoing
38.	Mohammad Azeem	Dr. Dharmendra Prasad Mahato	Snapshot Algorithm in Distributed System	Ongoing
39.	Akanksha Yadav	Dr. Sangeeta Sharma	Human Disease Detection	Ongoing
40.	Garima Thakur	Dr. Jyoti Srivastava	Natural Language Processing	Ongoing
41.	Dipti Sharma	Dr. Naveen Chauhan	Digital Twin in Healthcare	Ongoing
42.	Subeesh A	Dr. Naveen Chauhan	Machine Learning and IoT in Agriculture	Ongoing
43.	Praveen Prakash	Dr. Priyanka	Security of sensitive data in IoT environment	Ongoing
44.	Satish Chander Sharma	Dr. Dharmendra Prasad Mahato	Oblivious Routing in distributed System	Ongoing
45.	Ankit Verma	Dr. T.P. Sharma	Early Detection of Heart Diseases Using Efficient ML Techniques	Ongoing

46.	Vikas Kashtariya	Dr. Pardeep Singh	SDOH Extraction in Medical Text	Ongoing
47.	Akash Verma	Dr. Arun Kumar Yadav	Deep learning based Brain tumor Segmentation and Classification from MRI images	Ongoing
48.	Samridhi Singh	Dr. Rajeev Kumar and Dr. Nagendra Pratap Singh	Detection and Identification of Ovarian Cancer using AI	Ongoing
49.	Divya Jyoti	Dr. Dharmendra Prasad Mahato and Dr. Jyoti Srivastava	Text Summarization	Ongoing
50.	Geetanjali	Dr. Mohit Kumar	Hate Speech detection in Hindi Text on social media	Ongoing
51.	Devender Singh Daila	Dr. Rajeev Kumar and Dr. Prakash Chaudhary	Use of AI in Ultrasound images	Ongoing
52.	Neha Sharma	Dr Mohit Kumar	Sentiment analysis for low resource languages	Ongoing
53.	Ashutosh Sharma	Dr. Ram Prakash Sharma	Explainable and Generative AI for Biometric Security	Ongoing
54.	Shorav Verma	Dr. Ajay Kumar Mallick	Development of Deep learning Approach for Image Enhancement in Adverse Visual Conditions	Ongoing
55.	Vishal Kaushal	Dr. Sangeeta Sharma	Privacy Preserving Efficient Federated Learning Model for Spam Email Detection	Thesis Submitted
56.	Akanksha Yadav	Dr. Sangeeta Sharma	Sentiment Analysis in Social Media	Ongoing
57.	Bhanu Pratap Singh	Dr. Sangeeta Sharma	Computer Vision in Agriculture and Biodiversity	Ongoing
58.	Abhishek Sharma	Dr. Preeti Soni	Cyber Attack Detection and Prevention Mechanism for	Ongoing

			secure internet use.	
59.	Aanchal Bhandari	Dr. Naveen Chauhan	Mobile Device Security	Ongoing
60.	Robin Mongra	Dr. Siddhartha Chauhan	Security in IOT	Ongoing
61.	Amisha Gupta	Dr. Dharmendra Prasad Mahato	Minimum Dominating Set Problem	Ongoing

#### 6. Visit of Renowned Speakers:

- Prof. Vijay Laxmi Gaur, MNIT Jaipur
- Dr. Neetesh Saxena, Cardiff University, United Kingdom
- Dr. Yamuna Prasad, IIT Jammu

#### 7. CONSULTANCY SERVICES:

Sr. No	Name of the Scheme	Sponsored Agency	Amount Earned
1.	Dharamshala Smart City, HP	DSCL Dharamshala Smart City Limited	5,49,210 /-

#### 8. EQUIPMENTS ACQUIRED:

Sr. No.	Name of equipment	Name of manufacturer	Cost (Rs.)
1	Desktop	Arihant Enterprise	1627200.00
2	Interactive Panel 86"	Store	167499.00
3	Interactive Panel 75"	Store	293080.00
4	Projector	Store	173397.00
5	"Furniture a) Computer Chair b) Conference Table c) Conference Revolving Chair d) Study Cubical Table e) Study Chair f) Book Shelf g) Almirah h) Master Chair i) Visitor Chair"	"R Son Furniture Udyog"	1691613.00
6	Printer	"M/s Himtech Image Solution Shimla"	101281.98
7	A.C.	M. N. Agencies	639000.00
8	"Furniture a) Executive Table b) Executive Chair c) Computer Chair d) Computer Table e) Visitor Chair"	"M/S R Son Furniture Udyog, Mandi"	397932.06
9	Desktop	Alakh Infotech	7771695.00
Total			12862698.04

**9. TECHNICAL ASSOCIATION / SOCIETIES:**

- a. Google Developer Student Club (GDSC)
- b. CSEC: Computer Science Engineers' Community
- c. GLUG: GNU/Linux Users Group

**10. DETAIL OF THE LABORATORIES:****Name of the Laboratory**

- Artificial Intelligence and Robotics Lab
- Computer Organization and Architecture Lab
- Compiler Design Lab
- Computer Graphics Lab
- Computer Network Lab
- Data Structure Lab
- Data Base Management Lab
- Digital Image Processing Lab
- Microprocessor and Interfacing Lab
- Object Oriented Paradigm Lab
- Operating System Lab

### 3.4 DEPARTMENT OF ELECTRICAL ENGINEERING



#### 1. Academic Staff:

**Head:** Dr. O.P. Rahi, Associate Professor

#### FACULTIES:

Professor	Associate Professor	Assistant Professor (Grade-I)		Assistant Professor (Grade-II)
04	06	07		05
Sr. No	Name	Designation	Qualification	Specialization
1.	Prof. (Dr.) Yog Raj Sood	Professor (HAG)	Ph.D.	Power system & AI Applications to
2.	Prof. (Dr.) Sushil Chauhan	Professor	Ph.D.	Power Systems
3.	Prof. (Dr.) Ram Naresh Sharma	Professor	Ph.D.	Power Systems
4.	Prof. (Dr.) Ashwani Kumar Chandel	Professor	Ph.D.	Electric Power Quality & Harmonics
5.	Dr. Ravinder Nath	Associate Professor	Ph.D.	Signal processing & Control Engineering
6.	Dr. Veena Sharma	Associate Professor	Ph.D.	Instrumentation & Control Engineering
7.	Dr. R. K. Jarial	Associate Professor	Ph.D.	Power Electronic & Drives, High Voltage Engineering
8.	Dr. B. B. Sharma	Associate Professor	Ph.D.	Control Engineering
9.	Dr. O. P. Rahi	Associate Professor	Ph.D.	Power Systems
10.	Dr. Amit Kaul	Associate Professor	Ph.D.	Signal Processing & Control Engineering
11.	Dr. Himesh Handa	Assistant Professor (Grade-	Ph.D.	Instrumentation & Control Engineering
12.	Dr. Rajesh Kumar	Assistant Professor (Grade-	Ph.D.	Power Systems
13.	Dr. Bharti Koul	Assistant Professor (Grade-	Ph.D.	Power Systems

14.	Dr. Ram Niwash Mahia	Assistant Professor (Grade-	Ph.D.	Networked Control Systems
15.	Dr. Chandrasekaran S	Assistant Professor (Grade-	Ph.D.	Cyber Security of Power Electronic and Power
16.	Dr. Vivek Sharma	Assistant Professor (Grade-	Ph.D.	Instrumentation and Control Engineering
17.	Dr. Jiwanjot Singh	Assistant Professor (Grade-	Ph.D.	Power Electronics, Power Quality and Renewable
18.	Dr. Supriya Jaiswal	Assistant Professor (Grade-	Ph.D.	Power Systems
19.	Dr. Pankaj Kumar Mishra	Assistant Professor (Grade-	Ph.D.	Control Systems, Nonlinear Control, Machine Learning
20.	Dr. Sreeram T S	Assistant Professor (Grade-	Ph.D.	Power Systems
21.	Dr. Katam Nishanth	Assistant Professor (Grade-	Ph.D.	Non-Thermal Plasma, AI and ML applications
22.	Dr. Upasana Sarma	Assistant Professor (Grade-	Ph.D.	Power System and Power Electronics

## 2. Patents (Total Filed-01 and Total No. 01)

S. No.	Inventor Name(s), Designation, Department, Institute	Title of Patent	Registration / Reference No.	Date of Award / Filing (Day, Month, Year)	Awarding Agencies	Status
1.	Singh, Arush, Patil, Atul J., Sharma, Dr. R K Jarial (Associate Professor), Department of Electrical Engineering, NIT Hamirpur (H.P.), Ram Naresh, Hasmat Malik	Multichannel Electronic Device with Dynamic Sampling and Integrated Auxiliary System	202211050584	22-07-2023	I.P. India	Filed

## 3. Research Publications:

Publications	2024-25
National Journal	-
International Journals	30
National Conference	-
International Conference	40
No. of Books Published	-
Book Chapters	08

## 4. Seminar, Symposia, Summer school, Winter school, Short term course:

### a. Conducted in the Department: 09

Sponsoring Agency	Name of the Coordinators and Convener	Title of the Seminar/Symposia	Duration	Venue
NIT Hamirpur	Dr. Ram Niwash Mahia and Dr. Pankaj Kumar Mishra (Coordinators)	FDP on "Opportunities and Applications of	May 06-10, 2024	NIT Hamirpur

	and Dr. Veena Sharma (Convener)	Artificial Intelligence in Electrical Engineering”		
NIT Hamirpur	Dr. Katam Nishanth and Dr. Sreeram T. S. (Coordinators) and Dr. Ram Niwash Mahia (Convener)	FDP on “AI and Data Analytics Applications in Power Systems”	June 03-07, 2024	NIT Hamirpur
NIT Hamirpur	Dr. Amit Kaul (Chairman), Dr. Rajesh Kumar and Dr. Bharti Koul (Secretaries), Dr. Veena Sharma and Dr. R. Nath Sharma (Joint Secretaries)	International Conference on Electrical Systems and Energy Technologies (ESET-2024)	August 24-25, 2024	NIT Hamirpur
ANRF (SERB)- INAE Woman Engineers Program	Coordinators- Dr. Sivaji Charavorti (INAE) Dr. Bharti Koul & Dr. Gargi Khanna	Workshop on “Empowering Women Engineers Through Pedagogical Skills EWPS-2025”	February 21-22, 2025,	NIT Hamirpur
NIT Hamirpur	Convener Dr. Bharti Koul & Dr. Vandana Sharma Chairperson : Dr. Veena Sharma Coordinators: Dr Rinshu & Dr. Sunder Kala	Workshop on “Empowering Her : Unblocking Potential, Igniting Change”	8th March 2025	NIT Hamirpur
NIT Hamirpur	Dr. Chandrasekaran S. and Dr. Supriya Jaiswal (Coordinators) and Dr. O. P. Rahi (Convener)	FDP on “Microgrid: Operation, Control and Protection”	April 18-22, 2024	NIT Hamirpur
NIT Hamirpur	Dr. Chandrasekaran S. and Dr. Jiwanjot Singh (Coordinators) and Prof. Ashwani Kumar Chandel (Convener)	FDP on “Power Quality Analysis and Improvement in Deregulated Power System”	May 18-22, 2024	NIT Hamirpur
NIT Hamirpur	Dr. Chandrasekaran S. and Dr. Supriya Jaiswal (Coordinators)	GiAN Course Modeling and Control of Power Electronic Converters for Energy System Applications	December 16-20, 2024	NIT Hamirpur
NIT Hamirpur	Dr. Upasana Sarma and Dr. Supriya Jaiswal (Coordinators) and Dr. B. B. Sharma (Convener)	FDP on “Advanced Energy Storage Systems for Electric Vehicles”	November 11-15, 2024	NIT Hamirpur

**b. Participated by faculty members: 09**

Name of the Faculty / staff Member	Course/Seminar	Organization	Duration	Venue
Dr. R. K. Jarial	A FDP on “IOT Applications in Electrical Power System Networks”	Electrical Engineering Department, NIT Patna	One Week	Online Mode
Dr. Ram Niwash Mahia	Two-Week Faculty Development Programme on “Cyber-Physical Systems & Control: Bridging the Gap to Future Technologies (CPSC-2025)”	Electronics and ICT Academy, NIT Patna (Sponsored by MeitY, India)	January 23-31, 2025	Online Mode
Dr. Ram Niwash Mahia	Viksit Bharat @2047	NIT Hamirpur	June18-22, 2024	NIT Hamirpur
Dr. Chandrasekaran S.	Capacity Building Workshop on Science Communication	IIT Hyderabad	March 01-05, 2025	IIT Hyderabad
Dr. Vivek Sharma	Multi-Agent Systems and Distributed Control (MAS 2024)	Department of Electrical Engineering MNNIT Allahabad, Prayagraj	27th September – 01st October 2024	MNNIT Allahabad, Prayagraj
Dr. Vivek Sharma	Modelling and Control of Power Electronic Converters for Energy System Applications	Department of Electrical Engineering NIT Hamirpur	December 16–20, 2024	NIT Hamirpur
Dr. Jiwanjot Singh	Viksit Bharat @2047	NIT Hamirpur	June18-22, 2024	NIT Hamirpur
Dr. Supriya Jaiswal	Workshop on “Empowering Women Engineers Through Pedagogical Skills EWPS-2025”	NIT Hamirpur Sponsored by ANRF	February 21-22, 2025	NIT Hamirpur
Dr. Supriya Jaiswal	Smart Grids and IT: Facilitating Electric Vehicle Integration into Renewable Energy Sources	NIT Raipur and IT Bhilai (Sponsored by MeitY, India)	March 17-27, 2025	Online Mode

**5. Research Component:****a. Research Scheme: 03 (Sponsored R & D Projects) Details**

Sr. No.	Title of the Scheme	Sponsored by	Assistance Received (Rs. In Lacs)	Investigator	Year (Duration)	Brief Report	Status
1.	Artificial Intelligence Based Automated Home-Waste	Himachal Pradesh State Council for Science Technology	Rs 2,20,000/-	PI- Dr. Himesh Handa, and Co PI (s)- Dr.	20, Dec. 2023 to 20, Dec. 2025	Waste segregation is a major aspect of any efficient waste management system. Mostly, recycling centres	Ongoing

	Segregator and Composter	& Environment (HIMCOS TE)		Rakesh Sharma, and Dr. Ashok Kumar		do manual processing and sorting of waste material which increases human interference. Since manual segregation is a very tedious task, therefore, there has been extensive research into the development of automated techniques for the same. The techniques are categorized as two distinct approaches- hardware-based approach which primarily employs the use of sensors, and software-based approach, which uses image processing and deep learning algorithms to perform the classification.	
2.	Solid State Transformer Technology for Emerging Trends in Electric Mobility and DC Micro-Grid	INAE-DST Under Abdul Kalam Technology Innovation National Fellowship	57.0 Lacs	Prof. H. M. Suryawan shi (PI) & Director, NITH with Faculty involved from EED Dr. R. K. Jarial (Associate Professor EED)	April 2022 to Till Date	R & D Project is in progress after being transferred to NIT Hamirpur. Procurement of project components and appointment of project staff is in progress.	Ongoing

3.	Development of High Power Grid Friendly Conductive and Static Wireless Chargers for Electrical Vehicles	ANRF, Govt of India Through SERB Mission for Advancement in High Impact Areas (MAHA)	Sanctioned Vide ANRF/MAHA/2024 /000156/ECF Dated 14/3/2025 for Total Rs. 18,36,00,318.0 under Lead Institute PI as Prof. Kastha & share of 06 Institutes (IIT Kharagpur, IIT Bhubaneswar, BIT Mesra, NIT Durgapur, NIT Hamirpur & VNIT Nagpur). The share of grant for NIT Hamirpur is Rs 21537600.00	NIT Hamirpur PI (s) as Dr. R K Jarial, Dr. Jiwanjot Singh & Dr. Upasana Sarma	February 2025 (03 Years)	The project envisaged Joint collab. Tasks alongwith partner industries to create High Capacity 50KW Prototype EV Charging Infra. for adoption at national level for EVs in India.	Ongoing
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#### (b) Research Publications: 70 (Numbers)

##### International Journals: 30

1. Sushil Chauhan and Mukesh Singh, "Transient Stability Assessment of Power Systems Integrating Wind Energy Utilizing Detailed Models and a Hybrid Ensemble Technique", Arabian Journal for Science and Engineering, March, 2025.
2. Sushil Chauhan and Mukesh Singh, "Static Security of Renewable Integrated Power Systems Using Ensemble of Modified ELM With Unsupervised Feature Learning Technique", Computers and Electrical Engineering, Vol. 120, December, 2024.
3. Atul Jaysing Patil, Ram Naresh Sharma, Raj Kumar Jarial, and Hasmat Malik, "Optimized Synthetic Data Integration With Transformer's DGA Data for Improved ML-Based Fault Identification", IEEE Transactions on Dielectrics and Electrical Insulation, Vol. 32, no. 1, pp. 598-607, February, 2025.
4. Atul Jaysing Patil, Ram Naresh Sharma, and Raj Kumar Jarial, "Assessing the Cost-effectiveness of Electric Trucks in Indian Food Supply Chains", International Journal of Emerging Electric Power Systems, Vol. 26, no. 2, pp. 293-317, 2025.
5. Atul Jaysing Patil, Ram Naresh Sharma, Raj Kumar Jarial, and Hasmat Malik, "Novel Four-Gas Fault Interpretation Graphical Technique for Mineral Oil Transformer", IEEE Transactions on Dielectrics and Electrical Insulation, Vol. 31, no. 5, pp. 2721-2730, October, 2024.
6. Romil Chauhan, Ram Naresh Sharma, and Veena Sharma, "Optimizing FACTS Controller Placement and Parameters Using Dung Beetle Optimizer for Enhanced Power System Performance", Electrical Engineering, Accepted, 2025.
7. Vineet Kumar, Veena Sharma, R. Naresh, and Yogendra Arya, "A Novel Predictive Control Strategy for Renewable Penetrated Interconnected Power System", Wiley Journal Optimal Control, Applications and Methods, Vol. 45, pp. 2190-2205, May, 2024.
8. Mathewos Lolamo, Rajan Kumar, and Veena Sharma, "Power Quality Improvement of Grid-Tied PV Systems With Continuous-Time Adaptive LMS and FOPI Control-Based DSTATCOM", International Journal of Electric Power Systems Research, Accepted, 2025.
9. Mathewos Lolamo, Rajan Kumar, and Veena Sharma, "Enhancing Power Quality of PV-DSTATCOM Integrated Grid With Modified Adaptive LMS Control", Journal of Electrical Engineering, Accepted, 2025.

10. Vineet Kumar, Veena Sharma, A.V. Pavan Kumar, Yogendra Arya, and Srinivas Chikkam, "A State-of-the-Art Review on Concurrent Voltage and Frequency Regulation Problems in Renewable Integrated Power Networks", *International Journal of Renewable and Sustainable Reviews*, Accepted, 2025.
11. Raj Kumar Jarial et. al., "Techno-economic Assessment of Photo Voltaics by Predicting Daily Global Solar Radiations Using Hybrid ANN-PSO Model", *Energy Systems*, Vol. 26, no. 2, April, 2024.
12. R. K. Ranjan and B B Sharma, "Reduced Order Observer Based Synchronization and Secure Communication for a Class of Nonlinear Chaotic Systems", *Journal of Applied Nonlinear Dynamics*, Vol. 13, no. 2, pp. 223-234, July, 2024.
13. A. K. Jaiswal and B B Sharma, "Cluster Synchronization of Networks of Chaotic Systems: A Comprehensive Review of Theory and Applications", *IETE Technical Review (Taylor & Francis)*, Vol. 41, no. 5, pp. 537-556, April, 2024.
14. R M Bora and B B Sharma, "Synchronization of Chaotic and Hyper chaotic Nonlinear Dynamical Systems and Their Numerous Applications: A Review", *Journal of Applied Nonlinear Dynamics*, Vol. 14, no. 2, pp. 313-341, March, 2025.
15. Abhishek Saini and O. P. Rahi, "Optimal Power Flow Approaches for a Hybrid System Using Metaheuristic Techniques: A Comprehensive Review", *International Journal of Ambient Energy*, Vol. 45, Issue 1, pp.1-23, May, 2024.
16. Piyush Mahajan, and Amit Kaul, "Fusion of Multiple Time-Frequency Representation Techniques and Classifiers for ECG and PPG Signal Analysis", *International Journal of Biomedical Engineering and Technology*, December, 2024.
17. Syed Mohammad Zeeshan, Bharti Koul, and Obaid Ashraf, "Managing Demand in Commercial and Industrial Sectors: A Comprehensive Review", *International Journal of Innovative Research Growth*, Vol. 13, pp. 108-115, 2024.
18. Manish Kumar Panday, Ram Niwash Mahia, et. al., "Robust and Metaheuristic Load Frequency Control Techniques for Renewable Energy-Based Power System: Comprehensive Review and Comparative Analysis", *International Journal of Ambient Energy*, Taylor & Francis, Vol. 46, Issue 1, pp. 1-31, March, 2025.
19. Chandrasekaran S, A. K. Sahoo, Sandeep Negi, and Supriya Jaiswal, "Single-Phase Pseudo Open-Loop Grid Voltage Attributes Tracking Scheme Based on Non-Adaptive Linear-Phase Filters", *IEEE Transaction on Instrumentation and Measurement*, Vol. 74, March, 2025.
20. A. K. Singh, D. K. Tiwari, NBD Choudhury, and J. Singh, "Efficient peak current limit strategy and active power oscillation reduction in a three-phase grid-interfaced pv-battery system (gipvbs) with low voltage ride-through control", *Arabian Journal for Science and Engineering*, Vol. 50, Issue 8, pp. 5921-5943, October, 2024.
21. Hillol Phukan, Dinesh Kumar Tiwari, Jiwanjot Singh, and Avadh Pati, "Inherent Fault-Tolerant Multilevel Inverter", *Arabian Journal for Science and Engineering*, pp. 1-17, November, 2024.
22. Dinesh Kumar Tiwari, Abhishek Kumar Singh, Nalin Behari Dev Choudhury, and Jiwanjot Singh, "Isolation Based Reduced Switch Nine-Level High-Gain Multilevel Inverter", *IEEE Transactions on Industrial Electronics*, Vol. 72, Issue 4, pp. 3598-3608, October, 2024.
23. Dinesh Kumar Tiwari, Abhishek Kumar Singh, Nalin Behari Dev Choudhury, and Jiwanjot Singh, "Isolation-based bidirectional generalized step-up multilevel converter with optimized device count", *International Journal of Circuit Theory and Applications*, Vol. 52, Issue 9, pp. 4600-4639, September, 2024.
24. Ramudu Ganji, and Jiwanjot Singh, "A Modified Modular Multilevel Converter to Reduce the Second Order Ripples in the Submodule Capacitor Voltage: Design and Analysis", *International Journal of Circuit Theory and Applications*, Vol. 52, Issue 7, pp. 3357-3384, July, 2024.
25. Sidharth Sabyasachi, Arvind R. Singh, Revati Godse, Supriya Jaiswal, Ishan Srivastava, Vojtech Blazek, Lukas Prokop, and Stanislav Misak, "Reimagining E-Mobility: A Holistic Business Model for the Electric Vehicle Charging Ecosystem", *Alexandria Engineering Journal*, Vol. 93, pp. 236-258, 2024.
26. Ajay Swaroop Raturi, Raj Kumar Jarial, Yog Raj Sood, Ankur Maheshwari, Supriya Jaiswal, "Social Welfare Maximization in Deregulated Power Market Incorporating Wind Power Plants Using Metaheuristic Algorithm", *Wind Engineering*, Vol. 48, pp. 257-274, 2024.

27. Pallav, Himesh Handa and Bharat Bhushan Sharma, "Sliding mode based generalized technique for synchronization of identical and non-identical chaotic systems in presence of input nonlinearities", *Journal of Vibration and Control* (2025): pp 1-27, 2025.
28. Vatsal, Deven, Kailash Chand Sharma, and Vivek Sharma, "Fast frequency response for future low-carbon Indian power system: challenges and solutions," *Electric Power Components and Systems* (2024): 1-18, 2024.
29. P. K. Mishra and P. Jagtap, "Approximation-Free Control for Unknown Systems With Performance and Input Constraints," *IEEE Transactions on Automatic Control*, vol. 70, no. 5, pp. 3417-3424, May 2025.
30. P. K. Mishra and P. Jagtap, "Approximation- and Chattering-Free Quasi Sliding-Mode Control for Unknown Systems," *IEEE Transactions on Circuits and Systems II: Express Briefs*, vol. 71, no. 6, pp. 3081-3085, June 2024.

#### International Conferences: 40

1. Tushar Sharma and Sushil Chauhan, "Fast heuristic based distribution network reconfiguration with distributed generations", 2024 5th International Conference on Emerging Technology (INCET), Belgaum India, May 24-25, 2024.
2. Mathewos Lolamo, Rajan Kumar, and Veena Sharma, "Power Quality Enhancement of a PV-Integrated Grid System Using an Adaptive Neuro-Controller for DSTATCOM", International Conference on Electrical Systems and Energy Technologies (ESET-2024), NIT Hamirpur, India, August 24-25, 2024.
3. R. K. Jarial et. al., "Machine learning approach for analysing chemical degradation of power transformers: A study on synthetic data", AIP Conference Proceedings, February, 2025.
4. Aman Thakur, Bharat Bhushan Sharma, and Vivek Sharma, "Sparse Identification and M.P.C. Based Closed Loop Control of Nonlinear Quadruple Tank Process", 5th International Conference for Emerging Technology (INCET), Belgaum, Karnataka, India,, pp. 1-6, May 24-26, 2024.
5. Tushar Dhiman and Bharat Bhushan Sharma, "State and Parameter Estimation of Nonlinear Systems Using Extended Kalman Filter Based Sensor Fusion Approach", 5th International Conference for Emerging Technology (INCET), Belgaum, Karnataka, India,, pp. 1-6, May 24-26, 2024.
6. Pallov Anand, A. Pedro Aguiar, and B. B. Sharma, "Finite-Time Stabilization of a Class of Nonlinear Systems with Parametric Uncertainty Using Backstepping Approach: Application to Chaotic Systems", 16th APCA International Conference on Automatic Control and Soft Computing, Porto, Portugal; (Published in Lecture Notes in Electrical Engineering 1325, CONTROLLO 2024), pp. 540-551, July 17-19, 2024.
7. R. K. Ranjan and B B Sharma, "Stabilization and Synchronization of Discrete-Time Nonlinear Systems Using Output Feedback Control", IEEE Silchar Subsection Conference (SILCON-2025) held at NIT Agartala, pp. 1-6, November 15-17, 2024.
8. R. K. Ranjan, B B Sharma and D Prajapati, "Stabilization Through Contraction Based Output Feedback Control for a Class of Nonlinear Systems", IEEE International Conference on Intelligent Signal Processing and Effective Communication Technologies (INSPECT 2024) held at Gwalior (India), pp.1-6; December 7-8, 2024.
9. Rishabh Kumar, O. P. Rahi, and Supriya Jaswal "Power Quality Event Detection Using DWT and Fuzzy Logic", 2024 Second IEEE International Conference on Measurement, Instrumentation, Control, and Automation (ICMICA-2023), NIT Kurukshetra, May 3 - 5, 2024.
10. Akshay Kumar and O. P. Rahi, "Enhancing Substation Earthing System: A Finite Element Method For Minimizing Ground Resistance and Analyzing Electric Potential and Temperature Distribution", IEEE International Conference on Advances in Computer Science, Electrical, Electronics, and Communication Technologies (CE2CT-2025), Graphic Era Hill University, Bhimtal, Nagri Gaon, Uttarakhand, February, 21-22, 2025.
11. Abhishek Saini and O. P. Rahi, "Optimal Power Flow using Levy Flight Distribution Algorithm", International Conference on Electrical, Electronics & Automation (E2ACON2025), NIT Jalandhar, March 8-9, 2025.

12. Kriti Verma, and Amit Kaul, "Enhanced Information Security with ECG Biometric Authentication", International Conference on Emerging Application of Artificial Intelligence, Machine Learning and Cybersecurity (ICAMC- 2024) HMRITM, New Delhi, May 16-17, 2024.
13. Kriti Verma, and Amit Kaul, "Multimodal Biometric Fusion of ECG-PPG in eHealth Systems", International Conference on Electrical Systems and Energy Technologies (ESET-2024) NIT Hamirpur, H.P., August 24-25, 2024.
14. Tej Singh, Vijeta Vaerma, Rajesh Kumar, and Bharti Koul, "Maximum Power Tracking in PV Systems Using INC-based MPPT with Integral Regulator", International Conference on Electrical Systems and Energy Technologies (ESET-2024), NIT Hamirpur, H. P., August 24-25, 2024.
15. Aniket Kumar, and Rajesh Kumar, "Optimizing Wind Turbine Based Distribution Generation Sizing and Placement Using Particle Swarm Optimization", International Conference on Electrical Systems and Energy Technologies (ESET-2024), NIT Hamirpur, H. P., August 24-25, 2024.
16. Kunal Barwal, and Rajesh Kumar, "Environmental Impact of Floating Solar Panels: A Case Study on CO2 Emissions Reduction", International Conference on Electrical Systems and Energy Technologies (ESET-2024), NIT Hamirpur, H. P., August 24-25, 2024.
17. Rohit Prasher, and Rajesh Kumar, "Addressing System Inertia Load Flow and Stability With Dynamic Modeling in Large-Scale Wind and Solar Power Integration", International Conference on Electrical Systems and Energy Technologies (ESET-2024), NIT Hamirpur, H. P., August 24-25, 2024.
18. Raouf Ahmed, Bharti Bakshi Kaul, and Neetan Sharma, "Efficiency Augmentation Using SASTS and DASTS Under Instantly Varying Climatic Conditions", International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET), Patna, India, pp. 1-6, 2024.
19. S. Srivastava, R. Joshi, M. Kuri, P. Kumar, M. K. Pandey, and Ram Niwash Mahia, "Supercapacitor Based Energy Storage System in EVs: Review and Analysis", International Conference on Electrical Systems and Energy Technologies (ESET-2024), Department of Electrical Engineering, NIT Hamirpur (H.P.), India, August 24-25, 2024.
20. M. K. Pandey, P. Mishra, and Ram Niwash Mahia, "Analysis of Control Dynamics of a Robotic Arm Using Linear Quadratic Optimal Control Technique", 3rd IEEE International Conference on Modelling, Simulation, and Intelligent Computing (MoSiCom 2024), BITS Dubai Campus, Dubai, UAE, pp. 1-6, December, 2024.
21. P. Mishra, M. K. Pandey, and Ram Niwash Mahia, "Model Predictive Control for a 2-DOF Robotic Arm: Dynamics and Control", 3rd IEEE International Conference on Modelling, Simulation, and Intelligent Computing (MoSiCom 2024), BITS Dubai Campus, Dubai, UAE, pp. 1-6, December, 2024.
22. Aradhana, Amod Kumar, and Ashwani Kumar, "Health of Power Transformer Using Furanoic Compound Analysis", Second IEEE International Conference on Measurement, Instrumentation, Control and Automation (ICMICA-2023), NIT Kurukshetra, May 3 - 5, 2024.
23. Shivani, A. Kumar and S. Tiwari, "Comparative Study Based Economic Load Dispatch in Power System Using Different Metaheuristic Techniques", IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS), Bhopal, India, 2024.
24. S Thakur, A. Kumar and Chandrasekaran S, "Chaotic-PSO Approach for Optimal Power Flow", International Students' Conference on Electrical, Electronics and Computer Science (SCEECS), Bhopal, India, 2024.
25. A. Kumar, A. K. Chandel and S. Tiwari, "Transient Stability Improvement of Multi-Machine System by Using STATCOM With Power System Stabilizer", International Students' Conference on Electrical, Electronics and Computer Science (SCEECS), Bhopal, India, 2024.
26. Chandrasekaran S, and Sandeep, "Amplitude Error Based Frequency Deviation Detection for Grid Voltage Parameters Tracking", IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES), Mangalore, India, December 18-21, 2024.
27. Dev Srikrishna Alla, A. K. Sahoo, Sandeep Negi, and Chandrasekaran S, "Linear Phase-locked Loop based Hybrid Grid Synchronization for Grid-Forming Inverters", IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES), Mangalore, India, December 18-21, 2024.
28. Abhishek Kumar Singh, Dinesh Kumar Tiwari, Nalin Behari Dev Choudhury, and Jiwanjot Singh, "Optimizing Renewable Energy Integration: Real-Time Current Limiting for Grid-Feeding

- Inverter During LVRT Operation”, 2024 IEEE 11th Power India International Conference (PIICON), December, 2024.
29. Abhishek Kumar Singh, Dinesh Kumar Tiwari, Nalin Behari Dev Choudhury, and Jiwanjot Singh, “Challenges And Issues In LVRT Control Strategies For Grid-Interfaced PV Systems: A Brief Review”, 2024 IEEE 11th Power India International Conference (PIICON), December, 2024.
  30. Sayanjit Singha Roy, Ashish Paramane, and Jiwanjot Singh, “Automated Space Charge Detection Inside XLPE HVDC Cable Insulation Employing Customized Convolutional Neural Network”, 2024 IEEE 14th International Conference on the Properties and Applications of Dielectric Materials (ICPADM), pp. 77-80, August, 2024.
  31. Abhishek Kumar Singh, Dinesh Kumar Tiwari, Jiwanjot Singh, and Nalin Behari Dev Choudhury, “Enhanced Low-Voltage Ride-Through Capability of Grid-Interfaced Three Phase Solar PV Power Plant”, 2024 IEEE 4th International Conference on Sustainable Energy and Future Electric Transportation (SEFET), July, 2024.
  32. Dinesh Kumar Tiwari, Abhishek Kumar Singh, Nalin Behari Dev Choudhury, and Jiwanjot Singh, “PV Battery Assisted ANN-MPC Controlled SRM Motor Drive for Electric Vehicle Application”, 2024 IEEE 4th International Conference on Sustainable Energy and Future Electric Transportation (SEFET), July, 2024.
  33. Hillol Phukan, Jiwanjot Singh, Avadh Pati, and Ramudu Ganji, “Fault-Detection Analysis Technique of Pack-U-Cell Boost Multilevel Inverter”, 2024 IEEE 4th International Conference on Sustainable Energy and Future Electric Transportation (SEFET), July, 2024.
  34. Himanshu Raj, and Supriya Jaiswal, “Economic Load Dispatch in Microgrid Using Whale Optimization Algorithm”, 2024 IEEE 5th India Council International Subsections Conference (INDISCON), pp. 1-6, 2024.
  35. Supriya Jaiswal, Anmol Sharma, and Pranav Sharma, “Design of BLDC Motor for E-Rickshaw Application in Ludhiana City, India”, 2023 Second IEEE International Conference on Measurement, Instrumentation, Control and Automation (ICMICA), pp. 1-6, 2024.
  36. Supriya Jaiswal, Ankur Maheshwari, and Mukesh Singh, “Day-ahead Optimal Power Flow With Stochastic Wind and Solar Power Plants Using Harris Hawk Optimization”, 2024 IEEE 4th International Conference in Power Engineering Applications (ICPEA), pp. 226-231, 2024.
  37. Y. R. Sood, A. Maheshwari, and S. Jaiswal, “Optimal Power Flow Solution Based on Multi-verse Optimizer Algorithm Incorporating Renewable Energy Sources”, 2024 IEEE 4th International Conference in Power Engineering Applications (ICPEA), pp. 299-304, 2024.
  38. A. Kumar, H. Handa, “PI Sliding Mode Control and active Control Based Stabilization Scheme for a Chaotic System having Single Stable Equilibrium and its circuit Implementation”, 2024 5th International Conference for Emerging Technology (INCET), Belgaum, India. pp. 1-7, 2024.
  39. Vatsal, Deven, Kailash Chand Sharma, and Vivek Sharma, “Impact of Inverter-Based Resources on Low-Inertia Grids Under Varying Weather Conditions”, 2024 International Conference on Signal, Machines, Automation, and Algorithm. Springer, Singapore, 2024.
  40. Vatsal, Deven, Kailash Chand Sharma, and Vivek Sharma, “Fast Frequency Response Scheduling Considering Electric Vehicles and Renewable Generation”, 2024 IEEE 4th International Conference on Sustainable Energy and Future Electric Transportation (SEFET). IEEE, 2024.

**(c) Ph.D. Degree Awarded: 02**

Sr. No.	Name of the Candidate with Registration No.	Name of Supervisor(s)	Title of the Thesis	Brief Report
1.	Pallav Sahay 2K19-Phd. –EE-430	Dr. Himesh Handa	Control & Synchronization Schemes for a Class of Dynamical System	Chaos has been a topic of significant interest in the field of nonlinear systems for a long time. Various synchronization schemes have been developed, each holding significance for different applications. This work

				explores the feedback control technique for the synchronization of chaotic systems. Furthermore, circuit implementation using analog components has been carried out in NI Multisim.
2.	Bhumaiah Jula 2K19-Ph.D.-EE-437	Dr. R. K. Jarial	Control of Grid Converters for Electric Aircraft	The candidate has worked in the area of Electric Aircraft Power Smart Supply systems wherein several aspects including Grid Synchronisation issues along with renewable Energy have been covered. The PhD Degree was awarded on 23/10/2024.

**(d) Doctoral Programme (Ongoing): 25**

Sr. No.	Name of the Candidate with Registration No.	Name of Supervisor(s)	Tentative Title of the Thesis	Brief Report
1.	Mukesh Singh 2K19-Ph.D.-EE-431	Dr. Sushil Chauhan	Power System Security Assessment using Machine Learning Techniques	It is proposed to investigate static and dynamic aspects of power system security assessment using Machine Learning techniques. The candidate has submitted his thesis.
2.	Vivek Kumar 2K19-Ph.D.-EE-435	Dr. R. K. Jarial and Dr. Rajan Kumar	Design and Development of Improved Power Quality Multi-Functional Grid-Connected Solar Photovoltaic System	The candidate has submitted his Ph D thesis in December, 2024. He has focussed his research work in designing and implementing advanced algorithms to mitigate PQ issues in Grid Interconnected Solar Photovoltaic systems.
3.	Abhishek Saini 2K19-Ph.D.-EE-433	Dr. O. P. Rahi	Optimal Operation of Power System Incorporating Renewable Energy Resources	In this thesis optimization techniques have been applied to combinations of various energy sources. Particularly superiority of MALO algorithm is being proved over other techniques thus pressing economy and optimal operation in power system.

4.	Ravi Kumar Ranjan 2K19-Ph.D.-EE-438	Dr. Bharat Bhushan Sharma	Output Feedback Schemes for Stabilization and Synchronizat ion of Chaotic Systems for Stabilization and Systems	In many real world applications, it is not practical to measure all of the states directly. Usually, one can measure only a small number of outputs (corresponding to the sensors that are available). So designing control and synchronization schemes based on output feedback is desirable but a challenging task. The focus in current work is to study various output feedback and state feedback schemes and to design output feedback based control and synchronization strategies for a class of non-linear systems with and without parametric uncertainty. The results will be extended to address secure communication and message transmission and recovery schemes.
5.	Amita Singh 2K17-Ph.D.-EE-354	Dr. Veena Sharma	MPC Based Optimal Automatic Generation Control of RES Integrated Power Systems	The candidate is in the process of thesis writing. This research has proposed frequency regulation techniques for interconnected power system.
6.	Piyush Mahajan 2K19-Ph.D.-EE-429	Dr. Amit Kaul	Fusion of Shallow and Machine Learning Models for Disease Diagnosis via ECG and PPG Signals	This work focuses on the integration of Shallow and Deep learning models for non-invasive disease diagnosis.
7.	Manish Kumar Pandey 2K20-Ph.D.-EE-502	Dr. Ram Niwash Mahia	Design and Analysis of Robust Load Frequency Control Schemes for Power Networked Systems	The candidate is developing and testing of load frequency controllers and observers for a multi-area power system that incorporates renewable energies like wind and solar energy. To achieve this, the candidate is using Sliding mode and H-infinity Controllers and experimenting with established and new metaheuristic techniques to fine-tune the H-infinity and sliding mode controllers for optimal results.
8.	Romil Chauhan 2020-REE-001	Dr. Ram Naresh Sharma	Available Transfer Capability Enhancement of Transmission Systems in a Deregulated Environment	Available Transfer Capability (ATC) refers to the unused capacity available in the transmission system, not allocated to other purposes like current agreements or operational requirements.
9.	Yashasvi Chauhan 2020-REE-002	Dr. Bharat Bhushan Sharma	Stability and Synchronizat ion of	The main focus of this research work is to study synchronization phenomena in networks of coupled dynamical systems where the

			Complex Networked Systems	coupling topology can be expressed as a complex network. To analyze the synchronization of strict feedback like class of linear and non-linear systems, mainly contraction principle based approach is utilized. Further, synchronization problem of inter-connection of linear/non-linear systems in a complex network with linear and non-linear coupling is also analyzed and delays involved in system states as well as in coupling functions are taken into account to make the analysis more relevant to real world systems.
10.	Ankit Aharwar 2021-REE-001	Dr. Ram Naresh Sharma (Supervisor) and Dr. Veena Sharma (Co-Supervisor)	Analysis of Security Constrained Unit Commitment Problem Considering Renewable Energy	The problem of unit commitment is to determine the on-off status of generating units to supply required load at minimum cost including start-up costs of units.
11.	Ajay Swaroop Raturi 2021-REE-002	Dr. R. K. Jarial and Dr. Y. R. Sood	Optimum Utilisation of Renewable Energy Sources in the Deregulated Power Sector	The candidate has designed and developed advanced algorithms for ensuring Optimum Utilisation of Renewable energy sources in the Deregulated power sector and tried ensuring analysis efficacy by considering IEEE Standard bus systems. He has published 02 Papers in Reputed International Journals and has requested to deliver Open Seminaar.
12.	Atul Jay Sing Patil 22REE001	Prof. Ram Naresh Sharma (Supervisor) and Dr. R. K. Jarial (Co-Supervisor)	A Graphical and Synthetic Data-Driven Methodology to Enhance Transformer Incipient Fault Diagnostics	The candidate has developed some advanced tools for incipient faults based diagnosis for oil filled transformers using AI and ML based techniques. He has published 03 Papers in Journals. He has completed and going submit his research work in next few weeks.
13.	Himanshu Raj 22REE002	Dr. Supriya Jaiswal	Energy Scheduling in Multi Microgrid Scenario	Modelling of sources and loads in multi-microgrid scenario. Devising the algorithm for energy management and forecasting in microgrid operation.
14.	Mathewos Lolamo 22REE003	Dr. Rajan Kumar (Supervisor) and Dr. Veena Sharma (Co-Supervisor)	Power Quality Improvement in Solar PV Integrated Grid Systems using DSTATCO M	The work is focussed on addressing the power quality issues in renewable based power system.
15.	Atul Chadda 23REE001	Dr. Amit Kaul (Supervisor)	Power Output	Work is being planned to be carried out on Fault diagnosis and Life assessment of Electric

		and Dr. Rajesh Kumar (Co-Supervisor)	Prediction and Condition Monitoring of Renewable Energy Systems Using Artificial Intelligence	equipment.
16.	Tej Singh 23REE003	Dr. Rajesh Kumar and Dr. Bharti Koul	Challenges and Mitigation Strategies in Renewable Energy Integrated Power Grid	Work is being carried out to simulate computational model for integration of renewable energy systems with the main grid, Incorporating Energy Storage Systems (ESS) with RES to enhance overall system efficiency and reliability.
17.	Sapram Giridhar 24REE001	Prof. Ashwani Kumar Chandel	Power System Grid Synchronization Techniques	Grid tied converter for RES connected to the utility grid.
18.	Manisha Verma 24REE002	Dr. Himesh Handa	Control strategies for the stabilization & synchronization of Nonlinear Dynamical Systems	This work explores the control and synchronization techniques of nonlinear dynamical systems.
19.	Vijeta Verma 24REE003	Dr. Bharti Koul	Demand Side Management of Smart Grids	Work is being carried out to simulation and experimental work for Minimization of Electricity cost with user comfort including uncertainties by normalizing the load curve.
20.	Nishant Negi 24REE004	Dr. Veena Sharma	Investigation and Performance Analysis of Electric Vehicle	The work shall be carried out in the area of performance analysis of electric vehicle and hybrid electric vehicle.
21.	Vikas Kumar Badhan 24REE005	Dr. Ram Naresh Sharma	Power Quality Improvement	In this problem methods are developed to enhance the power quality of grid integrated solar PV systems.
22.	Ankit Kumar 24REE006	Dr. Ravinder Nath	Renewable Energy Systems and Their Integration	The integration of renewable energy systems is of paramount importance in today's energy landscape as the world transitions toward cleaner, more sustainable power sources. With growing concerns over climate change, depleting fossil fuels, and energy security, renewable energy technologies such as solar, wind, hydro, and biomass offer

				environmentally friendly alternatives that can significantly reduce greenhouse gas emissions. Their integration into existing energy grids enhances energy diversification, promotes decentralisation, and supports resilient infrastructure capable of accommodating fluctuating demands. Furthermore, renewable integration is vital for achieving national and international climate goals, ensuring long-term economic stability, and promoting energy access and equity, particularly in remote and underserved regions.
23.	Ankush Jaswal 24REE007	Dr. O. P. Rahi	Electric Vehicle Charging Infrastructure	Optimization of battery performance and energy efficiency in electric vehicles.
24.	Prathma Singh 25REE001	Dr. Upasana Sarma	PEM Fuel Cell Based Hybrid Energy System	The PEM fuel cell hybrid energy system offers a clean, efficient, and reliable power solution by combining hydrogen fuel cells with energy storage. It reduces emissions and improves performance, though cost and hydrogen infrastructure remain key challenges for broader adoption.
25.	Ishika 25REE002	Dr. Vivek Sharma	Chaotic System Synchronization	Chaotic system is a sub-class of nonlinear dynamical system. Chaotic System Synchronization refers to the process of coordinating the behaviour of two or more chaotic systems such that their states evolve in a correlated manner over time. This phenomenon has practical importance in fields like secure communications.

**(e) M. Tech. Dissertation Completed: 35 ( Passed Out in June 2024)**

Sr. No.	Name of the Student(s) with Roll No.	Name of Supervisor(s)	Tentative Title of Dissertation	Brief Report
1.	Tushar Sharma, 22MEE001	Dr. Sushil Chauhan	Fast Heuristic Based Distribution Network Reconfiguration With Distributed Generations	The work is focussed on reconfiguration of distribution system with distributed generation.
2.	Vivek Kumar Saini, 22MEE002	Dr. Ram Naresh Sharma	Optimal Location of Facts Device for Available Transfer Capability Using Firefly Algorithm	In this research, optimal location facts device is found to enhance the available transfer capability using firefly algorithm.
3.	Amit Kumar, 22MEE003	Dr. Ashwani Kumar Chandel	Transient Stability Improvement of Multi-Machine System by Using STATCOM With Power System Stabilizer	This research explored the synergistic impact of combining PSS and STATCOM in multi-machine systems under different transient conditions through extensive simulation studies. The efficacy of the suggested methodology is assessed using system stability metrics, including critical clearing time,

				transient stability margin, and rotor angle deviation.
4.	Nishant Thakur, 22MEE205	Dr. O. P. Rahi (Supervisor) and Dr. Chardrasekaran S (Co-Supervisor)	Incremental Conductance Based MPPT for Photovoltaic Systems Utilizing PI Controller	This dissertation highlights the use of the Incremental Conductance (INC) method to track the MPP in PV systems under varying environmental conditions.
5.	Sachin Sharma, 22MEE006	Dr. O. P. Rahi (Supervisor) and Dr. Sita Ram (Co- Supervisor)	Induction Motor Performance Improvement Through SPRS Using Multilevel Inverter	SPRS has been used for improving the performance of Induction Motor using 3, 5 and 7 level inverters. Research has optimized reactive power management and over all efficiency.
6.	Aniket Kumar, 22MEE007	Dr. Rajesh Kumar	Optimizing Genetic Algorithms for Distributed Generation Sizing and Location to Minimize Power Loss	Genetic Algorithms (GAs) is used for optimal placement and sizing of Distributed Generation (DG) within the IEEE 33-Bus-Radial Distribution System.
7.	Rohit Prashar, 22MEE008	Dr. Rajesh Kumar	Hybrid Renewable Energy Systems: An Impact Assessment and Analysis Based on Simulation for Sustainable Power	A simulation-based analysis and impact assessment of hybrid renewable energy sources focusing on long-term power generation and sustainability on grid system is carried out.
8.	Amit Kumar, 22MEE009	Dr. Yog Raj Sood	Study of power system resilience enhancement	The work explored the resilience enhancement in the power systems.
9.	Aadarsh Kapil, 22MEE010	Dr. Ram Naresh Sharma	Available Transfer Capability Calculation Using Continuation Power Flow Method	In this research, ATC is evaluated using the methodology of CPF approach on the standard IEEE 14 bus system.
10.	Rohit Verma, 22MEE011	Dr. Yog Raj Sood	Optimal location of distributed generation by application of machine learning	The work is focussed towards identifying optimum location of DGS which using machine learning concepts.
11.	Shivam Thakur, 22MEE012	Dr. Ashwani Kumar Chandel (Supervisor) and Dr. Chardrasekaran S (Co-Supervisor)	Optimal Power Flow by Using Hybrid Chaotic PSO Technique	Optimal Power Flow (OPF) is a fundamental problem in power system optimization, indispensable for ensuring efficient and reliable operation of modern power grids. This dissertation introduces a novel approach to tackle the OPF problem, leveraging the capabilities of a Hybrid Chaotic Particle Swarm Optimization (PSO) technique.

12.	Shivani, 22MEE013	Dr. Ashwani Kumar Chandel	Economic Load Dispatch Problem using Hybrid Meta-Heuristic Method MOA-PSO	This dissertation proposed a novel proposed hybrid meta-heuristic method, Magnetic Optimization Algorithm Particle Swarm Optimization (MOA-PSO), which synergizes the strengths of Particle Swarm Optimization (PSO) and the Magnetic Optimization Algorithm (MOA). PSO is proficient in local search but is prone to premature convergence, whereas MOA, inspired by magnetic dipole interactions, excels in global exploration. By integrating these methods, MOA-PSO achieves a balanced exploration-exploitation trade-off, resulting in faster convergence and higher-quality solutions.
13.	Shikha Thakur, 22MEE014	Dr. Yog Raj Sood	Simulation based analysis of microgrid using green energy resources	The work is focussed towards simulation based analysis of microgrid using green energy resources.
14.	Rishav Kumar, 22MEE016	Dr. O. P. Rahi (Supervisor) and Dr. Supriya Jaiswal (Co-Supervisor)	Power Quality Event Detection Using DWT and Fuzzy Logic	The proposed approach gives the characterization of power quality events by extracting the features from wavelet transform and classification is done using rule based fuzzy logic approach.
15.	Atul Kumar, 22MEE017	Dr. Yog Raj Sood (Supervisor) and Dr. Ram Niwash Mahia (Co- Supervisor)	Modeling and Simulation of Solar and Wind Based Hybrid Energy System	The work is focussed towards modeling and simulation of solar and wind based hybrid energy system.
16.	Kunal B. Arwal, 22MEE018	Dr. Rajesh Kumar	Examining the Feasibility of Floating PV at Bhakra Nangal Dam	The study focuses on the design and potential of an FPV system for the Bhakra Nangal Dam.
17.	Raouf Ahmed, 22MEE019	Dr. Bharti Koul	Efficiency Augmentation using Solar tracking system under Varying Climatic Conditions	Work has been done to study substantial disparities between the outputs, obtained through the two approaches. This compellingly underscores the advantages of employing solar tracking systems in enhancing energy generation.
18.	Chirag Thakur, 22MEE020	Dr. Ram Naresh Sharma	Optimal Capacitor Location in Radial Distribution Network to Improve Voltage Profile	Voltage profile improved using PSO approach in IEEE 15, 33, 69 radial distribution networks.

19.	Ajay Kumar, 22MEE021	Dr. O. P. Rahi (Supervisor) and Dr. Ram Niwash Mahia (Co- Supervisor)	Analysis of Power Quality in Integrated Smart Grid for EV's Charging Station	The work is related to the designing of charging station with active power filter for mitigation of total harmonic distortion.
20.	Abhinav Sharma, 22MEE022	Dr. Yog Raj Sood (Supervisor) and Dr. Supriya Jaiswal (Co-Supervisor)	Simulation of Green Electric Vehicle Charging Station and Optimal Placement of Distributed Generation and Electrical Vehicle Charging Station	The study focused on the Simulation of green electric vehicle charging station and optimal placement of distributed generation and electrical vehicle charging station.
21.	Akash, 22MEE101	Dr. Himesh Handa	Synchronization of Time-Dependent Dynamical Systems Using State Difference Integration, Iterative Learning Control and Contraction Theory	Chaotic system is a sub-class of nonlinear dynamical system. Chaotic System Synchronization refers to the process of coordinating the behaviour of two or more chaotic systems such that their states evolve in a correlated manner over time. This phenomenon has practical importance in fields like secure communications.
22.	Kriti Verma, 22MEE102	Dr. Amit Kaul	Enhanced Information Security with ECG Biometric Authentication	The thesis focussed on developing multimodal biometric solution using medical biometrics.
23.	Rakesh Kumar, 22MEE103	Dr. R. Nath	Multi Target Tracking Using Finite Set Statistics for Applications in Autonomous Navigation and Surveillance	Tracking multiple dynamic targets is complex due to uncertain measurement origins, complex motion models, sensor limitations, and real-time processing needs. This thesis explores the use of Multiple Hypothesis Tracking (MHT) and Random Finite Set filters in autonomous vehicle navigation and space debris monitoring, employing sensor management approaches to enhance performance and trajectory tracking over broader fields of view.
24.	Aman Thakur, 22MEE104	Dr. Bharat Bhushan Sharma (Supervisor) and Dr. Vivek Sharma (Co-Supervisor)	State and Parameter Estimation Using Sensor Fusion Approach	The work addresses the synchronization of non-linear systems using Model Predictive Control (MPC). Further, implementation of M.P.C. based control was done for coupled systems and strategies for improving performance of M.P.C. for non-linear systems were explored. The proposed control methods were utilized to control and

				synchronize the non-linear systems in presence of disturbances and uncertainties.
25.	Akshay Kumar, 22MEE105	Dr. Himesh Handa	Stabilization and Synchronization of Chaotic System and Circuit Realization.	Chaotic system is a sub-class of nonlinear dynamical system. Chaotic System Synchronization refers to the process of coordinating the behaviour of two or more chaotic systems such that their states evolve in a correlated manner over time. This phenomenon has practical importance in fields like secure communications.
26.	Tushar Dhiman, 22MEE106	Dr. Bharat Bhushan Sharma	Model Predictive Control of Nonlinear Systems and Applications to Microgrid Load-Frequency Control	Sensor fusion is a widely used technique to obtain additional or complementary information or to eliminate measurement noise or non-existent appropriate sensor or in excessively expensive sensor. The dissertation work explored basics of Kalman filter, Extended Kalman Filter, Unscented Kalman Filter and Particle filter techniques and utilized these filters for sensor fusion methods. Further, sensor fusion techniques were utilized to produce an improved model or estimate of a system from a set of independent data sources (sensors). Finally, applications were explored in the domain of control and synchronization of the underactuated system.
27.	Ravi Kumar, 22MEE107	Dr. Veena Sharma	Designing Optimal PID for Disturbance Rejection	This study explains the performance analysis of PID controllers tuned using PSO, autotuning, and conventional Ziegler-Nichols for a Simulink model of a DC motor.
28.	Prashant Dilip Yelpale, 22MEE201	Dr. Raj Kumar Jarial	As Advanced Induction Motor Fault Diagnosis by Integrating FFT, WT in MCSA and Thermal Analysis	The candidate has carried out experimental investigations on fault assessments in a 1.0 HP Induction motor drive by carrying out thermal and mechanical loading conditions. He has published 01 Paper in IEEE Conference as well.
29.	Tamanna Sharma, 22MEE202	Dr. O. P. Rahi	Design and Analysis of Substation Earthing	In this dissertation earthing system has been designed for a sub station using FEM. Research has ensured safety of personnel, equipment and optimized overall

				earthing design.
30.	Aradhana, 22MEE203	Dr. Ashwani Kumar Chandel	Health Monitoring of Power Transformer Using Furanic Compound Analysis	Transformer oil in service oxidizes and eventually reaches a point beyond which it is not fit for the intended purpose. In such cases maintenance guide recommends replacing the oil. Further, the Insulating paper used in transformers is subjected to heat and is also damaged by the oil oxidation products. Therefore, same maintenance regime of the oil is not applicable to the paper insulation. Further, paper degradation is not reversible. It is detailed in the literature that the life of transformers depends upon the paper insulation life.
31.	Md Hanzala Hassan, 22MEE204	Dr. Raj Kumar Jarial	Investigation of Implicating the role of DC Link Voltage Controller in the Proposed 2.04 MWp Rooftop SPV System at NIT Hamirpur	The candidate has completed simulation investigations using advanced tools PVsyst and Homer and Published 01 Paper in IEEE Conference.
32.	Obaid Ashraf, 22MEE205	Dr. Bharti Koul	Optimizing Residential Energy Consumption through Intelligent Demand-Side Management: A Data- Driven Approach	Work has been done to Develop and implement load shifting strategies to minimize the overall cost of residential energy consumption Develop a predictive model for energy consumption.
33.	Sayed Mohammad Zeeshan, 22MEE206	Dr. Bharti Koul	Demand Side Management to Optimize the Cost in Commercial and Industrial Loads	Work has been done to reduce the overall electricity costs for industrial and commercial entities by strategically shifting electricity consumption to periods with lower prices, and maintain a comfortable working environment for employees and customers while satisfying the user comfort.
34.	Biplab Roy, 21 MEE002	Dr. R. K. Jarial (Supervisor) and Dr. Himesh Handa (Co- Supervisor)	Investigation on Performance Wireless Electricity System	The candidate has been focussing on the design and development of an experimental setup in High Voltage lab. and investigating emerging issues and parameters affecting Performance of Wireless Electricity System.
35.	Sharad P S	Dr. R. K. Jarial	Impact of EV	The candidate has converted his

	Tomar, 21 MEE008		infrastructure on already existing Power System networks	full-time M tech Program to part-time and currently working on a topic related to EV infrastructure operational impact on already existing Power System networks.
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**(f) Ongoing M. Tech. Dissertations (4<sup>th</sup> Semester Ongoing Registered PG Students) – 24**  
**(To be pass out in June 2025)**

Sr. No.	Name of the Student(s) with Roll No.	Name of Supervisor(s)	Tentative Title of Dissertation	Brief Report
1.	Sunny Kumar, 23MEE001	Prof. Yog Raj Sood	Impact of Load Variation and Generation contingency on Available Transfer Capability	This study reveals the transmission line outages and generator failures can cause localize congestion and wide area impacts.
2.	Neha Kumari, 23MEE002	Prof. Sushil Chauhan	Distribution Networks Reconfiguration Using Cuckoo Search Algorithm	Work already accepted for publication in International conference “2025 7th International Conference on Energy, Power and Environment (ICEPE)”.
3.	Ankit Dhiman, 23MEE003	Dr. Jiwanjot Singh	Design and Analysis of High Gain DC to DC Converter	In this dissertation, the candidate design and analysis of high gain DC to DC converter.
4.	Nishant Sharma, 23MEE004	Prof. Yog Raj Sood	Multi-Terminal Hvdc Power Flow With Voltage Current and Power Control	This work introduces comparative analysis of PI controllers tuned with GWO-PSO and KNN for optimal control of multiterminal HVDC grids.
5.	Akshay Kumar, 23MEE005	Dr. O. P. Rahi	Earthing Design and Analysis for Substation Using FEM Technique	In this dissertation earthing mat system has been designed and optimized for a sub station using FEM. Research has a ensured safety of personnel, equipment and optimized overall earthing design.
6.	Sanjeeta, 23MEE006	Dr. Veena Sharma	Modelling and Performance Analysis of Electric Vehicle	This research is about investigating and analysing the performance indices such as velocity and acceleration characteristics of EVs using drive cycles and the battery performance such as SOC, voltage and current.
7.	Reshav Sharma, 23MEE007	Dr. Upasana Sarma (Supervisor) and Dr. Ram Niwash Mahia (Co-Supervisor)	Integration of Zinc-Air Batteries and ORC (Organic Rankine Cycle) With PEM Fuel Cell-Lithium-Ion Battery Based Hybrid Energy	This study explores a hybrid energy system combining Zinc-Air batteries, Organic Rankine Cycle (ORC), PEM fuel cells, and Lithium-Ion batteries to power rail transport. The integration aims to enhance

			System for Sustainable Rail Transport	energy efficiency and sustainability in hilly terrains. Such a system could reduce reliance on fossil fuels and improve eco-friendly mobility in remote regions.
8.	Shabnam Kumari, 23MEE008	Prof. Ashwani Kumar Chandel (Supervisor) and Dr. Jiwanjot Singh (Co-Supervisor)	Analysis of Critical Power System Contingencies using Thyristor Controlled Series Capacitor	In this work most contingencies scenarios occurs when maximum power imbalances are caused by the outage of specific subset of transmission lines have been determined.
9.	Anushka Dogra, 23MEE009	Dr. Supriya Jaiswal	UPQC based FOPID Controller to Improve Power Quality in Smart Grid	This research is about improving power quality using UPQC based FOPID controller in smart grid.
10.	Aakash Sharma, 23MEE010	Prof. Ram Naresh Sharma	Enhancing Available Transfer Capability Using CPF Method and FACTS Devices.	This research is about improving ATC using FACTS devices and Genetic Algorithm on base case IEEE 14 Bus System.
11.	Ashish Kumar, 23MEE011	Dr. Ram Niwash Mahia (Supervisor) and Dr. Upasana Sarma (Co-Supervisor)	Optimization of Energy Management in Electric Vehicles Using Rule Based and PSO Algorithms with Hybrid Zinc-Air Battery-Supercapacitor Systems	This thesis investigated the design, development, and comparative performance of two distinct Energy Management Strategies (EMS) for Electric Vehicles (EVs) powered by a Hybrid Energy Storage System (HESS) combining Zinc-Air Batteries (ZAB) and Supercapacitors (SC). The primary motivation for this research is the growing need to enhance the operational efficiency, power distribution, and energy recovery capabilities of electric mobility solutions while addressing battery stress and lifecycle degradation.
12.	Nayan Sharma, 23MEE012	Prof. Ashwani Kumar Chandel	Retrofitting of IC Engine Vehicle into Electric Vehicle	This study emphasizes the critical criteria for successful retrofitting, ensuring adherence to Automotive Research Association of India regulations to maintain road safety and performance standards.
13.	Richa Guleria, 23MEE013	Dr. Chardrasekaran S. (Supervisor) and Prof. Ashwani Kumar Chandel (Co-Supervisor)	Fast Estimation of Grid Voltage attributes Using Fixed-Frequency DSOGI	This work presents a type-1 synchronous reference frame phase-locked loop with fixed frequency Prefiltered PLL scheme dual second order generalized integrator incorporated as a prefilter.

14.	Gaurav Kapoor, 23MEE014	Dr. Rajesh Kumar	AI-Based Approach for Reduction of Partial Shading Effects in PV Generation Systems	The Thesis explores the impact of various shading conditions on the performance of the PV system and proposes an improved optimization approach using Perturb and Observe (P&O) and Fuzzy Logic-based, MPPT techniques.
15.	Suman Jamwal, 23MEE015	Dr. Sreeram T. S.	Simulation and Control of an AC Microgrid with High Penetration of Renewable Energy	This Thesis explores the Simulation and Control of a grid connected microgrid with significant Renewable Energy Penetration
16.	Rithik Bhardwaj, 23MEE101	Dr. Himesh Handa (Supervisor) and Dr. Vivek Sharma (Co-Supervisor)	Trajectory Tracking of Autonomous Car using Model Predictive Control	Control strategy is developed for an autonomous vehicle to track a specified trajectory. For this both longitudinal and lateral dynamics of an autonomous vehicle is used which is nonlinear dynamics. To design a MPC controller for a nonlinear system is difficult as it requires a non-convex optimization problem to be solved. The issue is addressed by using a Linear Parameter Varying (LPV) based Model Predictive Control (MPC) approach.
17.	Aryan Bhatia, 23MEE102	Dr. Amit Kaul	Combining Deep Learning & Statistical Models for Solar Radiation Prediction: An Integrated Approach	The thesis focussed on Combination of Deep Learning & Statistical Models for Solar Radiation Prediction.
18.	Anshuman Sharma, 23MEE103	Dr. B. B. Sharma	Optimal Sliding Mode Control Based Synchronization Scheme	The primary goal of the proposed work is synchronization of identical chaotic/ hyper chaotic systems using the active sliding mode control technique, along with its implementation using analog circuits. The controller is incorporated in slave system to meet out the goal of synchronization in two system configurations. For controller design the optimal sliding surface is selected using LQ (Linear Quadratic) minimization approach for ensuring that the system trajectories converge to desired sliding surface and achieves synchronization. Lyapunov stability theory ensures that the error dynamics and sliding surface are asymptotically stable. Synchronization of the

				proposed hyper chaotic pair using the sliding mode control is to be simulated in the MATLAB environment and the analog circuit implementation of proposed scheme of synchronization is to be carried out using MULTISIM-14.0.
19.	Abhinav Banyal, 23MEE104	Dr. Vivek Sharma (Supervisor) and Dr. Himesh Handa (Co-Supervisor)	Trajectory Tracking for Quadcopter	The problem of trajectory tracking for a quadcopter is addressed. The quadcopter is an underactuated system with the nonlinear dynamics. The problem is addressed using feedback linearization and LPV-MPC controller.
20.	Rahul Kumar Choudhary, 23MEE105	Dr. Pankaj Kumar Mishra	Safety-Critical Control For Nonlinear Systems: Implementation and Analysis	In this work a structured control framework is developed using control barrier functions.
21.	Vikas, 23MEE201	Dr. Katam Nishanth (Supervisor) and Dr. Raj Kumar Jarial (Co-Supervisor)	Feasibility Study of Solar Rooftop Systems for NIT Hamirpur: Technical and Economic Assessment	The dissertation presents a detailed techno-economic and environment feasibility assessment of rooftop Solar Photovoltaic Systems for NIT Hamirpur. Several aspects like Sp. Yield, Performance ration, Solar Fraction, Total Energy Output and Financial metrics like CAPEX, Levelized Cost of Energy, Net Present Value, Internal Rate of Return, Payback Period have been ascertained by using advanced tools, PVsyst, RETScreen Expert.
22.	Palak, 23MEE202	Dr. Bharti Koul	MPPT Driven Wind Energy System Under Dynamic Wind Condition	This thesis focuses on the MPPT technique for wind energy systems under dynamic wind conditions.
23.	Avinash Sharma, 23MEE203	Dr. Raj Kumar Jarial (Supervisor) and Dr. Vishal (Material Science and Engineering Deptt.) (Co-Supervisor)	Analytical and Experimental Thermal Aging Investigations on Structural and Electrical Performance of Kraft and Nomex Insulating Papers Immersed in Mineral Insulating Oil	The candidate has carried out several investigations concerning structural and electrical performance of Kraft and Nomex insulating Papers of various sizes immersed in mineral insulating oil under various thermal stresses at 120 Degree, 150 Degree, 180 Degree for 48 and 72 Hours.
24.	Preeti Negi, 23MEE204	Dr. Rajesh Kumar	Design and Analysis of Multiport EV Charger Using Solar PV Along With BESS Capability	The thesis proposes an effective solar system by combining Rectifiers with boost converters and Maximum power point tracking (MPPT) techniques to reduce transformer losses,

				increase efficiency, and facilitate the direct charging of multiple Electric Vehicles (EVs).
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### 3. Consultancy services: 01

Sr. No.	Name of the Scheme	Sponsoring Agency	Amount Earned	Year (Day, Month, Year)
1.	Liquid Dielectric Breakdown, DGA and UV VIS Spectrophotometer Test Analysis Tests were conducted for several IPPs and Govt. Utilities	(i) M/s SuryaSolar Power Pvt. Ltd. Una (ii) M/s Udartva Pvt. Ltd. (iii) M/s Balkishan Bhardwaj Pvt. Ltd. (iv) Aditya Rai Infra. Pvt. Ltd. (v) Rysa Infratech Pvt. Ltd. Delhi (vi) M/s Usaka Hydro Power Pvt. Ltd. (vii) M/s HPSEBL, Jwalamukhi	Rs. 2,28,376/-	April, 2024- March 31, 2025

### 4. Technical Association/Societies:

Sr. No.	Name of Faculty	Technical association / societies:
1.	Prof. Y. R. Sood	Senior Member IEEE, USA Fellow of Institution of Engineers (India) Life Member, Indian Society for Technical Education (ISTE) Member IEEE Sensors Council Member IEEE Council of Superconductivity Member IEEE Nanotechnology Council
2.	Dr. Ram Naresh Sharma	Senior Member, IEEE PES, Life Member, ISTE, Fellow Institution of Engineers (IE India)
3.	Dr. Ashwani Kumar Chandel	Fellow (IE) India Kolkata LM ISTE Delhi Fellow IETE New Delhi
4.	Dr. Ravinder Nath	Life member of ISTE (LM-13062) Fellow IEI (F-117078-5)
5.	Dr Veena Sharma	Member IEEE (99906230) Life Member ISTE (LM-20570) Life Member Instrument Society of India (LM-728) Fellow of Institution of Engineers (F-116687)
6.	Dr. R. K. Jarial	Member IEEE, Associate Member Institution of Engineers (India), Life Member, Indian Society for Technical Education (ISTE) Delhi, Member, IEEE Dielectrics and Electrical Insulation Society Member and IEEE Power Electronics Society Member, USA, Faculty In charge, Flying Dagger HobbyClub, NIT Hamirpur, BIS Technical Committee ETD 19 on High Voltage Engineering
7.	Dr. B. B. Sharma	Member IEEE USA Member, Robotic Society of India (RSI),

		Life Membership of ISTE (LM38011) Member IEEE Automatic Control Society (Membership No. 90499500) Fellow Institution of Engineers (India) (Membership No: F-1266469)
8.	Dr. O. P. Rahi	Member, IEEE (USA) Fellow, The Institution of Engineers (India) Life Member, Indian Society for Technical Education. Life Member, Instrumentation Society of India
9.	Dr. Amit Kaul	Senior Member, IEEE, Life Member ISTE, BMI, Associate Member IE(I), Life Member BSI
10.	Dr. Rajesh	Member Instrument society of India (LM-1958) Member The Institution of Engineers (India) (AM-0998683)
11.	Dr. Himesh Handa	Life Member ISTE
12.	Dr. Bharti Koul	Member, IEEE Member, Instrument Society of India (LM-1958) Member Institution of Engineers (India) (AM-0998683)
13.	Dr. Ram Niwash Mahia	Senior Member, IEEE Fellow, IETE (F-504303) Member, IE (India)
14.	Dr. Vivek Sharma	Life Member of Indian Society for Technical Education
15.	Dr. Jiwanjot Singh	Member, IEEE Member, IAS, IEEE Member, PES, IEEE
16.	Dr. Supriya Jaiswal	Senior Member, IEEE AMIE, IEI

### 5. Expert Lectures Delivered by EED Faculty :05

1. Dr. R. K. Jarial delivered an Expert Lecture on “Advances in Technological Assessment of EMI/EMC” at EED, NIT Hamirpur, Hamirpur, 2024.
2. Dr. Jiwanjot Singh delivered an Expert Lecture on “Power Converter Applications in EV” at Five Days Online Faculty Development Programme on “Advanced Energy Storage Systems for Electric Vehicles”, NIT Hamirpur, Hamirpur, 2024.
3. Dr. Supriya Jaiswal delivered an Expert Lecture on “Power Quality Introductions to Smart Grid” at Five Days Online Faculty Development Programme on “Power Quality Analysis and Improvement in Deregulated Power System”, NIT Hamirpur, Hamirpur, 2024.
4. Dr. Upasana Sarma delivered an Expert Lecture on “Hydrogen Fuel Cells: Paving the Way for Sustainable EV Solutions” at Five Days Online Faculty Development Programme on “Advanced Energy Storage Systems for Electric Vehicles”, NIT Hamirpur, Hamirpur, 2024.
5. Dr. Pankaj K. Mishra delivered an Expert Lecture on “Approximation-free control for unknown nonlinear systems” at online Faculty Development Programme (FDP) on "Cyber-Physical Systems & Control: Bridging the Gap to Future Technologies (CPSC-2025)", NIT Patna, Patna, 2024.

### 6. Book Chapters: 08

1. Sushil Chauhan and Mukesh Singh, “Application of machine learning models for power systems security assessment”, Artificial Intelligence and Machine Learning Applications for Sustainable Development, International CRC Press, 2024.
2. R. Sharma et. al., “Application of Demand Response for Voltage Profile Improvement and Deviation Charges Minimization”, Future Power Network and Smart Energy Systems, Lecture Notes in Electrical Engineering, Springer, 2024.
3. Ram Niwash Mahia et. al., “Optimal Reconfiguration of Transmission Network to Meet Load Growth for Ten Year Projected Scenario of Practical Transmission Grid”, Renewable Energy

- Integration in Utility Grids: Advances in Power Quality, Protection, Stability and Flexibility, Academic Press, Elsevier, 2025.
4. Ram Niwash Mahia et. al., “Novel System Protection Scheme for Power Transformers in Utility Grid to Mitigate Renewable Power Evacuation Constraints and Improve Grid Stability”, Renewable Energy Integration in Utility Grids: Advances in Power Quality, Protection, Stability and Flexibility, Academic Press, Elsevier, 2025.
  5. Ram Niwash Mahia et. al., “Transmission Loss Minimization in Utility Grid Using Reactive Power Management Considering Operations of Capacitor Banks and Transformer on Load Tap Changers: A Case Study”, Renewable Energy Integration in Utility Grids: Advances in Power Quality, Protection, Stability and Flexibility, Academic Press, Elsevier, 2025.
  6. Ram Niwash Mahia et. al., “Variability of Renewable Energy Generation and Flexibility Initiatives: Indian Scenario”, Renewable Energy Integration in Utility Grids: Advances in Power Quality, Protection, Stability and Flexibility, Academic Press, Elsevier, 2025.
  7. Ankur Maheshwari, Supriya Jaiswal, Yog Raj Sood, Himanshu Raj, Sidharth Sabyasachi, “Comprehensive Review on Metaheuristic Optimization Methods for Efficient Power System Operation”, Intelligent Methods in Electrical Power Systems, Springer Nature, 2024.
  8. Pallav, Himesh Handa, Sumit Sharma, “Stabilization and Synchronization of Chen-Lee Chaotic System using Sliding Mode Control Approach”, Artificial Intelligence and Machine Learning Applications for Sustainable Development, pp. 243, CRC Press, 2025.

### 3.5 DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING



#### 1. (a) ACADEMIC STAFF:

**HEAD:** Dr. Ashwani Kumar Rana, Associate Professor

#### FACULTIES:

Professor	Associate Professor	Assistant Professor
Dr. Rajeevan Chandel	Dr. K.S. Pandey	Er. Vinod Kumar
	Dr. Surender Kumar Soni	Dr. Rakesh Sharma
	Dr. Ashok Kumar	Er. Gagnesh Kumar
	Dr. Gargi Khanna	Dr. Aman Kumar
	Dr. Ashwani Kumar Rana	Dr. Amit Bage
	Dr. Krishan Kumar	Dr. Chandra Shekhar Prasad
	Dr. P. Daniel	Dr. Saurabh Kumar
	Dr. Manoranjan Rai Bharti	Dr. Sankalita Biswas
	Dr. Rohit Dhiman	Dr. Abhijit Bhattacharya
	Dr. Mahesh Angira	Dr. Sandeep Kumar
		Dr. Pushpendra Singh (On lien)

#### (b) ADMINISTRATIVE & TECHNICAL STAFF:

Ministerial & Office Staff	Technical Staff
(i) Mr. Abhishek Chauhan (Senior Assistant)	(i) Sh. Ashok Kumar (Senior Technical Assistant)
(ii) Sh. Kehar Singh (Office Attendant SG-I)	(ii) Sh. Suresh Kumar (Senior Technician)
	(iii) Sh. Shiv Dyal (Senior Technician)
	(iv) Mr. Sanju Kumar (Technician)

## 2. DISTINCTION ACHIEVED

- (i) Prof. Rajeevan Chandel as Transparency Officer of NITH, got RTI Suo Moto Disclosure Transparency Audit of NIT Hamirpur HP conducted by Indian Rubber Manufacturers Research Association (IRMRA), as per MoE Govt. of India, guidelines, for the year 2024-25. The institute attained a high score of 754/799.
- (ii) Dr. Deepanshu Kaushal and Prof. Rajeevan Chandel Received Best Paper Award in 1st International Conference on Artificial Intelligence, Device Computing, Communication and Signal Processing (AIDCCSP-2024), organized by DoECE, NIT Hamirpur HP, India, 20-22 December 2024.

## 3. SEMINAR, SYMPOSIA, SUMMER SCHOOL, WINTER SCHOOL, SHORT TERM COURSE:

### a) Conducted in the Department.

- (i) Prof. Rajeevan Chandel delivered an Expert Lecture on “Electronics Components” to the students and faculty of two Govt. schools (GHS Kango Ka Gehra, Dharampur, Dist Mandi HP & two other GH Schools) on the occasion of Science Day on 28th Feb 2025, in DoECE, NIT Hamirpur HP.
- (ii) Prof. Rajeevan Chandel delivered an Expert Lecture on “Pedagogical Skill Enhancement by Lesson, Class & Course Planning” on 21st Feb 2025 in the 2-days Workshop on Empowering Women Engineers through Pedagogical Skills (EWPS-2025) held under the aegis of ANRF (SERB)-INAE Women Engineers Program, organized by NIT Hamirpur HP, held on 21-22 Feb 2025.
- (iii) Prof. Rajeevan Chandel delivered an Expert Lecture on “Best Practices in Teaching- Course, Class and Lesson Planning” on 20 June 2024 in the 5-day inhouse Faculty Development Program on organized by Deptt. of HSS, NIT Hamirpur HP, from 18 to 22 June, 2024.
- (iv) Prof. Rajeevan Chandel delivered an Expert Lecture on “VLSI Design –Chip Fabrication Indian Initiatives” on 21-5-2024 in e-STC on AI Driven VLSI Design & Signal Processing, organized by DoECE, NIT Hamirpur HP from 21-25 May 2024.
- (v) Dr. Gargi Khanna organized 2-days Workshop on "Empowering Women Engineers through Pedagogical Skills (EWPS-2025)" under the aegis of ANRF (SERB)-INAE Women Engineers Program, at NIT Hamirpur HP, during 21-22 Feb 2025.
- (vi) Dr. Gargi Khanna Delivered Expert talk on “Speed Centric Multistage Logic Design MOS Circuit Design” in five-day short term course on “AI-Driven VLSI Design and Signal Processing ” on 23th May 2024.
- (vii) Dr. Mahesh Angira delivered a talk on “Deciphering RF-MEMS Technology: Spotlight on Switching Capabilities”. The talk was delivered on 2nd May 2024 during Next Generation RF to THz Devices for Wireless Communication and Other Application in ECE Department, NIT, Hamirpur.

### b) Expert Lectures Delivered in Other Institutes:

- (i) Prof. Rajeevan Chandel delivered an Expert Lecture on “CMOS VLSI Chip Design” on 28 Jan 2025 in hybrid FDP on Chip Design-A Fundamental Course, under EICT CDAC Mohali &

organized by Deptt. of Electronics & Commu. Engineering, Dr. B.R. Ambedkar NIT Jalandhar, Pb, India, held from 27 -31 Jan 2025.

- (ii) Prof. Rajeevan Chandel delivered an Expert Lecture on “VLSI Design- Industrial and Research Opportunities” on 11-June-2024 in the High End DST-SERB Karyashala organized by Deptt. of Electronics & Commu. Engineering, Dr. B.R. Ambedkar NIT Jalandhar, Pb, India from 10-14 June, 2024.
- (iii) Dr. Mahesh Angira delivered a talk on "Introduction to MEMS Technology: Spotlight on Sensors and Actuators" at the Department of Electronics and Communication Engineering, Gauhati University on 26-03-2025.
- (iv) Dr. Mahesh Angira delivered a special lecture on Communication system and Deciphering MEMS Technology” for 3rd, 5th and 7th Semester students of ECE department, TITS, Bhiwani on 20/07/ 2024.

**c) Participated by Faculty Members:**

Gagnesh Kumar, Quantum technology Spin QUBIT Semiconductor Modelling & Simulation Using “QTCAD” TCAD Software Impulse Technology, Delhi India 02 -Days, Delhi.

#### 4. RESEARCH

**(a) Research Scheme:**

Title of the Scheme	Sponsored by	Assistance Received (Rs) in lakh	Investigator	Brief Report
ASIC and Package Design for Ultra Small Atomic Clock	Ministry of Electronics & Information Technology, GoI	17	Dr. Gargi Khanna (Co-PI)	Ongoing

**(b) Research Publication:**

**Journal Publications:**

- (i) Dilip Singh and Rajeevan Chandel, “An Efficient FPGA-Based Accelerator for Perceptual Weighting Filter in Speech Coding,” IETE Technical Review, Taylor & Francis Publication, vol. 41, no. 4, pp. 441-453, 2024. doi: <https://doi.org/10.1080/02564602.2023.2297355>. [SCIE].
- (ii) Vandana Boora, Ajay Kumar, Madhukiran Kommukuri, Rajeevan Chandel, and Rohit Dhiman, “Electrical characterization and performance analysis of coaxial through-glass vias,” Sādhanā, Springer Nature, Indian Academy of Sciences, vol. 49, no. 44, pp. 1-5, 2024. <https://doi.org/10.1007/s12046-023-02392-w>. [SCIE].
- (iii) Deepanshu Kaushal and Rajeevan Chandel, “Inverse Artificial Neural Network Assisted Rapid Multiband Antenna Design for Multiple Custom Requirements,” Arabian Journal for Science and Engineering, vol. 49, pp. 15883–15897, 2024. <https://doi.org/10.1007/s13369-023-08639-2>. [SCIE].
- (iv) Himanshu Chaurasia and Rajeevan Chandel, “A New High-Performance Hybrid Full-Adder Design for VLSI Applications,” Journal of Active and Passive Electronic Devices, Old City Publishing, Inc., vol. 18, no. 3, pp. 169-183, 2025. ESCI, Web of Science.

- (v) Yachana Arora, Ajay Kumar, Rajeevan Chandel & Rohit Dhiman, Modeling of Differential Multibit Through-Glass-Via for 3D Integration,” IETE Journal of Research, Taylor & Francis, 16 March 2025. DOI: 10.1080/03772063.2025.2476748 [SCIE].
- (vi) Priya Kaushal and Gargi Khanna, “Breast Cancer Detection Using Si-Doped MoS<sub>2</sub> Channel-Based Thickness Engineered TFET Biosensor,” IEEE Sensors Letters, vol. 8, no. 9, pp. 1-4, 2024 (SCIE IF=2.2) <https://doi.org/10.1109/LSSENS.2024.3438872>.

### Conference Publications:

- (i) Deepanshu Kaushal and Rajeevan Chandel, “Microstrip Patch Antennas for X-Band Operation,” 1st International Conference on AI, Device Computing, Communication & Signal Processing, AIDCCSP-2024, organized by DoECE, NIT Hamirpur 177005 HP, India, 20-22 Dec, 2024. Best Paper award.
- (ii) Sachin Kumar, Aman Kumar, Akanksha Jaiswal, A Low Complexity MobileNetV2 based CNN Model for Brain Tumor Detection in MRI Images (web of science).
- (iii) Sachindra Bharti, Rohit Dhiman and Gargi Khanna, “ Body bias of Junctionless Transistors for Analog Applications,” 4th International Conference on Nano-electronics, Machine Learning & Internet of Things & Computing Systems (NMIC-2024), 13-14 April 2024. Best Paper Award.
- (iv) R.Kumari, M.angira, An innovative RF-MEMS Switch utilizing Latral Defecton for Comprehensive Band Switching across the entire FR-II mmwave spectrum”, MNDCS-2025, NIT, Silcahr, India. 5th International Conference on Micro/Nanoelectronics Devices, Circuits, & Systems (MNDCS-2025), 29-31 Jan, 2025.
- (v) P.Negi, M.Angira, Design and Analysis of QCA Technology based 2:1 Multiplexer”, 3rd IEEE sponosred International Confernece on Electrical, Electroncis, Information and Communication Technologies (ICEEICT 2024) held at K.Ramakrishna College of Engineering, Tiruchirappalli, Tamilnadu,India during 24-26 July, 2024. The paper Presented on 25th July, 2024. SCOPUS.
- (vi) S. Markam, M. Angira, Design and Performance Analysis of Metal-to-Metal Contact RF-MEMS Switch for 6G Technology, “ in 2nd International Conference on Computer, Electronics, and Electrical Engineering and their Applications ( IC2E3-2024), 6th June to 7th June, 2024, NIT, Utrakhand, India
- (vii) S.Sood, M. Angira, Design of MEMS based Piezoelectric Energy Harvester to Power WSN in HVAC Systems, “ in 15th INTERNATIONAL IEEE CONFERENCE ON COMPUTING, COMMUNICATION AND NETWORKING TECHNOLOGIES (ICCCNT), June 24 - 28, 2024, IIT - Mandi, Himachal Pradesh, India.
- (viii) Varun Kumar, Gagnesh Kumar, Evaluation and Optimization of GAA-CNTFET Performance for High-K Dielectric Materials InternationalConference on Smart Systems for Applications in Electrical Sciences [ICSSES-2024]-IEEE (Scopus) Siddaganga Institute of Technology, Tumakuru, Karnataka 03-04 May 2024 (Scopus).
- (ix) Pradyut Patel, Gagnesh Kumar Optimization of CNTFET and Effect of channel length scaling on CNTFET and MOSFET threshold voltage 5th IEEE International Conference for Emerging Technologies at Jain College of Engineering Belagavi (Scopus) Belagavi 24-26 May 2024 (Scopus).

- (x) Asif Rais, Gagnesh Kumar CMOS DESIGN TRADE OFFs IN MONOLITHIC 3D ICs. Sixth IEEE Sponsored International Conference on Electrical, Computer and Communication Technologies (IEEE ICECCT 2024) (Scopus) Chhattisgarh Swami Vivekanand Technical University (CSVТУ), Bhilai, Chhattisgarh, India 26 - 28, June 2024.(Scopus).

### Book Chapters Published

Sr. No.	Title of the Chapter	Name (s) of author(s) of chapter	Title of Book	Name(s) of Editor(s)	Year of Publication	Publisher
1.	"Through Silicon Vias for 3D Integration—A Mini Review," Chapter in Book, Springer Tracts in Electrical and Electronics Engineering pp. 81-98, 2024. Online ISBN: 978-981-99-4476-7. <a href="https://doi.org/10.1007/978-981-99-4476-7_6">https://doi.org/10.1007/978-981-99-4476-7_6</a>	Yachana Arora, Vandana Boora, Rohit Dhiman and Rajeevan Chandel	"Interconnect Technologies for Integrated Circuit and Flexible Electronics"	Eds. Dr. Yash Agarwal (DA-IICT Gandhinagar), Dr. Kavicharan M. (NIT Silchar) and Dr. Uma. P Sathyakan (VIT Vellore)	2024	Springer, Singapore
2.	"Explicit Power-Delay Models for On-chip Copper and SWCNT Bundle Interconnects," Chapter in Book, Springer Tracts in Electrical and Electronics Engineering, pp. 21-35, 2024. Online ISBN: 978-981-99-4476-7. DOI: <a href="https://doi.org/10.1007/978-981-99-4476-7_3">https://doi.org/10.1007/978-981-99-4476-7_3</a>	Yash Agrawal, Vinay Palaparthi, Mekala Girish Kumar, Kavicharan Mummaneni, Rajeevan Chandel	"Interconnect Technologies for Integrated Circuit and Flexible Electronics"	Eds. Dr. Yash Agarwal (DA-IICT Gandhinagar), Dr. Kavicharan M. (NIT Silchar) and Dr. Uma. P Sathyakan (VIT Vellore)	2024	Springer, Singapore

### (C) Ph.D Degree awarded:

- (i) Dr. Dilip Singh, 2K18-Ph.D.-ECE-393, Thesis Title: VLSI Design and Hardware Acceleration of Speech Coding Algorithms using FPGA under the supervision of Prof. Rajeevan Chandel, DoECE awarded in 2024.
- (ii) Mr. B. Mohan Rao, 2K19-Ph.D-ECE-460, under the supervision of Dr. Aman Kumar, DoECE awarded in 2024.

### (d) Name of Doctoral students presently Supervising (Ongoing)

Sr. No.	Name of Guide	Name of students
1.	Dr. Mahesh Angira	Mr. Abhishek Tiwari
2.	Dr. Mahesh Angira	Mr. Himanshu Panwar

### 5. TECHNICAL ASSOCIATION/SOCIETIES:-

- i) Prof. Rajeevan Chandel is Fellow of IETE (I), Life Member ISSS, Life Member ISTE
- ii) Dr. Gagnesh Kumar, Indian Microelectronic Society, Panjab University, Chandigarh (**Lifetime**), International Association of Engineers, Hong Kong (**Membership no. 134271**), Indian society for Technical Education (**LM 107262 or 3001**)

**6. DETAIL OF THE LABORATORIES:**

<b>Sr. No.</b>	<b>Name of the Laboratory</b>
1.	Basic Electronics Lab
2.	Computer Lab
3.	Electronics Workshop
4.	Analog Electronics Lab
5.	Digital Signal Processing Lab
6.	VLSI Design Lab
7.	Communication Lab
8.	MEMS Design Lab
9.	Embedded System Lab
10.	Digital Electronics Lab
11.	Industrial Electronics Lab
12.	Microwave Lab
13.	Fibre Optical Lab
14.	Microprocessor Lab

### 3.6 DEPARTMENT OF MECHANICAL ENGINEERING



#### (a) ACADEMIC STAFF

**HEAD: - Dr. Prashant Kumar (Ph.D)**

#### **FACULTIES: -**

Professor	Associate Professor	Assistant Professor SG – I	Assistant Professor SG – II
Dr. Rakesh Sehgal (HAG)	Dr. Rajesh Kumar Sharma	Dr. Deepak Sharma	Dr. Mahavir Singh
	Dr. Rajiv Kumar Sharma	Dr. Param Singh	
	Dr. Somesh Kumar Sharma	Dr. Akhilesh Ku. Choudhary	
Dr. Sunand Kumar	Dr. Sant Ram Chauhan	Dr. Ajoy Debbarma	Dr. Niharika Gupta
	Dr. Prashant Kumar	Dr. Dilshad Ahmad Khan	
Dr. Anoop Kumar	Dr. P.K. Sood	Dr. Laxmikant Yadav	
	Dr. Siddhartha Sharma	Dr. Anshul Sharma	
	Dr. Varun		
	Dr. Debasish Das		
	Dr. Mohit Pant		

**(b) ADMISTARATIVE & TECHNICAL STAFF: -**

<b>Asstt. SG-II</b>	<b>Technical Assistant (SG-II)</b>	<b>Technician (SG-II)</b>	<b>Sr. Technician</b>	<b>Technician</b>
Mr. Raman Thakur	Mr. Partap Chand Dhiman	Mr. Surinder Gautam	Mr. Aditya Mukherjee	Mr. Dhananjay
	Mr. Dev Raj Thakur		Mr. Sumeet Raman	

**2. DISTICTION ACHIEVED:**

**(a) By Student:** Students participated in various Technical Festivals within the Country and Qualified for National Level Exams such as GATE etc.

**3. SEMINAR, SYMPOSIA, SUMMER SCHOOL, WINTER SCHOOL, SHORT TERM COURSE:**

**(a) Conducted in the Department of Mechanical Engineering.**

<b>Sponsoring Agency</b>	<b>Name of the Co-ordinator</b>	<b>Title of the Seminar/Symposia/STC etc.</b>	<b>Duration</b>	<b>Venue</b>
NIT Hamirpur	Dr. Laxmikant Yadav & Dr. Param Singh	e-STC on Evolution of CCHP & Thermal Polygeneration	27-31 May, 2024	NIT Hamirpur, DoME
NIT Hamirpur	Dr. Anshul Sharma & Dr. Niharika Gupta	Condition Monitoring of Mechanical Systems (CMMS -2024)	16-20, September 2024	NIT Hamirpur (in Online Mode)
NIT Hamirpur	Dr. Sant Ram Chauhan (Chairman), Dr. Deepak sharma, Dr. Ajoy Debbarma, Dr. Akhilesh Kr. Choudhary, Dr. Mahavir singh	Emerging aspects of Manufacturing, Thermal and Design Engineering (MATHED-2024)	16-18 December, 2024	NIT Hamirpur, DoME
NIT Hamirpur & SJVN	Dr. Ajoy Debbarma (Coordinator), Dr. Varun (Convener)	Advances in Renewable Energy Technologies (ARET-2025)	17-21 February, 2025	NIT Hamirpur (in Physical Mode)

**4. RESEARCH:****(a) Research Scheme:**

<b>Title of the Scheme</b>	<b>Sponsored by</b>	<b>Assistance Received (in lakh)</b>	<b>Investigator</b>	<b>Present Status of Project</b>	<b>Brief Report</b>
Consultancy - Vetting of design calculations for the Log Boom and Trash Barrier	S.K Sales Company, Jalandhar (Pb.)	Rs. 0.51	Dr. Rajesh Kumar Sharma and Dr. Anshul Sharma	Completed	
Consultancy - Site inspection and assessment of the structural stability of the crane and the existing steel platform at Mandi Bharari, District Bilaspur	Society of Tourism, Sports, Trade and Employment Generation, Office of the Deputy Commissioner, Dist. – Bilaspur, 174001, Himachal Pradesh	Rs. 1.77	Dr. Rajesh Sharma, DoME, Dr. Pardeep Kumar, DoCE, Dr. Mohit Pant, DoME, Dr. Anshul Sharma, DoME	Phase - I : Completed and Phase - II: Ongoing	
Experimental and Numerical Investigation of Pool Boiling and Flow Boiling Enhancement by Surface Modification	Anusandhan National Research Foundation (ANRF), India	Rs. 14.67	Dr. Deepak Sharma	Completed	
Development of an Integrated Onboard mini HHO Generator for Hydrogen Production and Investigation of Diesel Engine Performance, Combustion and Emissions Characteristics using Ammonia-Hydrogen Enrichment with Biodiesel and Additive Fuel Blends	Anusandhan National Research Foundation (ANRF), India	Rs. 21.84	Dr. Akhilesh Kumar Choudhary	Ongoing	

**(b) Research Publication:****(i) PAPER PUBLISHED BY FACULTY:**

<b>S. No.</b>	<b>Name of Faculty</b>	<b>Name of Refereed Journal</b>	<b>Title of the Paper</b>	<b>Year of Publication</b>
1.	Dr. Rajesh Kumar Sharma	Surface Topography: Metrology and Properties	The effect of RF sputtering power on structural, nanomechanical and tribological properties of single layered TaN coatings	2024
2.	Dr. Rajesh Kumar Sharma	Journal of materials engineering and performance	A Comprehensive Investigation on Nanomechanical, Scratch, and Tribological Characteristics of TaN-Ag Nanocomposite Coating on Ti6Al7Nb Alloy	2024
3.	Dr. Rajesh Kumar Sharma	Journal of Process Mechanical Engineering, Part-E	"Impact of Deposition Pressure on the Structural, Nanomechanical, and Tribological Properties of $\delta$ -TaN Coatings Deposited via Magnetron Sputtering on Ti6Al7Nb Alloy	2024
4.	Dr. Rajiv Kumar Sharma	Journal of Industrial Integration and Management Vol. 09, No. 02, pp. 313-356 (2024)	A taxonomy study on key dimensions which may help SMEs for industry 4.0 implementation.	2024
5.	Dr. Rajiv Kumar Sharma	J Fail. Anal. and Prevention	Framework Based on Machine Learning Approach for Prediction of the Remaining Useful Life: A Case Study of an Aviation Engine.	2024
6.	Dr. Rajiv Kumar Sharma	Designs Volume 8 Issue 1 10.3390/designs8010012	Evaluating the Ranking of Performance Variables in Flexible Manufacturing System through the Best-Worst Method	2024
7.	Dr. Rajiv Kumar Sharma	International Journal of Logistics Systems and Management Vol. 49, No. 1	Conceptual framework to model and analyse the distribution structure decisions in logistics	2024
8.	Dr. Rajiv Kumar Sharma	Kybernetes Volume 54 Issue 4	Examining interdependencies among solution dimensions for sustainable development in SMEs based on Industry 4.0 concept	2024
9.	Dr. Rajiv Kumar	FIIB Business Review	Exploring Research Issues and Potential Future Directions in Industry 4.0 Adoption in SMEs: A	2024

	Sharma		Comprehensive Analysis and Integration	
10.	Dr. Parshant Kumar	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	A Comparative Study of Double-Pass Recycle Type Hybrid Photovoltaic Thermal Designs	2024
11.	Dr. Siddhartha Sharma	Johnson Matthey Technology Review	Tribological Models for Erosive Wear in Slurry Flow: A Review	2024
12.	Dr. Debasish Das	International Journal of Information Technology	Optimization of route planning for the mobile robot using a hybrid Neuro-IWO technique	2024
13.	Dr. Deepak Sharma	Journal of Engineering Physics and Thermophysics	Performance Analysis of a HVAC System with a Heat Recovery Wheel for a Hospital Building	2024
14.	Dr. Deepak Sharma	Heat Transfer Engineering	Pool boiling experiments in graphene, graphene oxide and reduced graphene oxide nanofluid	2025
15.	Dr. Param Singh	Advances in Materials and Processing Technologies	Performance evaluation of electrical discharge turning of inconel-825 under influence of different magnetic field intensities	2024
16.	Dr. Param Singh	Surface Review and Letters	Machining of Inconel-825 superalloy with Magnetic Field Assisted Electrical Discharge Turning: A Optimization Approach using Response Surface Methodology and Multi-Objective Genetic Algorithm	2024
17.	Dr. Param Singh	Arabian Journal for Science and Engineering	Optimizing of Novel Magnetic Field Assisted Electrical Discharge Turning Parameters for Machining EN24 Steel Alloy Using Response Surface Methodology and MCDM-Based CRITIC-TOPSIS Method	2024
18.	Dr. Param Singh	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering	A comprehensive review on process and response parameters, tool configurations, workpiece material selection, and electrolytes effect of electrochemical discharge machining process	2025

19.	Dr. Ajoy Debbarma	International Journal of Ambient Energy	CFD analysis of artificially roughened solar air heater: a comparative study of C-Shape, reverse C-Shape, and reverse R-Shape roughness element	2024
20.	Dr. Ajoy Debbarma	International Journal of Green Energy	Advancement in solar air heater with integrated PCM-based thermal energy storage system	2024
21.	Dr. Ajoy Debbarma	Environmental Progress & Sustainable Energy	Experimental study on thermal performance of reverse flow solar collector for dual heating applications	2024
22.	Dr. Ajoy Debbarma	Journal of Energy Storage	Heat transfer analysis and melting behavior of nano composite phase change materials (NCPCMs) in a reverse flow solar air heater	2024
23.	Dr. Ajoy Debbarma	Journal of Thermal Analysis and Calorimetry	Battery thermal management systems for electric vehicles: an overview of cooling techniques and performance optimization	2025
24.	Dr. Ajoy Debbarma	Sādhanā	Thermohydraulic performance analysis of tube heat exchanger using dual side serrated insert tape having triangular wings	2025
25.	Dr. Ajoy Debbarma	Nuclear Science and Engineering	Study of Rewetting Behavior in AHWR Fuel Cluster During Loss of Coolant with Water Jet Impingement	2025
26.	Dr. Akhilesh Kumar Chaudhary	Energy	Prediction of the Performance and emission characteristics of diesel engine using diphenylamine Antioxidant and ceria nanoparticle additives with biodiesel based on machine learning	2024
27.	Dr. Laxmikant Yadav	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Taylor & Francis	Experimental study of parabolic trough collector in series having a concentric copper tube in evacuated tube for Air heating, Vol. No. 46	2024
28.	Dr. Laxmikant Yadav	International Journal of Refrigeration, Elsevier	Evolution of purge with multi-sector, novel designs, and configurations of desiccant wheel: A Technical Review	2024

**(ii) BOOKS CHAPTER/BOOK:**

<b>S. No.</b>	<b>Type</b>	<b>Title</b>	<b>Publisher</b>	<b>Authors</b>	<b>ISBN/ISSN No.</b>	<b>Year</b>
1.	Book	Hydrogen Energy Production, Storage and Utilization	Taylor & Francis	Dilshad Ahmad Khan, Akhilesh Kumar Choudhary, Deepak Sharma	978-1032393032	2024
2.	Book Chapter	Recent Development and Future Prospects of Hierarchical Nanostructures of TiO <sub>2</sub> in Energy Applications	Engineering Materials, Springer	Sudhir Kumar Singh, Deepak Sharma	978-3031806254	2025
3.	Book Chapter	Enhancing the tribological properties of surfaces through various surface modification and coating techniques	Springer	Sudhir Kumar Singh, Madhup Kumar Mittal, and Deepak Sharma	978-3111376424	2025
4.	Book Chapter	Performance Increment of Solar Still Using Solar Pond	Walter de Gruyter GmbH & Co KG	Sudhir Kumar Singh, Deepak Sharma, Noor Alam, Surendra Kumar Yadav	978-9819765485	2024
5.	Book Chapter	Optimizing Quadcopter Chassis Through Generative Design: A Novel Approach	Springer Nature	Utkarsh Sharma, Bisheshwar Haorongbam, Anshul Sharma and Rajnish Mallick	2195-4364	2025
6.	Book Chapter	Recent developments to improve wear resistance of biomaterials	De Gruyter	Vivek Singh , Rajesh Kumar Sharma , Rakesh Sehgal and Sanjay Kumar	978-3111376424	2025
7.	Book Chapter	Thermochemical hydrogen production methods : A review	CRC Press, Taylor & Francis Group (England)	Sangharatna M. Ramteke, Sachin Akoji Meshram, H. Chelladurai, and Akhilesh	978-1003537816-1	2025

				Kumar Choudhary		
8.	Book Chapter	Sustainable supply chain practices in the emerging hydrogen transportation industry	CRC Press, Taylor & Francis Group (England)	Durwesh Jhodkar, Somadatta Karanjekar, Bharat Chede, Akhilesh Kumar Choudhary, and Tapus Bajpai	ISBN: 978-1-003-53781-6 (ebk) DOI: 10.1201	2025
9.	Book Chapter	Laser Cutting, Drilling and Piercing	Wiley, Scrivener Publishing LLC	Yajush Walia, Roopak Varshney and Param Singh	978-1394213573	2024
10.	Book Chapter	Characteristics of Additive Manufacturing Process	Wiley, Scrivener Publishing LLC	Sandip Kumar, Jagadeesha T, Gurudas Mandal, Akhilesh Kumar Singh, Rajesh Kumar, Aezeden Mohamed and Param Singh	978-1394238286	2024
11.	Book Chapter	Advances in Pre And Post Additive manufacturing Processes	CRC Press, Taylor and Francis	Akant Kumar Singh, MH Shakir, Siddhartha, Sanjay Yadav, M Yadav, NM Tripathi, I fidan	ISBN:978-1-032-54987-3(HBK)	2024
12.	Book Chapter	Analysis of Thermal Performance of Water Based Nanofluid in a Heat Exchanger	IGI Global	Laxmikant Yadav, Pranjal Tyagi, A. K. Verma, Awdhesh Kumar Poddar, Ramesh Kumar Singh, N. S. Thakur	979-8369327982	2024
13.	Book Chapter	Introduction: Hydrogen Energy: Production, Storage and Utilization	CRC Press, Taylor & Francis Group (England)	Dilshad Ahmad Khan, Akhilesh Kr. Choudhary, Deepak Sharma	ISBN: 978-1-003-53781-6 (ebk) DOI: 10.1201	2024

**(iii) PAPER****PRESENTED IN CONFERENCE/SEMINAR/SYMPOSIA:**

<b>Sr. No.</b>	<b>Name of Faculty</b>	<b>Details of Conference Proceeding</b>	<b>National / International</b>	<b>Title of the Paper</b>
1.	Dr. Deepak Sharma	International Conference on Recent Trends in Transport Processes, JUNE 24 - 26, 2024 Organized By Department of Chemical Engineering, NIT Hamirpur	International	Numerical study on heat transfer performance of novel tube configuration in shell and tube heat exchanger
2.	Dr. Deepak Sharma	International Conference on Recent Trends in Transport Processes, JUNE 24 - 26, 2024 Organized By Department of Chemical Engineering, NIT Hamirpur	International	Energy, exergy and sustainability analysis of split injection of diesel/n-butanol blends in diesel engines
3.	Dr. Deepak Sharma	2nd International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-2024) held at National Institute of Technology Hamirpur, Hamirpur, H.P., 16-18th December 2024.	International	Enhancing Desalination Performance of a Solar Still Integrated With Shallow Solar Pond
4.	Dr. Deepak Sharma	5th International Conference on Recent Advances in Mechanical Infrastructure, held in Ahmedabad, 10-12th January 2025.	International	Pool Boiling Heat Transfer Performance of Cu-Al <sub>2</sub> O <sub>3</sub> Coated Copper Microporous Surface
5.	Dr. Laxmikant Yadav	Advances in Energy and Sustainability(INCOM 2024), pp 373-384	International	Empowering Rural Communities with Organic Rankine Cycle-Based Biomass Energy from Agricultural Residue
6.	Dr. Laxmikant Yadav	International Conference on Mechanical and Energy Technologies	International	An Economic and Environmental Assessment of Evacuated Tube-Based Solar Air Collector
7.	Dr. Anshul Sharma	2nd International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering, 16-18 Dec 2024, NIT Hamirpur, India, Paper ID: 142	International	The Impact of Pore Size on Mechanical Properties of Graded Auxetic Re-entrant Structures: A Comprehensive Analysis
8.	Dr. Anshul Sharma	4th International Conference on Mathematical Modeling, Computational Intelligence	International	Optimizing the Design of Auxetic Core Airfoil for Wing Morphing

		Techniques and Renewable Energy (MMCITRE-2024), May 29-31, 2024, Manipal University, India, Paper ID: 189		Applications
9.	Dr. Anshul Sharma	4th International Conference on Mathematical Modeling, Computational Intelligence Techniques and Renewable Energy (MMCITRE-2024), May 29-31, 2024, Manipal University, India, Paper ID: 189	International	Optimizing re-entrant honeycomb auxetic unit cell structure for superior mechanical properties for practical applications
10.	Dr. Param Singh	2nd International Conference on Mechanical Engineering: Researches and Evolutionary Challenges (ICMech-REC 24), NIT Warangal, India, during May 29-31, 2024	International	Comparative study on mechanical properties and microstructure due to different percentage of reinforcement of B4C on Al7075/B4C Metal Matrix Composite
11.	Dr. Param Singh	International Conference on Composites: Design, Processing, Manufacturing and Health Monitoring 2024, IIT Mandi	International	Investigating the Impact of Varied Current and Rotational Speeds on the Machining Performance of Al7075 Alloy using Electrical Discharge Turning
12.	Dr. Param Singh	2nd International Conference on "Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-2024)" Organized by Department of Mechanical Engineering, National Institute of Technology Hamirpur, Hamirpur, H.P., India; 16th -18th December 2024	International	Comprehensive Review on Process Parameters, Different Work piece on Travelling Wire Electrochemical Discharge Machining
13.	Dr. Param Singh	2nd International Conference on "Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-2024)" Organized by Department of Mechanical Engineering, National Institute of Technology Hamirpur, Hamirpur, H.P., India; 16th -18th December 2024	International	Experimental Study on Mechanical Properties of PLA and PLA-Carbon Fiber Composite Fabricated using FDM

- (c) **Doctoral Programme:** 23 Nos. ongoing (During Session 2024-2025)
- (d) **Ph. D. Degree awarded:** 11 Nos. (During Session July, 2024-25)
- (e) **Master Thesis completed:** 16 Nos. (M.Tech in Thermal/Design/Manufacturing (Admitted in 2023 and Passed in 2025))

Sr. No.	Name of the Student	Name of Guide	Name of Co-Guide	Year of Regn.	Nature of Ph.D	Specialization/ Topic	Status
1.	Mr. Vishal Kumar	Dr. Debasish Das	-	2018	Full Time	Experimental Investigation of Bio Diesel in Modified Diesel Engine	Completed
2.	Mr. Amitesh Sharma (QIP)	Dr. Prashant Kumar	-	2018	Full Time	Performance of Jet Impingement Type Solar Air Heat	Completed
3.	Mr. Roopak Varshney	Dr. Param Singh	-	2019	Full Time	Assisted Electrical Discharging Machine	Completed
4.	Mr. Kamal Kishore	Dr. Manoj Kumar Sinha	-	2019	Full Time	Sustainable Machining of Difficult-to-Machine Materials	Completed
5.	Mr. Sudhir Kumar Singh	Dr. Deepak Sharma	-	2019	Full Time	Boiling Heat Transfer Enhancement	Completed
6.	Mr. Ayush Awasthi	Dr. Mohit Pant	-	2019	Full Time	Computational Fracture Mechanics	Completed
7.	Mr. Yogesh Kumar Yadav	Dr. Siddhartha Sharma	-	2019	Full Time	Erosion Wear Modelling	Thesis Submitted
8.	Mr. Vivek Singh	Dr. Rajesh Kumar Sharma	-	2019	Full Time	Experimental Investigation on Tribological Behaviour of Material	Completed
9.	Ms. Akanksha Maurya	Dr. Anoop Kumar	Dr. Deepak Sharma	2019	Full Time	Investigations on the Performance Improvement of Solar Cavity Receives	In Progress (22-07-2019)
10.	Mr. Vijay Kumar	Dr. Akhilesh Kumar Choudhary	-	2019	Full Time	Condition Monitoring of Mechanical System	Completed
11.	Mr. Rajat Kumar	Dr. Varun	-	2019	Full Time	Thermal Management System using Heat Pipes	Thesis Submitted
12.	Mr. Jasveer Singh	Dr. Rakesh Sehgal	-	2020	Full Time	Atomistic Modelling of Nano Materials for Mechanical Characterization	Thesis Submitted
13.	Mr. Saurabh Thakur	Dr. Sant Ram Chauhan	-	2020	Full Time	Incremental Sheet Forming of Polymer Material	In Progress (08-01-2020)
14.	Mr. Sohan Lal Sharma	Dr. Ajay Debbarma	-	2020	Full Time	Thermal Storage System for Power Generation using TEG Models	Completed

15.	Mr. Prince Oliver Horo	Dr. Dilshad Ahmad Khan	-	2020	Full Time	Magnetorheological Finishing (MRF)	In Progress (08-01-2020)
16.	Mr. Ankur Dwivedi	Dr. Anoop Kumar	-	2020	Full Time	Battery Thermal Management System	In Progress (08-01-2020)
17.	Mr. Ashutosh Kumar Verma	Dr. Laxmikant Yadav	-	2020	Full Time	Solar Assisted Deficient Cooling Tower	In Progress (08-01-2020)
18.	Mr. Love Kumar	Dr. Rajiv Kumar Sharma	-	2020	Full Time	Industrial Engineering	Completed
19.	Mr. Biswajit Sahoo	Dr. Debasish Das	-	2020	Full Time	Robotics	In Progress (08-01-2020)
20.	Mr. Vikram Singh (QIP)	Dr. Somesh Sharma	-	2020	Full Time	Multi – Agent Technology	Completed
21.	Mr. Akshay Thakur	Dr. Varun	-	2020	Part Time	Concentrated power indirect solar cooker using PCM for universal cooking	In Progress (05-10-2020)
22.	Mr. Nitin Kumar Dengre (QIP)	Dr. Anoop Kumar	Dr. Laxmikant Yadav	2021	Full Time	Solar driven combined heating cooling and dehumidification system	In Progress (10-08-2021)
23.	Mr. Kuber Singh Mehra	Dr. Varun	-	2021	Part Time	Biofuel Testing for CI Engines	In Progress (16-09-2021)
24.	Mr. Yajush Walia	Dr. Param Singh	-	2023	Full Time	Performance study of FDM on ABS and its composites	In Progress (19-01-2023)
25.	Mr. Amit Sanyal	Dr. Akhilesh Kumar Choudhary	-	2023	Full Time	Investigation of performance, combustion and emission of Diesel Engine using WPO and Hydrogen	In Progress (19-01-2023)
26.	Mr. Rahul Jamwal	Dr. Rajiv Kumar Sharma	-	2023	Full Time	Industry 5.0	In Progress (05-07-2023)
27.	Mr. Abhishek Thakur	Dr. Dilshad Ahmad Khan	-	2023	Full Time	Extrusion Pressure Based Magnetorheological Finishing	In Progress (05-07-2023)
28.	Mr. Pankaj Kumar	Dr. Rajesh Kumar Sharma	-	2023	Full Time	Journal Bearing	In Progress (05-07-2023)
29.	Mr. Prateek Bhardwaj	Dr. Prashant Kumar	-	2024	Full Time	Hybrid PVT Cooling	In Progress (08-03-2024)
30.	Mr. Ravinder Kumar	Dr. Somesh Sharma	-	2024	Full Time	Automation and Industry 5.0	In Progress (08-03-2024)

31.	Mr. Sohan Lal	Dr. Debasish Das	-	2024	Full Time	Natural Convection Heat Transfer	In Progress (18/07/2024)
32.	Mr. Raj kumar	Dr. Somesh Sharma	-	2024	Full Time	Manufacturing of HiTech Products	In Progress (19/07/2024)
33.	Mr. Ajay Kumar Saini	Dr. Siddharatha Sharma	-	2024	Full Time	CAMS resistant thermal barrier cooling	In Progress (18/07/2024)
34.	Mr. Gagandeep Rooprai	Dr. Siddharatha Sharma		2025	Part Time	Erosion wear analysis of FGM based 3-D printed wind turbine blade application	In Progress (06/01/2025)

**(iv) PATENT:**

Sr. No.	Title of Patent (CBR No.)	Application Number	Application filing Agency/office	Application Filing date	Present Status
1.	AN IMPROVED PROCESS AND CATALYST FOR BIODIESEL PRODUCTION	202421023318	The Patent Office, Govt. of India	25/03/2024	Granted (22.11.2024)
2.	Automated 3D Printer .....error detection and additional features	415388-001	The Patent Office, Govt. of India	28/06/2024	Granted
3.	Visco-Fluid Pump with Internal Cooling	202411053308	The Patent Office, Govt. of India	12/07/2024	Granted

**(f) DOCTORAL PROGRAMME:**

<b>S. No.</b>	<b>Title of Thesis</b>	<b>University / Institute &amp; Year of Ph. D. Award</b>	<b>Name of the Scholar</b>	<b>Name of the supervisors</b>
1.	Experimental Investigation of Bio Diesel in Modified Diesel Engine	NIT Hamirpur, 2025	Mr. Vishal Kumar	Dr. Debasish Das
2.	Assisted Electrical Discharging Machine	NIT Hamirpur, 2025	Mr. Roopak Varshney	Dr. Param Singh
3.	Experimental Investigation on Tribological Behaviour of Material	NIT Hamirpur, 2025	Mr. Vivek Singh	Dr. Rajesh Kumar Sharma
4.	Thermal Storage System for Power Generation using TEG Models	NIT Hamirpur, 2025	Mr. Sohan Lal Sharma	Dr. Ajoy Debbarma
5.	Industrial Engineering	NIT Hamirpur, 2025	Mr. Love Kumar	Dr. Rajiv Kumar Sharma
6.	Multi – Agent Technology	NIT Hamirpur, 2025	Mr. Vikram Singh	Dr. Somesh Sharma
7.	Performance of Jet Impingement Type Solar Air Heat	NIT Hamirpur, 2024	Mr. Amitesh Sharma	Dr. Prashant Kumar
8.	Sustainable Machining of Difficult-to-Machine Materials	NIT Hamirpur, 2024	Mr. Kamal Kishore	Dr. Manoj Kumar Sinha
9.	Boiling Heat Transfer Enhancement	NIT Hamirpur, 2024	Mr. Sudhir Kumar Singh	Dr. Deepak Sharma
10.	Computational Fracture Mechanics	NIT Hamirpur, 2024	Mr. Ayush Awasthi	Dr. Mohit Pant

11.	Condition Monitoring of Mechanical System	NIT Hamirpur, 2024	Mr. Vijay Kumar	Dr. Akhilesh Kumar Choudhary
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## 5. DISTICTION ACHIEVED:

### (a) By Student:

- Devansh Shrivastava, a B.Tech Mechanical Engineering final year student has been selected as the recipient of the ASME Foundation Scholarship award. He has been awarded a scholarship of 2000 USD.
- He also represented NIT, Hamirpur in the International Simulation Olympiad (ISIMO, 2024). His team, “team Panchayat”, comprising two other students from NIT Durgapur, came at 3 rd place in the Olympiad.
- His startup known as Bhumiputra Biodiesel, has been selected to participate in the DST – GDC I-NCUBATE Cohort 03 conducted by DST, Government of India and GDC, IIT Madras.

**6. DETAILS OF LABORATORIES:**

<b>Sr. No.</b>	<b>Name of Laboratory</b>	<b>Capacity</b>	<b>Year of Establishment</b>
1	Metrology & Measurement Laboratory	156 Sq.m	2020
2	Industrial Engineering Laboratory	78 Sq.m	1996
3	Computer Aided Manufacturing Laboratory	78 Sq.m	2005
4	Manufacturing Laboratory	78 Sq.m	2020
5	Mechatronics & Robotics Laboratory	78 Sq.m	2005
6	Material Testing Laboratory	117 Sq.m	1986
7	Theory of Machine	78 Sq.m	1996/1997
8	Computer Aided Design Laboratory	156 Sq.m	1992
9	Tribology Laboratory	78 Sq.m	1997
10	Rapid Design & Development Lab.	78 Sq.m	2020
11	Product Design & Development Laboratory	78 Sq.m	2020
12	Fluid Mechanics & Machinery Laboratory	243 Sq.m	1996
13	Heat & Mass Transfer Laboratory	78 Sq.m	1996
14	Steam Power Engineering Laboratory	120 Sq.m	2000
15	I.C.Engine Laboratory	117 Sq.m	1995
16	Refrigeration and Air Conditioning Lab.	78 Sq.m	1997
17	Student Research Laboratory	78 Sq.m	2021
18	PG Research Laboratory	78 Sq. m	2021

### 3.7 DEPARTMENT OF CHEMISTRY



#### 1. ACADEMIC STAFF

**HEAD OF THE DEPARTMENT:** Dr. Kalyan Sundar Ghosh

#### 2. FACULTIES:-

Professor	Associate Professor	Assistant Professor
---	Dr. K. S. Ghosh	Dr. Raj Kaushal Gr.-I
	Dr. Pamita Awasthi	Dr. Jai Prakash Gr.-I
	Dr. Bharti Gaur	Dr. Jagannath Kuchlyan Gr.-II

#### 3. SEMINAR, SYMPOSIA, SUMMER- WINTER SCHOOL, SHORT TERM COURSES, FDP:

Sponsoring Agency	Name of the Coordinator	Title of the seminar/symposia STC/ FDP etc.	Duration	Venue
NIT Hamirpur	Dr. Pamita Awasthi and Dr. Jagannath Kuchlyan	STC on Analytical Techniques in Chemical and Material Sciences: Experimental and Theoretical Tools	10-14 January 2025	NIT Hamirpur
NIT Hamirpur	Dr. K S Ghosh (Convener) Dr. Jai Prakash (Cordinator)	STC on Chemistry for Energy, Environment and Biomedical Applications	17-21 December, 2024	NIT Hamirpur
NIT Hamirpur and SERB	Dr. Jai Prakash (Organizing Chairman), Dr. K S Ghosh & Dr. Raj Kaushal	1 <sup>st</sup> International Conference on "Molecules and Materials: Chemistry for	21-22 November, 2024	NIT Hamirpur

	(Organizing Secretary),	Sustainable Future (M2ChemSF-2024)”		
NIT Hamirpur	Dr. Bharti Gaur (Convener) Dr. Raj Kaushal & Dr. Jai Prakash (Cordinator)	STC on Instrumental Techniques for Molecular Analysis	21-25 May, 2024	NIT Hamirpur

#### 4) **RESEARCH PUBLICATIONS:**

**Dr. K S Ghosh**

##### i) Research Publications:

1. Bopda, A., Fotsop, C.G., Kenda, G.T., Tchuifon, D.R.T., Mache, F.F., Nguena, K.L.T., Doungmo, G., Ndifor-Angwafor, N.G., **Ghosh, K.S.**, Hosseini-Bandegharai A. (2025) Investigating the uptake of brilliant blue FCF and orange II dyes from aqueous solution onto a porous Al-based MOF sorbent (CAU-10-H), *Inorg. Chem. Commun.* **178**, 114560.
2. Sushma, Sharma, S., **Ghosh, K.S.** (2025) Applications of functionalized carbon-based quantum dots in fluorescence sensing of iron (III), *J. Fluores.* **35**, 1255–1272.
3. Sushma, Sharma, S., **Ghosh, K.S.** (2024) Fluorescence chemosensing and bioimaging of metal ions using Schiff base probes working through photo-induced electron transfer (PET), *Crit. Rev. Anal. Chem.* (Accepted).

**Dr. Pamita Awasthi**

##### i) Research related: Publication

1.	Molecular Interaction between l-Leucine and Glycyl-l-leucine in l-Decyl-3-methylimidazolium Bromide Solution: Volumetric, Acoustic, and Density Functional Theory Approaches	Ravinder Sharma, <b>Pamita Awasthi</b> , Neetika Kumari, Indra Bahadur, Faruq Mohammad, Mwadhama M. Kabanda	2024	Journal of Chemical & Engineering Data	69(9), 2896-2916
2.	Structural and biological studies on beta – alanine substituted Sulfonamide derivatives: a new class of Juvenile hormone mimics as Insect growth regulators	Neetika Kumari, <b>Pamita Awasthi</b> ,	2024	Journal of Molecular Structure	140046
3.	Sulfonyl-acetohydrazide derivatives as juvenile hormone mimics to be insect growth regulators	Neetika Kumari, Manisha Chaudhary, <b>Pamita Awasthi</b>	2024	Bioorganic Chemistry	153, 107781
4.	A Comprehensive Review on the Development of Titanium Complexes as Cytotoxic Agents	Nitesh Kumar, Raj Kaushal, <b>Pamita Awasthi</b>	2024	Current Topics in Medicinal Chemistry	24, 2117-2128
5.	New insight into molecular interactions of surface-active ionic liquid (SAIL) with some biomolecules: Experimental and computational approaches	Ravinder Sharma, <b>Pamita Awasthi</b> , Neetika Kumari, Manu Vatsal, Arti Sharma, Ritu, Indra Bahadur, Mwadhama M. Kabanda, Faruq Mohammad	2024	Journal of Molecular Liquids	416, 126457
6.	Insight into the Volumetric Properties, Acoustic Properties, Density Functional Theory (DFT) and Molecular Docking of Surface-Active Ionic Liquid (SAIL) [OMim][Br] with l-	Ravinder Sharma, <b>Pamita Awasthi</b> *Manu Vatsal, Vandana Devi, Arti Sharma, Ritu, Renu Dogra, Indra Bahadur,*Faruq Mohammad, Ahmed	2025	Journal of Chemical & Engineering Data	70 (3) 1250-1276

	Asparagine and Glycyl-l-asparagin.	Abdullah Soleiman			
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**Dr. Raj Kaushal:****i) Research related: Publication**

1. Dr. Pratibha Sharma, Dr. Jai Prakash and Dr. Raj Kaushal, Eco-Friendly Synthesis of Amino and Carboxyl-Functionalized Silica Nanoparticles for Enhanced Adsorption of Water Pollutants, Hybrid Advances, <https://doi.org/10.1016/j.hybadv.2024.100209>.
2. Dr. Nitesh Kumar, Dr. Raj Kaushal and Dr. Pamita Awasthi, A Comprehensive Review on the development of titanium complexes as cytotoxic agents, Current topics in Medicinal Chemistry, DOI: 10.2174/0115680266317770240718080512.
3. Ms. Jyoti Sharma and Dr. Raj Kaushal, Nitrogen Containing Heterocyclic Chalcone Hybrids and Their Biological Potential (A Review), Russian Journal of General Chemistry, Vol. 94, No. 7, pp. 1794–1814. DOI: 10.1134/S1070363224070235

**ii) Conferences Attended:**

1. Ms. Jyoti Sharma, Dr. Arya Pratap and Dr. Raj Kaushal, CT-DNA binding investigation of oxovanadium(IV) chalcone containing bidentate chalcone by various spectro-analytical techniques, an online international symposium - Current Trends in Advanced Materials (CTAM – 2024) in association with the American Chemical Society, VIT-AP University, Andhra Pradesh, August 26-31, 2024.
2. Ms. Reeta, Ms. Jyoti Sharma and Dr. Raj Kaushal, DFT and molecular docking studies of selected flavonoid: A computational approach to Antidiabetic drug design., Molecule to Material: Chemistry for sustainable future M2ChemSF-2024, November21-22, 2024, PP-34, NIT Hamirpur.
3. Ms. Jyoti Sharma and Dr. Raj Kaushal, integrated molecular docking and DFT approach to explore the potential of pyrazol engrafted chalcones, Molecule to Material: Chemistry for sustainable future M2ChemSF-2024, November21-22, 2024, PP-35, NIT Hamirpur.

**Dr. Jai Prakash:****i) Research related: Publication**

1. Vikas Kumar, Dr. Jai Prakash, S Kansal, Awanish Tripathi, Fe<sup>3+</sup>-Dopants Mediated Crystal Structure Modifications in Photoactive Cuse Nanosheets for Achieving Effective Natural Solar Spectrum Driven Photocatalysis, Physica B: Condensed Matter 701 (2025) 416968 DOI: <https://doi.org/10.1016/j.physb.2025.416968>
2. Sahil Thakur and Dr. Jai Prakash, Advances in powder nano-photocatalysts as pollutant removal and as emerging contaminants in water: Analysis of pros and cons on health and environment, **Advanced Powder Materials (2024) 100233 (Impact Factor 28+)** <https://doi.org/10.1016/j.apmate.2024.100233>
3. Dilshod Boykobilov, Sahil Thakur, Dr. Jai Prakash, Olim Ruzimuradov, Electrochemical synthesis and modification of novel TiO<sub>2</sub> nanotubes: Chemistry and role of key synthesis parameters for photocatalytic applications in energy and environment, **Inorganic Chem Comm. 113419 (2024)** <https://doi.org/10.1016/j.inoche.2024.113419>

4. Sahil Thakur and Dr. Jai Prakash, Standalone Highly Efficient Graphene Oxide as an Emerging Visible Light-Driven Photocatalyst and Recyclable Adsorbent for the Sustainable Removal of Organic Pollutants, **Langmuir (ACS) Accepted (2024)** [10.1021/acs.langmuir.4c01727](https://doi.org/10.1021/acs.langmuir.4c01727)

5. Dr. Jai Prakash, Ultrasensitive detection of emerging water contaminants using surface enhanced Raman scattering technique: Recent advancement, challenges, and future prospects, **Current Opinion in Environmental Science & Health**, **39** (2024) 100552 DOI: <https://doi.org/10.1016/j.coesh.2024.100552>

6. Samriti, P Kumar, A Kuznetsov, H. C. Swart, Dr. Jai Prakash\*, Sensitive, Stable, and Recyclable ZnO:Ag Nanohybrid Substrates for Surface-Enhanced Raman Scattering Metrology, **ACS Materials Au** **4** (2024) 413-423 <https://doi.org/10.1021/acsmaterialsau.4c00002>

7. Samriti, S. Thakur, A. Ojha, R. Gupta, M. Bechelany, A. Kuznetsow, H. C. Swart, Jai Prakash\*, Graphene oxide as novel visible light active photocatalyst: Synthesis, modification by nitrogen and boron doping, and photocatalytic application, **Physica Status Solidi (a)** (2024) 2400169. <https://doi.org/10.1002/pssa.202400169>

8. Vikas Kumar, Jai Prakash, Sushil Kumar Kansal, Awnish Kumar Tripathi, Tailoring the geometry of visible and near-infrared light active CuSe nanostructure for enhanced photocatalytic activity, **Nano-Structures & Nano-Objects** **39** (2024) 101276 <https://doi.org/10.1016/j.nanoso.2024.101276>

9. BN Krishna, J Jakmunee, YK Mishra, Jai Prakash, ZnO based 0-3D diverse nano-architectures, films and coatings for biomedical applications, **Journal of Materials Chemistry B** **12** (2024) 2950 <https://doi.org/10.1039/D4TB00184B>

10. Dr. Jai Prakash, S Sun, MN Rumyantseva, Special Issue: Emerging nanomaterials and advanced techniques for sensing and removal of toxic gases for environmental and health applications, **Current Opinion in Environmental Science & Health**, **38** (2024) 100544 <https://doi.org/10.1016/j.coesh.2024.100544>

11. KSS Devi, Jai Prakash, S Tsujimura, Graphene oxide-based nanomaterials for electrochemical bio/immune sensing and its advancements in health care applications: A review, **Hybrid Advances**, **5** (2024) 100123 DOI: <https://doi.org/10.1016/j.hybadv.2023.100123>

#### ii) Conferences Attended:

1. International Conference on “Catalysis for Sustainable Chemicals, Materials & Energy” (CSCME-2025)” attended as Invited speaker at Thapar Institute of Engineering & Technology, Bhadson Road, Patiala – 147004 Punjab, India during 23rd February 2025 to 26th February 2025
2. Invited Talk at International conference on “CURRENT ADVANCES IN BASIC AND SOCIAL SCIENCES: Issues and Challenges” (January, 20-22, 2025) held at MCM DAV College Kangra (H.P.)

#### 5. DOCTORAL PROGRAMME:

On-going Doctoral Programme :

Sr. No	Title	Supervisor and Co-Supervisor	Name of Research Scholar	Brief Report
1.	Fabrication and Development of Nanoparticles as Metal ion Sensors	Dr.K.S Ghosh	Ms. Sushma	In Progress
2.	Development of colorimetric chemosensors for metal ions	Dr.K.S Ghosh	Ms. Ankita Sharma	In Progress
3.	Design and Fabrication of Nanosensors.	Dr.K.S Ghosh	Ms. Sonam	In Progress
4.	Synthesis Computational and	Dr. Pamita Awasthi	Ms. Neetika Kumari	Completed

	Biological Screening of Phenoxy Acetamide and Sulfonamide Derivatives			
5.	Synthetic, Structural & Biological study of Phenothiazine and Anthraquinone analogs as anticancer agents	Dr. Pamita Awasthi	Ms. Arti Sharma	In Progress
6.	Natural Product Mimics	Dr. Pamita Awasthi	Ms. Renu Dogra	In Progress
7.	Comprehensive study on natural product mimics	Dr. Pamita Awasthi (Supervisor) Dr. Jagganath Kuchlyan (Co-Supervisor)	Ms. Ritu	In Progress
8.	Synthesis and Characterization of Multifunctional Dendritic Polymers in Drug Delivery Applications	Dr. Bharti Gaur	Mr. Avtar Chand	Completed
9.	Bio-based Vitrimers	Dr. Bharti Gaur	Mr. Ankit Sharma	In Progress
10.	Sustainable energy	Dr. Bharti Gaur	Ms. Manju Yadav	In Progress
11.	Synthesis of Vanadium Complexes derived from Pyrazole Ring Chalcone and their Biological Potential	Dr. Raj Kaushal	Ms. Jyoti Sharma	In progress
12.	Synthesis of Mesoporous Hybrid metal complexes & their Pharmacological Potential	Dr. Raj Kaushal	Ms. Reeta	In Progress
13.	Inorganic synthesis	Dr. Raj Kaushal	Ms. Riya Sharma	In Progress
14.	Synthesis and Modification of Photocatalyst Nanomaterials for Waste Water Treatment	Dr. Jai Prakash	Ms. Samriti	Completed
15.	Functional Nanomaterials	Dr. Jai Prakash	Mr. Sahil Thakur	In Progress
16.	Functional Nanomaterials	Dr. Jai Prakash	Mr. Rupam	In Progress
17.	Photophysics of various molecule and fluorescence sensor	Dr. Jagganath Kuchlyan	Ms. Simran Kaur Bhatia	In Progress

#### 6. EQUIPMENT PROCURED UNDER EQUIPMENT GRANT OH-35 :

Sr.No	Name of equipment	Quantity	Cost (Rs)
1.	Remi Medium Duty Stirrer	2	39,196/-
2.	Hot Plate Cum Magnetic Stirrer	30	2,78,970/-
3.	UV – Transilluminator	1	94,494/-
4.	Argon Refillable seamless gas cylinders	3	30,000/-
5.	Multifunction printer	1	16,880/-
6.	Electronic Weighing machine	3	1,68,900/-
7.	Ultra low Deep freezer	1	3,37,187/-
8.	Microwave Synthesizer	1	16,82,160/-
9.	ELISA Reader	1	1,50,000/-

10.	Hot & Cold air Conditioners 1.5 ton	5	2,67,500/-
11.	Godrej Refrigerators	6	1,58,316/-

#### 7. DETAIL OF THE LABORATORIES:

Sr.No.	Name of the Laboratory
1.	Engineering Chemistry (UG) Laboratory-I
2.	Engineering Chemistry (UG) Laboratory-II
3.	PG Organic Chemistry Lab
4.	PG Inorganic Chemistry Lab
5.	PG Physical Chemistry lab-I
6.	PG Physical Chemistry lab-II
7.	Bio Physical Chemistry Research Lab
8.	Inorganic Chemistry Research lab
9.	Advanced Synthetic Chemistry Lab
10	Polymer Synthesis Research lab
11	Organic Synthesis Research Lab
12	Nanomaterials Research Lab
13	Computational Chemistry Lab
14.	Photochemistry Research Lab
15	Instrumentation Lab -I
16	Instrumentation Lab -II

### 3.8 DEPARTMENT OF MATHEMATICS & SCIENTIFIC COMPUTING



#### 1. Academic Staff

**Head:** Dr. Sunil, Professor.

**Faculty Names:**

Professor	Associate Professor	Assistant Professor
1. Dr. Yogeshvar Dutt Sharma 2. Dr. Sunil	1. Dr. Ramesh Kumar Vats 2. Dr. Pawan kumar Sharma	1. Dr. Suket Kumar 2. Dr. Subit Kumar Jain 3. Dr. Ganesh Talari 4. Dr. Om Prakash Yadav 5. Dr. Rifaqat Ali 6. Dr. Soniya Chaudhary 7. Dr. Jeetendrasingh Maan 8. Dr. Soniya Chaudhary 9. Dr. Pankaj Kumar

#### 2. Research (2024-25)

##### i. Research Publications: Paper published in National and International Journals/Conferences/Seminars:

- Shad, M., Sharma, Y.D. and Narula, P., 2024. Wind speed prediction using non-gaussian model based on Kumaraswamy distribution. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 46(1), pp.719-735.(SCI)

2. Kushwaha, A.K., Sharma, Y.D. and Saini, S., 2024. Instability analysis of vibrated thermo-convection in Casson nanofluid suspension. *Modern Physics Letters B*, 38(02), p.2350219.(SCI)
3. Sharma, S., Sunil & Sharma, P., 2024. Stability analysis of thermosolutal convection in a rotating Navier-Stokes-Voigt fluid. *Zeitschrift für Naturforschung A*, 79(7), pp.680–702. (Index: SCIE)
4. Devi, R., Chaudhary, S., Mahajan, A. & Kumar, S., 2024. Effects of variable gravity on stability in couple-stress fluids across various conducting boundaries. *Numerical Heat Transfer, Part B: Fundamentals*, 2024, pp.1–11. (Index: SCIE)
5. Chaudhary, S., Chauhan, S., Devi, R., Mahajan, A., Kumar, S. & Sharma, M., 2024. Stability of couple-stress fluid saturating a porous layer heated and salted from below and rotating about vertical axis. *Chinese Journal of Physics*, 90, pp.922–932. (Index: SCIE)
6. Devi, R., Choudhary, S., Sharma, P., Sunil, Sharma, M.K., Singh, M., Chaudhary, P. & Rawat, M., 2024. Analytic study of thermohaline convective stability in a couple stress fluid. *Malaysian Journal of Science*, 43(3), pp.49–55. (Index: Scopus)
7. Chandel, V. & Sunil, 2024. Nonlinear and linear analysis for thermal convection in partially-ionized plasma saturating a porous medium in the presence of magnetic field. *The European Physical Journal Plus*, 139(9), Article no. 856. (Index: SCIE)
8. Chandel, V. & Sunil, 2024. Influence of magnetic fields and bounding surface configurations on thermal convection in partially-ionized plasmas: Nonlinear and linear stability analyses. *Pramana – Journal of Physics*, 98(3), Article no. 107. (Index: SCIE)
9. Chandel, V. & Sunil, 2024. Effect of local thermal non-equilibrium on the stability of rotating partially ionized plasma heated from below. *IEEE Transactions on Plasma Science*, 52(11), pp.5315–5326. (Index: SCIE)
10. Chandel, V. & Sunil, 2025. Stability analysis of partially ionized plasma in a porous medium with local thermal non-equilibrium effects. *Journal of Plasma Physics*, 91(1), Article no. E1. (Index: SCIE)
11. Sharma, S., Kumar, S. & Sharma, P., 2025. A nonlinear stability analysis of rotating Navier-Stokes-Voigt fluid heated from below. *Journal of Applied Nonlinear Dynamics*, 14(1), pp.19–29. (Index: Scopus)
12. Chandel, V., Sunil & Devi, R., 2025. Stability and convection in compressible partially-ionized plasma layers: Nonlinear and linear analysis. *Zeitschrift für Naturforschung A*, 80(4), pp.323–333. (Index: SCIE)
13. Thakur, A., Kumar, S. & Devi, R., 2025. Nonlinear stability and subcritical dynamics of ferroconvection with couple stresses under thermal non-equilibrium in porous media. *Archive of Applied Mechanics*, 95(7), Article no. 146. (Index: SCIE)
14. Sharma, S., Kumar, S. & Sharma, P., 2025. Thermal convection in a Navier-Stokes-Voigt fluid saturating a porous medium using thermal nonequilibrium model. *Journal of the Physical Society of Japan*, 94(7), Article no. 074401. (Index: SCIE)
15. Chaudhary, S., Devi, R., Mahajan, A., Kumar, S. & Sharma, M., 2025. Effect of vertical rotation and salt on the stability of couple-stress fluid layer. *Chinese Journal of Physics*, 96, pp.245–257. (Index: SCIE)
16. Thakur, A., Kumar, S. & Devi, R., 2025. A nonlinear stability analysis for magnetized ferrofluid heated from below in the presence of couple stresses for combination of different bounding surfaces. *Numerical Heat Transfer, Part B: Fundamentals*, 86, pp.106–122. (Index: SCIE)
17. Kumar, D., Sunil & Devi, R., 2025. Influence of rotation and couple stresses on convective stability in Navier-Stokes-Voigt fluid. *Archives of Mechanics*, 77(3), pp.305–332. (Index: SCIE)
18. Chandel, V., Sunil & Devi, R., 2025. Study of global stability of partially-ionized plasma saturating a porous medium. *Journal of Applied Nonlinear Dynamics*, 14(4), pp.835–846 (Accepted for publication). (Index: Scopus)

19. Chandel, V., Sunil & Sharma, P., 2025. A mathematical and computational study of global stability in partially-ionized rotating plasma. *Computational Methods for Differential Equations* (Accepted for publication). (Index: Scopus)
20. Sharma, O.P.K., Vats, R.K. and Kumar, A., 2025. Results on controllability of impulsive delayed neutral-type fractional stochastic integro-differential system. *Mathematical Control and Related Fields*, Article ID: 2025012. (Index: SCIE).
21. Yadav, V., Vats, R.K. and Kumar, A., 2025. New exploration on approximate controllability of nondensely defined Hilfer neutral-type delayed nonlinear differential inclusion system with non-instantaneous impulse. *Journal of Mathematical Analysis and Applications*, 543(1), pp.128872. (Index: SCIE).
22. Sharma, O.P.K., Vats, R.K. and Kumar, A., 2025. New results on the existence and approximate controllability of neutral-type  $\Psi$ -Caputo fractional delayed stochastic differential inclusions. *Communications in Nonlinear Science and Numerical Simulation*, 144, pp.108666–108684. (Index: SCIE).
23. Sharma, O.P.K., Vats, R.K. and Kumar, A., 2025. New exploration on controllability of nonlinear  $\Psi$ -Caputo fractional Sobolev-type stochastic system with infinite delay via measure of noncompactness. *Journal of Mathematical Analysis and Applications*, 546(1), pp.129199–129225. (Index: SCIE).
24. Kumar, P., Vats, R.K. and Kumar, A., 2024. Approximate controllability of non-autonomous evolution system with infinite delay. *Boletim da Sociedade Paranaense de Matematica*, 42, pp.1–14. (Index: Scopus).
25. Yadav, V., Vats, R.K. and Kumar, A., 2024. New exploration on the existence and null controllability of fractional Hilfer stochastic systems driven by Poisson jumps and fractional Brownian motion with non-instantaneous impulse. *International Journal of Dynamics and Control*, 12(10), pp.3791–3804. (Index: Scopus).
26. Rao, A., Vats, R.K. and Yadav, S., 2024. Numerical study of nonlinear time-fractional Caudrey-Dodd-Gibbon-Sawada-Kotera equation arising in propagation of waves. *Chaos, Solitons & Fractals*, 184, pp.114941–114956. (Index: SCI).
27. Vats, R.K., Dhawan, K. and Vijayakumar, V., 2024. Analyzing single and multi-valued nonlinear Caputo two-term fractional differential equation with integral boundary conditions. *Qualitative Theory of Dynamical Systems*, 23(Article No. 174), pp.1–30. (Index: SCIE).
28. Jeet, K., Kumar, A. and Vats, R.K., 2024. Approximate controllability of neutral Hilfer fractional differential equations of Sobolev-type in a Hilbert space. *Mathematical Control and Related Fields*, 14(2), pp.493–512. (Index: SCIE).
29. Bajpai, A., Kumar, R. and Sharma, P.K., 2023. Axisymmetric half-space problem in thermoelastic diffusion under phase lags and hyperbolic two temperature. *Journal of Thermal Stresses*, 46(7), pp.535-551. (SCI)
30. Kumar, A. and Jain, S.K., 2024. ECDM: Enhanced edge based coupled deformable model for image segmentation in the presence of speckle noise and severe intensity inhomogeneity. *Applied Mathematical Modelling*, 128, pp.659-684. (Index: SCI).
31. Sharma, Y.D. and Yadav, O.P., 2024. Unsteady double-diffusive Brinkman–Bénard convection in cylindrical enclosure saturated with hybrid bi-viscous Bingham nanoliquid. *European Journal of Mechanics-B/Fluids*, 105, pp.138-150. (Index: SCI).
32. Devi, A. and Yadav, O.P., 2025. Higher-order galerkin finite element method for nonlinear coupled reaction-diffusion models. *Numerical Heat Transfer, Part B: Fundamentals*, 86(6), pp.1932-1956. (Index: SCI).
33. Devi, A. and Yadav, O.P., 2024. Higher Order Galerkin Finite Element Method for (1+2)-Dimensional Generalized Benjamin–Bona–Mahony–Burgers Equation: A Numerical Investigation. *Wave Motion*, 128, 103321. (Index: SCI).

34. Devi, A. and Yadav, O.P., 2024. Analysis and Simulation Of The (2+1)-Dimensional Fisher's Reaction–Diffusion Equation with Higher Order Finite Element Method. *Numerical Heat Transfer, Part B: Fundamentals*, pp.1–25. (Index: SCI).
35. Maheshwari, S., Sharma, Y.D., Yadav, O.P. and Bisht, A., 2024. Weak Nonlinear Thermo Bioconvection: Heat Transfer Via Artificial Neural Network. *International Communications in Heat and Mass Transfer*, 159, 108090. (Index: SCI).
36. Devi, A. and Yadav, O.P., 2025. A Numerical Study Of The Generalized Fitzhugh–Nagumo Equation Using A Higher Order Galerkin Finite Element Method. *Computational Mathematics and Mathematical Physics*, 65, pp.629–648. (Index: SCI).
37. Sharma, R. and Yadav, O.P., 2025. The Evolution Of Finite Element Approaches In Reaction–Diffusion Modeling. *Archives of Computational Methods in Engineering*, 32, pp.2745–2766. (Index: SCI).
38. Kumar, N. and Rifaqat Ali, 2024. Blockchain-enabled authentication framework for Maritime Transportation System empowered by 6G-IoT. *Computer Networks*, 244, p.110353. (SCIE)
39. Kumar, V., Rifaqat Ali, and Sharma, P.K., 2024. IoV-6G+: A secure blockchain-based data collection and sharing framework for Internet of vehicles in 6G-assisted environment. *Vehicular Communications*, 47, p.100783. (SCIE)
40. Kumar, V., Rifaqat Ali and Sharma, P.K., 2024. IoEPM+: A secured and lightweight 6G-enabled pollution monitoring authentication framework using IoT and blockchain technology. *Computer Networks*, 250, p.110554. (SCIE)
41. Kumar, N. and Rifaqat Ali, 2024. A smart contract-based 6G-enabled authentication scheme for securing Internet of Nano Medical Things network. *Ad Hoc Networks*, 163, p.103606. (SCIE)
42. Sourav and Rifaqat Ali, 2024. Lattice-based ring signcryption scheme for smart healthcare management. *Cluster Computing*, 27(10), pp.14131-14148. (SCIE)
43. Kumar, N. and Rifaqat Ali, 2024. A consortium blockchain-edge enabled authentication scheme for underwater acoustic network (UAN). *Internet of Things*, 28, p.101426. (SCIE)
44. Prajapat, S., Kumar, N., Das, A.K., Kumar, P. and Rifaqat Ali, 2025. Quantum-safe blockchain-assisted data encryption protocol for internet of things networks. *Cluster Computing*, 28(1), p.5. (SCIE)
45. Sourav and Rifaqat Ali, 2025. Post-Quantum Secure Health Records: A Blockchain-Based Lattice threshold Signcryption Scheme. *Cluster Computing*, (Accepted for publication). (SCIE).
46. Maan, J. and Negrín, E.R., 2024. Parseval-Goldstein type theorems for the index  $2F1_-$ -transform. *International Journal of Computational Mathematics*, [online] Available at: <https://doi.org/10.1007/s40819-024-01713-9>. (Index: SCIE/ Web of Science).
47. Maan, J. and Negrín, E.R., 2024. A comprehensive study of generalized Lambert, generalized Stieltjes, and Stieltjes–Poisson transforms. *Axioms*, 13(5), p.283. (Index: SCIE/ Q2/ IF=2.0/ Web of Science/ MDPI).
48. Maan, J. and Negrín, E.R., 2024. Parseval-Goldstein type theorems for the Kontorovich-Lebedev transform and the Mehler-Fock transform of general order. *Filomat*, 38(19). (Index: SCIE/ Q2/ IF=0.8/ Web of Science/ University of Niš).
49. Maan, J., González, B.J. and Negrín, E.R., 2024. The generalized Mehler–Fock transform over Lebesgue spaces. *Foundations*, 4(3), pp.442–450. (Index: MDPI).
50. Maan, J. and Negrín, E.R., 2024. Operators with complex Gaussian kernels over Lebesgue spaces. *Bulletin of the Institute of Mathematics, Academia Sinica*, [online] Available at: <https://doi.org/10.21915/BIMAS.2024202>. (Index: ESCI/ Q4/ IS=0.4).
51. Maan, J. and Negrín, E.R., 2024. Parseval-Goldstein type theorems for integral transforms in a general setting. *Istanbul Journal of Mathematics*, [online] Available at: <https://doi.org/10.26650/ijmath.2024.00013>. (Index: Istanbul University Press).

52. Maan, J. and Negrín, E.R., 2024. The generalized Stieltjes–Poisson transform over Lebesgue spaces and distributions of compact support. *São Paulo Journal of Mathematical Sciences*, [online] Available at: <https://doi.org/10.1007/s40863-024-00462-3>. (Index: ESCI/ Q3/ IS=0.4/ Springer).
53. Maan, J. and Negrín, E.R., 2024. Parseval–Goldstein type theorems for the index Whittaker transform. *Integral Transforms and Special Functions*, [online] Available at: <https://doi.org/10.1080/10652469.2024.2386664>. (Index: SCIE/ Q2/ IF=0.9/ Taylor & Francis).
54. Negrín, E.R., González, B.J. and Maan, J., 2024. Parseval–Goldstein type theorems for Lebedev–Skalskaya transforms. *Axioms*, 13(9), p.630. (Index: SCIE/ Q2/ IF=2.0/ MDPI).
55. Negrín, E.R., González, B.J. and Maan, J., 2024. Lebesgue spaces and operators with complex Gaussian kernels. *Mathematics*, 12(19), p.30014. (Index: SCIE/ Q1/ IF=2.3/ MDPI).
56. Srivastava, H.M., Negrín, E.R. and Maan, J., 2024. Exchange formulae for the Stieltjes–Poisson transform over weighted Lebesgue spaces. *Axioms*, 13(11), p.748. (Index: SCIE/ Q2/ IF=2.0/ MDPI).
57. González, B.J., Negrín, E.R. and Maan, J., 2024. Abelian theorems for the real Weierstrass transform over compactly supported distributions. *Mathematics*, 12(22), p.3546. (Index: SCIE/ Q1/ IF=2.3/ MDPI).
58. Negrín, E.R. and Maan, J., 2025. On  $L^p$ -boundedness properties and Parseval–Goldstein-type theorems for a Lebedev-type index transform. *Mathematics*, 12(24), p.3907. (Index: SCIE/ Q1/ IF=2.3/ MDPI).
59. Negrín, E.R., Maan, J. and González, B.J., 2025. Mellin and Widder–Lambert transforms with applications in the Salem equivalence to the Riemann hypothesis. *Axioms*, 14(2), p.129. (Index: SCIE/ Q2/ IF=2.0/ MDPI).
60. Maan, J. and Negrín, E.R., 2025. Index Whittaker transforms over Lebesgue spaces. *Journal of Pseudo-Differential Operators and Applications*, [online] Available at: <https://doi.org/10.1007/s11868-024-00668-1>. (Index: SCIE/ Q2/ IF=1.26/ Springer-Birkhäuser).
61. Chaudhary, S., Sharma, P.K. and Al-Mdallal, Q.M., 2025. Integral transform technique for determining stress intensity factor in wave propagation through functionally graded piezoelectric-viscoelastic structure. *Computers & Mathematics with Applications*, 186, pp.130- 154. (Index: SCI).
62. Chaudhary, S., Diksha, Yelve, N.P., Sharma, P.K. and Jha, M.K., 2025. A mechanics-based approach using machine learning, analytical, and numerical methods for SH wave propagation in viscoelastic structure. *Mechanics of Advanced Materials and Structures*, pp.1-18. (Index: SCI).
63. Chaudhary, S. and Mulay, S.S., 2025. Mechanics of surface wave propagation in a pre-stressed and functionally graded piezoelectric-hydrogel-viscoelastic composite layered structure. *ZAMM-Journal of Applied Mathematics and Mechanics/Zeitschrift für Angewandte Mathematik und Mechanik*, 105(3), p.e202401358. (Index: SCI).
64. Dewangan, N., Sahu, S.A. and Chaudhary, S., 2025. Stress generation due to Moving Load on gravitational magneto-elastic orthotropic half-space with parabolic irregularity. *Journal of Solid Mechanics*, 17(1), pp.1-16. (Index: SCOPUS).
65. Chaudhary, S. and Sharma, P.K., 2025. Crack dynamics in rotating, initially stressed material strip: A mathematical approach. *Applied Mathematical Modelling*, 140, p.115916. (Index: SCI).
66. Ben Salah, I., Othmani, C., Njeh, A., Chaudhary, S. and Zhang, B., 2024. Acoustoelastic guided modes with multiple zero-group-velocity points in monoclinic, trigonal, tetragonal, orthorhombic and triclinic plates. *Mechanics of Advanced Materials and Structures*, pp.1-17. (Index: SCI).
67. Patel, M., Behera, J., & Kumar, P. 2025. Enhanced Interval Quadratic Fractional Programming for Maximizing Sharpe Ratio in Portfolio Optimization. *International Journal of Applied and Computational Mathematics*, 11(4), 132. (Index: Scopus)

68. Behera, J., & Kumar, P. 2025. Efficient solution for multi-period interval-valued mean-VaR portfolio optimization problem using gH-derivative. *International Journal of General Systems*, 1-32. (Index: SCI)
69. Bhurjee, A. K., Kumar, P., & Kumar, P. 2025. Solution of a bi-level linear programming problem with uncertain parameters and its application. *Operations Research and Decisions*, 35(2), 1-22. (Index: ESCI)
70. Behera, J., & Kumar, P. 2025. An approach to portfolio optimization with time series forecasting algorithms and machine learning techniques. *Applied Soft Computing*, 170, 112741. (Index: SCI)
71. Behera, J., & Kumar, P. 2024. Implementation of machine learning in  $\ell_\infty$ -based sparse sharpe ratio portfolio optimization: a case study on Indian stock market. *Operational Research*, 24(4), 62. (Index: SCI)
72. Sahu, B. R. B., Bhurjee, A. K., & Kumar, P. 2024. Efficient solutions for vector optimization problem on an extended interval vector space and its application to portfolio optimization. *Expert Systems with Applications*, 249, 123653. (Index: SCI)
73. Thakur R K, Agrawal N K and Kumar P. (2024) A Distributed Approach for Scheduling Classes at Educational Institute, *Journal of Harbin Engineering University*, 45 (9), 191–197. (Index: Scopus.)
74. Thakur R K, Agrawal N K and Kumar P. (2024) A practical approach to college time table scheduler, *Mathematical Modeling And Computing*, 11 (3), 710–719. (Index: Scopus).

## ii. Research Scheme (2024-25):

S. No	Name of the Staff	Title of the Scheme	Sponsored by	Assistance Received (Rs.) in lakh	Investigator	Brief Report
1	Dr. Ankit Kumar Nain	Analysis of Controllability and Stability for Fractional Differential Equation using Fixed Point Theory.	CSIR	26,00,000 /-	Dr. Ramesh Kumar Vats	On Going

## Conference Publication

1. Kumar, A. and Jain, S.K., 2024, July. Fractional Coupled Active Contour Model for Image Segmentation. In *International Conference on Data Science and Applications* (pp. 355-367). Singapore: Springer Nature Singapore. (Index: Scopus).
2. Kumar, V., **Rifaqat Ali**, and Sharma, P.K., 2024, February. A secure multi-factor authentication framework for IoT-environment using cloud computing. In *International Conference on Innovative Computing and Communication* (pp. 477-494). Singapore: Springer Nature Singapore.

## Book Chapters

1. Rifaqat Ali and Chandrakar, P., 2024. Robot Path Planning in a Dynamic Environment Using Deep Q-Learning. In *Robotics and Automation in Industry 4.0* (pp. 9-33). Bentham Science Publishers.
2. Bhurjee, A.K., Kumar, P., Singh, R. and Yadav, V., 2024. Overview of nonlinear interval optimization problems. *Advances in Computers*, Elsevier, Volume 135. (SCIE)

3. Bhurjee, A. K., & Kumar, P. 2024. Fixed Charged Nonlinear Solid Transportation Problem with Budget Constraints Using Bounded Parameters. In Computational Intelligence for Data Analysis (pp. 75-91). Bentham Science Publishers.
4. Bhurjee, A. K., Kumar, P. 2025 A game-theoretical approach to analyze the risk of a pandemic situation on individuals and its application. In Applied and Computational Mathematics - Applications in Finance and Data Science (Accepted) (Index: Scopus).

**iii. Editorial Work:**

1. Associate Editor of International Journal Communication Systems, Wiley, SCIE indexed

**3. National/International Conference Organized:**

2. The 4th International Conference on Nonlinear Applied Analysis and Optimization (ICNAAO-2024), sponsored by NIT Hamirpur, NBHM, and SERB, was organized from 17th October 2024 to 19th October 2024 at the National Institute of Technology Hamirpur, Himachal Pradesh.

**4. Summer/Winter/FDP Organized:**

3. e-Workshop titled "Quant Hub: Exploring Math, Stats, ML in Data Science" was organized from 15th May 2024 to 19th May 2024 at the National Institute of Technology Hamirpur, Himachal Pradesh
4. "Initiation into Mathematics (InitMath) Himachal Pradesh, 2024" sponsored by NBHM was held from 16th September 2024 to 21st September 2024 at the National Institute of Technology Hamirpur, Himachal Pradesh.
5. Organized e-Workshop on Quant Hub: Exploring Math, Stats, ML in Data Science (Quant Hub- 2024) during May 15-19, 2024 at NIT Hamirpur .
6. Organized Instructional School For Teachers (IST) on Partial Differential Equations and their Applications to Image Processing during June 03-15, 2024 at IIT Mandi as the IST Organizer.
7. Organized Workshop on Initiation into Mathematics 2024 Himachal Pradesh during September 16-21, 2024 at NIT Hamirpur.
8. Mathematical Technique And Research Innovation In Interdisciplinary Application (e-MATRICA-2025) 19th May–23rd May 2025 (Five Days) at NIT Hamirpur.

**5. National/International Conferences Attended:**

1. 69th Congress of Indian Society of Theoretical and Applied Mechanics (An International Conference) ISTAM-2024, December 19-21, 2024, organised by CHRIST (Deemed to be University), Bengaluru, Karnataka, INDIA.
2. Attended 5th International Conference on Data Science and Application (ICDSA-2024) during July 17-19, 2024 held at MNIT Jaipur.
3. ISAAC-ICMAM Conference of Analysis in Developing Countries, on Dec 02 - Dec 06, 2024, organised by National University of Colombia, Colombia. (Online)
4. Attained 2nd Annual QEDS Conference on Advances in Applied & Computational Mathematics: Theory, Methods & Applications in Finance & Data Science (AACM - 2025) to be held at Birla Institute of Technology Mesra, Ranchi on 13th - 15th February 2025.

**6. Workshop Attended:**

1. Participated in the two weeks Faculty Development Program on “AI-based Image Processing for Bio-medical Applications (AIPBM-2025)” during February 17-28, 2025 organized by Electronics and ICT Academy, NIT Patna and NIT Jamshedpur.
2. Attended Indo-French workshop on Innovative Numerical Methods conducted by Department of Mathematics, IIT Roorkee during January 06-11, 2025.
3. Workshop on Function Spaces and Operator Theory (FSOT-2024), scheduled to be held at IIT Ropar from December 09–12, 2024.
4. Attended Five-Day Workshop on “Structural and Machinery Diagnostics” held on Feb. 10–14, 2025 at IIT Bombay, Mumbai, India.
5. Attained the “Viksit Bharat @ 2047: In- House Faculty Development Programme” organized by department of Department of Humanities and Social Sciences, NIT Hamirpur, from 18-22 June 2024.

**7. Invited Lecture/Speaker/Expert:**

1. Delivered an expert talk on “Controllability of Fractional Order System” held at NIT Jamsheedpur on 22 February 2025.
2. Delivered an expert talk on “Fractional Stochastic Differential Equations: Qualitative Insights” held at IGU, Meerpur Rewari on 06 March 2025.
3. Delivered an expert talk on “Investigating the Controllability of Systems Governed by Fractional Derivatives” held at NSCBM Government College, Hamirpur on 28 March 2025.
4. Teachers Enrichment Workshop (TEW) on “Differential Equations and its Applications” organized by the Department of Mathematics, Jaypee Institute of Information Technology, Noida, from April 16 - 29, 2025.
5. ISAAC-ICMAM Conference of Analysis in Developing Countries, on Dec 02 - Dec 06, 2024, organised by National University of Colombia, Colombia.
6. Workshop On MATHEMATICAL TECHNIQUE AND RESEARCH INNOVATION IN INTERDISCIPLINARY APPLICATION (e-MATRICA-2025) 19th May–23rd May 2025, Department of Mathematics and Scientific Computing, NIT Hamirpur
7. Gave an invited talk as a speaker in an International Conference on Matrix Analysis and Mathematical Modelling (MAMM 2024) from November 29 to December 1, 2024 at NIT Jhalandher.

**8. Doctoral Programme: On Going or Completed: (2024-25)**

Sr. No.	Name of Registered Student	Registration No.	Topic of his/her Research	Name of his/her Supervisor/ Co- Supervisor	Brief Report
1.	Sanjalee	2K19-PhD-MATH-493	Problems on onset of convection and heat transfer in the suspension of nanofluid	Prof. Y. D. Sharma / Dr. O. P. Yadav	Completed
2.	Arpan Garg	2K19-Ph.D-Math-494	Fluid Dynamics	Prof. Y.D. Sharma / Dr. Subit Kumar Jain	Completed

3.	Bhupendra Kumar	2k19-PHD-MATH-495	Time series modelling and forecasting based on stochastic and deep learning algorithms	Dr. Neha Yadav / Prof. Sunil	Competed
4.	Harender Kumar	2k19-PHD-MATH-496	Deep Learning Methods for solving Boundary Value Problems arising in Science and Engineering Applications	Prof. Sunil / Dr. Neha Yadav	Competed
5.	Mr. Parveen Kumar	2K19-PhD-Math-497	Study on Controllability of Functional Differential equations	Dr. Ramesh Kumar Vats	Competed
6.	Ankit Kumar	2k20-Ph.D.-Math.-518	Development and Analysis of a Class of Coupled Deformable Models: Applications to Image Segmentation	Dr. Subit Kumar Jain	completed
7.	Anisha Devi	2K20-Phd-Math-519	Finite element analysis and approximations of reaction diffusion equations	Dr. Om Prakash Yadav	Revised thesis submitted. (04 paper published).
8.	Pavinder	20RMA002	Object Detection using Deep Neural Network	Dr. Pawan Kumar Sharma	On Going
9.	Vipin Kumar	20RMA003	Authentication Systems using Blockchain	Dr. Rifaqat Ali	On Going
10.	Neeraj Kumar	21RMA002	Cryptography and Network Security (tentative)	Dr. Rifaqat Ali	On Going
11.	Om Prakash Kumar Sharma	21RMA003	Study on Controllability of Differential Systems	Dr. Ramesh Kumar Vats	On Going
12.	Vandana Yadav	21RMA004	Analysis of Fractional Differential Equations	Dr. Ramesh Kumar Vat	On Going

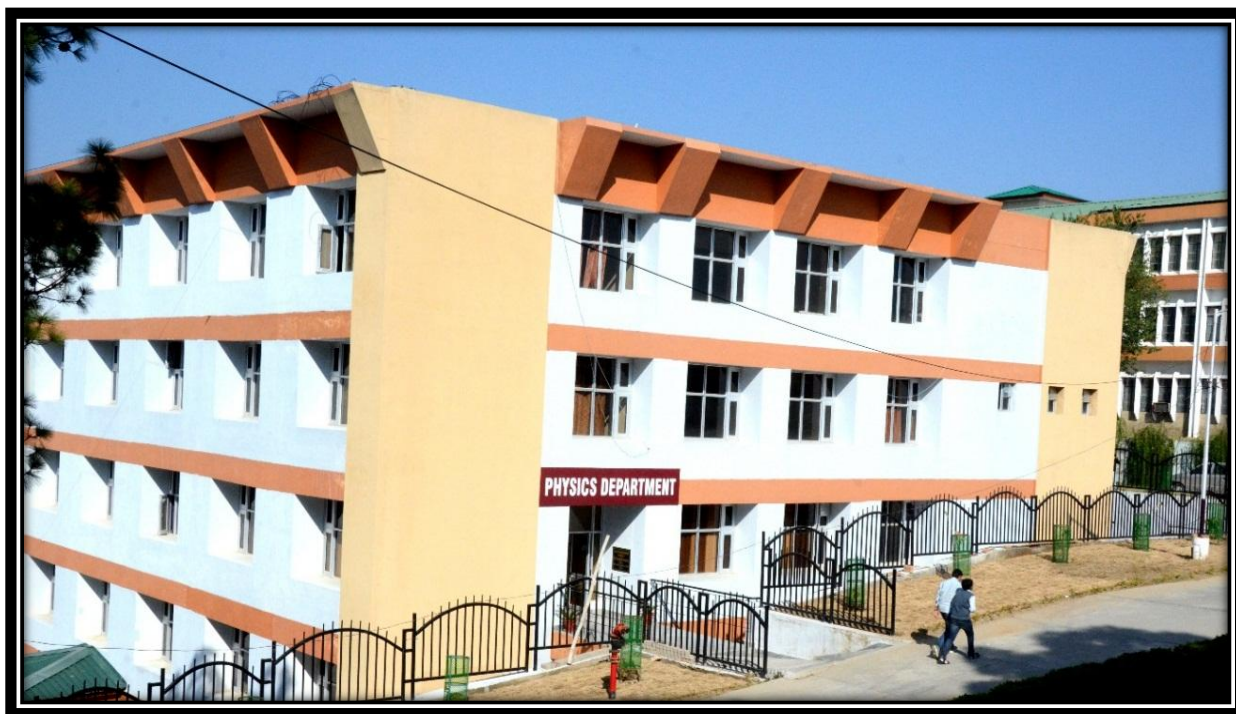
13.	Akanksha Thakur	22RMA001	Effect of couple stresses on Linear and Nonlinear stability of Ferrofluids	Prof. Sunil / Dr. Reeta Devi	On Going
14.	Sourav	22RMA002	Cryptography and Network Security (tentative)	Dr. Rifaqat Ali	On Going
15.	Sweta Sharma	22RMA003	Linear and nonlinear stability analysis of Navier-Stokes-Voigt fluid	Prof. Sunil / Dr. Poonam Sharma	On Going
16.	Rohit Sharma	22RMA004	Numerical PDEs (tentative)	Dr. O. P. Yadav	On Going
17.	Anjali	22RMA005	Differential & Integral Equations with fractional calculus	Dr. Ramesh Kumar Vats	On Going
18.	Sanjeev	22RMA006	Differential Equation and Fractional Calculus	Dr. Ramesh Kumar Vats	On Going
19.	Hem Raj	23RMA001	Piezo Thermoelasticity	Dr. Pawan Kumar Sharma	On Going
20.	Rohit Chauhan	23RMA003	Functional Analysis	Dr. Suket Kumar	On Going
21.	Rozy Sharma	23RMA004	Moore-Gibson-Thompson Thermoelasticity	Dr. Pawan Kumar Sharma	On Going
22.	Vishal Chandel	23RMA005	Linear and nonlinear stability analysis of partially-ionized plasma	Prof. Sunil	On Going
23.	Yatin Kumar	23RMA006	Artificial Neural Networks	Dr. Ramesh Kumar Vats	On Going
24.	Jyoti	23RMA007	Controllability	Dr. Ramesh Kumar Vats / Dr. Ankit Kumar	On Going
25.	Pratibha Sharma	23RMA009	Image Analysis	Dr. Subit Kumar Jain	Course Work
26.	Ankit Kumar	24RMA001	Decision Making under uncertainty	Dr. Ganesh Talari	On Going
27.	Deepak Kumar	24RMA002	Effect of couple stresses on linear and nonlinear stability analysis of Navier-Stokes-Voigt fluid	Prof. Sunil/ Dr. Reeta Devi	Work is in progress.

28.	Diksha	24RMA003	Solid mechanics	Dr. Pawan kumar Sharma Dr. Soniya Chaudhary	On Going
29.	Keshav Singh	24RMA004	Optimization	Prof. Y.D. Sharma	On Going
30.	Nancy Kapoor	24RMA006	Stochastic Programming	Dr. Ganesh Talari	On Going
31.	Mr. Praveen	24RMA007	Kontorovich– Lebedev transform and associated operators.	Dr. R. K. Vats Dr. Jeetendrasingh Maan	Ongoing
32.	Samridh Sood	24RMA008	Numerical methods for Image Processing	Dr. Subit Kumar Jain	Ongoing
33.	Yashika	24RMA009	Linear- Non Linear Thermobio convection	Prof. Y.D. Sharma	On Going
34.	Jeevan Lal	24RMA0010	Statistical Process and Product Control	Dr. Ganesh Talari	On Going
35.	Abhishek thakur	24RMA0012	Stochastic Storage Maodel	Dr. Ganesh Talari	On Going
36.	KATYAY ANI	24RMA0013	Elastodynamics	Dr. Pawan Kumar Sharma / Dr. Soniya Chaudhary	On Going
37.	Riya Chawla	24RMA0014	Cryptography and Blockchain	Dr. Rifaqat Ali	On Going
38.	SHIVANI SAINI	24RMA0015	Approximateing Solution using ANN	Dr. Ramesh Kumar Vats	On Going
39.	Akhil	24RMA0016	Inverse Process based Learning Models for Image Segmentation under Noisy and Blurry Environment	Dr. Subit Kumar Jain	On Going
40.	Umesh Kumar	24RMA0018	Computer Vision and Pattern Recognition for Crop Disease Detection and Classification	Dr. Subit Kumar Jain	On Going
41.	Kuldip Kumar	24RMA0019	Internet of Vehicle	Prof. Y.D. Sharma	On Going
42.	Abhinav	25RMA001	Quantum Cryptography	Dr. Rifaqat Ali	Ongoing
43.	Hritika Dhiman	25RMA002	Wave propagation	Dr. Soniya Chaudhary Dr. Pawan Kumar	Ongoing

**9. Detail of the Laboratories:**

<b>Sr. No.</b>	<b>Name of Laboratory</b>
<b>1.</b>	Mathematics and Computation Lab -1
<b>2.</b>	Mathematics and Computation Lab -2

### 3.9 DEPARTMENT OF PHYSICS & PHOTONIC SCIENCE



#### 1. ACADEMIC STAFF

**HEAD :** Dr. Rajesh Kumar

#### **FACULTIES:**

Professor	Associate Professor	Assistant Professor
-	Dr. Rajesh Kumar	Dr. Sandeep Sharma (Gr-I)
-	Dr. Subhash Chand	Dr. Neetika (Gr-II)
-	Dr. Kuldeep Kumar	Dr. Biswaranjan Das (Gr-II)
-	Dr. Arvind Kumar	Dr. Abhishek Singh (Gr-II)
-	-	Dr. Nisha (Gr-II)
-	-	Dr. Avijit Dewesai (Gr-II)

#### 2. RESEARCH:

##### (a) Research Publication:

##### **PAPER PUBLISHED BY FACULTIES:**

1. Synthesis and investigation of pure and doped-ZnO nanoparticles as efficient material for photocatalytic degradation of methylene blue under solar radiations Seema Azad and Subhash Chand  
Indian J Phys Vol. 98 (2024) p2285–2297.
2. Investigation of the Structural, Phase Formation, Optical, Bias-Dependent Dielectric and Visible Region Photocatalytic Degradation Performance of  $\text{Zn}(1-x)\text{Fe}(x)\text{O}$  Nanoparticles Prepared Using the Sol–Gel Method  
Seema Azad and Subhash Chand

- Journal of Electronic Materials Vol. 53, (2024) p7531-7548.
3. Synthesis and investigation of structural and high temperature conduction mechanism of TiO(2)/N-GQDs nanocomposite thin films as a transparent conducting material Adesh Kumar, Seema Azad and Subhash Chand  
Optical and Quantum Electronics Vol 56 (2024) p1909(20pages).
4. Synthesis and investigation of structural, bias-dependent dielectric and impedance behavior of N-GQDs/TiO(2) nanocomposites  
Adesh Kumar, Seema Azad and Subhash Chand  
Indian J Phys Vol. 99 (2025) p 1-15.
5. ECO-FRIENDLY CARBON QUANTUM DOTS AS A BI-FUNCTIONAL FLUORESCENT PROBE FOR Cr (VI) DETECTION AND OPTICAL THERMOMETRY, Avinash Kumar, Ritu, Ishant Kumar, Sandeep Kumar, Arvind K Gathania, Materials Research Bulletin, Feb. 2025, 113394, <https://doi.org/10.1016/j.materresbull.2025.113394>
6. A DUAL-MODE FLUORESCENT PROBE FOR TEMPERATURE-SENSING AND METAL IONS DETECTION BASED ON CASTOR LEAVES-DERIVED CARBON QUANTUM DOTS, Avinash Kumar, Ishant Kumar, Sandeep Kumar, Anchal Sharma, Amit Sharma, Arvind K Gathania, Carbon Letters, pp-1-16, 2025. DOI: 10.1007/s42823-024-00847-6
7. UNVEILING MOLECULAR ALIGNMENT, DIELECTRIC AND ELECTRICAL CONDUCTIVITY OF AN UNALIGNED 4-octyl-4'-cyanobiphenyl LIQUID CRYSTAL DOPED WITH CARBON DOTS, Priscilla P, Michael R. Fisch, Sandeep Kumar, Arvind K. Gathania, Jai Prakash, Supreet, Sanjeev Kumar, Riccardo Castagna, Gautam Singh, [Colloids and Surfaces A: Physicochemical and Engineering Aspects, Volume 707, 135854, 20 February 2025. https://doi.org/10.1016/j.colsurfa.2024.135854.](https://doi.org/10.1016/j.colsurfa.2024.135854)
8. EFFECT OF DOPING WITH CARBON DOTS ON THE ALIGNMENT AND DIELECTRIC PROPERTIES OF NEMATIC LIQUID CRYSTAL 4-CYANO-4'-PENTYLBIPHENYL IN ITO SAMPLE CELLS WITHOUT CONVENTIONAL ALIGNMENT LAYERS FOR LOW-COST DISPLAY APPLICATIONS, Priscilla P, Michael R. Fisch, Harikesh Meena, Srashti Tomar, Arvind K. Gathania, Sandeep Kumar, Jai Prakash, Supreet, Sanjeev Kumar, Gautam Singh, Journal of Molecular Structure, Vol.1321, Part 2, 139894, 5 Feb., 2025. <https://doi.org/10.1016/j.molstruc.2024.139894>
9. NIR Light-triggered Green Emitting Perovskite-based Phosphor for Optical Thermometry and Future Molecular Logic Gate Applications, Ishant Kumar, Avinash Kumar, Sandeep Kumar, Gobind B. Nair, H.C. Swartz and Arvind K. Gathania, J. of Fluoresc (2024). <https://doi.org/10.1007/s10895-024-04044-6>
10. CHARGE COMPENSATION-DRIVEN DOWNCONVERSION LUMINESCENCE ENHANCEMENT IN Er<sup>3+</sup>- DOPED SrTiO<sub>3</sub> PHOSPHORS BY CO-DOPING WITH ALKALI IONS (M<sup>+</sup> =Li, Na, K) FOR SOLID-STATE LIGHTING APPLICATIONS, Ishant Kumar, Yashwinder, Avinash Kumar, Sandeep Kumar, Himani Thakur, Arvind K. Gathania, Indian Journal of Physics, 10.1007/s12648-024-03432-9
11. CARBON DOTS INDUCED HOMEOTROPIC ALIGNMENT IN A NEGATIVE DIELECTRIC NEMATIC LIQUID CRYSTAL MATERIAL, Priscilla P, Arvind K. Gathania, Sandeep Kumar, Michael R. Fisch, Jai Prakash, Supreet, Sanjeev Kumar Harikesh Meena, Gautam Singh, Nano Express,5, 045008, Nov. 2024.
12. EFFECT OF CARBON DOTS IN TUNING MOLECULAR ALIGNMENT, DIELECTRIC AND ELECTRICAL PROPERTIES OF A SMECTOGENIC CYANOBIPHENYL-BASED LIQUID CRYSTAL MATERIAL, Priscilla P, Sandeep Kumar, Arvind K Gathania, Ashwani Kumar Singh, Supreet, Jai Prakash, Sanjeev Kumar, Praveen Malik, Riccardo Castagna and Gautam Singh, Journal of Physics D: Applied Physics, Volume 57, Number 35, 355302, 6 September 2024, DOI 10.1088/1361-6463/ad4a84
13. GREEN EMISSION IN THERMALLY STABLE Er<sup>3+</sup>. DOPED LEAD-FREE PEROVSKITE PHOSPHOR FOR SOLID-STATE LIGHTING AND OPTICAL THERMOMETRY APPLICATIONS, Ishant Kumar, Avinash Kumar, Sandeep Kumar, Vikas Sanglwan, Arvind K. Gathania, IEEE Photonics Journal, Vol 16, No.3, page: 1-7, Jun 2024, DOI: [10.1109/JPHOT.2024.3392566](https://doi.org/10.1109/JPHOT.2024.3392566)

14. EFFECT OF DOPING OF ORGANO-SOLUBLE CARBON DOTS ON IONIC RELAXATION AND CONDUCTIVITY OF PLANAR ANCHORED CYANOBIPHENYL BASED NEMATIC LIQUID CRYSTAL, Priscilla P, Ashwani Kumar Singh , Praveen Malik, Sandeep Kumar, Supreet, Arvind K. Gathania, Jai Prakash, Riccardo Castagnai, Daniele Eugenio Lucchetta, Poonma Malik, Gautam Singh, Journal of Molecular Structure, Volume 1301, 5 April 2024, 137403.
1. High responsive UV photodetector on epitaxial non-polar GaN nanostructures grown on sapphire (10-10) using laser-MBE. Vishnu Aggarwal, Rahul Kumar, Urvashi Varshney, Sudhanshu Gautam, Bipul Kumar Pradhan, Brajesh S. Yadav, Sandeep Sharma, Ramakrishnan Ganesan, Govind Gupta, Muthusamy Senthil Kumar, Sunil Singh Kushvaha. [Sensors and Actuators A: Physical Volume 368](#), 1 April 2024, 115103.
2. TiO<sub>2</sub> decorated MXene nanosheets for high-performance ammonia gas sensing at room-temperature. Nitesh Dogra, Sahil Gasso, Ankush Sharma, K. K. Sharma, Sandeep Sharma. [Surfaces and Interfaces Volume 48](#), May 2024, 104290.
3. Phase engineered MoSe<sub>2</sub>/MoO<sub>3</sub> composite with improved hydrogen evolution reaction. Nitesh Dogra, Sunil Singh Kushvaha, Kuldeep Kumar Sharma and Sandeep Sharma, [ACS Applied Energy Materials Vol 7 Issue 13](#) 2024
4. Enhanced X-band performance and analysis of physical characteristics of solid state route synthesized Ba<sub>1-x</sub>Gd<sub>x</sub>Fe<sub>12</sub>O<sub>19</sub> (0.00≤x≤0.50) compositions. Garima Sharda, Pawandeep Kaur, Sandeep Sharma, Anupinder Singh, Paramjeet Kaur, Sachin Kumar Godara, Jahangeer Ahmed, Saad M. Alshehri, Mandeep Singh. Material Today Communication [Volume 42](#), January 2025, 111413.
5. Dual Discrimination of Xylene and NO<sub>2</sub> with UV-Boosted Recovery at Room Temperature Using SnSe<sub>2</sub>/MWCNT Composite-Based Sensors, Imtej Singh Saggu, Lovepreet Singh, Sunil Singh Kushvaha, Mandeep Singh, and Sandeep Sharma. [ACS Applied Electronic Materials Vol 7/Issue 4](#) 2025.
6. Unveiling the origin of high catalytic activity of WO<sub>3</sub>/MWCNT nanocomposites for the hydrogen evolution reaction. Nitesh Dogra, Sunil Singh Kushvaha, Avijit Dewasi and Sandeep Sharma *Catal. Sci. Technol.*, 2025,**15**, 2327-2338.
7. MoSe<sub>2</sub>-Based Room Temperature Gas Sensor with Sub-parts-per-billion Limit of Ammonia and N, N-Dimethylformamide. Virendra Singh Choudhary, Ramandeep, Ashok Kumara, C. S. Yadav, Sandeep Sharma, Joel Garcias, Surender Kumar Sharma *Mater. Adv.*, 2025,**6**, 2854-2866.
8. A comparative study of Ku-band absorption characteristics and analysis of structural properties of Ba<sub>1-x</sub>Gd<sub>x</sub>Fe<sub>12</sub>O<sub>19</sub> (0.00≤x≤0.50) samples. Garima Sharda, Pawandeep Kaur, Sandeep Sharma, Anupinder Singh, Paramjeet Kaur, Sachin Kumar Godara, Jahangeer Ahmed, Saad M. Alshehri, Abhishek Kandwal, Mandeep Singh. [Materials Chemistry and Physics Volume 339](#), 15 July 2025, 130771.
9. Vanadium doping as a key factor for superior NH<sub>3</sub> sensing at room temperature in MoSe<sub>2</sub>/TiO<sub>2</sub> composites. Virendra Singh Choudhary, Sunil Gangwar, C.S. Yadav, Sandeep Sharma , Marcio A.P. Almeida , Surender Kumar Sharma [Sensors and Actuators A: Physical Volume 388](#), 1 July 2025, 116501.
10. A comparative study of structural, magnetic and X-band microwave absorption characteristics of pure and Zn–Zr co-doped M-type barium hexaferrites samples. Garima Sharda, Swati Verma, Anupinder Singh, Paramjeet Kaur, Pawandeep Kaur, Sandeep Sharma et al. *J Mater Sci: Mater Electron* **36**, 919 (2025).
11. Room-Temperature Dimethylformamide (DMF) Vapor Sensing Using WO<sub>3</sub>/MWCNTs Composite. Lovepreet Singh, Nitesh Dogra, Imtej Singh Saggu, Sunil Singh Kushvaha , Mandeep Singh, and Sandeep Sharma. *Appl. Phys. A* **131**, 572 (2025).
12. Narinder Kaur, **Nisha Kodan**, Dipika Sharma, Abhishek Ghosh, Prashant Bisht, Rajendra Singh and B. R. Mehta, 2D-In<sub>2</sub>S<sub>3</sub> Nanoflakes/1D-WO<sub>3</sub> Nanorods Heterojunction with Enhanced Absorption and Photoresponse for Photoelectrochemical Water Splitting, **Renewable Energy**, 240,122229 (2025) **(Impact factor: 9.0)**

13. **Nisha Kodan\***, Rajesh Kumar, Rekha Bai and B. R. Mehta, Boron-doped TiO<sub>2</sub> nanoparticles for improved photoelectrochemical response via enhanced surface area and visible light absorption, **Renewable Energy**, 237, 121734 (2024) (**Impact factor: 9.0**)
14. **Nisha Kodan\***, and B. R. Mehta, DFT study of electronic and optical properties of Cu<sub>2</sub>ZnSiS<sub>4</sub> chalcogenide compound and experimental investigation of improved PEC response of  $\alpha$ -MoO<sub>3</sub>/Cu<sub>2</sub>ZnGeS<sub>4</sub> nanocomposite, **Journal of Alloys and Compounds**, 970, 172496 (2024) (**Impact factor: 5.8**)
15. 1. N. Dogra, S.S. Kushvaha, A. Dewasi, S. Sharma, "Unveiling the origin of high catalytic activity of WO<sub>3</sub>/MWCNT nanocomposites for the hydrogen evolution reaction", *Catalysis Science & Technology*, 15, 2327-2338 (2025). DOI: <https://doi.org/10.1039/D4CY01524J>
16. 2. V. Gupta, H. Agravat, S. S. Mukherjee, A. Dewasi, J. S. Mishra, P. A. Nayak, P Panchal, M. Banaudha, R. Gangradey, "Design and analysis of the components of cryogenic extruder for producing liquid hydrogen", *Cryogenics*, 146, 104021 (2025). DOI: <https://doi.org/10.1016/j.cryogenics.2024.104021>

**(b) Doctoral Programme:**

Sr. No	Title	Supervisor	Name of the student	Brief Report
1.	Condensed Matter Physics	Dr. Arvind Kumar	Avinash Kumar	In progress
2.	Condensed Matter Physics	Dr. Vimal Sharma	Ms. Manisha Sharma	Thesis Submitted
3.	Synthesis & Characterization Phosphor material	Dr. Arvind Kumar	Mr. Ishant Kumar	In progress
4.	Condensed Matter Physics	Dr. Subhash Chand	Ms. Seema	Ph.D completed
5.	Properties of Transtion Metal Oxides	Dr. Rajesh Kumar	Mr. Shivank Kalia	In progress
6.	Study of Nano Ferrites	Dr. Vimal Sharma	Ms. Jyoti	In progress
7.	Condenced Matter Physics	Dr. Subhash Chand	Mr. Adesh Kumar	In progress
8.	Study of Metaloxide and rho/metaloxide NCs applications in Energy storage devices	Dr. Kuldeep Kumar	Mr. Danish Kumar	In progress
9.	Composite Materials	Dr. Vimal Sharma	Mr. Rahul	In progress
10.	Luninescent Materilas	Dr. Arvind Kumar	Mr. Sandeep Kumar	In progress
11.	Condenced Matter Physics	Dr. Rajesh Kumar	Mr. Anshul Sharma	In progress
12.	Condenced Matter Physics	Dr. Kuldeep Kumar	Mr. Abhishek Bhardwaj	In progress
13.	2 D Material	Dr. Kuldeep Kumar	Rakshit Singh Patwal	In progress
14.	Material Science	Dr. Rajesh Kumar	Poonam	In progress
15.	Material	Dr. Arvind Kumar	Anjali Bala	In progress
16.	Functional Materials	Dr. Rajesh Kumar	Abhirakshit	In progress
17.	Condensed Matter Physics	Dr. Kuldeep Kumar	Ashish Kumar	In progress
18.	Optical Materials	Dr. Arvind Kumar	Anchal Sharma	In progress
19.	Condensed Matter Physics	Dr. Subhash Chand	Mahesh Pathania	In progress
20.	Photocatalysis	Dr. Kuldeep Kumar	Pradeep Kumar	In progress
21.	Experimental Condensed Matter Physics	Dr. Avijit Dewasi	Ram Singh	In progress
22.	High Energy Physics	Dr. Neetika	Mittal	In progress
23.	Experimental Condensed Matter Physics	Dr. Sandeep Sharma	Anshul Kumar	In progress

24.	Material Science	Dr. Rajesh Kumar	Pinki Bagga	In progress
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(c) Ph.D Degree awarded : 01

(d) Master thesis completed : 20

### 3. EQUIPMENT ACQUIRED:

Sr. No.	Name of equipment	Cost (Rs. In lakh)
1.	Probe Sonicator	2,67,000
2.	Four Probe	1,18,826
3.	Magneto Resistance	2,14,000
4.	Temperature Controlled Measurement	2,30,100
5.	High Pressure Reactor	2,30,100
6.	Spin Coating Unit	2,38,832
7.	Zeeman Effect Set Up	1,69,950

### 4. DETAIL OF THE LABORATORIES:

Sr. No.	Name of the Laboratory
1.	Engineering Physics Lab
2.	Solid State Physics Lab
3.	Electricity & Magnetism Lab
4.	Spectroscopy Lab
5.	Thermal Physics Lab
6.	Numerical methods & Computational Physics Lab
7.	Optics Lab
8.	Modern Physics Lab
9.	Digital Electronics Lab
10.	Laser & Photonics Lab
11.	Measurement & Instrumentation Lab
12.	Fabrication & Assembly Lab
13.	Computational Lab
14.	R&D Lab-I
15.	R&D Lab-II
16.	R&D Lab-III

### 3.10 DEPARTMENT OF MATERIAL SCIENCE & ENGINEERING



#### 1. ACADEMIC STAFF:

HEAD: **Prof. Ravi Kumar**

FACULTIES:

Professor	Associate Professor	Assistant Professors		
Prof. Ravi Kumar	Dr. Vishal Singh	Dr. Rita Maurya	Dr. Raj Bahadur Singh	Dr. Vikram Verma

#### 2. RESEARCH:

##### (a) Research Publications:-

1. Detailed Micromeritics and Rheological Study of Mild Steel Grinding Chips: A Sustainable Feedstock for Additive Manufacturing, Amarjit Singh, Lucie Jezerska, Daniel Gelnar, Manoj Kumar Sinha & **Ravi Kumar**, Journal of Materials Engineering and performance, 2025
2. Investigation of structural, magnetic, and electronic properties of Co doped NdMnO<sub>3</sub>; Farooq H. Bhat, G. Anjum, Jan Asifa, Tanveer A. Dar, **Ravi Kumar**, Manzoor A. Malik, Journal of Magnetism and Magnetic Materials, 2025.
3. Harnessing the duality of magnetism and conductivity: A review of oxide based dilute magnetic semiconductors, Pankaj Bhardwaj, Jarnail Singh, **Vikram Verma, Ravi Kumar**, Journal of Physica B: Condensed Matter. 2025.
4. Effect of Mg-substitution on the electronic structure, splitting, and optical transitions of Cr<sub>2</sub>O<sub>3</sub> nanoparticles, Jarnail Singh, Shivank Kalia, Keun Hwa Chae, **Ravi Kumar & Vikram Verma**, Journal of Applied Physics A, 2025.
5. [Progress in Developing Highly Efficient p-type TCOs for Transparent Electronics: A Comprehensive Review](#), J Singh, P Bhardwaj, **R Kumar, V Verma**, Journal of Electronic Materials 2024

6. Progress in Developing Highly Efficient p-Type TCOs for Transparent Electronics: A Comprehensive Review, Jarnail Singh, Pankaj Bhardwaj, **Ravi Kumar, Vikram Verma**, Journal of Electronic Materials, 2024.
7. Influence of 100 MeV Au ion irradiation induced local structure modification on magnetic properties of epitaxial PrVO<sub>3</sub> thin films, Shivak Kalia, Varun Ranade, Keun Hwa Chae, Fouran Singh, Rajan Mishra, Ram Janay Choudhary, Rajesh Kumar, **Ravi Kumar**, Journal of Alloys and Compounds, 2025.
8. Effect of Lightly Substituted samarium ions on the structural, optical, magnetic and dielectric properties of the sonochemically synthesized M-type Sr-Hexferrite nanoparticles, Mohd. Hasim, Shameran J. Salih, Mukhils M Ismail, Ateeq Ahmed, Sher Singh Meena, Asha A Gaikwad, Rajshree B Jotania, Shalendra Kumar, D Ravinder, **Ravi Kumar**, Ahamad Imran, Khalid Mijasam Batoo, Sagr E Shirsath, Journal of Physica B; Condensed Matter, 2024.
9. Optical and Electrical Properties of 80 MeV Si<sup>8+</sup> Ions Irradiated Ga-doped Zinc stannate films; Neha Chauhan, **Ravi Kumar**, K. Asokan, A.P. Singh, Journal of Applied Physics A 2025.
10. Investigation of Structural, Magnetic and Electronic Properties of Co Doped NdMnO<sub>3</sub>, Farooq H Bhat, G Anjum, Jan Asifa, Tanveer A Dar, **Ravi Kumar**, Manzoor A. Malik, Journal of Magnetism and Magnetic Materials, 2025.
11. Observation of room temperature, ferromagnetism in transition metal ions substituted p-type transparent conducting oxide Cr<sub>2</sub>O<sub>3</sub> thin films, Pankaj Bhardwaj, Jarnail Singh, A.P. Singh, R.J. Choudhary, **Vikram Verma, Ravi Kumar**, Journal of Material Science and Engineering, 2024.
12. Morphotropic Phase Boundary evolution with synergistic effect of sintering temperature to improve electrocaloric and energy storage performances of leadfree Ba<sub>0.95</sub>Ca<sub>0.05</sub>Sn<sub>0.09</sub>Ti<sub>0.91</sub>O<sub>3</sub> (BCST) ceramic, Sachin Sharma, Revati Nandan, Pardeep Malhotra, Sanjeev Kumar, **Ravi Kumar**, N.S. Negi, Journal of Energy Storage, 2024.
13. Pankaj Sharma, **Vishal Singh** et al, "Surface Morphology Analysis of Inconel 625 through Multi-walled Carbon Nanotubes-Based Electric Discharge Machining", vol. 34, pp. 9813-9824, July 2024, Journal of Materials Engineering and Performance, doi: 10.1007/s11665-024-09849-x.
14. Pankaj Sharma, **Vishal Singh**, M. K. Sharma, An in-depth analysis of MWCNTs and graphene nanofluids-based EDM: Investigating surface integrity in Inconel 825 superalloy, November 2024, [Precision Engineering](#), Vol. 91, pp. 546-558, doi: 10.1016/j.precisioneng.2024.10.018.
15. Anvi Bakhsyan, **Vishal Singh** et al, "An Insight into Tribological Behavior of In-situ Synthesised AA6061/ZrB<sub>2</sub> Nanocomposites Using a Hybrid RSM-ANN Technique", Next Research, March 2025, 2(10):100285, doi: 10.1016/j.nexres.2025.100285.
16. [Tailoring Etching Conditions to Unlock the Electrochemical Potential of 2D Ti<sub>3</sub>C<sub>2</sub>TX MXene](#). AS Madhu Yadav, Mukesh Kumar, Vinay Kumar, **Raj Bahadur Singh** JOM – 2025.
17. [Electrochemical performance of V<sub>2</sub>O<sub>5</sub>/f-CNT asymmetric flexible device for supercapacitor application](#). Mamta Bulla, Vinay Kumar, Raman Devi, Sunil Kumar, Sarita Sindhu, Rita Dahiya, Anushree Jatrana, Ajay Kumar Mishra, **Raj Bahadur Singh**, Journal of Inorganic and Organometallic Polymers and Materials, 2025.
18. [Development of Low-Density Steel Nanocomposite Using Mechanical Alloying Followed by Spark Plasma Sintering](#), Anil Kumar, **Raj Bahadur Singh**, Journal of Materials Engineering and Performance, 2025.
19. Tribological behavior of Ni-based composite coatings produced by cold spray Sudesh Singh Rohit Kumar Singh Gautam, Vivek Mani Tripathi, Jitendra Kumar Gautam, Subhash Mishra, Hemant Nautiyal, **Raj Bahadur Singh**, Pushkar Jha, Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2025.
20. Hydrothermally reduced graphene oxide based electrodes for high-performance symmetric supercapacitor unil Kumar, Vinay Kumar, Mamta Bulla, Raman Devi, Rita Dahiya, Avnish Kumar Sisodiya, **Raj Bahadur Singh**, Ajay Kumar Mishra, Materials Letters, 2024.
21. [Unraveling the chemistry of PVP in engineering CdS nanoflowers for sunlight-driven photocatalysis](#), R Sharma, JR Mathivathani, S Thakur, S Govindasamy, **RB Singh** - Journal of Materials Chemistry C, 2025.

22. L.K. Singh, P.C. Yadav, P.K. Katiyar, **R. Maurya**, Mechanical and Tribological properties of epoxy-based natural fiber-reinforced hybrid bio-composites, Surface Review and Letters, 2550138, 10 (2025)
23. R., Shrivastava, **R. Maurya**, P.K. Katiyar, A Review on bipolar electrochemistry for corrosion testing: highlighting mechanisms, applications, and future prospects. J Solid State Electrochem 29, 471–511 (2025)
24. **R. Maurya**, V. Kumar, S. Gautam, S. Bharti, S. Mallika, Investigation of microstructural and mechanical characteristics of Al-ZrO<sub>2</sub> composites fabricated by stir casting, Interactions, 245, 301 (2024)
25. **R. Maurya**, P.K Katiyar, P. Rani, P.C. Yadav, Influence of pulse frequency on microstructure, mechanical properties, and corrosion resistance of electrodeposited Ni-SiC composite coatings, Materials Today Communications, 109977, 40 (2024)
26. R., Shrivastava, **R. Maurya**, P.K Katiyar, Examining Sigma Phase in Super Duplex Stainless Steels (UNS S32750) after Isothermal Aging, Focusing on Its Influence on Etching and Pitting Corrosion with Optical Microscopy. Metallogr. Microstruct. Anal. 13, 741–763 (2024)
27. S. Ariharan, M. Parchovianský, P. Singh, P. Rani, **R. Maurya**, A. Sekar, A.K. Keshri, A. Pakseresht, Hot Corrosion Behavior of La<sub>2</sub>Ce<sub>2</sub>O<sub>7</sub>-Based Plasma-Sprayed Coating, 779–788, 107 (2024)

(b) **Doctoral Programme:** 01 Student, thesis submitted and 01 Student is ongoing.

Sr. No.	Title	Guide	Name of the student(s)	Brief Report
1	Swift Heavy Ion Irradiation Induced Modification in Structural, Electrical and Optical Properties in Substituted RCrO <sub>3</sub> Thin Film	Dr. Ravi Kumar	Sh. Ravinder Kumar	Thesis submitted
2	Development of Low Density Steel Nanocomposites	Dr. Raj Bahadur Singh	Sh. Anil Kumar	Ongoing
3	Course Work	Dr. Vishal Singh	Sh. Amit Kumar Tripathi	Ongoing

(c) **Ph.D Degree awarded:** 16 Nos.

(d) **DOCTORAL PROGRAMME:** 03 Nos. thesis submitted /Ongoing.

(e) **POPULAR LECTURES BY OUTSIDE EXPERTS:**

Sr. No.	Date	Speaker	Topic
1.	20/09/2024	Prof. Fouran Singh	Research and Innovation for Sustainable Development

(f) **EQUIPMENT ACQUIRED:**

Sr. No.	Name of equipment	Name of manufacturer	Cost (in INR)
1.	Spare Part of Raman Microscope P-LSAC-0011 objective N-Plan 50X, A-9836-4883 Steerable Arm-LEICA DM UV/VI	M/S Renishaw Metrology Systems Ltd., G.K. Arcade, 3 <sup>rd</sup> Floor No.125/1-18, T.Mariyappa Road, First Block Jayanagar, Bangalore-560011 Dated: 27/04/2023	Rs. 10,20,462/-

2.	Compression Moulding Press	<b>M/S Ashian Engineers Company India, Janak Puri, New Delhi</b>	Rs. 7,40,000/-
3.	Computerization Mild Steel Tensile Testing Machine	Maxwell Scientific Corporation No. 234, Building .Arjun Nagar Opp. Puja Filling Station across Tangri river Ambala Cantt, Haryana 133006	Rs. 9,50,000/-

### 3. DETAIL OF THE LABORATORIES:

Sr. No.	Name of the Laboratory
1.	Field Emission Scanning Electro Microscope Lab (FESEM) / Nano Indentor Lab
2.	Pulse Laser Deposition Lab (PLD)
3.	PL/Miara-Raman Lab
4.	Nano Materials Lab
5.	Materials Science Research Lab
6.	Polymer Composites Lab
7.	Spectroscopy Lab
8.	Transport Phenomena Lab
9.	X-Ray Diffractometer (XRD) Lab
10.	Physical Metallurgy Lab
11.	Non-Destructive Testing Lab
12.	Optical Microscopy Lab
13.	Micro Hardness Tester Lab
14.	Electrical Transport Lab
15.	Computational Lab.
16.	Heat treatment lab.
17.	Tribology lab.

### 3.11 DEPARTMENT OF ARCHITECTURE



#### 1. ACADEMIC STAFF

**HEAD:** Dr. Ashwani Kumar

**FACULTY MEMBERS:**

Professor	Associate Professor	Assistant Professor
Prof. Minakshi Jain	Dr. Inderpal Singh	Dr. Amanjeet Kaur
Prof. Bhanu M Marwaha	Dr. Ashwani Kumar	Dr. Venu Shree
	Dr. Vandna Sharma	Dr. Sandeep Sharma
	Dr. Puneet Sharma	Dr. Neetu Kapoor
	Dr. Aniket Sharma	Dr. RashmiKumari
		Dr. Swechcha Roy
		Dr. Sourojee Dutta

#### 2. DISTINCTION ACHIEVED:

**Institute Ranking**

Sr. No.	Ranking organization	All India rank	Session year
1	Indian Institutional Ranking Framework (IIRF)	09	2024
2	National Institutional Ranking Framework (NIRF)	32	2024
3	India Today Institutional Ranking	-	2024

### 3. RESEARCH:

#### a) Research Publication by faculties:

##### (i) International journal:

1. Ridima Sharma & Vandna Sharma, 2024. "Thermal performance study of traditional slate roofed mud houses in the sub-tropical submontane and low hills of Himachal Pradesh", Visions for Sustainability.
2. Rahul Bharmoria & Vandna Sharma, 2024. "Analyzing the urban sustainable development impact of degraded visual quality on streetscape causing visual variation: a case of Dharamshala, Himachal Pradesh", Environment, Development and Sustainability.
3. Akansha Soni & Puneet Sharma, 2024. "A recent review of influential factors for core city area development processes", Journal of Urban Regeneration and Renewal, Volume 17 Number 3, ISSN No.: 1752-9646.
4. Kalpna Thakur, Inderpal Singh & Puneet Sharma, 2024. "A systematic review of integrated urban water management (IUWM)", Environment, Development and Sustainability.
5. Gitika Kaundal, Puneet Sharma & Inderpal Singh, 2024. "Climate-Resilient Traditional Architecture: A Case of Dharamshala, India", Journal of Architectural/Planning Research and Studies (JARS) – Accepted.
6. Swasti Sharma, Ashutosh Saini, Bhavna Shrivastava, Ashwani Kumar, 2024. "Existing Practices for Land Use Planning in Hill Cities of India: A Review", International Review for Spatial Planning and Sustainable Development, vol. 12 Issue 1.
7. Saraswat Anjali, Pipralia Satish, Kumar Ashwani, 2024. "Rapid Urbanizations of Metropolitan Cities in India: A Review", ISVS e-journal, Vol. 11 issue 1.
8. Shipra Goswami, Chandan Shradha, Kumar Ashwani, Pipralia Satish, 2024. "Conceptualizing Heritage Based City Development in India", Journal of Urban Regeneration and Renewal, Volume 17, Number 3, Spring 2024, pp. 337-349.
9. Goswami Shipra, Kolte Rushikesh, Kumar Ashwani, Pipralia Satish, 2024. "Fire Hazard In Urban Areas: A Scoping Review To Understand Issues And Opportunities", Journal of The Institution of Engineers (India): Series A.
10. Saraswat Anjali, Pipralia Satish, Kumar Ashwani, 2024. "Exploring the application of ecosystems approach to urban planning: a systematic literature review", International Review for Spatial Planning and Sustainable Development.
11. Akanksha Sangwan, Sudesh Vijay Ananad, Nand Kumar, Ashwani Kumar, Mahesh Jat, Rayees Ahmed, 2024. "Development of Site Suitability Framework for Urban Greenspace: A case study of Sikar city, Rajasthan, India", Environmental Earth Sciences.
12. Manish Sharma, Bansari Sharma, Nand Kumar, Ashwani Kumar, 2024. "Establishing A framework to assess urban water resilience in developing countries like India: Looking beyond water utilities and networked cities", Water Policy.
13. V Shree, H Kaur, KS Mehra, V Goel, H Goel, 2024. "A comprehensive assessment of IAQ role in ensuring environment quality and health in schools and plan for future school environment: a systematic review", Air Quality, Atmosphere & Health.
14. Asmita Yadav and Rashmi Kumari, 2024. "Gender safety perspective in urban planning: The case of pedestrian mobility in Kanpur city", CITIES.

15. Rashmi Kumari and Bharti Kasav, 2024. "Analysis of land use and land cover transpose using remote sensing and GIS approach: a case of Hamirpur, India", *Procedia Computer Science*.
16. Asmita Yadav and Rashmi Kumari, 2025. "An Exploratory Survey of Urban Pedestrian Mobility: A Gender Perspective", *Advances in Green Energy Technologies*.
17. Swechcha Roy, S. K. Paul, Amarjeet Kumar and Vivek Agnihotri, 2024. "Understanding Parents' Preferences while School Selection in Indian Cities Using Cluster Analysis and Logit Model", *International Journal of Educational Reform*.
18. Gayatri Mukherjee, Sourojee Dutta & Madhumita Roy, 2025. "Impact of Urban Developments on the Historic Character of Temple Towns: Insights from Ekamra Kshetra, Odisha, India", *ISVS e-journal*, Vol. 12, Issue 02 March.
19. [Neetu Kapoor](#), [Shivani Soni](#), [Abhinam Bhardwaj](#), and [Vijay Kumar Bansal](#), 2025. "Implementation of Geodesign Framework for Development of Flood Resilient Hill Town: A Case Study", [IDRiM Journal](#) 15(1).
20. ShanzahNazir, N.S. Thakur and [NeetuKapoor](#), 2024. "Optimizing Energy Efficiency in Commercial Buildings through Advanced Building Strategies", *IRJAEM* 2(4).
21. Anshul Kumari, Vijay Kumar Bansal and [Neetu Kapoor](#). 2024. "Planning Efficient Transportation through Network Analysis: A Case of Faridabad City," *International Research Journal on Advanced science Hub*.
22. Rubika Singh and [Neetu Kapoor](#). 2025. "Assessing the impact of land use land cover change and urbanization on urban heat island through remote sensing and geospatial techniques in Jhansi, India (2001–2021)", *Urban Climate*, Volume 61.

**(ii) International Conferences:**

1. Prashansha Prashar, Vandna Sharma. "The impact of aspect ratio on the courtyard microclimate in institute buildings", *International Conference and Knowledge Series on Inclusive, Resilient and Sustainable Human Settlement at Poornima University Jaipur Dated 02-04 May 2024*.
2. Niriksha Vaghasiya, Vandna Sharma, "Role of Biophilic Design in improving Energy Performance of Office Buildings located in the Hot Climate: a Review", *International Conference and Knowledge Series on Inclusive, Resilient, and Sustainable Human Settlement at Poornima University Jaipur Dated 02-04 May 2024*.
3. Vandna Sharma, "Understanding thermal performance of vernacular houses for propagating sustainable energy techniques in design and planning", *IEEE Conference: IC2E3-2024, 6TH -7TH June 2024, NIT Uttarakhand*.
4. Puneet Sharma, "Transforming the urban spaces- case of urban voids in cityscape", *Urban Development Missions Restructuring of Spaces and Emergence of New Urbanism, 15-16 November, 2024*.
5. Nandit Pastariya, Puneet Sharma, "Module design strategies for residential satisfaction in row housing; case of central India", *International Multi-disciplinary Conference on DESIGN 2030: Developing Efficient and Sustainable Innovations for Global Needs, March 21st and 22nd, 2025*.
6. Rushikesh Kolte, Shipra Goswami, Ashwani Kumar, Satish Pipralia, "Safeguarding Urban Resilience: A Critical Review of Norms and Regulations in Indian Cities", *2nd Conference on Future Challenges in Sustainable Urban Planning & Territorial Management, 2024*.
7. Anjali Saraswat, Satish Pipralia, Ashwani Kumar, "Evaluating Urban Sustainability Assessment Methods: A Path Towards Sustainable Cities", *2nd Conference on Future Challenges in Sustainable Urban Planning & Territorial Management, 2024*.

8. Anam Amjad, Amanjeet Kaur, "Implementation and Challenges to the Adaptive Reuse of Heritage Houses in Lucknow", ICoSoAPD International Conference, 2024.
9. Bhupender Panwar, Amanjeet Kaur, "Present Scenario of Industrial Sector in Himachal Pradesh: Problems and Prospects", ICoSoAPD International Conference, 2024.
10. Vishaliny V, Amanjeet Kaur, "Retrofitting for Resilience - A Case Study of Srirangam Temple Town", ICoSoAPD International Conference, 2024.
11. Sarthak Goel, Amanjeet Kaur, "Formulating framework for the resilience of indigenous communities", ICoSoAPD International Conference, 2024.
12. Bindu Agarwal, Amanjeet Kaur, "Preserving Heritage and Identity: Sustainable Neighbourhood Development for the Jaunsari Tribe in Chakrata, Dehradun Uttarakhand India", ZEMCH, VIT Vellore, 2024.
13. Anam Amjad, Amanjeet Kaur, "Assessment of Indicators for Resilience of Heritage Structure: Case Study of havelies in Lucknow", PLEA, Poland, 2024.
14. Vishaliny V, Amanjeet Kaur, "Religious Spatial Dynamics of Srirangam: SocioCultural and Socio-Economic Influences", SMUS, Thailand, 2024.
15. Monika, Swechcha Roy, Amanjeet Kaur, "Measuring Environmental Impact: Emissions Assessment From Construction To Building Operations", ASCE Conference International on Challenges and Innovations for Sustainable Smart Cities (CISSC 2025), Chandigarh
16. Amanjeet Kaur, Anindya Dutta, Bhupender Panwar, "Optimizing Residential Energy Consumption: A Comprehensive Redesign Strategy for Tropical Regions", 2nd International Conference on Engineering and Technological Innovation for Sustainable Development (ICETISD 2025).
17. Singh R, Kapoor N, "Assessing the Influence of Urban Development on the Urban Heat Island through Remote Sensing and Geospatial Techniques in Jhansi", 3rd International Conference SoAPD 2024 Opportunities and Challenges for Resilient Future on 18th to 20th April 2024.
18. Rashmi Kumari, Ayush, Muskan Sood, "Tangible and Intangible Aspects of Cultural Landscape: An Abode of Sacred Groves", International Conference on "Religious Architecture" December 29-30, 2024, NIT Patna.
19. Akanksha Singh, Rashmi Kumari, "Echoes of Faith and Form: Unveiling The Architectural Evolution of Orchha's Sacred Complex", International Conference on "Religious Architecture" December 29-30, 2024, NIT Patna.
20. Amritansh Chaubey, Savita Dixit, Rashmi Kumari, "Effect of development of temple on surrounding area", International Conference on "Religious Architecture" December 29-30, 2024, NIT Patna.
21. R Joshi, K Vashishtha, S Tripathi, Swechcha Roy and C Dhankar, "Application of the theory of planned behaviour to assess the impact of the intention of architects, designers, and engineers regarding the usage of sustainable construction materials (SCM) in India", IOP Conference Series: Earth and Environmental Science, 2024.
22. Swechcha Roy, "Resurging walkability in Indian children: An approach to appreciate parents' preference in school location planning using cluster analysis and logit model", National Conference titled 'Planning and Architecture for Hill Region' PAHR – 2024.
23. Dutta, S. and Goel, S., "Enhancing Visual Quality of Streetscape to Develop Socially Sustainable Core City Areas of Hilly Regions: A Case of Hamirpur, Himachal Pradesh", National Conference titled "Planning and Architecture for Hill Region" 2024, NIT Hamirpur.
24. Dutta, S. and Bhattacharya, I., "The Indigenous Technique of Water Management through Conservation of Baoli and Natural Water Springs: A Case of Kangra, Himachal Pradesh", ZEMCH, VIT Vellore, 2024.
25. Neetu Kapoor "Spatial and Temporal Variations of Urban Heat Island: A case study Ludhiana", National Conference titled "Planning and Architecture for Hill Region" 2024, NIT Hamirpur.
26. Damandeerv Nagul and Neetu Kapoor, "Integration of GIS and BIM for Thermal Comfort through Passive Design Strategies in a School Building: A Case Study", 2nd International Conference on Infrastructure Development and Sustainability 2024 (ICIDS 2024), Ahmedabad.

27. Shivani Soni, Neetu Kapoor, Abhinam Bhardwaj, “Geodesign-based approach for flood resilient hill town: A case of Kullu, Himachal Pradesh,” International Conference on Rethinking Built Environment (INCORBE) 2024.
28. Rubika Singh and Neetu Kapoor, “Assessing the Influence of Urban Development on the Urban Heat Island through Remote Sensing and Geospatial Techniques in Jhansi, India“ 3rd International Conference SoAPD 2024 Opportunities and Challenges for Resilient Future.

**b) Conferences Organized:**

- National conference on 'Planning and Architecture for Hill Regions' (PAHR 2024) from 15th – 16th May 2024.

**c) Workshop/ Training/ FDP:**

**(i) Organized**

- Five days e-STC on ‘Energy Efficient Building Technology (EEBT-2024)’ from 02nd Dec – 06th Dec. 2024.
- Five days workshop on “Innovation with Paper Engineering” from 10<sup>th</sup> April to 14<sup>th</sup> April, 2024.
- Five days e-STC on “Emerging Research Tools & Techniques in Architecture and Planning” from 22<sup>nd</sup> April to 26<sup>th</sup> April, 2024.
- Five days e-STC on “Information Science for Building Design and Urban Planning 2024” from 14<sup>th</sup> October to 18<sup>th</sup> October, 2024.
- Five days e-STC on “Applications of GIS & other Analytical Tools in Architecture & Planning” from 24<sup>th</sup> February to 28<sup>th</sup> February, 2025.
- Five days workshop on “Innovation with Clay and Paper” from 7<sup>th</sup> November to 11<sup>th</sup> November, 2024.

**d) Outreach Activities:**

Sr. no.	Activity	Duration/ dates	Resource person	Event Venue
1	Expert talk on RAA (Rastriya Avishkar Abhiyan)	5.02.25 and 10.02.25	Dr. Puneet Sharma	Govt. Senior secondary School Taal, HP and Govt. Senior secondary School Rail, HP
2	Measure drawing tour	13-18 09.24	Dr. Puneet Sharma	Nirmand, Kullu
3	Expert for ‘Synopsis’ stage viva-voce for M.Arch students of Chandigarh College of Architecture	29.01.2025	Dr. Sourojee Dutta	CCA, Chandigarh
4	Expert for ‘Program formulation, Concept design and Design philosophy’ stage viva-voce for M.Arch students of Chandigarh College of Architecture	2.4.2024 – 3.4.24	Dr. Sourojee Dutta	CCA, Chandigarh
5	Expert for ‘Program formulation and Site analysis’ stage viva-voce for M.Arch students of Chandigarh College of Architecture	12.3.25 – 13.3.25	Dr. Sourojee Dutta	CCA, Chandigarh

6	2 day Mentor Training Programme organized by BIS	6-7 June 2024	Dr. Amanjeet Kaur	Hotel Regenta Kullu
7	Expert talk	Jan 2025	Dr. Amanjeet Kaur	Sri Sri University

**e) Research project**

**i) EXTERNAL SPONSORED R&D PROJECTS**

Sr. No.	Title of R&D Project/Patent	Name of [PI / Co-PI]	Present Status of Project [Completed / Ongoing]	Patent Granted [Yes / No]	Rs.
1	Carrying capacity assessment of eco sensitive zone, Col. Sher Jung National park, Simbalbara-DEST Shimla, HP	Inder pal Singh, And Puneet Sharma	Completed	NO	07 L
2	Study of the different types/ varieties and performance parameters of flexible polyvinyl chloride (PVC) floorings manufactured and/or available in Indian market	Prof. Minakshi Jain, Dr. I.P. Singh and Dr. Sourovec Dutta	Completed	NO	6.05 L

**f) Book published**

**Text / Reference Books published on relevant subjects from reputed International Publishers:**

Sr. No.	Title	Publisher	Author	ISBN/ISSN No.
1	HILL ARCHITECTURE Past Present and Future	Lulu.com	Dr. Puneet Sharma	978-1-304-82050-1
2	Urban and Transit Planning: (Vol 1) Strategies, Innovations and Climate Management	Springer Nature	Dr. Puneet Sharma	978-3-031-76096-9
3	Book chapter titled "Perforated Screens of India: Learning from Traditional and Contemporary Reflections"	Springer, Singapore	Gupta, V., Gupta, N., Khajuria, A., Gupta, A. and Dutta, S.	978-981-99-8810-5
4	Book chapter titled "Biophilic Design: A New Approach Towards Sustainable and Restorative Environment"	Springer, Singapore	Seth, S. and Dutta, S.	978-981-99-8810-5

5	Book chapter titled “A Comprehensive Understanding of the Research Themes, Trends and Future Directions of Vernacular Architecture Using Bibliometric Analysis”	Springer, Singapore	Dutta, S. and Kumar, N.	978-981-97-4987-4
6	Book chapter titled “Understanding Wadas: The Traditional Maharashtra House” in the Architectural Guide: Mumbai”	DOMS, Germany	Amanjeet Kaur	978-3869228037
7	Book chapter titled "Documentation of Kasauni Uttrakhand" in Gandhi's Places”	Navjiwan Trust	Amanjeet Kaur	B0CW68VPMS
8	Book chapter titled “Transformations in the Vernacular Buildings of Nagaland, India”		Rongsen Imsong, Ashwani Kumar	9781003389002
9	Book chapter titled “Exploring Fire Hazard Vulnerability of traditional residential buildings in Walled City of Jaipur”		Shipra Goswami, Ashwani Kumar, Satish Pipralia	9781003389002
10	Book chapter titled “Problems and Prospects for Conservation of Traditional Bazaars in Walled City of Jaipur”. In: Patel, D., Kim, B., Han, D. (eds) Innovation in Smart and Sustainable Infrastructure. ISSI 2022. Lecture Notes in Civil Engineering, vol 364.	Springer, Singapore	Goswami, S.S.K., Kumar, A., Pipralia, S.	9789819935574
11	Book chapter titled “Issues Related to Urban Development in Hilly Areas: A Literature Review”	Springer, Singapore	I. Saini, A., Sharma, S., Kumar, G., Kumar, A	9789819739943
12	RETHINKING HILL ARCHITECTURE	Laxmi Book publication	Dr. Neetu Kapoor	9781304723321, 1304723321
13	Book Chapter titled “Methodology for GIS-Enabled Virtual Campus Design”	Taylor and Francis Group	Dr. Neetu Kapoor and Dr Vijay Kumar Bansal	9781003453321
14	Assessing the Influence of Urban Development on the Urban Heat Island through Remote Sensing and Geospatial Techniques in Jhansi, India	Springer Nature	Rubika Singh and Neetu Kapoor	978-981-96-0930-7
15	Book chapter titled “Lessons from Indian Traditional House Forms in Achieving Sustainability”	Springer	Amanjeet Kaur	

**g) Doctoral Programme: 21 Nos. ongoing**

Sr. No.	Guide	Name of the Student	Status
1.	Dr. Minakshi Jain	Yogesh Kumar	Ongoing
2.	Dr. Bhanu M. Marwaha	Manisha	Ongoing
3.	Dr. Inderpal Singh	Gouri	Ongoing
4.	Dr. Inderpal Singh	Keerti Manisha	Open seminar delivered
5.	Dr. I. P.Singh	Kalpna Thakur	Ongoing
6.	Dr Ashwani Kumar	Aamod Kumar Karmaksh	Ongoing
7.	Dr. Vandna Sharma	Rahul Bharmoria	Submitted
8.	Dr. Vandna Sharma	Ridima Sharma	Open seminar delivered
9.	Dr. Aniket Sharma	Rohit Thakur	Submitted
10.	Dr. Aniket Sharma	Rajat Nainwal	Ongoing
11.	Dr. Aniket Sharma	Athul P	Ongoing
12.	Dr. Aniket Sharma	Rajesh Yadav	Ongoing
13.	Dr. Puneet Sharma	Geetika Kaundal	Ongoing
14.	Dr. Puneet Sharma & Dr. Inderpal Singh	Kalpna Thakur	Ongoing
15.	Dr. Puneet Sharma & Dr. Rashmi Kumari	Shivani	Ongoing
16.	Dr. Puneet Sharma	Neelam Kumari	Ongoing
17.	Dr. Puneet Sharma	Rahul Sharma	Ongoing
18.	Dr Amanjeet Kaur	Bhupender Panwar	Ongoing
19.	Dr. Venu Shree	Jay Prakash	Ongoing
20.	Dr. Venu Shree	Shiv Dayal Singh	Ongoing
21.	Dr. Venu Shree	Mehul Chaudhary	Ongoing
22.	Dr. Sandeep Sharma	Aakanksha Bhardwaj	Ongoing
23.	Dr. Sandeep Sharma	Suresh Sharma	Ongoing
24.	Dr. Neetu Kapoor	Abhinam Bhardwaj	Ongoing
25.	Dr. Neetu Kapoor	Manshant Bhushan	Ongoing
26.	Dr. Rashmi Kumari	Asmita Yadav	Submitted (Defense Viva Delivered)
27.	Dr. Sourojee Dutta	Himanshi	Ongoing
28.	Dr. Sourojee Dutta	Mohd. Aamir	Ongoing

**4. POPULAR LECTURES BY OUTSIDE EXPERTS:**

Sr. No	Speaker	Topic
1	Dr. K. Tungnung, Associate professor, SPA, Vijayawada	Towards Sustainable Low carbon Futures: Parametric Ventilation
2	Dr. C G Sarvanan, Professor, DoME, Annamalai University, Tamil Nadu	Renewable Energy
3	Prof. Alakesh Manna, Professor, DoME, PEC Chandigarh	Air conditioning system layout and design
4	Dr. Ajay Kumar, Associate Professor, NIT Patna	Contemporary approaches for sustainable built environment
5	Dr. Amitava Sarkar, Associate professor, SPA, Vijayawada	Climatic responsive design
6	Dr. Joanna Jablonska, Dean and Prof. Wroclaw University of Science & Technology, Wroclaw Poland	Fundamentals of Acoustic Design of buildings Case Studies of Auditoriums and Concert Halls in Europe
7	Ar. Mithila Mattoo	Case studies of conservation projects in the US

**5. TECHNICAL ASSOCIATIONS/SOCIETIES:**

Sr. No.	Name of Professional Societies/ Institutions	Name of the Faculty	Status	National/ International
1.	Council of Architecture	Dr. Minakshi Jain	CA/90/13558	National
2.	Indian Society of Landscape Architects		J-10/A2007	National
3.	Council of Architecture	Dr. Bhanu M Marwaha	CA/92/15454	National
4.	Associate Member of The Indian Institute of Architects Mumbai		A-14291	National
5.	Fellow Member ITPI – New Delhi	Dr. I P Singh	2006/52	National
6.	Fellow Member of The Indian Institute of Architects Mumbai		A-16465	National
7.	Council of Architecture		CA/89/12443	National
8.	Member of The Indian Institute of Architects Mumbai	Dr. Aniket Sharma	Lifetime	National
9.	Council of Architecture		CA/2006/38390	National
10.	Associate Member of Institute of Town Planners, India		Lifetime (2011-119)	National

11.	Member, Indian Society of Heating, Refrigeration & Air Conditioning Engineers (ISHRAE)		2017-2020	National
12.	Life Member, Indian Building Congress (IBC)		Lifetime (ML6231)	National
13.	Life Member, Indian Concrete Institute		Lifetime (10542)	National
14.	Member, Autodesk User Group International Organization (AUGI)		Lifetime	International
15.	General Member, International Network for Traditional Building, Architecture and Urbanism (INTBAU)		Lifetime	International
16.	Member of The Indian Institute of Architects Mumbai	Dr. Puneet Sharma	Lifetime	National
17.	Council of Architecture		CA/2004/33626	National
18.	Institute of Urban Design India		Lifetime	National
19.	Council of Architecture	Dr. Vandna Sharma	CA/2005/36353	National
20.	Member, Indian Society of Heating, Refrigeration & Air Conditioning Engineers (ISHRAE)		2017-2020	National
21.	Life Member, Indian Building Congress (IBC)		Lifetime (ML6232)	National
22.	Associate Member of Institute of Town Planners, India		Lifetime (2011-118)	National
23.	General Member, International Network for Traditional Building, Architecture and Urbanism (INTBAU)		Lifetime	International
24.	Council of Architecture	Dr. Amanjeet Kaur	CA/2001/28647	National
25.	Member of The Indian Institute of Architects Mumbai		Lifetime (A15110)	National
26.	ICOMOS		Annual (2021-23)	International
27.	INTACH		Lifetime	National
28.	General Member, International Network for Traditional Building, Architecture and Urbanism (INTBAU)		Lifetime	International

29.	Member of The Indian Institute of Architects Mumbai	Ar. Neetu Kapoor	Lifetime	National
30.	Council of Architecture		CA/2006/37880	National
31.	General Member, International Network for Traditional Building, Architecture and Urbanism (INTBAU)		Lifetime	International
32.	Member of The Indian Institute of Architects Mumbai	Ar. Sandeep Sharma	Lifetime	National
33.	Council of Architecture		CA/2006/37836	National
34.	Council of Architecture	Dr. Venu Shree	CA/2006/38789	National
35.	Member of The Indian Institute of Architects Mumbai		Lifetime	National
36.	Institute of Indian Interior Designer		Lifetime	National
37.	The Indian Society for technical Education		Lifetime	National
38	Council of Architecture	Dr. RashmiKumari	CA/2009/45688	National
	Associate Member of Institute of Town Planners, India		2016-242, AITP	National
38	Associate Member of IIA Council of Architecture		A-27385	National
		Dr. Swechha Roy	CA/2013/62273	National
39	Council of Architecture	Dr. Sourojee Dutta	CA/2010/50268	National

## 6. DETAILS OF LABORATORIES:

1. Research & Documentation Lab
2. Computer Lab
3. Climatology & Energy Lab
4. Survey Lab
5. Audio Visual lab (SH-I to SH-IV)
6. Visual Arts Lab
7. Building Material & Construction lab
8. Carpentry lab
9. Built Environment and Model Making lab
10. BReUCom Research Lab
11. Urban design Lab
12. Heritage and Conservation Lab

### 3.12 DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES



**HEAD OF THE DEPARTMENT: - Dr. Manoj Sharma, Associate Professor**

#### 1. ACADEMIC STAFF

Sr. No.	Name of Faculty	Designation
<b>ASSOCIATE PROFESSOR</b>		
1.	Dr. Yogesh Gupta	Associate Professor
2.	Dr. Manoj Sharma	Associate Professor & Head of the Department
<b>ASSISTANT PROFESSOR GR-I</b>		
1.	Dr. Manoj Kumar Yadav	ASSISTANT PROFESSOR GR-I
2.	Dr. Sunder Kala Negi	Assistant Professor Gr-I
3.	Dr. Preeti Puri	Assistant Professor Gr-I
<b>ASSISTANT PROFESSOR GR-II</b>		
1.	Dr. Zareena J.M	Assistant Professor Gr-II
2.	Dr. Rinshu	Assistant Professor Gr-II

#### 2. TECHNICAL STAFF

Sr. No.	Name of Faculty	Designation
1.	Sh. Roop Lal	Technician SG-II
2.	Sh. Ashok	Sr. Technician

#### 3. SEMINAR, CONFERENCES, PROJECTS, WORKSHOP, SYMPOSIA, SUMMER SCHOOL, WINTER SCHOOL, SHORT TERM COURSE, PUBLICATION AND ANY OTHERS

##### Projects:

Sr. No.	SEMINAR, CONFERENCES, PROJECTS, WORKSHOP
1.	Project titled "Eminence of Local Deity Traditions and their Influence on the Sociocultural Values of Contemporary Society: A Study of Kullu and Shimla Districts of Himachal"

	Pradesh (ICSSR-RP-2024-530)” to Dr. Manoj Sharma, awarded by ICSSR amounting Rs. 45 Lakh.
2.	Project titled “Documentation of Traditional Deity Rituals and Alcoholic Customary Cultural Practices in Western Himalayan Kinnaur Tribe of HP” to Dr. Sunder Kala Negi, AP Gr.-I along with Dr. Yogesh Gupta as Co-Project Director awarded by ICSSR amounting Rs 10 lakh
3.	Project titled “Developing a Multilingual Health Communication Corpus for the Kutia Kondha of Kalahandi District, Odisha: An Ethnographic Study, to Dr Zareena JM and Dr Rinshu awarded by ICSSR Multi-Disciplinary Research Studies on Particularly Vulnerable Tribal Groups (PVTGs) of India (2024-25) amounting Rs. 15 Lakh.
4.	A Project titled “Socio-Economic Empowerment of Women through Localized Entrepreneurship: A Study of Himachal Pradesh”, has been awarded to Dr Preeti Puri and Dr Manoj Sharma by Indian Council of Social Science Research [ICSSR] amounting 8.50 Lakhs

#### 4. Events/Workshops:

Sr. No.	Name of Event/Workshop
1.	Workshop “Rethinking Academic Writing in English Studies: 21st Century Principles and Connection [RAW]” Date: 13th January-17th January 2025, Duration 5 Days.
2.	Short Term Training Program on “Cyber Security and Procurement: VAW 2024” Duration: one day, Date: 29th November 2024.
3.	Five-Day e-Workshop on “Research Methodology and Data Analysis (RMDA-2024)” (online) June 10th to June 14th, 2024.
4.	FDP “Viksit Bharat @2047: In-House Faculty Development Program” Date:18 June- 22 June 2024, Duration 5 Days.
5.	A one-day institute-level workshop titled “Empowering Women: Mind, Body, and Rights” will be held on April 6th, 2024

#### 5. National Conferences:

Sr. No.	Name of Conference
1.	ANVESHA 2024 - National Doctoral Research Conference, hosted by the Department of Humanities and Social Sciences, NIT Hamirpur, on 12-13 November 2024.
2.	The Department of Humanities and Social Sciences, NIT Hamirpur, in collaboration with the Indian Association for the Study of Population (IASP), organized two-day Northern Regional Conference on "Demographic Dividend and Inclusive Growth in North India" scheduled on March 20–21, 2025, at NIT Hamirpur.

#### 6. Research Publications:

Sr. No.	Name of Research Publications
1.	Sukhwinder Singh, Manoj Sharma and Yogesh Gupta published a paper titled as “Factors affecting individual’s willingness to pay for the reduction of industrial pollution: Empirical findings from the Indian Himalayan region. Scopus, Pollution, 2024.
2.	Dr. Manoj Kumar Yadav Published Research Article titled "Enduring Places and Excavating Memories: Biographical Narratives of Delhi in Malvika Singh’s Perpetual City (2013)" ( <a href="https://doi.org/10.1080/14484528.2024.2327617">https://doi.org/10.1080/14484528.2024.2327617</a> ), 2024
3.	Dr. Manoj Kumar Yadav Published conference paper titled "Translating Toba Tek Singh: From the “Sacredness” of the “Original” to the “Profaneness” of the Adaptation" (CRC Press, e-ISBN 9781003489436), 2024

4.	Dr. Manoj Kumar Yadav published conference paper titled "Being on the Margins: Gender, Disability and Violence in Mridula Garg's Kathgulah" (CRC Press, e-ISBN 9781003489436)
5.	Positive Psychology Unveiled (A guide to Embracing Positivity), Dr. Sunder Kala Negi, IIP publications, 2024
6.	Dr. Sunder Kala Negi, published "The Moral Mind: Decoding the Psychology of Business Ethics, in book titled, Futuristic Trends in Management, Dr. Sampath Lingam; Dr. K. Bhavani Selvi; Dr. S. Vijay Mallikraj and Dr. Shubham Kakran, 2024, IIP
7.	Exploring the Impact of Virtual Reality and Augmented Reality Technologies in Sustainability Education on Green Energy and Sustainability Behavioral Change: A Qualitative Analysis, Scopus, 2024, Dr. Sunder Kala Negi
8.	The Interplay of Metacognition and Psychological Empowerment in the Workplace: Exploring the Interrelationship from the Government and Private School Teachers, Dr. Sunder Kala Negi & Dr. Rinshu Dwivedi, 2024, Scopus.
9.	Dr Preeti Puri and Ms. Shefali published a book chapter entitled "Ta(l)king Away the Trauma: Verbo-Visual Testimony and Narrative Humility in Psychiatric Treatment", Name of the Book: Narrative Medicine: Trauma and Ethics, International Publisher: Vernon Press, Date: 23rd February 2024, ISBN: 978-1648898457.
10.	Ms. Shefali and Dr Preeti Puri published a research article "Traversing the (In) Visible Territory of Schizophrenia in HOAX Psychosis Blues: An Intersection of Life Writing and Graphic Medicine in Comics", Name of the Journal: Life Writing, Publisher: Routledge, Taylor and Francis, Date: January 2024 Indexing: WOS/AHCI: Q1 and Scopus DOI: <a href="https://doi.org/10.1080/14484528.2023.22894672">https://doi.org/10.1080/14484528.2023.22894672</a> .
11.	Ms. Anubhuti Walia and Dr. Preeti Puri published a conference paper "Reproduction, Society and Modern Medicine: Unveiling the Intricacies of the Fertility Industry in India through the Movie Good News (2019)" in a Web of Science indexed Journal Rupkatha Journal on Interdisciplinary Studies in Humanities, ESCI, Q2, Volume 16, Issue 4
12.	Ms. Shefali and Dr. Preeti Puri published a conference paper "Teeth as Deleuzoguattarian Partial Objects in Edgar Allan Poe's "Berenice" in a Web of Science Journal: Rupkatha Journal on Interdisciplinary Studies in Humanities, ESCI, Q2, Volume 16, Issue 4
13.	Ms. Shefali and Dr. Preeti Puri published a research article "The Distinctive Reality of Schizophrenia in Swallow Me Whole and HOAX Psychosis Blues: Exploring Comics and their Narrative Space, in the Journal Visual Studies, Indexing: WOS/AHCI: Q1 and Scopus 2025.
14.	Meta analysis approach on social protection of children's cognitive development and Finance Health Care through randomized, controlled trials, ST Parasa, VVS Nikhil, KBL Sreeja, A Kini, Rinshu Dwivedi, R Athe, Child Protection and Practice 4, 100110, 2025
15.	Healthy menstruation: Myth or reality? Insights into urban slums of Visakhapatnam city, India, G Pandey, T Darbhamulla, R Athe, Rinshu Dwivedi, Journal of Water, Sanitation and Hygiene for Development 15 (4), 274-286, 2025
16.	Burden of non-communicable diseases in South Asia: a decomposition analysis, J Pradhan, M Pai, Rinshu Dwivedi, B Mishra, S Behera, T Bera, R Kim, Journal of Health, Population and Nutrition 44 (1), 124, 2025
17.	KC Sahoo, Rinshu Dwivedi, R Athe, A Chauhan, S Jain, RK Sahoo Cost-effectiveness of portable-automated ABR for universal neonatal hearing screening in India, Frontiers in Public Health 12, 1364226, 2024.
18.	A Meta-Analysis Approach on Medical, Surgical and Expectant Management on Abortion of First Trimester S Negi, K Sharma, A Acharya, A Prabhu, R Dwivedi, R Athe Epidemiology, Biostatistics, and Public Health 19 (1)
19.	The Interplay of Metacognition and Psychological Empowerment in the Workplace: Exploring the Interrelationship from the Government and Private School Teachers SK Negi, R Dwivedi the Open Psychology Journal 17 (1)
20.	Performance analysis and science mapping on the effect of air pollution on child health: a bibliometric study from 2003–2023, T Bera, G Mohanty, R Dwivedi, J Pradhan Journal of

	Public Health, 1-17
21.	Impact of Spontaneous Abortion of First-Trimester on Medical Management: A Systematic Review and Meta-Analysis of Randomized, Controlled Trials A Prabhu, K Sharma, A Acharya, S Negi, R Dwivedi, P Jain, R Athe, Modernizing Maternal Care With Digital Technologies, 250-268

## 7. POPULAR LECTURES BY EXPERTS/INTERACTION WITH EXPERTS:

Sr. No.	Name of Lectures/Interaction
1.	The entire DoHSS faculty has chaired Sessions in IASP-2025 in two-day Northern Regional Conference on "Demographic Dividend and Inclusive Growth in North India" scheduled on March 20–21, 2025, at NIT Hamirpur.
2.	The entire DoHSS faculty has chaired Sessions in ANVESHYA 2024 - National Doctoral Research Conference, hosted by the Department of Humanities and Social Sciences, NIT Hamirpur, on 12-13 November 2024.
3.	Dr Yogesh Gupta chaired the session at National Seminar on “Inclusive Economics Growth Strategy in India: Challenges and Future Prospects” sponsored by ICSSR, Delhi at HP University Shimla.
4.	Dr Manoj Yadav and Dr Rinshu alongwith Dr Manoj Sharma has delivered a lecture in Five-Day e-Workshop on “Research Methodology and Data Analysis (RMDA-2024)” (online) June 10th to June 14th, 2024.
5.	Dr Manoj Kumar Yadav has organized a Training Programme (September 23rd to September 27th, 2024) for the B.Tech. students at the Training and Placement Office, NIT Hamirpur
6.	Dr Manoj Kumar Yadav has visited the United Kingdom for the Charles Wallace Research Grant from May 1st to May 31st 2024.
7.	Dr Preeti Puri has attended Senate Meetings in the Capacity of Senate Member Indian Institute of Information Technology (IIIT) Una on 30th April 2024.
8.	Dr Preeti Puri was the external Examiner for conducting the Viva - Voce for B.Tech. students at Indian Institute of Information Technology (IIIT) Una on 4th May 2024, and on 14 and 15th December 2024.
9.	Dr Preeti Puri was the faculty Collaborator to represent NIT Hamirpur at the PAN NIT Humanities and Social Sciences Research Conclave (HSSRC) – 2024 to be held at NIT Warangal.
10.	Dr Preeti Puri has received the best paper presenter award for her article entitled “Exploring the Commercialization of Infertility and IVF Technology in India through the Bollywood Movie “Good Newwz” (2019)” at the PAN NIT Humanities and Social Sciences Research Conclave (HSSRC) 2024 held at NIT Warangal from 28-30th May 2024.
11.	Dr Preeti Puri was the session Chair for the track “Medical Humanities” at the Pan NIT Humanities and Social Sciences Research Conclave organized by NIT Warangal from 28th May to 30th May 2024.
12.	Dr Preeti Puri was the external Subject Expert for conducting Guest Faculty interviews at Sardar Patel University, Mandi (H.P.) (A State Government University) on 23rd July, 2024
13.	Dr Preeti Puri has received a letter of Appreciation for the successful completion of tenure as Senate Member IIIT Una from 7th December 2019 to 7th May 2024 from the Chairperson BOG of Indian Institute of Information Technology (IIIT)Una
14.	Dr. Preeti Puri was invited as Chief Guest at Indian Institute of Information Technology (IIIT) Una to inaugurate a two-day seminar on "Professional Writing Practices for Engineering and Technology Students in International Settings" on 18th January 2025.
15.	Dr Rinshu has been invited as subject expert for question paper for the DY Patil University for Health Economics and Health Management
16.	Dr Rinshu has been appointed academic Editor, PlosOne, one of the most reputed journal

	of Health and Medical Sciences
17.	Dr Rinshu was appointed as editor for the volume “Research Topics   Mind the Gap: Addressing global healthcare challenges through equitable Healthcare technologies” in Medical Technologies for the Frontiers in Public Health accepted and under process for inviting the papers
18.	Dr Rinshu has delivered a lecture in application of GIS and other analytical tools in architecture and planning, e-short term course from 24 <sup>th</sup> to 28 <sup>th</sup> February, 2025.
19.	Dr Rinshu and Mr. Veeresh Tadhil has received the best paper award in IASSH held in Sambalpur University Odisha held as 20 <sup>th</sup> Annual Conference at Sambalpur University on March 7, 2025.

**8. Doctoral Program:**

Sr. No.	Doctoral Program
1.	Doctoral Programme 15 Research Scholars (presently ongoing)
2.	Ph.D. Degree awarded: -01

**9. Equipment Acquired- purchased:**

S. No.	Equipment/Software	Manufacturer	Cost (Rs.)
1	DLM Impact e-Language lab Academic—lifetime perpetual License (Mentor-50 users, Learners 1000 users)	Thaliyola infotech pvt. Ltd, Kerala purchased on 10/03/2025	Rs. 1,77,000/-

**10. Name of Laboratories:**

S. No.	Laboratory
1	Communication Skills Lab
2	Research Lab

### 3.13 DEPARTMENT OF MANAGEMENT STUDIES



**Head of the Department:** Dr. Mohd Adil, Associate Professor

#### 1. ACADEMIC STAFF:

Sr. No.	Name of Faculty	Designation
<b>Associate Professor</b>		
1.	Dr. Vivek Tiwari	Associate Professor
2.	Dr. Mohd Adil	Associate Professor (Head of the Department)
<b>Assistant Professor Gr-I</b>		
1.	Dr. Sachin Kumar	Assistant Professor, Gr-I
2.	Dr. Neeraj Dhiman	Assistant Professor, Gr-I
3.	Dr. Shampy Kamboj	Assistant Professor, Gr-I
4.	Dr. Richa Joshi	Assistant Professor, Gr-I

#### 2. TECHNICAL STAFF:

Sr. No.	Name of Staff	Designation
1.	Sh. Jitender Prasad	Sr. Technician

#### 3. STUDENT ADMITTED:

2024-2025	MBA
1 <sup>st</sup> Year	35
2 <sup>nd</sup> year	32

#### 4. RECOGNITION & AWARDS:

Dr. Mohd. Adil (Associate Professor) is the recipient of "**Inspiring Educator Award 2024**" for being one of the top 100 educators worldwide.

**5. SEMINAR, SHORT TERM COURSE / WORKSHOP/CONFERENCE ORGANIZED:****A. National Workshop organized:**

Two (02)

**6. SHORT TERM COURSE:**

Sr. No.	Course Title	Duration
1.	E-Short Term Course (e-STC) on “Exploring the Research Paths: What all you need to know’ (Module-1).	W.e.f. 30 September- 04 October 2024
2.	E-Short term Course on “Exploring the Research Paths: What all you need to know’ (Module-2)	W.e.f. 07 October- 11 October 2024

**7. RESEARCH:****(A)Research Project Granted: Two (02)**

Dr. Mohd. Adil	<b>One International project from UNSW (Australia)</b>
Dr. Sachin Kumar	ICSSR minor project awarded March 2025 as co-PI and host institution of project is Symbiosis Institute of International Business, Pune.

**8. RESEARCH PUBLICATIONS IN INTERNATIONAL JOURNALS:**

Sr. No.	Journal Name	Title of Paper	Year of publication	Author	Vol. and Page No.	Faculty
1	Journal of Cleaner Production	Fostering managers’ hope: A multi-analysis perspective on how green initiatives drive organizational performance	2025	Mohd Adil, SM Fazel-e-Hasan, H Ahmadi, MSadiq, H Sekhon, A Amrollahi	496, 145165	Dr. Mohd. Adil
2	Journal of Consumer Behaviour	Fostering Love for Innovative Sustainable Brands: A Multi-study, Multi-method Approach	2025	SM Fazel-e-Hasan, Mohd Adil, H Ahmadi, M Abid, G Mortimer, A Amrollahi	24, 1405-1420	
3	International Journal of Human–Computer Interaction	Examining Human Interactions with Smart Retail Technology: A Hybrid SEM- fsQCA Investigation	2025	SM Fazal-e-Hasan, G Mortimer, S Adapa, Mohd Adil, B M.S., M Sadiq, A.R. Amrollahi	41, 4541-4551	
4	Communications of the Association for Information Systems	Seeing Through the Mystique Surrounding the Task-Technology-Organization Fit: A Mixed-Method Exploration of Consumers’ Intention to Use Banking Conversational Agents	2024	ES Parthiban, Mohd Adil	55, 395-433	

5	Current Issues in Tourism	Factors influencing travellers' decision-making behaviour towards online travel purchases: A fuzzy-DEMATEL approach	2024	N Dogra, Mohd Adil	27, 3313-3332	
6	Journal of Retailing and Consumer Services	Why do consumers consume masstige products? A cross-cultural investigation through the lens of self-determination theory	2024	S Shahid, Mohd Adil, M Sadiq, G Dash	76, 103607	
7	Asia Pacific Journal of Tourism Research	Examining the impact of tourists' hope, knowledge and perceived value on online hotel booking intentions	2024	SM Fazal-e-Hasan, G Mortimer, H Ahmadi, Mohd Adil, M Sadiq	29, 719-735	
8	International Journal of Quality and Service Sciences	After-sales service and brand reputation: A case of kitchen appliance industry	2024	M Nasir, Y Kumari, Mohd Adil	16, 413-431	
9	International Journal of Tourism Cities	Impact of memorable tourism experiences on tourists' storytelling intentions: An empirical investigation	2024	A Guleria, Richa Joshi, Mohd Adil	10, 280-301	
10	Global Business and Organizational Excellence	Does emotional intelligence contribute to career success? Evidence from a systematic literature review	2024	Dr. Vivek Tiwari et al.	43 (4), 5-25	Dr. Vivek Tiwari
11	Journal of Enterprise Information Management	Examining the nexus between technostress and turnover intention: the moderating influence of PsyCap in Indian information management contexts	2025	Dr. Vivek Tiwari et al.	38 (2), 450-473	
12	Global Knowledge, Memory and Communication	What drives consumers to continually use food delivery apps? The moderating role of coupon proneness	2025	Richa Joshi, Prerna Garg, Sachin Kumar, Neeraj Dhiman	Vol. Ahead of Print	Dr. Richa Joshi
13	Asia-Pacific Journal of Business Administration	Unveiling the power of employer branding: enhancing talent retention through organizational advocacy	2024	Shiwani Choudhary, Richa Joshi	Vol. Ahead of Print	
14	Journal of Hospitality and Tourism Insights	The impact of memorable tourism experiences on	2024	Ayush Guleria, Richa Joshi, Mohd Adil	Vol. 7 Issue 4	

		customer-based destination brand equity: the mediating role of destination attachment and overall satisfaction				
15	Technological Forecasting & Social Change	A study on big data analytics and innovation: From technological and business cycle perspectives	2024	Sivarajah, U., Kumar, S., Kumar, V., Chatterjee, S., & Li, J.	202, 123328.	Dr. Sachin Kumar
16	IEEE Transactions on Engineering Management	Optimizing the digital transformation capability for enhancing economic sustainability of entrepreneurial venture: The moderating role of entrepreneurial orientation	2024	Kumar, V., Kumar, S., Chatterjee, S., & Mariani, M.	. Vol. 71, 8517-8530	
17	IEEE Transactions on Engineering Management.	Artificial Intelligence (AI) capabilities and the R&D performance of organizations: The moderating role of environmental dynamism	2024	Kumar, V., Kumar, S., Chatterjee, S., & Mariani, M	71, 11522-11532.	
18	Business Ethics, the Environment & Responsibility,	Mapping business ethics and society: A systematic journey into research and way forward	2024	Vrontis, D., Kumar, V., Kumar, S. Chaudhuri, R., & Chatterjee, S.	00:1–17.	
19	British Food Journal	Assessing the impact of consumption values on satisfaction and usage intentions of millet-based food products	2024	Kumar, S., Kumar, V., Mehta, V., Ivanová, E., & Chatterjee, S	126(12), 4441-4458	
20	Global Knowledge, Memory and Communication.	Examining the impact of online service convenience on user engagement and intention to continuously use e-resources: mediating role of attitude.	2024	Vandana, Kumar, S., Kumar, V.	2514-9342.	
21	Journal of Management History	A Systematic Review on Employee Happiness: Three-Decade Review, Synthesis, and Research Propositions	2024	Dhiman, N. Kanojia, H., Jamwal, M., & Kumar, S.	Vol. Ahead of Print	
22	Journal of Knowledge Management	Innovation capability and R&D performance of organizations: moderating role of	2024	Kumar, V., Kumar, S., Chaudhuri, R., Chatterjee, S., Vrontis D.,	Vol. Ahead of Print	

		industry–academic knowledge transfer,		&Vessal, S.R.		
23	Journal of Business Research	From insight to impact: Unravelling the dynamics of big data-backed growth hacking	2025	Kumar, V., Kumar, S., Chaudhuri, R., Chatterjee, S., Thrassou A., & Sakka, G.	188, 115083	
24	Technology in Society,	AI capability and environmental sustainability performance: Moderating role of green knowledge management.	2025	Kumar, S., Kumar, V., Chaudhuri, R., Chatterjee, S., & Vrontis, D.	Vol. Ahead of Print	
25	Global Business and Organizational Excellence	Consumer happiness and sustainable consumption	2024	Neelika Arora, Riya Gandotra, Neeraj Dhiman	43(6), 59-73.	Dr. Neeraj Dhiman
26	Indian Journal of Corporate Governance	Does Ethical Leadership Foster Employee Green Behavior? The Mediating Role of Psychological Ownership	2025	Kanojia and Dhiman	18(1), 110-131.	
27	Global Business and Organizational Excellence	The Roles of Cognitive and Affective Factors on Employees' Current and Future Pro-Environmental Behaviors	2025	Kanojia and Dhiman	Ahead of Print	
28	Global Knowledge, Memory and Communication	Employee happiness in the tourism industry? A systematic review, synthesis and future research agenda	2025	Sharma and Dhiman	Ahead of Print	

## 9. EXPERT TALKS IN WORKSHOPS (INDIA):

To disseminate knowledge on current research trends in the field of Management and impart expertise in advanced statistical techniques, Dr. Mohd. Adil (Associate Professor) and Dr. Sachin Kumar (Assistant Professor Grade-I) were invited as Resource Persons by several premier management institutes and universities across the country.

Name of the Faculty	Event	Date	Organised by the Institute/University
Dr. Mohd. Adil	5-day Faculty Development Programme (FDP) on Facets of Advanced Research Methodology	29 <sup>th</sup> July to 02 <sup>nd</sup> August, 2024	GLA University, Mathura, U.P.
Dr. Mohd. Adil	2-week Refresher Course in Commerce and Management	18.11.2024 to 30.11.2024	University of Jammu
Dr. Sachin Kumar	10-day Research Methodology Course (RMC), sponsored by the Indian Council	04 to 13 November 2024	GITAM School of Business, Hyderabad

	of Social Science Research (ICSSR)		
Dr. Sachin Kumar	One-Day Workshop on PLS-SEM for Quantitative Research	April 27 <sup>th</sup> 2024	LBSIM Delhi
Dr. Sachin Kumar	One-Week National Workshop  Organized by: Department of Commerce on Practical Applications of Smart PLS in Research	March 31st - April 5th 2025	Himachal Pradesh University Shimla

**10. Ph.D. DEGREE AWARDED: Three (03)**

Sr. No.	Title	Guide	Name of Student	Brief Report
1.	Modelling the Factors Influencing Traveler Behavior Towards Online Travel Purchase	Dr. Mohd. Adil	Nikhil Dogra	-
2.	Factors Influencing Consumers' Adoption of Banking AI-based Chatbots: Empirical Examination Using an Integrated Theoretical Model	Dr. Mohd. Adil	Eden Samuel P.	
3.	Examining the influence of Memorable Tourism Experiences and Customer-based Destination Brand Equity on Tourists' Storytelling Intention	Dr. Mohd. Adil & Dr. Richa Joshi	Ayush Guleria	-

**11. EQUIPMENT ACQUIRED:**

Sr. No.	Name of Equipment	Quantity	Cost (Rs. In INR)
1.	Interactive Panel 86"	02	Rs. 3,34,998/-
2.	Overhead Project	01	Rs. 57,799/-
3.	Desktop PC HP	30	Rs. 20,71,050/-

**12. NAME OF LABORATORIES:**

Sr. No.	Name of Laboratory
01	Managerial Computational & Simulation Lab

### 3.14 Centre for Energy Studies



#### 1. ACADEMIC STAFF

**HEAD :** Prof. N.S.Thakur, Professor

#### FACULTY:

Professor	Associate Professor	Assistant Professor
Prof. N.S. Thakur	Dr. Mamta Awasthi	--
Temporary Faculty		
Dr. Adya Isha		

#### 2. ADMISTARATIVE & TECHNICAL STAFF:

Junior Assistant	Technician
Sh. Tilak Raj	Sh. Sagar

#### BRIEF ACTIVITIES DURING 2024-2025 (ENDING MARCH 2025)

	Main Academic Activities	Brief information
1.	Admissions (PG & Ph.D.) in 2024-25	PG - 03 Nos., Ph.D. – 03 Nos.

#### 3. RESEARCH:

**(a) Research Scheme:** Solar Photovoltaic, Solar Thermal, Bioenergy, Biofuels, Wind, Hybrid Energy Technology, Environmental Engineering

**(b) Research Publications:****(i) PAPER PUBLISHED BY FACULTIES:**

Sr. No.	Journal Name	Title of paper	Year in which published	Author	Journal Pages
1	Global Waste Management	E-Waste Management: An Essential Deed to Safeguard Future	2025	M Awasthi, K Vaibhav, AK Choudhary, AK Gautam, A Chandra	85-114
2	International Research Journal of Engineering and Technology (IRJET)	Economic Assessment of Small-scale Grid-connected Roof-top Solar PV System for Domestic Consumers of Himachal Pradesh	2024	Ajala Sharma1, Dr. Mamta Awasthi	

**(ii) PAPER PRESENTED IN CONFERENCE/SEMINAR/SYMPOSIUM:**

- Developing a Sustainable Business Model for E-Waste Management: A Case Study of Hamirpur, Himanshu Singh and Mamta Awasthi1 (Paper accepted)

**(c) Total Doctoral Programme students till march 2025: 04****(d) Master Thesis Completed: 06 (Energy Technology)****4. EQUIPMENT ACQUIRED:**

Sr. No.	Name of Equipment	Name of Manufacturer	Cost (Rs. In INR)
1.	Biochar Furnace	Vidarbha Sales	4,90,000/-
2.	Analytical Balance	ACZET	1,73,790/-
3.	Non- Refrigerated Centrifuge	Neaution	91,735/-
4.	Biogas Analyser	Geotech	7,90,080/-

**5. NAME OF LABORATORIES:**

Sr. No.	Name of Laboratory
1.	Solar Photovoltaic Laboratory
2.	Solar Thermal Laboratory
3.	Microbial Culture Laboratory
4.	Bio Energy Laboratory
5.	Energy Research Laboratory
6.	Bio Fuel Laboratory
7.	Computational Laboratory

#### 4.0 Staff Details:

##### 4.1 Faculty:

S.No.	Name	Deptt.	Designation
1	Dr. Ravi Kr.Sharma	DoCE	Professor
2	Dr. Raman Parti	DoCE	Professor
3	Dr.Rakesh Kumar Dutta	DoCE	Professor
4	Dr.Yog Raj Sood	DoEE	Professor (HAG)
5	Dr.Sushil Chauhan	DoEE	Professor
6	Dr. Ram Naresh Sharma	DoEE	Professor
7	Dr.Ashwani Kumar	DoEE	Professor
8	Dr. Rakesh Kumar Sehgal	DoME	Professor (HAG)
9	Dr. Sunand Kumar	DoME	Professor
10	Dr. Anoop Kumar	DoME	Professor
11	Dr.(Mrs.) Rajeevan Chandel	DoECE	Professor
12	Dr.Lalit Kumar Awasthi	DoCSE	Professor (HAG) (On Deputation)
13	Dr. Yogeshwar Dutt Sharma	DoMSC	Professor
14	Dr. Sunil	DoMSC	Professor
15	Dr. Ravi Kumar	DoMSE	Professor
16	Dr. Minakshi Jain	DoARC	Professor (HAG)
17	Dr. Bhanu M. Marwaha	DoARC	Professor
18	Dr. Narender Singh Thakur	CES	Professor

#### Associate Professor

S.No.	Name	Deptt.	Designation
1	Dr.Pardeep Kumar	DoCE	Associate Professor
2	Dr.Rajeshwar Singh Banshtu	DoCE	Associate Professor
3	Dr. Vijay Shankar	DoCE	Associate Professor
4	Dr.Vijay Kuamr Bansal	DoCE	Associate Professor
5	Dr. Umesh Pandey	DoCE	Associate Professor
6	Dr.Chander Prakash	DoCE	Associate Professor
7	Dr. Sunil Sharma	DoCE	Associate Professor
8	Dr. Amrit Kumar Roy	DoCE	Associate Professor
9	Dr Hemant Kumar Vinayak	DoCE	Associate Professor
10	Dr.Ravinder Nath Sharma	DoEE	Associate Professor
11	Dr. Veena Sharma	DoEE	Associate Professor
12	Dr. Raj Kumar Jarial	DoEE	Associate Professor
13	Dr. Bharat Bhushan Shrama	DoEE	Associate Professor
14	Dr.Om Prakash Rahi	DoEE	Associate Professor
15	Dr. Amit Kaul	DoEE	Associate Professor
16	Dr. Rajesh Sharma	DoME	Associate Professor

17	Dr. Somesh Sharma	DoME	Associate Professor
18	Dr. Rajiv Kumar Sharma	DoME	Associate Professor
19	Dr. Siddhartha	DoME	Associate Professor
20	Dr. Varun	DoME	Associate Professor
21	Dr. Pardeep Kumar Sood	DoME	Associate Professor
22	Dr. Sant Ram Chauhan	DoME	Associate Professor
23	Dr. Prashant Kumar	DoME	Associate Professor
24	Dr. Debasish Das	DoME	Associate Professor
25	Dr. Mohit Pant	DoME	Associate Professor
26	Dr. Kumar Sambhav Pandey	DoECE	Associate Professor
27	Dr. Surender Soni	DoECE	Associate Professor
28	Dr. Ashok Kumar	DoECE	Associate Professor
29	Dr. Gargi Khanna	DoECE	Associate Professor
30	Dr. Ashwani Kumar	DoECE	Associate Professor
31	Dr. Krishan Kumar	DoECE	Associate Professor
32	Dr. Manoranjan Rai Bharti	DoECE	Associate Professor
33	Dr. Philemon Daniel	DoECE	Associate Professor
34	Dr. Rohit Dhiman	DoECE	Associate Professor
35	Dr. Mahesh Angira	DoECE	Associate Professor
36	Dr. (Mrs.) Kamlesh Dutta	DoCSE	Associate Professor
37	Dr. Teek Parval Sharma	DoCSE	Associate Professor
38	Dr. Siddhartha Chauhan	DoCSE	Associate Professor
39	Dr. Naveen Chauhan	DoCSE	Associate Professor
40	Dr. Pardeep Singh	DoCSE	Associate Professor
41	Dr. Tapas Palai	DoCHE	Associate Professor
42	Dr. Alok Garg	DoCHE	Associate Professor
43	Dr. Amit Arora	DoCHE	Associate Professor
44	Dr. Ramesh Kumar Vats	DoMSC	Associate Professor
45	Dr. Pawan Kr. Sharma	DoMSC	Associate Professor
46	Dr. Pamita Awasthi	DoCHY	Associate Professor
47	Dr. Bharti Gaur	DoCHY	Associate Professor
48	Dr. Kalyan Sunder Ghosh	DoCHY	Associate Professor
49	Dr. Subhash Chand	DoPPS	Associate Professor
50	Dr. Arvind Kumar	DoPPS	Associate Professor
51	Dr. Kuldeep Kr. Sharma	DoPPS	Associate Professor
52	Dr. Rajesh Kumar	DoPPS	Associate Professor
53	Dr. Vimal Sharma	DoPPS	Associate Professor
54	Dr. Yogesh Gupta	DoHSS	Associate Professor
55	Dr. Manoj Sharma	DoHSS	Associate Professor
56	Dr. Vivek Tiwari	DoMS	Associate Professor
57	Dr. Mohd. Adil	DoMS	Associate Professor
58	Dr. Vishal Singh	DoMSE	Associate Professor
59	Dr. Inderpal Singh	DoARC	Associate Professor
60	Dr. Vandana Sharma	DoARC	Associate Professor
61	Dr. Aniket Sharma	DoARC	Associate Professor

62	Dr. Puneet Sharma	DoARC	Associate Professor
63	Dr Ashwani Kumar	DoARC	Associate Professor
64	Sh. Rakesh Kumar Jamalata	Phy.Edu.	Associate Professor
65	Dr. Mamta Awasthi	CES	Associate Professor

### Assistant Professor Grade-I

S.No.	Name	Deptt.	Designation
1	Dr. K. Nallasivam	DoCE	Asstt. Prof. Gr-I
2	Dr. Dharmendra	DoCE	Asstt. Prof. Gr-I
3	Dr. Ray Singh Meena	DoCE	Asstt. Prof. Gr-I
4	Dr. Manendra Singh	DoCE	Asstt. Prof. Gr-I
5	Dr. Vimal Kumar	DoCE	Asstt. Prof. Gr-I
6	Dr. Himesh Handa	DoEE	Asstt. Prof. Gr-I
7	Dr. Rajesh Kumar	DoEE	Asstt. Prof. Gr-I
8	Dr. Bharti Koul	DoEE	Asstt. Prof. Gr-I
9	Dr. Ram Niwash Mahia	DoEE	Asstt. Prof. Gr-I
10	Dr Vivek Sharma	DoEE	Asstt. Prof. Gr-I
11	Dr Chandrasekaran S.	DoEE	Asstt. Prof. Gr-I
12	Dr. Jiwanjot Singh	DoEE	Asstt. Prof. Gr-I
13	Dr. Param Singh	DoME	Asstt. Prof. Gr-I
14	Dr. Akhilesh Kumar Choudhary	DoME	Asstt. Prof. Gr-I
15	Dr. Ajoy Debbarma	DoME	Asstt. Prof. Gr-I
16	Dr. Dilshad Ahmad Khan	DoME	Asstt. Prof. Gr-I
17	Dr. Deepak Sharma	DoME	Asstt. Prof. Gr-I
18	Dr. Laxmikant Yadav	DoME	Asstt. Prof. Gr-I
19	Dr Anshul Sharma	DoME	Asstt. Prof. Gr-I
20	Dr. Rakesh Sharma	DoECE	Asstt. Prof. Gr-I
21	Dr. Aman Kumar	DoECE	Asstt. Prof. Gr-I
22	Dr. Amit Bage	DoECE	Asstt. Prof. Gr-I
23	Dr. Saurabh Kumar	DoECE	Asstt. Prof. Gr-I
24	Dr. Chandra Shekhar Prasad	DoECE	Asstt. Prof. Gr-I
25	Dr. Abhijit Bhattacharyya	DoECE	Asstt. Prof. Gr-I
26	Dr. Sandeep Kumar Singh	DoECE	Asstt. Prof. Gr-I
27	Dr. Rajeev Kumar	DoCSE	Asstt. Prof. Gr-I
28	Dr. Nitin Gupta	DoCSE	Asstt. Prof. Gr-I
29	Dr. Dharmendra Prasad Mahato	DoCSE	Asstt. Prof. Gr-I
30	Dr. Arun Kumar Yadav	DoCSE	Asstt. Prof. Gr-I
31	Dr. Priyanka	DoCSE	Asstt. Prof. Gr-I
32	Dr. Jyoti Srivastava	DoCSE	Asstt. Prof. Gr-I
33	Dr. Sangeeta Sharma	DoCSE	Asstt. Prof. Gr-I
34	Dr. Mohit Kumar	DoCSE	Asstt. Prof. Gr-I
35	Dr. Radhe Shyam	DoCHE	Asstt. Prof. Gr-I

36	Dr. Arvind Kumar Gautam	DoCHE	Asstt. Prof. Gr-I
37	Dr. Subajit Majumder	DoCHE	Asstt. Prof. Gr-I
38	Dr. Pooja Thakur	DoCHE	Asstt. Prof. Gr-I
39	Dr. Rahul Saha	DoCHE	Asstt. Prof. Gr-I
40	Dr. Suket Kumar	DoMSC	Asstt. Prof. Gr-I
41	Dr. Om Prakash Yadav	DoMSC	Asstt. Prof. Gr-I
42	Dr. Subit Kumar Jain	DoMSC	Asstt. Prof. Gr-I
43	Dr. Rifaqat Ali	DoMSC	Asstt. Prof. Gr-I
44	Dr. Talari Ganesh	DoMSC	Asstt. Prof. Gr-I
45	Dr. Raj Kaushal	DoCHY	Asstt. Prof. Gr-I
46	Dr. Jai Prakash	DoCHY	Asstt. Prof. Gr-I
47	Dr. Sandeep Sharma	DoPPS	Asstt. Prof. Gr-I
48	Dr. Sunder Kala Negi	DoHSS	Asstt. Prof. Gr-I
49	Dr. Manoj Kumar Yadav	DoHSS	Asstt. Prof. Gr-I
50	Dr. Preeti Puri	DoHSS	Asstt. Prof. Gr-I
51	Dr. Sachin Kumar	DoMS	Asstt. Prof. Gr-I
52	Dr. Neeraj Dhiman	DoMS	Asstt. Prof. Gr-I
53	Dr. Shampy Kamboj	DoMS	Asstt. Prof. Gr-I
54	Dr. Richa Joshi	DoMS	Asstt. Prof. Gr-I
55	Dr. Rita Maurya	DoMSE	Asstt. Prof. Gr-I
56	Dr. Raj Bahadur Singh	DoMSE	Asstt. Prof. Gr-I
57	Dr. Vikram Verma	DoMSE	Asstt. Prof. Gr-I
58	Dr. Amanjeet Kaur	DoARC	Asstt. Prof. Gr-I
59	Dr. Venu Shree	DoARC	Asstt. Prof. Gr-I
60	Dr. Neetu Kapoor	DoARC	Asstt. Prof. Gr-I
61	Dr. Sandeep Sharma	DoARC	Asstt. Prof. Gr-I
62	Dr. Rashmi Kumari	DoARC	Asstt. Prof. Gr-I

#### Assistant Professor Grade-II

S.N.	Name	Deptt.	Designation
1	Dr. Aditi Chauhan	DoCE	Asstt. Prof. Gr-II
2	Dr. Meghna Sharma	DoCE	Asstt. Prof. Gr-II
3	Dr. Swaraj Chowdhury	DoCE	Asstt. Prof. Gr-II
4	Dr. Kunjari Mog	DoCE	Asstt. Prof. Gr-II
5	Dr. Kirti Mahajan	DoCE	Asstt. Prof. Gr-II
6	Dr. Supriya Jaiswal	DoEE	Asstt. Prof. Gr-II
7	Dr. Sreeram TS	DoEE	Asstt. Prof. Gr-II
8	Dr. Katam Nishant	DoEE	Asstt. Prof. Gr-II
9	Dr. Upasana Sarma	DoEE	Asstt. Prof. Gr-II
10	Dr. Pankaj Kumar Mishra	DoEE	Asstt. Prof. Gr-II
11	Dr. Niharika Gupta	DoME	Asstt. Prof. Gr-II
12	Dr. Gagnesh Kumar	DoECE	Asstt. Prof. Gr-II
13	Er. Vinod Kumar	DoECE	Asstt. Prof. Gr-II
14	Dr. Sankalita Biswas	DoECE	Asstt. Prof. Gr-II
15	Dr. Mohammad Khalid Pandit	DoCSE	Asstt. Prof. Gr-II

16	Dr Ram Prakash Sharma	DoCSE	Asstt. Prof. Gr-II
17	Dr Preeti Soni	DoCSE	Asstt. Prof. Gr-II
18	Dr Ajay Kumar Mallick	DoCSE	Asstt. Prof. Gr-II
19	Dr. Robin Singh Bhadoria	DoCSE	Asstt. Prof. Gr-II
20	Dr Manish Kumar Dhiman	DoCHE	Asstt. Prof. Gr-II
21	Dr Hammad Siddiqi	DoCHE	Asstt. Prof. Gr-II
22	Dr. Niloy De	DoCHE	Asstt. Prof. Gr-II
23	Dr Jeetendrasingh Maan	DoMSC	Asstt. Prof. Gr-II
24	Dr Soniya Chaudhary	DoMSC	Asstt. Prof. Gr-II
25	Dr Pankaj Kumar	DoMSC	Asstt. Prof. Gr-II
26	Dr Jagannath Kuchlyan	DoCHY	Asstt. Prof. Gr-II
27	Dr Abhishek Singh	DoPPS	Asstt. Prof. Gr-II
28	Dr Neetika	DoPPS	Asstt. Prof. Gr-II
29	Dr. Biswaranjan Das	DoPPS	Asstt. Prof. Gr-II
30	Dr. Nisha	DoPPS	Asstt. Prof. Gr-II
31	Dr. Avijit Dewasi	DoPPS	Asstt. Prof. Gr-II
32	Dr Rinshu Dwivedi	DoHSS	Asstt. Prof. Gr-II
33	Dr Zareena J.M.	DoHSS	Asstt. Prof. Gr-II
34	Dr Sourojee Dutta	DoARC	Asstt. Prof. Gr-II
35	Dr Swechha Roy	DoARC	Asstt. Prof. Gr-II

#### **Faculty Retired during 2024-25**

S.N.	Name of Faculty	Cadre	Date of Retirement
1	Dr. Surjit Singh Katoch	Associate Professor	31/01/2025

#### **4.2 Officers/Administrative Staff:**

Sr. No.	Name	Designation
1	Dr. Archana Santosh Nanoty	Registrar
2	Sh. Satish Chander Sharma	Deputy Registrar
3	Sh. Anil Kumar Sharma	Deputy Registrar (Deputation)
4	Sh. Anil Kumar	Senior Scientific Officer
5	Sh. Jagdish Verma	Senior Scientific Officer
6	Sh. Ashwani Kumar Sharma	Senior Scientific/Technical Officer
7	Dr. Mani Verma	Senior Medical Officer
8	Sh. Nitin Paliwal	Assistant Librarian (On lien)
9	Sh. Sanjay Jamwal	Asstt. Registrar
10	Sh. Gaurav Sharma	Asstt. Registrar
11	Sh. Kumar Saurabh	Asstt. Registrar (On lien)
12	Sh. Vipin Kumar	Asstt. Registrar
13	Sh. Gaurav Yadav	Asstt. Registrar (On lien)
14	Sh. N.C. Negi	Asstt. Registrar

15	Dr. Amarjit Singh	Scientific Officer/Technical Officer
16	Sh. Rohit Kumar Singh	Executive Engineer
17	Sh. P.C. Rangra	Supdt. SG-I
18	Sh. Raman Kumar	Supdt. SG-II
19	Sh. Pawan Kumar Sharma	Superintendent
20	Sh. Abhishek	Superintendent
21	Sh. Kanwar Singh	Superintendent
22	Sh. Jitender Kumar	Superintendent
23	Sh. Harshit Garg	Superintendent
24	Sh. Divya Kumar	Superintendent
25	Sh. Pravesh Kumar	Private Secretary
26	Sh. Desh Raj Bansal	Private Secretary
27	Sh. Gulab Singh Thakur	Senior Personal Assistant
28	Smt. Pushpa Devi	Personal Assistant
29	Ms. Priya Kapur, PA	Personal Assistant
30	Mrs. Sangeeta Kumari	Steno SG-II (On Deputation)
31	Sh. Vinod Kumar	Steno SG-II
32	Sh. Yashpal Singh	Asstt SG-I
33	Sh. Jitender Kumar	Asstt SG-I
34	Sh. Surinder Singh	Asstt SG-I
35	Sh. Raman Thakur	Asstt. SG-II
36	Smt. Meera Devi	Asstt. SG-II
37	Smt. Meena Devi	Asstt. SG-II
38	Sh. Ajit Kumar	Asstt. SG-II
39	Sh. Madan Lal	Asstt. SG-II
40	Sh. Raj Kumar	Asstt. SG-II
41	Smt. Nazima	Asstt. SG-II
42	Sh. Vikas Dogra	Asstt. SG-II
43	Sh. Ashwani Kumar	Sr. Assistant
44	Sh. Vishal Narota	Sr. Assistant
45	Sh. Vipin Kumar-I	Sr. Assistant
46	Sh. Vipin Kumar-II	Sr. Assistant
47	Sh. Shashi Kant Ratnakar	Sr. Assistant
48	Sh. V. K. Tippan	Sr. Assistant
49	Smt. Neenu Sharma	Sr. Assistant
50	Mr. Maneshwar Thakur	Sr. Assistant
51	Mr. Lav Sharma	Sr. Assistant
52	Mr. Abhishek Chauhan	Sr. Assistant
53	Mr. Vikram Rana	Sr. Assistant
54	Sh. Suresh Kumar	Junior Assistant
55	Sh. Ravi Dass	Junior Assistant
56	Sh. Ashok Kumar	Junior Assistant
57	Sh. Manohar Lal	Junior Assistant
58	Sh. Tilak Raj	Junior Assistant

59	Mr. Sudhir Sharma	Junior Assistant
60	Ms. Sonia Yadav	Junior Assistant
61	Ms. Sunita Yadav	Junior Assistant
62	Mr. Vasu Tyagi	Junior Assistant
63	Mr. Avinash Meena	Junior Assistant
64	Mr. Tanuj Chaudhary	Junior Assistant
65	Mr. Vishal	Junior Assistant
66	Mr. Goutam	Junior Assistant
67	Mr. Atul Negi	Junior Assistant
68	Mr. Deepak Garg	Junior Assistant
69	Mr. Piyush Pathania	Junior Assistant
70	Mr. Vikash Kumar Meena	Junior Assistant

#### **Retired Administrative Staff (Officers/Higher/Lower) during 2024-25:**

Sr. No.	Name	Designation	Date of Retirement
1	Sh. Kishore Kumar	Sr. Superintendent	31.12.2024
2	Sh. Sanjeev Mehta	Assistant SG-I	31.12.2024

#### **4.3 Technical Staff:**

Sr. No.	Name	Designation
1.	Sh. Raj Pal	Technical Assistant (SG-I)
2.	Sh. Ravi Singh	Technical Assistant (SG-I)
3.	Sh. Sanjeev Kumar Thakur	Technical Assistant (SG-II)
4.	Sh. Avinash Aggarwal	Technical Assistant (SG-II)
5.	Sh. Santosh Kumar	Technical Assistant (SG-II)
6.	Sh. Partap Chand	Technical Assistant (SG-II)
7.	Sh. Ravinder Kumar	Technical Assistant (SG-II)
8.	Sh. Dev Raj Thakur	Technical Assistant (SG-II)
9.	Sh. Inder Singh Guleria	Technical Assistant (SG-II)
10.	Sh. Rajesh Sharma	Assistant Engineer (SG-II)
11.	Dr. Ashok Kumar	Sr. Technical Assistant
12.	Sh. Umesh Kumar	Assistant Engineer (Depu)
13.	Sh. Kalyan Singh	Technical Assistant
14.	Sh. Desh Raj	Technician (SG-I)
15.	Sh. Chet Ram	Technician (SG-II)
16.	Sh. Sunil Kumar	Technician (SG-II)
17.	Sh. Santosh Kumar Yadava	Technician (SG-II)
18.	Sh. Rakesh Sharma	Technician (SG-II)
19.	Sh. Roop Lal	Technician (SG-II)

20.	Sh. Surinder Singh	Technician (SG-II)
21.	Sh. Parkash Singh	Technician (SG-II)
22.	Sh. Suresh Kumar	Technician (SG-II)
23.	Sh. Shiv Dyal	Technician (SG-II)
24.	Sh. Jiwan Kumar	Technician (SG-II)
25.	Sh. Gajinder Singh	Technician (SG-II)
26.	Sh. Surinder Kumar	Technician (SG-II)
27.	Sh. Ajay Kumar	Technician (SG-II)
28.	Sh. Sarvjeet Singh	Technician (SG-II)
29.	Sh. Sukhdev Singh	Technician (SG-II)
30.	Mrs. Reeta Singh	Sr. Technician
31.	Sh. Vijay Kumar	Sr. Technician
32.	Sh. Kishore Chand	Sr. Technician
33.	Sh. Naresh Kumar	Sr. Technician
34.	Mr. Jitender Prasad	Sr. Technician
35.	Mr. Rajesh Sharma	Sr. Technician
36.	Mr. Aditya Mukherjee	Sr. Technician
37.	Mr. Saleem Mohammad	Sr. Technician
38.	Mr. Ashok	Sr. Technician
39.	Mr. Mukesh Chawla	Sr. Technician
40.	Mr. Akash Sharma	Sr. Technician
41.	Mr. Chandradev Raj Singh	Sr. Technician
42.	Mr. Sumeet Raman	Sr. Technician
43.	Mr. Shivam	Sr. Technician
44.	Ms. Smriti	Sr. Technician
45.	Sh. Surender Pal	Technician
46.	Sh. Sanjeev Kumar	Technician
47.	Sh. Shameem Ahmed	Technician
48.	Sh. Pawan Kumar	Technician
49.	Mr. Dhananjay	Technician
50.	Mr. Anurag Dhiman	Technician
51.	Ms. Priya Thakur	Technician
52.	Mr. Vishal Singh-I	Technician
53.	Mr. Sagar	Technician
54.	Mr. Sanju Kumar	Technician
55.	Mr. Anand	Technician
56.	Mr. Shubham Tomar	Technician
57.	Mr. Vishal Singh-II	Technician
58.	Mr. Sahil Thakur	Technician
59.	Mr. Pritam Kumar	Technician
60.	Mr. Gurjeet Singh	Technician
61.	Mr. Prashant Angirash	Technician

62.	Mr. Vikas Vashishat	Technician
63.	Mr. Vikas Agrahari	Technician
64.	Mr. Debashis Behera	Technician
65.	Mr. Hem Raj	Technician
66.	Mr. Arun Kumar	Technician
67.	Ms. Sushma	Technician
68.	Mr. Mohit Saini	Technician

Technical Staff retired during 2024-2025			
Sr. No.	Name	Designation	Date of Retirement
1	Sh. Jaspal Singh	Technical Assistant (SG-I)	30/04/2024
2	Sh. Balbir Singh	Technical Assistant (SG-I)	30/04/2024
3	Sh. Rajesh Pal	Lib. Inform. Assistant (SG-II)	30/04/2024
4	Sh. Joginder Singh	Technical Assistant (SG-II)	31/05/2024
5	Sh. Ashwani Kumar	Technician (SG-II)	30/06/2024

#### 4.4 Supporting Staff:

Sr. No.	Name	Designation
1.	Sh. Bhupinder Singh	Office Attendant SG-I
2.	Sh. Om Prakash	Office Attendant SG-I
3.	Sh. Suresh Chand	Office Attendant SG-I
4.	Sh. Sunil Kumar	Office Attendant SG-I
5.	Sh. Kehar Singh	Office Attendant SG-I
6.	Sh. Suresh Kumar	Office Attendant SG-I
7.	Sh. Jai Chand	Office Attendant SG-II
8.	Sh. Roshan Lal	Office Attendant SG-II
9.	Sh. Subhash Chand-II	Office Attendant SG-II
10.	Sh. Manmohan Lal	Office Attendant SG-II
11.	Sh. Om Prakash	Office Attendant SG-II
12.	Sh. Jeevan Parkash	Office Attendant SG-II
13.	Sh. Balwant Chand Sharma	Office Attendant SG-II
14.	Sh. Ramesh Chand-II	Office Attendant SG-II
15.	Sh. Devinder Kumar	Office Attendant SG-II
16.	Sh. Ravinder Kumar	Office Attendant SG-II
17.	Sh. Lekh Raj	Office Attendant SG-II
18.	Sh. Subhash Chand-I	Office Attendant SG-II
19.	Sh. Sunil Kumar	Office Attendant SG-II
20.	Sh. Mukesh Singh	Office Attendant SG-II
21.	Sh. Vinod Kumar	Office Attendant SG-II
22.	Sh. Joginder Singh	Office Attendant SG-II
23.	Sh. Rajinder Singh	Sr. Office Attendant
24.	Smt. Salochana Devi	Sr. Office Attendant

25.	Sh. Anil Kumar	Sr. Office Attendant
26.	Sh. Rakesh Kumar	Sr. Office Attendant
27.	Sh. Prem Lal	Sr. Office Attendant
28.	Sh. Jiya Lal	Sr. Office Attendant
29.	Sh Neeraj Kumar	Sr. Office Attendant

Supporting Staff retired during 2024-2025			
Sr. No.	Name	Designation	Date of Retirement
1	Sh. Ashok Kumar-I	Office Attendant SG-II	30/04/2024
2	Sh. Parkash Chand	Sr. Office Attendant	30/06/2024
3	Sh. Basant Singh	Office Attendant SG-I	31/10/2024
4	Sh. Hari Singh	Office Attendant SG-I	31/01/2025
5	Sh. Ramesh Chand-I	Office Attendant SG-II	31/01/2025

## 5.0 Training & Placement Office

### 5.1 Placement Statistics for 2024-25 sessions:

For UG								
Discipline	Eligible/ Registered/Opt In Students	Placed Students	Placement Percentage	Total Job Offered	% of Total Job Offered	Max. CTC (in LPA)	Min. CTC (in LPA)	Average CTC (in LPA)
Computer Science Engineering	104	97	93.27 %	115	110.57 %	58	3.6	14.49
Electronics and Communication Engineering	93	75	80.65 %	93	100 %	53	3.6	11.39
Electrical Engineering	98	96	98.98 %	118	120 %	30	3.6	7.82
Mechanical Engineering	104	103	99.04 %	130	125%	205	3.6	9.74
Civil Engineering	71	59	87.30 %	66	92.95 %	21	3.6	8.29
Chemical Engineering	59	52	89.83 %	56	94.91%	23.5	3.6	6.92
Material Science Engineering	25	25	100 %	35	140%	10	4.5	7.05
Mathematics and Computing	41	35	85.37 %	35	85.36%	53	3.6	14.78
Engineering Physics	27	18	66.67 %	27	100%	18	3.6	8.79
Architecture	31	31	100 %	33	106.45%	7.1	3.6	4.94
Total Corporate Placement	653	591	90.50 %	708	108.42 %	205	3.6	10.58
Total Academic Placements	145	145	100 %	NA	NA	NA	NA	NA
TOTAL PLACEMENT	767	705	92.23 %	NA	NA	205	3.6	10.58

For PG								
Discipline	Eligible/ Registered/ Opt In	Placed Students	Placement Percentage	Total Job Offered	% of Total Job Offered	Max. CTC (in LPA)	Min. CTC (in LPA)	Average CTC (in LPA)
Computer Science Engineering	36	35	97.22 %	38	105.56	21.96	3.6	10.01
Computer Science Engineering (Dual Degree)	25	23	92 %	26	104	32	6	14.7
Electronics and Communicatio n Engineering	10	6	60.00 %	6	60	14	7	10.05
Electronics and Communicatio n Engineering (Dual Degree)	19	17	89.47 %	20	105.26	41	4.5	10.68

Electrical Engineering	13	10	76.92 %	11	84.62	11	6.5	8
Civil Engineering	28	19	67.86 %	23	82.14	8.5	4.5	6.44
Mechanical Engineering	13	6	46.15 %	6	46.15	11	6	8.22
Chemistry (MSc)	15	13	86.67 %	14	93.33	6	5.5	5.57
Mathematics( MSc)	22	15	68.18 %	23	104.55	8.5	3.6	5.75
Physics (MSc)	19	6	31.58 %	8	42.11	11	5.5	6.5
M.Arch	3	1	33.33 %	1	33.33	6.75	6.75	6.75
MBA	24	22	91.66 %	30	111.11	8.5	3.36	6.4
<b>Total</b>	<b>227</b>	<b>173</b>	<b>76.21 %</b>	<b>206</b>	<b>89.57</b>	<b>41</b>	<b>3.36</b>	<b>8.81</b>

**The Name of Organizations in which students of B.Tech, Dual Degree and Architecture are placed.**

Organization Name	CSE	CSE (Dual Degree)	ECE	ECE (Dual Degree)	EE	ME	CE	CH	MSE	MNC	EP	Arch	TOTAL
Mediatek		5											5
Qbit Labs		1	3										4
ITTIAM	1												1
Technip					3	6	2	5					16
Alstom				5	17	7							29
MU Sigma			1										1
Cloudera	3												3
Axtria		1											1
NexTurn	2		6		2	1		1			1		13
Increff	1												1
Cvent	1												1
Codeyoung			1							1			2
Oracle	4		1							2			7
JP Morgan & Chase	3												3
BNY mellon	2		2										4
Oracle FSS	9		3		3	1							16
Salesforce	1												1
Microsoft	2												2
Walmart										1			1
CISCO	1	1	1	1						1			5
TVS Motors					1								1
Adobe										1			1
Ship Global				1	1		1						3
SLB						1							1
Nation With Namo	1		1										2
AcmeGrade	2	2	2	1	4	8	4	0	2	1	6		32
ZF Group				1									1

Merck	1												1
Genpact	6												6
vConstruct												3	3
Escorts Kubota Ltd.			1		1	8			4				14
QuickSell		1											1
Sigmoid Analytics	5	2	7		1					1			16
UKG (Ultimate Kronos Group)	3		2										5
Accenture	9	1	8		2	2	1			7			30
Samsung R&D	2		1							1			4
Octro	5												5
Denso						1							1
American Express		3											3
Maruti Suzuki						2							2
Reliance Industries Ltd.								1					1
Siemens Ltd.													0
Cimpress	5									1			6
Infoedge	1		1										2
Lambda Function			1							1			2
PatentsKart			4		1						7		12
Effigo Global			1							2			3
Juspay		1	1		1		1						4
ISGEC					2	3							5
TEECL			1		4	3	1						9
Onix	3												3
Infosys	5		6	4	7	5	4	6	4	2	1		44
uBreathe						1							1
Q3 Tech			2		3			1		3			9
MAQ Software	7	1											8
Aditya Birla Group					2	4		2					8
Zscaler	1		1										2
NVIDIA	1												1
Havells		1		2									3
Baker Hughes						1		1					2
Larsen and Toubro Ltd.			5		12	16	3	2					38
Beyond IRR			1		1								2
Eldass			1										1
FNZ					1					1			2
GP (Globalization Partners)										1			1
Blue Star			1		2								3
SKB Construct			1										1
DMR							4						4
Avaada Group	1		2		2		3	1					9
HLS Asia					2								2

Udit Gaurav					1						3	4
Samanvay Foundation									1			1
HCL Tech	5								2			7
DLF				2	2	6					2	12
IOLCP							15					15
TVSM					2							2
SSWL			1					2				3
Bosch				1								1
Sunfocus Solutions Pvt Ltd				1								1
Neuroglia Health Private Ltd												0
Quizizz				1					1			2
Uflex					6		5					11
Rashmi Group								7				7
Sri Chaitanya Institute				1	1	2				1		5
Samsung R&D Delhi	5		2		2				1			10
Wabtec					1							1
VMA Architect											1	1
DE Shaw & Co	1											1
Namekart			1									1
CDIL					1							1
Triage Meditech Pvt. Ltd.				1								1
Nivesh Star									2			2
Google	1								1			2
C-DAC Hyderabad			2	1								3
Roundglass	1											1
Anglo Eastern					5							5
Desanalytica						2						2
JSW Energy				11	8	8						27
Control Print							2					2
Synergy Steel				5	9		2	1				17
Sai Eternal Foundation						2						2
Tech Mahindra						1	1	1	1	2		6
BEL (Bharat Electronics Ltd.)	1		4									5
Shorthills AI								1				1
Wonder Cement					1		3					4
Suzuki Motors				2	3							5
NBC Bearings					3							3
Turing	1											1
JSW					4			1				5
Sanrachna											5	5
Narayana Group			3							1		4

KAS Global ECommerce	1		1									2
HRRL (HPCL Rajasthan Refinery Ltd)							2					2
AKDG											1	1
RHI Magnesita					2		3					5
TCE											4	4
Mahindra Holidays and Resorts India Limited											3	3
KEC International					6		5					11
Indiamart	4											4
Afcons							1	2				3
Samundra						1						1
Renew							4					4
ShivamSingal Design Studio											1	1
IIT Kanpur							3	2		1		6
SpeedLabs			1					1	1			3
TutorLive							1			2		3
I-NAT Studio LLP											3	3
Fleet Management Ltd.						1						1
Rise11 Technologies	1											1
VISA Steel						1						1
GPCC							1					1
Struct Pro							2				1	3
Cosmo First Limited											3	3
Intellinez Systems Pvt. Ltd.	1											1
Toppan Speciality Films Pvt. Ltd.								1				1
CPDL (Chandigarh Power Distribution Ltd.)					1							1
Ralson			2			2			1			5
Aakash Educational Services Ltd.								1		1		2
Polycab India								2				2
Energy Infratech Private Limited							3					3
Varuna Sentinel		1										1
JungleWorks	1											1
Capgemini		1	1		2							4
DIT University		2										2
UltraTech Cement (Aditya Birla Group)							2					2

Oliver Engineering Private Limited (Kirloskar Ferrous)									6				6
Wipro	2		5										7
Chapter Apps Inc.										1			1
India Glycols Ltd.								1					1
GOODSPACE.AI PRIVATE LIMITED											2		2
Fi Money	1												1
BSES Delhi					1								1
Shigan Group					1	2							3
GreyB			1	2									3
Sona Machinery					1	2							3
Godrej Enterprises Group												1	1
Total Student Placed	114	24	93	18	113	128	62	62	35	37	25	31	742

The Name of Organizations in which students of PG programs are placed.

	M.Tech					M.Sc			MBA	
Organisation Name	EE	ECE	ME	CSE	Civil	Physics	Maths	Chemistry	MBA	Total
Academor									3	3
Acmegrade	2			1	4		2		3	12
Akash Institite						1				1
Alstom	2		1							3
BYLD Group				1						1
CollegeDekho									2	2
Control Prints								2		2
Copperpod IP		1								1
Cosmo First									1	1
Dell Technologies				5						5
Design Alytica					1					1
DIT University				1						1
GlowLogics Solutions Pvt Ltd									6	6
GPCC					2					2
Havells	1		2	1						4
IndiaMart									3	3
Intel		3		2						5
JECRC University Jaipur				4					1	5
KAS Global ECommerce				2						2
Larsen and Toubro	3		1		6					10
Learning Routs									1	1
Lovely Professional University				2						2

<b>Narayana Group</b>						1				<b>1</b>
<b>Oben Electric</b>									1	<b>1</b>
<b>Philips</b>		1		1						<b>2</b>
<b>Pin Click</b>									1	<b>1</b>
<b>Sai Eternal Foundation</b>					4					<b>4</b>
<b>Shigan Group</b>			1							<b>1</b>
<b>Sona Machinery</b>			1							<b>1</b>
<b>Sri Chaitanya Institute</b>						5	13	12		<b>30</b>
<b>SRPEC Unjha</b>				4	1					<b>5</b>
<b>Stryker</b>		1		6						<b>7</b>
<b>Synergy Steels</b>									2	<b>2</b>
<b>TATA ELXSI</b>				3						<b>3</b>
<b>TCE</b>					1					<b>1</b>
<b>TEECL</b>				1	1					<b>2</b>
<b>Teleperformamce</b>									1	<b>1</b>
<b>The Skytrails Pvt. Ltd.</b>									1	<b>1</b>
<b>TutorLive</b>									2	<b>2</b>
<b>UltraTech Cement (Aditya Birla Group)</b>					1					<b>1</b>
<b>Vardhman</b>									1	<b>1</b>
<b>Wabtec</b>	2			2						<b>4</b>
<b>Warner Bros Discovery</b>				1						<b>1</b>
<b>Wonder Cement</b>									1	<b>1</b>
<b>WSP</b>	1									<b>1</b>
<b>Total Student Placed</b>	<b>11</b>	<b>6</b>	<b>6</b>	<b>38</b>	<b>21</b>	<b>7</b>	<b>16</b>	<b>14</b>	<b>30</b>	<b>149</b>

### 5. Scholarship & Fellowship Details

The students of NIT Hamirpur on the basis of their parental income, caste and other eligibility conditions applied for various scholarship schemes offered either by various deptt. of Central Govt./State Governments or other organisation like ONGC, EIL, SJVNL, FFE, FAEA, Samsung Star, SDEF and SBA etc. during FY 2024-25. Most of the scholarship schemes works under DBT mode and exact value of any scholarship scheme may differ from what the Institute has approved and finally disbursed by the scholarship disbursing agency to student concerned.

Based on the information received from students, agencies and the records of this office, the detail of scholarship disbursed to the UG/PG & PhD students of this Institute during the FY 2024-25 is as under:-

Sr. No.	Name of the Scholarship	Name of source from where scholarship funds/grant received	Scholarship amount	No. of students got S/ship
1	Central Sector Scholarship "Top Class Education" for SC- Category Students (Top-10)	GOI, Ministry of Social Justice & Empowerment, New Delhi	1837700	23
2	Central Sector Scholarship "Top Class Education" for ST -Category Students (now National Fellowship & Scholarship for Higher Education of ST students)	GOI, Ministry of Tribal Affairs, New Delhi	6514562	102
3	PM YASASVI CENTRAL SECTOR SCHEME OF TOP CLASS EDUCATION IN SCHOOLS FOR OBC, EBC AND DNT STUDENTS	GOI, Ministry of Social Justice & Empowerment, New Delhi	7113898	79
4	To Class Education for Students with disability	GOI, Ministry of Social Justice & Empowerment, New Delhi	1709500	9
5	CSSS for College & University Students	Deptt. of Higher Education, Gol	243800	23
6	Post-matric scholarship scheme student with disabilities	Different State	282300	4
7	PMSS for Central Armed Police and Assam Rifles	MHA	468000	14
8	CENTRAL SPONSORED SCHEME OF POST MATRIC SCHOLARSHIP FOR ST STUDENTS-LADAKH	Ladakh	50000	1
9	PMSS for J&K students	AICTE, New Delhi	50000	1
10	Wards of Ex-Serviceman	Kendtiya Sainik Board (KSB)	76000	3
11	CRPF (Employee's ward) S/ship	CRPF, MHA	0	0
12	INSPIRE Scholarship	DST, Govt. of India	180000	3
13	SPDC (Scholarship Programme for Diaspora Children)	Ministry of External Affairs, Gol	152534	1

14	NATIONAL SCHOLARSHIP FOR POST GRADUATE STUDIES	UGC	288000	2
15	MMVY-Scholarship (Mukhyamantri Medhavi Vidyarthi Yojna)	MP Govt.	516181	8
16	CENTRALLY SPONSORED POST MATRIC SCHOLARSHIP SCHEME FOR SC STUDENTS- HIMACHAL PRADESH	HP Govt.	270000	9
17	HPBOSE (MHRD) merit S/ship	HP Govt.	75000	5
18	Kalpana Chawla Chhatravritti Yojana, HP	HP Govt.	90000	5
19	PM YASASVI POST MATRIC SCHOLARSHIP FOR OBC,EBC AND DNT STUDENTS- HIMACHAL PRADESH	HP Govt.	140000	7
20	Centrally Sponsored Post matric Scholarship Scheme for SC Students - Himachal Pradesh	HP Govt.	348100	7
21	INDIRA GANDHI UTKRISHT CHATRAVRITI YOJANA- HIMACHAL PRADESH	HP Govt.	18000	1
22	Post-Matric Scholarship for OBC Students	Uttarakhand Govt	63500	1
23	PMS to SC/ST (Rajasthan)	Rajasthan Govt.	240000	12
24	Rajasthan Police Scholarship (for Ward of Rajasthan Police Employee)	Rajasthan Govt.	75000	4
25	UP Scholarship	UP Govt.	184500	7
26	Police Scholarship (for ward of Police Employee)	BR Govt & Up Govt	30000	2
27	Mukhyamantri medhavi vidhyarti yojna(MMVY)	MP Govt.	73700	2
28	Indian Railway S/ship-for wards of Railway employee	Indian Rly.	27000	1
29	OEC- Post Matric Scholarship	Kelara Govt.	493500	4
30	SJVN Silver Jubilee Merit Scholarship	SJVN-L.H.O- Shimla (HP)	456000	19
31	ONGC- Scholarship	ONGC- New Delhi	384850	8
32	EIL (Engineering India Limited)- Scholarship	EIL	126000	3
33	VIL Scholarship	VIL	225000	6
34	Sri Badrika Ashram-Scholarship (Distt. Sirmour-HP)	SBA	590039	17
35	Reliance Foundation Scholarship	Reliance	150000	3
36	NCERT-Scholarship	NCERT-Sri Aurobindo Marg New Delhi	111000	5
37	FAEA- Scholarship	FAEA Scholarship, New Delhi - 110016	30550	1
38	ASME Foundation build engineers New York, Washington	ASME Scholarship	164637	1
39	FFE (Foundation for Excellence) Scholarship	FFE (NGO) Bengaluru	3065000	65

40	Lic golden jubilee scholarship	LIC	14000	1
41	SDEF-Scholarship	Swami Dayanand Charitable Education Foundation (SDEF), Noida	40000	2
42	Wards of Non-Teaching Staff of NIT, Hamirpur-Scholarship	Family trust of Shri S. Gopalakrishnan (Kris) [former Chairman (BoG), NIT Hamirpur]	60000	5
43	M.Tech Stipend to Dual Degree (GATE qualified) students	Govt. of India MHRD, New Delhi	25968596	208
44	M.Tech. Stipend (for GATE qualified students)	Govt. of India MHRD, New Delhi		
45	M.Tech. Stipend (for GATE qualified students)	Govt. of India MHRD, New Delhi		
46	Financial Assistance to Ph.D Scholars.	Govt. of India-MHRD, New Delhi	53894928	155
		Govt. of India- UGC Scheme	7259400	15
		Govt. of India- CSIR Scheme	3823200	7
Total			117973975	861

➤ **Research and Consultancy:**

**Memorandum of Understanding (MoUs)**

E&ICT Academy IIT Roorkee	27-03-2025
Ultratech Cement Ltd	03-03-2025
IIT Jodhpur	30-01-2025
Central University of Himachal Pradesh Dharmashala	21-01-2025
CSIR-CEERI,Pilani	22-11-2024
CSIR-Indian Institute of Petroleum Dehradun	03-10-2024
IIT-AIA Foundation for SMART Manufacturing	04-09-2024

**Testing & Consultancy Projects:-**

Sr. No.	Name of Department	Amount (In Rs)
1.	CED	4,34,29,758
2	EED	1,21,046
3	CSED	10,49,387
4	ECED	10,42,064
<b>Total</b>		<b>4,56,42,255-/-</b>

**Research Projects submitted to Funding Agencies:-**

Sr. No.	No. of Research Projects Proposal submitted	Funding Agencies
1.	Endorsement letter issued are 131	SERB,DST,HIMCOSTE,DEST, ANRF CSIR, ICSSR , Meity, NBHM, SDMF

**Research Projects sanctioned by Funding Agencies:-**

Sr. No.	No. of Research Projects Proposal submitted	Sanctioned amount (In Rs.)	Funding Agencies
1	16	9,41,93,547/-	ICSSR,DST,ANR F,HPSDMA

**Major Achievements:-**

1. 131 Nos. project proposals have submitted to various funding agencies till date.
2. 16 Nos. project sanctioned to various funding agencies till date.
3. 07 Nos. MOU was signed

**Activities Conducted (Cultural Activities)****❖ Hill'ffair 2024 (08-10 November 2024):**

Hill'ffair 2024, the annual cultural festival of NIT Hamirpur, was celebrated over a period of three days from 08 November 2024 to 10 November 2024. The event was organized under the theme "Udbhav: Dawn of the Ages", showcasing a vibrant celebration of cultural diversity, creativity, and student talent.

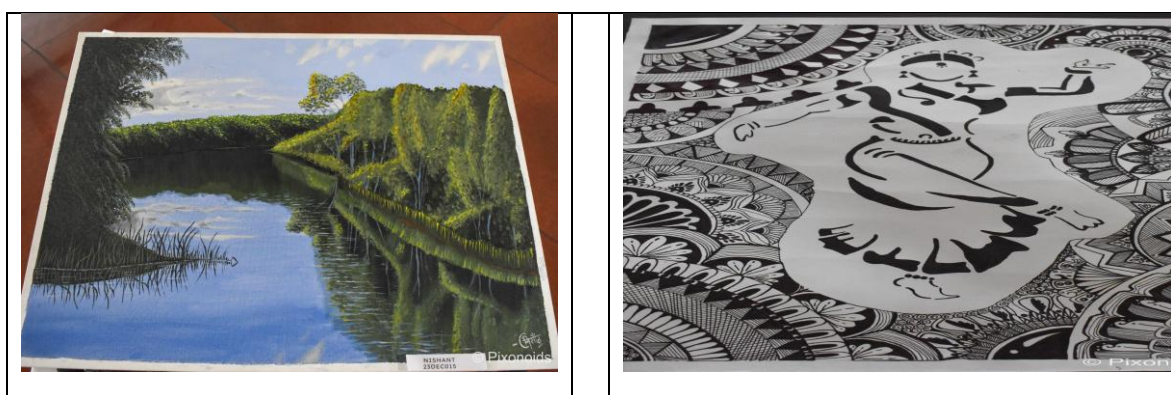
**❖ Interactive Session on Natural Healing Alternate Medicine, the Power of the Subconscious Brain, Vagus Nerve Stimulation, and Heart-Soul Meditation by Ranjit Kumar Kaushal (15 January 2025):**

An interactive session was organized by Dr. Rajit Kumar Kaushal, Naturopath and Director of PMSR Ranjeetrishi Organization, Hoshiarpur, Punjab, for the students, faculty, and staff members of NIT Hamirpur. The session aimed at promoting holistic well-being and focused on themes such as Natural Healing and Alternative Medicine, the Power of the Subconscious Mind, Vagus Nerve Stimulation, and Heart-Soul Meditation. Special emphasis was placed on practices for stress relief, inner peace, happiness, and enlightenment through integrative and natural approaches. The session was held on 15 January 2025 at 5:30 PM in the Mini Auditorium of the Institute.

**❖ Art Exhibition at Admin Block Gallery, Kala Sangam (10-14 February 2025):**

Echoes of Colors: A Modern Art Exhibition (Fine Arts Club), the fine arts exhibition "Kala Sangam" organized by Fine Arts Club of NIT Hamirpur on March 14 was a recent addition to the cultural activities on campus. The purpose of this exhibition was to give students an

opportunity to exhibit their artistic skills and present their artwork in different forms of art including watercolor, acrylic, mixed media, charcoal, and clay sculptures. The purpose of the Fine Arts Club is to stimulate the artistic potential of students and provide them with the chance to research and express themselves in areas such as painting, drawing, and sculpture. During the exhibition, students not only showcased their artworks but also presented the history and methods behind them to the audience. This exercise improved both their confidence and the communicative force of their art. Students upgraded their skills by learning innovative techniques. This exhibition encouraged art and culture in the institution, enhancing a sense of creativity among the academic community. The event not only provided painters with an opportunity to convey their thoughts through lines and colors but also provided the audience with an opportunity to comprehend and appreciate the artwork variety. The Fine Arts Club also continues to foster imagination, sense of aesthetics, and self-esteem in students through such events. The club wholeheartedly thanks the valued faculty in-charge for their continued support.



#### ❖ **Youth Parliament 2025 (16-17 February 2025):**

The English Club of the National Institute of Technology Hamirpur successfully organized the Youth Parliament 2025 on the 16th and 17th of February. This two-day event was not merely a simulation but a platform that channelled the spirit of democracy and critical inquiry into action. Youth Parliament, as an initiative, serves to replicate the workings of real parliamentary proceedings, giving students a chance to step into the roles of national leaders and engage in high-level discussions on matters of public interest. It aims to nurture responsible citizenship, encourage informed debate, and develop leadership and public speaking skills in the youth. The 2025 edition saw participation from enthusiastic students across years and disciplines, all of whom came together to deliberate on some of India's most pressing issues. The event was graced by Mr. Kaushal Dubey, a distinguished speaker known for his associations with institutions like KIET Ghaziabad, IIT Delhi MUN (G20 Summit Rapporteur), and JSS Youth Parliament (Speaker, Lok Sabha simulation). He conducted an insightful orientation session on parliamentary protocols and professional terminology. His presence added immense value to the simulation, especially as the sessions unfolded under the thematic focus of "Viksit Bharat"—India's vision to become a developed nation by 2047. Over the course of three sessions spanning two days, participants engaged in intense parliamentary debates. The simulated Parliament addressed a range of topics, including economic inequality, electoral reforms, foreign policy transparency, infrastructure development, and national security. Participants represented members of both the ruling party and the opposition, and the house resonated with sharp counterarguments, policy proposals,

deflections, and even some mocking exchanges—closely reflecting the unpredictable and passionate nature of actual parliamentary proceedings. The event culminated in the drafting and passing of a mock bill, symbolizing the application of deliberative democracy by the students. A journalist delegation was also seated in the parliament. Selected from the English Club, the journalist participants assumed roles under the banner of major national news agencies. Their objective was to observe the proceedings and report on the highlights. In addition to reporting, a dedicated questioning round was organized, where these journalists posed pressing and well-researched questions to the house—sharpening the intensity of the debates and holding representatives accountable. This round not only enriched the session’s engagement but also served as a platform for participants to refine their oration skills and enhance their ability for critical questioning, enhance their writing and analytical skills through real-time parliamentary observation. Through the Youth Parliament 2025, the English Club reaffirmed its vision of providing students with opportunities to engage meaningfully with national issues. It was not just an academic exercise but a powerful experience in democratic expression—encouraging the youth to take charge of the future they wish to build.



#### ❖ “Nrityaamrit”- Inter-Branch Dance Competition (22 March 2025):

“Nrityaamrit” an Inter-Branch Dance Competition was organized on 22nd March 2025, from 5:00 PM to 8:00 PM at the Auditorium, NIT Hamirpur (H.P.) by the Rhythmeecz (Nritya-Cultural Activities and Clubs), NIT Hamirpur. The event aimed to bring together dance enthusiasts for competition and create a fascinating aura combining the richness of heritage with the dynamism of contemporary expression.



❖ **Himachal Day (15 April 2025):**

National Institute of Technology (NIT) Hamirpur hosted Himachal Day celebration on 15 April 2025 in the institute auditorium, showcasing the rich cultural heritage and diversity of Himachal Pradesh. The day began with the inauguration exhibition held in the Administrative Block, NIT Hamirpur, organized under the course curriculum (Course Code: SA-209). The exhibition was inaugurated by Registrar Dr. Archana Santosh Nanoty, Dean Student Welfare Dr. Ashok Kumar, Associate Dean Dr. Pardeep Singh, and the Faculty In-Charges of Cultural Activities and Clubs. As part of their course curriculum, students were assigned to photograph the diverse cultures and traditions of Himachal Pradesh, and their captivating captures were displayed for the NIT community to admire. The exhibition provided a visual journey through the region's customs, attire, festivals, and social life. Following this, a wall painting depicting Himachali culture was inaugurated by Director in charge Prof. Anoop Kumar, Registrar Dr. Archana Santosh Nanoty and Dean Student Welfare Dr. Ashok Kumar. Created on the auditorium wall, the mural stands as a permanent tribute to the state's rich heritage and reflects the institute's commitment to cultural awareness. The event was graced by Director Prof. H.M. Suryawanshi, Registrar Dr. Archana Santosh Nanoty, Dean Student Welfare, Dean Faculty Welfare, and several esteemed faculty members. The program began with the ceremonial lamp lighting, followed by inspiring address by the Director in-charge Prof. Anoop Kumar emphasizing the importance of cultural identity and unity within the institute. The celebration featured vibrant traditional performances by students, including folk music, drama, and the ever-energetic Himachali Nati dance. Each performance vividly portrayed the customs and spirit of the state, with traditions from different districts of Himachal Pradesh beautifully represented on stage. From the attire to the music, the diversity of regional cultures was thoughtfully showcased, receiving enthusiastic applause and appreciation from the audience. The students' dedication and artistic talent brought the stage to life and captured the very soul of Himachal. All the esteemed dignitaries, guests and the faculty members praised the students for their initiative, creativity, and passionate efforts in organizing the event. The celebration concluded with a heartfelt vote of thanks, followed by a felicitation ceremony in which various student clubs and individual performers were recognized and appreciated by the Director for their outstanding contributions to the cultural vibrancy of the campus. NIT Hamirpur's Himachal Day 2025 served as a beautiful reminder of the state's legacy and the institute's commitment to fostering cultural appreciation.



## 6.0 THE BOG, FC & OTHER COMMITTEES

### 6.1 BOARD OF GOVERNORS:

The Board of Governors present incumbents are:

Sr. No.	Name & address	Designation
1	<b>Vacant</b> As per Gazette Notification dated 21/03/2025	<b>Chairperson</b>
2	<b>Prof. Hiralal Murlidhar Suryawanshi</b> Director, NIT Hamirpur (HP) – 177005	<b>Ex-Officio Member</b>
3	<b>Additional Secretary/Joint Secretary</b> Incharge dealing with Technical Education, Department of Higher Education, Ministry of Education, Govt. of India, Shastri Bhawan, New Delhi-110001	<b>Ex-Officio Member</b>
4	<b>Joint Secretary &amp; Finance Advisor</b> Incharge dealing with Technical Education, Department of Higher Education, Ministry of Education, Govt. of India, Shastri Bhawan, New Delhi-110001	<b>Ex-Officio Member</b>
5	<b>Additional Chief Secretary/Principal Secretary (Technical Education)</b> to the Govt. of Himachal Pradesh, Armsdale Building, HP Secretariat, Shimla-171002 (HP)	Member
6	<b>Director (Technical Education)</b> Industrial & Vocational Training, Govt. of HP Sundernagar, Mandi HP-175018	Member
7	<b>Nominee of NIT Council</b> (To be Nominated)	Member
8	<b>Nominee of NIT Council</b> (To be Nominated)	Member
9	<b>Prof. Rajesh Seghal,</b> Professor (HAG), Department of Mechanical Engg. , NIT Hamirpur (HP)-177005	Member
10	<b>Dr. Yogesh Gupta</b> Associate Professor, Department of HSS, NIT Hamirpur (HP)-177005	Member
11	<b>Director,</b> Indian Institute of Technology Mandi (HP)-175005 or [ His nominee, not below the rank of Professor]	Member
12	<b>Dr. Archana Santosh Nanoty</b> Registrar, NIT Hamirpur (HP) – 177005	Ex-Officio Secretary

## 6.2 FINANCE COMMITTEE

The Finance Committee present incumbents are:

Sr. No.	Name & address	Designation
1	<b>Vacant</b> As per Gazette Notification dated 21/03/2025	Chairman
2	<b>Prof. Hiralal Murlidhar Suryawanshi</b> Director, NIT Hamirpur (HP) - 177005	Ex- officio Member
3	<b>Joint Secretary</b> Incharge dealing with Technical Education, Ministry of Education, Govt. of India, Shastri Bhawan, New Delhi-110001	Member
4	<b>Joint Secretary &amp; Finance Advisor,</b> Incharge dealing with Technical Education, Department of Higher Education, Ministry of Education, Govt. of India, Shastri Bhawan, New Delhi-110001	Member
5	<b>Prof. Rakesh Sehgal</b> Professor (HAG), Department of Mechanical Engineering, NIT Hamirpur (HP)-177005	Member
6	<b>Dr. Yogesh Gupta</b> Associate Professor, Department of HSS, NIT Hamirpur (HP)-177005	Member
7	<b>Dr. Archana Santosh Nanoty</b> Registrar, NIT Hamirpur (HP) – 177005	Member Secretary

## 6.3 BUILDING & WORKS COMMITTEE:

The Buildings & Works Committee present incumbents are:

Sr. No.	Name & address	Designation
1	<b>Prof. Hiralal Murlidhar Suryawanshi</b> Director, NIT Hamirpur (HP) - 177005	Ex-officio Chairman
2	<b>Director or Deputy Secretary</b> or His nominee dealing with NITs, Department of Higher Education, Ministry of Education, Government of India, Shastri Bhawan, New Delhi – 110 001	Ex-officio Member
3	<b>Director or Deputy Secretary</b> or His nominee dealing with Finance (NITs), Department of Higher Education, Ministry of Education, Government of India, Shastri Bhawan, New Delhi – 110 001	Ex-officio Member
4	<b>Prof. Rakesh Sehgal</b> Professor (HAG), Department of Mechanical Engineering, NIT Hamirpur (HP)-177005	Member
5	<b>Dean (P&amp;D)</b> NIT Hamirpur (HP)-177005	Member

6	One Expert from <b>Civil Wing</b> of Central or State Government or Autonomous body of repute	Member
7	One Expert from <b>Electrical Wing</b> of Central or State Government or Autonomous body of repute	Member
8	<b>Registrar</b> NIT Hamirpur (HP)-177005	Ex-Officio Member Secretary

#### 6.4 THE SENATE

- a) The Director, ex-officio Chairman  
b) The Dy. Director, ex-officio Member (vacant)  
c) Professors appointed or recognized as such by the Institute for imparting instructions in the Institute

1.	Prof. Hiralal Murlidhar Suryawanshi Director, NIT Hamirpur.	Chairman
2.	Prof. Audithan Sivaraman Professor, Computer Science & Engineering Netaji Subhas University of Technology, New Delhi	Member
3.	Prof. S. P. Singh Professor, Humanities & Social Sciences Department IIT Roorkee, Roorkee	Member
4.	Prof. Minati Baral Professor, Chemistry Department, NIT Kurukshetra	Member
5.	Prof. Anoop Kumar Professor, Mechanical Engineering Department	Member
6.	Prof. Ashwani Kumar Professor, Electrical Engineering Department	Member
7.	Prof. Bhanu Marwaha Professor, Architecture Department	Member
8.	Prof. Minakshi Jain Professor, Architecture Department	Member
9.	Prof. Narinder Singh Thakur Professor, Centre for Energy Studies	Member
10.	Prof. Rakesh Sehgal Professor, Mechanical Engineering Department	Member
11.	Prof. Rakesh Kumar Dutta Professor, Civil Engineering Department	Member
12.	Prof. (Ms.) Rajeevan Chandel Professor, Electronics & Communication Engineering Department,	Member
13.	Prof. Ram Naresh Sharma Professor, Electrical Engineering Department	Member
14.	Prof. Raman Parti Professor, Civil Engineering Department	Member
15.	Prof. Ravi Kumar Professor, Material Science & Engineering Department	Member
16.	Prof. Ravi Kumar Sharma Professor, Civil Engineering Department	Member
17.	Prof. Sunand Kumar Professor, Mechanical Engineering Department	Member
18.	Prof. Sunil	Member

	Professor, Mathematics & Scientific Computing Department	
19.	Prof. Sushil Chauhan Professor, Electrical Engineering Department	Member
20.	Prof. Yogeshver Dutta Sharma Professor, Mathematics & Scientific Computing Department	Member
21.	Prof. Yog Raj Sood, Professor, Electrical Engineering Department	Member
22.	Dr. Archana Santosh Nanoty, Registrar	Secretary

## 7.0 CENTRAL FACILITIES

### 7.1 COMPUTER CENTRE

Computer Centre at National Institute of Technology, Hamirpur (HP) has been setup with the objective of providing state-of-the-art computational and communication facilities for the students, faculty and staff to carry out academic and research activities. Computer Centre is a central facility, which caters to the needs of different academic departments, centers and various sections of the Institute. Additionally, it also provides design and implementation services for computer network and automation of Institute. The mission of Computer Centre is to design, implement, perceive and fine tune the future computing and communication requirement of the Institute. Computer Centre at NIT Hamirpur aspires to be a leading computational/communication facility in higher education. Apart from this, Computer Centre is actively involved in extending consultancy services to outside organizations to rollout their hardware, software and networking infrastructure in best possible manner.

#### 1) Objectives:

Computer Centre at NIT Hamirpur has been established with following objectives:

- To provide a central computing/communication facility with network infrastructure for all the students, faculty members and staff of the Institute.
- To collect/analyse the computing requirements of the departments and design, procure, deploy and maintain the solutions.
- To assist students, faculty and research scholars of all departments in the Institute in computerizing their activities.
- To conduct short terms courses for the students and staff of the Institute.
- To design, maintain and administer campus-wide network including Internet and allied services.
- To design and implement office automation modules in-house as per the Institute requirement.
- To provide communication service throughout the campus.
- To provide consultancy in ICT related areas.

- 2) Computer Centre manages various computing and communication facilities throughout the campus. It provides Internet access, Web, Email, FTP and other computing services 24x7x365. The Institute has campus wide network of more than 3000 voice & Data nodes over the fibre backbone with above 100 active devices, Wi-Fi, Voice over IP (VoIP) and Video-Conferencing. A fleet of servers from SUN, IBM, HP, Dell, etc. have been deployed to provide the services like Web, Email, DNS, proxy, DHCP, etc in the campus. The Institute has got 1Gbps connectivity under National Knowledge Network (NKN), MHRD, Govt. of India. Students, Faculty and staff are provided with Internet facility in academic, administrative and residential area. We have high end facilities like cluster computing environment having 14 heterogeneous chassis based blades with different operating systems equipped with 6TB SAN and 24TB NAS storage capacity. Internet connectivity of 1 Gbps from NKN has been provided to the Institute by MHRD, Govt. of India under NKN (National Knowledge Network). An additional Internet connectivity of 500 Mbps has been leased from M/S. Airtel. For external telephone connectivity E1 PRI Link of 30 Channels has been subscribed from BSNL.

#### 3) Technical Officers/Officials

Faculty Incharge	:	Dr. T.P.Sharma
Senior Scientific Officer	:	Sh. Anil Kumar

Senior Scientific Officer	:	Sh. Jagdish Verma
Scientific Officer	:	Sh. Ashwani Kumar Sharma
Technical Assistant (SG-II)	:	Sh. Ravi Singh
Sr. Technician	:	Sh. Rakesh Sharma
Technician	:	Sh. Parshant Angirash

- 4) The detail of the assets/equipment purchased for the Computer Centre during the financial year 2024-2025 is as below:-

Sr. No.	Name of Asset/Equipment	Quantity
1.	Mat lab Campus / Campus wise Licences	01 Nos
2.	Deployment of Wireless Network in Academic Area of the Institute (300Nos. WI FI Access point, 50 Network Switches)	01 Nos
3.	Fire Wall	01 Nos
4.	online software Google Workspace for Education plus	5000 Nos
5.	Microsoft 365 A3	150 Nos
6.	Wireless LAN Controller HP Aruba 9240	01 No.
7.	24 ports distribution switches	01 No.
8.	24 ports PoE access Switch	10 No.
9.	48 Ports Non PoE Access Switch	7 No.
10.	10G SFP Plus Transceivers Single	7 No.
11.	SFP-1G	25 No.
12.	SFP Plus – 10G	12 No.
13.	Wireless Access Point type 1	593 No.
14.	Wireless Access Point type 2	62 No.
15.	Racks-30U	06 No.
16.	Network Access Control Device	01 No.
17.	System Integration and Services	01 No.
18.	Resident Engineer	01 No.
19.	IO Box	1000 No.
20.	Patch Panels	62 No.
21.	OFC- SM	3750 No.
22.	LIU	25 No.
23.	Pig Tails-SM	500 No.
24.	Fiber Patch Cords	250 No.
25.	Racks-12 or 15 U	50 No.
26.	SFP-1G	75 No.
27.	SFP Plus – 10G	12 No.
28.	OFC-SM	7148 No.
29.	LIU	29 No.
30.	Extra Charges Due to Scope Increase	01 No.

31.	Open Network Management System	01 No.
32.	Distribution Switches	06 No.
33.	Google Workspace for Education Plus	5000 No.
34.	D LINK DGS 1210-25P Gigabit Managed Switch	5 No.

### 5) Detail of the Laboratories

Sr. No.	Name of the Laboratories
1.	Internet Laboratory
2.	Research Laboratory
3.	Programming Laboratory

## 7.2 WORKSHOP

Workshop is the central facility for imparting training to the students of all branches of Ist year B. Tech. in various shops. Training is also imparted to Mechanical Engineering students, in the subject of Manufacturing Process central workshop comprises various shop namely CNC shop, Fitting Shop, Welding Shop, Sheet metal Shop, Carpentry Shop, Pattern making shop, Foundry Shop, Turning Shop, Machine Shop and Fabrication Shop. Students of all branches use workshop facilities for fabrication of their minor and major projects. These shops are well equipped with latest tools, equipment and machineries for carrying out research work at M. Tech. and Ph.D. level in the area of manufacturing engineering with specialization in Metal Cutting and casting.

## 7.3 LIBRARY:

1. No. of print books available up to 31-03-2025 : 95417
2. No. of e-books available up to 31-03-2025 : 471
3. E-resources subscribed by Institute:
  - Indiatat e-Database
  - Sage (Urban Studies and Planning) e-Journals
4. e-resources accessible through ONOS scheme:

1.	ACM Digital Library
2.	American Association for the Advancement of Science
3.	American Chemical Society
4.	American Institute of Aeronautics and Astronautics (AIAA)
5.	American Institute of Physics
6.	American Mathematical Society
7.	American Physical Society
8.	American Society for Microbiology
9.	Annual Reviews
10.	ASCE
11.	ASME
12.	Bentham Science
13.	BMJ Journals
14.	Cambridge University Press
15.	Cold Spring Harbor Laboratory Press
16.	Elsevier Science Direct

17.	Emerald Publishing
18.	ICE Publishing
19.	IEEE-IEL Online-Complete
20.	Indianjournals.com
21.	Institute of Physics
22.	Lippincott Williams & Wilkins (Wolters Kluwer)
23.	Oxford University Press
24.	Project Muse
25.	Sage Publishing
26.	SPIE Digital Library
27.	Springer Nature
28.	Taylor and Francis
29.	Thieme Medical Publisher
30.	Wiley Blackwell Publishing

5. e-resource subscribed through e-SodhSindhu:

- ASCE Library
- ASME Digital Collection
- ISID (Institute for Studies in Industrial Development)
- Oxford University Press
- Springer Link
- Web of Science

6. Other Facilities

- RFID based Library Management System for self-check-in, check-out, renewal etc.
- INFED to provide the facility of Off-Campus Access of e-Resources.
- Wi-Fi services to access e-resources

#### 7.4 DISPENSARY:

1) **BACKGROUND:-** Medical facilities are available on working days from 09:00 AM to 07:00 PM daily for the faculty, students, staff & residents of the Institute. Ambulances are available on a telephone call. The following doctors are available on rotation basis in the Health Centre:-

- (i) Dr. Mani Verma, Senior Medical Officer (Incharge)
- (ii) Dr. Pushpender Verma, Medical Officer part time basis
- (iii) Dr. Avika Chaudhary, Eye Specialist part time basis
- (iv) Dr. Astha Thakur, Dental Officer part time basis

2) The working hours of the Health Centre is as follows:-

Monday, Tuesday, Thursday & Friday: 09:00 AM to 08:00 PM

Wednesday, Saturday & Sunday: 09:00 AM to 07:00 PM

3) Total patients treated annually = 26392

4) Number of outdoor attendance = 26242

5) Number of day care Patients = 150

6) Number of referral cases = 1500

7) Ambulance Services are available 24X7 with basic facilities.

8) Blood donation camps are being organized by the Health Centre from time to time.

#### 7.5 Sports Activities:

National Institute of technology Hamirpur is one of the premier technical institutes in Northern India.

The Institute presently provides sports facilities for both indoor and outdoor activity. A Standard size

stadium with the provision of pavilion has been provided to the student where the games like Cricket, Football, Hockey, Basketball, Volleyball, lawn Tennis and Athletics are played. The facilities of separate Basketball and lawn Tennis court with the provision of flood lights also have been provided to our students. We have the provision of indoor hall for badminton and other indoor games and gymnasium facility with latest physical fitness machines for both boys and girls separately. The facilities of Billiards and pool table for the student and staff have also been provided. Along with this, the facility of students activity center (SAC) is also handed over to the sports section for the use of students, faculty and staff with indoor facilities of Badminton, Kabaddi, Table Tennis, Martial Arts Karate, Gymnasium Hall Male & Female, squash court and hall for Drama, Dance & Music etc.

### **Inter Branch and Inter year tournament)**

At Institute level sports department organized inter branch tournament in the odd semester and in the even semester there is inter year tournament for both boys and girls every year. All the student take part in these tournaments with great spirit. During the session 2024-25 EE Deptt. Got overall champion among Boys in Inter Branch tournament. third year students among Boys & Girls got overall trophy in Inter year tournament. During the session 2024-25 two day 35<sup>th</sup> Annual Athletic meet was organized from 28<sup>th</sup> -29<sup>th</sup> March 2025. In this meet the following events were organized such as 100M, 200M, 400M, 800M, 1500M, 5000M, 4x400M and 4x100 relay 4 x 400m mixed relay, Long jump, High jump, triple Jump, shot Put, Discus and Javelin Throw for both boys and girls. Mr. Jatin (21BCS075) among Boys and Ms. Bindli among the Girl declared as best Athlete.

### **Participation of Institute teams outside the Institute**

Beside this our Institute teams have also participate in the Tournament held at other Institute. During the session 2024-25 our Institute teams proved their talent in different games outside the Institute students as well as faculty & Staff teams performed very well. The detail of the participation game wise given below:-

Sr. No	Games (Boys)	Date	Name of Tournament	Venue	Position
1	Football	18-20Oct 2024	ALL INDIA INTER NIT TOURNAMNET	NIT Rourkela	---
2	Basketball	8-10 Nov 2024	ITUSA Northern Region	IIT Ropar	2 <sup>nd</sup>
3	Volleyball	8-10 Nov 2024	ITUSA Northern Region	NIT Kurukshetra	1 <sup>st</sup>
4	Kabaddi	8-10 Nov 2024	ITUSA Northern Region	NIT Kurukshetra	1 <sup>st</sup>
5	Badminton	8-10 Nov 2024	ITUSA Northern Region	NIT Kurukshetra	3 <sup>rd</sup>
6	Yoga	8-10 Nov 2024	ITUSA Northern Region	NIT Kurukshetra	3 <sup>rd</sup>
7	Cricket	20-23 Dec 2024	ALL INDIA INTER NIT	NIT Silchar	---
8	Chess	20-23 Dec 2024	ALL INDIA INTER NIT	NIT Silchar	---
9	Athletics	10-12 Jan 2025	ALL INDIA INTER NIT	NIT Surathkal	Triple Jump :- 2 <sup>nd</sup> High Jump :- 3 <sup>rd</sup> Long Jump :- 3 <sup>rd</sup>

10	Power Sports	10-12 Jan 2025	ALL INDIA INTER NIT	NIT Surathkal	Body Building -1st Power Lifting :- 1 <sup>st</sup> Weight Lifting :- 3 <sup>rd</sup> Power Lifting :-3 <sup>rd</sup>
11.	Kabaddi	24-26 Jan 2025	ALL INDIA INTER NIT	NIT Tiruchirappalli	---
12	Badminton	24-26 Jan 2025	ALL INDIA INTER NIT	NIT Tiruchirappalli	---
13	Basketball	7-9 Feb 2025	ALL INDIA INTER NIT	NIT Jalandhar	---
14	Table Tennis	7-9 Feb 2025	ALL INDIA INTER NIT	NIT Jalandhar	---
15	Volleyball	01-03 March 2025	MST -2025	MNIT Jaipur	---

Sr. No	Games (Girls)	Date	Name of Tournament	Venue	Position
1.	Basketball	8-10Nov 2024	ITUSA Northern Region	IIT Ropar	2 <sup>nd</sup>
2	Volleyball	8-10 Nov 2024	ITUSA Northern Region	NIT Kurukshetra	2 <sup>nd</sup>
3.	Badminton	8-10 Nov 2024	ITUSA Northern Region	NIT Kurukshetra	---
4	Yoga	8-10 Nov 2024	ITUSA Northern Region	NIT Kurukshetra	3 <sup>rd</sup>
5.	Athletics	10-12 Jan 2025	All India Inter NIT	NIT Surathkal	---
6.	Basketball	7-9 Feb 2025	All India Inter NIT	NIT Jalandhar	---
7.	Table Tennis	7-9 Feb 2025	All India Inter NIT	NIT Jalandhar	---
8.	Volleyball	01-03 March 2025	MST -2025	MNIT Jaipur	1 <sup>st</sup>

Sr. No	Games (Faculty & Staff)	Date	Name of Tournament	Venue	Position
1.	Cricket	14-17 Dec 2024	ALL INDIA INTER NIT FACULTY & STAFF	NIT SILCHAR	2 <sup>nd</sup>
2.	Chess	14-17 Dec 2024	ALL INDIA INTER NIT FACULTY & STAFF	NIT SILCHAR	---
3.	Badminton	20-22 Dec 2024	ALL INDIA INTER NIT FACULTY & STAFF	NIT Kurukshetra	1 <sup>st</sup> in (Above 50)
4.	Table Tennis	20-22 Dec 2024	ALL INDIA INTER NIT FACULTY & STAFF	NIT Kurukshetra	---

### Physical Facilities & Games and Sports Facilities

The Institute maintains excellent fitness facility and play ground with the following provision

1	Athletic track & field	200,M track(grass)	01 no	There is one ground for all these 03 games
2	Football Ground	Without flood Light	01 no	
3	Cricket ground	Without flood Light	01 no	
4	Volleyball court	With flood light	02 no	
5	Basketball court	With flood light	02 no	01 No. Outdoor 01 No. Indoor
6	Lawn Tennis court	With flood light	03 no	Synthetic01 no

				cemented-02 No.
7	Students Activity Center (SAC)	Badminton Court, Kabaddi court, Table tennis, Billiards & pool, Karate & Yoga Hall, Gym Hall (Male & Female) separate space Billiards, Pool and TT for faculty & Staff		
8	Indoor Games facilities are available inside hostel compounds (Table tennis, Carrom. Chess, Outdoor, Indoor Badminton court, etc.) There are an attractive stadium with the provision of pavilion for 1500 spectators			

**7.6 OTHER FACILITIES LIKE HOSTELS, MESSES, STAFF QUARTERS, ADMINISTRATION & TELEPHONE EXCHANGE etc.:**

Name of the Hostel	Type (Single/ Double/ 03 Seated/ 04 seated/ 06 seated)	Capacity
Kailash Boys Hostel	03 seated = 327 04 seated = 376	703
Vindhyachal Boys Hostel	Single seated	170
Satpura Hostel	Normal Room, Hall = 95 Guest rooms = 27	122
Mani Mahesh	Single seated	165
Aravali Girls Hostel	Single seated	30
Dhauladhar Boys Hostel	Single seated- 91 03 seated- 24 Warden & MMC A office-01 Guest Room=04	163
Neelkanth Boys Hostel	03 seated=20 04 Seated=129	576
Himadri Boys Hostel	Four let= 116 Triplet=82	710
Himgiri Boys Hostel	Single seated-468 Doublet=11	490
Udyagiri Boys Hostel	Triplet room 150	450
Parvati Girls Hostel	Single seated-54 03 seated-36	162
Ambika Girls Hostel	Seven seated=25 Five seated= 4 Four seated=26 Two seated=63 Guest room Doublet=3	431
Aravali Girls Hostel	Rooms	30

**Hostel Management Policy:-**

- National Institute of Technology, Hamirpur is a fully residential institute. All the students admitted in the institute should reside in hostels. However, with special permission of higher authority, students may be permitted to stay outside.
- Each hostel is having one Warden, at least one Asstt. Warden, Mess Manager and Hostel/ Mess Attendant who will look after the day to day affairs of the boarders.
- The top most hostel authority next to Director is Chief Warden (H) who coordinates these activities and is authorized for all financial transaction.
- There is a separate Bank Account of each hostel in the name of the Warden of concerned hostel and one is in the name of Chief Warden (H). Students will deposit their dues at concerned Hostel Warden Account and later on Hostel Establishment Fund, Ambulance Fund and Mess Security is transferred to the Chief Warden (H).
- The mess account bills contain only the mess advance to start with, which will be topped at the end of each semester.
- At the end of every semester there is complete reconciliation.
- Hostel Establishment Fund, Common Room Fund, Ambulance Fund is collected from the students once in a year and which will be transferred to the Chief Warden Office except Common Room Fund. The Common Room Fund is used by the Warden for the welfare of the concerned Hostel.
- The Head Cook, Cook and Mess Workers are employed by the Chief Warden (H) for all the hostels and their monthly salary is included in the monthly mess bill of the boarders of concerned hostel.
- The salary of Mess Staff is paid by the Warden of concerned hostel through their Bank Account opened in the SBI NIT Hamirpur branch.
- All expenses like electricity bill, water charges etc. are divided among all the boarders equally.
- For PG and Research Students mess bill is charged for all 12 months unless they are specially permitted by the authority to stay outside for a specific period.
- No mess rebate is allowed to any boarder unless specially permitted by the Warden for specific reason, as per Hostel Rules.
- No mess bill will be charged to the UG students during vacation unless they are specially permitted to stay during vacation, but salary charges of mess workers, electricity bill, water charges stationery charges will be payable for the 12 months.
- For UG, PG and Ph. D regular students including 1<sup>st</sup> year, the Establishment charges, ambulance charges and common room charges are collected from July 1<sup>st</sup> once in a year.
- Each hostel maintains its Bank Account and all the bills of grocery, ration, milk, gas, vegetables, Liveries disbursement of wages (including festival allowance) to mess workers as well as electricity/ water charges fully paid by the Warden of concerned hostel.
- The accounts of all the hostels are duly audited by an external agency at least twice in a year.

**The Hostel of Residence:-**

The institute is essentially residential institute and provides hostel accommodation for students. Separate hostel accommodation is available for girl students. It is mandatory for all the students to stay in the hostel. However, a student may be permitted on application in prescribed form during beginning of each semester to live with his/ her parents or local guardian at Hamirpur (HP). Students permitted to stay outside hostel are exempted from payment of mess charges, electricity charges and water charges under Hostel Fee. The name, full address, office and residence and telephone number, designation and willingness of local

guardian have to be furnished at the time of admission. The room allotment of the hostel is done on the basis of merit through software.

#### **POST OFFICE, BANK, SHOPPING CENTRE & OTHER FACILITIES:**

To facilitate all financial transactions, a fully computerized branch of State Bank of India functions in the Institute premises. Similarly, for the convenience of the students, a Post Office is operating in the campus. It provides saving bank facility and has provision of money orders, postal orders and postage stamps etc.

#### **7.7 PLINTH AREA OF THE NIT BUILDING**

<b>PLINTH AREA OF THE NIT BUILDING</b>		
<b>Sr. No.</b>	<b>Description</b>	<b>Plinth Area in Sqm</b>
1	Residential	12420.83
2	Hostels	24984.86
3	Academic	35361.87
4	Garage	2137.50
5	Roads	46900.00
6	Green	566236.54
	Total Land	<b>688041.60</b>
	<b>Gross Plinth area =688041.60 Sqm (Residential +Hostels +Academic +Garage + Roads +Green).</b>	
	<b>Total = 688041.60 Sqm</b>	

#### **7.8 List of completed works during the year 2024-25, NIT Hamirpur (HP).**

<b>Sr. No.</b>	<b>Name of work</b>	<b>Date of completion</b>	<b>Expenditure (In Rs. )</b>	<b>Chargeable Head</b>
1	Providing power connection to work stations in newly established computation lab room No. 203 1st floor (Admin Block) NIT hamirpur (H.P).	06-12-2024	152915	OH-35
2	Providing LED street lights in the NIT campus (Phase-III).	28/02/2024	798300	OH-35
3	Protection of Type-IV Block-A, building, affected by landslide during heavy rains at NIT Hamirpur. (SH: Proposed RCC wall for protection of Type-IV Qtrs.).	08-05-2024	956364	OH-35
4	Proposed retaining wall at road side near Parvati Girls Hostel to protect the road NIT, Hamirpur (HP).	10-07-2024	750298	OH-35
5	Providing, fixing and testing of network passive items (Internet LAN wiring) in Administrative area (Corporate office) at NIT Hamirpur.	11-03-2024	233680	OH-35
6	Re-wiring in Corporate Office NIT Hamirpur.	18/11/2024	522775	OH-35

7	Replacement of old lead acid batteries for UPS with new batteries at New Computer Center NIT Hamirpur for 2024-25.	12-06-2024	2330880	OH-35
8	Providing & fixing of tiles in Architect Department & Construction Cell NIT Hamirpur (H.P).		41536	OH-35
9	Installation of IP based CCTV surveillance system at Construction Cell NIT Hamirpur.	27/11/2024	66700	OH-35
10	Repair of HT 11KV cable at NIT Hamirpur		122000	OH-35
			5975448	



# **Annual Accounts**

## **2024-25**





भारतीय लेखापरीक्षा तथा लेखा विभाग  
कार्यालय प्रधान निदेशक लेखापरीक्षा (केन्द्रीय), चण्डीगढ़

Indian Audit & Accounts Department  
Office of The Principal Director of Audit (Central),  
Chandigarh



सं०/No: पी. डी. ए. (सी) के. व्यय/NITH/2024-25/ 668

दि०/Dated: 21.11.2025

सेवा मे,

सचिव,

उच्चतर शिक्षा विभाग,

शिक्षा मंत्रालय,

भारत सरकार, नई दिल्ली - 110001

विषय: National Institute of Technology, Hamirpur (Himachal Pradesh) के वर्ष 2024-25 के लेखाओं पर पृथक लेखापरीक्षा प्रतिवेदन

महोदय/महोदया,

कृप्या National Institute of Technology, Hamirpur (Himachal Pradesh) के वर्ष 2024-25 के लेखाओं पर पृथक लेखापरीक्षा प्रतिवेदन (Separate Audit Report) संसद के दोनों सदनों के समक्ष प्रस्तुत करने हेतु संलग्न पाएं। संसद में प्रस्तुत होने तक प्रतिवेदन को गोपनीय रखा जाए। संसद में प्रस्तुत करने के उपरांत प्रतिवेदन की पांच प्रतियाँ इस कार्यालय को भी भेज दी जाएं।

कृप्या इस पत्र की पावती भेजें।

भवदीया,

संलग्न: उपरोक्त अनुसार

-हस्ता-

प्रधान निदेशक

उपरोक्त की प्रतिलिपि वर्ष 2024-25 की पृथक लेखापरीक्षा प्रतिवेदन की प्रति सहित आवश्यक कार्यवाही हेतु Director, National Institute of Technology, Hamirpur, Himachal Pradesh-177005 को प्रेषित की जाती है।

भवदीय,

प्रवीण  
21/11  
निदेशक

प्लॉट नं. 20-21, सेक्टर - 17ई, चण्डीगढ़ - 160017

Plot No. 20-21, Sector-17E, Chandigarh - 160017

दूरभाष/ Tel.No. 0172 - 2782020 & 2706117

फैक्स/ FAX No: 0172 - 2782021 / 2783974

ई-मेल/ Email: pdacchandigarh@cag.gov.in

**Opinion of the Comptroller & Auditor General of India on the Accounts of National Institute of Technology, Hamirpur, Himachal Pradesh for the year ended 31 March 2025**

**Opinion**

We have audited the financial statements of National Institute of Technology, Hamirpur, Himachal Pradesh, which comprise the statement of financial position as at 31 March 2025, the Income & Expenditure Account and the Receipts & Payment Account for the year then ended, and notes to the financial statements, including a summary of significant accounting policies under Section 19(2) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with Section 22(2) of the National Institutes of Technology, Science, Education and Research Act, 2007.

This Audit Report contains the comments of the Comptroller & Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards, disclosure norms, etc. Audit observations on financial transactions regarding compliance with the Law, Rules and Regulations (Propriety & Regularity) and efficiency cum performance aspects, etc., if any, are reported through inspection reports/ CAG's audit reports separately.

In our opinion, the accompanying financial statements of National Institute of Technology, Hamirpur, Himachal Pradesh, read together with the accounting policies and Notes thereon and matters mentioned in the Separate Audit Report, which follows, **give a true and fair view** of the financial position of the autonomous body as at March 31, 2025, and (of) its financial performance and its cash flows for the year then ended in accordance with uniform format prescribed by the Ministry of Human Resource Development, Government of India vide order No. 29-4/2012-FD dated 17 April 2015/accounting standards generally accepted in India.

**Basis for Opinion**

We conducted our audit in accordance with CAG's auditing regulations/standards/manuals/guidelines/guidance-notes/orders/circulars etc. Our responsibilities are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the autonomous body in accordance with ethical requirements that are relevant to our audit of the financial statements, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to

provide a basis for our opinion.

**Responsibilities of Management for the financial statements**

The Board of Governors (BoG) of National Institute of Technology, Hamirpur, H.P. is responsible for the preparation and fair presentation of the financial statements in accordance with uniform format prescribed by the Ministry of Human Resource Development, Government of India vide order No. 29-4/2012-FD dated 17 April 2015/accounting standards generally accepted in India, and for internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

**Auditor's Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion in accordance with CAG's auditing regulations/standards/manuals/guidelines/guidance-notes/orders/circulars etc.

**For and on behalf of the CAG of India**



**Principal Director of Audit (Central), Chandigarh**

**Place:** Chandigarh

**Date:**

<b>Separate Audit Report on the Accounts of National Institute of Technology, Hamirpur for the year ended 31 March 2025</b>
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**A. Significant Accounting Policies (Schedule 23)**

**A.1** As per the notes and instructions for compilation of financial statements of Central educational institutions, suitable accounting policy should be disclosed regarding Conversion or translation of foreign currency ( in case of organizations receiving foreign funds/Incurring expenditure in Foreign Exchange on imports). During the year 2024-25, NIT Hamirpur incurred an expenditure of ₹12.39 lakh as foreign currency transaction (US\$) for payment made on account of PHD thesis evaluation by experts. However, in this regard, no disclosures have been made by the Institute in the annual accounts in contravention of the prescribed format.

**A.2** A reference is invited to the Note no. 3 'Related party disclosure' of the format prescribed for central higher educational institutions which states that Accounting Standard (AS) 18, 'Related Party Disclosures', issued by the Institute of Chartered Accountants of India, requires disclosures to be made in respect of related party transactions. Keeping in view the involvement of public funds, in the context of an educational institutions, disclosures should be made in a note to the financial statements of the educational institutions regarding transactions between the educational Institution and related parties which includes trustees/board members/key management personnels etc. and their relatives.

Further, If there have been transactions between related parties, during the existence of a related party relationship, the educational institution should disclose the following:

- (i) the name of the transacting related party;
- (ii) a description of the nature of transactions;
- (iii) volume of the transactions; either as an amount or as an appropriate proportion;
- (iv) the amounts or appropriate proportion or outstanding items pertaining to related parties at the Balance Sheet date and provisions for doubtful debts due from such parties at that date; and
- (v) amounts written off or written back in the period in respect of debts due from or to related parties

However, the institute has not disclosed any related party transactions although an amount of Rs 43.42 lakh on account of salary and consultancy fee amounting to Rs 17.80 lakh has been paid to Director during the year.

**B. General****B.1 Capital Works in Progress: ₹34.06 crore**

As per the CPWD form 65 for the month of March 2025, the Institute had deposited ₹14.86 crore up to 31.03.2025 towards construction works of Boys Hostel (EWS) & Girls Hostel (EWS) against which expenditure of ₹15.75 crore was incurred as on 31.03.2025.

However, the Institute has booked only ₹14.86 crore (₹7.70 crore plus ₹7.16 crore) under Capital Works in Progress. Further, liability of the remaining amount of ₹0.89 crore payable to CPWD was not booked in the accounts. This needs to be reconciled.

Sr. No.	Name of work	Total expenditure up to 31/03/2025 by CPWD (₹)	Total amount deposited with CPWD up to 31/03/2025 (₹)	Amount payable to CPWD as on 31/03/2025 (₹)	Physical Status of work completed (per cent)
1.	Construction of boys hostel (EWS)	8,20,44,469	7,69,56,790	50,87,679	60
2.	Construction of girls hostel (EWS)	7,54,85,313	7,16,10,210	38,75,103	73
	<b>Total</b>	<b>15,75,29,782</b>	<b>14,85,67,000</b>	<b>89,62,782</b>	

**B.2** Rule 230(8) of GFR 2017 provides that all interests or other earnings against Grants-in-Aid or advances (other than reimbursement) released to any grantee institution should be mandatorily remitted to the Consolidated Fund of India immediately after finalization of accounts. Clause 12 of the sanction order of grants pertaining to recurring/non-recurring grants also clearly included the above condition.

The Institute has been receiving Grants in RBI Treasury Single Account (TSA) since October 2022, and no interest is being earned by the Institute. However, the Institute had earned interest on saving accounts as well as FDRs during 2019-2022 which included interest earned on Grants-in-Aid funds. The interest earned on such grants is not quantifiable, as separate bank account in respect of grants was not maintained by the Institute. The Institute should make efforts to work out the total interest earned on grants and remit it to the Consolidated Fund of India in accordance with the GFR.

The comment was pointed out in Separate Audit Reports for the year 2019-20 to 2023-24. But the Institute has not made compliance. However, the Institute has stated at Sl. No. 5 of Schedule 24- Contingent Liability and Notes to Accounts of the annual accounts that the Institute is in the process of assessing/computing the interest earned on Grants during respective years and the same will be returned to Ministry of Education.

### **B.3 Non-provision of retirement Benefits**

In contravention to the format of accounts prescribed by the Ministry of Education, provisions for retirement benefits of employees (Gratuity, Leave Encashment, Pension etc.) accrued for each accounting year should be made in the annual accounts for each accounting year on actuarial valuation basis. Although the Institute has made provisions towards Gratuity & Leave Encashment on actuarial valuation basis, provisions for pension benefits have not been made in the accounts. The Institute has also not prepared the sub schedule as required by the Approved format. The Institute is also required to make detailed disclosures as required by AS 15.

**B.4** Ministry of human resource development gazette notification dated 23 April 2009 para 37 (ii) states that the caution money shall be refundable to students, scholars and fellows at the time of finally leaving the institute, after deduction of relevant dues, if any and where no claim for a refund is received within two years of finally leaving the institute, the caution money shall be credited into the students welfare fund.

The Institute has shown a liability amounting ₹176.32 lakh on account of college caution money deposits from ex-students. The Institute has intimated that these funds have been lying with the Institute since 2016 onwards, however, year wise details of these deposits were not provided. Hence, in view of the above the Institute should make and disclose a policy in the regard and do accounting entries accordingly as per the approved format.

### **C. Management Letter**

Deficiencies which have not been included in this Separate Audit Report have been brought to the notice of the Management through a Management Letter issued separately for remedial/corrective action.

### **D. Assessment of Internal Controls**

#### **D.1 Adequacy of Internal Audit System**

Internal audit of the Institute is pending for 2024-25 in view of stipulation of ministry that it should be done by Principal Accounts Officer of the Ministry.

#### **D.2 Adequacy of Internal Control System**

Internal Control System was found to be inadequate to the following extent:

- i. Internal audit of the Institute was not conducted for the year 2024-25.
- ii. There is no laid down procedure for appointment of consultants on contract.

#### **D.3 Physical verification of Fixed Assets**

Physical verification of fixed assets was not conducted for the year 2024-25.

#### D.4 System of physical verification of Inventories

physical verification of inventories was not done for the year 2024-25.

#### D.5 System of physical verification of Library books

As per information provided to audit, complete physical stock verification of books is underway and a total of 1175 books are untraceable out of which 1079 books having cost less than ₹1000 each and total cost of such books is ₹2.06 lakh. 96 books are costing more than Rs 1000 each and total cost of such books has been ₹2.79 lakh.

#### D.6 Regularity in payment of Statutory Dues

As per record made available to audit, no irregularities were noticed in the payments of statutory dues.

#### E. Grant-in-aid

The position of Grant-in-aid in the Institute during the year 2024-25 was as under:

(Figures in ₹crore)

Particulars	OH-31	OH-35	OH-36	Total
Opening Balance as on 01.04.2024	0	4.16 <sup>1</sup>	0	4.16
Grants received during the year	48.37	21.91	68.25	138.53
Total available grants	48.37	26.07	68.25	142.69
Less: utilisation during 2024-25	48.19	21.84	68.18	138.21
Less: lapsed by RBI on 31/03/2025	0.18	0	0.07	0.25
Unutilised balance at the end of the year	0	4.23 <sup>2</sup>	0.00	04.23

<sup>1</sup> comprise of unspent balance as on 31 March 2024 as per SAR 2023-24

<sup>2</sup> comprise of Rs 4.03 crore on account of arbitration case deposit with High court and Rs 0.21 crore in respect of advance to Jal Shakti vibhag for tubewell (shown under Sch-08). However, the Institute has shown only Rs 0.21 crore in respect of advance to Jal Shakti vibhag for tubewell as unutilized grant in Schedule 3

**NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)**  
**BALANCE SHEET AS AT 31st March, 2025**

(Amount-----Rs.)			
	Schedule	Current Year	Previous Year
<b><u>SOURCES OF FUNDS</u></b>			
CORPUS/CAPITAL FUND	1	6,79,16,03,471.62	6,62,40,46,093.39
DESIGNATED/EARMARKED/ENDOWMENT FUNDS	2	6,76,01,977.67	5,63,37,650.67
CURRENT LIABILITIES AND PROVISIONS	3	1,82,38,89,356.65	1,20,09,34,963.13
<b>TOTAL</b>		<b>8,68,30,94,805.94</b>	<b>7,88,13,18,707.19</b>
<b><u>APPLICATION OF FUNDS</u></b>			
<b><u>FIXED ASSETS</u></b>	4		
Tangible Assets		3,33,07,14,616.15	3,34,95,04,165.67
Intangible Assets		3,85,02,516.20	3,43,97,579.40
Capital Works-In-Progress		34,05,86,563.00	19,20,19,563.00
<b>INVESTMENT FROM EARMARKED/ENDOWMENT FUNDS</b>	5		
Long Term		6,66,29,072.00	5,63,35,000.00
Short Term			
<b>INVESTMENT - OTHERS</b>	6	-	-
<b>CURRENT ASSETS</b>	7	4,80,70,89,914.48	3,92,37,12,211.37
<b>LOANS, ADVANCES &amp; DEPOSITS</b>	8	9,95,72,124.11	32,53,50,187.75
<b>TOTAL</b>		<b>8,68,30,94,805.94</b>	<b>7,88,13,18,707.19</b>
SIGNIFICANT ACCOUNTING POLICIES	23		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	24		

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**REGISTRAR**  
**NIT HAMIRPUR (HP)**

**DIRECTOR**  
**NIT HAMIRPUR (HP)**

**NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P.)**  
**INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD/YEAR ENDED 31/03/2025**

(Amount --Rs.)

<b><u>INCOME</u></b>	<b>Schedule</b>	<b>Current Year</b>	<b>Previous Year</b>
ACADEMIC RECEIPTS	9	27,06,09,228.95	22,17,59,869.50
GRANT & SUBSIDIES	10	1,16,62,00,000.00	1,00,93,38,000.00
INCOME FROM INVESTMENTS	11	18,09,64,627.00	24,31,02,771.00
INTEREST EARNED	12	8,11,739.00	13,32,196.00
OTHER INCOME	13	2,37,86,117.00	3,61,93,301.20
PRIOR PERIOD INCOME	14	-	2,62,00,000.00
<b>TOTAL(A)</b>		<b>1,64,23,71,711.95</b>	<b>1,53,79,26,137.70</b>
<b><u>EXPENDITURE</u></b>			
STAFF PAYMENT & BENEFITS (ESTABLISHMENT EXPENSES)	15	1,41,95,38,101.50	71,77,51,840.00
ACADEMIC EXPENSES	16	10,29,85,986.50	9,88,77,018.00
ADMINISTRATIVE AND GENERAL EXPENSES	17	18,81,46,831.00	16,26,94,182.00
TRANSPORTATION EXPENSES	18	23,60,615.00	14,23,962.00
REPAIR & MAINTENANCE	19	4,68,70,378.00	3,47,28,635.00
FINANCE COSTS	20	59,515.00	-
OTHER EXPENSES	21		-
PRIOR PERIOD EXPENSES	22		-

Depreciation (Net Total at the year-end - corresponding to schedule 4)		15,78,51,369.72	17,47,85,026.06
<b>TOTAL (B)</b>		<b>1,91,78,12,796.72</b>	<b>1,19,02,60,663.06</b>
<b>Balance being excess of Income over Expenditure (A-B)</b>		<b>-27,54,41,084.77</b>	<b>34,76,65,474.64</b>
Corpus fund		-	-
Building Fund			
Others (specify)		-----	-----
<b>BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CAPITAL FUND</b>		<b>-27,54,41,084.77</b>	<b>34,76,65,474.64</b>
SIGNIFICANT ACCOUNTING POLICIES	<b>23</b>		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	<b>24</b>		

**DEPUTY REGISTRAR (F&A)**  
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**NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)**  
**RECEIPTS AND PAYMENTS ACCOUNT FOR THE PERIOD/YEAR ENDED 31/03/2025**

(Amount-Rs)

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR		PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
I. Opening Balances				1. Expenses		
a} Cash Balances	4383.00	4,186.05		a} Establishment Expenses	1,06,96,22,297.00	69,00,09,192.00
b) Bank Balance				b) Academic Expenses	1,10,80,784.00	10,77,13,812.00
In Current accounts	7,99,23,623.67	4,81,29,223.26		c) Administrative Expenses	5,19,15,445.00	18,61,91,055.00
In Deposit Accounts	65,11,302.54	8,67,05,721.08		d) Transportation Expenses	23,80,230.00	13,82,295.00
Savings accounts	3,89,31,38,097.21	3,54,02,57,152.00		e) Repairs & Maintenance	2,86,63,733.00	1,22,52,905.00
				f) Prior period expenses	-	-
II. Grants Received				II. Payments against Earmarked/Endowment Funds	-	-
a} From Government of India	1,38,53,00,000.00	1,12,96,38,000.00				
b) From State Government	-	-				
	-	-				
c) From other sources (details} (Grants for capital & revenue exp/ to be shown separately if available						
III. Academic Receipts	24,72,86,348.00	22,17,59,869.50		III. Payments against Sponsored Projects/Schemes	-	-
IV. Receipts against Earmarked/Endowment Funds	-	-		IV. Payments against Sponsored Fellowships/Scholarships	-	-
V. Receipts against Sponsored Projects/Schemes	-	-		V. Investments and Deposits made		
				a} Out of Earmarked/Endowments funds	-	-
VI. Receipts against sponsored Fellowships Scholarships	-	-		b) Out of own funds (Investments- Others	-	-
				VI. Term Deposits with Scheduled Banks	-	-
VII. Income on Investments from				VII. Expenditure on Fixed Assets and capital WIP		
a} Earmarked/Endowment funds	-	-		b) Other investments a} Fixed Assets	15,66,57,501.00	12,03,10,344.00
b) Other investments	-	-		b) Capital Works- in- Progress	6,36,50,000.00	-
VIII. Interest received on				VIII Other Payments including statutory payments	-	-

a) Bank Deposits	16,17,58,371.00	46,95,419.00				
b) Loans and Advances	-	-				
c) Savings Bank Accounts	8,11,739.00	12,99,353.00				
d) Project grant	-	-				
IX. Investments encashed	-	-		IX. Grants Laps	1,17,75,697.00	7,94,01,753.05
X. Term Deposits with Scheduled Banks encashed	-	-		X. Deposits, Advances and Stock	1,29,43,19,144.23	96,56,88,489.27
				Student curricular Activities Receipts	32,25,893.00	24,94,580.00
XI. Other income (including Prior Period Income)	4,67,13,824.00	3,58,96,426.20		XI. Other Payments		-
XII. Deposits, Advances and Stock	1,99,70,10,406.99	1,06,74,66,856.65		XII. Closing balances		-
				Tfd to Project Cash book		-
				Tfd to Corpus fund	26,23,51,714.70	
Student Curricular Activities Receipt	1,08,53,175.00	91,69,625.00		a) Cash in hand	2,293.00	4383.00
				b) Bank balances		
				In Current Accounts	25,59,435.00	7,99,23,623.67
				In Savings Accounts	7,45,39,195.57	65,11,302.54
				In Deposit Accounts	4,79,65,67,907.91	3,89,31,38,097.21
XIII. Miscellaneous Receipts including Statutory Receipts	-	-				
XIV. Any Other Receipts	-	-				
TOTAL	7,82,93,11,270.41	6,14,50,21,831.74		TOTAL	7,82,93,11,270.41	6,14,50,21,831.74

**DEPUTY REGISTRAR (F&A)**  
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**NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P.)**  
**SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2025**

(Amount--Rs.)

		Current Year		Previous year	
<b>SCHEDULE 1 A. CAPITAL FUND :</b>					
Balance as at the beginning of the year			3,82,52,27,471.42		4,00,82,26,332.28
Add : Contribution towards Capital fund					
Add: Grants from UGC, Government of India and State Government to the extent utilized for capital expenditure		21,91,00,000.00		12,03,00,000.00	
Add: Assets Purchased out of Earmarked Funds		-		-	
Add: Assets Purchased out of Sponsored Projects, where ownership vests in the institution		-		5,82,470.00	
Add: Assets Donated/Gifts Received		-		-	
Add: Other Additions (Interest on Corpus fund)		-		-	
Add: Excess of Income over expenditure transferred from the Income & Expenditure Account		-27,54,41,084.77		34,76,65,474.64	
Less: Amount transferred to a corpus account		26,23,51,714.70		32,05,79,216.21	
Less: Unutilized capitals Grant (Trfd. To Schedule 3C)		-		4,15,63,665.24	
Less: Accrued interest for the year 2022-23 & 2023-24 (Trfd To Corpus) pppspu:				21,00,02,171.00	
Add: Amount of Income of PY parked in Deposit tfd					
Add: Depreciation excess Charged PY					
Total					
(Deduct) lapsed grant TSA		1,17,75,697.00	-33,04,68,496.47	7,94,01,753.05	-18,29,98,860.86
Current liabilities					
<b>BALANCE AS AT THE YEAR -- END</b>			<b>3,49,47,58,974.95</b>		<b>3,82,52,27,471.42</b>

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**NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)**  
**SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2025**

	Current year		Previous Year	
<b>SCHEDULE 1 B. CORPUS:</b>				
Balance as at the beginning of the year		2,79,88,18,621.97		2,22,14,51,961.76
Add : Transfer from capital fund	-		-	
Add: Grants from UGC, Government of India and State Government to the extent utilized for capital expenditure	-		-	
Add: Accrued Interest for the year 2022-23 & 2023-24	7,49,72,170.00		21,00,02,171.00	
Add: Other additions (interest on corpus fund + PY contribution of excess income)	-		36,73,64,489.21	
Add: Appropriation of excess/loss in Income & Expenditure Account for Corpus funds	42,30,53,704.70		-	
Total		49,80,25,874.70		57,73,66,660.21
(Deduct) deficit transferred from the income & expenditure account		-		-
<b>BALANCE AS AT THE YEAR -END</b>		<b>3,29,68,44,496.67</b>		<b>2,79,88,18,621.97</b>

**DEPUTY REGISTRAR (F&A)**  
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**NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)**  
**SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2025**

(Amount--Rs.)

<b>SCHEDULE 2 - DESIGNATED/ EARMARKED / ENDOWMENT FUNDS</b>	<b>Fund Wise Breakup</b>		<b>Total</b>	
	Pension Fund	Endowment Funds	Current Year	Previous Year
<b>A.</b>				
a) Opening balance	5,63,37,650.67		5,63,37,650.67	5,48,05,847.67
b) Additions during the year	1,02,93,262.00		1,02,93,262.00	15,31,803.00
c) Income from investments made of the funds	-		-	-
d) Accrued Interest on investments/Advances	9,71,065.00		9,71,065.00	-
e) Interest on Savings Bank a/c	-		-	-
f) Other additions (Prior Period Interest)	-		-	-
<b>Total (A)</b>	<b>6,76,01,977.67</b>		<b>6,76,01,977.67</b>	<b>5,63,37,650.67</b>
<b>B.</b>				
Utilization/Expenditure towards objectives of funds	-		-	-
i) Capital Expenditure	-		-	-
ii) Revenue Expenditure	-		-	-
<b>Total (B)</b>	<b>-</b>		<b>-</b>	<b>-</b>
<b>Closing balance at the yearend (A-B)</b>	<b>6,76,01,977.67</b>	<b>-</b>	<b>6,76,01,977.67</b>	<b>5,63,37,650.67</b>

**DEPUTY REGISTRAR (F&A)**  
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**NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)**  
**SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2025**

(Amount--Rs.)

	Current Year		Previous Year	
<b><u>SCHEDULE 3-CURRENT LIABILITIES AND PROVISIONS</u></b>				
<b><u>A. CURRENT LIABILITIES</u></b>				
1. Deposits from staff (TWS)	11,782.00		11,782.00	
2. Deposits from students	1,97,79,765.00		1,76,32,515.00	
College Caution Money				
- Ex Students	1,76,32,515.00			
- Current Students	21,47,250.00			
Hostel Caution Money	1,76,78,411.50		1,47,24,661.50	
Library Security	46,48,825.00		46,38,450.00	
3. Sundry Creditors				
a) For Goods & Services	-		-	
b) Others	-		-	
4. Deposit-Others (including EMD, Security Deposit and other )	77,67,89,551.12		74,06,78,898.36	
5. Statutory Liabilities (GPF, TDS, WC TAX, CPF, GIS, NPS):	-	81,89,08,334.62	-	77,76,86,306.86
<b><u>B) Others</u></b>				
6. Other Current Liabilities				
a) Salaries and Pension	6,09,20,380.00		6,24,93,104.00	
b) Receipts against sponsored projects & consultancy	5,85,41,717.93		6,33,96,496.93	
c) Receipts against sponsored fellowships & scholarships SC & ST	47,19,659.00		23,54,702.00	
Receipts against sponsored fellowships & scholarships others				
d) Unutilized Grants	21,20,000.00		4,15,63,665.24	
e) Grants in advance	-		-	

f) Other funds	2,55,22,876.00		2,39,31,209.00	
g) Other liabilities	-		-	
h) Fees received in advance	9,29,21,718.00		11,96,82,194.00	
i) Outstanding Liability UNI	3,65,353.00		3,65,353.00	
j) Interest on project Grant payable	-		-	
k) Extra Curricular Activities	6,28,73,968.10		5,52,46,686.10	
l) Medical Expenses	1,87,584.00		3,53,554.00	
m) Legal Fees	-		33,691.00	
n) Other Misc	-		20,650.00	
o) Security Charges	33,92,360.00		30,61,736.00	
p) Seminar Expense payable	-		-	
q) Professional Development allowance	-		21,90,462.00	
r) LTC	-		2,70,387.00	
s) Student Welfare expenses	-		-	
t) Children Education allowances	31,97,808.00		30,51,675.00	
u) Entertainment Expenses	990.00		16,660.00	
v) Maintenance of Building	-		2,40,058.00	
w) Wages	43,86,754.00		43,13,051.00	
x) Convocation	-		-	
y) NDCPS	38,45,931.00		39,99,132.00	
z) Vehicle running expenses	22,052.00	32,30,19,151.03	41,667.00	38,66,26,133.27
<b>TOTAL (A)</b>		1,14,19,27,485.65		1,16,43,12,440.13
<b><u>B. PROVISIONS</u></b>				
1. For Taxation	-		-	
2. Gratuity	28,78,95,449.00		50,85,528.00	
3. Superannuation Pension	-		-	
4. Accumulated Leave Encashment	37,21,83,272.00		36,56,490.00	
5. Pension Benefit				
6. Trade Warranties/Claims	-		0.00	
7. Others ( Specify)	-		0.00	
Auditors remuneration payable	1,50,000.00		5,53,040.00	
Consultancy charges payable	-		2,02,960.00	
Telephone charges payable	5900.00		6,316.00	
Electricity charges payable	13,39,747.00		10,97,179.00	

Salary contract/ part time staff	45,83,626.00		38,24,452.00	
Cleaning and Maintenance	16,88,716.00		14,91,338.00	
Water Charges	-		6,50,255.00	
Stationery expenses	-		56,240.00	
Departmental operating cost	-		-	
Examination expenses	-		-	
Leave salary contribution	-		-	
Scholarship	63,90,355.00		-	
Provision for contingency, other work , Equipment & Furniture	77,24,806.00		1,92,50,845.00	
E-Journal Capital expenditure			7,35,280.00	
Advertisement Expenses		68,19,61,871.00	12,600.00	3,66,22,523.00
<b>TOTAL (B)</b>		68,19,61,871.00		3,66,22,523.00
<b>TOTAL (A+B)</b>		1,82,38,89,356.65		1,20,09,34,963.13

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**SCHEDULE - 3 (a) SPONSORED PROJECTS**

1.Sr. No.	2. Name of the Project	Opening Balance		5. Receipts/recoveries during the year	6. Total	7. Expenditure during the year	Amount in Rupees Closing Balance	
		3. Credit	4. Debit				8. Credit	9. Debit
1.	Sponsor Projects	1,89,64,101.02	-	2,56,81,017.00	4,46,45,118.02	3,04,97,142.00	1,41,47,976.02	-
<b>Total</b>		<b>1,89,64,101.02</b>	<b>-</b>	<b>2,56,81,017.00</b>	<b>4,46,45,118.02</b>	<b>3,04,97,142.00</b>	<b>1,41,47,976.02</b>	<b>-</b>

**SCHEDULE 3 (b) SPONSORED FELLOWSHIPS AND SCHOLARSHIPS**

1.Sr. No.	2. Name of Sponsor	Opening Balance		Transaction during the year		Amount in Rupees Closing Balance	
		3. Credit	4. Debit	5. Credit	6. Debit	7. Credit	8. Debit
1.	Ministry of Social Justice	23,54,702.00	-	23,64,957.00	-	47,19,659.00	-
<b>Total</b>		<b>23,54,702.00</b>	<b>-</b>	<b>23,64,957.00</b>	<b>-</b>	<b>47,19,659.00</b>	<b>-</b>

**DEPUTY REGISTRAR (F&A)**  
**NIT, HAMIRPUR (HP).**

**NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)**  
**SCHEDULE 3(c) UNUTILISED GRANTS FROM UGC, GOVERNMENT OF INDIA AND STATE GOVERNMENTS**

	Current Year	Previous Year
<b>A. Plan grants: Government of India</b>		
Balance B/F	1,17,75,697.00	7,94,37,547.06
Add: Receipts during the year	1,38,53,00,000.00	1,12,96,38,000.00
<b>Total (a)</b>	<b>1,39,70,75,697.00</b>	<b>1,20,90,75,547.06</b>
Less Lapse	1,17,75,697.00	7,94,37,547.06
Less: Utilized for Revenue Expenditure	1,16,36,62,489.00	99,75,49,259.00
Less: Utilized for Capital expenditure	21,90,78,076.00	12,03,13,044.00
<b>Total (b)</b>	<b>1,39,45,16,262.00</b>	<b>1,19,72,99,850.06</b>
<b>Unutilized carried forward (a-b)</b>	<b>25,59,435.00</b>	<b>1,17,75,697.00</b>
<b>B. UGC grants: Plan</b>		
Balance B/F		
Add: Receipts during the year		
<b>Total (c)</b>		
Less Refunds		
Less: Utilized for Revenue Expenditure		
Less: Utilized for Capital expenditure		
<b>Total d)</b>		
<b>Unutilized carried forward (c-d)</b>		
<b>C. UGC Grants Non Plan</b>		
Balance B/F		
Add: Receipts during the year		
<b>Total (e)</b>		
Less Refunds		

Less: Utilized for Revenue Expenditure		
Less: Utilized for Capital expenditure		
Total (f)		
<b>Unutilized carried forward (e-f)</b>		
<b>D. Grants from State Govt.</b>		
Balance B/F		
Add: Receipts during the year		
Total (g)		
Less Refunds		
Less: Utilized for Revenue Expenditure		
Less: Utilized for Capital expenditure		
Total (h)		
<b>Unutilized carried forward (g-h)</b>		
<b>'Grand Total (A+B+C+D)</b>	<b>25,59,435.00</b>	

**DEPUTY REGISTRAR (F&A)**  
**NIT, HAMIRPUR (HP).**

## SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2025

### SCHEDULE-4

S. No.	Assets Heads	GROSS BLOCK				DEPRECIATION FOR THE YEAR				NET BLOCK (WDV)	
		Opening Balance	Additions	Deductions	Closing Balance	Depreciation Opening Balance	Depreciation for the year	Deductions/ Adjustment	Total Depreciation	31/03/2025	31/03/2024
1	Land	44,20,551.00	-	-	44,20,551.00	-	-	-	-	44,20,551.00	44,20,551.00
2	Site Development/other Infrastructure	9,89,71,941.30	25,15,882.00	-	10,14,87,823.30	5,53,14,289.00	-	-	5,53,14,289.00	4,61,73,534.30	4,36,57,652.30
3	Buildings	4,20,81,25,768.24	4,33,67,529.00	54,34,127.00	4,24,60,59,170.24	1,21,15,48,009.22	8,49,21,183.40	1,08,682.54	1,29,63,60,510.08	2,94,96,98,660.16	2,99,65,77,759.02
4	Roads & Bridges	1,26,27,238.00	-	-	1,26,27,238.00	3,00,149.42	2,52,544.76	-	5,52,694.18	1,20,74,543.82	1,23,27,088.58
5	Tube wells & Water Supply	2,22,81,493.00	97,480.00	-	2,23,78,973.00	8,89,132.66	4,47,579.46	-	13,36,712.12	2,10,42,260.88	2,13,92,360.34
6	Sewerage & Drainage	2,67,01,462.00	1,74,500.00	-	2,68,75,962.00	10,68,058.48	5,37,519.24	-	16,05,577.72	2,52,70,384.28	2,56,33,403.52
7	Electrical Installation and equipment	11,17,585.00	42,54,701.00	-	53,72,286.00	1,09,811.65	2,68,614.30	-33,321.40	4,11,747.35	49,60,538.65	10,07,773.35
8	Plant & Machinery	46,04,59,258.04	41,73,473.00	-	46,46,32,731.04	45,74,19,492.66	32,48,438.03	-2,08,673.65	46,08,76,604.34	37,56,126.70	30,39,765.38
9	Scientific & Laboratory Equipment	11,82,54,166.00	7,91,43,831.00	2,79,55,605.00	16,94,42,392.00	1,98,62,023.36	1,35,55,391.36	22,36,448.40	3,11,80,966.32	13,82,61,425.68	9,83,92,142.64
10	Office Equipment	13,89,09,730.85	2,14,980.00	96,18,000.00	12,95,06,710.85	4,46,72,210.47	97,13,003.31	21,49,800.00	5,22,35,413.78	7,72,71,297.07	9,42,37,520.38
11	Audio Visual Equipment	4,99,715.00	91,21,000.00	-	96,20,715.00	74,957.25	7,21,553.63	-6,84,075.00	14,80,585.88	81,40,129.13	4,24,757.75
12	Computers & Peripherals	8,53,42,957.00	1,78,96,870.00	-	10,32,39,827.00	5,29,40,947.80	2,06,47,965.40	-72,65,600.00	8,08,54,513.20	2,23,85,313.80	3,24,02,009.20
13	Furniture Fixtures & Fittings	13,50,92,290.04	90,32,776.00	-	14,41,25,066.04	12,07,94,539.19	1,08,09,379.95	-27,132.90	13,16,31,052.05	1,24,94,013.99	1,42,97,750.85
14	Vehicles	1,06,19,157.00	33,85,693.00	-	1,40,04,850.00	89,29,874.00	3,38,569.30	-	92,68,443.30	47,36,406.70	16,89,283.00
15	Lib. Books & Scientific Journals	6,21,90,067.06	29,428.00	-	6,22,19,495.06	6,21,90,066.06	-	-	6,21,90,066.06	29,429.00	1.00
16	Small Value Assets	1,22,262.00	-	-	1,22,262.00	1,17,914.65	4,346.35	-	1,22,261.00	1.00	4,347.35
	<b>Total(A)</b>	<b>5,38,57,35,641.53</b>	<b>17,34,08,143.00</b>	<b>4,30,07,732.00</b>	<b>5,51,61,36,052.53</b>	<b>2,03,62,31,475.88</b>	<b>14,54,66,088.51</b>	<b>-37,23,872.01</b>	<b>2,18,54,21,436.38</b>	<b>3,33,07,14,616.15</b>	<b>3,34,95,04,165.67</b>
17	Capital Work in Progress	19,20,19,563.00	0.00	-	19,20,19,563.00	-	-	-	-	<b>19,20,19,563.00</b>	<b>19,20,19,563.00</b>
18	Borewell and Pumping Machinery	-	17,50,000.00	-							
19	Building-Boys	-	7,69,56,790.00	-	7,69,56,790.00	-	-	-	-	<b>7,69,56,790.00</b>	

	Hostel (EWS)										
20	Building-Girls Hostel (EWS)	-	7,16,10,210.00	-	7,16,10,210.00	-	-	-	-	7,16,10,210.00	
	<b>TOTAL (B)</b>	19,20,19,563.00	15,03,17,000.00	-	34,05,86,563.00	-	-	-	-	34,05,86,563.00	19,20,19,563.00
S. No.	Intangible Assets	Opening Balance	Additions	Deductions	Closing Balance	Depreciation Opening Balance	Amortization for the year	Deductions / Adjustment	Total Depreciation	31/03/2025	31/03/2024
21	Computer Software	-	88,87,177.00	-	88,87,177.00	-	35,54,870.80	-35,54,870.80	71,09,741.60	17,77,435.40	-
22	E-Journals	13,82,92,802.00	38,79,169.00	-	14,21,71,971.00	10,38,95,222.60	15,51,667.60	-	10,54,46,890.20	3,67,25,080.80	3,43,97,579.40
23	Patent	-	-	-	-	-	-	-	-	3,85,02,516.20	-
	<b>TOTAL C</b>	13,82,92,802.00	1,27,66,346.00	-	15,10,59,148.00	10,38,95,222.60	51,06,538.40	-35,54,870.80	11,25,56,631.80	-	3,43,97,579.40
	<b>Grand Total (A+B+C)</b>	5,71,60,48,006.53	33,64,91,489.00	4,30,07,732.00	6,00,77,81,763.53	2,14,01,26,698.48	15,05,72,626.91	-72,78,742.81	2,29,79,78,068.18	3,70,98,03,695.35	3,57,59,21,308.07

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**SCHEDULE 4 A PLAN**

S. No.	Assets Heads	GROSS BLOCK				DEPRECIATION FOR THE YEAR				NET BLOCK (WDV)	
		Opening Balance	Additions	Deductions	Closing Balance	Depreciation Opening Balance	Depreciation for the year	Deductions / Adjustment	Total Depreciation	31/03/2025	31/03/2024
1	Land	44,20,551.00	-	-	44,20,551.00	-	-	-	-	44,20,551.00	44,20,551.00
2	Site Development	9,89,71,941.30	25,15,882.00	-	10,14,87,823.30	5,53,14,289.00	-	-	5,53,14,289.00	4,61,73,534.30	4,36,57,652.30
3	Buildings	4,20,81,25,768.24	4,33,67,529.00	54,34,127.00	4,24,60,59,170.24	1,21,15,48,009.22	8,49,21,183.40	1,08,682.54	1,29,63,60,510.08	2,94,96,98,660.16	2,99,65,77,759.02
4	Roads & Bridges	1,26,27,238.00	0.00	-	1,26,27,238.00	3,00,149.42	2,52,544.76	-	5,52,694.18	1,20,74,543.82	1,23,27,088.58
5	Tube wells & Water Supply I	2,22,81,493.00	97,480.00	-	2,23,78,973.00	8,89,132.66	4,47,579.46	-	13,36,712.12	2,10,42,260.88	2,13,92,360.34
6	Sewerage & Drainage	2,67,01,462.00	1,74,500.00	-	2,68,75,962.00	10,68,058.48	5,37,519.24	-	16,05,577.72	2,52,70,384.28	2,56,33,403.52
7	Electrical Installation and equipment	11,17,585.00	42,54,701.00	-	53,72,286.00	1,09,811.65	2,68,614.30	-33,321.40	4,11,747.35	49,60,538.65	10,07,773.35
8	Plant & Machinery	46,04,59,258.04	41,73,473.00	-	46,46,32,731.04	45,74,19,492.66	32,48,438.03	-2,08,673.65	46,08,76,604.34	37,56,126.70	30,39,765.38
9	Scientific & Laboratory Equipment	11,82,54,166.00	7,91,43,831.00	2,79,55,605.00	16,94,42,392.00	1,98,62,023.36	1,35,55,391.36	22,36,448.40	3,11,80,966.32	13,82,61,425.68	9,83,92,142.64
10	Office Equipment	13,89,09,730.85	2,14,980.00	96,18,000.00	12,95,06,710.85	4,46,72,210.47	97,13,003.31	21,49,800.00	5,22,35,413.78	7,72,71,297.07	9,42,37,520.38
11	Audio Visual Equipment	4,99,715.00	91,21,000.00	-	96,20,715.00	74,957.25	7,21,553.63	-6,84,075.00	14,80,585.88	81,40,129.13	4,24,757.75
12	Computers & Peripherals	8,53,42,957.00	1,78,96,870.00	-	10,32,39,827.00	5,29,40,947.80	2,06,47,965.40	-72,65,600.00	8,08,54,513.20	2,23,85,313.80	3,24,02,009.20
13	Furniture Fixtures & Fittings	13,50,92,290.04	90,32,776.00	-	14,41,25,066.04	12,07,94,539.19	1,08,09,379.95	-27,132.90	13,16,31,052.05	1,24,94,013.99	1,42,97,750.85
14	Vehicles	1,06,19,157.00	33,85,693.00	-	1,40,04,850.00	89,29,874.00	3,38,569.30	-	92,68,443.30	47,36,406.70	16,89,283.00
15	Lib. Books & Scientific Journals	6,21,90,067.06	29,428.00	-	6,22,19,495.06	6,21,90,066.06	-	-	6,21,90,066.06	29,429.00	1.00
16	Small Value Assets	1,22,262.00	-	-	1,22,262.00	1,17,914.65	4,346.35	-	1,22,261.00	1.00	4,347.35
	<b>Total (A)</b>	5,38,57,35,641.53	17,34,08,143.00	4,30,07,732.00	5,51,61,36,052.53	2,03,62,31,475.88	14,54,66,088.51	-37,23,872.01	2,18,54,21,436.38	<b>3,33,07,14,616.15</b>	<b>3,34,95,04,165.67</b>
17	<b>Capital Work in Progress</b>	19,20,19,563.00	0.00	-	19,20,19,563.00	-	-	-	-	<b>19,20,19,563.00</b>	<b>19,20,19,563.00</b>
18	<b>Borewell and pumping Machinery</b>		17,50,000.00	-							
19	<b>Building-Boys Hostel (EWS)</b>	-	7,69,56,790.00	-	7,69,56,790.00	-	-	-	-	<b>7,69,56,790.00</b>	
20	<b>Building-Girls Hostel (EWS)</b>	0.00	7,16,10,210.00	-	7,16,10,210.00	-	-	-	-	<b>7,16,10,210.00</b>	

	<b>Total (B)</b>	19,20,19,563.00	15,03,17,000.00	-	34,05,86,563.00	-	-	-	-	34,05,86,563.00	19,20,19,563.00
<b>S. No</b>	<b>Intangible Assets</b>	<b>Opening Balance</b>	<b>Additions</b>	<b>Deductions</b>	<b>Closing Balance</b>	<b>Depreciation Opening Balance</b>	<b>Amortization for the year</b>	<b>Deductions/ Adjustment</b>	<b>Total Depreciation</b>	<b>31/03/2025</b>	<b>31/03/2024</b>
21	Computer Software	-	88,87,177.00	-	88,87,177.00	-	35,54,870.80	-35,54,870.80	71,09,741.60	17,77,435.40	0.00
22	E-Journals	13,82,92,802.00	38,79,169.00	-	14,21,71,971.00	10,38,95,222.60	15,51,667.60	-	10,54,46,890.20	3,67,25,080.80	3,43,97,579.40
23	Patent	-	-	-	-	-	-	-	-	-	0.00
	<b>TOTAL C</b>	13,82,92,802.00	1,27,66,346.00	-	15,10,59,148.00	10,38,95,222.60	51,06,538.40	-35,54,870.80	11,25,56,631.80	3,85,02,516.20	3,43,97,579.40
	<b>Grand Total (A+B+C)</b>	5,71,60,48,006.53	33,64,91,489.00	4,30,07,732.00	6,00,77,81,763.53	2,14,01,26,698.48	15,05,72,626.91	-72,78,742.81	2,29,79,78,068.18	<b>3,70,98,03,695.35</b>	<b>3,57,59,21,308.07</b>

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**SCHEDULE 4 B NON- PLAN**

S. No.	Assets Heads	GROSS BLOCK				DEPRECIATION FOR THE YEAR				NET BLOCK (WDV)	
		Opening Balance	Additions	Deductions	Closing Balance	Depreciation Opening Balance	Depreciation for the year	Deductions / Adjustment	Total Depreciation	31/03/2025	31/03/2024
1	Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Site Development	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Buildings	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Roads & Bridges	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Tube wells & Water Supply I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Sewerage & Drainage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Electrical Installation and equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Plant & Machinery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Scientific & Laboratory Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Office Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Audio Visual Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Computers & Peripherals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	Furniture Fixtures & Fittings	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	Vehicles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	Lib. Books & Scientific Journals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	Small Value Assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Totai(A)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	Capital Work in Progress (B)	0.00	0.00	0.00	0.00					0.00	0.00
									<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>
S. No.	Intangible Assets	Opening Balance	Additions	Deductions	Closing Balance	Depreciation Opening Balance	Amortization for the year	Deductions / Adjustment	Total Depreciation	31/03/2025	31/03/2024
18	Computer Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	E-Journals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	Patent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL C		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<b>Grand Total (A+B+C)</b>										

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**SCHEDULE 4( C) (i) PATENTS AND COPYRIGHTS**

Particulars	Opening Balance 01/04/2024	Additions	Gross	Amortization	Net Block 31/03/2025	Net Block 31/03/2024
<b>A. Patents Granted</b>						
1 Balance as on 31.03.14 of Patents obtained in 2008-09 (Original Value - Rs .... /-)	0.00	0.00	0.00	0.00	0.00	0.00
2 Balance as on 31.03.14 of Patents obtained in 2010-11 (Original Value- Rs .... /-)	0.00	0.00	0.00	0.00	0.00	0.00
3 Balance as on 31.03.14 of Patents obtained in 2012-13 (Original Value - Rs .... /-)	0.00	0.00	0.00	0.00	0.00	0.00
4 Patents granted during the Current Year	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	0.00	0.00	0.00	0.00	0.00	0.00
Particulars	Opening Balance 01/04/2024	Additions	Gross	Patents Granted/ rejected	Net Block 31/03/2025	Net Block 31/03/2024
<b>B. Patents Pending in respect of Patents applied for</b>						
1 Expenditure incurred during 2009-10 to 2011-12	0.00	0.00	0.00	0.00	0.00	0.00
2 Expenditure incurred during 2012-13	0.00	0.00	0.00	0.00	0.00	0.00
3 Expenditure incurred during 2013-14	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>C. Grand Total (A+B)</b>	0.00	0.00	0.00	0.00	0.00	0.00

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**SCHEDULE 5 : INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS**

Amount in Rupees

	Current Year	Previous Year
1 In Central Government Securities	-	-
2 In State Government Securities	-	-
3 Other approved Securities	-	-
4 Shares	-	-
5 Debentures and Bonds	-	-
6 Term Deposits with Banks	6,66,29,072.00	5,63,35,000.00
7 Others (to be specified)	-	-
Total	6,66,29,072.00	5,63,35,000.00

**SCHEDULE 5 A : INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS (FUND WISE)**

Amount in Rupees

	Current Year	Previous Year
1 Endowment Fund Investments	-	-
Pension FUND FDR	6,66,29,072.00	5,63,35,000.00
Total	6,66,29,072.00	-

**SCHEDULE 6 : INVESTMENTS - OTHERS**

Amount in Rupees

	Current Year	Previous Year
1 In Central Government Securities	-	-
2 In State Government Securities	-	-
3 Other approved Securities	-	-
4 Shares	-	-
5 Debentures and Bonds	-	-
6 Others (to be specified)	-	-
Total	-	-

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)**  
**SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2025**

(Amount-Rs)

<b>SCHEDULE 7 - CURRENT ASSETS</b>		<b>Current Year</b>		<b>Previous Year</b>	
<b>1. Stock:</b>					
a) Stores and Spares	-			-	
b) loose Tools	-			-	
c) Publications	-			-	
d) laboratory chemicals consumables and glass ware	50,155.00			3,50,000.00	
e) Building Material	-			-	
f) Electrical Material	-			-	
g) Stationery	-			-	
h) Water supply material	-	50,155.00		-	3,50,000.00
<b>2. Sundry Debtors:</b>					
a) Debts Outstanding for a period exceeding six months	-			-	
b) Others	-			-	-
<b>3. Cash and Bank Balances</b>					
<b>a) With Scheduled Banks:</b>					
Cash In Hand	2,293.00			4,383.00	
Current Account/Grant in Transit	25,59,435.00			7,99,23,623.67	
Fixed Deposit	4,72,99,38,835.91			3,83,68,03,097.21	
Saving Account Main Account	7,44,11,936.63			65,11,302.54	
Saving Account Secrecy Fund	1,27,258.94			1,19,804.94	
<b>b) With non-Scheduled Banks:</b>					
In term deposit Accounts	-			-	
In Savings Accounts	-	4,80,70,39,759.48			3,92,33,62,211.36
<b>4. Post Office- Savings Accounts</b>					
<b>TOTAL</b>		<b>4,80,70,89,914.48</b>		<b>3,92,37,12,211.36</b>	

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

<b>Annexure-A</b>	<b>Amount</b>
1. Grants from UGC A/c	
2. University Receipt a/c	
3. Scholarship A/c	4,19,659.00
4. Academic Fee Receipt a/c	
5. Development (Plan) A/c	
6. Combined Entrance Exams (CBT) A/c	
7. UGC Plan Fellowship A/c	
8. Corpus Fund A/c (EMF)	5,835.76
9. Sponsored Projects Fund A/c	17,32,646.02
10. Sponsored Fellowship A/c	
11. Endowment & Chair A/c (EMF)	1,840.67
12. UGC JRF Fellowship A/c (EMF)	
13. HBA Fund A/c (EMF)	
14. Conveyance A/c (EMF)	
15. UGC Rajiv Gandhi National Fellowship A/c (EMF)	
16. Academic Development Fund A/c (EMF)	
17. Deposit A/c	36,78,550.09
18. Student Fund A/c	
19. Student Aid Fund A/c	
20. Plan Grants for specific schemes	
I. TSA Balance	25,59,435.00
II. Current Account (Cash in Hand)	6,87,00,664.03
III Term deposit with Scheme Banks with SBI	4,79,65,67,907.91
	4,87,36,66,538.48

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)**  
**SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2025**

Amount (Rs.)

<b>SCHEDULE 8- LOANS ADVANCES &amp; DEPOSITS</b>					
		<b>Current Year</b>		<b>Previous Year</b>	
<b>1. Advances to employees: (Non-interest bearing)</b>					
a) Salary	-			-	
b) Festival	-			-	
c) Medical Advance	-			-	
d) Other (to be specified)	19,07,459.11	19,07,459.11		37,79,035.51	37,79,035.51
<b>2. Long Term Advances to employees: (Interest bearing)</b>					
a) Vehicle loan	-			-	
b) Home loan	-			-	
c) Others (to be specified)	-			-	
<b>3. Advances and other amounts recoverable in cash or in kind or for value to be received:</b>					
a) On Capital Account	21,20,000.00			4,15,63,665.24	
b) to Suppliers	-			-	
c) Others	-	21,20,000.00		-	4,15,63,665.24
<b>4. Prepaid Expenses</b>					
a) Insurance		-			
b) Other expenses					-
<b>5. Deposits</b>					
a) Telephone '	-			-	
b) Lease Rent	-			-	
c) Electricity	-			-	
d) AI GTE if applicable	-			-	
e) Others (to be specified)	-	-		-	

<b>6. Income Accrued:</b>				
a) On Investments from Earmarked/ Endowment Funds	9,71,065.00		-	
b) On Investments-FDR	1,92,06,256.00		6,95,56,123.00	
c) On Investments-FDR (Corpus Fund)	7,49,72,170.00		21,00,02,171.00	
d) On Loans and Advances	-		-	
e) Others (includes income due unrealized) Saving Bank	-	9,51,49,491.00	32,843.00	27,95,91,137.00
<b>7. Other- Current assets receivable from UGC/sponsored projects</b>				
a) Debit balances in Sponsored Projects	-		-	
b) Debit balances in Sponsored Fellowships & Scholarships	-		-	
c) Grants Receivable	-		-	
d) Other receivables from UGC	-	-	-	
<b>8. Claims Receivable</b>				
Misc. Income	3,25,954.00		2,03,090.00	
License Fees	65,220.00		2,05,360.00	
Garage Rent	4,000.00		7,900.00	
Interest on loan & Advances from Staff	-		-	
Income receivable from Forest Department	-		-	
Rent from Guest House	-		-	
Rent from Shop	-	3,95,174.00	-	4,16,350.00
<b>TOTAL</b>		<b>9,95,72,124.11</b>		<b>32,53,50,187.75</b>

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)**  
**SCHEDULE FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31/03/2025**

<b>SCHEDULE 9- ACADEMIC RECEIPT</b>		<b>(Amount-Rs)</b>	
		<b>Current Year</b>	<b>Previous Year</b>
<b>FEES FROM STUDENTS</b>			
<b>Academic</b>			
1. Tuition fee		21,91,99,161.00	20,02,01,225.50
2. Admission fee		23,07,500.00	14,43,100.00
3. Enrolment fee		-	-
4. Library Admission fee		47,27,825.00	36,69,150.00
5. Laboratory fee		-	-
6. Art & Craft fee		-	-
7. Registration fee		2,11,300.00	2,95,519.00
8. Syllabus fee			
<b>Total (A)</b>		<b>22,64,45,786.00</b>	<b>20,56,08,994.50</b>
<b>Examinations</b>			
1. Admission test fee		-	-
2. Annual Examination fee		72,39,550.00	62,31,350.00
3. Mark sheet certificate fee		-	-
4. Entrance examination fee		-	-
5. Supplementary fees		15,13,201.00	6,54,700.00
6. Phd thesis submission		8,48,000.00	4,80,000.00
<b>Total (B)</b>		<b>96,00,751.00</b>	<b>73,66,050.00</b>
<b>Other Fees</b>			
1. Identity card fee		-	14,400.00
2. Fine/ Miscellaneous fee		2,33,66,381.00	3,61,200.00
3. Medical fee		48,66,250.00	39,50,650.00
4. Transportation fee		-	-
5. Hostel fee		-	-
6. Grade Card Fee		14,24,185.95	7,52,800.00
7. Common Facility Fee		49,05,875.00	37,05,775.00

<b>Total(C)</b>	<b>3,45,62,691.95</b>	<b>87,84,825.00</b>
<b>Sale of Publications</b>		
1. Sale of Admission forms	-	-
2. Sale of syllabus and Question Paper etc.	-	-
3. Sale of prospectus including admission forms	-	-
<b>Total (D)</b>	<b>-</b>	<b>-</b>
<b>Other Academic Receipts</b>		
1. Registration fee for workshops programmes	-	-
2. Registration fees (Academic Staff College)	-	-
<b>Total (E)</b>	<b>-</b>	<b>-</b>
<b>GRAND TOTAL (A+B+C+D+E)</b>	<b>27,06,09,228.95</b>	<b>22,17,59,869.50</b>

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**SCHEDULE 10- GRANTS SUBSIDIES IRREVOCABLE GRANTS RECEIVED****Amount in Rupees**

Particulars	Plan			Total Plan	Non Plan UGC/Govt. of India	Current year Total	Previous Year Total
	Govt. of India	UGC					
		Plan	Specific Schemes				
Balance B/F	1,17,75,697.00	-	-	-	-	1,17,75,697.00	7,94,37,547.06
Add: Receipts during the year	1,38,53,00,000.00	-	-	1,38,53,00,000.00	-	1,38,53,00,000.00	1,12,96,38,000.00
Total	1,39,70,75,697.00	-	-	1,39,70,75,697.00	-	1,39,70,75,697.00	1,20,90,75,547.06
Less: Grant Lapse	1,17,75,697.00	-	-	1,17,75,697.00	-	1,17,75,697.00	7,94,37,547.06
Balance	1,38,53,00,000.00	-	-	1,38,53,00,000.00	-	1,38,53,00,000.00	1,12,96,38,000.00
Less: Utilized for Capital expenditure (A)	21,90,78,076.00	-	-	21,90,78,076.00	-	21,90,78,076.00	12,03,13,044.00
Balance	1,16,62,21,924.00	-	-	1,16,62,21,924.00	-	1,16,62,21,924.00	1,00,93,24,956.00
Less: utilized for Revenue Expenditure (B)	1,16,36,62,489.00	-	-	1,16,36,62,489.00	-	1,16,36,62,489.00	99,75,49,259.00
Balance C/F (C)	25,59,435.00	-	-	25,59,435.00	-	25,59,435.00	1,17,75,697.00

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**SCHEDULE 11- INCOME FROM INVESTMENTS****Amount in Rupees**

<b>Particulars</b>	<b>Earmarked/ Endowment Fund</b>		<b>Other Investments</b>	
	<b>Current Year</b>	<b>Previous Year</b>	<b>Current Year</b>	<b>Previous Year</b>
<b>1. Interest</b>				
a. On Government Securities				
b. Other Bonds/Debentures				
2. Interest on Term Deposits	-	-	16,17,58,371.00	5,93,00,600.00
3. Income accrued but not due on Term Deposits/Interest bearing advances to employees			1,92,06,256.00	18,38,02,171.00
4. Interest on Savings Bank Accounts				
5. Others (On Project Grants)				
<b>TOTAL</b>	<b>-</b>	<b>-</b>	<b>18,09,64,627.00</b>	<b>24,31,02,771.00</b>
<b>Transferred to Earmarked/Endowment Funds</b>				
<b>Balance</b>				

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

## NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)

## SCHEDULE FORMING PART OF INCOME &amp; EXPENDITURE FOR THE PERIOD/YEAR ENDED 31/03/2025

## SCHEDULE 12- INTEREST EARNED

(Amount-Rs.)

Particulars	Current Year	Previous Year
1 On Savings Accounts With Schedule Bank	8,11,739.00	13,32,196.00
2 On Loans:		
a) Employees/Staff	-	-
b) Others	-	-
3. On Debtors and Other Receivables	-	-
<b><u>TOTAL</u></b>	<b>8,11,739.00</b>	<b>13,32,196.00</b>

DEPUTY REGISTRAR (F&A)  
NIT HAMIRPUR (HP)

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)**  
**SCHEDULE FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31/03/2025**

**SCHEDULE 13-OTHER INCOME****(Amount-Rs)**

		<b>Current Year</b>		<b>Previous Year</b>	
1. Hostel Room Rent		1,70,10,250.00		2,02,43,750.00	
2. License fee		28,33,047.00		22,04,700.40	
3. Hire Charges of Auditorium/Shop/Convention Centre etc.		18,51,569.00		13,08,264.80	
4. Electricity charges recovered					
5. Water charges recovered		-		18,14,179.00	
6. Rent from Guest House		12,18,900.00		16,21,649.00	
7. Rent from Garage		1,07,200.00		80,227.00	
<b>Total</b>		<b>2,30,20,966.00</b>	<b>2,30,20,966.00</b>	<b>2,72,72,770.20</b>	<b>2,72,72,770.20</b>
<b>B. Sale of Institute's publications</b>			-	-	
<b>C. Income from holding events</b>					
1. Gross Receipts from annual function/ sports carnival			-	-	
Less: Direct expenditure incurred on the annual function/ sports carnival			-	-	
2. Gross Receipts from fetes			-	-	
Less: Direct expenditure incurred on the fetes			-	-	
3. Gross Receipts for educational tours			-	-	
Less: Direct expenditure incurred on the tours			-	-	
4. Others (to be specified and separately disclosed)			-	-	
<b>Total</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

<b>D. Others</b>					
1. Income from consultancy		-			
2. RTI fees		-			
3. Income from Royalty		-			
4. Sale of application form (recruitment)		-			
5. Misc. receipts (Sale of tender form waste paper Grass tree etc.)		3,28,194.00		82,99,569.00	
6. Profit on Sale/disposal of Assets/Stock		-			
a) Owned assets		-			
b) Assets received free of cost		-			
7. Grants/Donations from Institutions Welfare Bodies and International Organizations		-			
8 Others (specify) Overhead Charges		4,36,957.00		6,20,962.00	
10. Charges for use of transport		-		-	
<b>Total</b>		<b>7,65,151.00</b>	<b>7,65,151.00</b>	<b>89,20,531.00</b>	<b>89,20,531.00</b>
<b>Grand Total (A+B+C+D)</b>			<b>2,37,86,117.00</b>		<b>3,61,93,301.20</b>

**SCHEDULE 14- PRIOR PERIOD INCOME**

Particulars	Amount In Rupees	
	Current Years	Previous Year
1. Academic Receipts	-	-
2. Income from Investments	-	-
3. Accrued Interest (FY 2022-23 corpus)	-	2,62,00,000.00
4. Other Income	-	-
<b>Total</b>	<b>-</b>	<b>2,62,00,000.00</b>

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)**  
**SCHEDULE FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31/03/2025**

**SCHEDULE 15- STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)**

	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Salaries	-	59,87,30,322.00	59,87,30,322.00	-	54,71,69,129.00	54,71,69,129.00
b) Allowances and Bonus	-	-	-	-	-	-
c) Contribution to New Pension Fund	-	14,41,10,688.00	14,41,10,688.00	-	3,55,75,885.00	3,55,75,885
d) Contribution to Other Fund	-	-	-	-	-	-
e) Staff Welfare Expenses	-	11,42,109.50	11,42,109.50	-	3,19,063.00	3,19,063.00
f) Retirement and Terminal Benefits	-	28,28,09,921.00	28,28,09,921.00	-	10,33,02,639.00	10,33,02,639.00
g) LTC facility	-	36,02,391.00	36,02,391.00	-	22,26,298.00	22,26,298.00
h) Medical facility	-	1,24,64,146.00	1,24,64,146.00	-	48,66,305.00	48,66,305.00
i) Children Education Allowance	-	43,75,443.00	43,75,443.00	-	37,40,175.00	37,40,175.00
j) Honorarium	-	2,07,323.00	2,07,323.00	-	71,095.00	71,095.00
l) Others (specify) Professional development allowance	-	35,68,976.00	35,68,976.00	-	1,29,13,458.00	1,29,13,458.00
Overtime Drivers	-	-	-	-	-	-
Leave Encashment	-	36,85,26,782.00	36,85,26,782.00	-	75,67,793.00	75,67,793.00
<b>TOTAL</b>	-	1,41,95,38,101.50	1,41,95,38,101.50	-	71,77,51,840.00	71,77,51,840.00

**DEPUTY REGISTRAR (F&A)**  
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**SCHEDULE 15 A- EMPLOYEES RETIREMENT AND TERMINAL BENEFITS**

	<b>Pension</b>	<b>Gratuity</b>	<b>Leave Encashment</b>	<b>Total</b>
Opening Balance as on ____				
Addition : Capitalized value of Contributions Received from other Organizations				
Total (a)				
Less: Actual Payment during the Year (b)				
Balance Available on 31.03 c (a-b)				
Provision required on 31.03 as per Actuarial Valuation (d)				
A. Provision to be made in the Current year (d -c)				
B. Contribution to New Pension Scheme				
C. Medical Reimbursement to Retired Employees				
D. Travel to Hometown on Retirement				
E. Deposit Linked Insurance Payment				
<b>Total (A+B+C+D+E)</b>				

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)**  
**SCHEDULE FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31/03/2025**

<b>SCHEDULE 16- ACADEMIC EXPENSES</b>						
	<b>Current Year</b>			<b>Previous Year</b>		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Laboratory expenses	-	-	-	-	17,700.00	17,700.00
b) Field work/Participation in Conferences	-	-	-	-	2430.00	2430.00
c) Expenses on Seminars/Workshops	-	83,499.00	83,499.00	-	2,22,170.00	2,22,170.00
d) Payment to visiting faculty	-	-	-	-	-	-
e) Examination	-	16,97,775.00	16,97,775.00	-	16,72,108.00	16,72,108.00
f) Student Welfare expenses	-	11,29,548.50	11,29,548.50	-	4,16,981.00	4,16,981.00
g) Admission expenses --	-	-	-	-	-	-
h) Convocation expenses	-	30,39,951.00	30,39,951.00	-	33,16,820.00	33,16,820.00
i) Publications	-	-	-	-	-	-
j) Stipend/means-cum-merit scholarship	-	8,62,53,879.00	8,62,53,879.00	-	8,68,62,627.00	8,68,62,627.00
k) Subscription Expenses	-	-	-	-	-	-
l) Others (specify) academic expenses	-	36,21,578.00	36,21,578.00	-	14,21,571.00	14,21,571.00
m) Accreditation to AICTE Expenses	-	1,59,000.00	1,59,000.00	-	-	-
n) Departmental Operating cost less closing stock of consumable material.	-	70,00,756.00	70,00,756.00	-	49,44,611.00	49,44,611.00
<b>Total</b>	-	10,29,85,986.50	10,29,85,986.50	-	9,88,77,018.00	9,88,77,018.00

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)**  
**SCHEDULE FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31/03/2025**  
**SCHEDULE 17- ADMINISTRATIVE AND GENERAL EXPENSES**

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
<b>A Infrastructure</b>						
a) Electricity and power	-	2,76,39,598.00	2,76,39,598.00	-	1,40,00,262.00	1,82,21,465.00
b) Water charges	-	5,22,281.00	5,22,281.00	-	42,21,203.00	
c) Insurance	-	-	-	-	-	
d) Rent Rates and Taxes (including property tax)	-	-	-	-	-	
<b>B Communication</b>						
e) Postage and Stationery	-	-	-	-	-	-
f) Telephone Fax and Internet Charges	-	10,76,341.00	10,76,341.00	-	82,635.00	82,635.00
<b>C Others</b>						
g) Printing and Stationery (consumption)	-	10,02,494.00	10,02,494.00	-	12,34,093.00	14,43,90,082.00
h) Travelling and Conveyance Expenses	-	37,52,789.00	37,52,789.00	-	63,02,128.00	
i) Hospitality	-	-	-	-	16,660.00	
j) Auditors Remuneration	-	2,53,840.00	2,53,840.00	-	3,11,520.00	
k) Professional Charges	-	-	-	-	3,46,110.00	
l) Advertisement and Publicity	-	9,51,949.00	9,51,949.00	-	16,69,027.00	
m) Magazines & Journals	-	-	-	-	-	
n) Others Misc. Administrative expenses	-	99,43,378.00	99,43,378.00	-	75,80,989.00	
o) Security Charges	-	3,38,60,864.00	3,38,60,864.00	-	3,39,15,329.00	
p) Legal expenses	-	12,40,412.00	12,40,412.00	-	18,47,073.00	
r) Wages/ Outsourcing	-	6,23,66,209.00	6,23,66,209.00	-	3,97,854.00	
s) Salary Contract/ part time staff	-	4,55,36,676.00	4,55,36,676.00	-	9,07,69,299.00	
<b>Total</b>	-	18,81,46,831.00	18,81,46,831.00	-		16,26,94,182.00

**SCHEDULE 18-TRANSPORTATION EXPENSES**

Particulars		Amount in Rupees		
		Current Year		Previous Year
		Plan	Non-Plan	Total
<b>1 Vehicles (owned by institution)</b>				
a) Running expenses	-	16,44,880.00	16,44,880.00	10,49,988.00
b) Repairs & maintenance	-	5,69,760.00	5,69,760.00	2,96,913.00
c) Insurance expenses	-	1,45,975.00	1,45,975.00	77,061.00
<b>2 Vehicles taken on rent/lease</b>	-	-	-	-
a) Rent/lease expenses	-	-	-	-
<b>3 Vehicle (Taxi) hiring expenses</b>	-	-	-	-
<b>Total</b>	-	<b>23,60,615.00</b>	<b>23,60,615.00</b>	<b>14,23,962.00</b>

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)**  
**SCHEDULE FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31/03/2025**

**SCHEDULE 19- REPAIR & MAINTENANCE**Amount in  
Rupees

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Buildings	-	1,47,17,419.00	1,47,17,419.00	-	1,03,20,827.00	1,03,20,827.00
b) Furniture & Fixtures	-	84,960.00	84,960.00	-	-	-
c) Plant & Machinery	-	-	-	-	-	-
d) Office Equipment	-	35,55,646.00	35,55,646.00	-	20,65,102.00	20,65,102.00
e) Computers	-	1,16,350.00	1,16,350.00	-	83,730.00	83,730.00
f) Laboratory & Scientific equipment	-	38,47,327.00	38,47,327.00	-	23,304.00	23,304.00
g) Audio Visual equipment	-	-	-	-	-	-
h) Cleaning Material & Services	-	2,05,66,703.00	2,05,66,703.00	-	2,22,35,672.00	2,22,35,672.00
i) Book binding charges	-	-	-	-	-	-
j) Gardening	-	-	-	-	-	-
k) Estate Maintenance	-	-	-	-	-	-
l) Others Water supply	-	61,920.00	61,920.00	-	-	-
m) Road	-	-	-	-	-	-
n) Street light/Electric Installation	-	17,46,048.00	17,46,048.00	-	-	-
o) Oxidation Pond	-	21,74,005.00	21,74,005.00	-	-	-
p) Maintenance of Entrance Flayer In Admin Block	-	-	-	-	-	-
<b>Total</b>	-	4,68,70,378.00	4,68,70,378.00	-	3,47,28,635.00	3,47,28,635.00

**DEPUTY REGISTRAR (F&A)**  
**NIT HAMIRPUR (HP)**

**SCHEDULE 20- FINANCE COSTS**

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Bank charges	-	59,515.00	59,515.00	-	-	-
b) Others (specify)	-	-	-	-	-	-
<b>Total</b>	-	59,515.00	59,515.00	-	-	-

**DEPUTY REGISTRAR (F&A)**  
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## NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)

## SCHEDULE FORMING PART OF INCOME &amp; EXPENDITURE FOR THE PERIOD/YEAR ENDED 31/03/2025

## SCHEDULE 21- OTHER EXPENSES

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Provision for Bad and Doubtful Debts/Advances	-	-	-	-	-	-
b) Irrecoverable Balances Written- off	-	-	-	-	-	-
c) Grants/Subsidies to other institutions/organizations	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-

## SCHEDULE 22: PRIOR PERIOD EXPENSES

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1 Establishment expenses	-	-	-	-	-	-
2 Academic expenses	-	-	-	-	-	-
3 Administrative expenses	-	-	-	-	-	-
4 Transportation expenses	-	-	-	-	-	-
5 Repairs & Maintenance	-	-	-	-	-	-
6 Other expenses	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-

DEPUTY REGISTRAR (F&A)  
NIT HAMIRPUR (HP)

**NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)**  
**SCHEDULE FORMING PART OF THE ACCOUNTS FOR THE PERIOD ENDED**  
**31st March, 2025**

**SCHEDULE: 23 SIGNIFICANT ACCOUNTING POLICIES (ILLUSTRATIVE)**

1. BASIS FOR PREPARATION OF ACCOUNTS The accounts are prepared under the Historical Cost Convention unless otherwise stated and generally on the Accrual method of accounting.

2. REVENUE RECOGNITION 2.1 Fees from Students (except Tuition Fees) and Interest on Savings Bank account are accounted on cash basis. Tuition Fees collected separately for each semester is accounted on accrual basis.

2.2 Income from Land, Buildings and Other Property and Interest on Investments are accounted on accrual basis.

2.3 Interest on interest bearing advances to staff for House Building, Purchase of Vehicles and Computers is accounted on accrual basis every year.

**3. FIXED ASSETS AND DEPRECIATION**

3.1 Fixed assets are stated at cost of acquisition including inward freight, duties and taxes and incidental and direct expenses related to acquisition, installation and commissioning.

3.2 Gifted and Donated assets are valued at the declared value where available; if not available, the value is estimated based on the present market value adjusted with reference to the physical condition of the asset. They are set-up by credit to Capital Fund and merged with the Fixed Assets of the Institution. Depreciation is charged at the rates applicable to the respective assets.

3.3 Books received as gifts, are valued at selling prices printed on the books. Where they are not printed, the value is based on assessment.

3.4 Fixed assets are valued at cost less accumulated depreciation. Depreciation on fixed assets is provided on Straight line method, at the following rates:

1.	Land	0%
2.	Site Development	0%
3.	Buildings	2%
4.	Roads & Bridges	2%
5.	Tube wells & Water Supply	2%
6.	Sewerage & Drainage	2%
7.	Electrical Installation and equipment	5%
8.	Plant & Machinery	5%
9.	Scientific & Laboratory Equipment	8%
10.	Office Equipment	7.5%
11.	Audio Visual Equipment	7.5%
12.	Computers & Peripherals	20%
13.	Furniture, Fixtures & Fittings	7.5%
14.	Vehicles	10%
15.	Lib. Books & Scientific Journals	10%

3.5 Depreciation is provided for the whole year on additions during the year.

3.6 Where an asset is fully depreciated, it will be carried at a residual value of Rs.1 in the Balance Sheet and will not be further depreciated. Thereafter, depreciation is calculated on the additions of each year separately at the rate of depreciation applicable for that asset head.

3.7 Assets created out of Earmarked Funds and funds of Sponsored Projects, where the ownership of such assets vests in the Institution, are setup by credit to Capital Fund and merged with the Fixed Assets of the Institution. Depreciation is charged at the rates applicable to the respective assets. Assets created out of Sponsored Project funds, where the ownership is retained by the sponsors but held and used by the Institution are separately disclosed in the Notes on Accounts as below;

<b>S. No</b>	<b>Asset Name</b>	<b>Value as on 31.03.2025 (Rs.)</b>
1.	Furniture Fixtures & Fittings	494686.00
2.	Computer & Peripheral	3490149.00
3.	Scientific & Laboratory Equipment	1859969.00

3.8 Assets, the individual value of each of which is Rs. 2000 or less (except Library Books) are treated as Small Value Assets, 100% depreciation is provided in respect of such assets at the time of their acquisition. However physical accounting and control are continued by the holders of such assets.

#### 4 Intangible Assets:

Patents and copy rights, E Journals and Computer Software are grouped under Intangible Assets. Depreciation charged @ 40% on the same.

4.1. PATENTS: No such expenditure incurred.

4.2 Electronic Journals (E-Journals) are separated from Library Books in view of the limited benefit that could be derived from the on-line access provided. E-journals are not in a tangible form, but temporarily capitalized and in view of the magnitude of expenditure and the benefit derived in terms of perpetual knowledge acquired by the Academic and Research Staff; Depreciation is provided in respect of E-journals at a higher rate of 40% as against depreciation of 10% provided in respect of Library Books.

4.3 Expenditure on acquisition of software has been separated from computers and peripherals, as apart from being intangible assets, the rate of obsolescence in respect of these is very high. Depreciation is provided in respect of software at a higher rate of 40% as against depreciation of 20% provided in respect of Computers & Peripherals.

5. STOCKS: Expenditure on purchase of chemicals, glassware, publications and other stores is accounted as revenue expenditure, except that the value of closing stocks held on 31<sup>st</sup> March is set up as inventories by reducing the corresponding Revenue Expenditure on the basis of information obtained from Departments. They are valued at cost.

## 6. RETIREMENT BENEFITS:

- Gratuity: During the year F.Y. 2024-25, Provision for Gratuity has been made on the basis of Actuarial valuation report in compliance to AS-15.
- Leave Encashment: During the year F.Y. 2024-25, Provision for Leave Encashment has been made on the basis of Actuarial valuation report in compliance to AS-15.
- Other retirement benefits: Pension Benefits, Deposit Linked Insurance and Travel to Home Town on retirement are accounted on actual payment basis.

## 7. INVESTMENTS

a. Long term investments: NIL

b. Short Term investments: NIL

## 8. EARMARKED/ENDOWMENT FUNDS:

8.1 CORPUS: Corpus fund is separately maintained. Interest accrued thereon has been accounted for in the books on accrual basis.

8.2 PENSION FUND: Pension fund is maintained by the Institution.

## 9 GOVERNMENT AND UGC GRANTS

9.1 Government Grants are now on TSA of PFMS portal.

9.2 Total Capital Grant is transferred to Capital fund and on TSA, any unutilised grant automatically lapsed in beginning next financial year. During the year 2024-25, an amount of Rs. 21,20,000.00 has been kept as unutilized grant since this amount has not been booked as expense yet.

9.3 Total Revenue Grant is transferred to Income and Expenditure account and on TSA any unutilised grant is automatically lapsed in beginning of next financial year.

10 INVESTMENTS OF EARMARKED FUNDS AND INTEREST INCOME ACCRUED ON SUCH INVESTMENTS: Investment of above funds are kept in Separate deposits of Institution and income is accounted accordingly.

## 11 SPONSORED PROJECTS

In respect of ongoing Sponsored Projects, the amounts received from sponsors are credited to the head 11.1 "Current Liabilities and Provisions -Current Liabilities -Other Liabilities -Receipts against ongoing sponsored projects." As and when expenditure is incurred /advances are paid against such projects, or the concerned project account is debited with allocated overhead charges, the liability account is debited.

12 INCOME TAX The income of the Institution is exempt from Income Tax under Section 10(23c) (iiiab) of the Income Tax Act 1961. No provision for tax is therefore made in the accounts.

SCHEDULE: 24 CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS (ILLUSTRATIVE)

1. CONTINGENT LIABILITIES: 1.1 As on 31.03.2025: Court Cases are filed against the Institution; however contingent liability if any cannot be ascertained at present stage except in two number arbitration cases in which Institute has filed appeal before hon'able High Court HP.

1.2 Letters of credit established by the Bank on behalf of the Institution and outstanding on 31.03.2025 - Rs NIL

1.3 A demand of Rs.65.46 Lakh has been raised by EPFO vide e-proceeding Diary No.22/2019 dated 09.02.2022. Against the penalty order u/s 7A of EPF and MP Act 1952, Institute has filed an appeal before the Hon'ble Tribunal Court, Chandigarh and 20% of the assessed amount has been deposited.

2. CAPITAL COMMITMENTS:

2.1 The Value of contracts remaining to be executed on Capital Account and not provided, as major works are being executed through CPWD deposit.

2.2 In the Balance Sheet as on 31.3.2025 and the Balance Sheets of earlier years, Fixed Assets created out of Plan funds and Fixed Assets created out of non plan funds were not exhibited distinctly.

3. Previous year's figures have been regrouped wherever necessary.

4. The details of balances in Saving Bank Accounts, Current Accounts and Fixed Deposit Accounts with Banks are enclosed as attachment 'A' to the Schedule of Current Assets.

5. In reply to the audit observation no.3 to the 'Persistent Irregularities in Annual Accounts', it is clarified that the institute is in the process of assessing/computing the interest earned on grants during the respective years and the same will be returned to MOE after seeking approval from competent authority. However, from FY 2020-21 the grant is being received through TSA portal of PFMS.

6. The campus of Institution is constructed on Land area measuring 688156 Sq meters, out of which Land Measuring 680083 Sq meter is owned by Government of Himachal Pradesh. The process of transferring the Land in the name of NIT has been taken up with the revenue authorities of the State.

7. Schedules I to 24 are annexed to and form an integral part of the Balance Sheet at 31<sup>st</sup> March 2025 and the Income & Expenditure account for the year ended on that date.

8. In reply to the audit observation no A.3.ii dtd. 27.09.2024, It is clarified that an amount of Rs. 51.33 lakh (Rs. 44.28 lakh for F.Y. 2023-24 + Rs. 7.05 lakh for F.Y. 2022-23) has

already been accounted for at the time of maturity of FDR in respect of Pension Fund. However, Accrued Interest of Rs. 9, 71,065 has been booked during the year.

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**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)**  
**GENERAL PROVIDENT FUND**  
**RECEIPTES AND PAYMENTS ACCOUNT**  
**FOR THE YEAR 01/04/2024 TO 31/03/2025**

PREVIOUS YEARS (Rs.)	RECEIPTS HEAD OF ACCOUNT	AMOUNT (Rs.)
48,72,60,325.99	CASH IN BANK	49,56,41,016.99
5,08,19,043.00	SUBSCRIPTION	4,78,07,150.00
20,99,000.00	REFUND OF ADVANCE	22,91,300.00
1,503.00	MIS RECEIPT	-
63,93,624.00	BANK INTEREST	6,49,92,541.00
<u>54,65,73,495.99</u>		<u>61,07,32,007.99</u>
	<b>PAYMENT</b>	
17,83,700.00	TEM. ADVANCE TO STAFF	18,45,000.00
4,91,04,779.00	WITHDRAWAL	6,43,92,850.00
-	BANK CHARGES	-
44,000.00	GENERAL ACCOUNT OF INSTITUTE	88,000.00
<u>49,56,41,016.99</u>	CLOSING BANK BALANCE	<u>54,44,06,157.99</u>
<u>54,65,73,495.99</u>		<u>61,07,32,007.99</u>

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**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)**  
**GENERAL PROVIDENT FUND**  
**INCOME AND EXPENDITURE ACCOUNT**  
**FOR THE YEAR 01/04/2024 TO 31/03/2025**

<b>PREVIOUS YEARS (Rs.)</b>	<b>EXPENDITURE HEAD OF ACCOUNT</b>	<b>AMOUNT (Rs.)</b>
3,50,49,828.00	Interest credited to the	3,66,61,602.00
-	Subscribers accounts	-
	Bank Charges	
21,95,769.00	Excess of + Income/-loss	26,14,270.00
<u>3,72,45,597.00</u>		<u>3,92,75,872.00</u>
<b>INCOME</b>		
63,93,624.00	Income from Investment	
3,74,56,253.00	Bank Interest received	6,49,92,541.00
<u>66,04,280.00</u>	Add: Interest due for 2024-2025	1,17,39,584.00
3,72,45,597.00	Less: Due of year 2023-2024	<u>3,74,56,253.00</u>
		3,92,75,872.00
<u>3,72,45,597.00</u>		3,92,75,872.00

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**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)**  
**GENERAL PROVIDENT FUND**  
**BALANCE SHEET**  
**AS ON 31/03/2025**

PREVIOUS YEARS (Rs.)	HEAD OF ACCOUNT	AMOUNT (Rs.)
	<b>LIABILITIES</b>	
	Subscription Account (PF Contribution)	
80,20,93,013.55	Upto 2024	85,29,12,056.55
<u>5,08,19,043.00</u>	DURING THE YEAR	<u>4,78,07,150.00</u>
<b><u>85,29,12,056.55</u></b>		<b><u>90,07,19,206.55</u></b>
	Add: Interest	
36,05,79,038.45	Upto 2024	39,56,28,866.45
3,50,49,828.00	During the year	3,66,61,602.00
<b><u>39,56,28,866.45</u></b>		<b><u>43,22,90,468.45</u></b>
	Less : Withdrawal	
65,79,39,051.00	upto 2024 During the year	70,70,43,830.00
<u>4,91,04,779.00</u>		<u>6,43,92,850.00</u>
<b><u>70,70,43,830.00</u></b>		77,14,36,680.00
		56,15,72,995.00
<b>54,14,97,093.00</b>		
	<b>Income &amp; Expenditure Account</b>	
-81,70,389.01	upto 2024	-59,74,620.01
<u>21,95,769.00</u>	During the year	<u>26,14,270.00</u>
-59,74,620.01		-33,60,350.01
<b><u>3,74,159.00</u></b>		
	Wrong credit in GPF	1,503.00
	Account Op Bal	
-42,497.00	Less: Paid During the year	-
	Add: CY	-
		1,503.00
<b><u>53,58,54,134.99</u></b>		<b>55,82,14,147.99</b>
	<b>ASSETS</b>	
	Temporary Advance	
4,78,56,048.00	upto 2024	4,96,39,748.00
<u>17,83,700.00</u>	During the year	<u>18,45,000.00</u>
<b><u>4,96,39,748.00</u></b>		<b><u>5,14,84,748.00</u></b>
	Less : Refund	
4,52,22,883.00	upto 2024	4,73,21,883.00
<u>20,99,000.00</u>	During the year	<u>22,91,300.00</u>
<b><u>4,73,21,883.00</u></b>		<b><u>4,96,13,183.00</u></b>
<b>23,17,865.00</b>		<b>18,71,565.00</b>
	<b>Bank Interest Accrued</b>	
66,04,280.00	Opening Balance	3,74,56,253.00
<u>3,74,56,253.00</u>	Add : (C-Year accrued)	<u>1,17,39,584.00</u>
4,40,60,533.00		4,91,95,837.00
<u>66,04,280.00</u>	Less : Interest received on Maturity	3,74,56,253.00
		1,17,39,584.00
3,74,56,253.00		
	<b>RECOVERABLE FROM</b>	
	<b>GENERAL ACCOUNT</b>	
	General Account for FY 23-24 & 24-25	1,32,000.00
	Wrongly credit in GPF FY 23-24	4,39,000.00
4,39,000.00	Less: Adjustment General A/c FY 23-24	3,74,159.00
		64,841.00

49,56,41,016.99	Closing Balance Bank	54,44,06,157.99
<u>53,58,54,134.99</u>		<u>55,82,14,147.99</u>

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