

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

ANNUAL REPORT & ANNUAL ACCOUNTS 2022-23



(AUTHENTICATED)

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

Dated:-

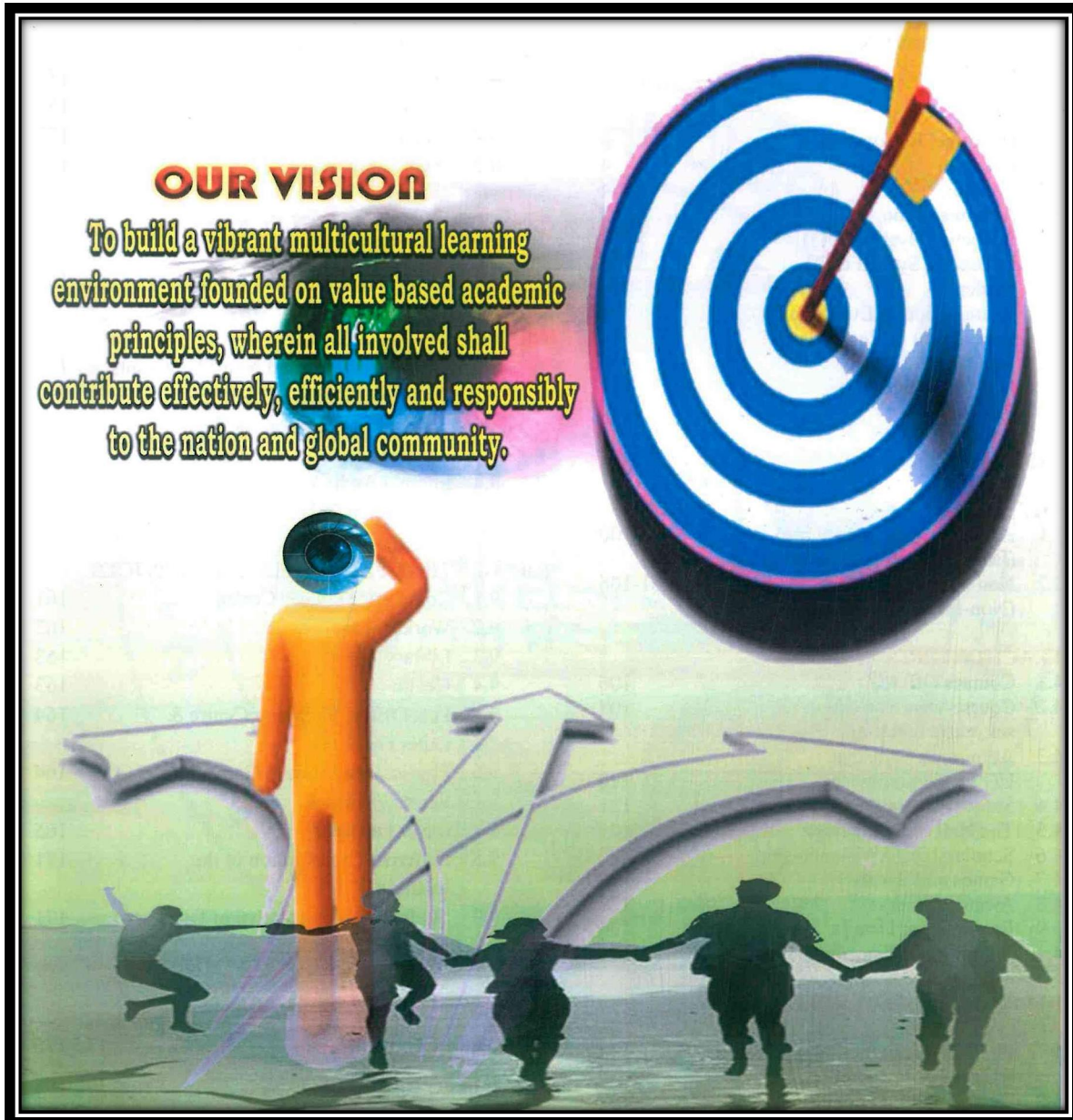
**NATIONAL INSTITUTE OF TECHNOLOGY
HAMIRPUR (H.P) - 177005**



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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 7th August 1986 as Regional Engineering College, a joint venture of the Govt. of India and Govt. of Himachal Pradesh.

On 26th 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 5th June, 2007. The provisions of Act came into force with effect from 15th August, 2007 as per notification S.O. 1384 (E) dated 9th 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

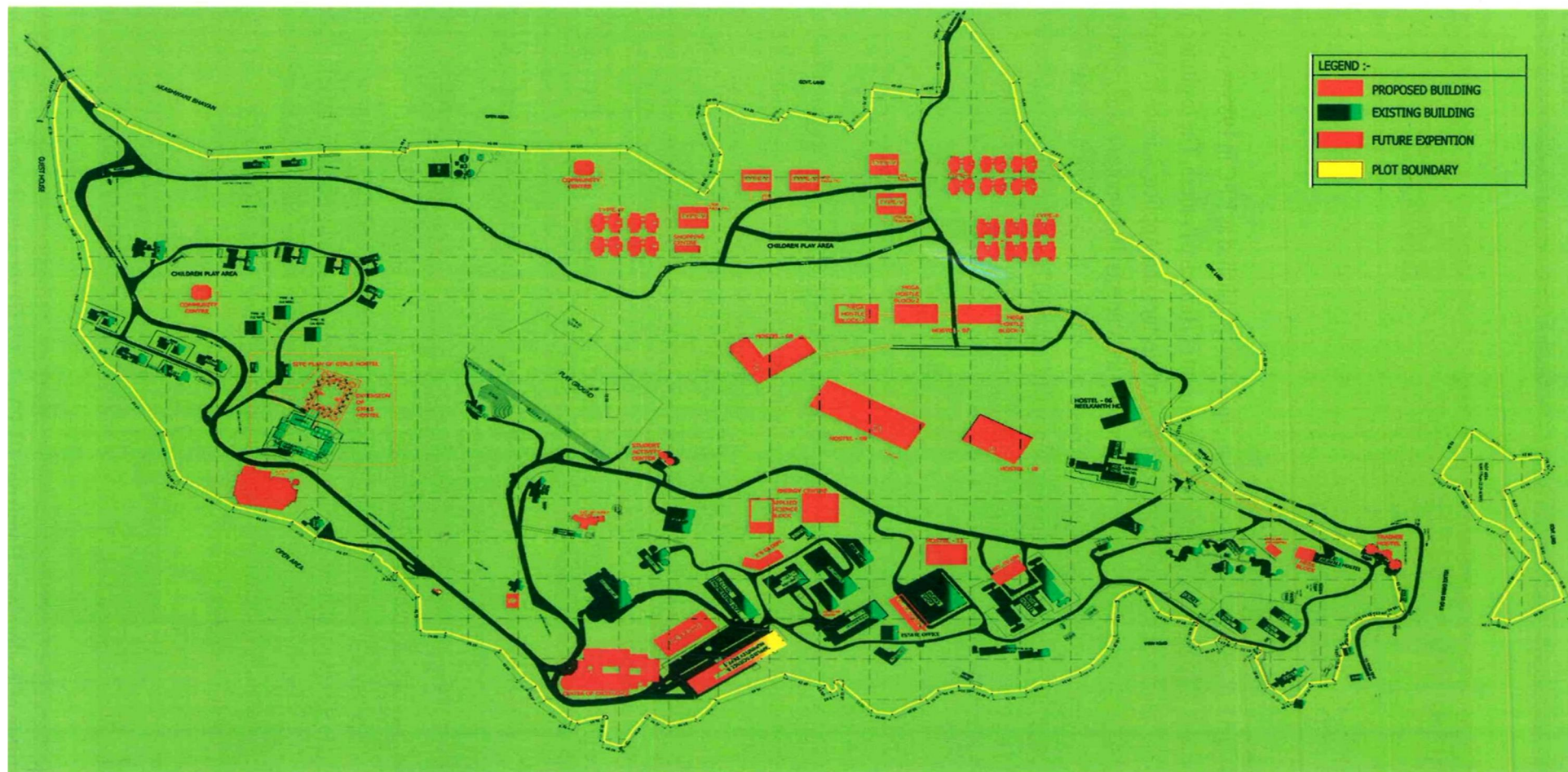
The Institute campus is located on Hamirpur-Awah Devi Road on the outskirts of the Hamirpur town, at a distance of about four (04) kilometer

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

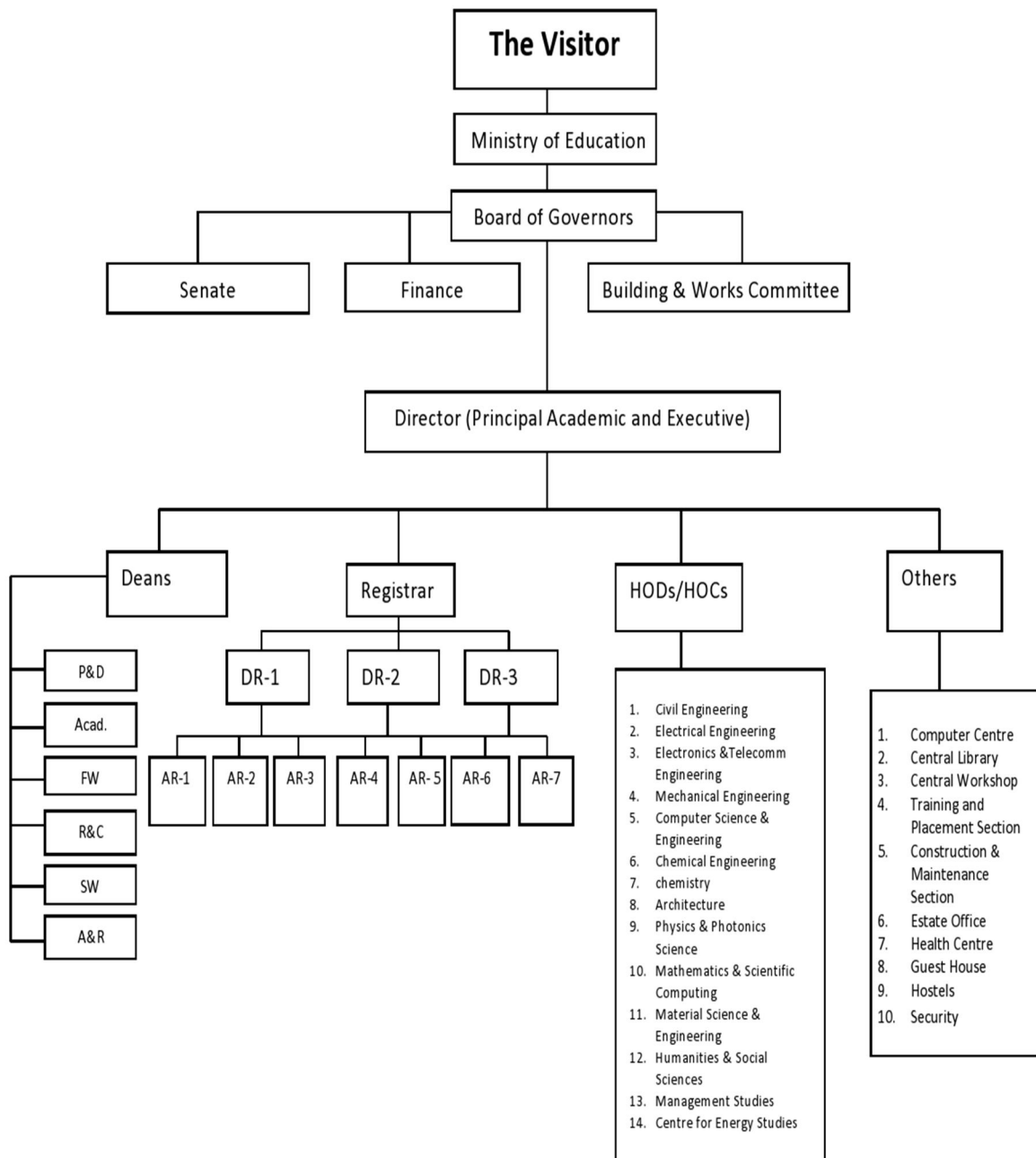
The campus has an area of 177.1 Acres in the picturesque surrounding with lush green pine trees, facing snow clad Dhauladhar mountain ranges. The place has healthy climate with moderate temperature ranging from 4° to 40° at an altitude of 900 meter. It presents a spectacle of harmony in architecture 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, open air 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 assist 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 decentralized.



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.	Material 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
		Thermal
		Manufacturing

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	Architecture, Planning
2.	Civil Engineering	Water Resources, Environment Engineering, Remote Sensing, Geotechnical Engineering & Geology, Structural & Transportation Engineering

3.	Computer Science & Engineering	Networking, Artificial Intelligence, Information Security
4.	Electronics & Communication Engineering	Communication and Networks, VLSI Design, RF and Microwave
5.	Electrical Engineering	Power System, Signal Processing & Control, Instrumentation, Power Electronics & Drives, High Voltage Engineering
6.	Mechanical Engineering	Design, Thermal, Production & Industrial, Energy Technology
7.	Chemical Engineering	Computational Fluid Dynamics, Electrochemical Engineering, Biochemical & Bioprocess Engineering
8.	Materials Science & Engineering	Polymer Matrix Composites/ Nanocomposites, Physical/Mechanical Metallurgy, Functional Oxide Materials (Ceramic/Thin Films/Nanoparticles)
9.	Chemistry	Organic Chemistry, Inorganic Chemistry, Physical Chemistry
10.	Physics & Photonics Science	Condensed Matter Physics, Nuclear Physics, High Energy Physics
11.	Mathematics & Scientific Computing	Pure Mathematics, Applied Mathematics, Statistics
12.	Management Studies	Management
13.	Humanities & Social Sciences	Economics, Sociology, Psychology, Behavioural and Social Sciences
14.	Centre for Energy Studies	Solar, PV, Solar Thermal, Bio-Energy, Environment, Wind Energy

2.9 Admissions

Number of students admitted during 2022-23 are as follows:

Programme	Number of Students Admitted
UG Programmes (B.Tech./B.Arch./Dual Degree)	942
PG Programmes (M.Tech./M.Arch./MSc/MBA)	374
PhD Programmes	70

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

Programme	Number of Students Registered
B.Tech.[All Semesters]	3707
B.Arch. [All Semesters]	39
Dual Degree [All Semesters]	114
M.Tech. [All Semesters]	466
M.Arch. [All Semesters]	34
MSc. [All Semesters]	127
MBA [All Semesters]	48
Ph.D. [All Semesters]	231
Total	4766

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 (2022-23) are as under:

S.No.	Programme	Sanctioned Intake	Actual Admission
B.Tech. Programmes			
1.	Chemical Engineering	76	77
2.	Civil Engineering	123	124
3.	Computer Science and Engineering	124	127
4.	Electrical Engineering	125	125
5.	Electronics and Communication Engineering	117	118

6.	Mechanical Engineering	125	119
7.	Materials Science and Engineering	40	36
8.	Mathematics & Computing	50	49
9.	Engineering Physics	50	46
Dual Degree Programmes			
1.	Computer Science and Engineering	28	28
2.	Electronics and Communication Engineering	28	28
B.Arch. Programme			
1.	Architecture	58	55

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 2022-23 are as follows:

S.No.	M.Tech./M.Arch. Programme	Sanctioned Intake			Actual Admission
		CCMT	Self-Finance	Total	
1.	Civil Engineering (Geotechnical)	19	6	25	20
2.	Civil Engineering (Structures)	19	6	25	24
3.	Civil Engineering (Transportation)	19	6	25	24
4.	Civil Engineering (Water Resources)	19	6	25	17
5.	Civil Engineering (Environment)	19	6	25	21
6.	Electrical Engineering (Power System)	19	6	25	22
7.	Electrical Engineering (Signal Processing &)	19	6	25	7

	Control)				
8.	Electrical Engineering (Condition Monitoring of Power Apparatus)	19	6	25	6
9.	Mechanical Engineering (Thermal)	19	6	25	4
10.	Mechanical Engineering (Design)	19	6	25	12
11.	Mechanical Engineering (Manufacturing)	19	6	25	12
12.	Electronics & Communication Engineering (VLSI Design)	19	6	25	21
13.	Electronics & Communication Engineering (Communication Systems & Networks)	19	6	25	17
14.	Computer Science & Engineering (Artificial Intelligence)	19	6	25	17
15.	Computer Science & Engineering	19	6	25	22
16.	Chemical Engineering	19	6	25	2
17.	Materials Science & Engineering	19	6	25	1
18.	Energy Technology	19	6	25	10
19.	M. Arch. (Sustainable Architecture)	19	6	25	17
	Total				276

S.N o.	MSc Programme	Sanctioned Intake	Actual Admission
1.	Physics	25	23
2.	Chemistry	25	23

3.	Mathematics and Computing	25	23
S.No.	MBA Programme	Sanctioned Intake	Actual Admission
1.	Master of Business Administration	40	29

2.9.3 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 2022-23 in various Departments are as follows:

S.No.	Department	Candidates Admitted with MHRD Fellowship	Candidates Admitted Under Other Schemes
1.	Architecture	5	--
2.	Civil Engineering	7	3
3.	Computer Science & Engineering	5	3
4.	Electronics & Communication Engineering	3	2
5.	Electrical Engineering	2	2
6.	Mechanical Engineering	4	--
7.	Chemical Engineering	1	--
8.	Materials Science & Engineering	1	--
9.	Chemistry	4	2
10.	Physics & Photonics Science	4	2
11.	Mathematics & Scientific Computing	2	9
12.	Management Studies	2	1
13.	Humanities & Social Sciences	2	1

14.	Centre for Energy Studies	3	--
Total		45	25

2.10 Results

The summary of results is as follows:

Programme	Students Passed in 2022-23
UG Programmes (B.Tech./B.Arch./Dual Degree) [Final Year]	689
PG Programmes (M.Tech./M.Arch./MSc/MBA) [Final Year]	325
PhD Programmes	28

The results of various programmes are as follows:

2.10.1 UG Programmes

Sr. No.	Programme	Students Admitted in 2018-19	Students Passed in 2022-23
B.Tech. Programmes			
1.	Chemical Engineering	56	54
2.	Civil Engineering	94	94
3.	Computer Science and Engineering	103	100
4.	Electrical Engineering	91	90
5.	Electronics and Communication Engineering	89	89
6.	Mechanical Engineering	102	93
7.	Material Science & Engineering	22	22
Dual Degree Programmes			
		Students Admitted in 2017-18	Students Passed in 2022-23
1.	Computer Science and Engineering	60	55
2.	Electronics and Communication Engineering	60	57
B.Arch. Programme			
1.	Architecture	46	35

Total	723	689
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2.10.2 PG Programmes

S. No.	M.Tech./M.Arch. Programme	Students Admitted in 2020-21	Students Passed in 2022-23
1.	Civil Engineering (Geotechnical)	19	17
2.	Civil Engineering (Structures)	19	16
3.	Civil Engineering (Transportation)	19	16
4.	Civil Engineering (Water Resources)	19	15
5.	Civil Engineering (Environmental Engineering)	17	15
6.	Electrical Engineering (Power System)	18	12
7.	Electrical Engineering (Signal Processing & Control)	18	16
8.	Electrical Engineering (Condition Monitoring of Power Apparatus)	18	18
9.	Mechanical Engineering (Thermal)	17	13
10.	Mechanical Engineering (Design)	17	15
11.	Mechanical Engineering (Manufacturing)	14	12
12.	Mechanical Engineering (Energy Technology)	9	7
13.	Electronics & Communication Engineering (Communication Systems & Networks)	17	16
14.	Electronics & Communication Engineering (VLSI Design)	17	15
15.	Computer Science & Engineering (Computer Science & Engineering)	16	15
16.	Computer Science & Engineering (Artificial Intelligence)	18	13

17.	Chemical Engineering (Chemical Engineering)	2	0
18.	Materials Science & Engineering (Material Science & Engineering)	6	4
19.	M.Arch. (Sustainable Architecture)	19	17
Total		299	252
Dual Degree			
1	Computer Science & Engineering	60	55
2	Electronics and Communication Engineering	60	57
Total		120	112
S.No.	M.Sc. Programme	Students Admitted in 2020-21	Students Passed in 2022-23
1.	Physics	18	15
2.	Chemistry	22	19
3.	Mathematics & Computing	22	21
Total		62	55

S.N o.	MBA Programme	Students Admitted in 2020-2021	Students Passed in 2022-23
1.	Management Studies	19	18
Total		19	18

2.10.3 PhD Programmes

S.No.	Department	PhDs Awarded
1.	Architecture	--
2.	Civil Engineering	02
3.	Computer Science & Engineering	04
4.	Electronics & Communication Engineering	07
5.	Electrical Engineering	03
6.	Mechanical Engineering	01
7.	Chemical Engineering	--
8.	Materials Science & Engineering	03
9.	Chemistry	03
10.	Physics & Photonics Science	01
11.	Mathematics & Scientific Computing	03
12.	Management Studies	--
13.	Humanities & Social Sciences	--
14.	Centre for Energy Studies	01
Total		28

MEDALS**DIRECTOR MEDAL TO THE BEST ALL ROUNDER**

Roll No.	Name	Department
181045	Akhya Rai	Civil Engineering

GOLD MEDAL TO 1ST BRANCH TOPPERS B.TECH./ DUAL DEGREE/B.ARCH.

Roll No.	Name	Branch
181068	Gaurav Choudhary	Civil Engineering
182002	Abhishek	Electrical Engineering
183017	Devansh Rohilla	Mechanical Engineering
184056	Asha Nandi	Electronics & Communication Engineering
17MI417	Jaismin Thakur	Electronics & Communication Engineering (Dual Degree)
185019	Prateek Bharat Sharma	Computer Science & Engineering
185036	Aman Garg	
17MI503	Jahnvi Gupta	Computer Science & Engineering (Dual Degree)
187059	Aditi Mishra	Chemical Engineering
188001	Akshat Uppal	Materials Science & Engineering
17623	Prachi Garg	Architecture

AWARD AND MEDALS

GOLD MEDAL TO 1ST BRANCH TOPPERS M.TECH./DUAL DEGREE/ M.ARCH./MSC/MBA

Branch	Specialization	Name	Roll No.
Civil Engineering	Geotechnical	Duha Nissar Hamdani	20MCE009
	Structures	Anuj Meena	20MCE104
		Sachin Kumar Saini	20MCE117
	Transportation	Agrita Singh	20MCE203
	Water Resources	Divya Thakur	20MCE307
	Environment	Kunal Sharma	20MCE407
Electrical Engineering	Power System	Neha Gangwar	20MEE009
	Signal Processing & Control	Riddhi Mohan Bora	20MEE112
	Condition Monitoring of Power Apparatus	Adarsh Dubey	20MEE201
Mechanical Engineering	Thermal	Akshay Sharma	20MME004
	Design	Gopal Sengar	20MME105
	Manufacturing	Rajat Latt	20MME210
	Energy Technology	Ajaykumar Ramanand Sharma	20MME301
Electronics & Communication Engineering	VLSI Design	Shipra Bajpey	20MEC016
	Communication Systems & Networks	Sheetal	20MEC110
	Electronics & Communication	Jaismin Thakur	17MI417

	Engineering (Dual Degree)		
Computer Science & Engineering	Computer Science & Engineering	Surya Pratap Saini	20MCS015
	Artificial Intelligence	Harsha Vardhan Sahoo	20MCS104
	Computer Science & Engineering (Dual Degree)	Jahnvi Gupta	17MI503
Materials Science & Engineering	Materials Science & Engineering	Abhijith Prasad	20MMS001
Architecture	Sustainable Architecture	S Monika	20MAR014
Master Science of	Physics	Mansi Talwar	20MPH008
	Chemistry	Shivankar Jagota	20MCY020
	Mathematics & Computing	Navjot Singh Bajaj	20MMA015
Management Studies	Master of Business Administration	Saumya Srivastava	20MMB009

SILVER MEDAL TO 2ND BRANCH TOPPERS B.TECH./DUAL DEGREE/B.ARCH.

Roll No.	Name	Branch
181059	Vivek Mishra	Civil Engineering
182005	Rishabh Mankotia	Electrical Engineering
182041	Muskan Gautam	
183051	Garima Bansal	Mechanical Engineering
184524	Kartik Aggarwal	Electronics & Communication Engineering
17MI439	Rahul Raj	Electronics & Communication Engineering (Dual Degree)
185027	Shagun Katoch	Computer Science & Engineering
17MI547	Divyanshu	Computer Science & Engineering

		(Dual Degree)
187026	Kanika Choudhary	Chemical Engineering
188003	Akshit Gupta	Materials Science & Engineering
17612	Manish Jangid	Architecture

BRONZE MEDAL TO 3RD BRANCH TOPPERS B.TECH./DUAL DEGREE/B.ARCH.

Roll No.	Name	Branch
181053	Manav Thakur	Civil Engineering
182055	Sukriti Mohan	Electrical Engineering
183073	Piyush Sharma	Mechanical Engineering
184013	Harshit Gupta	Electronics & Communication Engineering
17MI449	Vicky Kumar Soni	Electronics & Communication Engineering (Dual Degree)
185002	Alekh Gupta	Computer Science & Engineering
17MI544	Abhinav Lamba	Computer Science & Engineering (Dual Degree)
187004	Saurav Thakur	Chemical Engineering
188007	Parshant Bhardwaj	Materials Science & Engineering
188028	Manisha Yadav	
17625	Sahil Aadarsh	Architecture

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.



2.13.1 Head of the Institute :

Sr. No.	Name of the post	Sanctioned strength	In position
1	Director	01	01
	Total	01	01

Academic Staff:

Sr.No.	Name of the Post	Sanctioned Strength	In Position
1.	Professor	37	18
2.	Associate Professor	74	41
3.	Assistant Professor	150	85
Total			144

2.13.2 Staff Position:**Faculty**

TOTAL FACULTY 2022-23							
Name of Department	Professor		Associate Professor		Assistant Professor		Total Faculty in position
	Sanctioned Strength	In Position	Sanctioned Strength	In Position	Sanctioned Strength	In Position	
DoCE	37	03	74	05	150	09	17
DoEE		04		05		06	15
DoME		03		08		09	20
DoECE		01		05		17	23
DoCSE		01		05		10	16
DoCHE		00		00		07	07
DoMSC		02		02		04	08
DoCHY		00		02		03	05
DoPPS		00		05		00	05
DoHSS		00		01		03	04
DoMS		00		00		06	06
CES		01		00		01	02
DoMSE		01		01		02	04
DoARC		02		01		08	11
Phy.Edu.		00		01		00	01
TOTAL		37		18		74	41

2.13.3 (A) Officers:

Sr. No.	Name of the Post	Sanctioned Strength	In Position
1.	Registrar	01	01*
2.	Deputy Registrar	03	02
3.	Assistant Registrar	07	06
4.	Executive Engineer(Level-11)	01	00
5.	Executive Engineer (Level-10)	02	00
6.	Assistant Librarian	02	01
7.	Sr. Medical Officer	01	00
8.	Medical Officer	01	01
9.	Sr. Scientific/Technical Officer	04	02
10.	Scientific/Technical Officer	04	01
	Total	26	14

* Officiating

B .Technical Higher:

Sr. No.	Name of the Post	Sanctioned Strength	In Position
1	Technical Assistant/ Junior Engineer/ SAS Assistant/Library Information Assistant	32	01
2	Sr. Technical Assistant/ Assistant Engineer/ Sr. SAS Assistant/ Sr. Library Information Assistant/Pharmacist SG-II	22	05
3	Technical Assistant (SG -II) Assistant Engineer SG-II/ SAS Assistant (SG-II)/Library Assistant SG-II	16	07
4	Technical Assistant (SG-I) Assistant Engineer SG-/ SAS Assistant (SG-I)/ Library Assistant SG-I	08	06
	Total	78	19

C Technical Lower:

Sr. No.	Name of the Post	Sanctioned Strength	In Position
1	Technician	30	04
2	Sr. Technician	23	06
3	Technician (SG-II), Pharmacist	17	14
4	Technician (SG-I)	08	04
	Total	78	28

D Administrative/Stenographer (Higher):

Sr. No.	Name of the Post	Sanctioned Strength	In Position
1	Superintendent/ Accountant	07	02
2	PA	02	00
3	Sr. Superintendent	05	01
4	Sr. PA	01	00
5	Superintendent SG-(II)/ PS	04	04
6	Superintendent SG-(I)	02	00
	Total	21	07

E Administrative/Stenographer (Lower):

Sr. No.	Name of the Post	Sanctioned Strength	In Position
1	Jr. Assistant	18	03
2	Sr. Assistant/ Stenographer	12	07
3	Assistant(SG-II) / Sr. Stenographer	09	08
4	Assistant (SG-I)/ Stenographer (SG-II)	05	08
5	Stenographer (SG-I)	01	02
	Total	45	28

F Supporting Staff:

Sr. No.	Name of the Post	Sanctioned Strength	In Position
1	Attendant/ Security Guard/ Mali/ Care Taker (Higher Scale)	15	--
2	Sr. Attendant/ Security Guard/ Mali/ Care Taker	12	08
3	Attendant/ Security Guard/ Mali/ Care Taker (SG-II)	08	25
4	Attendant/ Security Guard/ Mali/ Care Taker (SG-I)	04	11
	Total	39	44
	Total (A to F)	287	140

2.13.4 TEMPORARY FACULTY 2022-23 :-

Sr. No.	Name of faculty members	Name of Deptt./Centre	Date of Joining	Remarks
1.	Dr.Brij Kishor	DoMSE	16/08/2022	
2.	Dr. Sumeet Kumar Sharma	DoMSE	17/08/2022	
3.	Dr. Gurpreet Singh	DoMSE	22/08/2022	(Resigned)
4.	Dr.Abhijeet Ojha	DoMSE	22/08/2022	
5.	Dr. Minakshi Rana	DoHSS	17/08/2022	
6.	Dr. Shah Husain	DoHSS	22/08/2022	
7.	Dr. Imran Ali Baig	DoHSS	22/08/2022	
8.	Dr. Shashank Tripathi	DoEE	22/08/2022	
9.	Dr. Navneet Singh	DoPPS	17/08/2022	
10.	Dr. Varun Kumar	DoPPS	18/08/2022	
11.	Dr. Pooja Singh	DoPPS	22/08/2022	
12.	Dr. Pooja Sharma	DoCSE	16/08/2022	
13.	Dr. Pushpender Kumar	DoCSE	17/08/2022	
14.	Dr.Meghna Dhalaria	DoCSE	22/08/2022	

15.	Dr. Arvind Singh Bisht	CES	18/08/2022	
16.	Dr. Himanshu	DoCHY	18/08/2022	
17.	Dr. Chayawan	DoCHY	18/08/2022	
18.	Dr. Manu Vatsal	DoCHY	18/08/2022	
19.	Ar. Saurav Kumar	DoArch	22/08/2022	(Resigned)
20.	Dr. Ankita Bisht	DoMSC	18/08/2022	
21.	Dr. Surendra Kumar Mishra	DoMSC	22/08/2022	
22.	Dr. Kodeeswari M	DoECE	18/08/2022	
23.	Dr. Ashish Goswami	DoECE	22/08/2022	
24.	Dr. Renu	DoCHE	23/08/2022	(Resigned)
25.	Dr. Amol Sharma	DoCE	09/09/2022	
26.	Dr Anand Kumar	DoEED	12/09/2022	
27.	Sh. Amit Kumar Baitha	DoArch.	12/09/2022	
28.	Sh .Shahbaz Quadri	DoArch	19/09/2022	
29.	Dr. Ravi Kant	DoPPS	17/11/2022	
30.	Dr. Shankita Bhardwaj	DoPPS	17/11/2022	
31.	Dr. Ambika Sharma	DoHSS	21/11/2022	
32.	Dr. Yaisna Rajkumari	DoHSS	21/11/2022	
33.	Dr. Smriti Bansal	DoMSC	21/11/2022	
34.	Dr. Mantu Majumder	DoCE	21/11/2022	(Resigned)
35.	Dr. Apoorva Dwivedi	DoECE	21/11/2022	
36.	Dr. Zareena J.M.	DoHSS	07/12/2022	
37.	Dr. Madan Kumar Das	DoEE	13/12/2022	

38.	Dr. Swati Katwal	DoEE	10/01/2023	
39.	Dr. Abhimanyu	DoCE	10/01/2023	
40.	Dr. Deepti Surya	DoMSC	01/02/2023	
41.	Dr. Sukriti Tiwari	DoEE	01/02/2023	
42.	Dr. Vineet Kumar	DoMSE	03/02/2023	
43.	Dr. Sanjay Kumar	DoMSC	03/02/2023	
44.	Dr. Kali Dass	DoME	03/02/2023	
45.	Dr. Sandeep Sharma	DoME	03/02/2023	
46.	Dr. Deepak Singh	DoCE	03/02/2023	
47.	Mr. Priyank Jain	DoArch	03/02/2023	
48.	Dr. Abhay Kumar Choudhary	DoCHE	06/02/2023	
49.	Dr. Abhishek Kumar Gupta	DoMSE	07/02/2023	
50.	Dr. Jeewan Chandra Atwal	DoME	07/02/2023	
51.	Dr. Antaram Narayan Sarve	DoCHE	07/02/2023	
52.	Mr. Shiv Dayal Singh	DoArch	07/02/2023	
53.	Dr. Shibayan Biswas	DoCE	07/02/2023	
54.	Mr. Mujahid Habin	DoArch	08/02/2023	
55.	Dr. Mohd. Sultan Alam	DoMSC	08/02/2023	
56.	Ar. Zeba Hussain	DoArch	06/03/2023	
57.	Dr. Sneha Das	DoCE	09/03/2023	
58.	Dr. Parvesh Kumar	DoCE	10/03/2023	

2.13.5 RELIEVED:

Sr. No.	Name of faculty members	Name of Department	Date of Relieving
1	Dr. Gopal Rawat	DoECE	26/09/2022
2	Dr. Joseph Tripura	DoCE	27/10/2022
3	Dr. Jitendra Singh Yadav	DoCE	31/10/2022
4	Dr. Nidhi Gupta	DoMSC	31/10/2022
5	Dr. Prakash Choudhary	DoCSE	02/11/2022
6	Dr. Rajan Kumar	DoEE	21/11/2022
7	Dr. Manoj Kumar Sinha	DoME	21/11/2022
8	Dr. Neha Yadav	DoMSC	28/12/2022
9	Dr. Pranika Shrivastava	DoME	29/12/2022
10	Dr. Nagendra Pratap Singh	DoCSE	05/01/2023
11	Dr. Anil Kumar Yadav	DoEE	19/01/2023
12	Dr. Joy Pal	DoCE	20/01/2023
13	Dr. Nitesh Kumar	DoMSE	17/02/2023

2.13.6 Retiree Faculty:

Sr. No.	Name of faculty members	Name of Department	Date of Relieving
1)	Dr. Vinod Kumar, Professor	DoECE	31/03/2023

2.13.7 Faculty on Lien

Sr. No.	Name of faculty members	Name of Department	On Deputation
1)	Dr. Lalit Kumar Awasthi, Professor	DoCSE	Director, NIT Uttarakhand
2)	Dr. R.K. Sehgal, Professor	DoME	Director NIT Srinagar
3)	Dr. Manoj Sharma, Assistant Professor Gr-I (Lien)	DoHSS	Professor, HPU Shimla
4)	Dr. Divakar Yadav	DoCSE	IGNOU Delhi
5)	Dr. Vijay Kumar	DoCSE	NIT Jalandhar

2.13.8 New Appointment: Nil**Annexure-IV**

Sr. No.	Name of the Post	Sanctioned Strength	In Position					
			SC	ST	OBC	EWS	Gen	Total
1	Asst. Prof. or equivalent	150	16	04	22	00	43	85
2	Assoc. Prof. or equivalent	74	00	00	00	00	41	41
3	Professor or equivalent	37	00	00	00	00	18	18

3.1 DEPARTMENT OF CHEMICAL ENGINEERING



1. ACADEMIC STAFF:-

Head of the Department: Dr. Ashwani Kumar

Faculties:-

Professor	Associate Professor	Assistant Professor
-----	-----	1. Dr. Radhe Shyam 2. Dr. Tapas Palai 3. Dr. Alok Garg, 4. Dr. Subhajit Majumder 5. Dr. Arvind Kumar Gautam 6. Dr. Pooja Thakur 7. Dr. Rahul Saha

Technical Staff:-

1. Mr Subhas Chand (On outsourcing basis)
2. Mrs. Praveen Kumari (On outsourcing basis)

Ministerial Staff:-

1. Sh. Joginder Singh, ASG-I
2. Mr. Kehar Singh, Office Attendant

2. DISTINCTION ACHIEVED:**3. Program/Events Organized****a) FDP/STC/Workshops organized****4. Research Publication****i) Papers published by Faculties:**

S.No.	Name of Faculty	Title of the paper	Name of Journal/Conference in which paper published
1.	Dr. Subhajit Majumder	Production of Styrene from Dehydrogenation of Methylbenzene.	Chemical Engineering & Technology, 45(5), 817-823.
2.	Dr. Rahul Saha	Low salinity surfactant alternating gas/CO ₂ flooding for enhanced oil recovery in sandstone reservoirs	Journal of Petroleum Science and Engineering, 212, 110253, 2022
3.	Dr. Rahul Saha	Chemical Nanofluids in Enhanced Oil Recovery: Fundamentals and Applications (Book Published)	CRC Press, Taylor and Francis, ISBN 9780367425241, 2021
4.	Dr. Rahul Saha	Optimum Formulation of Chemical Slug and Core Flooding Studies (Book Chapter)	Microbial Enhanced Oil Recovery: Principles and Potential, Springer, ISBN 978-981-16-5464-0, pp. 73-99, 2021
5.	Dr. Rahul Saha	CO ₂ -Based Enhanced Oil Recovery (Book Chapter)	Microbial Enhanced Oil Recovery: Principles and Potential, Springer, ISBN 978-981-16-5464-0, pp.

			51-71, 2021
6.	Arvind K. Gautam,	“Preparation and characterization of fragrance by extracting the essential oils from different raw materials”,	J. Indian Chem. Soc., 98, 2021, 100178
7.	Dr. Arvind K. Gautam	“Comparative Study of Two Identical Industrial Digesters Using Radiotracer-Based Residence Time Distribution Measurement”,	J. Pant, Journal of Chemical Engineering & Technology, 45, 2022, 479-488
8.	Dr.Arvind K. Gautam,	“A theoretical and mathematical study on the importance of petroleum derivatives in the production of sanitizer based products”,	Raj Kumar Arya, Journal of Materials Today: Proceedings, Accepted, January 2022
9.	Dr.Arvind K. Gautam,	“Temperature effects on liquid and crystalline state of SW-Germanium in supercooled region”,	International Journal of Modern Physics B, Accepted, March 2022
10.	Dr. Alok Garg	Highly efficient photo-degradation of cetirizine antihistamine with TiO ₂ -SiO ₂ photocatalyst under ultraviolet irradiation	International Journal of Chemical Reactor Engineering
11.	Dr.Alok Garg	Photocatalytic degradation and mineralization of amoxicillin and ofloxacin using TiO ₂ -SiO ₂ composites	Toxicological & Environmental Chemistry
12.	Dr.Alok Garg	Efficient degradation of doxycycline and ofloxacin in an aqueous environment using Fe and Cu doped TiO ₂ -SiO ₂ photocatalyst under sunlight	Environmental Engineering Research

ii) **Papers accepted for publication:-**

1. J Singh, A Kumar, A Pathak, T Palai, Adsorptive Removal of Arsenic(III) from Contaminated Water Using Rice Husk, Tea Waste and Sugarcane Bagasse Bio-adsorbents, Water, Air, & Soil Pollution (2023) (in press). DOI: [10.1007/s11270-023-06308-6](https://doi.org/10.1007/s11270-023-06308-6)
2. A Kumar, LM Aeshala, T Palai, Electrochemical Reduction of CO₂ to Useful Fuel: Recent Advances and Prospects, *Journal of Applied Electrochemistry* (2023) (in press). DOI: [10.1007/s10800-023-01850-x](https://doi.org/10.1007/s10800-023-01850-x)
3. P Sharma, J Prakash, T Palai, R Kaushal, Surface functionalization of bamboo leave mediated synthesized SiO₂ nanoparticles: Study of adsorption mechanism, isotherms and enhanced adsorption capacity for removal of Cr(VI) from aqueous solution, *Environmental Research*, 214, 113761, (2022). DOI: [10.1016/j.envres.2022.113761](https://doi.org/10.1016/j.envres.2022.113761)

Book Chapter

- T Palai, KK Dubey, Valorization of Dairy Industry Waste into Functional Food using Lactase, in Thermochemical and Catalytic Conversion for Future Biorefineries, Pradeep Verma (Eds), Springer Nature, Singapore, pp. 161-183, ISSN/ISBN No. 978-981-19-4315-7, 2022.

Conference Publication

1. A Kumar, T Palai, "Effect of Imine Based Functional Group Polymer on Electrochemical Reduction of CO₂", Poster presentation in International Conference on Advances in Smart Materials, Chemical & Biochemical Engineering (CHEMSMART-2022), December 16-18, 2022, NIT Rourkela, India.
2. R Pathania, T Palai, "Immobilized *Bacillus firmus* Cells for Bioremediation of Hexavalent Chromium from Wastewater" Oral presentation in International Conference on Recent Advances in Biotechnology (icRAB -2022), December 2-4, 2022, NIT Jalandhar, India.
3. D Suri, T Palai, Microbial Electrosynthesis of Useful Hydrocarbons from CO₂, Poster presentation in *National Conference on Advances in Chemical Engineering and Science (ACES-2023)*, March 30-April 01, 2023, IISER, Bhopal, India.
4. S Akhther, T Palai, LM Aeshala, Membranes for Reduction of Carbon Dioxide to Valued Added Chemicals, Oral presentation in *National Conference on Advances in Chemical Engineering and Science (ACES-2023)*, March 30-April 01, 2023,

IISER, Bhopal, India.

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

Invited Talk/Expert Lecture Delivered

- Invited Lecture on “Smart Bioconjugate for Valorization of Dairy Waste”, at e-workshop entitled Recent Trends in Sustainable and Green Technology (RTSGT-2022), organized by Department of Chemical Engineering, NIT Srinagar, India, June 28 - July 02, 2022.

Session Chair/Co-chair in Conference

- Session Chair at International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-22), February 15-17, 2023, Department of Mechanical Engineering, NIT Hamirpur.

X) Award/Recognition

- ISTE Section Best Teacher Award - 2022 by The Indian Society for Technical Education (ISTE) hosted by Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, 30th September, 2022.
- Best Poster Award for the paper entitled “Microbial Electrosynthesis of Useful Hydrocarbons from CO₂” authored by D. Suri and T. Palai, at 4th National Conference on Advances in Chemical Engineering and Science (ACES-2023), March 30-April 01, 2023, organized by IISER, Bhopal, India.

5. Equipment Purchase

Sr. No	Name of Equipment	Qty	Name of Manufacturer / Supplier	Cost in Rs.
1.	Digital Refractrometer	01	M/s Klorofil Scientic SCO - 32 FF Sectors 33 D Chandigarh	Rs.60,345.00
2.	Microprocessor Automatic Ph Meter	01	M/s Rajji Scientific Surgico, Ist Floor Krishna Niketan Palampur	Rs.35,500.00

3.	COD Digestor Unit	01	M/s Innovation Engineers 1079 Bangali Mohalla Ambala Cantt.	Rs.84,998.00
4.	Hot Air Oven	01	M/s Innovation Engineers 1079 Bangali Mohalla Ambala Cantt	Rs.73,939.00
5.	Semi Micro Weighing Balances	01	M/s SPL Bio Tech 1/62, Sainik Colony Kasrew Khera Meerut UP	Rs.1,00,000.00
6.	UV Vis-Spectro Photometer	01	M/s Motors Scientific Insturments Pvt. Ltd Plot 175, Sector -07, IMT Manesar Gurugram Haryana	Rs.3,48,100.00
7.	Magnetic Stirrers	01	M/s AM Fashion Hub 23 Bajrang Vihar Chapala Kidhani Sagganer Rajasthan	Rs.24,298.00
8.	Centrifuge	01	M/s Kashal Enterprises 23, Bajrang Vihar Chapala Ki dhani Jai Pur Rajasthan	Rs.20,000.00
9.	UV Poto Reactor	01	M/s Natural Sciences Equipment 311, HS 11 DC Sector-2 Industrial Growth Centre Daha Ambala.	Rs.1,24,990.00
10	Turbidity Meter	01	M/s Bio Chemi Enterprises 707, 7 th Floor Vipul Plaza Sector 81, Faridabad.	Rs.84,000.00
11	Ultra Sonication Bath	01	M/s Perfect Enterprises Plot No.576 Indu Trial Area Phase -2 Chandigarh	Rs.23,987.00
12	Water Quality Meter	01	M/s Axcent Instrument 706, 7 th Floor Vipual Plaza Sector 81 Faridabad	Rs.2,95,000.00
13	Bomb Calorimeter	01	M/s New India Scientific 25 Aggarsain Nagar New Ekta	Rs.1,88,000.00

			Vihar Ambala Cantt	
14	Magnetic Thermal Conductivity Apparatus	01	M/s Mass International Engineering Science and Technology Plot No 459, Phase-I Sector 2, 1GCHIIDC Saha Ambala	Rs.3,17,970.00
15	Gas Law Apparatus	01	M/s Mass International Engineering Science and Technology Plot No 459, Phase-I Sector 2, 1GCHIIDC Saha Ambala	Rs.54,162.00
16	Pressure Calibrator	01	M/s Nagman Instruments and Electronics Pvt. 170/1A2 Chennai	Rs.1,14,900.00
17	Separating and Throttling Calorimeter	01	M/s Mass International Engineering Science and Technology Plot No 459, Phase-I Sector 2, 1GCHIIDC Saha Ambala	Rs.90,270.00
18	Trolley	01	M/s Twiclo Enterprises House No 101 Village Bholka Plot Panched Chirkurola Dhanbad Jharkhand	Rs.14,999.00

6. 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
- Thermodynamics Lab.
- Research Lab

3.2 DEPARTMENT OF CIVIL ENGINEERING



Head: Dr. S.S. Katoch Associate Professor

Sr. No.	Name of Faculty	Designation
PROFESSOR		
1.	Dr. R.K.Sharma	Professor
2.	Dr. Raman Parti	Professor
3.	Dr. R.K.Dutta	Professor
ASSOCIATE PROFESSOR		
1.	Dr. Pardeep Kumar	Associate Professor
2.	Dr. R.S.Banshtu	Associate Professor
3.	Dr.S.S. Katoch	Associate Professor, HEAD OF DEPARTMENT
4.	Dr. V.S.Dogra	Associate Professor
5.	Dr. V.K.Bansal	Associate Professor
ASSISTANT PROFESSOR		
1.	Dr. Amrit Kumar Roy	Assistant Professor Grade-1
2.	Dr. Umesh Kumar Pandey	Assistant Professor Grade-1
3.	Dr. Chander Prakash	Assistant Professor Grade-1
4.	Dr. Sunil Sharma	Assistant Professor Grade-1
5.	Dr. Dharmendra	Assistant Professor Grade-1
6.	Dr. K. Nallasivam	Assistant Professor Grade-1
7.	Dr. Manendra Singh	Assistant Professor Gr-II
8.	Dr. Ray Singh Meena	Assistant Professor Gr-II
9.	Dr.Vimal Kumar	Assistant Professor Gr-II
TEMPORARY FACULTY ON CONTRACT BASIS		
1.	Dr. Abhimanyu	Assistant Professor (On contract)

2.	Dr. Deepak Singh	Assistant Professor (On contract)
3.	Dr. Shibayan Biswas	Assistant Professor (On contract)
4.	Dr. Parvesh Kumar	Assistant Professor (On contract)

(I) RESEARCH PUBLICATIONS

Year	Author (s)	Title & Vol. No.	Journal Name	Indexing (SCI) Web of Science/ Scopus
2022	Avinash Bhardwaj, Ravi Kumar Sharma	Bearing Capacity Evaluation of Shallow Foundations on Stabilized Layered Soil using ABAQUS	Studia Geotechnica et Mechanica	SCOPUS
2022	Avinash Bhardwaj, Ravi Kumar Sharma	Designing thickness of subgrade for flexible pavements incorporating waste foundry sand, molasses, and lime	Innovative Infrastructure Solutions	SCOPUS
2022	Gaurav Juneja, Ravi Sharma	Numerical analysis of square and circular skirted footings placed on sand using PLAXIS 3D software	Journal of Mining and Environment	SCOPUS
2022	Gaurav Juneja, Ravi Sharma	Numerical analysis of square and circular skirted footings placed on sand using PLAXIS 3D software	International Journal of Mining, Reclamation and Environment	SCOPUS
2022	Gaurav Juneja, Ravi Sharma	Numerical Study on the Behaviour of Geocell-Reinforced Sand Layer Overlying Soft Clay Subgrade	Indian Geotechnical Journal	SCOPUS
2022	Gaurav Juneja, Ravi Sharma	Numerical Investigation of Square Footing Positioned on Geocell Reinforced Sand By Using Abaqus Software	Civil and Environmental Engineering Reports	ESCI
2022	Gyanendra Kumar Chaturvedy and Umesh Kumar Pandey	Performance Characteristics of Rubberised Concrete: A Multipoint Review	Journal of Innovative Infrastructure Solutions (Springer,Switzerland), Vol-7(1), Article-43	SCOPUS/EmergingSCI/SCIImago/ProQuest
2022	Govind Mohan and Umesh Kumar Pandey	Bilinear elasto-dynamical response of SDOF system under sinusoidal loading	Journal of Innovative Infrastructure Solutions (Springer,Switzerland), Vol-7(1), Article-52	SCOPUS/EmergingSCI/SCIImago/ProQuest
2022	Amol Sharma, Chander Prakash, Anita Sharma, Pulkit Sharma	Hybrid Machine Learning and Optimum Feature Selection Based Landslide Susceptibility Analysis	International Journal of Geoinformatics	SCOPUS
2022	Mozim Shafi,	Application of remodeled	Environmental	SCIE

	Chander Prakash, Khalid Muzamil Gani	water quality indices for the appraisal of water quality in a Himalayan lake	Monitoring and Assessment	
2022	Rajat Sharma, Rajeshwar Singh Banshtu, Chander Prakash, Anita Sharma,	Glacier retreat in Himachal from 1994 to 2021 using deep learning	Remote Sensing Applications: Society and Environment	ESCI, SCOPUS
2022	Samarth Y. Bhatia, Gopal R. Patil, Aniruddha D. Chopadekar, Sunil Sharma	Skywalk facility utilization and factors influencing its use: A case study of Mumbai Metropolitan Region, India, 10(1), 396-405	Case Studies on Transport Policy	Scopus
2022	Akhilesh Nautiyal, Sunil Sharma	Methods and factors of prioritizing roads for maintenance: a review for sustainable flexible pavement maintenance program, 7(190)	Innovative Infrastructure Solutions	Scopus
2022	Surya Pratap Singh, Amrit Kumar Roy	Formulation of a Bearing Capacity Equation for a Circular Footing with Vertical and Inclined Loads on Layered Sand	Journal of Mining and Environment	SCOPUS, Web of Science
2022	Surya Pratap Singh, Amrit Kumar Roy	Slope stability analysis and preventive actions for a landslide location along NH-05 in Himachal Pradesh, India	Journal of Mining and Environment	SCOPUS, Web of Science
2022	Mitresh Kaul, K.Nallasivam	Response of Elevated Water Tanks Subjected to Lateral Loads, CEER 2022; 32 (2): 0118-0131 DOI: 10.2478/ceer-2022-0022	Civil and Environmental Engineering Reports	SCI/SCOPUS indexed (Sciendo)
2022	K. Kavin Mathi and K.Nallasivam	Dynamic and Fatigue Life Prediction Analysis of Rigid Airfield Runway Pavement Using Finite Element Method Volume 5, Issue 3, July 2022, 23pp.1..23. doi.org/10.22115/CEPM.2022.347999.12.	Computational Engineering and Physical Modeling	SCI/SCOPUS indexed (Pouyan)
2022	Mohammad Farhan Shaikh and Nallasivam .K	Static Analysis of Box-Girder Bridge Under The Influence of Indian Railway Vehicle Loading Using ANSYS Finite Element Model, Volume 3, Article number: 25 (2022). https://doi.org/10.1186/s43251-022-00076-9	Advances in Bridge Engineering,	SCI/SCOPUS indexed(Springer)

2022	Shakya, R., Singh, M., Sarda, V.K. et al	Scour depth forecast modeling caused by submerged vertical impinging circular jet: a comparative study between ANN and MNL, 8, 43 (2022)	Sustainable Water Resources Management	Scopus
2022	Singh, M., Viladkar, M.N., Shekhawat, P.S. et al	Bearing capacity of strip footings on jointed rock mass (2022)15:1579	Arabian Journal of Geosciences	Scopus
2022	Chander Kant, Gulshan Kumar and Ray Singh Meena	Modelling Morphometric and Geomorphological Parameters of Mountainous River Basin for Water Resource Management Using Remote Sensing and GIS Approach	Modeling Earth Systems and Environment	Scopus
2022	Kaiser Roy, Chander Kant and Ray Singh Meena	Spatio-Temporal Snow Cover Health Analysis of Western Himalayan River Basin by Elevation Zones	10th International Conference on Advancements in Engineering and Technology, ICAET-2022 on November 11-12, 2022.	Scopus
2022	Shubham Chaudhary, Anshul Choudhary, Rahul Kumar, Kamal Deep, Tushar Kumar Kumawat, Ajay Sattawan and Ray Singh Meena	Identification of Spring Potential Zones using GIS and AHP in Northern Himalayan region: Bharmour, Chamba district, Himachal Pradesh, India	10th International Conference on Advancements in Engineering and Technology, ICAET-2022 on November 11-12, 2022.	Scopus
2022	Chander Kant, Vishal Goyal and Ray Singh Meena	Accuracy Assessment of Google Earth Engine and GIS for extraction of Snow Covered area in Western Himalayan River Basin	10th International Conference on Advancements in Engineering and Technology, ICAET-2022 on November 11-12, 2022.	Scopus
2022	Avinash Kumar, Chander Kant and Ray Singh Meena	Future Changes in Precipitation Events using the Stastical Downscaling model (SDSM) in the Beas Basin Region	10th International Conference on Advancements in Engineering and Technology, ICAET-2022 on November 11-12, 2022.	Scopus
2022	Saksham Chauhan and Ray Singh	"Prioritization of the sub-watersheds in Neugal Watershed of the Western	27th International Conference on Hydraulics, Water	Scopus

	Meena	Himalayan region using Morphometric analysis and GIS"	Resource, Environmental & Coastal Engineering, organized by Punjab Engineering College, Chandigarh, India (December 22-24, 2022).	
2022	Chaityendra Singh and Ray Singh Meena	The impact of land use and land cover changes on soil erosion in Beas Basin	27th International Conference on Hydraulics, Water Resource, Environmental & Coastal Engineering, organized by Punjab Engineering College, Chandigarh, India (December 22-24, 2022).	Scopus
2023	V. Kumar, M. A. Iqbal, A. K. Mittal,	Progressive damage in pretensioned and reinforced concrete plates against repeated impacts (Accepted)	International Journal of Protective Structures	SCI
2023	6. Shakya, R., Singh, M., Samadhiya, N. K	Response of Underground Tunnels to Combined Dynamic Loadings of Running Metro-train and Earthquake	Journal of Mining and Environment	Scopus, Web of Science
2023	Virajan Verma & K. Nallasivam	"Dynamic interaction analysis of a high-speed train vehicle and a thin-walled curved box-girder bridge with a sub-track system by finite element method"	Asian Journal of Civil Engineering	SCI/SCOPUS indexed(Springer)
2023	Mohammad Farhan Shaikh and Nallasivam .K	"Static and Free Vibration Response of a Box-Girder Bridge Using the Finite Element Technique"	Multidiscipline Modelling in Materials and Structures	SCI/SCOPUS indexed(Emerald)
2023	Ishan Shankar Vats and Nallasivam .K	"Response of a Natural Draught Hyperbolic Cooling Tower using the Finite Element Technique" , doi.org/10.1007/s42107-023-00703-4	Asian Journal of Civil Engineering	SCI/SCOPUS indexed(Springer)
2023	Khair Ul Faisal Wani and K.Nallasivam	"Modal Analysis of Rigid Pavement Resting on Two-Parameter Soil Foundation Model using Finite Element Framework"	World Journal of Engineering	SCI/SCOPUS indexed(Emerald)
2023	Surbhi Aswal and K.Nallasivam	"Static response of a multi-span suspension bridge subjected to highway vehicle	Asian Journal of Civil Engineering	SCI/SCOPUS indexed(Springer)

		loading(2023). https://doi.org/10.1007/s42107-023-00585-6		
2023	Mohammad Farhan Shaikh and Nallasivam .K	"Dynamic Response of a Box-Girder Bridge Using the Finite Element Technique",2023. https://doi.org/10.1007/s42107-023-00633-1	Asian Journal of Civil Engineering	SCI/SCOPUS indexed(Springer)
2023	Surbhi Aswal and K.Nallasivam	"Dynamic response of a multi-span suspension bridge subjected to highway vehicle loading". https://doi.org/10.1007/s42107-023-00655-9	Asian Journal of Civil Engineering	SCI/SCOPUS indexed(Springer)
2023	Kashyap Shukla and Nallasivam .K	"Dynamic Response of High-Rise Buildings with Shear walls due to Seismic Forces". https://doi.org/10.1007/s42107-023-00669-3	Asian Journal of Civil Engineering	SCI/SCOPUS indexed(Springer)
2023	K. Kavin Mathi and K.Nallasivam	"Static Analysis of Rigid Airfield Pavement Using Finite Element Method Vs Closed-Form Solution" , Volume 5, Issue 4 - Serial Number 20, October 2023. doi:10.22115/CEPM.2023.354941.1219.	Computational Engineering and Physical Modeling	SCI/SCOPUS indexed (Pouyan)
2023	Abhishek Sharma and Nallasivam .K	"Static Analysis of a Concrete Gravity Dam using the Finite Element Technique". doi.org/10.1007/s42107-023-00686-2	Asian Journal of Civil Engineering	SCI/SCOPUS indexed(Springer)
2023	H Yadav, AK Roy, A Kumar, A Kumar, N Chauhan, Vijay Kumar	Analysis of retaining walls along the Beas River's meandering curve	Structures	SCI
2023	AK Roy, H Yadav, SC Dasu, P Kumar, A Chanotra	Wind responses on twin box girder bridge deck using a fluid–structure interaction approach	Asian Journal of Civil Engineering	SCOPUS
2023	Gyanendra Kumar Chaturvedy, Umesh Kumar Pandey & Harit Kumar	Effect of graphene oxide on the microscopic, physical and mechanical characteristics of rubberized concrete	Journal of Innovative Infrastructure Solutions (Springer,Switzerland), Vol-8(6), Article-163	SCOPUS/EmergingSCI/SCImago/ProQuest

(III). M. Tech Dissertation Guidance:-**M.Tech Completed in 2022-23:**

Sr. No.	Name	Roll No.
Geotechnical Engineering		
1	Anish Pandit	21MCE001
2	Akanksha Verma	21MCE002
3	Ankit Kumar	21MCE003
4	Ghanshyam Gupta	21MCE004
5	Imran Khan	21MCE005
6	Kashitij Guleria	21MCE006
7	Krishna Kotiyal	21MCE007
8	Lokeshwar Singh Dilta	21MCE008
9	Moqin Mushtaq Zargar	21MCE009
10	Mounius Bashir	21MCE010
11	Nitin Kumar	21MCE011
12	Shivangi Choudhary	21MCE012
13	Vinay Thakur	21MCE013
14	Akash Bharti	21MCE014
15	Shubham Kumar	21MCE015
16	Vikas Rawat	21MCE016
17	Anita Verma	21MCE017
18	Abhay Pratap Singh	21MCE018
19	Ayush Gaurav	21MCE019
20	Amit Kumar	21MCE020
21	Alankrit Walia	21MCE022
22	Rishabh Kumar Pathak	21MCE023
23	Vivek Dwivedi	21MCE024
Structural Engineering		
1	Akshay Pathania	21MCE101
2	Arun Katoch	21MCE102
3	Chiragkumar Jugalbhai Maheswari	21MCE103
4	Gaurav Kumar Shukla	21MCE104
5	Harit Kumar	21MCE105
6	Mohammad Farhan Shaikh	21MCE106
7	Mohammad Sultan	21MCE107
8	Nisha	21MCE108
9	Pankaj Chauhan	21MCE109
10	Pratibha Thakur	21MCE110
11	Prince Dhiman	21MCE111
12	Rohit Raj	21MCE112
13	Subodha Kumar	21MCE113
14	Suhaib Rasul	21MCE114
15	Surbhi Aswal	21MCE115
16	Vijay Kumar	21MCE116
17	Vineet Kumar	21MCE117
18	Anand	21MCE118
19	Nitin Chauhan	21MCE119
20	Anoop Kumar	21MCE120
21	Sachin Sharma	21MCE121
22	Dushyant Sharma	21MCE122
23	Chandesh Palsara	21MCE123

24	Shubham Pathak	21MCE124
Transportation Engineering		
1	Abhishek	21MCE201
2	Aditya Motla	21MCE202
3	Akarshit Awasthi	21MCE203
4	Akshay Kumar	21MCE204
5	Ashutosh Ranjan	21MCE205
6	Atul Kumar Dwivedi	21MCE206
7	Avinash	21MCE207
8	Gaurav Walia	21MCE208
9	Mansha Verma	21MCE209
10	Mumtaz Hussain	21MCE210
11	Shivam Kumar	21MCE211
12	Mushaib Mushtaq Bhat	21MCE212
13	Nikhil Saxena	21MCE213
14	Rahul Kumar	21MCE214
15	Ravi Kumar	21MCE215
16	Vishwajeet Kumar	21MCE217
17	China Veeraraghavaiah Mopidevi	21MCE218
18	Mursalim Hoque	21MCE219
19	Sunidhi Thakur	21MCE220
20	Sandeep Bharti	21MCE221
21	Sumit Pathak	21MCE222
22	Prashant Sharma	21MCE223
23	Abhinay Thakur	21MCE224
24	Waquar Ahmad Siddiqui	21MCE225
Water Resource Engineering		
1	Arshdeep Singh	21MCE301
2	Avinash Kumar	21MCE302
3	Chaityendra Singh	21MCE303
4	Mayank Tyagi	21MCE304
5	Nishant Kumar	21MCE305
6	Rajnish Chaudhary	21MCE306
7	Yash Shukla	21MCE307
8	Saksham Chauhan	21MCE308
9	Simran Kapoor	21MCE311
10	Kaiser Roy	21MCE312
11	Diksha Chaudhary	21MCE313
12	Abhishek Kumar	21MCE314
Environmental Engineering		
1	Aman Minhas	21MCE401
2	Adarsh Singh	21MCE402
3	Ankita	21MCE403
4	Bharti	21MCE404
5	Deven Singh	21MCE405
6	Farmaan Mushtak	21MCE406
7	Geetanshi Panwar	21MCE407
8	Greety Joseph	21MCE408
9	Munish Kumar	21MCE409
10	Rachita Gupta	21MCE410

11	Rajesh Kumar	21MCE412
12	Rohit Singh	21MCE413
13	Vinayak Thakur	21MCE414
14	Yogita	21MCE415
15	Lalit Bahal	21MCE416
16	Shubham Thakur	21MCE417
17	Sakshi Guleria	21MCE418
18	Shrishti Sharma	21MCE419
19	Harshalata Sharma	21MCE420
20	Tasaduq Hassan Wani	21MCE421
21	Ravish Patial	21MCE422

M.TECH ADMISSIONS IN 2022-23:

S. N	Name of Student	Roll No.
Geotechnical ENGINEERING		
1	Pramjeet S	22MCE001
2	Priti Sharma	22MCE002
3	Akhilesh Sharma	22MCE003
4	Mahipal Singh	22MCE004
5	Nitin Meena	22MCE005
6	Abhishek	22MCE006
7	Vivek Kumar Sharma	22MCE007
8	Savita Tekta	22MCE008
9	Sahil Kumar	22MCE009
10	Amit Kumar	22MCE010 (Self-Sponsored)
11	Ashutosh	22MCE011(Self-Sponsored)
12	Akhil Sharma	22MCE012(Self-Sponsored)
13	Priyanka Shandil	22MCE013(Self-Sponsored)
14	Sourabh Kumar	22MCE014(Self-Sponsored)
15	Yogeshwar Singh	22MCE015(Self-Sponsored)
16	Lokesh Sharma	22MCE016(Self-Sponsored)
17	Mukul Bist	22MCE017(Self-Sponsored)
18	Kartikey Sharma	22MCE018(Self-Sponsored)
19	Vaibhav Kumar Mishra	22MCE019(Self-Sponsored)
20	Vishal Kaushal	22MCE020(Self-Sponsored)
Structural Engineering		
1	Neeraj Kumar	22MCE101
2	Raman Saini	22MCE102
3	Shilpa Thakur	22MCE103
4	Rishabh Meena	22MCE104
5	Vipul Chauhan	22MCE105
6	Neeraj Baloria	22MCE106
7	Mohit Kansotiya	22MCE107
8	Niraj Sharma	22MCE108
9	Saket Kumar	22MCE109
10	Nurool Bashar	22MCE110
11	Aman Deep	22MCE111
12	Pragya Saraswat	22MCE112

13	Pradeep Kumar	22MCE113
14	Sahil Kumar	22MCE114
15	Satish Kumar	22MCE015 (Self-Sponsored)
16	Vishal Yadav	22MCE016 (Self-Sponsored)
17	Mohd Faishal	22MCE017 (Self-Sponsored)
18	Karan Kumar	22MCE018 (Self-Sponsored)
19	Munish Kumar	22MCE019 (Self-Sponsored)
20	Ankit Sharma	22MCE020 (Self-Sponsored)
21	Vijay Kumar	22MCE021 (Self-Sponsored)
22	Shivam Sharma	22MCE022 (Self-Sponsored)
23	Sanchit Dhiman	22MCE023 (Self-Sponsored)
24	Aniket	22MCE024 (Self-Sponsored)
Transportation ENGGINEERING		
1	Guneet Singh	22MCE201
2	Sachin Sharma	22MCE202
3	Vishali	22MCE203
4	Satyansh Singh	22MCE204
5	Ankit Kumar	22MCE205
6	Chander Prakash	22MCE206
7	Suraj Patel	22MCE207
8	Shubham Rana	22MCE208
9	Pankaj Kumar	22MCE209
10	Medha	22MCE210
11	Mohd Ibrar	22MCE211
12	Karishma	22MCE212
14	Ansul Kumari	22MCE213 (SELF-SPONSORED)
15	Sahil Kaundal	22MCE214 (SELF-SPONSORED)
16	Pratik Bhardwaj	22MCE215 (SELF-SPONSORED)
17	Nishant	22MCE216 (SELF-SPONSORED)
18	Shubham Rana	22MCE217 (SELF-SPONSORED)
19	Ritika Thakur	22MCE218 (SELF-SPONSORED)
20	Divyanshi	22MCE219 (SELF-SPONSORED)
21	Tushar Sharma	22MCE220 (SELF-SPONSORED)
22	Arpit Sharma	22MCE221 (SELF-SPONSORED)
23	Neeraj Thakur	22MCE222 (SELF-SPONSORED)
24	Manoj Kumar	22MCE223 (SELF-SPONSORED)
Water Resource Engineering		
1	Aditya Chaudhary	22MCE301
2	Ayush Bharati	22MCE302
3	Abhishek Attri	22MCE303
4	Nimish Verma	22MCE304 (Self-Sponsored)
5	Sahil Kumar	22MCE305 (Self-Sponsored)
6	Abhinav Minhas	22MCE306 (Self-Sponsored)
7	Megha Soni	22MCE307 (Self-Sponsored)
8	Ankita Devi	22MCE308 (Self-Sponsored)
9	Ajay Kumar	22MCE309 (Self-Sponsored)
10	Vineet Sharma	22MCE310 (Self-Sponsored)
11	Sakhsham Rana	22MCE311 (Self-Sponsored)
12	Pankaj Verma	22MCE312 (Self-Sponsored)

14	Abhinav Thakur	22MCE313 (Self-Sponsored)
15	Mrinal Ghezta	22MCE314 (Self-Sponsored)
16	Pragati Singh	22MCE315 (Self-Sponsored)
17	Sakshi	22MCE316 (Self-Sponsored)
18	Sumit Sharma	22MCE317 (Self-Sponsored)
Environmental Engineering		
1	Chandraj Chandel	22MCE401
2	Rajat Suman	22MCE402
3	Rishav Kaundal	22MCE403
4	Koka Mohammad Umer Bin Farooq	22MCE404
5	Virender Shivay	22MCE405
6	Ajay Deep Meena	22MCE406
7	Abhishek Meena	22MCE407
8	Muskan	22MCE407 (SELF-SPONSORED)
9	Akanksha Thakur	22MCE408 (SELF-SPONSORED)
10	Leena Kumari	22MCE409 (SELF-SPONSORED)
11	Shabnam Bhatia	22MCE410 (SELF-SPONSORED)
12	Priyanka Kumari	22MCE411 (SELF-SPONSORED)
14	Mridul Bhardwaj	22MCE412 (SELF-SPONSORED)
15	Kusum	22MCE413 (SELF-SPONSORED)
16	Akshay Pathania	22MCE414 (SELF-SPONSORED)
17	Nitin Kumar	22MCE415 (SELF-SPONSORED)
18	Safi Ullah	22MCE416 (SELF-SPONSORED)
19	Pawas Patel	22MCE417 (SELF-SPONSORED)
20	Mohd. Tafseer	22MCE418 (SELF-SPONSORED)
21	Rishabh Bahri	22MCE419 (SELF-SPONSORED)
22	Shiwani	22MCE420 (SELF-SPONSORED)

(IV) Ph.D. admission in 2022-23:

S. No.	Name of Student	Roll No.	Status	Name of Guide
1	Kartick Kumar	22RCE003	On going	Dr.Sunil Sharma
2.	Absishek Sharma	22RCE004 (PT01)	On going	Dr. Vijay Shankar
3.	Abhishek Sharma	22RCE005	On going	Dr.K.Nallasivam
4.	Vishal	22RCE006	On going	Dr.Vimal Kumar
5	Aman Chauhan	22RCE007	On going	Dr. V.K Bansal
6	Rajat Sharma	22RCE008	On going	Dr. R.S Banshtu
7	Aditya Thakur	23RCE001	On going	Dr.Dharmendra
8	Vansheika	23RCE002	On going	Dr. Chander Prakash

(V) Ph.D awarded in 2022-23

S. No.	Name of Student	Roll No.	Status	Name of Guide
1	Virajan Verma	2K17 Ph.D CE329	Submitted (Defense over)	Dr. K Nallasivam
2	Desh Deepak Pandey	2K17 Ph.D CMSE345	Submitted (Defense over)	Dr. R.S Banshtu
3	Govind Mohan	2K17 Ph.D CE351	Submitted (Defense over)	Dr.U.K Pandey

4	Akhilesh Nautiyal	2K17 Ph.D CE-352	Submitted (Defense	Dr. Sunil Sharma
5	Amol Sharma	2K18 Ph.D CE-378	Awarded	Dr. Chander
6	Vishal Panwar	2K18 Ph.D CE-379	Submitted	Dr. R.K Dutta
7	Mukul Bajpai	2K18-Ph.D-CEEE-	Submitted (Defense	Dr.S.S Katoch
8	Sonu Singh	2K19-Ph.D-CE-425	Submitted	Dr. Vijay Shankar

(VI) RESEARCH PROJECTS FOR THE YEAR 2022-23

Sr. No.	Title of Project	Funding Agency & Amount Sanctioned	Allotment Year & Time	Present Status of the Project/PI	Name of PI/ Co-PI
1.	Traffic Safety assessment of horizontal curvature on hilly highways using lateral discipline based approach	Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE), Shimla Rs. 1.80 lakh	24/06/2020 to 23/06/2022	Ongoing	Dr. Subhadip Biswas, PI & Dr. Sunil Sharma, Co-PI
2.	Mobile GIS application and web-GIS based Himachal Landslide information System (HIMLIS).	Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE), Shimla Rs. 3.00 lakh	12/07/21 to 11/07/23	Ongoing	Dr. Chander Prakash, PI & Dr. R.S. Banshtu (Co-PI)

(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 2022-23:

Sr. No	Name of Equipment	Amount	Name and addressed of the firm	Qty.
1	ELECTRONIC LECTERN [Model: DP-C5 Serial No: ONF230123HAMDP002, ONF230125DPP0002 ACCESSORIES:	389970	M/s ONFINITY TECHNOLOGIES, Plot 260, Phase-1, Industrial Estate, HSI IDC, Alipur, Barwala, Panchkula, Haryana-134118	2 set.
2	SOKKIA IP 56 with compensator Setting Accuracy 03 Second	195912	M/s M.S Survey Instruments, 448, Satti Street, Near Indra Park, Roorkee (Haridwar) U.K 247667	08 Nos.
3	Dinesh Scientific LCD Display R Type Silicon Carbide (Sic) rods Muffle Furnace	484000	M/s Innovative Engineers, 1079 Bengali Mohalla Ambala Cantt, Haryana	01 No.
4	ERDAS Educational Kit Version 2022 or Latest	1416000	M/s IGIS Pvt. Ltd., 243/196 Rabindranath Tagore Marg, New Cantt. Road, Dehradun- 248001	05 users
5	Repair of equipments [CCS Make Computerized Marshall Test apparatus with a cost of Rs. 1,263,00/-] [CCS Make Universal penetrometer with Electronic Readout with a cost of Rs. 33,600/-]	235056	M/s Components & Control System, 500, Solani Puram, Roorkee-247667 (Uttarakhand, India)	01 No.
6	ELITEONE 840 AIO COMPUTER [990000	M/s Satluj Document Company, ,Satluj Bhawan, Plot No. 448, Near Dev School, New Shimla-171002	05 Nos.
7	Multifunctional Wideformat Printer Plotter Printers	499875	M/s Luxmi Enterprises, SCO 13-14, Sector-19C, Chandigarh-160019	01 No.
8	Ultrapure and Pure Lab Water Purification Systems	285593	AnaDiGi Solutions Pvt. Ltd., SCO 108, 2 nd Floor, Sector- 47C, Chandigarh-1600047 (India)	01 No.
9	Jaw Crusher	160000	M/s Simran Scientific & Engineering Works, Vill. Bhangeri Mahawatpur, P.O Melapnagar, Roorkee, Near IIT Roorkee	01 No.
10	Supply & Installation of PTV Tutor License Software (one network license including maintenance for a period of 3 years)	409861	M/s Unitrans Mobility Solutions, 357, SFS Flats, Phase-IV, Ashok Vihar, Delhi-110052	01 users

11	Trans CAD Software-Single user Academic License Standalone License Latest version [Single Unser Academic License]	1011429	M/s RamCAD Scientific Softmach Engineers, D-4, Frist Floor, Pocket 9A, Jasola, New Delhi-110025	01 No.
12	MIKE+SOFTWARE	4371074	M/s DHI (India) Water & Environment Pvt. Ltd., Unit No.815, Eighth Floor, DLF Prime Tower, Plot No.F-79-80, Okhla Phase-I, New Delhi	01 No.
13	Supply and Installation of Plaxis 2D and 3D Suite Classroom	2476815	M/s Innovative Systel, H.No.39/2, Lane No.4, Nanak Nagar, Jammu, Jammu and Kashmir-180004	01 No.
14	Ultrapure and Pure Lab Water Purification Systems	337000	M/s AnaDiGi Solutions Pvt. Ltd., SCO 108, 2 nd Floor, Sector-47C, Chandigarh-1600047 (India)	01 No.
15	GEO 5 User Educational License- 5 years Subscription including 5 years Maintenance	305620	M/s CIVILTECHY, D.No.35, Kommalapudi, Manubolu, Nellore (Dt), Andhra Pradesh, India-524405	05 users
16	AMC for service & calibration of Trimble S6 Total Station	165200	M/s Allterra Solutions LLP Ghaziabad, IIND, VC-2, Mahalaxmi Plaza, Sector-3, Vaishali (UP)-201010	06 Nos.
17	METRY LCD Display R Type Silicon carbide (SiC) rods Muffle Furnace	496750	M/s METREX SCIENTIFIC INSTRUMENTS PRIVATE LIMITED, WH 20, Phase 1, Mayapuri Industrial Area, Phase-1, New Delhi-110064	01 No.
18	Oven [Industrial Oven Model: MOP-200]	489800	M/s METREX SCIENTIFIC INSTRUMENTS PRIVATE LIMITED, WH 20, Phase 1, Mayapuri Industrial Area, Phase-1, New Delhi-110064	01 No.
19	Supply and Installation of Desk FOCUS- FRONT SEATER	615000	M/s RFH Solutions Pvt. Ltd., SCF 3&9, Shaheed Udham Singh Nagar, Jalandhar (Pb)	[100 desks consistin g of two chairs each]
20	MIDAS Civil Education Bundle	825500	M/s Aileron, Hall No. 212, A-2, South Block, Bahu Plaza Jammu-180012	05 users
21	Industrial Oven, Electronic Weighing Machine, Standard Penetration Test Apparatus and Digital CBR Testing Machine	213580	M/S Weekay Industries, 117, D.B, Gupta Market, Karol Bagh, New Delhi-110005	01 No.

22	Digital Consolidation Apparatus, Three Gang with Amil DAQ and Amil Analysis Software	218064	M/s Amil Ltd., Plot No. 652, 2nd Floor, Industrial Area, Phase 9, Mohali-160062	01 No.
23	PNEUMATIC GAS GUN SET-UP	20,00,100/-	M/s SV Engineering, Bhangedi, Village Bhagneri Mahabatpur, Roorkee, Bhangedi, Haridwar, Uttrakhand-247666	01 No.

(IX) CONSULTANCY SERVICES FOR THE PERIOD 01/04/2022 TO 31/03/2023

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	3,60,90,520
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. 1. ACADEMIC STAFF:

HEAD of Department: Dr. Naveen Chauhan

FACULTIES:

Professor	Associate Professor	Assistant Professor
Dr. Lalit Kumar Awasthi (On deputation to Director Uttarakhand)	1. Dr. (Mrs.) Kamlesh Dutta 2. Dr. T.P. Sharma 3. Dr. Siddhartha Chauhan 4. Dr. Naveen Chauhan 5. Dr. Divakar Yadav (on lien)	1. Dr. Pardeep Kumar 2. Dr. Rajeev Kumar 3. Dr. Nitin Gupta 4. Dr. Dharmendra Prasad Mahato 5. Dr. Arun Kumar Yadav 6. Dr. Priyanka 7. Dr. Jyoti Srivastava 8. Dr. Sangeeta Sharma 9. Dr. Mohit Kumar 10. Dr. Vijay Kumar (on lien)

2. DISTINCTION ACHIEVED:**a) By students:**

- a. Mr. Amit Gupta, B.Tech. CSE (2013-2017) scored 246th rank in UPSC 2023.
- b. Shalvi Mahajan, B.Tech CSE, alumnus, recognized as Most Impactful Women in Technology 2022.
- c. Five students from DoCSE selected for prestigious Google summer of code.
- d. 22 students from DoCSE cleared GATE exam.
- e. One Patent published by three B.Tech CSE students with mentor Dr. Nitin Gupta.
- f. Two teams from NIT Hamirpur including students from DoCSE made it to the finals of Smart India Hackathon (SIH) organized nationwide by Government of India in Oct 2022.
- g. Aditi Singh, B.Tech. CSE secured 50 lac, Muskan Khajuria 48 lac and Shagun 45.5 Lac annual package last year.
- h. Best Paper Award to Nima Tshering Bhutia, Himanshu Verma, Naveen Chauhan and Lalit Kumar Awasthi for their research paper titled, "DDoS Attack Detection in Internet of Medical Things Using Machine Learning Techniques" in IEEE International Conference in Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI-2022).

b) By faculty Member:

- a. One Patent granted to Dr. Sangeeta Sharma.

Journals Publications: -

1. Pooja Rani, Kamlesh Dutta and Vijay Kumar, Drug synergy model for malignant diseases using deep learning, Journal of Bioinformatics and Computational Biology, <https://doi.org/10.1142/S0219720023500142>, 2023/5/10, World Scientific (SCIE Impact factor 1.0 and Scopus)
2. Pooja Rani, Kamlesh Dutta and Vijay Kumar, Performance Evaluation of Drug Synergy Datasets using Computational Intelligence Approaches, Multimedia Tools and Applications, 2023, Springer(SCIE Impact factor 3.6 (2022) and Scopus)
3. Parnika Bhat and Kamlesh Dutta, A System Call-based Android Malware Detection Approach with Homogeneous & Heterogeneous Ensemble

- Machine Learning, Computers & Security, 2023, Elsevier(SCIE Impact factor 5.6 and Scopus)
4. Parnika Bhat and Kamlesh Dutta, A multi-tiered feature selection model for android malware detection based on Feature discrimination and Information Gain, Journal of King Saud University -Computer and Information Sciences, Volume 34, Issue 10, Part B, November 2022, Pages 9464-9477, Elsevier (SCIE Impact factor 6.9 (2022) and Scopus)
 5. Parnika Bhat and Kamlesh Dutta, Machine learning and deep learning techniques for detecting malicious android applications: An empirical analysis, Proceedings of the Indian National Science Academy, Issue 2, June 2023 <https://doi.org/10.1007/s43538-023-00182-w>, Springer, (ESCI Impact factor 0.9 and Scopus)
 6. Arun Kumar, Kamlesh Dutta, Abhishek Srivastava, Generating Automated Layout Design using a Multi-population Genetic Algorithm. Journal of Web Engineering, 22(02), 357-384.<https://doi.org/10.13052/jwe1540-9589.2227>, River Publisher (SCIE (2021 Impact Factor 0.617) and Scopus)
 7. Arun Kumar, Kamlesh Dutta, Abhishek Srivastava, Topological and Dimensional constraints based optimal placement of Layout Entities using Clustering and Genetic Algorithm, Applied Soft Computing Volume 132, January 2023, 109867, Elsevier, (SCIE Impact factor 8.7 (2022) and Scopus)
 8. Kamlesh Dutta, Varun Gupta, and Vachik S. Dave, Analysis and Comparison of Neural Network Models for Software Development Effort Estimation, Research Anthology on Agile Software, Software Development, and Testing, 2022, Pages: 29 DOI: 10.4018/978-1-6684-3702-5.ch009
 9. Kusum Lata, Pardeep Singh, Kamlesh Dutta, "Mention detection in coreference resolution: survey,"Applied Intelligence, vol 52, issue 6, pp 1-45, 2022. IF 5.08.
 10. Mehul Sharma, Shrid Pant, Priety, Deepak Kumar Sharma, Nitin Gupta, Gautam Srivastava, "Advancing Security in the Industrial Internet of Things Using Deep Progressive Neural Networks", in Mobile Networks and Applications, Springer, Feb 2023, p.p. 1-15.
 11. Yash Prakash Gupta, Mukul and Nitin Gupta, "Deep Learning Model based Multimedia Retrieval and its Optimization in Augmented Reality Applications", in Multimedia Tools and Applications, Springer, Aug 2022.
 12. Ritwik Duggal, Nitin Gupta, AaryaPandyyaa, Poorvansh Mahajan, Kanak Sharma, Tarushkaundal, and Pragya Angra, "Building Structural Analysis based Internet of Things Network Assisted Earthquake Detection", in

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13. M Sreenu, Nitin Gupta, Chandrashekar Jatoth, Aldosary Saad, Abdullah Alharbi and Lewis Nkenyereye, "Blockchain based Secure and Reliable Cyber Physical Ecosystem for Vaccine Supply Chain", in Computer Communications, Elsevier, July 2022.
 14. Gupta, Sonam, Tushtee Varshney, Abhinav Verma, Lipika Goel, Arun Kumar Yadav, and Arjun Singh. "Aybrid Machine Learning Approach for Credit Card Fraud Detection." *International Journal of Information Technology Project Management (IJITPM)* 13, no. 3 (2022): 1-13. DOI:10.4018/IJITPM.313420
 15. Yadav, Divakar, Aarushi Gupta, Arti Jain, and Arun Kumar Yadav. "Plant leaf disease detection using CNN with transfer learning and XGBoost." *International Journal of Data Analysis Techniques Strategies* 14, (2022): 244-265. DOI:<https://doi.org/10.1504/IJDATS.2022.128273>.
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 17. Gupta, C., Kumar, M., Yadav, A. K., & Yadav, D. (2023). FERNET: An Integrated Hybrid DCNN Model for Driver Stress Monitoring via Facial Expressions. *International Journal of Pattern Recognition and Artificial Intelligence*, 37(03), 2357002.
 18. Manick and J. Srivastava, "Cassava Leaf Disease Detection Using Deep Learning," 2022 IEEE International IOT, Electronics and Mechatronics Conference (IEMTRONICS), Toronto, ON, Canada, 2022, pp. 1-7, doi: 10.1109/IEMTRONICS55184.2022.9795751.
 19. Yadav, A. K., Kumar, M., Kumar, A., Shivani, Kusum, & Yadav, D. (2023). Hate speech recognition in multilingual text: Hinglish documents. *International Journal of Information Technology*, 15(3), 1319-1331.
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 21. Rathee, P., Shirsath, M., Awasthi, L. K., & Chauhan, N. (2023). A Novel Deep Convolutional Neural Network based Classification of

- Arrhythmia. International Journal of Next-Generation Computing, Vol. 14, No. 2.
22. Himanshu Verma, Naveen Chauhan, Lalit Kumar Awasthi, "Modeling Buffer-Overflow in 6LoWPAN- Based Resource-
 23. Constraint IoT-Healthcare Network", Springer Journal of Wireless Personal Communications, 2023.
 24. Deepa Rani, Tanuj Wala, Rajeev Kumar, Naveen Chauhan Fuzzy Logic-Based Delay Efficient Data Collection Technique for IoT Environment, Inderscience International Journal of Communication Networks and Distributed Systems, 1754-3924,2023.
 25. Tanuj Wala, Rajeev Kumar, Naveen Chauhan, Ajay k. Sharma, "DDC-OMDC: Deadline-based data collection using optimal mobile data collectors in Internet of Things". International Journal of Communication System, 1-22, 2023.
 26. Himanshu Verma, Naveen Chauhan, Narottam Chand, Lalit Kumar Awasthi, "Buffer-loss estimation to address congestion in 6LoWPAN based resource-restricted "Internet of Healthcare Things" Network, Elsevier Journal of Computer
 27. Communications, 2022.
 28. Radha Rani and Dharmendra Prasad Mahato, "A randomized algorithm for the wait-free consensus problem Journal of Supercomputing" 2022, Volume= 86, pages= 25, 10.1007/s11227-022-04774-z, Impact Factor: 2.55.
 29. Radha Rani and Dharmendra Prasad Mahato, "Survey on Wait Free Consensus Protocol in Distributed Systems", International Journal of Communication Networks and Distributed Systems, 2022, 10.1504/IJCNDS.2023.10049439.

Publications in Conferences

1. Varsha Maheshwari , Kamlesh Dutta and Aanchal Kushwaha, Analysis of different attacks on various NLP SoTA models, Computational Intelligence for Information, Security and Communication Applications (CIISCA-2023), 22-23 June,2023, IEEE
2. Pooja Rani, Kamlesh Dutta and Vijay Kumar, An efficient drug synergy model based on deep learning for malignant diseases, IEEE International Conference on Computer, Electronics & Electrical Engineering and their applications (IC2E3-2023), 8-9 June,2023

3. Ishant Kumar and Kamlesh Dutta, Rhyme detection of Hindi and Rajasthani Poems using Statistical-Based Method, IEEE International Conference on Contemporary Computing and Communications (InC4 2023), 21-22 April, 2023.
4. Shubham Jain and Kamlesh Dutta, Identification of Characteristics of Mewari Poems, 12th conference in sequence on Information Systems & Computer Networks (ISCON -2023), 3-4 March 2023, IEEE Explore
5. Rahul Gupta and Kamlesh Dutta, Resampling Strategies for Mitigating Class Imbalance of ASD Dataset on the Performance of Machine learning Classifiers, Fourth International Conference on Advanced Computational and Communication Paradigms(ICACCP 2023), Springer, 16-18 February, 2023
6. Aanchal Kushwaha, Kamlesh Dutta and Varsha Maheshwari, Analysis of BERT Email Spam Classifier Against Adversarial Attacks, IEEE International Conference on Artificial Intelligence and Smart Communication (AISC-2023), 27-29 January, 2023
7. Ayush Kaushal and Kamlesh Dutta, Analysis of Performance Metrics for Classification of Punjabi Poetry using Machine Learning Techniques., IEEE International Conference on Artificial Intelligence and Smart Communication (AISC-2023), 27-29 January, 2023
8. Arun Kumar and Kamlesh Dutta, Generating Automated Layout Design using Multi-Population Genetic Algorithm, 2nd International Workshop on Big data driven Edge Cloud Services (BECS 2022) Co-located with the 22nd International Conference on Web Engineering (ICWE 2022), July 5-8, 2022, Bari, Italy. (Position Paper)
9. Triveni Lal Pal and Kamlesh Dutta, Learning Co-occurrence Embeddings for Sentence Classification, In: Joshi, S., Bairwa, A.K., Nandal, A., Radenkovic, M., Avsar, C. (eds)Cyber Warfare, Security and Space Research. SpacSec 2021. Communications in Computer and Information Science, vol 1599. Springer, Cham.https://doi.org/10.1007/978-3-031-15784-4_8 (August 2022)
10. Arunima Khunteta and Pardeep Singh, “ Emotion Cause Extraction - A Review of Various Methods and Corpora,” 2nd
11. International Conference on Secure Cyber Computing and Communications (ICSCCC), 2021, pp. 314-319, doi:10.1109/ICSCCC51823.2021.9478079.
12. Sumit Kumar and Pardeep Singh, “An Analysis of Various Text Segmentation Approaches,” International Conference on Intelligent Cyber-Physical Systems(ICPS-2021). Springer.
13. Sagnik Sarkar, Pardeep Singh, Namrata Kumari, and Poonam Kashtriya, “The task of Question Answering in NLP Comprehensive Review,”

- International Conference on Recent Innovations in Computing (ICRIC-2022), Springer
14. Arvind Jamwal, Pardeep Singh, and Namrata Kumari, "Survey of Text Summarization Stratification," International Conference on Recent Innovations in Computing (ICRIC-2022), Springer.
 15. Parul Bansal and Pardeep Singh, "Clinical Named Entity Recognition Using U-Net Classification Model," International Conference on Recent Innovations in Computing (ICRIC-2022), Springer.
 16. Arunima Khunteta and Pardeep Singh, "Emotion Cause Pair Extraction By Multi Task Learning on Enhanced English Dataset," International Conference on Machine Learning and Data Engineering (ICMLDE 2022), Elsevier.
 17. Rahul Kumar Yadav, Pardeep Singh, and Poonam Kashtriya, "Diagnosis of breast cancer using machine learning tools and techniques," International Conference on Machine Learning and Data Engineering (ICMLDE 2022), Elsevier.
 18. Namrata Kumari, Nikhil Sharma, and Pardeep Singh, "Performance of Optimizers in Text Summarization for News Articles," International Conference on Machine Learning and Data Engineering (ICMLDE 2022), Elsevier.
 19. Sagnik Sarkar and Pardeep Singh, "Combining the Knowledge Graph and T5 in Question Answering in NLP, Second International Conference on Sentimental Analysis and Deep Learning (ICSADL 2022), pp 405-409, 2023, Springer.
 20. Dharmendra Prasad Mahato and Ravi Shankar Singh, "Dependability Analysis for Transaction Processing in On-Demand Computing System", 18th International Conference on Distributed Computing and Intelligent Technology held on 19th - 23rd January 2022, KIIT University, Bhubaneswar, Odisha, India., Core Rank B and Tier II.
 21. Shubham Thakur and Dharmendra Prasad Mahato, "IoT based oxygen concentrators Demo & Exhibits Track, COMSNETS 2022 in 14th International Conference on COMMunication Systems & NETWORKS", January 3 - 9, Hybrid Conference, Bengaluru, India Initiative by COMSNETS Association, In-Cooperation With ACM, sigmobile, sigcomm, IEEE ComSoc.
 22. Shivam Sood and Dharmendra Prasad Mahato, "QR-AR based Smart Indoor Navigation with CrowdManagement", STUDENT MOBILE APP COMPETITION in The 23rd International Conference on Distributed

- Computing & Networking (ICDCN 2022), to be held during 4-7th January, 2022, New Delhi, Conference Rank: Core B and Tier-II.
23. Nilansh Panchani and Dharmendra Prasad Mahato, "Dijkstra's Shortest Path in Sleeping Model" 8th International Conference on Computing in Engineering and Technology (ICCET- 2023) during July 14-15, 2023, at NIT Patna, Proceedings of the conference to be published in IET. Accepted on 29th April 2023.
 24. Tejasvi Mehta and Dharmendra Prasad Mahato, "Effective Scheduling and Nature Inspired Hybrid Load Balancing in VANETs", 8th International Conference on Computing in Engineering and Technology (ICCET-2023) during July 14-15, 2023, at NIT Patna, Proceedings of the conference to be published in IET. Accepted on 29th April 2023.
 25. Sarthak Gupta, Kuldeep Singh and Dharmendra Prasad Mahato, "High Utility Sequence Mining Using Cuckoo Search Algorithm", 8th International Conference on Computing in Engineering and Technology (ICCET-2023) during July 14-15, 2023, at NIT Patna, Proceedings of the conference to be published in IET. Accepted on 29th April 2023.
 26. Anshul, Kuldeep Singh and Dharmendra Prasad Mahato, "Evolutionary Technique for High Utility Sequential Pattern Mining", 8th International Conference on Computing in Engineering and Technology (ICCET-2023) during July 14-15, 2023, at NIT Patna, Proceedings of the conference to be published in IET. Accepted on 29th April 2023.
 27. Ankit Gupta and Dharmendra Prasad Mahato, "A Cascading-Failure-Aware Distributed Computing System with Performance Sharing: Reliability and Robustness Analysis, 12th International Conference on Soft Computing for Problem Solving (SocProS 2023), Moving Towards Society 5.0, August 11-13, 2023 organized by Department of Applied Mathematics and Scientific Computing INDIAN INSTITUTE OF TECHNOLOGY ROORKEE, ROORKEE, Accepted on 27th June 2023.

3. SEMINAR, SYMPOSIA, SUMMER SCHOOL, WINTER SCHOOL, SHOR TERM COURSE:

(a) Conducted in the DoCSE:

Sponsoring Agency	Name of the Co-ordinator	Title of the Seminar/symposia	Duration
ITI Joginder	Dr. Mohit Kumar, Dr.	Essential Soft Skills	23/12/2022 to

Nagar	Arun Kumar Yadav		27/12/2022
NIT Hamirpur	Dr. Mohit Kumar, Dr. Jyoti Srivastava	One Week Online Short-Term Course (e-STC) on Machine Learning and its applications in Information Security, Computer Vision and Natural Language Processing (MaLCoN-2023)	13/03/2023 to 17/03/2023

(b) Participated by Faculty Members: NIL**1. RESEARCH Projects:**

Title of the Scheme	Sponsored by	Assistance Received (Rs) in lakh	Investigator
ICT Based Solution to Expedite the Efficient Delivery of Care to the Patient of Heart Attack	HIMCOSTE	INR 6,50,000/-	Dr. Naveen Chauhan Prof. Lalit Kumar Awasthi, Dr. Rajeev Kumar and Dr. Rajesh Sharma (Deptt. of Cardiology IGMC Shimla)
QR-AR based Smart Indoor Navigation with Crowd Management	Faculty Research Programme Grant - Institute of Eminence, University of Delhi	INR 1,75,000/-	Dr. D. P. Mahato

(c) Expert Talks By Dr. (Mrs.) Kamlesh Dutta:

- i. Neural Machine Translation, Refresher Course on Artificial Intelligence and Machine Learning during 9th - 21st January 2023, Punjabi University, Patiala (Punjab)
- ii. Neural NLP for Low Resource Languages, e-Short Term Course (Online Mode) on Machine Learning and its applications in Information Security, Computer Vision and Natural Language Processing(MaLCoN 2023) during 13th-17th March 2023.

- iii. Artificial Intelligence : Challenges and Opportunities, Lovely Professional University, 28 th April, 2023
- iv. Role of ICT in Rural Infrastructure Development , STC - Role of Technical Institutions in Rural Infrastructure Development , 12-16 September 2022, National Institute of Technical Teachers Training and Research, Chandigarh

d) Attended Events:

1. Dr.(Mrs. Kamlesh Dutta) attended Webinar on “Introduction to Legal NLP”, Indian Institute of Information Technology Kottayam, 4th September, 2022

2. Research Supervision

Master Thesis completed:

Sr. No	Title	Guide	Name of the students	Brief Report
1.	A GitHub Actions Workflow for Continuous Delivery of Software on Arduino Based IoT Devices.	Dr. Naveen Chauhan	Suthinan Mustmani (21MCS020)	Completed
2.	Class Imbalanced Landslide Identification	Dr. Naveen Chauhan	Aseem Narwal (21MCS102)	Completed
3.	Real Time Atrial Fibrillation Detection System through IoMT using Hybrid Machine Learning Classification.	Dr. Naveen Chauhan	Akshat Raj Vansh (185520)	Completed
4.	Reduced Lead ECG Multi-label classification with Higher generalization using 2D SEResnets with Self Attention	Dr. Naveen Chauhan	Danish Sheikh (185517)	Completed
5.	Disease Detection using Texture Based Local Binary Pattern feature and Modified Local Binary Pattern using feature selection and Machine Learning.	Dr. Naveen Chauhan	Vishal Guleria (185511)	Completed
6.	Multiple Drone Routing Model for On-Demand Hyperlocal Market using	Dr. Naveen Chauhan	Dishant (185530)	Completed

	Neighbor Search Heuristic Algorithm			
7.	Rhyme Detection of Hindi and Rajasthani Poems using Statistical-Based Feature Extraction and Supervised Learning Techniques	Dr. Kamlesh Dutta	Ishant Kumar	Completed
8.	Identification of Characteristics of Mewari Poems	Dr. Kamlesh Dutta	Shubham Jain	Completed
9.	Analysis of Performance Metrics for Classification of Punjabi Poetry using Topic Modeling and Machine Learning Techniques.	Dr. Kamlesh Dutta	Ayush Kaushal	Completed
10.	Analysis of Email Spam Classifiers Against Adversarial Attacks	Dr. Kamlesh Dutta	Aanchal Kushwaha	Completed
11.	Analysis of Adversarial Attack for Textual Data	Dr. Kamlesh Dutta	Varsha Bhawanishanker Maheshwari	Completed
12.	Resampling Strategies for Mitigating Class Imbalance of Autism Spectrum Disorder Dataset	Dr. Kamlesh Dutta	Rahul Kumar Gupta	Completed
13.	Sentiment Analysis Of Twitter Text	Dr. Siddhartha Chauhan	Abhinav	Completed
14.	Design And Evaluation For Sensor Based Recommendation For Improvised Taggn	Dr. Siddhartha Chauhan	Mukul Jain	Completed
15.	Performance Analysis Of SQL VS Nosql Database For Microservice	Dr. Siddhartha Chauhan	Ritesh Kumar	Completed
16.	Hate Speech Detection in English Memes	Dr. Siddhartha Chauhan	Kashish Kumar	Completed
17.	Content Based Image Retrieval for Retinal Images using SURF Algorithm	Dr. Siddhartha Chauhan	Aman Parteek	Completed
18.	Secure Health Monitoring and Communication System for IOT	Dr. Siddhartha Chauhan	Swayam Kaul	Completed
19.	Multidimensional Community	Dr. Nitin Gupta	Akshay Thakur	Completed

	Correlation Based Routing for Data Transmission in VANETs			
20.	Design and Implementation of a Refreshable Braille Display Watch for Enhancing Multilingual Communication Between Deaf-Blind Individuals and the General Population	Dr. Nitin Gupta	Himanshi	Completed
21.	Privacy Aware Routing in Opportunistic Networks with Federated Learning	Dr. Nitin Gupta	Moulik	Completed
22.	Contactless Biometric Verification using Recognition and Detection of Bracelet Lines	Dr. Nitin Gupta	Ritwik Duggal	Completed
23.	Bayesian Optimization and Neural Network Based Opportunistic Routing in WSN	Dr. Nitin Gupta	Gollamandala Sanjay	Completed
24.	Sentimental Classification in Hindi Text using Hybrid Deep Learning Mode	Dr. Arun Kumar Yadav	Ashish Dhiman	Completed
25.	Multi Document Extractive Text Summarization using Statistical Approach	Dr. Arun Kumar Yadav	Kartikey Tiwari	Completed
26.	Skin Cancer Classification using Deep Learning	Dr. Arun Kumar Yadav	Mohammed Usman Syed	Completed
27.	Fingerprint Detection and Matching using Deep Learning and Gabor Features	Dr. Arun Kumar Yadav	Krishan Kumar	Completed
28.	Bird Species Classification and Detection using Deep Learning	Dr. Arun Kumar Yadav	Manoj Kumar	Completed
29.	Automation of FaaS/Serverless Frameworks OpenFaaS and OpenWhisk in Private Cloud	Dr. Sangeeta Sharma	Pankaj Tiwari 21MCS024	Completed
30.	A Hybrid Approach For Efficient Loadbalancing And Dynamic Vm	Dr. Sangeeta Sharma	Ankush Kumar 21MCS026	Completed

	Allocation Includ Computing			
31.	Brain Tumor Detection Using Deep Learning Model	Dr. Sangeeta Sharma	Avadh Naresh Kushwaha 21MCS120	Completed
32.	Credit Card Fraud Detection using Continual Learning	Dr. Sangeeta Sharma	Dikshit Kaushal 185513	Completed
33.	Network Intrusion Detection System Using ANN and CNN-based Ensemble Deep Learning Techniques	Dr. Sangeeta Sharma	Kamal Kant Mahour 21MCS117	Completed
34.	Lung and Colon Cancer Classification and Detection using Extreme Learning	Dr. Sangeeta Sharma	Mohit Kumar Verma 185502	Completed
35.	Workflow Scheduling by optimizing Pareto Front with multi-objective Genetic Algorithm	Dr. Sangeeta Sharma	Utkarsh Vashisht 185542	Completed
36.	Cassava Leaf Disease Detection Using Deep Learning	Dr. Jyoti Srivastava	Manick	Completed
37.	Early-Stage Dementia Detection by Optimize Feature Weights with Ensemble Learning	Dr. Jyoti Srivastava	Tanvi Mahajan	Completed
38.	Hate Speech Detection Using Twitter Dataset	Dr. Jyoti Srivastava	Amit Kumar (17mi539)	Completed
39.	An Explainable NLP Framework for Sentiment Analysis using Interpretable ML and XAI	Dr. Jyoti Srivastava	Harsha Vardhan Sahoo (20mcs104)	Completed
40.	Early stage detection of Parkinson's Disease (PD) using Machine Learning	Dr Mohit Kumar	Vinaya Kumar	Completed
41.	POTHOLE DETECTION FROM IMAGES	Dr Mohit Kumar	Archit Dhiman	Completed
42.	Analyzing GTZAN and Introducing PAM(dataset)and Baselines for Music Genre Classification using Deep Learning	Dr Mohit Kumar	Sarthak Sharma	Completed
43.	Automatic Sign Language Recognition for ISL using	Dr Mohit Kumar	G Khartheesvar	Completed

	Deep Learning			
44.	FERNET: An Integrated Hybrid DCNN Model for Driver Stress Monitoring via Facial Expression	Dr Mohit Kumar	Chinmay Gupta	Completed
45.	Intelligent Traffic Management for High-Priority Vehicles	Dr Priyanka	Prashant Kumar (20MCS008)	Completed
46.	A Novel Deep Neural Network based Classification of Arrhythmia	Prof Lalit Awasthi/Dr Priyanka	Mahesh Rajendra Shirsath (20MCS006)	Completed
47.	Real-Time Decision Making Preemptive Service Based CS Recommendation and Reservation System For Electric Vehicles	Dr. Priyanka	Vineet Sharma (17MI514)	Completed
48.	Efficient Workflow Scheduling in Cloud Computing using Hybrid Algorithm	Prof Lalit Awasthi/Dr Priyanka	Aakanksha (17MI549)	Completed
49.	Workflow Scheduling by Multi Objective Genetic Approach with Ranking of Task in Cloud Environment	Prof Lalit Awasthi/Dr Priyanka	Namisha (17MI550)	Completed
50.	Automated classification of Fatal Ultrasound Images with Hybrid Capsule Network	Dr Priyanka	Sourav Kumar Tanwar (21MCS013)	Completed
51.	Exploring the efficacy of NLP and Deep learning Technique for depression detection	Dr Priyanka	Yogesh Nimalkar (21MCS015)	Completed
52.	Efficient WBAN Routing by MultiObjective Optimization Genetic Algorithm	Dr Priyanka	Gudala Laya (185557)	Completed
53.	Content Based Image retrieval for Retinal images using SIFT	Dr Priyanka	Nakshatra Goyal (185531)	Completed

54.	Skin cancer detection using deep learning approach	Dr Priyanka	Ankush (185508)	Completed
55.	Augmentation of Medical Image dataset using GAN	Dr Priyanka	Harsh Seth (185560)	Completed
56.	Routing scheduling for Drone Delivery System using Deep Reinforcement learning	Dr Priyanka	Karan Bharadwaj (185544)	Completed
57.	Bell-pepper leaf bacterial spot detection using Deep Learning approach	Dr Priyanka	Kritarth Kapoor (185510)	Completed
58.	Novel view Synthesis with Relightable Scene from Image Collection	Dr. Rajeev Kumar	Barish Barla (21MCS103)	Completed
59.	Image Generations for Low-Count Monkeypox Dataset using Auxiliary Conditional Generative Adversarial Networks	Dr. Rajeev Kumar	Uttkarsh Chaurasia 185518	Completed
60.	Digitizing ECG Reports: A Cost-Efficient Device for Paper to Digital Conversion and Arrhythmia Analysis	Dr. Rajeev Kumar	Yarra Sai Prashant 185553	Completed
61.	A Survey on Potential Security Threats in the 6G ERA	Dr. Rajeev Kumar	Amishi Bansal 185535	Completed
62.	Depression Detection using Conversational Agent and Facial Expression	Dr. Rajeev Kumar	Mayanak Kumar Mongia 185527	Completed
63.	Telemedicine via WBANs for Emergency Care	Dr. Rajeev Kumar	Ashotosh Kumar Roy 21MCS003	Completed
64.	Link Prediction in Social Networks using vertex Entropy	Dr. Rajeev Kumar	Shubham 21MCS122	Completed
65.	QR-AR based Smart Indoor Navigation with Crowd Management	Dr. Dharmendra Prasad Mahato	Shivam Sood	Completed

			17MI523	
66.	IOT based Delivery System for Demand and Supply Chain of Oxygen Concentration	Dr. Dharmendra Prasad Mahato	Shubham Thakur 17MI522	Completed
67.	On scheduling transaction in grid computing using Gaussian mixture model-ant colony optimization considering load	Dr. Dharmendra Prasad Mahato	Prakrately Rai 20MCS111	Completed
68.	Mathematical Modelling of COVID-19 using Differential Equations	Dr. Dharmendra Prasad Mahato	Vishal Parmar 17MI535	Completed
69.	Effective Scheduling and Nature Inspired Hybrid Load Balancing in VANETs	Dr. Dharmendra Prasad Mahato	Tejasvi Mahta 21MCS023	Completed
70.	High Utility Sequence Mining using Honey Bee Algorithm	Dr. Dharmendra Prasad Mahato	Bhanu Pratap 185559	Completed
71.	High Utility Sequence Mining using BAT Algorithm	Dr. Dharmendra Prasad Mahato	Anshul 185529	Completed
72.	A Cascading-failure-Aware Distributed Computing System with Performance Sharing	Dr. Dharmendra Prasad Mahato	Ankit Gupta 185558	Completed
73.	Work Participation, Productivity, mental and Physical Health Outcomes among Elderly in India	Dr. Dharmendra Prasad Mahato	Akshay Singh 21MCS118	Completed
74.	Dijkstra's Shortest Path in Sleeping Model	Dr. Dharmendra Prasad Mahato	Nilansh Panchani 21MCS121	Completed
75.	High Utility Sequence Mining using Cuckoo Search Algorithm	Dr. Dharmendra Prasad Mahato	Sarthak Gupta 185503	Completed
76.	Global State Determination in	Dr.T.P. Sharma	Raghvendra	Completed

	Wireless Sensor Networks		Mishra 21MCS022	
77.	Crop Yield Prediction using Time Series Models	Dr.T.P. Sharma	Vishal Maniyal 21MCS014	Completed
78.	Improvisational of Evaluation Metrics of Text Summarization	Dr.Pardeep Singh	Devshree Shinde 21MCS105	Completed
79.	Unilization of Punjabi Text	Dr.Pardeep Singh	Vishal Pal 21MCS115	Completed

1. DOCTORAL PROGRAMME:

Doctoral Programme: Submitted: 5 & In Progress: 24

Ph.D Degree awarded: 8

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 Environment	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	Ongoing

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.	Rangu Manjula	Dr. Naveen Chauhan	Blockchain Technology for Green Revolution :The Future Agriculture	Ongoing
11.	Vishal Kaushal	Dr. Sangeeta Sharma	Privacy Preserving Efficient Model for Spam Email Detection using Federated Learning	Ongoing
12.	Ankit Verma	Dr. T. P. Sharma	Early Detection of Heart Diseases using Efficient ML Algorithms on ECG Signals	Ongoing
13.	Shobhit Tyagi	Dr. Divakar Yadav	Deep Learning Based Approaches for Fake Image Detection	Awarded
14.	Tarun Agrawal	Dr. Prakash Choudhary	Classification and Segmentaiton of Chest Radiography Images Using Deep Convolutional Neural Network	Awarded
15.	Shubhkirti Sharma	Dr. Vijay Kumar/ Dr. Kamlesh Dutta	Development of Dominance based Multi-Objective Algorithms for Engineering Problems	Ongoing
16.	Radha Rani	Dr. Dharmendra Prasad Mahato	Distributed Computing	Thesis Submitted
17.	Poonam Kashtriya	Dr. Pardeep Singh	Knowledge Extraction	Ongoing
18.	Pranjal	Dr. Siddhartha Chauhan	Human Activity Recognition (HAR) using Deep Learning Models	Submitted
19.	Yogendra Kumar	Dr. Vijay Kumar	Intrusion Detection System frameworks using Machine Learning approaches	Ongoing
20.	K Susheel Kumar	Dr. Nagendra pratapsingh	Medical image processing	Thesis Submitted
21.	Vishnu Kumar Prajapati	Dr. T. P. Sharma	An Efficient and Fault Tolerant Data Dissemination in IoT Enabled Systems	Ongoing
22.	M Sreenu	Dr. Nitin	A Novel resilient and responsive	Ongoing

		Gupta	Pharmaceutical supply chain through Blockchain and Artificial Intelligence	
23.	Namrata Kumari	Dr. Pardeep Singh	Text Summarization	Ongoing
24.	Piyush Rawat	Dr. Siddhartha Chauhan	Energy efficient protocols in Wireless Sensor Networks	Awarded
25.	Tanuj Wala	Dr Rajeev Kumar and Dr. Ajay Kumar Sharma	Efficient Handling of Big Data in Internet of Things	Thesis Submitted
26.	Richa	Dr. T. P. Sharma and Dr. Ajay Kumar Sharma	Dynamic and Fault Tolerant Topology for Efficient Data Dissemination in IoV	Awarded
27.	Sourav Mondal	Dr Priyanka/Dr Prakash Choudhary	Brain Stroke Prediction using Machine Learning	Ongoing
28.	Parveen Prakash	Dr. Priyanka	---	Ongoing
29.	Kusum Lata	Dr. Kamlesh Dutta/ Dr. Pardeep Singh	Coreference Resolution for Hindi Language Text Using Deep Learning	Awarded
30.	Parnika Bhat	Dr. Kamlesh Dutta	Malware Detection for Android in Static and Dynamic Environment	Awarded
31.	Triveni Lal Pal	Dr. Kamlesh Dutta	Enhancing Semantic Representation of Long Word Sequence Embeddings using Neural Network Techniques	Awarded
32.	Chetan Agarwal	Dr. Kamlesh Dutta	Anaphora Resolution in Machine Translation	Ongoing

33.	Himanshu Kumar	Dr. Kamlesh Dutta	---	Ongoing
34.	Nishant Sharma	Dr. Naveen Chauhan	Improving data availability in Internet of Vehicle environment	Awarded
35.	Himanshu Verma	Dr. Naveen Chauhan	Resource-Constraint-6LoWPAN based 'Internet of Healthcare Things'	Thesis Submitted
36.	Md. Ataullah	Dr. Naveen Chauhan	IoT Security	Ongoing

2. Visit of Renowned Speakers:

- Prof. Mahesh Chander Govil, Director NIT Sikkim
- Prof. Samar Agnihotri, IIT Mandi

3. 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 /-

4. EQUIPMENT ACQUIRED:

Sr. No	Name of equipment	Name of manufacturer	Cost (Rs. In lakh)
1.	HP Laserjet Printer m208dw	M/s Luxmi Enterprises Chandigarh	90735.00
2.	Xerox Versalink MFM B7125	Satluj Document Company	146286.40
3.	Xerox Versalink C 7025	Satluj Document Company	249792.46
4.	HP Monitor P22v G4 9TT53A7	M/s Tetcos Bangalore	12900
5.	MATLAB R2023a (Software)	DesignTech Systems Pvt Ltd	3932377
6.	Electronic Lectern, Windows 10 PC with motorized lift LED Screen	Technova Solutions	459800
7.	Audio System, Amplifier, DSP, Wireless Mic, Wall Speakers	Technova Solutions	371755

5. TECHNICAL ASSOCIATION / SOCIETIES:

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

6. 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. R.K jarial**
Associate Prof

FACULTIES:

Professor	Associate Professor	Assistant Professor
04	05	06

Sr. No	Name	Designation	Qualification	Specialization
1.	Prof. (Dr.) Yog Raj Sood	Professor	Ph.D.	Power system & AI Applications to Deregulation of Power System
2.	Prof. (Dr.) Sushil Chauhan	Professor	Ph.D.	Power System
3.	Prof. (Dr.) Ram Naresh Sharma	Professor	Ph.D.	Power System
4.	Prof. (Dr.) Ashwani	Professor	Ph.D.	Electric Power Quality &

	Kumar Chandel			Harmonics
5.	Dr. Ravinder Nath	Associate Professor	Ph.D.	Signal processing & Control Engg.
6.	Dr. Veena Sharma	Associate Professor	Ph.D.	Instrumentation & Control Engg.
7.	Dr. R. K. Jarial	Associate Professor	Ph.D.	Power Electronic & Drives, High Voltage Engg.
8.	Dr. B. B. Sharma	Associate Professor	Ph.D.	Control Engineering
9.	Dr. O. P. Rahi	Associate Professor	Ph.D.	Power System
10.	Dr. Amit Kaul	Assistant Professor	Ph.D.	Signal Processing & Control Engineering
11.	Dr. Himesh Handa	Assistant Professor	Ph.D.	Instrumentation & Control Engg.
12.	Dr. Rajesh Kumar	Assistant Professor	Ph.D.	Power System
13.	Dr. Bharti Koul	Assistant Professor	Ph.D.	Power System
14.	Dr. Ram Niwash Mahia	Assistant Professor	Ph.D.	Networked Control Systems
15.	Dr. Supriya Jaiswal	Assistant Professor	Ph.D.	Power System

2. Patents (Applied for -03 and Patent Granted-01)

Sr. No.	Name of Faculty EED Involved in Team Effort	No. of Patents	2022-23
1.	Prof. Yog Raj Sood, Prof. EED, National Institute of Technology Hamirpur (HP) and Dr. Anuradha Tomar	01	Patent Granted on “Recovery of kinetic energy from high inertia stranding conductor manufacturing plant; Patent Application Number: 1930/DEL/2013 A
2.	Vineet Kumar, Veena Sharma, R. Naresh, and Rajesh Kumar Sharma, EED, National Institute of Technology Hamirpur (HP)	01	“A speedy explicit predictive control method and system for an automatic voltage regulator system”, Date of filing: 26/12/2022, Publication date: 30/12/2022
3.	Vineet Kumar, Veena Sharma, and R. Naresh, EED, National Institute of Technology Hamirpur (HP)	01	“Advanced voltage and frequency control system and method for renewable integrated power system,” Date of filing: - 26/07/2022 Publication date (U/S 11A): 05/08/2022, FER Issue date: 15/02/2023 FER Filing date: 08/05/2023
4.	Er. Rajat, Er Mohit and Dr. R. K. Jarial, Associate Prof. EED, National Institute of Technology Hamirpur (HP)	01	Applied for one Patent (Appl. No. 202211057130 Dated 06/10/2022 on Innovative Product developed at NITH Entitled: “Semiautomatic Logistic Trolley for Health sector”

3. Research Publications:

Publications	2022-23
National Journal	-
International Journals	41
National Conference	-
International Conference	46
No. of Books Published	-
Book Chapters	12

Annexure - P**1. Seminar, Symposia, Summer school, Winter school, Short term course:*****a) Conducted in the Department: 03***

Sponsoring Agency	Name of the Coordinators	Title of the Seminar/Symposia	Duration	Venue
Skill Hub Initiative (PMKVY 3.0)	Dr. Rajesh Kumar Dr. Bharti Koul Dr. Amit Kaul and Dr. Veena Sharma	STC on Home Appliances Their Repair and Maintenance (Theory and Maintenance)	4-9 July 2022	NIT Hamirpur
Directorate of Technical Education, Sunder Nagar (H.P)	Dr. R K Jarial	On Job Training for ITI Students	02/1/2023 to 7/1/2023	EED, NIT Hamirpur
NITTR, Chandigarh	Dr R K Jarial & Dr. A K Chandel	The STC on Research Scope in Electric Vehicles (In collaboration with ANSYS)	05/12/2022 to 09/12/2022	On-line STC on Collaborative Mode

b) Participated by faculty members: 03

Name of the Faculty / staff Member	Course/Seminar	Organization	Duration	Venue
Dr. Bharat Bhushan Sharma	3-day online workshop on “Basics of Electrical Vehicles and its Design Process”	Organized by EduxLab in Association with Mechanica IIT Chennai	October 05-07, 2022	Online
Dr R K Jarial	The STC on Research Scope in Electric Vehicles (In collaboration with ANSYS)	NITTR, Chandigarh	05/12/2022 to 09/12/2022	Online
Dr. Ram Niwash Mahia	Five Days GIAN Course on “Multi-Agent and Micro-Grid Concepts”	MNIT Jaipur, Rajasthan	June 02-06, 2022	MNIT Jaipur (Online)

2. Research Component:**(a) Research Scheme:09 (Sponsored R& D Projects) Details**

S. No	Title of the scheme	Sponsored by	Assistance received (Rs. In lacs)	Investigator	Brief Report
1.	Model Predictive Controller based Automatic Generation Control of Interconnected	HIMCOSTE, HP Shimla	5.00 lacs (Ongoing)	Dr. Veena Sharma	Here in this project, an interconnected power system incorporating renewable sources of power will be thoroughly

	Power System Integrated with Renewable Energy Sources.”				investigated with control modules of conventional and latest model predictive controller/Sliding mode controller and in the presence of different nonlinearities present in the power system using MATLAB software.
2.	Portable Physiological Data Acquisition and Disease Diagnosis System	Himachal Pradesh State Council for Science Technology & Environment (HIMCOSTE)	5.7 lacs (Ongoing)	Dr. Amit Kaul (Principal Investigator) Co-PI(s): Dr. Ravindra Nath, Dr. Rajiv Marwah (IGMC) Dr. Sunil Sharma (IGMC)	A portable physiological data acquisition system has been developed.
3.	Synchronization in Complex Interconnected Network of a Class of	DST-SERB Sponsored Project	Rs. 16.94 Lacs (Sanctioned Amount)	Dr. B.B. Sharma	The DST-SERB project titled “Synchronization in Complex Interconnected

	Systems Using Contraction Theory				Network of a Class of Systems Using Contraction Theory” has been executed between March 2019 to Sept. 2022. The final project report has already been submitted to the funding agency.
4.	Power Flow Management in Solar-Wind-Based Micro-Grid Using Artificial Intelligent-Based Control Techniques	HIMCOSTE, Shimla	3.6 lacs (Completed)	Dr. Anil Kumar Yadav (PI) (Till 19-01-2023) & Dr. Rajan Kumar (Co-PI) (Till 21-11-2022)	R & D activities are being Progressed. Due to excessive oil prices and more carbon emission, the alternate path is to utilize renewable energy sources. There are some regions in H.P., which are not connected to the conventional grid, or the transmission of electricity is expensive. Mohamed Imran Khan is appointed as project assistant.
5.	Development	Science and	28.71 lacs	Dr. Rajan	R & D activities

	of Intelligent Controllers for Back-EMF- Based Position Sensor less Brushless DC Motor Drives Employed in Solar Photovoltaic Water Pumping Systems	Engineering Research Board, Government of India	(Ongoing)	Kumar (Till 21-11-2022)	are being Progressed. The efforts are on to procure items / equipments to develop hardware intelligent controllers for back-emf-based position sensor less brushless dc motor drives, employed in SPV water pumping systems. Mr. Prem Kumar is appointed as project assistant.
6.	Solution Technique to Unit Commitment Problems in Power System Integrated with Renewable Energy Sources	Council of Scientific and Industrial Research (CSIR)	10.0 Lacs	PI: Dr. Ram Naresh Sharma Co-PI: Dr. Veena Sharma	A detailed literature survey has been done on unit commitment problems on power systems in cost-based unit commitment (UC) problem, profit-based UC problem as well as UC on considering renewable energy sources. The literature review

					was done using various sources like reputed journals and books from the institution's library and website. Study of UC problems on 10-unit test system 20-unit test system, up to 100-unit test systems using recent metaheuristic approaches like, binary fish swarm algorithm (BFSA), binary particle swarm algorithm (BPSO) and many more.
7.	R & D Project "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 Suryawanshi (PI) & Director, NITH with Faculty involved from EED Dr. R K Jarial (Associate	R & D Project in Progress after being transferred to NIT Hamirpur. Procurement of project components and appointment of project staff is in progress

				Professor EED)	
8.	Rejuvenating efforts are ongoing for streamlining activities for institutes' first Ever Industry Sponsored TIFAC CORE on Power Transformer Diagnostics, Since its inception 2004 at NITH towards accelerating pace of Field Testing & more Academic field Extension & Outreach Activities towards self-sustaining as an Asset of Institute.	TIFAC Delhi HPSEBL, Shimla & NIT Hamirpur	530 Lacs	PI: Dr. R K Jarial & Co-ordinator, TIFAC CORE	The centre is trying develop to a level to self-sustain several academic and field-testing activities. At present, efforts are on to carry out procurement of some of urgently needed Equipments, repair and re-calibration of commonly used diagnostic equipments and routine lab tests on solid and liquid dielectrics for Power Transformers like DGA, Breakdown Tests, UV -VIS Spectrophotometric , HPLC, Flash Point, FTIR etc.
9.	Chief Minister's	Govt. Of Himachal	Studentship @ Rs	Mr Rajat-Incubatee	The Modified Medical Trolley has

	Himachal Pradesh Startup Innovation Scheme 2021-22	Pradesh & Incubation Centre, NITH	25,000/- received to Incubatee for last One Year. (Rs. 3.0 lacs)	Mentor: Dr R K Jarial	been designed and Developed under this Scheme is completed and is currently successfully being utilised by Medical Staff at Dr. RKMV Medical College &Hospital, HMR since Dec. 2022.
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(b) Research Publications: 87 (Numbers)

International Journals: 41

1. Vineet Kumar, R. Naresh, and Veena Sharma, "Stochastic profit-based unit commitment problem considering renewable energy sources with battery storage systems and plug-in hybrid electric vehicles," International Journal of Energy Research, vol. 46(12), pp. 16445-16460, 2022.
2. Vineet Kumar, Veena Sharma, and R. Naresh, "Leader Harris Hawks algorithm based optimal controller for automatic generation control in PV-hydro-wind integrated power network," Electric Power Systems Research, vol. 214, 2023. <https://doi.org/10.1016/j.epsr.2022.108924>.
3. Vineet Kumar, Veena Sharma, Yogendra Arya, R. Naresh & Amita Singh, "Stochastic wind energy integrated multi source power system control via a novel model predictive controller based on Harris Hawks optimization," Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, vol. 44, no. 4, pp. 10694-10719, 2022.
4. Vineet Kumar, Veena Sharma, and R. Naresh, "Model Predictive Controller-Based Voltage and Frequency Regulation in Renewable Energy Integrated Power System Coordinated with Virtual Inertia and Redox Flow Battery," Iranian Journal of Science and Technology, Transactions of Electrical Engineering, vol. 47, no. 1, pp. 159-176, 2022.
5. Amita Singh, Veena Sharma, Vineet Kumar, R. Naresh, & O.P. Rahi, "AOA

- based optimal control of combined AVR-LFC model in wind integrated power system,” *Wind Engineering*, vol. 47(3), pp. 515-527, 2023.
6. M. Singh and Sushil Chauhan, “A hybrid-extreme learning machine-based ensemble method for on line dynamic security assessment of power systems”, *Electric Power Systems Research*, 214 (Jan. 2023),108923.
 7. Mukesh Singh and Sushil Chauhan, “Tree-based ensemble machine learning technique for power system static security assessment”, *Electric Power Components and Systems*, Vol. 50,2022, Issue 6-7, pp. 359-373.
 8. Y. Chauhan and B B Sharma, “Synchronisation Results for an Interconnected Network of Nonlinear Systems with Diffusive Nonlinear Coupling using Contraction”, *Journal of Applied Nonlinear Dynamics*, Vol.12, Issue:3 ISSN: 21646457, 21646473, pp. 591-608. DOI: 10.5890/JAND.2023.09.012, 2023.
 9. P. Anand and B B Sharma, “Generalized Finite-time Synchronization Scheme for a Class of Nonlinear Systems Using Backstepping like Control Strategy”, *International Journal of Dynamics and Control*, <https://doi.org/10.1007/s40435-022-00948-y>, pp. 1-13, May, 2022.
 - 10.S. Changder and B B Sharma, “Synchronization among Multiple Chaotic Systems Connected in Chain and Star Configuration Using Backstepping Strategy”, *International Journal of Systems, Control and Communications (IJSCC) (Inder science)*, Vol.14 No.1, (DOI: 10.1504/IJSCC.2022.10049254), Nov., 2022.
 - 11.Maheshwari A, Sood YR, Jaiswal S. Investigation of optimal power flow solution techniques considering stochastic renewable energy sources: Review and analysis. *Wind Engineering*. 2023;47(2):464-490. doi:10.1177/0309524X221124000.
 - 12.Maheshwari, Ankur, Yog Raj Sood, and Supriya Jaiswal. “Flow direction algorithm-based optimal power flow analysis in the presence of stochastic renewable energy sources”; *Electric Power Systems Research* 216 (2023): 109087.
 - 13.Bharti Koul, Kanwar deep Singh & Yadwinder S. Brar, “Robust and Comfortable Day-Ahead Demand Side Management of Residential, Industrial and Commercial Consumers for Demand Normalization”, *Electric Power Components and Systems*, Vol. 50(3), pp. 101-119, ISSN-1532-

- 5008 print / 1532-5016 online DOI:10.1080/15325008.2022.2135637.
14. Manish Kumar, Raj Kumar Jarial, Anant Kumar Verma, Ravindra Nath, Miguel Torres, Catalina González-Castaño, Pedro Roncero-Sánchez, "Enhanced PLL-less grid synchronization algorithm amidst unbalanced and distorted three-phase grid conditions", International Journal of Electrical Power & Energy Systems, 2023, DOI: [10.1016/j.ijepes.2022.108926](https://doi.org/10.1016/j.ijepes.2022.108926)
 15. Mughal, S.N., Sood, Y.R. & Jarial, R.K, "A novel hybrid model for predicting hourly global solar radiations on the tilted surface", International Journal of Environmental Science and Technology, 2023, <https://doi.org/10.1007/s13762-021-03903-0>
 16. Manish Kumar, Raj Kumar Jarial, Anant Kumar Verma, Chandrasekaran Subramanian, Ravindra Nath, Panos C Kotsampopoulos, Claudio Burgos Mellado, "Leveraging half-cycle orthogonal signal generation approach for PLL-less tracking of single-phase grid", Measurement, 2022, DOI: [10.1016/J.Measurement.2022.111980](https://doi.org/10.1016/J.Measurement.2022.111980)
 17. Bhumaiah Jula, Raj Kumar Jarial, Anant Kumar Verma, Pedro Roncero-Sánchez, Josep M Guerrero, Tiago Davi CuriBusarello, Hafiz Ahmed, "An enhanced fast fundamental frequency estimator for three-phase electric aircraft _____ grid", Measurement, 2022, DOI: [10.1016/j.measurement.2022.111142](https://doi.org/10.1016/j.measurement.2022.111142)
 18. Shafqat Nabi Mughal, Yog Raj Sood, RK Jarial, "Design and optimization of photovoltaic system with a week ahead power forecast using autoregressive artificial neural networks", Materials Today: Proceedings, 2022, DOI: [10.1016/j.matpr.2021.10.223](https://doi.org/10.1016/j.matpr.2021.10.223)
 19. Sharma, Sumit, Yog Raj Sood, Sanjay Kumar, Vineet Kumar, and Vineet Kumar. "Renewable based techno-economic analysis for telecommunication system: A case study of western Himalaya." Wind Engineering (2023): 0309524X231169469.
 20. Kumar, Sanjay, Sumit Sharma, Yog Raj Sood, Subho Upadhyay, and Vineet Kumar. "A review on different parametric aspects and sizing methodologies of hybrid renewable energy system." Journal of The Institution of Engineers (India): Series B 103, no. 4 (2022): 1345-1354.
 21. Sharma, Sumit, Yog Raj Sood, Naveen Kumar Sharma, Mohit Bajaj, Hossam M. Zawbaa, Rania A. Turky, and Salah Kamel. "Modeling and

- sensitivity analysis of grid-connected hybrid green microgrid system." *Ain Shams Engineering Journal* 13, no. 4 (2022): 101679.
22. Maheshwari, Ankur, and Yog Raj Sood. "Solution approach for optimal power flow considering wind turbine and environmental emissions." *Wind Engineering* 46, no. 2 (2022): 480-502.
23. Kaur, Jasmine, Yog Raj Sood, and Rajnish Shrivastava. "Optimal resource utilization in a multi-microgrid network for Tamil Nadu state in India." *IETE Journal of Research* 68, no. 1 (2022): 183-193.
24. Walia, Akhil, and Amit Kaul. "Dual Window Fourier Transform (DWFT): A Tool to Analyze Non-stationary Signals." *Circuits, Systems, and Signal Processing* 41.11 (2022): 6075-6097.
25. Anup Kumar, Himanshu Sharma, Ram Niwash Mahia, Om Prakash Mahela, and Baseem Khan, "Design and Implementation of Hybrid Transmission Line Protection Scheme Using Signal Processing Techniques", *International Transactions on Electrical Energy Systems*, 2022, doi.org/10.1155/2022/7209553
26. Pallav & Himesh Handa (2022) Simple Synchronization Scheme for a Class of Nonlinear Chaotic Systems Using a Single Input Control, *IETE Journal of Research*, DOI: [10.1080/03772063.2022.2083028](https://doi.org/10.1080/03772063.2022.2083028)
27. Pallav, Handa, H. Chaos Synchronization for a Class of Hyperchaotic Systems Using Active SMC and PI SMC: A Comparative Analysis. *J Control Autom Electr Syst* **33**, 1671-1687 (2022). <https://doi.org/10.1007/s40313-022-00960-9>
28. Yadav N, Pallav, Handa H. Projective synchronization for a new class of chaotic/hyperchaotic systems with and without parametric uncertainty. *Transactions of the Institute of Measurement and Control*. 2023;45(10):1975-1985. doi:[10.1177/01423312221150294](https://doi.org/10.1177/01423312221150294)
29. Sukriti Tiwari & Ashwani Kumar (2022) Optimal Micro-PMUs Placement with Channel Limits using Dynamically Controlled Taguchi Binary Particle Swarm Optimization, *Electric Power Components and Systems*, 50:18, 1072-1086, DOI: [10.1080/15325008.2022.2145392](https://doi.org/10.1080/15325008.2022.2145392).
30. Sukriti Tiwari, Ashwani Kumar, Vedik Basetti, Multi-objective micro phasor measurement unit placement and performance analysis in distribution system using NSGA-II and PROMETHEE-II, *Measurement*, Volume

- 198,2022,111443, <https://doi.org/10.1016/j.measurement.2022.111443>.
31. Bhatt, N., Chandel, A.K. An intelligent water drop approach for simultaneous reconfiguration and DG integration in distribution system. *Energy Syst* (2022). <https://doi.org/10.1007/s12667-022-00521-8>.
 32. Vedik Basetti, Ashwani Kumar Chandel, Chandan Kumar Shiva, "Square-root cubature Kalman filter based power system dynamic state estimation", *Sustainable Energy, Grids and Networks*, Volume 31,2022,100712, <https://doi.org/10.1016/j.segan.2022.100712>.
 33. Pawan Kumar Pathak, Anil Kumar Yadav, A. Shastri, "BWOA based metaheuristic approach for uncertain nonlinear milling CNC machine system," *Expert Systems, Wiley*, vol. 40, no. 6, pp.13233, 2023.
 34. Pawan Kumar Pathak, Anil Kumar Yadav, S. Padmanaban, "Transition toward Emission-Free Energy Systems by 2050: Potential Role of Hydrogen," *International Journal of Hydrogen Energy*, Elsevier, vol. 48, no. 26, pp.9921-9927, 2023.
 35. Pawan Kumar Pathak, Anil Kumar Yadav, S. Padmanaban, B. Twala, I. Kamwa, "Design of smart battery charging circuit via PV for hybrid electric vehicle," *IET Renewable Power Generation*, pp.1-11, 2023.
 36. Maloth Ramesh, Anil Kumar Yadav, Pawan Kumar Pathak, "Artificial gorilla troops optimizer for frequency regulation of wind contributed microgrid system," *Journal of Computational and Nonlinear Dynamics*, ASME Transactions, vol. 18, no.1, pp. 011005-1-11, January 2023.
 37. Pawan Kumar Pathak, Anil Kumar Yadav, S. Padmanaban, PA Alvi, "Design of Robust Multi-Rating Battery Charger for Charging Station of Electric Vehicles via Solar PV System," *Electric Power Components and Systems*, Taylor & Francis, vol. 50, no. 14-15, pp. 751-761, 2022.
 38. Pawan Kumar Pathak, Anil Kumar Yadav, S. Padmanaban, I. Kamwa, "Fractional Cascade LFC for Distributed Energy Sources via Advanced Optimization Technique under High Renewable Shares," *IEEE Access*, vol. 10, pp. 92828-92842, September 2022.
 39. Pawan Kumar Pathak, Anil Kumar Yadav, PA Alvi, A. Shastri, "BWOA assisted PIDF-(1+I) controller for intelligent load frequency management of standalone micro-grid," *ISA Transactions*, Elsevier, vol. 132, pp. 387-401, January 2023.

40. Pawan Kumar Pathak, Anil Kumar Yadav, S. Padmanaban, PA Alvi, I. Kamwa, "Fuel cell-based topologies and multi-input DC-DC power converters for hybrid electric vehicles: A comprehensive review," *IET Generation, Transmission & Distribution*, Wiley, vol. 16, no. 11, pp. 2111-2139, June 2022.
41. Rohit Ranjan Kumar, Anil Kumar Yadav, and Maloth Ramesh, "Hybrid PID plus LQR based frequency regulation approach for the renewable sources based standalone microgrid," *International Journal of Information Technology*, Springer, vol. 14, no. 5, pp. 2567-2574, August 2022. (ISSN: 2511-2104).

International Conferences: 46

1. Vineet Kumar, Veena Sharma and R. Naresh, "Load Frequency Control in Wind Penetrated Power System using a Novel IGWO based MPC Controller," 2022 IEEE 10th Power India International Conference (PIICON), New Delhi, India, 2022, pp. 1-5, doi: 10.1109/PIICON56320.2022.10045258.
2. Veena Sharma, Vineet Kumar, R. Naresh, and V. Kumar, "MPA Optimized Model Predictive Controller for Optimal Control of an AVR System," In *Intelligent Data Engineering and Analytics: Proceedings of the 10th International Conference on Frontiers in Intelligent Computing: Theory and Applications (FICTA 2022)*, pp. 61-70. Singapore: Springer Nature Singapore, 2023.
3. Nitish Ojha, Mukesh Singh and Sushil Chauhan, "Extreme learning machine based transient stability assessment: An energy function approach", 2022 2nd International Conference on Emerging Frontiers in Electrical and Electronic Technology, (ICEFEET) IEEE | DOI: 10.1109/ICEFEET51821.2022.9847898.
4. R. K. Ranjan and B B Sharma, "Output Feedback Scheme Based Network Synchronization of a Class of Discrete Time Systems in Chain and Ring Topology", 4th International Conference on Communication and Intelligent Systems (ICCIS-2022) held at NIT Delhi between December 19-20, 2022.
5. R Sandal and B. B. Sharma, "Performance Evaluation of Different windowing Based LP FIR Filters in Synchronization of Discrete-Time Chaotic Systems", 2nd IEEE International Conference on Emerging

- Frontiers in Electrical and Electronic Technologies (ICEFEET 2022 at NIT Patna on 24 - 25 June 2022.
6. M. Mustkeem and B. B. Sharma, "Synchronization of Multi-Agent Non-Identical Chaotic Systems through Model Matching Control using Feedback Linearization", 2nd IEEE International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET 2022 at NIT Patna on 24 - 25 June 2022.
 7. Chaturvedi, Vaibhav, Siddique Zaid Ahmed, Ajay Kumar, and Supriya Jaiswal, Power Quality Improvement of Grid-connected EV Charging Station using DSTATCOM, In 2022 IEEE Students Conference on Engineering and Systems (SCES), pp. 1-5. IEEE, 2022.
 8. Siddique, Zaid, Vaibhav Chaturvedi, and Supriya Jaiswal. Non-cooperative Game Theory based Electric Vehicle Charge Scheduling. In 2022 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES), pp. 1-5. IEEE, 2022.
 9. Manu Kumari, Chilaka Ranga and Ashwani Kumar Chandel "Validating Health Status of Transformer: Grey Relational Analysis and Fuzzy Logic," Fifth International Conference on Electrical, Computer and Communication Technologies, 22 - 24, February 2023, conducted by, Vellore College of Engineering and Technology, Erode, Tamil Nadu, India.
 10. Nirbhay Tiwari and O. P. Rahi, "Application Oriented SEPIC Converter with Improved Voltage Gain for Electric Vehicle Battery Charger", IEEE-International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE-2022), 23-24, April 2022.
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 31. Megha Ahirwar, and Ram Niwash Mahia, "An Evaluation of Techniques for Controlling and Monitoring Greenhouse", 2nd International Conference for Advancement in Technology (ICONAT 2023), Goa, India, 2022.
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- 36.A. Nayan and O. P. Rahi, "Charging and Discharging of Battery in a PV System using Fuzzy Logic Controller," 2022 First International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT), May 2022, pp. 1-5, doi: 10.1109/ICEEICT53079.2022.9768417.
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- 41.Aditya and A. K. Chandel, "Voltage Profile in a Large Power System Under Power System Contingencies using FACTS Devices," 2022 International Conference on Intelligent Controller and Computing for Smart Power (ICICCSP), Hyderabad, India, 2022, pp. 1-5, doi: 10.1109/ICICCSP53532.2022.9862390.
- 42.A. Naramu and A. K. Chandel, "Energy-based Kinetic Energy Features for Online Dynamic Security Assessment using Bayes by Backprop Machine Learning Algorithm," 2022 1st International Conference on Sustainable

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- 44.A. Raj and A. K. Chandel, "Enhancement of Voltage Profile/Stability by Optimal Placement of UPFC," 2022 IEEE 7th International conference for Convergence in Technology (I2CT), Mumbai, India, 2022, pp. 1-6, doi: 10.1109/I2CT54291.2022.9825290.
- 45.Sneha V Sah, Vivek Prakash, PK Pathak, and Anil Kumar Yadav, "Fractional Order AGC Design for Power Systems via Artificial Gorilla Troops Optimizer," 2022 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES-2022), MNIT Jaipur, 14-17 December2022.
- 46.Ravi Kumar, Anil Kumar Yadav, Imran Ahamad, Maloth Ramesh, "Comparative Analysis of Battery Charging Circuits using Solar PV System," IEEE International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET-2022), NIT Patna, 24 -25 June 2022.

(c) Ph.D. Degree Awarded: 05

Sr. No.	Name of the Candidate with Regn. No.	Name of Supervisor(s)	Title of the Thesis
1	Mr. Sumit Sharma 2K18-Ph. D-EE-383	Dr. Yog Raj Sood	Optimal Planning and Sensitivity Analysis of Hybrid Green Microgrid
2.	Mr. Shafqat Nabi Mughal (Part Time) 2K16-Ph.D.-EE-304	Dr. Yog Raj Sood & Dr. R. K. Jarial,	Techno-economical Aspects with Prediction of Solar Radiations for Efficient Utilisation

			of Photovoltaic System
3.	Mr. Vineet Kumar 2K17-Ph.D.-EE-356	Dr. Ram Naresh Sharma	Generation Scheduling and Unit Commitment of Power System Integrated with Renewable Energy Sources
4.	Mr. Nimish Bhatt 2K17-Ph.D.-EE-355	Dr. Ashwani Kumar	Performance Analysis and Island Detection in Distribution Power System.
5.	Ms. Sukriti Tiwari 2K18-Ph.D.-EE- 385	Dr. Ashwani Kumar	Optimal Monitoring and Performance Analysis of Grid Connected Distribution System.

(d) Doctoral Programme (Ongoing): 23

Sr. No.	Tentative Title	Guide	Name of the student(s)	Brief Report
1	Control and Synchronization of dynamical systems (Tentative)	Dr. Himesh Handa	Pallav Sahay 2K19-Phd. - EE-430 (Full-time)	The Candidate got registered in 2019 in EED and has completed his course work. He is trying to explore possible research topic and keen to work in the area of control and synchronization of dynamical systems.
2	Multi-Objective	Dr. Yog Raj	Ankur	Proposed different nature

	Optimal Operation of Deregulated Power Sector Incorporating Wind and Solar Energy	Sood & Dr. Supriya Jaiswal	Maheshwari 2K19-Phd. - EE-432 (Full Time)	inspired algorithm implementations for solution of OPF with RES integration.
3	Control of Renewable Energy System	Dr. Anil Kumar Yadav	Maloth Ramesh 2K19-Phd. - EE-439	This thesis work proposed and tested several control strategies and controllers for hybrid renewable based power system. The current status is Thesis submitted.
4	Control of Grid Converters for Electric Aircraft	Dr. R K Jarial	Bhumaiah Jula 2K19-Phd. - EE-437	The candidate was registered in 2019 and is pursuing Ph D as regular scholar. He has completed his Comprehensive and State of Art Exam. He is working on research problem related estimation of grid performance impacting parameters for electric Aircraft Power Supply systems.
5	Estimation of Grid Voltage Parameters for grid integration	Dr. RK Jarial & Dr. R Nath Sharma	Manish Kumar 2K18-Ph.D.- EE- 384	The candidate was registered in 2018 and is pursuing Ph.D. as regular student. He has

	of DG Systems			completed his research work and recently submitted Ph D thesis. He has worked on grid synchronization for single and three phase system.
6	Model Predictive Controller Based Frequency Regulation of Renewable Energy Sources Integrated Power System	Dr. Veena Sharma	Amita Singh 2K17-Ph.D.- EE-354	The candidate is in the process of thesis writing. This research has proposed frequency regulation techniques for interconnected power system.
7	Combined Voltage and Frequency Control in Interconnected Multi-Area Power System	Dr. Veena Sharma	Vineet Kumar 2K19-Ph.D.- EE-434	The candidate is in the process of thesis writing. The thesis work is based on optimization and control of interconnected power system for frequency regulation.
8	Power System Security Assessment using Machine Learning Techniques	Dr Sushil Chauhan	Mukesh Singh 2K19-Ph.D.- EE-431	It is proposed to investigate static and dynamic aspects of power system security assessment using Machine Learning techniques. Out of four objectives of the research proposal candidate has achieved three objectives and

				working towards the fourth one.
9	Combining Traditional and Esoteric Biometrics for Robust Human Authentication	Dr. Amit Kaul	Akhil Walia 2K17-Ph.D.- EE-330	This thesis work proposed and tested Combining Traditional and Esoteric Biometrics for Robust Human Authentication. The current status is Thesis submitted.
10	Design and development of SPV System for Improved Power Quality of Grid connected System	Dr R K Jarial and Dr. Rajan Kumar	Vivek Kumar 2K19-Ph.D.- EE-435	The candidate was registered in 2019 and is pursuing Ph D Program as regular scholar. He has completed his comprehensive & SOA. He is currently working on research problem related with design of SPV Energy Systems for Improved Power Quality of Grid connected System.
11	The solution to power system optimization problem using meta-heuristic techniques	Dr. O.P. Rahi	Abhishek Saini 2K19-Ph.D.- EE-433	In this research work, the solution to power system optimization problem using meta-heuristic techniques for conventional and renewable energy sources will be investigated on standard IEEE bus systems and also OT's will be applied

				to hybrid power systems.
12	Output Feedback Schemes for Stabilization and Synchronization of Chaotic Systems for Stabilization and Systems	Dr. B.B. Sharma	Ravi Kumar Ranjan 2K19-Ph.D.- EE-438	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.
13	Non-Invasive Disease	Dr. Amit Kaul	Piyush Mahajan	Comprehensive examination and state-of-

	Diagnosis		2K19-Ph.D.- EE-429	art Delivered, 1 Conference paper Published. The current work in this thesis is focussed on diagnosing and analysing non- invasive diseases with practical data.
14	Analysis of Load Frequency Control Schemes for Networked Control Systems	Dr. Ram Niwash Mahia	Manish Kumar Pandey 2K20-PhD. - EE-502	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.
15	Enhancement of Available Transfer Capability of Transmission Systems in the Deregulated	Dr. Ram Naresh Sharma	Romil Chauhan 2020-REE- 001	The candidate has successfully passed the comprehensive examination and state-of- the-art seminar. She is working for the upliftment of the transmission

	Environment			system by enhancing its available power transfer capability by proposing new methods.
16	Stability and Synchronization of Complex Networked Systems	Dr. Bharat Bhushan Sharma	Yashasvi Chauhan 2020-REE-002	The main focus of this research work is to study synchronization phenomena in networks of coupled dynamical systems where the 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 will be utilized. Further, synchronization problem of inter-connection of linear/non-linear systems in a complex network with linear and non-linear coupling will also be analysed.
17	Security Constrained Unit Commitment with Uncertainties	Dr. Ram Naresh Sharma and Dr. Veena Sharma	Ankit Aharwar 2021-REE-001	The candidate has successfully passed the comprehensive examination and state-of-the-art seminar. The work is focussed on analysis of security

				constraints and proposing the subsequent solution methodologies for unit commitment.
18	Optimal utilisation of Renewable Energy Systems in wake of Restructuring in Power System	Dr. R. K. Jarial and Prof. Y. R. Sood	Ajay Swaroop Raturi 2021-REE-002	The candidate was registered in 2021 and is pursuing Ph.D. under P/T Program. He has completed his Comprehensive and State of Art Exam. He is working on a research project related with Optimal utilisation of Renewable Energy Systems in wake of Restructuring in Power System.
19	Prevention of Hydro Power-Generator Outages Due to Pseudo-Faults	Dr. Bharat Bhushan Sharma	Deepika Sood (23REE002)	The preliminary objective of the proposed research is to design a system to avoid tripping of the hydro generator due to pseudo faults thereby eliminating unnecessary generation loss. Considering limitations of the site condition, effort would be to make use of already available parameters to solve the problem.
20	Power Quality	Dr. Rajan	Mathewos	The candidate has

	improvement in Renewable Energy integrated Utility grid	Kumar and Dr. Veena Sharma	Lolamo (22REE003)	completed his course work. The work is focussed on addressing the power quality issues in renewable based power system.
21	Energy Scheduling in Multi Microgrid Scenario	Dr. Supriya Jaiswal	Himanshu Raj (22REE002)	The candidate has completed his course work. This work will analyse the multi microgrid and improve the energy scheduling scenario.
22	Machine learning tools for diagnosis in Power transformers	Dr R N Sharma &Dr. R K Jarial	Mr Atul Jay Sing Patil (22REE001)	The candidate has completed his Course work and is working on research problems related to Machine learning tools for fault diagnosis in transformers.
23	Health Monitoring of Power Apparatus	Dr. Amit Kaul (Guide) Dr. Rajesh Kumar (Co-guide)	Mr. Atul Chadda (23REE001)	Course work completed. His work will focus on devising several health monitoring methods for the conditioning of power apparatus.

(e) M.Tech. dissertation Completed: 49(Passed Out in July 2022)

Sr .N o.	Title	Guide	Name of the student(s)	Brief Report
1	Enhancement of voltage	Dr. Ashwani Chandel	Abhay Raj 20MEE001	Nearly all of the loads in industry and homes are inductive in

	profile/stability by the optimal placement of facts devices			nature. Inductive loads draw reactive power and thus if loading is increased reactive power requirement is more. Facts devices are controllers made up of power electronic switches which are used for the reactive power compensation. But main problem of fact devices is that the fact devices are costly. So, for the reactive power compensation they can't be placed everywhere for the system's voltage profile to be improved. Therefore, a method based on sensitive voltage indices, such as the Fast voltage stability index (FVSI) and Line stability index (LSI), was used in this research to determine the best sites for the fact device, primarily UPFC.
2	Voltage Profile in a large Power system under Power system Contingencies using FACTS devices	Dr. Ashwani Chandel	Aditya 20MEE002	Electrical power systems are prone to several types of power quality disturbances. Flexible AC Transmission Systems (FACTS) devices are the most appropriate solution for resolving these issues. FACTS devices are solid-state power converters that also capable to control electrical transmission characteristics such as impedance, phase & voltage magnitude in transmission or

				distribution systems. Static synchronous compensator (STATCOM) Controller provides reactive compensation which is inserted in parallel to the transmission & distribution systems that based on Voltage source converters (VSC) with DC link capacitor.
3	Energy Management Strategy for Battery and Supercapacitor HESS for Standalone PV Based Microgrid	Dr. Ram Niwash Mahia	Ayushi 20MEE004	The candidate studied about the battery-supercapacitor HESS for PV based standalone microgrid for obtaining better performance of the system and for improving battery lifetime.
4	Optimization of standalone solar wind-hydro pump in remote hilly area	Dr. Rajesh Kumar, Dr. Bharti Bakshi Koul	Law Kumar 20MEE005	The candidate done work related to optimization of standalone solar wind-hydro pump in remote hilly area.
5	Estimation of State of Charge Based on Extended Kalman Filter	Dr Supriya Jaiswal	Mona Rani 20MEE007	An EKF and a second order Thevenin ECM has been used here for study of SOC estimate for battery.
6	A Confidence-aware online dynamic security	Dr. Ashwani Kumar Chandel	Naramu Avinash 20MEE008	A confidence-aware ML-based dynamic security assessment scheme is developed with the application of pre-processed

	assessment scheme using simple pre-processed input features			inputs for reducing the computation-time involved in data generation stage. From the basic theory of direct methods simple pre-processed terms namely Kinetic Energy (KE) terms and fault-on trajectory approximated (FTA) terms are introduced
7	Controlling PMSG Based Wind Energy Conversion System to Maximise the Power	Dr. Ram Niwash Mahia	Neha Gangwar 20MEE009	This thesis involved the construction of a PMSG based WECS in MATLAB/SIMULINK. Various control techniques for PMSG based WECS are discussed in this thesis and also the Perturb & Observe Algorithm for MPPT is inferred and tested by simulation in order to maximize the power that is generated by the system.
8	Extreme Learning Machine based Transient Stability Assessment: An Energy Function Approach	Dr. Sushil Chauhan	Nitish Ojha 20MEE010	The candidate worked on proposing machine learning methods for transient stability enhancement in power system.
9	Application of SEPIC Converter to Design Charging Station for	Dr. Ram Niwash Mahia	Rajat Kumar 20MEE011	The aim of thesis is to investigate the charging station for electric vehicles planning challenge from a different of various points of view in order to better serve its goal.

	Electric Vehicle Based on PV Source			
10	Comparative Analysis of Battery Charging Circuits using Solar PV System	Dr. Anil Kumar Yadav	Ravi Kumar. 20MEE012	The candidate worked on comparative analysis of battery charging circuits for solar energy-based systems.
11	Optimal Load Frequency Control of Hybrid Power System	Dr. Anil Kumar Yadav	Rohit Ranjan Kumar 20MEE013	The candidate worked on optimal load frequency control of hybrid power system.
12	Optimal power tracking of DFIG based wind energy conversion system	Dr. Anil Kumar Yadav	Shivanshu Nayak 20MEE015	Completed and worked on optimal tracking of DFIG wind systems.
13	Non-Cooperative Game Theory based EV charge scheduling	Dr. Supriya Jaiswal	Siddique Zaid Ahmed 20MEE016	A novel game-theory-based algorithm is presented with the goal of providing an effective solution to the issue of electric vehicle (EV) charging schedules.
14	Effect of EV integration on grid stability and power quality	Dr. Supriya Jaiswal	Vaibhav Chaturvedi 20MEE017	A distributed static compensator, abbreviated as DSTATCOM, has been built for the distributed end of the power grid. This DSTATCOM takes into account the very non-linear loading caused by EV charging stations.

15	Designing of PID controller with fuzzy logic for speed control of dc shunt motor using MATLAB	Dr. Anil Kumar Yadav	Amarjit Singh Tanwar 20MEE101	Completed and designed PID controller for speed control of DC shunt motor.
16	ECG based cardiac abnormality detection using Machine Learning approach	Dr. Amit Kaul	Amita Singh 20MEE102	1 Conference paper Published out of the work carried out on applying ML approaches for arrhythmia detection
17	Heart Disease Prediction using Ensemble of Features extracted from ECG signal.	Dr. Amit Kaul	Anupuram Pradeep Kumar 20MEE103	1 Conference paper Published from the work focussing on extracting ensemble of features from ECG
18	An optimized affine projection algorithm for acoustic echo cancellation	Dr. Ravinder Nath	Avnish Tanwar 20MEE104	Completed and proposed an affine algorithm for acoustic echo cancellation
19	Synchronization of Chaotic Systems with parametric uncertainty	Dr. Himesh Handa	Ayush Pratap 20MEE105	The thesis presents a summary of synchronization of chaotic systems utilizing the concept of hybrid adaptive control.
20	Synchronization of Chaotic	Dr. Himesh Handa	Kartikey Singh	Synchronization of various systems is done using the

	Systems using Sliding Mode Control		20MEE106	method of sliding mode control.
21	Synchronization of chaotic and hyperchaotic systems using nonlinear feedback control method and feedback linearization technique with and without time delay	Dr. Himesh Handa	Kunzang Dolma 20MEE107	Synchronization of chaotic and hyperchaotic systems with uncertain parameters or time delays are the main intents of the dissertation work. In order to achieve this, nonlinear feedback control and feedback linearization techniques are used to demonstrate the simulation results.
22	Classification of ECG Signal using Machine Learning Algorithm	Dr Veena Sharma	Md Tarique Anis 20MEE108	Dissertation submitted in June 2022 and classified ECG signal using machine learning.
23	Synchronization of Nonlinear Multi-Agent Systems using i/p-o/p Linearization	Dr. Bharat Bhushan Sharma	Mohammad Mustkeem 20MEE109	It is common practice to refer to the synchronization of two systems as a transmitter-receiver setup, and the concept's extension to network synchronization is an essential component in many different kinds of applications. In the literature, model-matching control techniques have been offered to establish the aim of synchronization in various network topologies. In the present work,

				further study and exploration of model-matching scheme for synchronization is done that may be utilized in the context of networks that comprise multi-agent systems. By utilizing a control law that is drawn from the concepts of graph theory, this synchronization technique finds a solution to the Model Matching control that affects multi-agent systems.
24	Projective Synchronization of Chaotic and Hyperchaotic Systems	Dr. Himesh Handa	Nisha Yadav 20MEE110	The objective is to design a nonlinear adaptive active controller for projective synchronization of identical and non-identical chaotic systems while incorporating the concept of different dimensionality and parametric uncertainty
25	Fuzzy-Logic Based Control of Multi-Fed Electric Vehicles	Dr. Ram Niwash Mahia	Nishant Mishra 20MEE111	This thesis provided an idea about the Switched Reluctance Motor (SRM) used in recent trends for the Electric Vehicles.
26	Reduced Order Synchronization of Chaotic and Hyperchaotic Systems Using Nonlinear	Dr. Bharat Bhushan Sharma	Riddhi Mohan Bora 20MEE112	Several non-linear control techniques such as Active Control, Adaptive Control, LMI based Framework for the synchronization of two different order Chaotic and Hyperchaotic systems have been well-explored in available literature. The present work focuses on the

	Control Design Techniques			<p>Reduced Order Synchronization (ROS) challenge, which occurs when the order of the drive system is greater than that of the response system. The effect of External Disturbances, Model-Uncertainties, and Time Delays are also incorporated while developing the control strategies. As a contribution to the control domain, a novel control approach using back-stepping control technique is proposed to attain ROS between different order General Strict Feedback Systems. The proposed results are substantiated by numerous numerical examples involving several benchmark systems.</p>
27	Synchronizability of Discrete-time Chaotic Systems under Band-limited Channels with Application to Secure Communication	Dr. Bharat Bhushan Sharma	Ritesh Sandal 20MEE113	<p>The presented work addresses synchronization of discrete-time chaotic systems using appropriate controller design and further, windowing methods for FIR filter design are used to achieve synchronization of discrete-time chaotic systems under band limited channels has been analysed. The encryption technique is used to secure the communication in case of ideal channel as well as the case of non-ideal channel. For such study, bandlimited filters are used</p>

				to model the channel. Finally, detailed numerical results are presented to show efficacy of presented synchronization & secure communication scheme.
28	Waste Segregation Using Multi-Layer CNN	Dr. Veena Sharma	Santanu Ghosh 20MEE115	Dissertation submitted in June 2022. Multilayer CNN was employed for waste segregation.
29	Reduction of Chattering in Buck Converter Based on Sliding Mode Control	Dr. Ram Niwash Mahia	Sarvam Maheshwari 20MEE116	The candidate has worked on to suppress the chattering from buck converter with Sliding Mode Control.
30	Automatic Braking System using Fuzzy Logic Controller	Dr. Anil Kumar Yadav	Somnath Sanket 20MEE117	Completed and designed fuzzy logic-based controller for automatic braking system.
31	Multi Algorithmic Approach for Photoplethysmogram (PPG) based Disease Diagnosis	Dr. Amit Kaul, and Mr. Bhukya Ramdas	Vinoth T 20MEE118	The Candidate has got employment with National Wind Power Corpn., Chennai and Full time converted in to Part Time. He is working on Multi algorithmic approach for PPG based disease diagnostic.
32	Power Quality enhancement for EV fast charging system using an integrated solid-state transformer	Dr. R K Jarial	Adarsh Dubey 20MEE201	The candidate has worked in the area of solid-state transformer. He has investigated various issues on Power Quality Enhancement of EV Charging System Using an Integrated Solid-State Transformer and Passive Harmonic Mitigation

	randpassivehar monicmitigation circuit.			Circuit.
33	Power Factor Correction Using Electric Spring with Fuzzy Control System	Dr. R. K Jarial	Ankita 20MEE202	The candidate has designed and simulated a Power Factor Correction System Using analogy with Electrical Spring based Fuzzy Control System
34	Function of Thermography Inspection Effect on Cost and Power Losses Reduction in NIT Hamirpur Distribution Substation	Dr. R. K. Jarial	Ashok Kumar 20MEE203	The candidate has explored practical condition assessment related aspects of transmission line using thermal imaging camera. Some key findings concerning Thermography Inspection impact on Cost and Power Losses Reduction in NIT Hamirpur Distribution Substation have been covered.
35	Developmentof ArtificialIntellige ncebasedMPPT techniquesforso larPVsystem	Dr. Rajan Kumar	Asnapuram Pranavi 20MEE204	Completed the development of artificial intelligent based MPPT methods for solar system.
36	Charging and Discharging of Battery in a PV System Using Fuzzy Logic Controller	Dr. O. P. Rahi	Atul Nayan 20MEE205	The dissertation discusses the charging and discharging of battery in a PV System and has also applied the using Fuzzy Logic controller.
37	An Enhanced Control Methodology for LVRT	Dr. O. P. Rahi	Binaya Kumar Biswal 20MEE206	In this dissertation, an enhanced control Methodology has been proposed for LVRT improvement of DFIG under fault condition.

	Improvement of DFIG under Fault Condition			
38	Fault Estimation in AC Machines Through Vibration and Current Signature Analysis Adopting Advanced Computing	Dr. Y. R. Sood, and Dr. R. K. Jarial	Jayant Kumar Bradiya 20MEE207	The candidate has nicely documented the dissertation by investigating several aspects using a Lab. based Hardwired system concerning Fault Estimation in AC Machines Through Vibration and Current Signature Analysis Adopting Advanced Computing techniques.
39	Application oriented SOCbasedFast andStableChargingSystemusing MultilevelDC-DCBuckConverterforEVs	Dr. Rajan Kumar	Krushna Basudev Ray 20MEE208	Completed the analysis of SOCbasedFastandStableChargingSystemusingMultilevelDC-DCBuckConverterforEVs.
40	Performance analysis of solar photovoltaic system using various MPPT technique	Mr. Rajesh Kumar	Deepti Meena 20MEE209	Completed the analysis of solar photovoltaic system using various MPPT technique
41	Intelligent DGA based diagnosis of power transformers to find incipient faults	Dr. Ashwani Kumar Chandel	Niharika Verma 20MEE210	In this work several conventional DGA interpretation techniques like Dorenunberg ratio method, IEC ratio codes Roger's ratio, Duval triangle and Duval pentagon graphical methods are analysed.

				Further, several models like ANFIS, medium tree, linear discriminant, fine tree etc are implemented for Duval pentagon method to enhance its accuracy.
42	An Improved SEPIC Converter with high voltage gain for Electric Vehicle Battery Charger	Dr. O. P. Rahi	Nirbhay Tiwari 20MEE211	An improved SEPIC converter for better performance of battery in electric vehicles with high voltage gain for electric vehicle battery charger has been proposed.
43	Health Index Evaluation of Power Transformers using intelligent Techniques	Dr. Veena Sharma and Dr. Rajesh Kumar	Prasant Kumar Samal 20MEE212	Dissertation submitted in June 2022 with focus on evaluation of power transformer's health index
44	Control of permanent magnet synchronous motor in electric vehicle application	Dr. Rajan Kumar	Prerna Sahu 20MEE213	Completed and control strategies were proposed for permanent magnet synchronous motor in electric vehicle application.
45	Optimization and Integration of Electric Vehicle Charging System in Coupled Transportation	Dr. O. P. Rahi	Pulkit Bhatnagar 20MEE214	An optimal methodology has been applied in this research work for and integration of Electric Vehicle charging system in coupled transportation and distribution networks

	and Distribution Networks			
46	Fuzzy Logic based Control Technique using MPPT for Solar PV System	Dr. O. P. Rahi	Rajnish Kumar Rai 20MEE215	The dissertation has proposed a Fuzzy Logic based control technique using MPPT for Solar PV system over conventional control and has established the superiority of proposed technique.
47	A comparative Evaluation of Different Grid Synchronization Techniques to Estimate the Fundamental Frequency of Three-phase System	Dr. R. K. Jarial	Sampathi Sai Jithendra 20MEE216	The candidate has carried out research work concerning issues related to Grid Integration of Renewable sources in a Power System. He has made a comparative evaluation of Different Grid Synchronization Techniques to estimate the fundamental Frequency of a 3 - phase Supply System
48	Monitoring Smart Grid's Security and Privacy Related Aspects Using Block Chain Technology	Dr. Bharti Koul	Subhashree Rout 20MEE217	Monitoring Smart Grid's security and privacy related aspects using Blockchain Technology
49	Synchronization of Solar PV- Wind-Battery- Based DC Micro grid for Brushless DC Motor-	Dr. Rajan Kumar	Sunil K Gautam 20MEE218	Completed and focussed on synchronization techniques for solar PV system for Brushless DC Motor-Driven Pump.

	DrivenPump			
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(f) Ongoing Guidance for M tech Dissertations (4th Semester Ongoing Registered PG Students) - 21 (To be pass out in June 2023)				
Sr.No.	Title	Guide	Name of the student(s)	Brief Report
1	An efficient Repeated Power Flow approach to evaluate ATC considering power systems security	Prof. R. N. Sharma	Moirangthem Kenedy Singh 21MEE005	On going with the focus on proposing efficient power flow approach to find out ATC while maintaining system security.
2	Cluster-Based Synchronization of Complex Networks of Nonlinear Systems	Dr. Bharat Bhushan Sharma	Mr. Akshay Kumar Jaiswal 21MEE101	A general methodology for establishing explicit conditions or criterion for synchronisation of non-linear coupled dynamical system based on Lyapunov stability is explored. The proposed method can be applicable to arbitrarily size of various structures (wherein coupling can be linear or nonlinear, links can be bidirectional or unidirectional and low or high dimensional systems). The proposed

				methodology for cluster synchronization has enormous application in the area biology, physics, robotics, computer networks etc.
3	Hybrid Cyber-Attack Compensation of Sustainable Microgrid	Dr. Anil Yadav and Dr. Bharat Bhushan Sharma	Komal Sharma 21MEE004	The proposed work aims to study the load frequency control (LFC) of sustainable microgrids subjected to cyber-attacks. The inclusion of the cyber-physical aspect in the power system is resulting in the increased complexity of the system. This complexity is giving adversaries a platform to jeopardize the stability, security, and, reliability of the system. The work presented here focuses on the analysis of the frequency response of the two different sustainable microgrids using robust control techniques namely active disturbance rejection control (ADRC), and Kharitonov Theorem-based proportional-integral (KT-PI) control in case of Denial of Service (DoS) attacks.

4	Intelligent Wind Turbine Maintenance: Predicting Gearbox Faults through Machine Learning and SCADA Data Analysis	Dr. Veena Sharma	Gautham Chakrawarthy A K 21MEE105	On going and turbine maintenance methods with gearbox faults is the focus of this dissertation work.
5	Fault Detection in PMSM with Magnetic Domain Model	Dr. Supriya Jaiswal	Tej Singh 21MEE203	The aim of proposed hybrid intelligent algorithms for detection of inter turn short circuit faults and open circuit faults in PMSM using magnetic domain model.
6	Frequency Optimization in Solar PV Systems Using VI-based Synchronous Inverters with ADP Controller	Dr. Bharti Koul	Mukul Sharma 21MEE006	In this thesis, the work is going on Frequency Optimization in Solar PV Systems Using VI-based Synchronous Inverters.
7	Fuzzy Logic Based PV-Battery system for a Standalone Microgrid	Dr. Bharti Koul	Narendra Kumar Mourya 21MEE012	Fuzzy Logic Based PV-Battery system for a Standalone Microgrid
8	Voltage Profile Improvement	Prof. Ashwani Kumar	Abhishek Gautam 21MEE001	The distribution system (DS) is a multi-phase system that functions in a

	using DSTATCOM in Three Phase Unbalanced Radial Distribution Systems			radially or weakly meshed topology. It also has a high R/X ratio. Real-time activities, such as network optimization, VAR planning, voltage profile enhancement, and state estimation, need a load flow algorithm that is dependable and efficient in order to be carried out. Therefore, for complicated system like DS, the existing load flow algorithms should be improved in order to keep track of system state variables.
9	Validating Health Status of Transformer: Grey Relational Analysis and Fuzzy Logic	Prof. Ashwani Kumar	Manu Kumari 21MEE207	In this dissertation work, a novel approach grey relational analysis and Fuzzy Logic (FL) model is proposed to assess the overall health index of transformers. The health of the transformer directly affects by its insulation. Hence, accurate monitoring of insulation condition in return indicates the present health state of transformer insulation.

10	Intelligent condition Assessment of Power Transformer using DGA	Dr. O. P. Rahi	Akshay Dhiman 21MEE201	In this dissertation an intelligent system using fuzzy logic technique has been developed for transformer fault diagnosis, which is more capable than conventional IEC three ratio method using DGA.
11	Electric Mobility Impact on Power Grid	Dr. O. P. Rahi	Nishant Sharma 21MEE208	This dissertation provides an overview of impact of electric mobility on power grid.
12	Machine Learning Tools for DGA of Power Transformer	Dr. R K Jarial	Patil Shubham Dadaso 21 MEE204	The candidate has studied various methodologies concerning Machine Learning Tools for DGA of Power Transformer
13	Investigation on Performance Wireless Electricity System	Dr. R K Jarial & Dr. Himesh	Biplab Roy 21 MEE002	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
14	Impact of EV infrastructure on already existing Power System networks	Dr. R K Jarial	Sharad P S Tomar 21 MEE008	The candidate has converted his 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
15	Speed Control of Permanent magnet BLDC Motor Using Intelligent Controller	Dr. R K Jarial	Shivani Arora 21 MEE009	The candidate has worked on key issues concerning the implementation of simulation tools on Speed Control of a Permanent magnet BLDC Motor Using Intelligent Controller and has investigated several aspects affecting drive performance under steady and transient conditions.
16	Chemical Degradation of Insulation oil of Power Transformer	Dr R K Jarial	Dharme Megharani Balaso 21 MEE205	The candidate has carried out experimental studies concerning several aspects of the Chemical Degradation of Insulation oil of Power Transformer. A methodology has been evolved using data analytics to present catastrophic failure.
17	Fault Diagnosis of a transformer using Fuzzy model and nature based metaheuristic algorithm	Dr. Rajesh Kumar	Akshita Dhiman 21MEE206	On going and analysis of fault diagnostic of transformer is in progress.

18	An Evaluation of Control Techniques for Controlling and Monitoring of Greenhouse	Dr. Ram Niwash Mahia	Megha Ahirwar 21MEE103	The candidate has worked on key issues in greenhouse such as temperature and humidity control with the help of Fuzzy Logic Controller and Neural Network techniques. This work illustrates the use of thermal image classification for disease diagnosis in rice plants, followed by temperature optimization employing a control system.
19	Thermal Image Analysis using Fusion of Machine Learning and Deep Neural Networks	Dr. Amit Kaul	Mr. Jayaprakash Katual 21mee102	1 Conference paper published and candidate has worked on anomaly detection with aid of thermal images by employing Machine learning and deep learning techniques.
20	Performance Comparison of GKF with adaptive algorithms for acoustic echo cancellation	Dr. Ravinder Nath	Shubham 21mee104	This dissertation addressed the problem of acoustic echo cancellation and compared the proposed GKF technique with adaptive algorithms.
21	Transient Stability Analysis of Wind Farm	Prof. Shushil Chauhan	Gaurav Rawat 21mee003	Transient stability enhancement is done for wind integrated systems using PSAT real time

	Integrated Power Systems using PSAT			simulator.
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3. Consultancy services: 01

Sr. No.	Name of the scheme	Sponsoring Agency	Amount earned
1	Completed 09 Field assignments allocated by Electric Utilities located within Himachal Pradesh concerning Soil Earth Resistance tests & Lab. Tests for Samples of Insulation Oil collected from site of Various Substations.	(i)HPSEBL, Shimla (ii) HPPTCL, Shimla (iii) HPPCL, Shimla	Rs. 1,63,000/-

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 Power Globe Member IEEE Indian Council Senior Member International Association of Computer science and Information Technology (IACSIT) Member IEEE Education Society Member IEEE Power & Energy Society Member IEEE Dielectrics and Electrical Insulation Society Member IEEE Sensors Council Member IEEE Council of Superconductivity

		Member IEEE Nanotechnology Council Fellow Member, International Institute of Education & Management
2	Dr. Ram Naresh Sharma	Member, IEEE, Member, ISTE, Fellow Institution of Engineers (India)
3	Dr. Ashwani Kumar	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	ISTE (LM-20570) Instrument Society of India (LM-728) Fellow of Institution of Engineers
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 IEEE Power Electronics Society Member, USA till 31 st Dec 2021.
7	Dr. B.B. Sharma	Member, IEEE and Member IEEE (Control System Society), Member, Robotic Society of India, member institution of Engineers (India)
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. Bharti Koul	Member, IEEE Member, Instrument Society of India Member Institution of Engineers (India)
12	Dr. Anil Kumar Yadav (Till 19-01-2023)	Senior Member, IEEE and Member, The Institution of Engineers (India)
13	Dr. Rajan Kumar (Till 21-11-2022)	International Awards (01) Membership of Societies (02) Senior Member, IEEE Member, IE (India)
14	Dr. Ram Niwash Mahia	Member, IEEE and Member, IE (India)
15	Dr. Supriya Jaiswal	Senior Member, IEEE Member, IE (India)

5. Expert Lectures Delivered by EED Faculty :05

1. Dr. O. P. Rahi delivered an Expert Lecture on “Comprehensive View of Electrical Machines to the students and faculty of Gove. Hydro Engineering College, Bandla, Bilaspur on 24.03.2023.
2. Dr. O. P. Rahi delivered an Expert Lecture on “Career Counselling” to the students and teachers of Govt. Senior Secondary School, Berthin, Bilaspur on 27th Feb, 2023.
3. Dr. R. K. Jarial delivered a talk to the Participants of OJTSTC on 7th Jan 2023 to Participants of Program in EED NITH.
4. Dr. Amit Kaul delivered a talk on “*Artificial Intelligence and Deep learning for Signal Processing*” in Online Faculty Development Program AI and Machine Learning, organized by the Electrical Engineering Department, UIT, HPU, Shimla, H.P. INDIA (18-22, January,2023).
5. Dr. Himesh Handa delivered a talk to the Participants of OJTSTC on 6th Jan 2023 to Participants of Program in EED NITH for ITI students, ITI Lambloo.

6. Book Chapters:12

1. Vineet Kumar, R. Naresh, Veena Sharma, and Vineet Kumar, "State of the Art on Optimization and Metaheuristic Algorithms," In book: Handbook of Intelligent Computing and Optimization for Sustainable Development, WILEY- SCRIVENER, pp. 509-536, 2022.
2. Vineet Kumar, R. Naresh, Veena Sharma, and Vineet Kumar, "Assessment of GAMS in Power Network Applications including Wind Renewable Energy Source," In book: Renewable Energy Systems: Modelling, Optimization, and Applications, WILEY-SCRIVENER, 2022.
3. Jaiswal, Supriya, and Sohit Sharma. Electric vehicles and smart grid interactions: Infrastructure, current trends, impacts and challenges.; In Smart Grids for Renewable Energy Systems, Electric Vehicles and Energy Storage Systems, pp. 15-44. CRC Press, 2022.
4. R K Jarial, Bhumaiah, Anant, "Active power filter control methods for power quality improvement in more electric aircraft applications", Institution of Engineering and Technology (IET), Feb. 2023
5. R K Jarial, Adarsh Dubey, Book entitled "Advanced Research in Electronic Devices for Biomedical and mHealth" by Dr Rajesh Kumar Kesharvani& Dr Upendra Kumar in AAP CRC Press and being Published in Dec 2023.
6. Ramesh C. Bansal, Manohar Mishra, Yog Raj Sood (Editors), "Electric Power Systems Resiliency: Modelling, Opportunity, and Challenges", Academic Press, Elsevier, 2022
7. Pallav, Handa, H. (2023). Synchronization of MLS Chaotic System Using Sliding Mode Control Technique. In: Kumar, R., Verma, A.K., Sharma, T.K., Verma, O.P., Sharma, S. (eds) Soft Computing: Theories and Applications. Lecture Notes in Networks and Systems, vol 627. Springer, Singapore. https://doi.org/10.1007/978-981-19-9858-4_28
8. Pallav, Handa, H., "Stabilization of Uncertain Nonlinear Chaotic System using SMC", International Conference on Signal and Data Processing (ICSDP'22), Bhopal, India (To be published in LNEE)
9. S. Koul, B. Koul and B. Bakshi, Influence of AI, Machine learning to empower healthcare sector in Machine Learning, Deep Learning, Big Data and Internet of things for healthcare (ed.) Govind Singh Patel, Seema

- Nayak and Sunil Kumar Chaudhary, CRC Press, 2022. (Scopus Indexed)
(in Press)
10. Shivanshu Nayak, Anil Kumar Yadav and Pawan Kumar Pathak, "Optimum power tracking of DFIG based Wind Energy Conversion System," Signals, Machines and Automation (SIGMA 2022), Lecture Notes in Electrical Engineering, Springer, vol. 1023, pp. 197-210, 2023.
 11. Maloth Ramesh, Anil Kumar Yadav, Rajan Kumar, Pawan Kumar Pathak, "Energy Conversion: Methods, Technology and Future Directions: An Extended Study of Frequency Supported-Wind Energy Conversion System," Nova Science Publisher's, pp. 73-94, 2022.
 12. Kamal Singh, Anil Kumar Yadav and Pawan Kumar Pathak, "Power Management for Hybrid Energy Systems Using Droop Control," Lecture Notes in Mechanical Engineering, Springer, pp.767-778, 2023.

3.5 DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING



1 Academic Staff:

HEAD: Dr. Gargi Khanna , Associate Professor

FACULTIES:

Professor	Associate Professor	Assistant Professor
Dr. Rajeevan Chandel	Sh. K.S. Pandey	Dr. Krishan Kumar
	Dr. Surender Kumar Soni	Sh. Vinod Kumar
	Dr. Ashok Kumar	Dr. P. Daniel
	Dr. Gargi Khanna	Sh. Manoranjan Rai Bharti
	Dr. Ashwani Kumar Rana	Sh. Rakesh Sharma
		Sh. Gagnesh Kumar
		Dr. Rohit Dhiman
		Dr. Aman Kumar
		Dr. Amit Bage
		Dr. Chandra Shekhar Prasad
		Dr. Saurabh Kumar
		Dr. Sankalita Biswas

		Dr. Abhijit Bhattacharya
		Dr. Sandeep Kumar
		Dr. Mahesh Angira
		Dr. Pushpendra Singh
		Dr. Dharmendra Singh Yadav

2. DISTINCTION ACHIEVED

(a) By student:

Four M.Tech. Dissertations of E&CE students supervised by Prof. Rajeevan Chandel are placed as given below:

- i) Er. Subhashish Anand: Qualcomm Inc., Hyderabad.
- ii) Er. Nivali Yadav: Qualcomm Inc., Bangalore.
- iii) Er. Rohini Raj: Standard Chartered Bank, Chennai.
- iv) Er. Aaryadarshan Diwedi: Intel Inc.

Two M.Tech. Dissertation of E&CE students got PhD admission as given below:

- i) Mr. Harsh Raju: PhD. Admission in IIT Roorkee (M.Tech. Dissertation supervised by Er. Vinod Kumar, Asstt. Professor)
- ii) Mr. Shiv Kumar, PhD Admission in IIT Roopar (M.Tech. Dissertation supervised by Dr. Sandeep Kumar Singh, Asstt Professor)
- iii) Mr. Prashant Shah in IIT Mandi (M.Tech. Dissertation supervised by Dr. Saurabh Kumar, Asstt Professor)

One M.Tech. Dissertation of E&CE students supervised by Dr Sankalita Biswas, Asstt. Professor, got MBA admission as given below:

- i) Mr. Aditya Kumar, MBA Admission in IIM Kozhikode.

The M.Tech and PhD. Dissertations of E&CE students supervised by Dr Krishan Kumar, Asstt. Professor, are placed as given below:

- i) Dr Amandeep Kaur joined IIIT Gawalior as Assistant Professor
- ii) Mr Priyutsh M.Tech student joined Qualcomm
- iii) Mr Mukul Dual degree student joined Intel Inc

Three students of the E&CE department namely, Mr. Ujjwal Chaudhary (194030), Mr. Baibhav (194058) and Ishan Agarwal (194540) won 1st position in Electromania one of the competitions of Techkriti'23 - an annual four-day Inter-

collegiate Technical and Entrepreneurship festival organized by the Indian Institute of Technology, Kanpur.

Mr. Gautam Rana (194009) achieved All India rank 10 in GATE E&CE 2023 examination and Got admission in IIT Bombay.

Mr. Aastik Agnihotri (194017) achieved GATE rank 575 and got admission at IIT Madras

Mr. Ujjwal Chaudhary (194030) achieved GATE Rank 671 and got admission at IISc Bangalore.

Mr. Animesh Barnyal (194105) obtained 99.72 percentile in CAT 2023 and got admission at IIM Calcutta.

(b) By faculty Member:

1) Patent Granted to M.C. Chowdary, E.N.V.V. Chowdary, A. Kumar, **Rohit Dhiman**, and **Rajeevan Chandel**, Method and System for Enriching Life in a Humanly maintained Aquaculture Environment, Patent Application Number 201811034266. Filed on 11th Sept 2018. Patent Granted: Patent Grant No.: 399088, Date of Grant: 13th June 2022.

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

a) Conducted in the Department.

1. Expert Session on 'Giving your BEST and; Industry Expectations from New-Gen Employee' by Er. Peter Cherian, Director Knowledge Mission, Chennai cum Ex-Director HR- Hexagon India, Director HR-Intergraph Corporation US, Head HR- CG Maersk India and Denmark, formerly with CMC Ltd, a Govt. of India enterprise and HCL Tech, was organized for the students and faculty of NIT Hamirpur HP on 9 th Sep. 2022. Coordinators: Prof. Rajeevan Chandel, Professor DoECE, and Dr. B.B. Sharma, TPO.

2. Organized one day Workshop cum Research Facility Training Programme on VLSI Design and IC Packing Techniques, under Scientific Social Responsibility (SSR) policy of SERB under SERB funded project "Through Package CNT Bundle Vias in Glass Interposer for Heterogeneous 3-Dimensional Integration" of

Dr. Rohit Dhiman, for researchers, PG and PhD Research Scholars and faculty of NIT Hamirpur HP on 21st December, 2022.

3. Organized one week short term course on "Recent Innovation and Development in RF and Microwave Engineering for Wireless Communication" from 12-05-2022 to 16-05-2022 by Dr. Saurabh Kumar and Dr. Chandra Shekhar Prasad

b) Expert Lectures Delivered in Other Institutes:

i) Prof. Rajeevan Chandel delivered an Expert Lecture on, "VLSI Design Fundamentals," on 11th July 2022, in SERB Karyashala - High End Workshop on Hardware Assisted Techniques for Fog Computing based IoT Networks, organized by DA-IICT Gandhinagar, Gujarat in association with SERB, New Delhi. 11 th to 17 th July, 2022

ii) Prof. Rajeevan Chandel delivered an invited Plenary Lecture online on 27th May 2022, on the topic "VLSI Signal Processing" in the International Conference PRAGYATA-2022 on the theme Innovative and Sustainable Developments in Electrical and Electronics Engineering, organized by Department of EEE at Shri Vaishnav Vidyapeeth Vishwavidyalaya (SVVV), Indore (MP), 27-28th May 2022

iii) Prof. Rajeevan Chandel delivered an Expert Lecture on, "Some Case Studies in VLSI Design and Research," on 19 th April 2022, in SERB Karyashala - High End Workshop on Recent trends in VLSI Devices, Circuits and Applications, organized by ABV-IIITM Gwalior in association with SERB, New Delhi, 18th to 24th April, 2022

iv) Prof. Rajeevan Chandel delivered an Expert Lecture on "Work and Research Opportunities in VLSI and Semiconductor Industries-Towards Sustainable Society" on 14 Feb 2023 in the 5-day Online Short Term Course (STC) on Opportunities in Semiconductor industries after B.Tech and M.Tech, organized by Deptt. of Electronics Engineering, NIT Uttarakhand, India, 13-17 Feb., 2023

v) Prof. Rajeevan Chandel delivered an Expert Lecture on "Performance of the Transistors in VLSI Circuits" on 20th Feb 2023 (Monday) in the workshop

entitled, Electronics, Photonics and IC at the 75th Anniversary of Transistor, organized by NIT Delhi, India. 20-25 Feb, 2023.

vi) Dr. Saurabh Kumar delivered an invited lecture on “Antenna Miniaturization: Techniques and Challenges” on February 18, 2023, in the research meeting, organized by Prakash Bharati, A Consortium of Photonics Professional in India in association with IEEE Photonics Society.

vii) Dr. Saurabh Kumar delivered an invited lecture entitled “Antenna miniaturization for compact wireless communication system” on November 09, 2022, in the One-Week hybrid Short Term Course (STC) on “Advancement in Microwave Technology for VLSI and Communication System”, organized by the Electronics and Communication Engineering Department of National Institute of Technology (NIT) Delhi from November 07-12, 2022.

c) Participated by Faculty Members:

1. Prof. Rajeevan Chandel attended Mini Colloquia on Advances in III-N Devices and Systems, organized by the National Academy of Sciences India (NASI)-Delhi, Chapter, IEEE EDS and Deen Dayal Upadhyaya College, Delhi 1-6 June 2022

2. Prof. Rajeevan Chandel attended Virtual Mini Colloquia (MQ) on 75th Anniversary of Transistor Invention, IEEE EDS Delhi Chapter, India and Deen Dayal Upadhyaya College, 22-29 Aug 2022, an Int. event with the Best Experts from across the globe.

3. Prof. Rajeevan Chandel attended Online webinar on ProWriting Aid, organized by Central Library, NIT Hamirpur HP on 19 January, 2023

4. Dr. Chandra Shekhar Prasad Participated in a national level FDP on " 5 G Antenna design with AIML application using HFSS" organized by ECE department St. Martin's Engineering college from 27th to 28th May 2022

4. RESEARCH

(a) Research Scheme:

Title of the Scheme	Sponsored by	Assistance Received (Rs) in lakh	Investigator	Brief Report
Development of robust multi-sensor non-stationary data analysis methods using array signal processing and deep learning techniques for electroencephalogram (EEG) signal analysis.	Science and Engineering Research Board (SERB), DST, India.	1922456	Dr. Abhijit Bhattacharyy a	Ongoing
Development of automated detection and classification software to map lunar craters in the polar regions using Chandrayaan-2 data	ISRO	20.0376	Dr. Rakesh Sharma and Dr. Ashok Kumar	Ongoing

(b) Research Publication:

Journal Publications:

1. Animesh Srivastava and **Rajeevan Chandel**, "A Novel Co-planar Five Input Majority Gate Design in Quantum-Dot Cellular Automata," IETE Technical Review, Taylor and Francis Publication, vol. 39, no. 4, pp. 850-864, 2022. <https://doi.org/10.1080/02564602.2021.1914205>. SCIE
2. Ajay Kumar, **R. Chandel**, and **Rohit Dhiman**, "Proposal and Analysis of Carbon Nanotube based Differential Multibit Through Glass Vias,"

Microelectronics Journal, vol. 126, pp. 105500, Aug 2022.
<https://doi.org/10.1016/j.mejo.2022.105500>. SCIE, Scopus, IF=1.609

3. Girish Kumar Mekala, Rajeswari Malothu, Yash Agrawal, **Rajeevan Chandel**, "Signal Integrity Assessment of GNR-FET-based Ternary Logic for Multi Layered GNR Interconnects with Dielectric Insertion," ECS Journal of Solid State Science and Technology, vol. 12, no. 4, March 2023. DOI: 10.1149/2162-8777/acc68b. Scopus.

4. Priya Kaushal, **Gargi Khanna**, "The role of 2-Dimensional materials for electronic devices", vol.143, Materials Science in Semiconductor Processing, Elsevier, 2022. SCI IF 4.644

5. A Gaur, **G Khanna**, P Asthana, " Designing Peak Detector and Zero Crossing Detector for Asymmetric Synchronous Electric Charge Extraction" Nano, World Scientific Publishing Company, vol.17, 2022, ISSN (print): 1793-2920 | ISSN (online): 1793-7094, <https://doi.org/10.1142/S1793292022500941>, SCIE IF 1.438

6. Priya Kaushal, **Gargi Khanna**, "MoS₂ based Thickness Engineered Tunnel field-effect transistors for RF/analog applications", Materials Science in Semiconductor Processing, vol.151, 2022.SCI IF 4.644

7. Pinku Ranjan, Swati Yadav, Harshit Gupta and **Amit Bage**, "Design and Development of Machine Learning Assisted Cylindrical Dielectric Resonator Antenna," EVERGREEN Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy, Vol. 10, Issue 01, pp308-316, March 2023

8. SK Gupta, **A Bage**, P Ranjan, "A compact, high isolation building block for 8 × 8 multi-input multi-output antenna array suitable for 5G smartphone applications." Int J RF MicrowComput Aided Eng. 2022; 32(12):e23516. doi:10.1002/mmce.23516

9. Pinku Ranjan, Swati Yadav, **Amit Bage**, "DUAL BAND MIMO ANTENNA FOR LTE, 4G AND SUB-6 GHZ 5G APPLICATIONS," FACTA UNIVERSITATIS Series: Electronics and Energetics Vol. 36, No 1, March 2023, pp. 43-51, <https://doi.org/10.2298/FUEE2301043R>

10. **Abhijit Bhattacharyya**, Aarushi Verma, Radu Ranta, Ram Bilas Pachori, "Ocular Artifacts Elimination from Multivariate EEG Signal using Frequency-Spatial Filtering". IEEE Transactions on Cognitive and Developmental Systems, In Press, 2022, pp.1-13.
11. Rahul Kumar and **Surender Soni**, "Impact of user mobility on ED based spectrum sensing and digital communication performance over FTR fading channel " Name of Journal: AEU-International Journal of Electronics and Communications ISBN/ISSN No.: 1434-8411 Year of Publication: 2022 Vol. No.: 145 SCI, Scopus
12. Amandeep Kaur, **Krishan Kumar** "Imperfect CSI based Intelligent Dynamic Spectrum Management using Cooperative Reinforcement Learning Framework in Cognitive Radio Networks", IEEE Transactions on Mobile Computing, vol. 21, Issue. 5, pp. 1672-1683, May 2022. ISSN: 1536-1233 (print); 1558-0660 (web); Impact Factor = 6.075
13. Amandeep Kaur, Jaismin Thakur, Mukul Thakur, **Krishan Kumar**, Arun Prakash, Rajeev Tripathi "Deep Recurrent Reinforcement Learning based Distributed Dynamic Spectrum Access in Multichannel Wireless Networks with Imperfect Feedback", IEEE Transactions on Cognitive Communications and Networking (in press). ISSN:2372-2045 (CD); 2372-2045 (Electronic); Impact Factor = 6.359
14. Ashok Kumar, **Krishan Kumar** "Deep Learning-Based Joint NOMA Signal Detection and Power Allocation in Cognitive Radio Networks", IEEE Transactions on Cognitive Communications and Networking, vol. 8, no. 4, pp. 1743-1752, Dec. 2022. ISSN: 2372-2045 (CD); 2372-2045 (Electronic); Impact Factor = 6.359
15. Nidhi Sharma, **Krishan Kumar** "Energy Efficient Clustering and Resource Allocation Strategy for Ultra-Dense Networks: A Machine Learning Framework", IEEE Transactions on Network and Service Management, (in press).ISSN: 2373-7379(CD); 1932-4537(Electronic); Impact Factor = 4.758
16. Yadav, Manish Varun, et al. "A novel compact rectangular slot antenna with ladder structure for ultra-wideband applications." Telecommunications and Radio Engineering 81.1 (2022).

17. **Kumar, S.**, Choudhary, A. &Baudha, S. Performance Enhancement of Thin Film Solar Cell Using Swastika-Shaped Plasmonic Nanoantenna. Plasmonics (2023). <https://doi.org/10.1007/s11468-023-01926-6>

Conference Publications

1. Subhashish Anand, **Rajeevan Chandel** and **Rohit Dhiman**, “A High-Power Class-D Amplifier with Low Total Harmonic Distortion” International 7th International Conference on Microelectronics, Computing and Communication Systems (MCCS-2022), ARTTC, BSNL, Hazaribag Road, Ranchi- 835217, Jharkhand, India, Ranchi University Ranchi and ISVE Ranchi (Jharkhand) India, 9-10 July 2022.
2. Deepanshu Kaushal and **Rajeevan Chandel**, "Improving the Flare Perturbation Response of Gasket Monopole Antenna for Custom Frequency Solutions", 8th IEEE International Symposium on Smart Electronic Systems (iSES-2022), NIT Warangal, India, 19-21 December, 2022.
3. Rohini Raj and **Rajeevan Chandel**, “Multi-Objective Optimization using a Hybrid Antlion Optimizer for Analog Circuit Design” International 7th International Conference on Nanoelectronics Circuits and Communication Systems (NCCS-2021), organized by ISVE at Advanced Regional Telcom Training Centre, BSNL, Hazaribag Road, Ranchi- 835217, Jharkhand, India, Jan 29-30, 2022.
4. "Priti Yadav, Bijendra Kumar Ray, **Gargi Khanna**, ‘HandwrittenMathematical Character Recognition Using Machine Learning and Deep Learning,’ Intelligent Data Engineering and Analytics: Proceedings of the 10th International Conference on Frontiers in Intelligent Computing: Theory and Applications (FICTA 2022) pp 455-467, June 2022"
5. Priya Kaushal, **Gargi Khanna**, “Performance analysis of silicon based TFET and MoS₂ based TFET”, 8th International Conference on Nanoelectronics, Computational Intelligence &Communication Systems, (NCCS-2022) organized by ISVE at Advanced Regional Telecom Training Centre, BSNL, Hazaribag Road, Ranchi, December 2022

6. Arihant Raj Siddharth, Urvashi and **Gargi Khanna**, "Low Power Architecture of 4-bit Odd Parity Generator/Checker Scheme", 5th International Conference on Power, Control & Embedded Systems (ICPCES-2023) at MNNIT Allahabad, India, January 2023.
7. Ashish Goswami, **Ashok Kumar** and Osamah S. Badarneh, ""On the Statistics and Performance Evaluation ofK- μ /Inverse Gamma Shadowed Fading Channel"4th IEEE Middle East & North Africa COMMunications Conference. Al-Zaytoonah University of Jordan, Amman Jordan.ISBN/ISSN No.: 978-1-5090-5838-9 Year of Publication:06-08 Dec. 2022Page No.: 136-140
8. Nikita Chaudhary and **Rakesh Sharma**, "Analysis of Deep Learning Algorithms for Image Denoising" Advances in Signal Processing and Communication Engineering, ISBN 978-981-19-5549-5, Springer.
9. R. Sharma and **S. Kumar**, "Compact Dual-Band Wearable Antenna for On/Off Body Wireless Communication Applications," 2022 IEEE Silchar Subsection Conference (SILCON), Silchar, India, 2022, pp. 1-6, doi: 10.1109/SILCON55242.2022.10028789.
10. T. Thakur and **S. Kumar**, "Dual Band Circularly-Polarized Crossed-Dipole Antenna for RFID Applications," 2022 13th International Conference on Computing Communication and Networking Technologies (ICCCNT), Kharagpur, India, 2022, pp. 1-6, doi: 10.1109/ICCCNT54827.2022.9984372.

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	"Energy Efficient SRAM Design Using FinFETs and	Samarth Agarwal, Rajeevan Chandel	Book titled Artificial Intelligence Driven Circuits and Systems.	Mishra B., Mathew J., Patra P. (Eds)	2022	Springer, Singapore

	Potential Alteration Topology Schemes"		Lecture Notes in Electrical Engineering, vol 811, pp. 65-75, Springer, Singapore, 2022. https://doi.org/10.1007/978-981-16-6940-8_6 . (SCOPUS)			
2	"Implementation of 512-bit SRAM Tile Using the Lector Technique for Leakage Power Reduction"	Rajeevan Chandel , K Madhu Kiran and R. Dhiman	Book titled Nanoelectronics for Next-Generation Integrated Circuits, DOI: 10.1201/9781003155751-11	Dr. Rohit Dhiman (Ed)	2022	CRC Press
3	"Artificial intelligence based Alzheimer's disease detection using deep feature extraction"	Manav Nitin Kapadnis, Abhijit Bhattacharya , Abdulhamit Subasi	Book titled Applications of Artificial Intelligence in Medical Imaging	Abdulhamit Subasi	2023	Elsevier Academic Press
4	Nanowires for Supercapacitors. In Nanowires	Verma, S., Verma, S. , Kumar , Saurabh, & Verma, B.	Nanowires: Applications, Chemistry, Materials, and Technologies	Ram K. Gupta	2023	CRC Press.

5	Analysis of Deep Learning Algorithms for Image Denoising	Nikita Chaudhary and Rakesh Sharma	Advances in Signal Processing and Communication Engineering	Pradip Kumar Jain, Yatindra Nath Singh, Ravi Paul Gollapalli, S. P. Singh	2023	Springer, Singapore
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(c) Doctoral Programme: 18 onging

(d) Ph.D Degree awarded: 1

e) Thesis submitted: 2

(f) DOCTORAL PROGRAMME:

Sr. No.	Name of Guide	Name of students
1.	Prof. Rajeevan Chandel	Mr. Dilip Singh
2.	Dr. Surender Soni	Ms Nikita Shandil
3.	Dr. Ashok Kumar	Mr. Pawan Gupta
4.	Dr. Gargi Khanna	Ms. Priya Kaushal
		Mr. Sachindra Bharti
5.	Dr. Ashwani Rana	Priyanka
6.	Dr. Rohit Dhiman	Mr. Ajay Kumar
		Mr. Madhu Kiran
7.	Dr. M. R. Bharti	Parmila Devi
		Tanuja Dogra
8.	Dr. Krishan Kumar	Nidhi Sharma
		Mnish Bhatia
9.	Dr. Rakesh Sharma	G. Devendhar
		Sakshi Anand

10.	Dr. Amit Bage	Mr. Surendra Kumar Gupta
11.	Dr. Chandra Shekhar Prasad	Ashima Kaplesh
12.	Dr. Saurabh Kumar	Sunil Kumar
13.	Dr. Sandep Kumar Singh	Mr. Akash

(g) POPULAR LECTURES BY OUTSIDE EXPERTS:

Sr. No.	Date	Speaker	Topic
1.		Mr. Rajesh Dutta, Chief Information Officer, Usha Martin Ltd,	Expert talk on "Time Management and Skill Enhancement"

(h) CONSULTANCY SERVICES:

Sr. No	Name of the Scheme	Sponsored Agency	Amount Earned
-	-	-	-

(i) EQUIPMENT ACQUIRED:

Sr. No.	Name of Equipment	Quantity in No.'s	Cost (Rs. In Lakh) in
1.	Vector Network Analyzer ZNL-20 and accessories	(01 No.)	Rs.22,98,990/-
2.	CST studio suite 3D EM Simulation Software	(01 No.)	Rs.13,27,500/-
3.	T-CADOMNI SILVACO's (2D&3D) (University Bundle License)	10 Users.	Rs. 27,82,500/-

5. TECHNICAL ASSOCIATION / SOCIETIES:-NIL -

- i) Prof. Rajeevan Chandel has been Reviewer for IEEE Transactions on Nanotechnology, 2022
- ii) Prof. Rajeevan Chandel has been Examiner for PhD Thesis evaluation of NIT Jalandhar, and PU, Chandigarh, 2022.
- iv) Prof. Rajeevan Chandel was Reviewer for the International Symposium on VLSI Design and Test (VDAT), 2022

6. DETAIL OF THE LABORATORIES:

Sr. No.	Name of the Laboratory
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. Sant Ram Chauhan (Ph. D)**

FACULTIES: -

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

(b) ADMISTARATIVE & TECHNICAL STAFF

Asstt. SG-II	Technical Assistant (SG-II)	Sr. Technical Assistant	Sr. Technician (SG-II)	Technician (Outsource)
Mr. Raman Thakur	Mr. Partap Chand Dhiman	Mr. Dev Raj Thakur	Mr. Surinder Gautam	Mr. Mandeep Sen
				Mr. Dinesh Pathania
				Mr. Ravi Kant

2. DISTICTION ACHIEVED:

(a) **By Student:** Students participated in various Tehnical Festivals within Country and Qualified 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.**

Sponsoring Agency	Name of the Co-ordinator	Title of the Seminar/Symposia/STC etc.	Duration	Venue
NITH & SBI-Hamirpur	DoME	International confrence on Emerging Aspects of Manufacturing, Thermal And Design Engineering (MATHED-2022)	15-17 Feb, 2023	DoME, NIT Hamirpur
NITH	DoME Dr. Rajeev	ATAL's Continuous professional deveopment programmes (CPDP)/ Faculty Develompent Programmes on Warehouse Managment	06-17 Feb, 2023	DoME, NIT Hamirpur
Skill india & NITH	DoME Dr. Parshat Kumar & Dr. Sant Ram Chauhan	Maintenance of refrigeration & Air Conditioning Equipments. STTP.	20-25 June, 2022	DoME, NIT Hamirpur
Skill india & NITH	DoME Dr. Sant Ram Chauhan	Hand on experience oriented workshop on conventional and CNC Machining	05-09 Sept, 2022	DoME, NIT Hamirpur

4. RESEARCH:

(a) **Research Scheme:**

Title of the Scheme	Sponsored by	Assistance Received ₹ (in lakh)	Investigator	Brief Report
CORE RESERACH GRANT, Experimental and Numerical Investigation of Pool Boiling and Flow Boiling Enhancement by Surface Modification	Science and Engineering Research Board (SERB), Government of India	14.67 Lakh	Dr. Deepak Sharma	
Design, Fabrication, and Experimental Investigations into Extrusion Pressure		28.00 Lakh	Dr. Dilshad	

Based Magnetorheological Finishing Tool				
Sponsored Project entitled "Experimental and Numerical Study on a Battery Thermal Management System by Mist Jet Impingement Integrated Forced-Air Convection"	SERB-DST under scheme "Empowerment and Equity Opportunities for Excellence in Science".	22.68 Lakh	Dr. Ajoy Debberma	

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

S. No.	Name of Faculty	Name of Refereed Journal	National / International	Title of the Paper	Year of Publication
1.	Dr. Rajesh Kumar Sharma	Journal of Reinforced Plastics and Composites	International	Laser powder bed fusion of glass-filled polyamide-composite with enhanced physical properties	2023
2.	Dr. Rajesh Kumar Sharma	Tribology in Industry	International	Experimental Investigations on Temperature and Frictional Behaviors of Textured Journal Bearings	2022
3.	Dr. Parshant Kumar	Journal of Energy Storage	International	Numerical investigation on transient thermal performance predictions of phase change material embedded solar air heater	2022
4.	Dr. Parshant Kumar	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	International	An integrated active-passive solution for strengthening the functionality of a solar air heater	2022
5.	Dr. Parshant Kumar	Renewable Energy	International	Modeling and optimization of photovoltaic thermal system under recyclic operation by response surface methodology	2022
6.	Dr. Parshant Kumar	Energy Sources, Part A: Recovery, Utilization, and	International	Jet impingement in a V-rib roughened solar air heater: an experimental approach	2022

		Environmental Effects			
7.	Dr. Parshant Kumar	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	International	Analytical and experimental investigations of recyclic double pass photovoltaic thermal system	2022
8.	Dr. Rajiv Kumar Sharma	International Journal of System Assurance Engineering and Management	International	Examining interaction among supplier selection strategies in an outsourcing environment using ISM and fuzzy logic approach.	2022
9.	Dr. Rajiv Kumar Sharma	International Journal of logistics	International	A hybrid approach to examine the potential of additive manufacturing to cope up with supply chain disruptions	2022
10.	Dr. Rajiv Kumar Sharma	Journal of Industrial Integration and Management	International	A Taxonomy Study on Key Dimensions Which May Help SMEs for Industry 4.0 Implementation	2022
11.	Dr. Rajiv Kumar Sharma	International Journal of Business Performance and Supply Chain Modelling	International	Assessment of interaction among key variables responsible for perfect order fulfilment in an upstream supply chain network	2022
12.	Dr. Laxmikant Yadav	Journal of Building Engg (SCI)	International	Investigation of angular aspects of a novel four-sector rotary dehumidifier configuration for HVAC applications	2023
13.	Dr. Laxmikant Yadav	Numerical Heat Transfer Part A (SCI)	International	Mathematical investigation of different parameters of the passive desiccant wheel	2023
14.	Dr. Laxmikant Yadav	Heat Transfer Engg (SCI)	International	PERFORMANCE EVALUATION OF DIFFERENT DESICCANT MATRIX MATERIALS COATED WITH	2023

				SILICA GEL 3A	
15.	Dr. Laxmikant Yadav	TSEA, ASME (SCI)	International	Thermoeconomic Analysis of Novel Vapor Compression-Absorption Multi-Target-Temperature Cascade Refrigeration System	2023
16.	Dr. Laxmikant Yadav	Numerical Heat Transfer Part A (SCI)	International	Mathematical investigation of two-stage dehumidification from single rotary dehumidifier with and without precooling	2022
17.	Dr. Param Singh	Journal of The Institution of Engineers (India): Series C	International	Performance Study of Ultrasonic-Assisted Micro-Electrical Discharge Machining of Inconel 718 Superalloy Using Rotary Tool Electrode	2023
18.	Dr. Param Singh	Journal of The Institution of Engineers (India): Series D	International	Machining Performance Characteristics of Ti-6Al-4V Alloy Due to Ultrasonic Assisted Micro-EDM Using Rotating Tool Electrode	2023
19.	Dr. Deepak Sharma	Heat Transfer Engineering, Taylor & Francis	International	Sandeep Kumar Singh, Sudhir Kumar Singh, Deepak Sharma, Heat Transfer Characteristics of Plate Heat Exchanger with Bubble Fin using Al ₂ O ₃ /Water Nanofluid: Numerical Investigation, Heat Transfer Engineering, Vol. 44, Issue-20, 2022. [SCI Indexed]	2022
20.	Dr. Deepak Sharma	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Taylor & Francis	International	Thermal performance enhancement of basin-type solar still coupled with mini solar pond and shallow solar pond in closed-cycle mode, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Taylor & Francis, Vol. 44, Issue-3, pp.-7237-7251, 2022. [SCI Indexed]	2022
21.	Dr. Deepak Sharma	International Journal of Ambient Energy, Taylor & Francis	International	Numerical Investigation of Heat Transfer Performance of Microchannel with Wall-Mounted Obstacles Using Hybrid Nanofluids, International Journal of Ambient Energy, Taylor &	2022

				Francis, Vol 43, Issue-1, pp.- 1-12, 2022. [Scopus Indexed]	
22.	Dr. Deepak Sharma	International Journal of Thermophysics, Springer	International	A Comprehensive Review on Thermal Performance Enhancement of Plate Heat Exchanger, International Journal of Thermophysics, Springer, Vol. 43, Issue-7, pp.- 1-68, 2022. [SCI Indexed]	2022
23.	Dr. Deepak Sharma	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Taylor & Francis	International	A comprehensive review on performance assessment of solar cavity receiver with parabolic dish collector, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Taylor & Francis, Vol. 44, Issue-2, pp.- 4808-4845, 2022. [SCI Indexed]	2022
24.	Dr. Deepak Sharma	Heat Transfer Engineering, Taylor & Francis	International	Numerical Investigation on Pool Boiling Heat Transfer of Silica and Alumina Nanofluids, Heat Transfer Engineering, Taylor & Francis, Volume 45, Issue 9, 2023. [SCI Indexed]	2023
25.	Dr. Deepak Sharma	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Taylor & Francis	International	Performance improvement of solar still by using float wicks in different proportion of covered area, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 45:2, 6027-6042, 2023. [SCI Indexed]	2023
26.	Dr. Sant Ram Chauhan	Journal of Manufacturing Processes	International	A comprehensive investigation of surface morphology during grinding of Inconel 625 using conventional grinding wheels	2023
27.	Dr. Sant Ram Chauhan	Material science and engineering technology	International	Machinability study of silicon carbide and cenosphere reinforced Al7075 composite using three different tool materials	2023
28.	Dr. Sant Ram Chauhan	Silicon	International	Experimental Investigation and Comparison of Output Cutting Regimes with Finite Element Machining Models for SiCp Based Al7075 Composite	2022
29.	Dr. Rajesh	Scientific	International	Interface Microstructure Effects	2023

	Kumar	Reports (Nature)		on Dynamic Failure Behavior of Layered Cu/Ta Microstructures	
30.	Dr. Rajesh Kumar	Diamond and Related Materials (Elsevier)	International	Effect of the interface on mechanical and fracture properties of lateral graphene/hexagonal boron-nitride heterostructure: A molecular dynamics study	2023
31.	Dr. Varun	Journal of Energy Storage	International	A study on thermal management system of lithium-ion batteries for electrical vehicles: A critical review	2023
32.	Dr. Varun	Renewable Energy	International	An experimental investigation of innovative new roughness patterns (dimples with alternative protrusions) for the performance enhancement of solar air heater	2023
33.	Dr. Varun	Journal of Energy Storage	International	PCM-assisted energy storage systems for solar-thermal applications: Review of the associated problems and their mitigation strategies	2023
34.	Dr. Varun	Thermal Science and Engineering Progress	International	5E analysis of a novel designed hot water storage header integrated vacuum tube solar water heater	2023
35.	Dr. Varun	Journal of Energy Storage	International	A consolidated decision-making framework for nano-additives selection in battery thermal management applications	2023
36.	Dr. Varun	Solar Energy	International	Prioritization of potential barriers to the implementation of solar drying techniques using MCDM tools: A case study and mapping in INDIA	2023
37.	Dr. Varun	Sustainable Energy Technologies and	International	Influence of magnetic baffle and magnetic nanofluid on heat transfer in a wavy minichannel	2023

		Assessments			
38.	Dr. Varun	Sustainable Energy Technologies and Assessments	International	A comprehensive review on the atomization and spray characteristics of renewable biofuels	2023
39.	Dr. Varun	Solar Energy	International	Solar air heater performance enhancement with differently shaped miniature combined with dimple shaped roughness: CFD and experimental analysis	2023
40.	Dr. Varun	Journal of Energy Storage	International	Energy, exergy, economic and environmental analyses of solar air heating systems with and without thermal energy storage for sustainable development: A systematic review	2023
41.	Dr. Varun	Heat Transfer Engineering	International	Thermo-hydraulic performance of spring tape inserts in a circular channel in transitional flow regime	2023
42.	Dr. Debasish Das	Biomass Conversion and Biorefinery, Springer	International	A kinetic study and thermometric analysis on waste cooking oil	2023
43.	Dr. Somesh Kr. Sharma	International Journal of Computer Integrated Manufacturing (SCI)	International	Critical factors of multi-agent technology influencing manufacturing organizations: an AHP and DEMATEL-oriented analysis	2023
44.	Dr. Somesh Kr. Sharma	IEEE Transactions on Engineering Management (SCI)	International	Applying Hybrid Approach of AHP, DEMATEL, and TOPSIS to study the impact of Multi-Agent Technology on the performance of Manufacturing Organizations	2023
45.	Dr. Mohit Pant	Mechanics of Advanced Materials and Structures	International	Thermoelastic fracture analysis in orthotropic media using optimized element free Galerkin algorithm	2022
46.	Dr. Mohit Pant	Iranian Journal of Science and Technology, Transactions of	International	A revamped element-free Galerkin algorithm for accelerated simulation of fracture and fatigue problems in two-dimensional	2022

		Mechanical Engineering		domains	
47.	Dr. Mohit Pant	International Journal on Interactive Design and Manufacturing (IJIDeM)	International	An Adaptive Quadrature Criterion for Simulating Thermoelastic Crack Propagation Using EFGM	2023
48.	Dr. Mohit Pant	Journal of thermal stresses	International	An efficient meshfree framework for simulation of crack tip stress fields in two-dimensional graded media subjected to thermoelastic loads	2023

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
Book	Materials for 3D Printing in Medicine: Metals, Polymers, Ceramics, Hydrogels	CRC Press	Kamal Kishore, Roopak Varshney, Param Singh and Manoj Kumar Sinha	978-103-21-1077-6	August 31, 2022
Book Chapter	Tersoff and REBO Potentials	Springer Nature	Rajesh Kumar, Jashveer Singh	978-981-19-3091-1	2022
Book Chapter	Reactive Forcefield (ReaxFF): Application to Predict 2D Nanomaterials Synthesis	Springer Nature	Rajesh Kumar	978-981-19-3091-1	2022
Book	Small Hydropower: Design and Analysis	Elsevier	S K Singal; Varun Goel; H Nautiyal; DE Papantonis	978-0-323-91757-5	2023
Book	Pool Boiling Heat Transfer Enhancement using Nanoparticle Coating on Copper Substrate	Handbook of Green and Sustainable Nanotechnology Fundamentals, Developments and Applications, Springer	Sudhir Kumar Singh & Deepak Sharma	978-3-03-069023-6	2022

(ii) PAPER

PRESENTED IN CONFERNECE/SEMINAR/SYMPOSIUM:

Sr. No.	Name of Faculty	Details of Conference Proceeding	National / International	Title of the Paper	Year of Publication
1.	Dr. Parshant Kumar	20 th ISME Conference on Advances in Mechanical Engineering, 19-21 st May, 2022, held at IIT Ropar.	International	Comparative Experimental Investigation of Impinging Jet Ribbed Solar Air Heater	2022
2.	Dr. Parshant Kumar	9th International Conference of Fluid Mechanics and Fluid Power (FMFP)", 14-16 th Dec, 2022 held at IIT Roorkee.	International	Performance exploration of Impinging Jet Solar Air Heater: A comparative Study “	2022
3.	Dr. Parshant Kumar	International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering, (MATHED-22), 15-17 th February, 2023 held at NIT Hamirpur.	International	Influence of the Recycling on the Performance of without glass Double Pass Air based PV/T System,	2023
4.	Dr. Parshant Kumar		International	Numerical Investigation of Heat Transfer Characteristics of Microchannel with Obstacles and Nano fluid	2023
5.	Dr. Parshant Kumar		International	Design, Analysis and Comparative study of Earth to Air Heat Exchanger Embedded with Short Length Rectangular Spaced Twisted Tape	2023
6.	Rajiv Kumar Sharma	7th International Conference on Production & Industrial Engineering (CPIE – 2023) to be held during March 10-12, 2023 at Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab, India.	International	Modelling and analyzing the structural relationship among industry 4.0 dimensions	2023
7.	Rajiv Kumar Sharma	International Conference on “Emerging Aspects of Manufacturing, Thermal	International	Implementation of machine learning technique for selecting	2023

		and Design Engineering (MATHED 22) organized by the Department of Mechanical Engineering, National Institute of Technology Hamirpur during February 15-17, 2023		better alternatives for demand forecasting in supply chain management	
8.	Dr. Param Singh	International Conference on “Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-22)” organised by the Department of Mechanical Engineering, National Institute of Technology Hamirpur during February 15-17, 2023.	International	A Comparative Study of Different Current and Rotation-al Speed on Electrical Discharge Turning of Al7075 Alloy	2023
9.	Dr. Param Singh	International Conference on “Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-22)” organised by the Department of Mechanical Engineering, National Institute of Technology Hamirpur during February 15-17, 2023.	International	Comparative study of microstructural & mechanical properties of Al6061 & Al6061-Al2O3 composite, International Conference on “Emerging Aspects of Manufacturing	2023
10.	Dr. Param Singh	International Conference on “Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-22)” organised by the Department of Mechanical Engineering, National Institute of Technology Hamirpur during February 15-17, 2023.	International	Investigation and optimization of EDM assisted groove cutting on AA8011-TiC Nanocomposite using Taguchi approach	2023
11.	Dr. Param Singh	20th ISME Conference on Advances In Mechanical Engineering(19 th - 21 st May 2022), IIT Ropar	International	Experimental Study of Electrical Discharge Turning on Al-7075 Alloy	2022
12.	Dr. Deepak Sharma	International Conference on “Advances in Mechanical Engineering-2022” (ICAME-2022) May, 27-28,	International	Numerical Simulation of Nucleate Boiling Heat Transfer Performance using SiO ₂ /Water Nanofluid,	2022

		2022, G H Raison Institute of Engineering & Technology, Nagpur, India.			
13.	Dr. Deepak Sharma	International Conference on “Advances in Mechanical Engineering-2022” (ICAME-2022) May, 27-28, 2022, G H Raison Institute of Engineering & Technology, Nagpur, India.	International	Performance Investigation of Cylindrical Cavity Receiver Using Roughened Surfaces	2022
14.	Dr. Deepak Sharma	International Conference on Innovations in Clean Energy Technologies 8th to 10th April 2023, Maulana Azad National Institute of Technology, Bhopal, India.	International	Performance Increment of Solar Still using Solar Pond	2023
15.	Dr. Akhilesh Kumar Choudhary	(MATHED-2022) 15th – 17th February 2023 Organized by Department of Mechanical Engineering, NIT Hamirpur, HP	International	An Experimental evaluation of Karanja biodiesel blend to measure performance and emission characteristics International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering	2023
16.	Dr. Akhilesh Kumar Choudhary	(MATHED-2022) 15th – 17th February 2023 Organized by Department of Mechanical Engineering, NIT Hamirpur, HP	International	A Review on Mechanical System Condition Monitoring International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering	2023
17.	Dr. Akhilesh Kumar Choudhary	(MATHED-2022) 15th – 17th February 2023 Organized by Department of Mechanical Engineering, NIT Hamirpur, HP	International	Analysis of the performance and emission characteristics of a CI engine using biodiesel and CeO ₂ nanoparticles as fuel International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering	2023
18.	Dr. Akhilesh Kumar Choudhary	(MATHED-2022) 15th – 17th February 2023 Organized by Department of Mechanical Engineering,	International	Review of a study on the effects of diesel/biodiesel additives and nanoparticles on engine performance and	2023

		NIT Hamirpur, HP		emissions International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering	
19.	Dr. Debasish Das	International conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-2023), organised at NIT Hamirpur	International	A review : on comparative analysis of wco with nano additives	2023
20.	Dr. Debasish Das	International conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-2023), organised at NIT Hamirpur	International	Production of biodeiesl from flaxseed oil through base catalysed transesterification process	2023
21.	Dr. Debasish Das	International conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-2023), organised at NIT Hamirpur	International	A Review: Route planning of wheeled robot in hindrancefull environment	2023
22.	Dr. Mohit Pant	International Conference on Advances in Mechanical Engineering Material Sciences, VIT AP Univesity	International	“Effective nodal variation algorithm for fracture simulations using element free galerkin method,”	2023
23.	Dr. Mohit Pant	International conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-2023), organised at NIT Hamirpur	International	Numerical simulation of thermoelastic fracture in orthotropic media using EFGM	2023
24.	Dr. Mohit Pant	Indian Society Of Theoretical and Applied Mechanics (ISTAM) at IIT Mandi.	International	An Efficient Enrichment Approach for Fracture Simulations using Element Free Galerkin Method	2023
25.	Dr. Mohit Pant	20th ISME Conference on Advances in Mechanical Engineering at IIT Ropar PB	International	A Novel Meshfree Simulation of Thermoelastic Fracture Problems	2022

- (c) Doctoral Programme: 24 Nos. ongoing (During Session 2022-2023)
- (d) Ph. D. Degree awarded: Nos. (During Session July, 22-23)
- (e) Master Thesis completed: 21 Nos. (M.Tech in Thermal/Design/Manufacturing (Admitted in 2021 and Passed in 2023))

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. Navneet Arya	Dr. Varun	-	2018	Full Time	Passive Heat Transfer Augmentation Techniques	Completed 2023
2.	Mr. Vishal Kumar	Dr. Debasish Das	-	2018	Full Time	Experimental Investigation of Bio Diesel in Modified Diesel Engine	In Progress (19-07-2018)
3.	Mr. Ajay Kumar	Dr. Prashant Dhiman	-	2018	Full Time	Thermal Performance of New Solar Thermal Air Heater	Completed 2023
4.	Mr. Sunil Setia	Dr. S.R. Chauhan	-	2018	Full Time	Development Mechanical Tribological and Machining Characteristics of Mono and Hybrid Nano Composites	Completed 2023
5.	Mr. Amitesh Sharma (QIP)	Dr. Prashant Dhiman	-	2018	Full Time	Performance of Jet Impingement Type Solar Air Heat	In Progress (01-08-2018)
6.	Mr. Roopak Varshney	Dr. Param Singh	-	2019	Full Time	Assisted Electrical Discharging Machine	In Progress 22-07-2019
7.	Mr. Kamal Kishore	Dr. Manoj Kumar Sinha	-	2019	Full Time	Sustainable Machining of Difficult to Machine Materials	In Progress 22-07-2019
8.	Mr. Sudhir Kumar Singh	Dr. Deepak Kumar Sharma	-	2019	Full Time	Boiling Heat Transfer Enhancement	In Progress 22-07-2019
9.	Mr. Ayush Awasthi	Dr. Mohit Pant	-	2019	Full Time	Computational Fracture Mechanics	In Progress 22-07-2019
10.	Mr. Yogesh Kumar Yadav	Dr. Siddharatha	-	2019	Full Time	Erosion Wear Modelling	In Progress 22-07-2019
11.	Mr. Vivek Singh	Dr. Rajesh Kumar	-	2019	Full Time	Experimental Investigation on	In Progress

		Sharma				Tribological Behaviour of Material	22-07-2019
12.	Ms. Akanksha Maurya	Dr. Santosh B. Bopche	-	2019	Full Time	Investigations on the Performance Improvement of Solar Cavity Receives	In Progress 22-07-2019
13.	Mr. Vijay Kumar	Dr. Akhilesh Kumar Choudhary	-	2019	Full Time	Condition Monitoring of Mechanical System	In Progress 22-07-2019
14.	Mr. Rajat Kumar	Dr. Varun	-	2019	Full Time	Thermal Management System using Heat Pipes	In Progress 22-07-2019
15.	Mr. Jasveer Singh	Dr. Rajesh Kumar	-	2020	Full Time	Atomistic Modelling of Nano Materials for Mechanical Characterization	In Progress (08-01-2020)
16.	Mr. Saurabh Thakur	Dr. Parnika Shrivastava	-	2020	Full Time	Incremental Sheet Forming of Polymer Material	In Progress (08-01-2020)
17.	Mr. Sohan Lal Sharma	Dr. Ajoy Debbarma	-	2020	Full Time	Thermal Storage System for Power Generation using TEG Models	In Progress (08-01-2020)
18.	Mr. Prince Oliver Horo	Dr. Dilshad Ahmad Khan	-	2020	Full Time	Magnetorheological Finishing (MRF)	In Progress (08-01-2020)
19.	Mr. Ankur Dwivedi	Dr. Anoop Kumar	-	2020	Full Time	Battery Thermal Management System	In Progress (08-01-2020)
20.	Mr. Ashutosh Kumar Verma	Dr. Laxmikant Yadav	-	2020	Full Time	Solar Assisted Deficient Cooling Tower	In Progress (08-01-2020)
21.	Mr. Love Kumar	Dr. Rajiv Kumar Sharma	-	2020	Full Time	Industrial Engineering	In Progress (08-01-2020)
22.	Mr. Biswajit Sahoo	Dr. Debasish Das	-	2020	Full Time	Robotics	In Progress (08-01-2020)
23.	Mr. Yajush Walia	Dr. Param Singh		2023	Full Time	-	In Progress (19-01-2023)
24.	Mr. Amit Sanyal	Dr. Akhilesh Kumar Choudhary		2023	Full Time	-	In Progress (19-01-2023)

(iv) PATENT:

Sr. No.	Title of Patent (CBR No.)	Application Number	Application filing Agency/office	Application Filing date	Present Status
1	A Speedy Explicit Predictive Control Method and System for an Automatic Voltage Regulator System	202211075357	IPO DELhi	26/12/2022	Filed
2	SOLAR EARRINGS	368877-001	Intellectual Property INDIA Patents	06/08/2022	Filed

(f) DOCTORAL PROGRAMME:

S. No.	Title of Thesis	University / Institute & Year of Ph. D. Award	Name of the Scholar	Name of the supervisors
1.				
2.				

5. DISTICTION ACHIEVED:

- (a) By Student: -
- (b) By Faculty Member: -

6. DETAILS OF LABORATORIES:

Sr. No.	Name of Laboratory	Capacity	Year of Establishment
1	Foundary, Forming and Welding Laboratory	313 Sq.m	1996
2	Metrology & Measurement Laboratory	156 Sq.m	2020
3	Industrial Engineering Laboratory	78 Sq.m	1996
4	Computer Aided Manufacturing Laboratory	78 Sq.m	2005
5	Advanced Manufacturing Laboratory	78 Sq.m	2020
6	Mechatronics & Robotics Laboratory	78 Sq.m	2005
7	Material Testing Laboratory	117 Sq.m	1986
8	Theory of Machine	78 Sq.m	1996/1997
9	Computer Aided Design Laboratory	156 Sq.m	1992
10	Tribology Laboratory	78 Sq.m	1997
11	Rapid Design & Development Lab.	78 Sq.m	2020
12	Product Design & Development Laboratory	78 Sq.m	2020
13	Fluid Mechanics & Machinery Laboratory	243 Sq.m	1996
14	Heat & Mass Transfer Laboratory	78 Sq.m	1996
15	Steam Power Engineering Laboratory	120 Sq.m	2000
16	I.C.Engine Laboratory	117 Sq.m	1995
17	Refrigeration and Air Conditioning Lab.	78 Sq.m	1997
18	Automobile Engineering Laboratory	117 Sq.m	1995

3.7 DEPARTMENT OF CHEMISTRY



1. ACADEMIC STAFF

HEAD: Dr. Pamita Awasthi

FACULTIES:-

Professor	Associate Professor	Assistant Professor
---	1) Dr.Pamita Awasthi	1) Dr. K.S. Ghosh Gr-I
	2) Dr.Bharti Gaur	2) Dr.Raj Kaushal
		3) Dr. Jai Prakash

2) SEMINAR, SYMPOSIA, SUMMER SCHOOL, WINTER SCHOOL, SHORT TERM COURSES:

Sponsoring Agency	Name of the Coordinator	Title of the seminar/symposia etc.	Duration	Venue
Nil				

3). Research Publication: (w.e.f. 01.04.2022 to 31.03.2023)**1. Paper Published:****Dr. Pamita Awasthi.****Patent:**

1. Dr. Pamita Awasthi, Kirna Devi, Manu Vatsal, Sulfonamide analogues to be anticancer, antibacterial, antifungal, antimicrobial, carbonic anhydrase inhibitor and antidiabetic agents, Patent No: 419894, Application No: 201711028145, Date of filing: 24.07.2017, Date of grant: 31.01.2023, IPR Govt. of India.

Journal Paper:

1. VandnaDevi, Neetika Kumari, and Pamita Awasthi. "Synthesis, characterization and insect growth regulating study of beta-alanine substituted sulfonamide derivatives as juvenile hormone mimics." Phosphorus, Sulfur, and Silicon and the Related Elements 197, no. 10 (2022): 1080-1090.
2. Manu Vatsal, Anjali Sharma, PamitaAwasthi 1,5-Benzosulfonamide anthracenedione analogues of mitoxantrone as antibacterial and anticancer agents (Indian Journal of Chemistry-Section B) 61,2022, 442-449.
3. Anjali Sharma, and Pamita Awasthi. "Synthesis, cytotoxic evaluation and ct-DNA binding of series of 1, 4-disubstituted anthraquinone-sulfonamide conjugates." Journal of Chemical Sciences 134, no. 4 (2022): 97.

Conferences attended:

1. Neetika Kumari, Pamita Awasthi, In-silico receptor binding analysis and spectroscopic DNA binding studies of insect growth regulator Pyriproxyfen, National Conference on Frontiers in Chemical Sciences (NCFCS-2022)Indian Society of Analytical Scientists (ISAS)-Delhi Chapter and Central University of Himachal Pradesh, Dharamshala,November 4-5, 2022.
2. Priyanka, Pamita Awasthi, DFT and Molecular Docking study of synthesized sulfonamide and commercially used Insect Growth Regulators, National Conference on Frontiers in Chemical Sciences (NCFCS-2022)Indian Society of Analytical Scientists (ISAS)-Delhi Chapter and Central University of Himachal Pradesh, Dharamshala,November 4-5, 2022.

Dr.Bharti Gaur.International Journal publications (SCI- Journals)

1. Shalini Parihar, **Bharti Gaur**; High performance self-healing polymeric nanocomposite coatings, *Progress in Organic Coatings*, 182, 107626, 2023.(**Q1, Impact factor-6.206**)

2. Shalini Parihar, **Bharti Gaur**; Self healing approaches in polymeric materials-an overview, *Journal of Polymer Research*, 30, 1-21, 2023. **(Q2, Impact factor-3.061)**
3. Tamanna Thakur, **Bharti Gaur**; Curing and thermal comparative study of rosin epoxy thermosets with bio-based imidoamines and commercial curing agents, *Journal of Elastomers & Plastics*, 55, 2, 223-243; 2023.
4. Rashi Dhiman, Tamanna Thakur, **Bharti Gaur**, Amar Singh Singha; Functionalized carbon nanotube and carbon nanodot modified multiblock poly (arylene ether ketone sulfone) copolymer as proton exchange composite membranes for fuel cell applications, *Polymer International*, 72 (3), 287-310, 2023. **(Q2, Impact factor-3.213)**
5. Shalini Parihar, **Bharti Gaur**; Thermo-reversible self-healing polymeric coatings derived from gum rosin, *Progress in Organic Coatings*, 168, 106889, 2022. **(Q1, Impact factor-6.206)**

Book Chapter

1. Shalini Parihar, **Bharti Gaur**; Basics of Self-healing Epoxy Systems—General Concepts, Behavior, and Mechanism. *Multifunctional Epoxy Resins: Self-Healing, Thermally and Electrically Conductive Resins*, 15-39, 2023

Dr. K.S. Ghosh.

1. Sharma, S., Chayawan, Jayaraman, A., Debnath, J., **Ghosh, K.S.** (2023) Highly Selective Aminopyrazine-Based Colorimetric Probe for “Naked-Eye” Detection of Al³⁺: Experimental, Computational Studies and Applications in Molecular Logic Circuits, *ChemistrySelect* **8**, e202203695.
2. Sharma, A., Kesamsetty, D., Debnath, J., **Ghosh, K.S.** (2023) Inhibition of lysozyme amyloid fibrillation by curcumin-conjugated silver nanoparticles: A multispectroscopic molecular level study, *J. Mol. Liq.* **372**, 121156.
3. Sharma, S., Chayawan, Jayaraman, A., Debnath, J., **Ghosh, K.S.** (2023) 2-Hydroxy-naphthalene hydrazone based dual-functional chemosensor for ultrasensitive colorimetric detection of Cu²⁺ and highly selective fluorescence sensing and bioimaging of Al³⁺, *J. Photochem. Photobiol. A* **437**, 114408.
4. Prakash, J., Krishna, S.B.N., Kumar, P., Kumar, V., **Ghosh, K.S.**, Swart, H.C., Bellucci, S., Cho, J. (2022) Recent Advances on Metal Oxide Based Nano-Photocatalysts as Potential Antibacterial and Antiviral Agents, *Catalysts* **12**, 1047.

5. Sharma, A., Sarmah, S., Roy, A. S., **Ghosh, K.S.** (2022) Multispectroscopic studies on the molecular interactions between bovine gamma-globulin and borohydride-capped silver nanoparticles, *Luminescence* **37**, 1200-1207.
6. Sharma, A., Rastogi, H., **Ghosh, K.S.** (2022) Enhancement in chaperone activity of human alphaA-crystallin by nanochaperone gold nanoparticles: Multispectroscopic studies on their molecular interactions, *Spectrochimica Acta A* **279**, 121344.

Dr. Raj Kaushal:

1. Mandeep Kaur and Raj Kaushal, Synthesis and in-silico molecular modelling, DFT studies, antiradical and antihyperglycemic activity of novel vanadyl complexes based on chalcone derivatives, Journal of Molecular Structure, 1252 (2022) 132176, <https://doi.org/10.1016/j.molstruc.2021.132176>.
2. Pratibha Sharma · Jai Prakash, · Raj Kaushal, An insight into the green synthesis of SiO₂ nanostructures as a novel adsorbent for removal of toxic water pollutants, Environmental Research 212 (2022) 113328, 1-21, <https://doi.org/10.1016/j.envres.2022.113328>.
3. Pratibha Sharma, Jai Prakash , Tapas Palai, Raj Kaushal, Surface functionalization of bamboo leave mediated synthesized SiO₂ nanoparticles: Study of adsorption mechanism, isotherms and enhanced adsorption capacity for removal of Cr (VI) from aqueous solution, Environmental Research 214 (2022) 113761, <https://doi.org/10.1016/j.envres.2022.113761>.
4. Mandeep Kaur and Raj Kaushal, Spectroscopic investigations, *ab-initio* DFT calculations, molecular docking and *in-vitro* assay studies of novel oxovanadium(V)chalcone complexes as potential antidiabetic agents, 1271(2023), 133994. <https://doi.org/10.1016/j.molstruc.2022.133994>.
5. Raj Kaushal , Mandeep Kaur, Antidiabetic potential of Ruthenium (III) hydroxamate complexes: spectrophotometric investigations, Current Enzyme Inhibition, 18(3) 2022, 200-210. DOI: [10.2174/1573408018666220825152849](https://doi.org/10.2174/1573408018666220825152849)

Dr. Jai Prakash :

1. Samriti, A Ojha, **Jai Prakash**, Water challenges in South Asian countries: A focused review on emerging nanomaterials and technological processes in wastewater treatment, **ACS ES&T Water (Accepted) March 2023**.
2. R Gupta, R Verma, ...**Jai Prakash**, A Critical Review on Recent Progress, Open Challenges, and Applications of Corrosion-resistant Superhydrophobic Coating, **Materials Today Communications**, **34** (2023) 105201.

3. A. Chakroborty, ..**Jai Prakash**, TiO₂nanoflowerphotocatalysts: Synthesis, modifications and applications in wastewater treatment for removal of emerging organic pollutants, **Environmental Research**, **212**, (2022) **113550**
4. Samriti, K Shukla, R Gupta, RK Gupta, J Prakash. Highly efficient visible light active doped metal oxide photocatalyst and SERS substrate for water treatment, **Environmental Science and Pollution Research**, (2022) **1-15**
5. Pratibha,, Raj Kaushal, **Jai Prakash**, Surface functionalization of green synthesized SiO₂ nanoparticles: Study of adsorption mechanism, isotherms and enhanced adsorption capacity for removal of Cr (VI) from aqueous solution, **Environmental Research**, **214**, (2022) **113761**.
6. Pratibha, **Jai Prakash**,RajKaushal, An insight into the green synthesis of SiO₂ nanostructures as a novel adsorbent for removal of toxic water pollutants, **Environmental Research** **212**, (2022) **113328**
7. **Jai Prakash** et al. Recent Advances on Metal Oxide Based Nano-Photocatalysts as Potential Antibacterial and Antiviral Agents, **Catalysts** **12** (2022) **1047 (Invited)**
8. **Jai Prakash** et al. Nanomaterial-based surface-enhanced Raman scattering spectroscopy for sensing and diagnostics gas molecules in environment and healthcare, **Sensors and Diagnostics** **1** (2022) **1143**
9. **Jai Prakash**, Mechanistic Insights into Graphene Oxide Driven Photocatalysis as Co-Catalyst and Sole Catalyst in Degradation of Organic Dye Pollutants **Photochem** **2** (2022) **651 (Invited)**
10. Fernando C. Vicentini, Luiz R. G. Silva, Jéssica S. Stefano, Alan R. F. Lima, **Jai Prakash**, Juliano A. Bonacin& Bruno C. Janegitz, Starch-Based Electrochemical Sensors and Biosensors: A Review, **Biomedical Materials & Devices**, (2022)
11. Samriti..**Jai Prakash**, Highly efficient visible light active doped metal oxide photocatalyst and SERS substrate for water treatment, **Environ. Science and Pollution Research**, **30** (2022)**34054**

5. **Doctoral Programme:** - 12 Nos. on going.

Ph. D Degree Awarded: - 02

Doctoral Programme :

Sr. No	Title	Supervisor and Co-Supervisor	Name of the student	Brief Report
1	Synthesis Biological Screening and DNA-Interaction studies of 9,10 anthraquinone class of Compounds as potential anticancer agents	Dr. Pamita Awasthi	Ms. Anjali Sharma	Completed
2	“Synthesis Computational and Biological Screening of Phenoxy Acetamide and Sulfonamide Derivatives”	Dr. Pamita Awasthi	Ms. Neetika Kumari	In progress
3	“Synthesis of Phenothiazine and Anthraquinone analogs as anticancer drugs”.	Dr. Pamita Awasthi	Ms Arti Sharma	In Progress
4	“Bio Based Self Healing Coatings Based on Thermo Reversible Diel’s Alder Reactions”	Dr. Bharti Gaur	Ms. Shalini	Submitted
5	“Synthesis and Characterization of Multifunctional Dendritic Polymers in Drug Delivery Applications”	Dr. Bharti Gaur	Mr. Avtar Chand	In Progress
6	“Vitrimers”	Dr. Bharti Gaur	Mr. Ankit Sharma	In Progress
7	“Development of Nanomaterials as Amyloid Inhibitor and Antibacterial agents Elucidation at Molecular level”	Dr. K.S. Ghosh	Ms. Anchal Sharma	Completed
8	“Schiff base Molecules as Chemosensor Applications in Metal Ion Sensing “	Dr. K.S. Ghosh	Ms. Shivani Sharma	In Progress
9	Carbon Quantum Dots and their Nanocomposites: Fabrication and Applications as Nanosensor	Dr. K.S Ghosh	Ms Sushma	In Progress

10	Synthesis and Applications of Small Molecules as Fluorescent Sensors of Ions.	Dr.K.S Ghosh	Ms Ankita Sharma	In Progress
11	Synthesis and Functionalization of Silica Nanoparticles for Removal of Water Pollutants”	Dr. Raj Kaushal Dr.Jai Prakash	Ms. Pratibha Sharma	Submitted
12	Pyrazole Chalcone derivatives and their metal complexes,	Dr. Raj Kaushal	Ms. Jyoti Sharma	In progress
13	“Synthesis and modification of photocatalyst nanomaterials for water treatment”	Dr.Jai Prakash	Ms.Samriti	In Progress
14	Functional Nanomaterials	Dr. Jai Prakash	Mr. Sahil Thakur	In Progress

6. Popular Lectures by outside experts

Sr. No.	Date	Speaker	Topic
1	27.04.2022 Via online mode	Prof. Shuhui Sun Institute National de la Recherche Scientifique Energy Materials and Telecommunications Montreal Canada.	Rational Design of Novel Nanomaterials for Fuel Cells and Batteries.

7.(Equipment procured under equipment Grant OH-35 : (during 1.04.2022 to 31.03.2023)

a)

Sr. No	Name of equipment	Qty	Cost
1	Fume Hoods with Cubboard	01 No	Rs.2,08,000.00
2	Hot Air Oven	05 Nos	Rs.1,59,945.00
3	All Quarts Double Distillation Unit	01 No	Rs.99,789.00
4	Multi Channel Electrochemical Workstation	01 No	Rs.43,66,000.00

Equipment procured under WOS Project PI Dr Priyanka Sharma and Scientist Mentor Dr. Pamita Awasthi : (during 1.04.2022 to 31.03.2023)

c)

Sr.No	Name of equipment	Qty	Cost
1.	Fin Pipette	01	Rs.15,871.00
2	Fin Piptte Stand	01	Rs.6,254.00

8. DETAIL OF THE LABORATORIES:

Sr.No.	Name of the Laboratory
1.	Under Graduate (UG) Laboratory-I
2.	Under Graduate (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 Research Lab
8.	Inorganic Chemistry Research lab
9.	Advanced Synthetic Chemistry Research Lab
10	Polymer Synthesis Research lab
11	Organic Synthesis Research Lab
12	Nanomaterials Research Lab
13	Computational Chemistry Lab
14.	Advanced Instrumentation Research Lab

3.8 DEPARTMENT OF MATHEMATICS & SCIENTIFIC COMPUTING



1. Academic Staff

Head: Dr. Ramesh Kumar Vats, Associate Professor.

Faculty Names:

Professor	Associate Professor	Assistant Professor
1. Dr. Yogeshwar Dutt Sharma, Ph.D.	1. Dr. Ramesh Kumar Vats Ph.D.	1. Dr. Suket Kumar, Ph.D.
2. Dr. Sunil, Ph.D.	2. Dr. Pawan kumar Sharma, Ph.D.	2. Dr. Subit Kumar Jain, Ph.D.
		3. Dr. Om Prakash Yadav, Ph.D.
		4. Dr. Rifaqat Ali, Ph.D.

3. Research (2022-23)

i. Research Scheme (2022-23):

S. No	Name of the Staff	Title of the Scheme	Sponsored by	Assistance Received (Rs.) in lakh	Investigator	Brief Report
1.	NIL					

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

1. Kushwaha AK, Sharma YD, Sanjalee 2023. Investigation of over stability analysis of oscillatory thermo-bioconvection with arbitrary directions of vibration. Journal of Porous Media, vol. 26, no. 10, pp. 44-62, 10.1615/JPorMedia.2023045672.
2. Kushwaha AK, Sharma YD, Sharma A. 2023. Stability analysis of bioconvective heat transferrin a suspension of gyrotactic microorganisms under vertical vibration. Special Topics & Reviews in Porous Media vol. 14, no. 3, pp. 49-61, 10.1615/SpecialTopicsRevPorousMedia.2023046450.
3. Kushwaha AK, Sharma YD. 2022. Significance of vertical vibration on the stability of thermo-bioconvection in a suspension of oxytactic microorganisms. International Communications in Heat and Mass Transfer, vol. 133, p 105943, doi.org/10.1016/j.icheatmasstransfer.2022.105943.
4. Kushwaha AK, Sharma YD, Saini S. 2023. Instability analysis of vibrational thermo-convection in Casson nanofluid suspension. Modern Physics Letter B, 2023, (Accepted for Publication).
5. Garg A, Sharma YD, Jain SK. 2023. Stability analysis of thermo-bioconvection flow of Jeffrey fluid containing gravitactic microorganism into an anisotropic porous medium. Forces in Mechanics, Vol. 10, p 100152, doi.org/10.1016/j.finmec.2022.100152.
6. Garg A, Sharma YD, Jain SK. 2023. Instability investigation of Thermo-bioconvection of oxytactic microorganism in Jeffrey nanoliquid with effects of internal heat source and porous medium. Journal of Porous Media, vol. 26, no. 10, pp 13-32, 10.1615/JPorMedia.2023046406.
7. Garg A, Sharma YD, Jain SK. 2023. ‘Onset of triply diffusive thermo-bio-convection in the presence of gyrotactic microorganisms and internal heating into an anisotropic porous

- medium: Oscillatory convection.' Chinese Journal of Physics, vol. 84, pp 173-188, doi.org/10.1016/j.cjph.2023.05.014.
8. Shad M, Sharma Y D, Narula P. 2023. Forecasting Southwest Indian Monsoon Rainfall Using the Beta Seasonal Autoregressive Moving Average (β SARMA) Model. Pure and Applied Geophysics, vol. 180, pp 405-419, doi.org/10.1007/s00024-022-03217-3.
 9. Shad M, Sharma YD, Singh A. 2022. Forecasting of monthly relative humidity in Delhi, India, using SARIMA and ANN models. Modeling Earth Systems and Environment, vol. 8, pp 4843-4851, doi.org/10.1007/s40808-022-01385-8.
 10. Shad M, Sharma YD, Singh A. 2022. A generalized time series model based on Kumaraswamy distribution to predict double-bounded relative humidity data. Electronic Journal of Applied Statistical Analysis, vol. 15, no. 1, pp 123-144. 10.1285/i20705948v15n1p123.
 11. Sanjalee, Sharma YD, Yadav OP. 2023. Regular and chaotic Rayleigh Bénard convection in hybrid Casson nanoliquid under the effect of non-uniform heat source. Chinese Journal of Physics, vol. 83, pp 28-50. doi.org/10.1016/j.cjph.2023.02.006.
 12. Sanjalee, Sharma YD, Yadav OP. 2023. Study of Heat Transfer in Anisotropic Porous Enclosures Saturated with Casson Fluid Based Carbon Nanotube Suspension. Journal of Porous Media, 10.1615/JPorMedia.2023044926.
 13. Sanjalee, Sharma YD, Yadav OP. 2022. Stability analysis of double diffusive thermo-bioconvection in aerobic-microorganism-suspended Casson nanofluid. The European Physical Journal Plus, vol. 134, no. 6, pp 1-13, doi.org/10.1140/epjp/s13360-022-02895-1.
 14. Sanjalee, Sharma YD, Yadav OP. 2022. Entropy Generation in Magnetohydrodynamics Flow of Hybrid Casson Nanofluid in Porous Channel: Lie Group Analysis. International Journal of Applied and Computational Mathematics, vol. 8, no. 5, p 247, doi.org/10.1007/s40819-022-01306-4.
 15. Sanjalee, Sharma YD, Yadav OP. 2023. Convective instability of Blood-based Au-Fe₃O₄ hybrid nanoliquid under the presence of magnetic field with internal heat source: Application to cancer treatment. Journal of Applied Mathematics and Mechanics, 10.1002/zamm.202200518
 16. Sanjalee, Sharma YD, Yadav OP. 2023. The linear and non-linear study of effect of rotation and internal heat source/sink on Benard convection. Fluid Dynamics Research, <https://doi.org/10.1088/1873-7005/ace3f0>.

17. Sanjalee, Sharma YD, Yadav OP. 2023. Study of thermal convection in chemically reactive carbon nanotube suspension saturated in anisotropic porous enclosure. *International Journal of Modern Physics B*. (Accepted).
18. Sanjalee, Sharma YD, Yadav OP. 2022. Magnetohydrodynamics peristaltic flow of gold-iron oxide hybrid Casson nanofluid under heat generation and chemical reaction. *Springer Proceedings of ICNAA-2022*. (Accepted).
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23. Vishal Chandel, Sunil, Reeta Devi and Poonam Sharma, "Global stability for thermal convection in a partially-ionized plasma", *Proceedings of the '2nd International Conference on Mathematics in Space and Applied Sciences (ICMSAS-2023)' Vol.01*, 149-157 (2023) [ISBN-978-81-947143-1-6] during March 03-04, 2023, Hamirpur, India. Department of Mathematics: Government College Hamirpur-HP, 2023.
24. Sweta Sharma, Sunil and Poonam Sharma, "Global stability for thermal convection in a Navier-Stokes-Voigt fluid", *Proceedings of the '2nd International Conference on Mathematics in Space and Applied Sciences (ICMSAS-2023)' Vol.01*, 158-165 (2023) [ISBN-978-81-947143-1-6] during March 03-04, 2023, Hamirpur, India. Department of Mathematics: Government College Hamirpur-HP, 2023.
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- Dynamics Systems, 30: 1-15 (2023). (SCI) DOI: <https://link.springer.com/article/10.1007/s12346-023-00795-y>
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28. Vandana Yadav, Ramesh Kumar Vats, Ankit Kumar, Kamal Jeet, "Results on the existence and approximate controllability of neutral-type delay integro-differential system with noninstantaneous impulse", Mathematical Methods in the Applied Sciences, 1–18 (2023). (SCI) DOI: <https://doi.org/10.1002/mma.9484>
29. G. Geetanjali, P. K. Sharma, Memory responses of semiconducting medium containing spherical cavity in the framework of a generalized thermoelastic diffusion, Presented at 2nd International Conference on Mathematics in Space and Applied Sciences (ICMSAS-2023), March 03-04, 2023. (Attended and Presented) <https://doi.org/10.1007/s12648-022-02313-3>
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31. G. Geetanjali, A. Bajpai, P. K. Sharma, Impact of variable thermal conductivity and diffusivity on two temperature fractional thermodiffusive elastic half space with dual phase lags, Waves in Random and Complex Media, 2022. <https://doi.org/10.1080/17455030.2022.2063987>
32. P. Yadav, N. Gupta, P. K. Sharma, A comprehensive study towards high-level approaches for weapon detection using classical machine learning and deep learning methods. Expert Systems with Applications, 118698, 2022. <https://doi.org/10.1016/j.eswa.2022.118698>

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35. KUMAR, SUKET. "INTEGRAL INEQUALITIES IN AMALGAM SPACE." *Mathematica (1222-9016)* 64.1 (2022).
36. Kumar, A. and Jain, S.K., 2022. Deformable models for image segmentation: A critical review of achievements and future challenges. *Computers & Mathematics with Applications*, Volume 119, pp 288-311.
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39. Sanjalee, YD Sharma, OP Yadav, Entropy Generation in Magnetohydrodynamics Flow of Hybrid Casson Nanofluid in Porous Channel: Lie Group Analysis, *International Journal of Applied and Computational Mathematics* 8 (5), 1-28, 2022, Publisher: Springer.
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42. Jamulkar, S., Chandrakar, P., Ali, R., Agrawal, A., & Tiwari, K. (2022). Evidence Management System Using Blockchain and Distributed File System (IPFS). In *Machine Learning and Big Data Analytics (Proceedings of International Conference on Machine Learning and Big Data Analytics (ICMLBDA) 2022)* (pp. 337-359). Springer International Publishing.

iii. Editorial Work: NIL

3. National/International Conference Organized: NIL**4. Summer/Winter/FDP Organized: NIL**

1. E-Workshop on Applications of Financial Mathematics in Stock Market (FMSM-2022), during May 25-29, 2022.
2. E-STC on Recent development in Numerical Methods for Partial differential equations (RD-NMPDE-2022), during 30-05-2022 to 03-06-2022.
3. E-Workshop on Cyber Security and Block chain Technology (CSBT-2022), during April 23-27, 2022
4. E-Workshop on Machine Learning and Cloud Computing (MLCC-2022), during October 15-19, 2022

5. National/International Conferences Attended: NIL**6. Workshop Attended: NIL****7. Invited Lecture/Speaker/Expert:**

1. Session Chair in International Conference on Recent Advances in Mathematical Fluid Dynamics organized by the department of Mathematics, MNIT Jaipur during December 02-04, 2022.

8. Doctoral Programme: On Going or Completed: (2022-23)

Sr. No.	Name of Registered Student	Registration No.	Topic of his/her Research	Name of his/her Supervisor/ Co-Supervisor	Brief Report
1.	Mr. Ankit Kumar	2K17-PhD-Math-344	Controllability of Integer and Non-integer Differential System	Dr. Ramesh Kumar Vats	Completed
2.	Mr. Ankit Kumar Nain	2K17-PhD-Math-349	Existence of Solutions for Hadamard Fractional Boundary Value Problems	Dr. Ramesh Kumar Vats	Completed
3.	Ankit Bajpai	2K17-Ph.D.-Math-376	Forced Vibration Analysis of Thermodiffusive	Dr. Pawan Kumar Sharma	Completed

			Elastic Plates with Two Temperature Theory		
4.	Ms. Kanika	2K18-PhD-Math-411	Existence & Stability of fractional differential equation	Dr. Ramesh Kumar Vats	On Going
5.	Geetangali	2K18-Ph.D-MATH-412	Free & forced vibration analysis of thermoelastic continua with variable material properties	Dr. Pawan Kumar Sharma	On Going
6.	Mohammad Shad	2K18-Ph.D-MATH-413	Time series modeling and forecasting	Prof. Y. D. Sharma	On Going
7.	Atul Kuamr Kushwaha	2K18-Ph.D-MATH-414	Thermo-bioconvection problems	Prof. Y. D. Sharma	On Going
8.	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	On Going
9.	Arpan Garg	2K19-Ph.D-Math-494	Fluid Dynamics	Prof. Y.D. Sharma Dr. Subit Kumar Jain	On Going

10.	Bhupendra Kumar	2k19-PHD-MATH-495	Time series modelling and forecasting based on stochastic and deep learning algorithms	Prof. Sunil Dr. Neha Yadav	On Going
11.	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	On Going
12.	Mr. Parveen Kumar	2K19-PhD-Math-497	Study on Controllability of Functional Differential equations	Dr. Ramesh Kumar Vats	On Going
13.	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	On Going
14.	Anisha Devi	2K20-Phd-Math-519	Finite element analysis and approximations of reaction diffusion equations	Dr. Om Prakash Yadav	On Going
15.	Pavinder	20RMA002	Object Detection using Deep Neural Network	Dr. Pawan Kumar Sharma	On Going

16.	Vipin Kumar	20RMA003	Authentication Systems using Blockchain	Dr. Rifaqat Ali	On Going
17.	Neeraj Kumar	21RMA002	Cryptography and Network Security (tentative)	Dr. Rifaqat Ali	On Going
18.	Om Prakash Kumar Sharma	21RMA003	Study on Controllability of Differential Systems	Dr. Ramesh Kumar Vats	On Going
19.	Vandana Yadav	21RMA004	Analysis of Fractional Differential Equations	Dr. Ramesh Kumar Vats	On Going
20.	Akanksha Thakur	22RMA001	Effect of couple stresses on Linear and Nonlinear stability of Ferrofluids	Prof. Sunil Dr. Reeta Devi	On Going
21.	Sourav	22RMA002	Cryptography and Network Security (tentative)	Dr. Rifaqat Ali	On Going
22.	Sweta Sharma	22RMA003	Linear and nonlinear stability analysis of Navier-Stokes-Voigt fluid	Prof. Sunil Dr. Poonam Sharma	On Going
23.	Rohit Sharma	22RMA004	Numerical PDEs (tentative)	Dr. O. P. Yadav	On Going

24.	Anjali	22RMA005	Differential & Integral Equations with fractional calculus	Dr. Ramesh Kumar Vats	On Going
25.	Sanjeev	22RMA006	Differential Equation and Fractional Calculus	Dr. Ramesh Kumar Vats	On Going
26.	Hem Raj	23RMA001	Piezo Thermoelasticity	Dr. Pawan Kumar Sharma	On Going
27.	Manisha Sharma	23RMA002	Numerical PDEs (tentative)	Dr. O. P. Yadav	On Going
28.	Rohit Chauhan	23RMA003	Functional Analysis	Dr. Suket Kumar	On Going
29.	Rozy Sharma	23RMA004	Moore-Gibson-Thompson Thermoelasticity	Dr. Pawan Kumar Sharma	On Going
30.	Vishal Chandel	23RMA005	Linear and nonlinear stability analysis of partially-ionized plasma	Prof. Sunil	On Going

9. Detail of the Laboratories:

Sr. No.	Name of Laboratory
1.	Basic Computational Lab
2.	Advance Computational Lab

3.9 DEPARTMENT OF PHYSICS & PHOTONIC SCIENCE



1. ACADEMIC STAFF

HEAD : Dr. Kuldeep Kumar Sharma

FACULTIES

Professor	Associate Professor	
-	Dr. Subhash Chand	Dr. Rajesh Kumar
-	Dr. Arvind Kumar	Dr. Vimal Sharma
-	Dr. Kuldeep Kumar Sharma	-

2. DISTINCTION ACHIEVED

(b) [M.Sc.](#) (Physics) student Ms. Mansi Talwar has achieved the 48th All India Rank in the Joint Entrance Screening Test -2023. (JEST-2023). Mr. Rohit Singh, Ms. Ritu [M.Sc.](#) students, and Mr. Uttam Kumar, a B. Tech. (Engineering Physics) student, have also qualified JEST-2023.

(c) Mr. Ishant Kumar, Ms. Leelavati, Ms. Jyoti, Dr. Arvind Kumar, and Dr. Naveen Kumar were selected for the position of Assistant Professor in Physics, Class-I Gazetted (College Cadre) in the Department of Higher Education, H.P.,

(d) [M.Sc.](#) (Physics) student Mr. Praveen Kumar has been appointed as Inspector of GST & Central Excise.

(e) Mr. Vikash Kumar Prasad, [M.Sc.](#) Final Year student for has got placement package offer of Rs. 8.25 Lacs per annum by “Byjus” through the Training and Placement Cell, National Institute of Technology Hamirpur. Other final-year [M.Sc.](#) (Physics) students Mr. Dheeraj and Ms. Kiran, have also got a good placement package offer from the “Physicswallah” and the “Minerva Study Circle” through Institute Training and Placement Cell

(f) [M.Sc.](#) (Physics) student Ms. Mansi, have achieved 88th All India Rank in GATE-2023. Other [M.Sc.](#) (Physics) students Ms. Divya Rani, Ms. Ritu, Mr. Sri Ram G, Mr. Mohit Saini, Mr. Satish Singh Kaintura, Mr. Rupam Roy, and Mr. Rohit Singh and [B.Tech.](#) (Engg, Physics) 3rd year students Mr. Vaibhav Sharma, Mr. Uttam Kumar have also achieved good ranks GATE-2023.

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

a) Conducted in the department.

Sponsoring agency	Name of the Coordinator	Title of the Seminar/symposia/Workshop	Duration	Venue
District Administration Hamirpur	Dr. Kuldeep Kumar, Dr. Pamita Awasthi and Dr. Pawan Kumar	1. The “Capacity Building Program – 2022-23 for the School Cadre Lecturers in the Subjects of Physics, Chemistry and Mathematics of District Hamirpur (H.P)” was organized at NIT Hamirpur on the Saturdays every week	August 27, 2022 to February 4, 2023	Departments of Physics & Photonics Science, Chemistry and Mathematics & Scientific Computing

4. RESEARCH

(a) Research Scheme:

Title of the scheme	Sponsored by	Assistance received (Rs.) in lakh	Investigator	Brief Report
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(b) Research Publication

PAPER PUBLISHED BY FACULTIES:

1. Structural, morphological, optical and dielectric properties of TiO_2 nanoparticles synthesized using sol-gel method. Seema, Naveen Kumar and Subhash Chand journal of sol-gel science and technology, volume 105 page 163–175 (2023)

2. Role of multi-layered graphene as an additional fuel on energy release of Al/MgO nano-thermite by Priya Thakur, Vimal Sharma & Nagesh Thakur January 2022 philosophical magazine Doi:10.1080/14786435.2021.2019846.

3. Origin of ferromagnetism in $\text{Cr}^{1-x}\text{Mn}_x\text{O}$ nanoparticles; Leelavati, R kumar, R kumar; superconductivity and novel magnetism, June 2022

4. A comparative study on the structural, optical, and magnetic behavior of transition metal (Co and Mn) ions substituted Cr_2O_3 nanoparticles; P Bhardwaj, R kumar, J Singh, V Verma, R Kumar journal of magnetism and magnetic materials, Jan. 2023

5. Coprecipitation synthesis, structural, optical properties, and thermometry application of $\text{Tm}^{3+}/\text{Yb}^{3+}$ co-doped YPO_4 phosphor, Himani Thakur, **Arvind K. Gathania**, Santosh Kachhap, Rajesh Kumar, Sunil Kumar Singh, Rajesh Kumar Singh, J. of Luminescence, 254, 119513, Feb. 2023.

6. Synthesis, characterization and potential sensing application of carbon dots synthesized via the hydrothermal treatment of cow milk, Avinash Kumar, Ishant Kumar, and Arvind K. Gathania, scientific reports, article number: 22495, vol 12, Dec. 2022.

7. Activation of zirconia nanophosphors with Eu^{3+} to demonstrate multifunctional optical applications, Ishant kumar, Avinash kumar and **Arvind K. Gathania**, materials chemistry and physics, vol. 292, 126846, Dec. 2022

8. Hybrid material of $\alpha\text{-Fe}_2\text{O}_3$ nanostructure with reduced graphene oxide: enhanced dielectric and optical properties in relation to their composition and morphology, Ravi Kant and K.K. sharma, journal of Molecular Structure 1282(2):135216, 2023.

Publications in Conference:

1. A study of the photoluminescence properties of lemon juice-synthesized carbon quantum dots, Avinash Kumar, Ishant Kumar and Arvind K. Gathania, page 648, 2022, International Union of Materials Research Societies – International Conference in Asia-2022 (IURCM-(IUMRS-ICA-2022)), organized by the Material Research Society of India (MRS-I) and IIT Jodhpur
2. Effect of concentration, annealing temperature, and time on the luminescence properties of Sm^{3+} activated LiBaPO_4 , Ishant Kumar, Avinash Kumar and Arvind K. Gathania page 635, 2022, International Union of Materials Research Societies – International Conference in Asia-2022 (IURCM-(IUMRS-ICA-2022)), organized by the Material Research Society of India (MRS-I) and IIT Jodhpur

i) PATENT: Published

Title : SMART PAINTING ROLLER WITH TEMPERATURE SENSOR TO DETECT THE TEMPERATURE OF WALL AND PAINT, Reference. No. 202211046848 A, The Patent Office Journal No. 34/2022 Dated : 26/08/2022 (72)

Name of inventors: Dr. Indu Sharma, Associate Professor, Department of Physics Career Point University-Hamirpur-176041-INDIA, Dr. Khalid Mujasam Batoo, Associate Professor, King

Abdullah Institute For Nanotechnology, King Saud University, Riyadh, Saudi Arabia, **Dr. Kuldeep Kumar, Associate Professor, Department of Physics & Photonics Science, National Institute of Technology-Hamirpur**, Dr. Rajesh Sharma, Department of Physics, Sardar Vallabhai Patel, Cluster University Mandi, Himachal Pradesh, Dr. Sanjay Kumar, Associate Dean Cum Principal, Department of Pharmaceutical Health and Sciences, Career Point University, Hamirpur-176041, Ms. Arushi Sharma, Research Scholar, Department of Mathematics and Statistics, Banasthali Vidyapith, Rajasthan-30402,)Ms. Kanika Pathania, Assistant Professor Department of Pharmaceutical Health and Science, Career Point University, Hamirpur-176041 INDIA, Ms. Rajni Devi, :Assistant Professor Department of Pharmaceutical and Health Sciences, Career Point University, Hamirpur -176041 INDIA , Ms. Madihu Bala Assistant Professor ,Department of Pharmaceutical and Health Sciences, Career Point University, Hamirpur -176041 INDIA, Ms Neha Thakur, :Research Scholar, Department of Physics Career Point.

(c) **Doctoral Programme:**

Sr. No	Title	Guide	Name of the student	Brief Report
1.	Study of Ni Doped Rare Earth Cobaltite Thin Film	Dr. Rajesh Kumar	Mr. Ashok Kumar	Ph.D Awarded
2.	Synthesis & Characterization of High K dilation Materials and their Heterojunctions	Dr. Subhash Chand	Mr. Naveen Kumar	Ph.D completed
3	Properties of transmission metal doped C&D	Dr. Rajesh Kumar	Ms. Leelavati	Thesis Submitted
4	Condensed Matter Physics	Dr. Arvind Kumar	Avinash Kumar	In progress
5	Condensed Matter Physics	Dr. Vimal Sharma	Ms. Manisha Sharma	In progress
6	Synthesis & Characterization Phosphor material	Dr. Arvind Kumar	Mr. Ishant Kumar	In progress
7	Condensed Matter Physics	Dr. Subhash Chand	Ms. Seema	In progress
8	Properties of Transtion Metal Oxides	Dr. Rajesh Kumar	Mr. Shivank Kalia	In progress
9	Study of Nano Ferrites	Dr. Vimal Sharma	Ms. Jyoti	In progress
10	Condenced Matter Physics	Dr. Subhash Chand	Mr. Adesh Kumar	In progress
11	Study of Metaloxide and rho/metaloxide NCs applications in Energy storage devices	Dr. Kuldeep Kumar	Mr. Danish Kumar	In progress
12	Composite Materials	Dr. Vimal Sharma	Mr. Rahul	In progress
13	Luninescent Materilas	Dr. Arvind Kumar	Mr. Sandeep Kumar	In progress
14	Condenced Matter Physics	Dr. Rajesh Kumar	Mr. Anshul Sharma	In progress

15	Condensed Matter Physics	Dr. Kuldeep Kumar	Mr. Abhishek Bhardwaj	In progress
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(d) Ph.D Degree awarded : 01

(e) Master thesis completed : 15

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

Sr. No.	Date	Speaker	Topic
-	-	-	-

(g) **CONSULTANCY SERVICES:**

Sr. No	Name of the Scheme	Sponsored Agency	Amount Earned
-	-	-	-

(i) **EQUIPMENT ACQUIRED:**

Sr. No.	Name of equipment	Cost (Rs. In lakh)
1.	Set up measure wave length separation of Sodium D-Lines	168649.00
2.	De-Bolmer	313954.00
3.	Kerr effect trainer	472000.00
4.	Magnetic field using Stewart and Gees Apparatus	13200.00
5.	Ultrasonic interferometer	60000.00
6.	Sextant with Stand	43800.00
7.	Boltzman	28320.00
8.	Tunnel Diode	17700.00
9.	Potential of Murcury	23600.00
10.	Absorption Spectra of iodine	34800.00
11.	NMR	206000.00
12.	Compound Pendulum	24700.00
13.	GM Counter	224200.00
14.	Vaccum Diode	17700.00
15.	Newton Rings	19460.00
16.	Planks Constant	16181.00
17.	Muffle Furnance	490846.00
18.	Power Tuneable	497708.00
19.	Hot Air Oven	43000.00
20.	Transistor	19000.00
21.	IC-555 Timer Multivibrators	21240.00
22.	Diode Laser Characterstics	70800.00

23.	Polarization of Light	177000.00
24.	Mosfet Characterstics	25000.00
25.	Syringe Infusion Pump	24980.00
26.	Electron Diffraction	390441.00
27.	Data Acquisition Device	43424.00
28.	GPIB-45B	150568.00
29.	Frequency Generation Kit	2347894.00
30.	Holography Kit	499715.00
31	HP Desktop HP Monitor	88198.00

5. TECHNICAL ASSOCIATION / SOCIETIES:

The Department of Physics and Photonics Science is pleased to announce that **Physteo**, the Physics Society of the National Institute of Technology Hamirpur, was formally launched on 20th April 2023 in the presence of Prof. H. M. Suryawanshi, Director of NIT Hamirpur, Dr. Kuldeep Kr. Sharma, Head of the Department of Physics and Photonics Science, Prof. B. N. Jagtap, and Prof B. P. Singh from IIT Bombay. The society has become official now and was approved by the competent authority at the end of year 2022. Students of the Department spent four months planning the yearly schedule, society's structure, and initial projects before the Society's inauguration.

6. 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: Dr. Vishal Singh

FACULTIES:

Professor	Associate Professor	Assistant Professors		
Prof. Ravi Kumar	Dr. Vishal Singh	Dr. Rita Maurya	Dr. Raj Bahadur Singh	Dr. Abhijeet Ojha
		Dr. Sumeet Kumar Sharma	Dr. Vineet Kumar	Dr. Abhishek Kumar Gupta

2. DISTINCTION ACHIEVED

- (a) By student: -
- (b) By faculty Member: -

3. SEMINAR, SYMPOSIA, SUMMER SCHOOL, WINTER SCHOOL, SHORT TERM COURSE-Conducted in the Department.

Sponsoring agency	Name of the Coordinator	Title of the Seminar/symposia	Duration	Venue
NIT, Hamirpur(HP)	Dr. Rita Maurya Dr. Raj Bahadur Singh Dr. Nitesh Kumar	Advance Materials Processing and Characterization Techniques (AMPCT-2022)	5 Days	26 th to 30 th May, 2022

b) Participated by Faculty Members:

Name of the Staff	Course/Seminar	Organization	Duration	Venue
-	-	-	-	-

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

Title of the Scheme	Sponsored by	Assistance Received (Rs) in lakh	Investigator	Brief Report
-	-	-	-	-

(b) Research Publications:-**PAPER PUBLISHED IN JOURNALS/CONFERENCES BY FACULTIES:**

- Sahil Dani, A. Arya, Hitesh Sharma, Rakesh Kumar, Navdeep Goyal, **Ravi Kumar**, Rabia Pandit, “ Structural and electronic properties of double perovskite ruthenates; A₂GdRuO₆ (Where A= ba, Sr)” journal of alloys and compounds 913(2022)165177.
- Amarjit singh, Jarnail Singh, Harish Singh Dhama, Manoj Kumar Sinha, Koushik Viswanathan, **Ravi Kumar**, “Quantifying the influences of coal fly ash on rheological and compaction behaviour of iron powder and mild steel machining chips” journal of advanced powder technology 33(2022) 103819
- Ashish Kaushal and **Vishal Singh**, “Excellent electromagnetic interference shielding performance of polypropylene/carbon fiber/multiwalled carbon nanotube nanocomposites”, Polymer Composites, April 2022, doi:10.1002/pc.26649
- Lovepreet Singh and **Vishal Singh**, “CQDs/PANI nanocomposites based sensing probe for the sensitive and selective detection of mercury ions via Raman spectroscopy”, Applied Physics A, 128 (7), July 2022, doi: 10.1007/s00339-002-05752-1.
- M. K. Sharma, M. Sharma and **Vishal Singh**, “Structural and optical Properties of Ce_{1-x}Gd_xO₂ nanoparticles”, Materials Today: Proceedings, Vol. 67, Part 1, pp. 267-270, 2022, doi: 10.1016/j.matpr.2022.07.350.
- Lovepreet Singh, A. Kashyap and **Vishal Singh**, “Investigating the effect of rGO concentration on rGO-PMMA composites synthesized via solution casting technique”, Research and Development in Materials Science, July 28, 2022, doi: 10.31031/RDMS.2022.17.000912.
- D. Mishra, **R. Maurya**, V. Verma, K. Balani, K.V. M. Krishna, D. Srivastava, GN Ganesha, U. Singha, A. Mukhopadhyay “Understanding the influence of graphene-based lubricant/coating during fretting wear of zircaloy” *Wear*, 2023 512,204527.
- P.K. Katiyar, **R. Maurya**, P.K. Singh “Highlighting the corrosion mechanisms of corroded plain carbon steels using the atomic force microscopy”, *International Journal of Sustainable Building Technology & Urban Development*, 2022, 13(2), 198-220.

9. **R. Maurya**, S. Panwar, K. Balani, “Heat-Treatment Design of LATZ9531 Alloy and Ensuing Structure–Properties Correlation”, *Journal of Materials Engineering and Performance*, 2022, 1-8.
10. P. Priyadarshi, P.K. Katiyar, **R. Maurya**, “A review on mechanical, tribological and electrochemical performance of ceramic particle-reinforced Ni-based electrodeposited composite coatings”, *J Mater Sci*, 2022, 57, 19179–19211.
11. P. K. Katiyar, A. L. kumar, **R. Maurya**, P. K. Singh, “High entropy alloys (HEAs) as a binder material for heavy tungsten alloys, tungsten carbide hard metals, and titanium carbo-nitride based cermet composites-a comprehensive review”, *Advances in Materials and Processing Technologies*, 2022, 1-38.
12. P. Priyadarshi, K. Kishore, **R. Maurya**, Electrodeposited Ni on copper substrate: an experimental and simulation comparative study. *Int J Interact Des Manuf*, 2022, 1-7.
13. Sunil Kumar, Vinay Kumar, Raman Devi, Avnish Kumar Sisodia, Anushree Jatrana, **Raj Bahadur Singh**, Rita Dahiya, and Ajay Kumar Mishra, “Sustainable and Scalable Approach for Enhancing the Electrochemical Performance of Molybdenum Disulfide (MoS₂)”, *Advances in Materials Science and Engineering*, 2022 (2022) pp. 1-7.

Conference Publications:

1. Lovpreet Singh, Kunal Kishore and **Vishal Singh**, “Structural and functional study of fluorescent carbon dots synthesized from lemon-peel via one step microwave irradiation method”, [IOP Conference Series: Materials Science and Engineering, Volume 1248, International Conference on Materials Science and Engineering \(ICMSE 2022\) 11/06/2022 - 12/06/2022 Online](#), doi: 10.1088/1757-899X/1248/1/012053.
2. Pankaj Sharma, **Vishal Singh**, Manoj Kumar Sinha “Enhancing EDM performance of Inconel 825 by using RSm and Moga Approach” in the International Conference on “Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-22)” organised by the Department of Mechanical Engineering, National Institute of Technology Hamirpur during February 15-17, 2023.
3. P. Priyadarshi, **R. Maurya**, “Effect of frequency on pulse electrodeposited Ni–SiO₂ nanocomposite coatings” in the International Conference on “Emerging Aspects of Manufacturing, Thermal and Design Engineering (MATHED-22)” organised by the Department of Mechanical Engineering, National Institute of Technology Hamirpur during February 15-17, 2023.

Books/Reports/Chapters/General articles etc.

- i) PAPER ACCEPTED FOR PUBLICATION: -Nil-
- ii) PATENT: -Nil-
- iii) CONFERENCE PUBLICATIONS: --
- (c) Doctoral Programme: 04 Students, Thesis submitted and 04 Students are Ongoing.

Sr. No.	Title	Guide	Name of the student(s)	Brief Report
1	Structural , Electrical and Magnetic Studies of Transition Metal substituted	Dr. Ravi Kumar	Mr. Kapil Dev Singh	Awarded

	RCrO ₃			
2	Metal Matrix Composites	Dr. Ravi Kumar	Sh. Amarjeet Singh	Awarded
3	Synthesis and Characterization of LDPE, HDPE with fillers graphite GE, CNT and study the electrical and mechanical properties	Dr. Vishal Singh	Mr. Ashish	Awarded
4	Polymer Nanocomposites Based Chemo-Sensors for the Sensitive and Selective Detection of Mercury Ions	Dr. Vishal Singh	Sh. Lovepreet Singh	Awarded
5	DMO in TM Ions Substituted Cr ₂ O ₃ NPs and TFs	Dr. Ravi Kumar	Sh. Pankaj Bhardwaj	Thesis submitted
6	Swift Heavy Ion Irradiation Induced Modification in Structural, Electrical and Optical Properties in Substituted RCrO ₃ Thin Film	Dr. Ravi Kumar	Sh. Ravinder Kumar	Ongoing
7	Performance Improvement of Inconel 718 in EDM Process	Dr. Vishal Singh	Sh. Pankaj Sharma	Ongoing
8.	Development of Low Density Steel Nanocomposites	Dr. Raj Bahadur Singh	Sh. Anil Kumar	Ongoing

(d) **Ph.D Degree awarded:** 10 Nos.

(e) **Master thesis completed:** -

S.No	Title	Name of Student	Guide allotted
1.	Investigations of Clathrate based hydrogen storage canisters	Abhijith Prasad	Dr. Nitesh Kumar
2.	Bio-composites	Lokesh Kumar Singh	Dr. Rita Maurya
3.	Development of Bulk Ultrafine-Grained Incoloy 800 through Equal Channel Angular Pressing and Rolling	Samvart Harshit	Dr. Raj Bahadur Singh
4.	Synthesis, Structural and Pseudocapacitive Characterisation of NiCr ₂ O ₄ and Polymer-	Sandeep Singh	Prof. Ravi Kumar

	Ceramic Nanocomposite		
5.	Comparative study of Kinetic models of Drug Delivery from transdermal patches	Satish Kumar	Dr. Nitesh Kumar

(f) **DOCTORAL PROGRAMME:** 04 Nos. Thesis submitted /Ongoing.

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

Sr. No.	Date	Speaker	Topic
-	-	-	-

(h) **CONSULTANCY SERVICES:**

Sr. No	Name of the Scheme	Sponsored Agency	Amount Earned
-	-	-	-

(i) **EQUIPMENT ACQUIRED:**

Sr. No.	Name of equipment	Name of manufacturer	Cost (in INR)
1.	Digital Rockwell hardness Tester	M/S KBS Technologies,	64,999.00
2.	Muffle Furnace, 1400° C	M/S INNOVATIVE ENGINEERS	2,19,698.00
3.	Optical Microscope	M/s Ambika Scientific Traders	6,80,500.00
4.	Ultrasonic Flaw Detector	M/s Baba Gurditta Corporation	3,77,609.00
5.	Eddy Current Testing Unit	M/S Vishtar Systems & Solutions	4,99,140.00
6.	High Quality Water Purification System	M/S BIO-AGE EQUIPMENT & SERVICES	3,30,400.00
7	Computerized Micro Hardness Tester	M/S Micro-Mach Technologies	21,77,100.00
8	Impact Testing Machine	M/S Quality Engineers	95,000.00
9	Laboratory Rolling Mill	M/S Prakash Engineering Works	4,46,642.00
10	X-ray Diffractometer (XRD)	M/S Spectris Technologies Private Limited	1,03,04,468.00

4. TECHNICAL ASSOCIATION / SOCIETIES:

-Nil-

5. 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 Diffractormeter (XRD) Lab
10.	Physical Metallurgy Lab
11.	Non-Destructive Testing Lab
12.	Optical Microscopy Lab
13.	Micro Hardness Tester Lab
14.	Electrical Transport Lab

3.11 DEPARTMENT OF ARCHITECTURE



1. ACADEMIC STAFF

HEAD: Dr. Bhanu M Marwaha

FACULTIES:

Professor	Associate Professor	Assistant Professor
Dr. Minakshi Jain	Dr. Inderpal Singh	Dr. Vandna Sharma
Dr. Bhanu M Marwaha		Dr. Puneet Sharma
		Dr. Aniket Sharma
		Dr. Amanjeet Kaur
		Dr. Venu Shree
		Dr. Sandeep Sharma
		Dr. Neetu Kapoor
		Dr. RashmiKumari

2. DISTINCTION ACHIEVED:**Institute Ranking**

Sr. No.	Ranking organization	All India rank	Session year
1	Indian Institutional Ranking Framework (IIRF)	09	2022
2	National Institutional Ranking Framework (NIRF)	26	2022
3	India Today Institutional Ranking	11	2022

a) **By Student:** 20 Students Participated at national level competitions.

b) **By Faculty Member:**

- Three of the faculty members nominated as lead trainer for Infant-Toddler- Caregiver friendly Neighborhoods (ITCN) Training and Capacity Building Programme
- One of the faculty member Awarded Outstanding Women Researcher in Architecture.
- Patent granted for a “A system for developing a problem solving framework for site planning” Ref. No. 20 2022 104 576 to Bansal V.K., Jain, M., and Kapoor, N

3. RESEARCH:

a) **Research Publication by faculties:**

(i) **International journal:**

1. Akansha Soni, Puneet Sharma, (2023), Analysis of urban intervention processes carried out in core cities in India, Journal of Urban Regeneration and Renewal, Volume 16 Number 4, 2023, (Accepted), ISSN No.: 1752-9646
2. Akansha Soni, Puneet Sharma, (2023), A recent review of influential factors for core city area development processes, Journal of Urban Regeneration and Renewal, (Accepted), ISSN No.: 1752-9646
3. Gangrade, S., & Sharma, A. (2022). Study of thermal comfort in naturally ventilated educational buildings of hot and dry climate-A case study of Vadodara, Gujarat, India. *International Journal of Sustainable Building Technology and Urban Development*, 13(1), 122-146.
4. Sharma, V. and Kapoor N (2023), The way towards more sustainable habitat: In context to Indian residential sector, Journal of AIP Conference Proceedings, 2759 (1), 040011-1-10
5. Sam, N., Kapoor, N. (2022). Identification of factors for designing efficient post pandemic public Spaces, *Zeichen Journal*, 0932-4747, 8, 289-297.

6. Rahul Bharmoria, Vandna Sharma (2022), Achieving urban sustainability for hilly urban areas by addressing degrading visual place quality aspects: A case of Dharamshala region, Himachal Pradesh, International Journal of Sustainable Building Technology and Urban Development Vol.13, Issue 3 pp. 242-265
7. Rajat Nainwal, Aniket Sharma, (2022), Comparison of multi-linear regression and artificial neural network to predict the energy consumption of residential buildings IOP Conference Series: Earth and Environmental Science

(ii) International Conferences:

1. Puneet Sharma, Rejuvenating the world heritage Shimla-Kalka rail track in core area of Shimla, International Conference on Civil, Architectural and Environmental Sciences 23rd April 2022 at Davanagere, India, Virtual mode
2. Shubhi Joshi, Puneet Sharma, Identifying the potential areas and domain for framing the sustainable urban design guidelines for transit-oriented development in Indore metropolitan area, International Conference on Sustainable Goals, 16-17th Sept. 2022, Virtual mode
3. Sam, N., Kapoor, N., (2022) Post pandemic public Spaces, Proceedings of International conference on Pandemics and Urban Form, PUF202, April 28th-30th 2022, Istanbul, Turkey.
4. Vandna Sharma, Shradha, Role of vernacular architecture in thermal comfort of Lucknow, 3rd International Conference on Modern Research in Biological, Pharmaceutical, Medical and Environmental Sciences organized by Indian Academicians and researchers Association on 9th October 2022
5. Vandna Sharma, Monika Patle, Evaluating The Feasibility Of Self-Sustaining Settlement In Central India Concerning Sustainable Development: Case Study Of Nagpur, 3rd International Conference on Modern Research in Biological, Pharmaceutical, Medical and Environmental Sciences organized by Indian Academicians and researchers Association on 9th October 2022
6. Vandna Sharma, Urban Design Degradation: A case of hill town of Manali; Himachal Pradesh, International Conference on Recent Advancements in the areas of Science, Technology, Business, Economics, Management, Social Sciences, Humanities & Travel-Tourism organized by Indian Academicians and Researchers Association in association with Suan Sunandha Rajabhat University, Thailand on 9th December 2022
7. Vandna Sharma, Evaluating Existing Infrastructure and Demography of Manali for Degrading Urban Aspects, International Conference on Recent Advancements in the areas of Science, Technology, Business, Economics, Management, Social Sciences, Humanities

& Travel-Tourism organized by Indian Academicians and Researchers Association in association with Suan Sunandha Rajabhat University, Thailand on 9th December 2022

8. Vandna Sharma, Role Of Physical And Socio-Cultural Factors In Vernacular Architecture, International Conference on Recent Advancements in the areas of Science, Technology, Business, Economics, Management, Social Sciences, Humanities & Travel-Tourism organized by Indian Academicians and Researchers Association in association with Suan Sunandha Rajabhat University, Thailand on 9th December 2022

b) Conferences Organized

c) Workshop/ Training/ FDP:

(i) Organized

- Academic Certification Programme for Young Professionals under Infant- Toddler-Caregiver friendly Neighbourhoods (ITCN) Capacity Building Programme 3rd to 24th Sept. 2022, NIT Hamirpur.
- Organised Workshop on BIM during 30-31st March,2023 DoA NIT Hamirpur

(ii) Attended

- “Understanding influential factors while designing for social sustainability in urban parks”, paper presented in International conference iConverge held from 15-17 September,2022
- “Lessons from Indian Traditional House Forms in achieving Sustainability”, paper presented in International Conference SRBE (virtual) held from 19-21 December,2022
- “Training of Trainers Workshop on Architecture Design Studio” workshop attended from 17-19 January,2023 jointly organized by IIT Bombay and NDMA under the project on Development of Resource Material on Earthquake Engineering

d) Outreach Activities:

Sr. no.	Activity	Duration/ dates	Resource person	Event Venue
1	Workshop on sustainable technologies at CES, NIT Hamirpur	23- 24 feb. 2023	Dr.Puneet Sharma	NIT Hamirpur, HP
2	Measure drawing of Tara Devi temple	5- 9 Oct. 2022	Dr.Puneet Sharma & Dr Neetu Kapoor	Shimla, HP
3	NATA Observer During NATA Examination	11 - 12 June 2022	Dr.Puneet Sharma	Shahpur, HP

	2022			
4	Reviewer of Technical Papers in international Conference iConverge organised by DIT University	15-17 September, 2023	Dr Amanjeet Kaur & Dr Neetu Kapoor	DIT University, Dehradun
5	Reviewer of International Conference RAiSE (Recent Advances in Sustainable Environment)	February 25-26, 2022	Dr Neetu Kapoor	-
6.	Awarded Outstanding Women Researcher in Architecture	March, 2023	Dr Neetu Kapoor	-
7.	Editorial Board Member of International Journal of Urban and Regional Planning (URP)	-	Dr Neetu Kapoor	-
8.	Conducted tour of NCC Cadets to Firing Range, Suker Khad for firing practice	05 April 2022	Dr Aniket Sharma	NIT Hamirpur and 4HP(I) COY NCC Hamirpur
9.	Evaluator For End Semester examination, For Ar-213 History of Architecture -III, AR-323 Ekistics	December 2022	Dr. Vandna Sharma	Himachal Pradesh Technical University

e) **Research project**1. **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	International project “Building Urban Resilient Communities” co funded by Erasmus + Programme of the European Union	Inderpal Singh, Puneet Sharma, and Aniket Sharma	Completed	NO	138 L
2	Infant-Toddler- Caregiver friendly Neighbourhoods Capacity Building Programme	Puneet Sharma, Amanjeet Kaur and Neetu Kapoor	On going	No	0.25 L

f) **Book published**

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

Sr. No.	Title	Publisher	Author	ISBN/ISSN No.
1	Tourist circuit in north east India, Case of Barak valley	LAP LAMBERT Academic Publishing, AV Akademikerverlag GmbH & Co. KG, Germany	Puneet Sharma, Anindya Dutta	978-620-5-51748-2
2	Sustainable Development Framework for Conservation of a Temple Town	LAP LAMBERT Academic Publishing, AV Akademikerverlag GmbH & Co. KG, Germany	Vandna Sharma, Aniket Sharma, Pinglashree N.	978-620-6-14765-7

(g) Doctoral Programme: 21 nos. ongoing

Sr. No.	Title	Guide	Name of the Student	Brief report
1.	Eco frame work for Religious tourism of Trikota Hills: Study of Shri Mata Vaishno Devi Katra	Dr. Minakshi Jain	Ar. Vikas Bhola	Submission stage
2.	Developing Sustainable Residential Model by Integrating Landscape Elements: study area Nainital	Dr. Minakshi Jain & Dr. I. P.Singh	Ar. Priyank Jain	SOA completed
3	Developmental Model for Urban Revitalization of Core area in India: case of Sagar, MP, India	Dr. Puneet Sharma	Ar. Akansha Soni	Submission stage
4	Role of Fenestration for daylight performance in government offices of Hamirpur	Dr. Aniket Sharma	Ar. Rohit Thakur	SOA completed
5	Visual Place Quality framework for the Hill Towns of Himachal Pradesh	Dr. Vandna Sharma	Ar. Rahul Bharmoria	SOA completed
6	Enhancing the thermal performance of slate roof systems of vernacular Houses – a case of Himachal Pradesh	Dr. Vandna Sharma	Ar. Ridima Sharma	SOA completed
7	To Develop an Energy Prediction Framework from the energy consumption pattern of residential buildings of Himachal Pradesh”	Dr. Aniket Sharma	Ar. Rajat Nainwal	SOA completed
8	Sustainable Housing for Industrial Workers. Case Study-Noida (U.P.)	Dr. Bhanu M Marwaha	Ar. Manisha	SOA completed
9	Community resilience framework for hill town- A case of Shimla, Himachal Pradesh	Dr. Puneet Sharma	Ar. Geetika Kaundal	SOA completed
10	Urban mobility in hill towns	Dr. Inderpal Singh	Ar. Gouri	SOA completed
11	Attainment of social sustainability through gender sensitive strategies in urban planning -a case of Kanpur city	Dr. Rashmi Kumari	Ar. Asmita Yadav	SOA completed

12	Sustainable Tourism Development in Himachal Pradesh: A paradigm toward Green Economy	Dr. Inderpal Singh	Ar. Kirti	SOA completed
13.	Planning for water resilient cities	Dr. Puneet Sharma & Dr. Inderpal Singh	Ar. Kalpna Thakur	SOA completed
14	Assessment of a construction waste quantification model suitable for residential buildings in the Indian context- a case of Agra	Dr. Puneet Sharma & Dr. Rashmi Kumari	Ar. Shivani	SOA completed
15	Socio-ecological resilience in the coastal ecosystems of Kerala	Dr. Aniket Sharma	Ar. Atul	SOA completed
16	Quantification of BIPV towards the net zero building	Dr. Venu Shree	Ar. Jay Prakash	SOA completed
17.	Application of vernacular building construction technique to achieve sustainability in modern construction in the Lahaul region	Dr. Venu Shree	Ar. Shiv Dayal	SOA completed
18	Study of Urban Sprawl	Dr. Venu Shree	Ar. Mehul Chaudhary	Course Work (1st Year)
19.	Development of urban design benchmarks and guidelines along railway station precincts for the enhanced image of the city	Dr. Sandeep Sharma	Ar. Aakanksha Bhardwaj	Course Work (1st Year)
20	Research Area- Land Use Planning	Dr. Neetu Kapoor	Ar. Abhinam Bhardwaj	Course Work (1st Year)
21	Framework for industrial towns and informal sector	Dr Amanjeet kaur	Ar Bhupender Panwar	Course Work (1st Year)

4. POPULAR LECTURES BY OUTSIDE EXPERTS:

Sr. No	Date	Speaker	Topic
1.	14.05.2021	Prof Pushplata	Understanding change in built form with focus on built areas
2	14.05.2021	R. Gaurik	The future of tourist movement in the hill town of Shimla and its impact on the built form
3	15.05.2021	Dr. Hemant Vinayaki	Changing built forms through structural deficiencies and material changes in hilly areas
4	15.05.2021	Dr Aanchal	Change in land use of Dehradun and its impact on built form
5	16.05.2021	Dr. Amitava Sarkar	Study of energy consumption with changing nature
6	16.05.2021	Dr. Sanil and Dr. Vani Soundarya	Hills as Commons – The Case of the Nilgiris and its Tribes
7	17.05.2021	Dr. Vijay Kumar Bansali	Spatial Planning in Hilly Areas - Part
8	17.05.2021	Dr. Atul Kant Piyosho	Working with raster data and terrain analysis using QGIS
9	11.09.2021	Pro. Meenakshi Jain, Director, SPA, Vijayawada	Landscape a tool for sustainable development
10	18.05.2021	Dr Tarush Chandra	Research on architectural practices in hilly areas
11	18.05.2021	Pro. Meenakshi Jain, Director, SPA, Vijayawada	Traditional knowledge system in hilly areas

12	12.09.2021	Prof. Mahua Mukherjee, Arch. & Planning., IIT Roorkee	Role of Sustainable Architecture in Risk Reduction
13	13.09.2021	Dr. Deepak Khare, Prof. WRDM, IIT Roorkee	Water Resources Planning and Management for Sustainable Development
14	13.09.2021	Dr. Hemant Vinayak, Asso.. Pro. NITTR, Chandigarh	Structural Safety in Hill Cities
15	14.09.2021	Dr. Umesh Sharma, Prof. Civil Engineering, IIT Roorkee	Durability and service life of RCC structures in hilly areas
16	14.09.2021	Dr. Adinarayananeeer, Associate Pro. Spa, Vijayawada	Assessment Methods for Resilience

5. CONSULTANCY SERVICES:

Sr. No.	Name of the Scheme	Sponsored Agency	Amount earned
1.	Landscape proposal for Bus stand Hamirpur, HP	HP Tourism department Hamirpur	Nil

6. 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
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
25.	Member of The Indian Institute of Architects Mumbai	Lifetime (A15110)		National
26.	ICOMOS	Annual		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

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. Rashmi Kumari	CA/2009/45688	National
39.	Associate Member of Institute of Town Planners, India		2016-242, AITP	National

7. EQUIPMENT ACQUIRED:

Sr. No.	Name of Equipment	Grant/ Lab	Cost (Rs./)
1.	U Value measurement set	Equipment grant	3,91,100/-
2.	Thermal imager, 1 No	Equipment grant	1,97,000

8. 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 Model Making lab
10. BReUCom Research Lab

9. STUDENT ACTIVITIES:**i) Competitions at national and international level**

Area	Competition Name	Name of the Individual	Duration	Position
Design	HUDCO Trophy NASA		Jan.22- Mar.22	Participation
EBSB Club	EBSB - Poster Making Competition	Akshara AT	April 2022	1st Position
Design	C.P. Kukreja Trophy NASA	Arshita Mehta, Asmi Sharma, Deeksha Negi Bashtel	August 2022	Participation
Design	Museum of emotion	Mugdha Pratap, Manika Gautam, Sakshi Gupta	August 2022- October 2022	Participation
SBA Club	Swachhta Pakhwada - Poster making Competition	Akshara AT, Kruthi Pattath	September 2022	1st position, 2nd Position
Design	ANDC NASA	Kashish Ahuja Ananya Arora	October 2022	Participation

		Chinmay taral Diksha Pranjali Bhardwaj Mohammed Ameen PK Ayush Lalta Sachin Mathur Sarthak Prashar Shinjini Dutta Arshita Mehta		
Design	Transparence 17.0		October 22- Jan 23	Participation
Design	Transparence 17.0	Rohit Saxena, Sumit Latwal, Nishant Dhiman	October 22 - Jan 23	Best studio project (In Northern interface)
Design	Children's House Design Kaira Loro Competition	Ashish Kumar Sharma, Royal Sharma, Vishal Prashar, Vishaliny V	June 2022	Participation
Design	GRIHA NASA	Ananya Arora Asmi Sharma Nishkriti Sharma Gunjan Verma Nihaal Pushpala	December 2022	Participation
Design	Lauri Baker Trophy NASA	Ananya Arora Shinjini Mehta Asmi Sharma Arshita Mehta Asmi Singhal Gourika Ishika Suri Muskan Verma Parth Dhiman Pranjali Bhardwaj Priyal Gandhi Sachin Mathur Ameen Mohammed Srijan Sharma Gunjan Verma	January 2023	Participation
Sports	Inter Year Basketball tournament	Deeptanshu Navangul, Aarush Dogra, Ritesh Negi	January 2023	2nd Position
Sports	Inter Year Volleyball	Ritesh Negi	February 2023	3rd Position

	tournament			
Sports	Inter Year Snooker tournament	Aarush Dogra	February 2023	2nd Position
Design	Ethos	Asmi sharma Muskan verma Ananya Arora Arshita mehta	February 2023	Participation
Sports	LALKAAR 4x100 Relay Girls Long Jump Girls Javelin Throw Girls	Vibhuti Sharma	April 2023	1st Position, 2nd Position, 3rd Position Respectively
Sports	LALKAAR High Jump Boys	Ritesh Negi	April 2023	1st Position
Design	Metaverse Retail Store	Ayush Mehta, Rohit Verma, Apoorva Kaushal	March 2022	Honorable Mention
IIA Event	IIA WAD celebration(HP Chapter) - Quiz	Ashish Kumar Sharma, Akshara A T	October 2022	2nd Position
IIA Event	IIA WAD celebration(HP Chapter) - Quiz	Vishal Prashar	October 2022	1st Position
SBA Club	Swachhta Pakhwada-Quiz	Manvi Mahajan	1-15 Sep 2022	1st Position
SBA Club	Swachhta Pakhwada-Essay Writing competition	Ashish Kumar Sharma	1-15 Sep 2022	1st Position
EBSB Club	Earth Day Poster Design	Pranshu	March 2023	2nd Position
SBA Club	Swachhta Pakhwada - Essay Writing Competition	B M V Yeshwanth	September 2022	3rd Position
EBSB Club	EBSB Club - Poster Making Competition	B M V Yeshwanth	April 2023	3rd Position
IIA Event	IIA WAD celebration(HP Chapter) - Design	Vishal Prashar, Royal Sharma	October 2022	1st Position

	Competition			
Sports	Badminton Tournament (Inter-Dept)	Mugdha Pratap	August 2022	2nd Position
Sports	Badminton Tournament (Inter-Dept)	Vishaliny V	August 2022	2nd Position
Bhangra Club	ABVP Event, Hamirpur	Briti Mehta	January 2023	Participant
Karate Club	Karate Fight	Vibhuti Sharma	March 2023	1st Position
Karate Club	Best Individual Fitness	Vibhuti Sharma	March 2023	1st Position
Literacy Mission	Representing Culture Through Art	Prakash K Rajan	March 2023	1st Position
	Archumen Quiz	Ananya Arora, Asmi Sharma, Muskan Verma , Arshita Mehta , Siya Deokar, Aanchal	February 2023	Participation

ii) Workshops/ Training/ Courses

Organization Name	Individual Name	Subject Area and Location	Date/ Duration
Louis I Kahn Program Landour Mussoorie	Prerna Singh	Architectural Documentation, Mussoorie	05.01.2022-08.01.2022
GRIHA	Deeptanshu Navangul	Mud, Brick and Lime mortar Architecture, Hands On Workshop, Delhi	10.01.2022
AVD workshop AVEI	Vishaliny V	Arch Vault Dome Hands-On session/ Auroville Pondicherry	04.07.2022 - 09.07.2022
Short Course on Landscape Architecture	Vishaliny V	University of the Arts London, UK	19.12.2022 - 23.12.2022

Short Course on Interior Styling	Vishaliny V	University of the Arts London, UK	12.12.2022-15.12.2022
ARCHITECTURAL HARDWARE FAIR	Vanshaj mehta	JAY FACTORIES	May -2023
Thesis Gamified	Vanshaj mehta	ACEDGE	25.04.2023 - 31.04.2023
Team Shunya (building sustainable future)	Vanshaj mehta	IIT Bombay	Dec - 2022
Shastra summit (IIT madras)	Vanshaj mehta	IIT madras	Dec - 2022
MASONARY DETAIL SERIES	Vanshaj mehta	IMI	Sep-2022
Shastra summit (IIT madras)	Vanshaj mehta	IIT madras	Dec - 2022
MODULAR KITCHEN EQUIPMENT DESIGNING AND MANUFACTURING	Vanshaj mehta	HETTICH , OEM kangra	2022-2023
Space Planning	Manvi Mahajan	Bonito Discover by Bonito Designs	10.09.2022
Architecture Symposium	Manvi Mahajan, Ashish Kumar Sharma, Vishal Prashar, Mridul Chauhan, Vishaliny V, Jahnvi Raj	Opportunities and Challenges in Architecture and Allied Profession	05.04.2022 - 09.04.2022
Manifesto for the Just City	Ashish Kumar Sharma, Vishal Prashar, Royal Sharma, Vishaliny V	TU Delft, Netherlands	Oct. 2022
Introduction to Urban Planning	Ashish Kumar Sharma	NPTEL	Sep. 2022
ITCN Training Programme	Ashish Kumar Sharma	NIUA	Oct. 2022
Design Thinking	Jahnvi Raj	International Business Management Institute-Berlin	16.05.2022-27.05.2022
Floating Gardens Workshop	Jahnvi Raj	Serendipity Arts Festival 2022- Panaji	17.12.2022 - 18.12.2022
Pot painting & Rice Planting Workshop	Jahnvi Raj	Serendipity Arts Festival 2022- Panaji	17.12.2022
Camera Obscura workshop	Jahnvi Raj	Serendipity Arts	17.12.2022 -

		Festival 2022- Panaji	18.12.2022
Claymation on Microsoft Surface	Jahnvi Raj	Serendipity Arts Festival 2022- Panaji	18.12.2022
Art and Sustainability Workshop- Upskill your garment	Jahnvi Raj	Serendipity Arts Festival 2022- Panaji	23.12.2022
Scrapature: Make 3D Art from Waste	Jahnvi Raj	Serendipity Arts Festival 2022- Panaji	23.12.2022
India Hospitality + F&B PRO Summit	Jahnvi Raj	India Hospitality + F&B PRO Expo - Goa	17.03.2023-19.03.2023
Kaarwan	Briti Mehta	Set and Production Design	23.03.2023
BIM workshop	Chinmay taral Muskan verma (2nd year)	NIT Hamirpur	March 2023
STC on PSUC- planning strategies for urban challenges	Asmi Sharma Ananya arora Ishika suri	PSUC	27.06.2022-1.07.2022
CSEB intense	Avani Shahji	Earth Institute Auroville	12-06-2023 to 17-06-2023

iii) External Internships

Individual Name	Subject and Area of Internship	Date/ Duration
Manvi Mahajan	Architecture Intern - Designers Den, Noida	01-06-2022 to 15-07-2022
Ashish Kumar Sharma	Architecture Intern - Studio - 14, Dharmshala (H.P.)	01-06-2022 to 12-07-2022
Vishal Prashar	Architecture Intern - Studio - 14, Dharmshala	01-06-2022 to 12-07-2022
Royal Sharma	Architecture Intern - Studio - 14, Dharmshala	01-06-2022 to 12-07-2022
Gaurav	Architecture Intern - Studio - 14, Dharmshala	01-06-2022 to 12-07-2022
Apoorva Kaushal	Architecture Intern -The Design Gesture, Pune	01-01-2022 to 30-03-2022
Apoorva Kaushal	Architecture Research Intern -WeSearch Lab, New Delhi	01-06-2022 to 31-07-2022

Rohit Saxena	Architecture Intern - BDM Architects & Planners, Kotdwara	01-06-2022 to 25-07-2022
Vanshaj Mehta	Architecture Intern -Shashi sharma architects ,Palampur	01-06-2022 to 12-07-2022
Vanshaj Mehta	Architecture Intern -Seismo architects ,Palampur	01-06-2021 to 01-07-2021
Royal Sharma	Architecture Intern - Value Passive House	30-12-2022 to 15-2-2023
Praksh K Rajan	Architecture Intern- Ethos	20-03-2023 to 20-06-2023
Saksham Walia	Architecture Intern-TBC Architecture, Chandigarh	1-06-2023 to 30-06-2023
Upinder Kumar	Architecture Intern- Paragrid Architects & Builders, Punjab	25-05-2023 to 16-07-2023
Aaditya Goyal	Architecture Intern- DBK Infra Pvt. Ltd. Mandi	01-06-2023 to 15-07-2023
Manika Gautam	Architecture Intern- Vatika, Gurgaon	16-06-2023 to 16-07-2023
Deeptanshu Navangul	Architecture Intern- Ingenious Studios Pvt. Ltd, Gurgaon	23-06-2023 to 23-07-2023
Muskan Verma	Architecture Intern - SJVN Shimla	16-05-2023 to 16-06-2023
Kashish Ahuja	Architecture Intern - Contour Engineering Consultant	December 2022 to January 2023
Kanika Thakur	Architecture Intern - Cherry hill interiors	17-05-2023 to 7-7-2023
Gunjan Verma	Architecture intern - Ashoka associates	15-05-2023 to 30-06-2023
Gourika	Architecture intern- Studio 5A architects	25-05-2023 to 15-07-2023
Shinjini Dutta	Architecture intern- Oracle architects	15-06-2023 to 15-07-2023

iv) Students in Position at various College Clubs and Teams

Teams/ Clubs/ Committees	Name	Year	Position
Athletic team	Mridul Chauhan	4th	Captain odd sem / member
SRIJAN Magazine	Mridul Chauhan	4th	Managing editor

Sports committee	Mridul Chauhan	4th	Joint Sports secretary
Swachh Bharat Abhiyan 2022	Vishal Prashar	4th	President
IIA WAD celebration - HP Chapter	Vishal Prashar	4th	Organising Committee member
Ek Bharat Shreshtha Bharat 2023-24	Vishal Prashar	4th	Member
Yogic Self	Vishal Prashar	4th	Member
IIA WAD celebration - HP Chapter	Ashish Kumar Sharma	4th	Organising Committee member
Hill'ffair 2022	Vishaliny V	4th	Vice President
Swachh Bharat Abhiyan 2022	Vishaliny V	4th	Social Media Head
Ek Bharat Shreshtha Bharat '22	Vishaliny V	4th	Secretary
Ek Bharat Shreshtha Bharat '23	Vishaliny V	4th	Joint Secretary
Mani Mahesh Girls Hostel Mess Committee	Vishaliny V	4th	Member
Training and Placement Cell	Rohit Verma	4th	Junior Training Representative JTPR
Training and Placement Cell	Ayush Mehta	4th	Junior Training Representative JTPR
SRIJAN Magazine	Apoorva Kaushal	4th	Associate Designer
NITH	Apoorva Kaushal	4th	Newsletter Design Head
NITH	Apoorva Kaushal	4th	TPR Design
In4mals	Apoorva Kaushal	4th	Member
Fash P	Apoorva Kaushal	4th	Member

IIA WAD celebration - HP Chapter	Manvi Mahajan	4th	Cultural Committee Member
EBSB Club 2022	Ashwin Siva Prasad	4th	Secretary
Athletic team	Priya Jamwal	4th	Member
Swachh Bharat Abhiyan 2022	Priya Jamwal	4th	Member
Swachh Bharat Abhiyan 2022	Sarthak Goel	4th	Member
IIA WAD celebration - HP Chapter	Priya Jamwal	4th	Cultural Committee Member
Volleyball Team Girls	Priya Jamwal	4th	Member
Design N Deco Hill'ffair	Shubham Bhardwaj	4th	Secretary
Design N Deco Hill'ffair	Royal Sharma	4th	Secretary
Martial Arts Karate Academy	Vibhuti Sharma	3rd	Coordinator
Sports Committee	Vibhuti Sharma	3rd	Athletics Vice Captain
Sports Committee	Ritesh Negi	3rd	Assistant Sports Secretary
National Association of Students of Architecture (NASA)	Prerna Singh	3rd	Unit Secretary
National Association of Students of Architecture (NASA)	Aarthi Reddy	3rd	Graphic Designer
HILLFFAIR	Kartikey Saini	3rd	Core Coordinator
Design N Deco Hillffair	Divyanshu Pilakshi Sharma Aarya Masurkar Shishir Kaulas	3rd	Co Coordinators
English Club	Prerna Singh	3rd	Co Coordinator
Fine Arts	Prakash K	3rd	Co Coordinator

	Ranjan		
Bhangra Club	Briti Mehta	3rd	Co Coordinator
Design N Deco NIMBUS	Deeptanshu Navangul Ishita Chauhan Shubham	3rd	Core Coordinator
Design O Crats	Mirza Abdhullah Saksham Walia	3rd	Core Coordinator
Pixonoids	Sarthak Sood	3rd	Core Coordinator
Parvati Girls Hostel	Aarya Masurkar	3rd	Deputy Head Girl
Parvati Girls Hostel	Briti Mehta	3rd	Secretary Cultural Committee
STC psuc workshop 2022	Chinmay taral Sachin Diksha Singh	2nd year	Organizing committee members
Dhauladhar boys hostel	Sarthak Prashar	2nd	Discipline secretary
Dhauladhar boys hostel	Sachin	2nd	Common room secretary
NITH 2nd year cricket team	Ayush lalta	2nd	Vise captain
Dhauladhar boys hostel	Ayush lalta	2nd	Mess committee member secretary
National Association of Students of Architecture (NASA)	Ananya Arora	2nd	Unit Designee
Ambika Girls Hostel	Asmi singhal	2nd	Ambika Girls Hostel - Joint Secretary (Electricity Committee)
Ambika Girls Hostel	Ishika Suri	2nd	Ambika Girls Hostel - Secretary (Electricity Committee)

3.12 DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES



1. ACADEMIC STAFF

HEADL: Dr. Yogesh Gupta, Associate Professor.

ACADEMIC STAFF:

- Dr. Manoj Sharma, Assistant Professor (on lien)
- Dr. Manoj Kumar Yadav, Assistant Professor
- Dr. Sunder Kala Negi, Assistant Professor

SEMINAR, WORKSHOP, SYMPOSIA, SUMMER SCHOOL, WINTER SCHOOL, SHORT TERM COURSE

- Conducted in the Department : -Nil-
- Participated by Faculty Member: Dr. Manoj Kumar Yadav- 5 days workshop at Highland Institute at Kohima during December, 2022.

RESEARCH:

- Research Publications (National) :

Sr. No.	Journal Name	Title of Paper	Published year	Author	Journal Pages
1.	Caesurae: The Poetics of Cultural Translation	Intruders	2022	Manoj Kr Yadav	10-16
2	Neuroscience Information	A Deep Drive in to Meta: Insightful tool for moral reasoning and emotional maturity.	2022	Dr. Sunder Kala Negi	8-10

3	Seybold Report	Attachment and vicinity : effects on female gender clservier	2022	Dr. Sunder Kala Negi	6-10
4	Journal of Positive School Psychoses	Multicultural Educational System : A practical approach to Healthy Global Society	2023	Dr. Sunder Kala Negi	9-13

PAPER PRESENTED IN CONFERENCE/ SEMINAR/ SYMPOSIA:

- Paper Accepted for Publication in conference proceeding:
 - 1) Women with Disabilities: Discrimination & Violence in Mridula Garg's Kathgulab- Dr. Manoj Kumar Yadav and Ms. Shivane.
 - 2) Translating Toba Tek Singh : From the 'Sacredness' of the 'Original' to the 'Profaneness' of the adaptation- Dr. Manoj Kumar Yadav.
- Patent: -Nil-
- Doctoral Programme: 9 (ongoing)
- Ph.D. Degree awarded: -Nil-

POPULAR LECTURES BY OUTSIDE EXPERTS:

- Interaction with Experts: Prof.(Dr.) Smita Jha and Prof. (Dr.) Rajan Arora, IIT Roorkee during their visit in the Department.
- Interaction with Prof. Piar Chand during his visit in the Department.

EQUIPMENT ACQUIRED:

S. No	Equipment	Manufacturer	Cost (Rs.)
1	Headphone set for Communication Lab	Zebrasonic	42,449/-(50 sets)

NAME OF LABORATORIES:

S No	Laboratory
1	Communication Skills Lab
2	Research Lab

3.13 DEPARTMENT OF MANAGEMENT STUDIES



1. ACADEMIC STAFF:

- Prof. R. K. Dutta, Head of the Department.
- Dr. Mohd. Adil, Assistant Professor
- Dr. Vivek Tiwari, Assistant Professor
- Dr. Neeraj Dhiman, Assistant Professor
- Dr. Richa Joshi, Assistant Professor
- Dr. Sachin , Assistant Professor
- Dr. Shampy Kamboj, Assistant Professor

SEMINAR, SYMPOSIA, SUMMERSCHOOL, WINTERSCHOOL, SHORT TERM COURSE

- Conducted in the Department : -Nil-
- Participated by Faculty Member : 01 (Detailed)

Workshop	Organized by	Date	Attended by
Editor's Workshop on Publishing High Quality Papers and Minimizing Rejections	Jindal Global Business School	8-9 April 2022	Dr. Sachin Kumar via online mode

RESEARCH:

- Research Scheme: -Nil-
- Research Publications (National) :

S.No	Journal Name	Title of Paper	Published Year	Author	Journal Pages
1.	FIIB Business Review	Modelling the Impact of Emotional Intelligence, Career Success and Happiness on Turnover Intention Among Managerial-level Employees in the Information Technology Industry	2022	Dr. Vivek Tiwari	To be allotted
2.	Vision: The Journal of Business Perspective	Emotional Intelligence in the Field of Business and Management: A Bibliometric Analysis of the Last Two Decades	2022	Dr. Vivek Tiwari	To be allotted
3.	Journal of Asia Business Studies	Review of work–life interface: a systematic literature analysis	2023	Dr. Vivek Tiwari	559-575
4.	Vision: The Journal of Business Perspective	A Bibliometric Analysis of Turnover Intention in the Field of Business and Management: (2002–2022)	2023	Dr. Vivek Tiwari	To be allotted
5.	Global Business and Organizational Excellence	Modelling the impact of techno-stress and burnout on employees' work-life balance and turnover intention: A job demands-resources theory perspective	2023	Dr. Vivek Tiwari	To be allotted
6.	Global Business and Organizational Excellence	Emotional intelligence and career success: Does resilience matter?	2023	Dr. Vivek Tiwari	To be allotted
7.	Journal of Positive School Psychology	Measuring the Role of Human Resource Management of Environmental Performance: Mediating Role of Organizational Citizenship Behaviour for the Environment	2022	Dr. Vivek Tiwari	7284-7296
8.	International Journal of Consumer Studies	Ecotourism experience: A systematic review and future research agenda.	2023	Dr. Mohd. Adil	1-26
9.	Journal of Retailing and Consumer Services	Unraveling customer repurchase intention in OFDL context: An investigation using a hybrid technique of SEM and fsQCA	2023	Dr. Mohd. Adil	103281

10.	Processes	Modeling Vehicle Insurance Adoption by Automobile Owners: A Hybrid Random Forest Classifier Approach	2023	Dr. Mohd. Adil	629
11.	Psychology & Marketing	Anti-consumption behavior: A meta-analytic integration of Attitude Behavior Context theory and Wellbeing theory	2022	Dr. Mohd. Adil	2302-2327
12.	Journal of Service Theory and Practice	Online service failure: Antecedents, moderators and consequences.	2022	Dr. Mohd. Adil	797-842
13.	Journal of Vacation Marketing	Should we or should we not? Examining travelers perceived privacy, perceived security, and actual behavior in online travel purchase	2022	Dr. Mohd. Adil	1-20
14.	Business Strategy and The Environment	Organic food consumption and contextual factors: An attitude-behavior-context perspective	2022	Dr. Mohd. Adil	-
15.	Current Issues in Tourism	Demystifying tourists' intention to purchase travel online: The moderating role of technical anxiety and attitude	2022	Dr. Mohd. Adil	2146-2165
16.	Food Quality and Preferences	Socio-environmental considerations and organic food consumption: An empirical investigation of the attitude of Indian consumers	2022	Dr. Mohd. Adil	-
17.	Frontiers in Psychology	Examining ecotourism intention: The role of tourists' traits and environmental concerns	2022	Dr. Mohd. Adil	940116
18.	Mathematics	Examining consumer's intention to adopt ai-chatbots in tourism using Partial Least Squares Structural Equation Modeling method	2022	Dr. Mohd. Adil	2190
19.	Sustainability	Does contextual factor influence travelers' towel reuse behavior? Insights from circular economy	2022	Dr. Mohd. Adil	6155
20.	NMIMS Management Review	How psychological and contextual factors influence green hotel stay? Anempirical evidence from young Indians	2022	Dr. Mohd. Adil	140-148
21.	Sustainability	Explanatory or Dispositional Optimism: Which Trait Predicts Eco-Friendly Tourist Behaviour?	2022	Dr. Mohd. Adil	2994

22.	International Journal of Productivity and Quality Management	Determinants of Sustainable Growth in Indian Banking Industry: An ISM Approach	2022	Dr. Mohd. Adil	93-109
23.	Journal of Islamic Marketing	Influence of religiosity on ethical consumption: The mediating role of materialism and guilt	2022	Dr. Mohd. Adil	2173-2192
24.	International Journal of Mental Health and Addiction	Phobic COVID-19 Disorder Scale: Development, dimensionality and item-structure test	2022	Dr. Mohd. Adil	2718-2730.
25.	Vision: The Journal of Business Perspective	How continuous intentions towards over the top platform are framed? Stimulus–organism–response model perspective	2022	Dr. Neeraj Dhiman	1-12
26.	Foresight (Emerald)	Tourists’ post-adoption continuance intentions of chatbots: integrating task–technology fit model and expectation–confirmation theory	2022	Dr. Neeraj Dhiman	209-224
27.	Vision: The Journal of Business Perspective	Does Green HRM Practices Infuse Green Behaviour Among Hotel Employees? The Mediating Role of Psychological Green Climate	2022	Dr. Neeraj Dhiman	1-10
28.	FIIB Business Review	User Attitude towards E-Learning Platforms: an insight through the Expectation Confirmation Model and the Affordance Theory lens	2022	Dr. Neeraj Dhiman	1-16
29.	Journal of Interactive Marketing (Sage Publication)	What we know and don’t know about consumer happiness – Review, Synthesis and Research Agenda.	2022	Dr. Neeraj Dhiman	2-3
30.	Vision: The Journal of Business Perspective (Sage)	Consumers’ Continuance Intentions to Consume Green Tea: An Extended Theory of Planned Behavior perspective	2023	Dr. Neeraj Dhiman	To be allotted
31.	Vision: The Journal of Business Perspective (Sage)	Employee’s intentions to use HR analytics: Technology acceptance model with job relevance and self-efficacy	2023	Dr. Neeraj Dhiman	To be allotted
32.	International Journal of Consumer Studies.	Applying the theory of reasoned action to examine consumers' attitude and willingness to purchase organic foods.	2022	Dr. Sachin Kumar	118-135

33.	Behaviour & Information Technology	What drives students to adopt m-learning apps? The role of e-WOM in signalling theory perspective	2022	Dr. Sachin Kumar	To be allotted
34.	Springer Book-Digital Entertainment as Next Evolution in Service Sector.	Emerging trends for reshaping digital entertainment: Role of demographics, consumer, and technological innovations	2023	Dr. Sachin Kumar	To be allotted
35.	International Journal of Public Sector Performance Management	India-foreign migration for job: An opinion of professional skilled youths' of India	2022	Dr. Sachin Kumar	Accepted abstract available online
36.	Emerald Book Series- Exploring The Latest Trends In Management Literature	Cultural Diversity in Tourism: A Bibliometric Analysis of 33 Years (1988–2021)	2022	Dr. Sachin Kumar	147-168
37.	JOURNAL OF INFORMATION SCIENCE THEORY AND PRACTICE (JISTap)	Investigating the Impact of Value Co-Creation on Satisfaction and Intention to adopt E-Resources	2022	Dr. Sachin Kumar	Accepted for publication
38.	International Journal of Information Science and Management	Impact of Online Service Convenience on Adoption of Electronic Information Resources	2022	Dr. Sachin Kumar	Accepted for publication

PAPER PRESENTED IN CONFERENCE/ SEMINAR/ SYMPOSIUM:

Name of Conference	Organized by	Date	Title of paper presented	Participated by
Conference on Excellence in research and education	IIM Indore	3-5 June 2022	Role of self brand connection in enhancing brand engagement: A Study on sportswear brands	Dr. Sachin Kumar

- Paper Accepted for Publication: 2
- Doctoral Programme : 9 (ongoing)
- Ph.D. Degree awarded : -Nil-
- Master Thesis Completed : 19
- Patent : 01 (detailed)

Name of Patent	Inventor	Applicant	Date of publication	Published by	Application No.
A SYNCHRONIZED SYSTEM AND METHOD TO RESTRICT INFORMAL COMMUNICATION IN ONLINE COMMUNICATION SERVICE PLATFORMS	NIT Hamirpur	Dr. Richa Joshi, Dr. Sachin Kumar, Dr. Neeraj Dhiman	17/03/2023	Official Journal of the Patent Office	02311011185A

POPULAR LECTURES BY OUTSIDE EXPERTS: 01 (detailed)

One day National Webinar on 2-11-2022 organized by Dr. Sachin Kumar-Organizing Chairman, Dr. Neeraj Dhiman and Dr. Richa Joshi- Organizing Secretary.

Speaker- Surya Kant Sharma, Senior Consultant, North Region AMFI, Ex DGM SEBI

Topic- “Wealth Creation through Management of Personal Finance: A roadmap to Financial Freedom.”

EQUIPMENT ACQUIRED:

SNo	Equipment	Manufacturer	Cost (Rs.)
	-Nil-	-Nil-	-Nil-

NAME OF LABORATORIES:

SNo	Laboratory
1	Managerial Computational & Simulation Lab

3.14 Centre for Energy Studies



1. ACADEMIC STAFF

HEAD **Dr. Mamta Awasthi**
Assistant Professor Grade-1

(I) FACULTY OF CES:

Sr. No.	Name of Faculty	Designation
PROFESSOR		
1.	Dr. N.S. Thakur	Professor
ASSISTANT PROFESSOR		
1.	Dr. Mamta Awasthi	Assistant Professor Grade-1
TEMPORARY FACULTY ON CONTRACT BASIS		
1.	Dr. Arvind Singh Bisht	Assistant Professor (On contract)

(II) (A) RESEARCH PUBLICATIONS

Year	Author (s)	Title of paper	Journal Name	Indexing (SCI) Web of Science/ Scopus
2023	Prashant Malik, Mamta Awasthi, Subho Upadhyay, Prachi Agrawal, Gautam Raina,	Planning and optimization of sustainable grid integrated hybrid energy system in India. , Sustainable Energy Technologies and Assessments	Sustainable Energy Technologies and Assessments	SCI SCOPUS

	Shubham Sharma, Manish Kumar, Sunanda Sinha			
2023	Deepalika Mehra, Vijay Kumar, Akhilesh Kumar Choudhary, Mamta Awasthi	Performance and emission characteristics of CI engine using hydrogen enrichment in biodiesel blend with additives—A review	Journal of Renewable and Sustainable Energy	SCOPUS
2022	Prashant Malik, Mamta Awasthi, Sunanda Sinha	A techno-economic investigation of grid integrated hybrid renewable energy systems	Sustainable Energy Technologies and Assessments	SCI SCOPUS
2023	Vaibhav, K. Awasthi, M.	E-waste: A review	Nanoworld Journal	SCOPUS
2022	Parveen Kumar Gautam, N S Thakur	A Technical review of NanoFluids- based parabolic trough solar collector (NPTSC)	International Journal of Advances in Science, Engineering and Technology(----
2022	Arvind Singh Bisht N. S. Thakur	Identification & Prioritisation of Barriers in the Growth of Pine Needle Biomass Gasification Plants (<250 kW) for Electricity Generation in the Western Himalayan Region: Uttarakhand, India	PIOS Springer Nature	ESCI SCOPUS
2023	Arvind Singh Bisht N. S. Thakur	A decision-making framework to evaluate and select optimal biomass gasification plant size for sustainable regional bioenergy development Process Integration and Optimization for Sustainability	PIOS Springer Nature	ESCI SCOPUS

(III) (B) BOOK CHAPTERS

Author(s)	Year of Publication	Title of Chapter	Page No.	ISBN/ISSN No.	National / International	Publisher
	Awasthi, M., Moten, T.	Recent Advancement and Efficiency Hinderling Factors in the Wastewater Treatment Plant: A Review.	97-116	Print ISBN 978-3-030-99857-8, Online ISBN 978-3-030-99858-5	International	Springer, Cham. https://doi.org/10.1007/978-3-030-99858-5_5

2022	Shailendra yadav, Shilpa Chandra, Amardeep and Mamta Awasthi (2022)	Green synthesis of silver nano-particle from cyanobacteria and effect on microalgal growth and production of exopolysaccharide (EPS)	1-15	ISBN: 978-1-80356-462-3	International	Intechopen doi: 10.5772/intechopen.106039
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(II) (C) WORKSHOP ORGANIZED

workshop on "Sustainable Technologies" at the Centre for Energy Studies, National Institute of Technology Hamirpur (NITH) during February 23–24, 2023

(III). M.TECH ENERGY STUDIES (ENERGY TECHNOLOGY) ADMISSIONS IN 2022-23:-

S. N	Name of Student	Roll No.
1	Rajat Rajnish	22MES001
2	Pratibha Sharma	22MES002(Self-Sponsored)
3	Vanlalruatfeli	22MES003(Self-Sponsored)
4	Neha Sharma	22MES004(Self-Sponsored)
5	Nishikant kalia	22MES005(Self-Sponsored)
6	Akshat	22MES006(Self-Sponsored)
7	Sanskar Rana	22MES007(Self-Sponsored)
8	Anjala Sharma	22MES008(Self-Sponsored)
9	Bhavya Bhaskar Singh	22MES009(Self-Sponsored)
10	Shanzah Nazir	22MES010(Self-Sponsored)

(IV) Ph.D. Admission in 2022-23:

S. No.	Name of Student	Roll No.	Status	Name of Guide
1	Vinay Yadav	22RCES001	On going	Prof. N.S. Thakur
2.	Shailendra Yadav	22RCES002	On going	Dr.Mamta Awasthi
3.	Aakash Joshi	23RCES001	On going	Prof. N.S. Thakur

(V) Ph.D awarded in 2022-23

S. No.	Name of Student	Roll No.	Status	Name of Guide
1	Prashant Malik	2k17-Ph.D.-CEE-	Awarded	Dr.Mamta

(VI) RESEARCH PROJECTS FOR THE YEAR 2022-23

Sr. No.	Title of Project	Funding Agency & Amount Sanctioned	Allotment Year & Time	Present Status of the Project/PI	Name of PI/ Co-PI
1.	Advanced microalgal biorefinery approach for recycling of domestic sewage/wastewater for cleaner and greener	Ministry of Environment, Forest & Climate Change (MoEF&CC)	2023-2024 (for 3 years)	Ongoing	Dr. Mamta Awasthi Project Partner in Multi-institutional

	Himalayan region	Rs. 96.75 Lakhs			Project
2.	Scalable small scale business model for E-waste management through 3Rs, deep learning collection system, and market chain in NIT Hamirpur (HP)	Ministry of Education (MoE) Rs. 41.04 Lakhs	2022-2023 (for 3 years)	Ongoing	Dr. Mamta Awasthi, PI

(VII) DETAIL OF LABORATORIES:

Sr. No.	NAME OF LABORATORY
1	Solar Photovoltaic Laboratory
2	Solar Thermal Laboratory
3	Energy Simulation Laboratory
4	Bio Energy Laboratory
5	Energy Research Laboratory
6	Environmental Engineering Laboratory

(VIII) EQUIPMENT/ FURNITURE PURCHASED FOR THE YEAR 2022-23:

Sr. No.	Name of Equipment	Amount	Name and addressed of the firm	Qty.
-----NIL-----				

(IX) CONSULTANCY SERVICES FOR THE PERIOD 01/04/2022 TO 31/03/2023

S. N.	Name of The Test	Sponsored Agency	Amount
-----NIL-----			

4 Staff Details

4.1 ADMINISTRATIVE STAFF

Sr. No.	Title	First Name	Last Name	Designation	Employee Code
1	Dr.	Yogesh	Gupta	Registrar (Officiating)	
	Prof.	Vinod	Kumar		
	Dr.	Rajeshwar Singh	Banstu		
2	Sh.	Anil	Kumar	Sr. Scientific Officer	S0243
3	Sh.	Jagdish Chand	Verma	Sr. Scientific Officer	S0057
4	Sh.	Ashwani	Kumar	Scientific Officer	S0059
5	Dr.	Mani	Verma	Medical Officer	S0293
6	Sh.	Nitin	Paliwal	Assistant Librarian	S0343
7	Sh	Anil Kumar	Sharma	Deputy Registrar	S0359
8	Sh.	Satish Chander	Sharma	Deputy Registrar	
9	Sh.	Sanjay	Jamwal	Assistant Registrar	S0151
10	Sh.	Gaurav	Sharma	Assistant Registrar	S0344
11	Sh.	Vipan	Kumar	Assistant Registrar	
12	Sh.	Kumar	Saurabh	Assistant Registrar	
13	Sh.	Gaurav	Yadav	Assistant Registrar	
14	Sh.	Nanak Chand	Negi	Assistant Registrar	S0126

4.2 Ministerial Staff (Higher/Lower):

Sr. No.	Title	First Name	Last Name	Designation	Employee Code
1	Sh	Pritam Chand	Rangra	Superintendent Gr-II	S0129
2	Sh.	Raj Kumar	Sharma	Sr. Superintendent	S0136
3	Sh.	Desh Raj	Bansal	Private Secretary	S0099
4	Sh.	Parvesh	Kumar	Private Secretary	S0282
5	Sh.	Raman	Kumar	Sr. Superintendent	S0272
6	Sh.	Kishore	Kumar	Superintendent	S0138
7	Sh.	Pawan Kumar	Sharma	Superintendent	S0145
Ministerial Staff (Lower)					
1	Smt.	Pushpa	Devi	Stenographer (SG- I)	S0164
2	Sh.	Gulab Singh	Thakur	Stenographer (SG- I)	S0117
3	Sh.	Vinod	Kumar	Stenographer SG-II	S0149
4	Smt.	Sangeeta	Kumari	Stenographer SG-II	S0150
5	Sh.	Sanjeev	Mehta	Asst. SG I	S0097
6	Sh.	Joginder	Singh	Asst. SG I	S0141
7	Sh.	Yashpal	Singh	Asst. SG I	S0142
8	Sh.	Jitender	Kumar	Asst. SG I	S0146
9	Sh.	Surinder	Singh	Asst. SG I	S0072
10	Sh.	SukhDev	Singh	Asst. SG I	S0286
11	Sh.	Raman	Thakur	Asst. SG II	S0158
12	Sh.	Meera	Thakur	Asst. SG II	S0155
13	Smt.	Meena	Devi	Asst. SG II	S0162
14	Sh.	Madan	Lal	Asst. SG II	S0152
15	Smt.	Raj	Kumar	Asst. SG II	S0160

16	Sh.	Ajit	Kumar	Asst. SG II	S0157
17	Ms.	Nazima	--	Asst. SG II	S0159
18	Sh.	Vikas	Dogra	Asst. SG II	S0311
19	Sh.	Ashwani	Kumar	Sr. Assistant	S0314
20	Sh.	Vishal	Narota	Sr. Assistant	S0313
21	Sh.	Vipan	Kumar-I	Sr. Assistant	S0312
22	Sh.	Vipan	Kumar-II	Sr. Assistant	S0315
23	Sh.	Shashi Kant	Ratnakar	Sr. Assistant	S0320
24	Sh.	V.K.	Tippan	Sr. Assistant	S0321
25	Ms.	Neenu	Sharma	Sr. Assistant	S0325
26	Sh.	Suresh	Kumar	Jr. Assistant	S0192
27	Sh.	Ashok	Kumar-I	Jr. Assistant	S0195
28	Sh.	Ravi	Das	Jr. Assistant	S0190

4.3 Technical Staff

Sr. No.	Title	First Name	Last Name	Designation	Employee Code
1	Sh.	Sanjeev Kumar	Vasishta	Assistant Engineer SG-I	-
2	Sh.	Rajesh	Sharma	Assistant Engineer SG-II	S0172
3	Sh.	Sandeep Kumar	Yogi	Assistant Engineer (on deputatyon)	---
4	Sh.	Birender Singh	Minhas	Library Information Assistant SG-I	S0166
5	Sh.	Rajesh	Paul	Sr. Library Information Assistant	S0167
6	Sh.	Joginder	Singh	Technical Assistant SG-II	S0169
7	Sh.	Sarvjit	Singh	Technician SG-II	S0170
8	Sh.	Amarjeet	Singh	Technical Assistant SG-I	S0270
9	Sh.	Ravi	Singh	Technical Assistant SG-I	S0240
10	Sh.	Om Parkash	Sharma	Technical Assistant SG-I	S0105
11	Sh.	Jaspal	Singh	Technical Assistant SG-I	S0106
12	Sh.	Balbir	Singh	Technical Assistant SG-II	S0077
13	Sh.	Rajpal	Minhas	Technical Assistant SG-I	S0092
14	Sh.	Avinash	Aggarwal	Sr. Technical Assistant	S0269
15	Sh.	Santosh	Kumar	Sr. Technical Assistant	S0275
16	Sh.	Inder Singh	Guleria	Technical Assistant SG-II	S0104
17	Sh.	Partap	Chand	Technical Assistant SG-II	S0113
18	Sh.	Bikram	Singh	Technical Assistant SG-II	S0084
19	Sh.	Ravinder	Kumar	Technical Assistant SG-II	S0107
20	Sh.	Sanjeev Kumar	Thakur	Sr. Technical Assistant	S0058
21	Sh.	Dev	Raj	Sr. Technical Assistant	S0114
22	Sh.	Joginder	Singh	Technician SG-I	S0093
23	Sh.	Desh	Raj	Technician SG-I	
24	Sh.	Kalyan	Singh	Technician SG-I	
25	Sh.	Ashwani	Kumar	Technician SG-II	
26	Smt.	Reeta	Singh	Sr. Technician	S0268
27	Sh.	Ajay	Kumar	Technician SG-II	S0101
28	Sh.	Sukh Dev	Singh	Technician SG-II	S0102

29	Sh.	Parkash	Singh	Technician SG-II	S0079
30	Sh.	Suresh	Kumar	Technician SG-II	S0069
31	Sh.	Shiv	Dayal	Technician SG-II	S0070
32	Sh.	Jiwan	Kumar	Technician SG-II	S0061
33	Sh.	Gajinder	Singh	Technician SG-II	
34	Sh.	Surinder	Singh	Technician SG-II	S0086
35	Sh.	Sunil	Kumar	Sr. Technician	S0111
36	Sh.	Santosh Kumar	Yadav	Sr. Technician	S0266
37	Sh.	Chet	Ram	Technician SG-II	S0095
38	Sh.	Roop	Lal	Technician SG-II	S0087
39	Sh.	Surinder	Kumar	Technician SG-II	S0116
40	Sh.	Vijay	Kumar	Sr. Technician	S0267
41	Sh.	Kishore	Chand	Sr. Technician	S0265
42	Sh.	Naresh	Kumar	Sr. Technician	S0264
43	Sh.	Mahesh	Chand	Technician SG-I (Driver)	S0173
44	Sh.	Surender	Pal	Technician	S0316
45	Sh.	Sanjeev	Kumar	Technician	S0317
46	Sh.	Shameem	Ahmed	Technician	S0319
47	Sh.	Pawan	Kumar	Technician	S0326
48	Sh.	Ashok	Kumar	Technical Assistant	
49	Sh.	Rakesh	Kumar	Technician SG-II	

4.4 Supporting Staff:

Sr. No.	Title	First Name	Last Name	Designation	Employee Code
1	Mr.	Bhagwan	Dass	Office Attendant SG-I	S0198
2	Mr.	Suresh Chand	Rangra	Office Attendant SG-I	S0186
3	Mr.	Om	Prakash	Office Attendant SG-I	S0181
4	Mr.	Sunil	Kumar	Office Attendant SG-I	S0180
5	Mr.	Hari	Singh	Office Attendant SG-I	S0219
6	Mr.	Bhupinder	Singh	Office Attendant SG-I	S0210
7	Mr.	Surinder	Kumar	Office Attendant SG-I	S0280
8	Mr.	Suresh	Kumar	Office Attendant SG-I	
9	Mr.	Kashmir	Singh	Office Attendant SG-I	S0196
10	Mr.	Kehar	Singh	Office Attendant SG-I	S0194
11	Mr.	Basant	Singh	Office Attendant SG-I	
12	Mr.	Ravinder	Kumar	Office Attendant SG-II	S0207
13	Mr.	Vijay	Kumar	Office Attendant SG-II	S0202
14	Mr.	Balwant	Chand	Office Attendant SG-II	S0064
15	Mr.	Rajinder	Singh	Office Attendant SG-II	S0213
16	Mr.	Tilak	Raj	Office Attendant SG-II	S0075
17	Mr.	Banka	Ram	Office Attendant SG-II	S0074
18	Mr.	Ashok	Kumar-I	Office Attendant SG-II	S0191
19	Mr.	Lekh	Raj	Office Attendant SG-II	
20	Mr.	Joginder	Singh	Office Attendant SG-II	S0119
21	Mr.	Devinder	Kumar	Office Attendant SG-II	S0214
22	Mr.	Ramesh	Chand-I	Office Attendant SG-II	S0205

23	Mr.	Manmohan	Lal	Office Attendant SG-II	S0089
24	Mr.	Jiwan	Parkash	Office Attendant SG-II	S0206
25	Mr.	Ramesh	Chand-II	Office Attendant SG-II	S0201
26	Mr.	Subhash	Chand	Office Attendant SG-II	S0222
27	Mr.	Chain	Singh	Office Attendant SG-II	S0203
28	Mr.	Jai	Chand	Office Attendant SG-II	S0208
29	Mr.	Vinod	Kumar	Office Attendant SG-II	S0221
30	Mr.	Roshan	Lal	Office Attendant SG-II	
31	Mr.	Vidya	Sagar	Office Attendant SG-II	
32	Mr.	Subhash	Chand	Office Attendant SG-II	S0279
33	Mr.	Mukesh	Singh	Office Attendant SG-II	S0278
34	Mr.	Manohar	Lal	Office Attendant SG-II	S0188
35	Mr.	Om	Parkash	Office Attendant SG-II	S0276
36	Mr.	Sunil	Kumar	Office Attendant SG-II	S0277
37	Mr.	Anil	Kumar	Sr. Office Attendant	S0262
38	Smt.	Salochna	--	Sr. Office Attendant	S0263
39	Mr.	Jiya	Lal	Sr. Office Attendant	S0274
40	Mr.	Neeraj	Kumar	Sr. Office Attendant	S0271
41	Mr.	Parkash	Chand	Sr. Office Attendant	
42	Mr.	Rajinder	Singh	Sr. Office Attendant	
43	Mr.	Rakesh	Kumar	Sr. Office Attendant	
44	Mr.	Prem	Lal	Sr. Office Attendant	

Ministerial Higher:

Sr. No.	Name of the Post	Sanctioned Strength	In Position					Total
			SC	ST	OBC	PH	Gen	
1	Registrar, Deputy Registrar, Assistant Registrar, Sr. Scientific/Technical officer, Scientific Officer/Technical Officer, Assistant librarian, Executive Engineer, Sr. Medical Officer Medical officer	26	00	00	01	01	12	14
2	Superintendent SG-I, Superintendent SG-II, Private secretary, Sr. Superintendent, Sr. Personal Assistant, Superintendent, Personal Assistant.	21	02	00	00	00	05	07
3	Stenographer SG-I, Assistant SG-I, Stenographer SG-II Assistant ASG-II, Sr. Stenographer, Sr. Assistant, Stenographer, Junior Assistant.	45	05	00	05	00	18	28
	Total	92	07	00	06	01	35	49

Technical Higher:

Designation	Total Sanctioned Strength						In- Position					
	GEN	SC	ST	OBC	EWS	Total	GEN	SC	ST	OBC	EWS	Total
Technical Assistant	16	3	1	5	1	26	1	0	0	0	0	1
Senior Technical Assistant	12	2	1	0	0	15	3	1	0	0	0	4
Technical Assistant SG-II	9	1	0	0	0	10	2	4	0	0	0	6
Technical Assistant SG-I	5	0	0	0	0	5	4	0	1	0	0	5
Junior Engineer	2	0	0	0	0	2	0	0	0	0	0	0
SAS Assistant	2	0	0	0	0	2	0	0	0	0	0	0
Library and Information Assistant	2	0	0	0	0	2	0	0	0	0	0	0
Assistant Engineer	2	0	0	0	0	2	0	0	0	1	0	1
Senior SAS Assistant	2	0	0	0	0	2	0	0	0	0	0	0
Senior Library and Information Assistant	2	0	0	0	0	2	1	0	0	0	0	1
Assistant Engineer SG-II	2	0	0	0	0	2	1	0	0	0	0	1
SAS Assistant SG-II	2	0	0	0	0	2	0	0	0	0	0	0
Library and Information Assistant SG-II	2	0	0	0	0	2	0	0	0	0	0	0
Assistant Engineer SG-I	1	0	0	0	0	1	1	0	0	0	0	1
SAS Assistant SG-I	1	0	0	0	0	1	0	0	0	0	0	0
Library and Information Assistant SG-I	1	0	0	0	0	1	1	0	0	0	0	1
Pharmacist SG-II	1	0	0	0	0	1	0	0	0	0	0	0
Total	64	6	2	5	1	78	14	5	1	1	0	21

Technical Lower:

Designation	Total Sanctioned Strength						In- Position					
	GEN	SC	ST	OBC	EWS	Total	GEN	SC	ST	OBC	EWS	Total
Technician	17	4	1	6	2	30	2	1	1	0	0	4
Senior Technician	18	2	0	2	1	23	4	2	0	0	0	6
Technician SG-II	13	2	1	0	0	16	10	2	2	0	0	14
Technician SG-I	7	1	0	0	0	8	3	1	0	0	0	4
Pharmacist	1	0	0	0	0	1	0	0	0	0	0	0
Total	56	9	2	8	3	78	19	6	3	0	0	28

Supporting Staff:

Designation	Total Sanctioned Strength						In- Position					
	GEN	SC	ST	OBC	EWS	Total	GEN	SC	ST	OBC	EWS	Total
Office Attendant/ Lab Attendant	8	2	1	3	1	15	0	0	0	0	0	0
Sr. Office Attendant/ Sr. Lab Attendant	11	1	0	0	0	12	3	0	5	0	0	8
Office Attendant SG-II/ Lab Attendant SG-II	7	1	0	0	0	8	17	7	1	0	0	25
Office Attendant SG-I/ Lab Attendant SG-I	4	0	0	0	0	4	8	3	0	0	0	11
Total	30	4	1	3	1	39	28	10	6	0	0	44

5.0 Training & Placement Cell

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

Office of Training and Placement:

Office of Training & Placement has been actively performing and coordinating a number of professional activities for the students. Some of the major activities relating to the students are Practical Training for the students and Campus Placements in various organizations/industrial units within the country and outside.

5.1 Short Term Industrial Research Experience

Short Term Industrial Research Experience is an integral part of engineering education that aims to make students familiar with the culture and environment of industries and getting practical knowledge on working of equipment, plants and processes which cannot be accommodated or explained in a laboratory. Students are exposed to the concept of plant management and organization at first hand.

Placement Statistics for 2022 – 2023 (Up to March 31, 2023)

B.Tech. 2022-2023 Batch

B.Tech.								
Discipline	Eligible Students	Placed Students	Placement Percentage	Total Job Offered	% of Total Job Offered	Max. CTC (in LPA)	Min. CTC (in LPA)	Average CTC (in LPA)
Electrical Engineering	116	103	88.79	107	92.24	18	4	8.47
Mechanical Engineering	116	99	85.34	100	86.20	36	3.4	7.68
Chemical Engineering	53	42	79.24	43	81.13	52	5	9.14
Civil Engineering	93	58	62.36	59	63.44	9.5	3.24	6.21
Electronics & Communication Engineering	105	81	77.14	81	77.14	42	6.5	13.4
Computer Science & Engineering	111	88	79.27	91	81.98	173	4	16.64

Material Science & Engineering	25	17	68	14	56	9.2	4	6.42
TOTAL	619	488	78.83	495	79.96			

B.Arch.								
Discipline	Eligible Students	Placed Students	Placement Percentage	Total Job Offered	% of Total Job Offered	Max. CTC (in LPA)	Min. CTC (in LPA)	Average CTC (in LPA)
Architecture	36	6	16.66	6	16.6	9.25	5.25	6.33

Dual Degree								
Discipline	Eligible Students	Placed Students	Placement Percentage	Total Job Offered	% of Total Job Offered	Max. CTC (in LPA)	Min. CTC (in LPA)	Average CTC (in LPA)
Electronics and Communication Engineering (Dual Degree)	53	39	73.58490566	43	81.13207547	20	4.6	13
Computer Science Engineering (Dual Degree)	56	45	80.35714286	50	89.28571429	37	8	16.55
TOTAL	109	84	77.06422018	93	85.32110092			

PG								
Discipline	Eligible 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	36	21	58.33	21	58.33	18	5	9.68
Electronics and Communication Engineering	15	11	73.33	11	73.33	32.45	11	28.15
Electrical	20	8	40	8	40	10.7	1.5	5.26

Engineering								
Civil Engineering	58	23	39.66	23	39.66	8.25	5	6.53
Mechanical Engineering	20	8	40	8	40	10.5	4	6.34
Chemical Engineering	6	1	16.67	1	16.67	2.76	2.76	2.76
Chemistry (MSc)	17	11	64.71	11	64.71	7.25	4	5.93
Mathematics (MSc)	20	8	40	11	55	10.8	3	6.21
Physics (MSc)	17	5	29.41	5	29.41	7.25	4	5.17
M.Arch.	12	6	50	6	50	7.5	3.84	6.14
MBA	18	11	61.11	14	77.78	4.2	3	3.68

The Name of Organizations in which students of B.Tech. and Dual Degree are Placed.

Company Name	EE	ECE	ECE_DD	CSE	CSE_DD	Civil	ME	MSE	Chemical	Total
Accenture	0	0	1	1	1	0	0	0	0	3
Afcons	0	0	0	0	0	1	0	0	0	1
Airoha MediaTek	0	0	2	0	4	0	0	0	0	6
Allen	0	0	1	0	0	0	2	1	0	4
Amazon	0	0	1	0	7	0	0	0	0	8
AMD-Xilinx	0	0	1	0	0	0	0	0	0	1
AmDocs	0	0	2	0	0	0	0	0	0	2
American Express	0	0	1	0	3	0	0	0	0	4
Anglo Eastern	0	0	0	0	0	0	1	0	0	1
Avadaa	0	0	0	0	0	0	0	0	1	1
Axtria	0	0	0	0	2	0	0	0	0	2
Balkiwal Tutorials	0	0	0	0	0	1	0	1	0	2
BEL	0	0	0	8	0	0	0	0	0	8
BeyondIRR	0	0	0	2	0	0	0	0	0	2
Bosch	0	0	5	0	5	0	0	0	0	10
C-DOT	0	1	3	1	4	0	0	0	0	9
Carrier	1	4	2	4	2	0	0	0	0	13
CDAC	1	0	0	0	0	0	0	0	0	1

CHAITANYA'S ACADEMY	1	0	0	0	0	0	0	0	0	1
Chandrayaan Coaching	0	0	1	0	0	0	0	0	0	1
Chqbook	0	0	0	1	0	0	0	0	0	1
Ciena	0	0	0	0	1	0	0	0	0	1
Consort Builders	0	0	0	0	0	2	0	0	0	2
Copperpod	0	0	1	0	0	0	0	0	0	1
Cred	0	0	0	0	0	0	0	0	1	1
credix finance	0	0	0	1	0	0	0	0	0	1
Cvent	0	0	0	2	0	0	0	0	0	2
Cyfuture	0	0	0	0	0	0	1	0	0	1
Daikin	0	0	0	0	0	0	1	0	0	1
Delhivery	0	0	0	0	1	2	3	0	0	6
Denso	1	0	0	0	0	0	3	0	0	4
Directii : Titan	0	0	0	1	0	0	0	0	0	1
EIL	1	0	0	0	0	0	0	0	0	1
Ericsson	11	3	0	1	0	0	0	0	0	15
Exicom	2	0	0	0	0	0	1	0	0	3
EXL	10	1	0	1	0	8	12	1	5	38
Gap	0	1	0	2	0	0	0	0	0	3
Gemini Solutions	0	0	0	3	1	0	0	0	0	4
GILP Application Pvt. Limited (Nation with Namu)	0	0	0	0	0	0	2	0	1	3
Goldman Sachs	0	0	0	0	1	0	0	0	0	1
Google	0	0	0	0	1	0	0	0	0	1
GreyB	3	0	1	0	0	0	1	0	0	5
GSTN	1	0	0	0	0	0	1	0	0	2
Harman	0	2	0	0	0	0	0	0	0	2
HDFC	0	3	0	0	0	0	0	0	1	4
Hexaware	3	1	0	1	0	0	0	0	0	5
HMEL	2	3	0	0	0	0	3	3	11	22
Incedo	3	0	0	1	0	3	2	1	0	10
Increff	5	0	0	3	1	1	0	0	0	10
Info Edge	0	5	0	3	0	0	0	0	0	8
Intel	0	0	6	0	2	0	0	0	0	8

Ittiam	0	0	1	3	0	0	0	0	0	4
Jio	0	15	0	6	0	0	0	0	0	21
JSW	1	0	0	0	0	1	0	0	2	4
Jungleworks	0	1	0	0	0	0	0	0	0	1
KEC	7	0	0	0	0	6	1	0	1	15
Larsen & Toubro	1	0	0	0	0	20	2	1	0	24
Luminous Power	1	1	0	0	0	0	0	0	0	2
LYBL	1	0	0	0	0	0	0	0	0	1
Mahindra & Mahindra	1	0	0	0	1	0	0	0	0	2
Maruti Suzuki India Ltd.	0	0	0	0	0	0	4	0	0	4
Merilytics	1	0	0	0	0	0	0	0	0	1
Microchip	0	0	4	0	0	0	0	0	0	4
Microtek	2	0	0	1	0	0	1	0	0	4
Nagarro	1	1	0	0	0	0	0	0	0	2
NatWest	2	6	0	4	0	0	0	0	0	12
NBC Bearings	0	0	0	0	0	0	0	1	0	1
Nokia	0	0	0	0	2	0	0	0	0	2
NSL hub	0	1	0	6	0	0	0	0	0	7
Nvidia	0	0	1	0	0	0	0	0	0	1
Oceaneering	0	0	0	0	0	0	3	0	0	3
Octro	0	0	0	2	0	0	0	0	0	2
Optum	4	7	0	3	0	0	0	0	0	14
Oracle FSS	5	2	3	4	1	0	8	1	0	24
Orient Electric	1	0	0	0	0	0	1	0	0	2
Placewit	0	0	0	1	0	0	0	0	0	1
PrimeAxis	1	0	0	0	0	0	0	0	0	1
Publicis Sapient	0	2	1	0	0	0	0	0	0	3
Q3 Technologies	2	2	0	6	0	0	0	0	0	10
Redhat	0	0	0	0	1	0	0	0	0	1
Reliance Industries Limited	11	0	0	0	0	0	6	0	7	24
Relinns Technologies	1	0	0	0	0	1	0	0	0	2
Saint-Gobain	1	0	0	0	0	0	0	0	1	2
Salesforce	0	1	0	1	0	0	0	0	0	2

Samsung	0	2	1	0	1	0	0	0	0	4
Sigmoid	0	0	0	1	0	0	0	0	0	1
Sourceone	0	0	0	1	0	0	0	0	0	1
Speedlabs	2	0	0	0	0	0	0	0	0	2
Spinks world	0	0	0	0	0	0	2	1	0	3
SSWL	1	0	0	0	0	0	5	0	0	6
Standard Chartered	0	1	0	1	2	0	0	0	0	4
Stardour	1	0	0	0	0	0	0	0	0	1
Stryker	0	0	3	0	3	0	0	0	0	6
Subconscious	0	0	0	0	1	0	0	0	0	1
Subros	4	0	0	0	0	0	7	2	0	13
Talent Recruit Pvt. Limited	0	0	0	0	0	0	3	0	0	3
Tata Power	2	0	0	0	0	0	0	0	0	2
Tata Power DDL	3	0	0	0	0	0	0	0	0	3
TCS INI	0	3	0	0	0	0	1	0	0	4
TCS R&I	1	0	0	0	0	0	0	0	0	1
Technip	0	0	0	0	0	2	8	0	3	13
Titan.co	0	0	0	1	0	0	0	0	0	1
Tredence	0	0	0	1	1	0	3	0	1	6
V Construct	0	0	0	0	0	1	0	0	0	1
Wells Fargo	0	9	0	10	0	0	0	0	0	19
Wipro	4	1	1	0	0	10	11	1	8	36
Xebia	0	0	0	0	1	0	0	0	0	1
Yellow. Ai	0	2	0	3	0	0	0	0	0	5
Zycus	0	0	0	0	0	0	1	0	0	1
Total	107	81	43	91	50	59	100	14	43	588

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

Company Name	E E	E C E	M E	CS E	Chemical	Civil	Physics	Mathematics	Chemistry	MB A	M.Ar ch	Total
AAKASH BYJU	1	0	0	0	0	1	0	2	5	0	0	9
ALLEN	0	0	0	0	0	0	1	3	2	0	0	6
AMERICAN EXPRESS	0	0	0	1	0	0	0	0	0	0	0	1

BAKLIWAL	0	0	0	0	0	0	0	0	2	0	0	2
BYJU'S	0	0	0	0	0	2	1	0	0	0	0	3
CAPGEMINI	0	0	2	0	0	0	0	0	0	0	0	2
CHAIYTANAS ACADAEMY	0	0	0	0	0	0	1	0	0	0	0	1
CHANDERYA AN	0	0	0	0	0	0	0	0	2	0	0	2
CLIMATE SECURE	0	0	0	0	0	2	0	0	0	0	0	2
COPPERPOD IP	2	0	0	1	0	0	0	0	0	0	0	3
CUMMINS	0	0	0	0	1	0	0	0	0	0	0	1
DAIKIN INDIA	0	0	2	0	0	0	0	0	0	0	0	2
GALGOTIYA UNIVERSITY	0	0	0	2	0	0	0	0	0	0	0	2
GEMINI	0	0	0	1	0	0	0	0	0	0	0	1
HDFC	0	0	0	1	0	0	0	0	0	0	0	1
HIMTREASUR ES INFOTECH LLP	0	0	0	1	0	0	0	0	0	0	0	1
INDIA MART	0	0	0	0	0	0	0	0	0	3	0	3
INTEL	0	4	0	6	0	0	0	0	0	0	0	10
JUNGLEWORK S	0	0	0	1	0	0	0	0	0	0	0	1
KEC INTERNATION AL	3	0	0	0	0	6	0	0	0	0	3	12
L&T	0	0	0	0	0	8	0	0	0	0	0	8
MARUTI SUZUKI	1	0	0	0	0	0	0	0	0	0	0	1
MECHARTES	0	0	2	0	0	0	0	0	0	0	0	2
MICROCHIP	0	1	0	0	0	0	0	0	0	0	0	1
MICROTEK	0	0	0	1	0	0	0	0	0	3	0	4

MINERVA	0	0	0	0	0	0	0	1	0	0	0	1
MINERVA STUDY CIRCLE	0	0	0	0	0	0	1	0	0	0	0	1
NATWEST	0	0	0	1	0	0	0	0	0	0	0	1
PHILIPS	0	0	0	3	0	0	0	0	0	0	0	3
P P SAVANI UNIVERSITY	0	0	0	1	0	0	0	0	0	0	0	1
PRADAN	0	0	0	0	0	0	0	0	0	2	1	3
PRIME AXIS	0	0	0	0	0	0	1	1	0	0	0	2
QUALCOMM	0	6	0	0	0	0	0	0	0	0	0	6
RELINNS TECHNOLOGI ES	0	0	0	0	0	0	0	0	0	2	0	2
SIGNIFY INNOVATIONS	0	0	1	0	0	0	0	0	0	0	0	1
SOLULABS	0	0	0	0	0	0	0	1	0	0	0	1
SPINK INDIA	0	0	1	0	0	0	0	0	0	0	0	1
STRYKER	0	0	0	1	0	0	0	0	0	0	0	1
SUBROS	0	0	0	0	0	0	0	0	0	2	0	2
TCE	0	0	0	0	0	2	0	0	0	0	0	2
TCS	0	0	0	0	0	0	0	2	0	0	0	2
VCONSTRUCT PVT LTD	0	0	0	0	0	0	0	0	0	0	2	2
VINOVE SOFTWARE	0	0	0	0	0	0	0	0	0	2	0	2
WSP	0	0	0	0	0	2	0	0	0	0	0	2
XEBIA	0	0	0	0	0	0	0	1	0	0	0	1
Total	7	11	8	21	1	23	5	11	11	14	6	118

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 2021-22. 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 2022-23 is as under:-

S.No.	Name of the Scholarship	Name of source from where scholarship funds/grant received	Scholarship amount	No. of students got S/ship	Remarks
1	Central Sector Scholarship "Top Class Education" for SC-Category Students (Top-10)	GOI, Ministry of Social Justice & Empowerment, New Delhi	3753500	56	Fresh & Renewal
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	3220650	49	Fresh & Renewal
3	To Class Education for Students with disability	GOI, Ministry of Social Justice & Empowerment, New Delhi	65000	1	Renewal
4	CSSS for College & University Students	Deptt. of Higher Education, GoI	280000	28	Fresh & Renewal
5	PMSS for Central Armed Police and Assam Rifles	MHA	186000	6	Fresh/Renewal
6	PMSS for J&K students	AICTE, New Delhi	31500	1	Renewal
7	PMSS for wards of Ex-Serviceman	Kendtiya Sainik Board (KSB)	362000	12	Renewal
8	CRPF (Employee's ward) S/ship	CRPF, MHA	35000	1	Renewal

9	INSPIRE Scholarship	DST, Govt. of India	120000	2	Fresh/Renewal for MSC students
10	SPDC (Scholarship Programme for Diaspora Children)	Ministry of External Affairs, GoI	122587	1	Renewal
11	Merit Cum Means Scholarship For Professional and Technical Courses CS	Ministry of Minority Affairs, GoI	190000	6	Fresh
12	PG Scholarship to SC/ST students for pursuing professional courses	UGC	118870	2	Fresh
13	MMVY-Scholarship (Mukhyamantri Medhavi Vidyarthi Yojna)	MP Govt.	406064	11	Fresh & Renewal
14	PMS to SC/ST/Gen. (Uttar Pradesh)	UP Govt.	906690	19	Fresh & Renewal
15	PMS to SC (Himachal Pradesh)	HP Govt.	82330	3	Fresh & Renewal
16	HPBOSE (MHRD) merit S/ship	HP Govt.	72000	7	Renewal
17	Kalpana Chawla Chhatravritti Yojana, HP	HP Govt.	90000	6	Fresh & Renewal
18	HP (BOCW) Assistance	Assistance to wards of HP Building & Other Construction Workers (BOCW) under MANREGA by Gvot of HP	221000	4	Fresh & Renewal
19	PMS to SC/ST (Rajasthan)	Rajasthan Govt.	84000	4	Fresh & Renewal
20	Rajasthan Police Scholarship (for Ward of Rajasthan Police Employee)	Rajasthan Govt.	12000	1	Renawal

21	Delhi Police Scholarship (for ward of Delhi Police Employee)	Delhi Govt.	15000	1	Renewal
22	PMS Telangana State	Telangana Govt.	32800	1	Renewal
23	Indian Railway S/ship-for wards of Railway employee	Indian Rly.	36000	3	Fresh & Renewal
24	OEC- Post Matric Scholarship	Kelara Govt.	89600	1	Renewal
25	PMS -Madhya Pradesh	MP Govt.	53316	1	Renewal
26	SJVN Silver Jubilee Merit Scholarship	SJVNL-H.O- Shimla (HP)	360000	15	Fresh & Renewal
27	ONGC- Scholarship	ONGC- New Delhi	624000	13	Renewal
28	EIL (Engineering India Limited)- Scholarship	EIL	72000	2	Renewal
29	Sri Badrika Ashram-Scholarship (Distt. Sirmour-HP)	SBA	714128	11	Fresh and Renewal
30	NCERT-Scholarship	NCERT-Sri Aurobindo Marg New Delhi	63000	3	Fresh and Renewal
31	FAEA- Scholarship	FAEA Scholarship, New Delhi -110016	140050	4	Fresh & Renewal
32	FFE (Foundation for Excellence) Scholarship	FFE (NGO) Bengaluru	2154600	29	Fresh & Renewal
33	SDEF-Scholarship	Swami Dayanand Charitable Education Foundation (SDEF), Noida	140000	7	Fresh & Renewal
34	Wards of Non-Teaching Staff of NIT, Hamirpur- Scholarship	Family trust of Shri S. Gopalakrishnan (Kris) [former Chairman (BoG), NIT Hamirpur]	60000	6	Fresh & Renewal

35	M.Tech Stipend to Dual Degree (GATE qualified) students	Govt. of India MHRD, New Delhi	5952000	40	Rs.12,400/- each PM for 2022-23 batch dual degree students (as per actual Attendance)
36	M.Tech. Stipend (for GATE qualified students)	Govt. of India MHRD, New Delhi	24403200	164	Rs.12,400/- each PM for 2021-22 batch students (as per actual Attendance)
37	M.Tech. Stipend (for GATE qualified students)	Govt. of India MHRD, New Delhi	14731200	99	Rs.12,400/- each PM for 2022-23 batch students (as per actual presence)
38	Financial Assistance to Ph.D Scholars.	Govt. of India-MHRD, New Delhi	78135840	178	Rs.31,000/- each per month & Rs.35,000/- each per month + HRA @8% (as per actual Attendance)
39		Govt. of India- UGC Scheme	6648480	15	Rs.31,000/- each per month Rs.35,000/- each per month + HRA @8% (as per actual Attendance)
40		Govt. of India- CSIR Scheme	3214080	8	Rs.31,000/- each per month & Rs.35,000/- each per month + HRA @8% (as per actual Attendance)
Total			147998485	821	

For the Year 2022-2023									
Ministry/ Department	Name/Details of Event/Conference/ Exhibition	Month-Year in which the Event/Conference/ Exhibition organized	Agency selected to organize the Event	Process for the selection of the Agency (Bid/Nomination)	Cost incurred (Rs. In Lacs)	No. of Participants/ Public footfalls	Activities assigned to PSUs/Govt. Agencies, etc. in respect of Event/Conference/ Exhibition and cost incurred, if any, for organizing the Event/Conference/ Exhibition	Participation by way of Exhibit/Stalls, etc. by PSU/Govt. Agencies, etc. and cost incurred, if any, in Exhibition (Yes/No)	Any other useful information/details
Ministry of Education/Department of Higher Education Government of India	EBSB/ One Day workshop titled "Vidyarthi Vigyan Manthan	28 th April 2022	NIT Hamirpur & NIT Calicut	As per the Ministry of Education, Department of Higher Education guidelines	-	100	-	-	Completed
Ministry of Education/Department of Higher Education Government of India	EBSB/ Online Quiz competition jointly organised by NIT Hamirpur & NIT Calicut	28 th August 2022	NIT Hamirpur & NIT Calicut	As per the Ministry of Education, Department of Higher Education guidelines	Rs. 0.12 Lacs	100	-	-	Completed

For the Year 2022-2023									
Ministry/ Department	Name/Details of Event/Confere nce/ Exhibition	Month-Year in which the Event/Confere nce/Exhibition organized	Agency selected to organize the Event	Process for the selection of the Agency (Bid/Nominati on)	Cost incurred (Rs. In Lacs)	No. of Participants/ Public footballs	Activities assigned to PSUs/Govt. Agencies, etc. in respect of Event/Confere nce/Exhibition and cost incurred, if any, for organizing the Event/Confere nce/exhibition	Participation by way of Exhibit/Stalls, etc. by PSU/Govt. Ag encies, etc. and cost incurred, if any, in Exhibition (Yes/No)	Any other useful information/de tails
Ministry of Education/De partment of Higher Education Government of India	EBSB/ Onam festival celebration	10 th September 2022	NIT Hamirpur & NIT Calicut	As per the Ministry of Education, Department of Higher Education guidelines	-	100	-	-	Completed
Ministry of Education/De partment of Higher Education Government of India	EBSB/ Student exchange program	3 rd October to 10 th October 2022	NIT Hamirpur & NIT Calicut	As per the Ministry of Education, Department of Higher Education guidelines	Rs. 2.6 Lacs	100	-	-	Completed

For the Year 2022-2023									
Ministry/ Department	Name/Details of Event/Confer ence/ Exhibition	Month-Year in which the Event/Confer ence/Exhibiti on organized	Agency selected to organize the Event	Process for the selection of the Agency (Bid/Nominat ion)	Cost incurred (Rs. In Lacs)	No. of Participants/ Public footballs	Activities assigned to PSUs/Govt. Agencies, etc. in respect of Event/Confer ence/Exhibiti on and cost incurred, if any, for organizing the Event/Confer ence/exhibiti on	Participation by way of Exhibit/Stalls , etc. by PSU/Govt.Ag encies, etc. and cost incurred, if any, in Exhibition (Yes/No)	Any other useful information/d etails
Ministry of Education/De partment of Higher Education Government of India	EBSB/ Celebration of Makar Sankranti festival	14 th January 2023	NIT Hamirpur & NIT Calicut	As per the Ministry of Education, Department of Higher Education guidelines	-	100	-	-	Completed
Ministry of Education/De partment of Higher Education Government of India	EBSB/ Student exchange program	19 th March 2023 to 23 rd March 2023	NIT Hamirpur & NIT Calicut	As per the Ministry of Education, Department of Higher Education guidelines	Rs. 1.0 Lacs	500	-	-	Ongoing

Details of Missions										
Ministry/Department	Name of the Mission	Month-Year of Formation	Broad Objective(s)/Mandate	Activities Carried out so far	Achievements	Dt. Of First Meeting	Dt. Of last Meeting	No. of meeting took place till 15.03.23	Are there any overlapping in their activities and need for merging	Remarks
Ministry of Education/Department of Higher Education Government of India	EBSB	28.02.2022	To foster the main objectives of Gender Equality, Women Empowerment and Sustainable Development under Ek Bharat Shreshtha Bharat	Online national seminar on "Gender Equality, Women Empowerment and Sustainable Development" on 08 th -09 th March 2022	Celebration of International Women's Day	05.03.2022	07.03.2022	03	No	Completed
Ministry of Education/Department of Higher Education Government of India	EBSB	28.02.2022	Online national seminar on "Gender Equality, Women Empowerment and Sustainable Development" on 08 th -09 th March 2022	Online Poster making competition on "Go Green: Reduce, Reuse, Recycle" on 22 nd April 2022	Celebration of Earth Day	20.04.2022	21.04.2022	02	No	Completed
Ministry of Education/Department of Higher Education Government of India	EBSB	28.02.2022	Vidyarthi Vigyan Manthan objectives as per the EBSB guidelines	One Day workshop titled "Vidyarthi Vigyan Manthan (VVM) on 28 th April 2022	Vidyarthi Vigyan Manthan	26.04.2022	27.04.2022	02	No	Completed

Details of Missions										
Ministry/Department	Name of the Mission	Month-Year of Formation	Broad Objective(s)/Mandate	Activities Carried out so far	Achievements	Dt. Of First Meeting	Dt. Of last Meeting	No. of meeting took place till 15.03.23	Are there any overlapping in their activities and need for merging	Remarks
Ministry of Education/Department of Higher Education Government of India	EBSB	28.02.2022	To exchange the knowledge about culture, traditions, cuisines etc. of Himachal Pradesh & Kerala	Online Quiz competition jointly organised by NIT Hamirpur & NIT Calicut on 28 th August 2022	About culture, traditions, cuisines etc. of Himachal Pradesh & Kerala	26.08.2022	27.08.2022	02	No	Completed
Ministry of Education/Department of Higher Education Government of India	EBSB	28.02.2022	Unity in diversity	Onam festival celebration on 10 th September 2022	Cultural heritage of Himachal & Kerala	05.09.2022	09.09.2022	05	No	Completed
Ministry of Education/Department of Higher Education Government of India	EBSB	28.02.2022	To explore the culture of Himachal Pradesh with our partner institute NIT Calicut, Kerala	Student exchange program	Cultural student exchange program between NIT Hamirpur and NIT Calicut	01.09.2022	30.09.2022	10	No	Completed

Details of Missions										
Ministry/Department	Name of the Mission	Month-Year of Formation	Broad Objective(s)/Mandate	Activities Carried out so far	Achievements	Dt. Of First Meeting	Dt. Of last Meeting	No. of meeting took place till 15.03.23	Are there any overlapping in their activities and need for	Remarks
Ministry of Education/Department of Higher Education Government of India	EBSB	28.02.2022	Unity and togetherness as per the Ek Bharat Shreshtha Bharat programme	Celebration of Makar Sankranti festival	Celebration of festival together as a part of EBSB	12.01.2023	13.01.2023	02	No	Completed
Ministry of Education/Department of Higher Education Government of India	EBSB	24.02.2023	To explore the culture of Himachal Pradesh with our partner institute NIT Calicut, Kerala	Student exchange program	Cultural student exchange program between NIT Hamirpur and NIT Calicut	19.03.2023	23.03.2023	05	No	Ongoing

Activities Conducted

Sr. No.	Name details of event/conference/exhibition	Month-Year	Organizing Section	Cost incurred (Rs. In lacs)	No. of Participation
1.	NIMBUS-2023 Orientation	January 18, 2023	Technical Activities, NIT Hamirpur	0.10	650
2.	Innovision	February 12, 2023	Technical Activities, NIT Hamirpur	0.75	1000
3.	NIMBUS-2023	April 14-16, 2023	Technical Activities, NIT Hamirpur	17.8872	3000
4.	The Inquisition [A Quiz for Awareness in Entrepreneurship & Start-up]	November 25, 2022	E-Cell, NIT Hamirpur	0.9387	230

Student Participation outside the institute

Sr. No.	Name details of event/conference/exhibition	Duration	Cost incurred (Rs. In lacs)	No. of Participation	Remarks
1.	Smart India Hachathon - 2022	August 24-26, 2022	0.51034	06	
2.	Participation in International Collegiate Programing Contest (ICPC) Kanpur	September 30 – October 01, 2022	0.17926	03	
3.	Participation in International Collegiate Programing Contest (ICPC) Kanpur	October 4, 2022	0.11095	03	
4.	Participation in CANSAT India by Flying Daggers Club	February 15, 2023	0.34	03	
5.	Participation in ICPC regional Amritapuri, Bengaluru	April 01-02, 2023	0.41850	03	
6.	Participation in E-Summit organized by IIT Kanpur	January 13-15, 2023	0.45664	08	
7.	Participation in ICPC Regional competition, Mathura	April 09, 2023	0.19	03	
8.	Participation in Hult Prize Mumbai regionals Competition, Mathura	June 09-11, 2023	0.448	04	

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	Prof. Hiralal Murlidhar Suryawanshi Director, NIT Hamirpur (HP) - 177005	Chairman
2	Prof. Hiralal Murlidhar Suryawanshi Director, NIT Hamirpur (HP) - 177005	(Ex- officio) Member
3	Additional Secretary/Joint Secretary Incharge dealing with Technical Education, Ministry of Human Resource Development, Govt. of India, Shastri Bhawan, New Delhi-110001	Member (MoE Nominee)
4	Finance Advisor, Department of Higher Education, Ministry of Human Resource Development, Govt. of India, Shastri Bhawan, New Delhi-110001 Deputy Secretary (IFD-HE)	Member (MoE Nominee)
5	Additional Chief Secretary/Principal Secretary (Technical Education) to the Govt. of Himachal Pradesh, Armsdale Building, HP Secretariat, Shimla-171002 (HP)	HP Govt. letter No. EDN(TE)A(1)-08/2002 dated 23/10/2015
6	Director (Technical Education) Industrial & Vocational Training, Govt. of HP Sundernagar, Mandi HP-175018	
7	Council nominee (--Vacant----	Member
8	Council nominee (--Vacant----	Member
9	Prof. Anoop Kumar, Professor, Department of Mechanical Engg. , NIT Hamirpur (HP)	Member
10	Dr. Amrit Kumar Roy Assistant Professor, Department of Civil, NIT Hamirpur (HP)	Member
11	Director, Indian Institute of Technology Mandi (HP)-175005 or [His nominee, not below the rank of Professor]	-----
12	Dr. R.S Banshtu Registrar, NIT Hamirpur (HP) – 177005	Secretary

6.2 FINANCE COMMITTEE

The Finance Committee present incumbents are:

Sr. No.	Name & address	Designation
1	Prof. Hiralal Murlidhar Suryawanshi Director, NIT Hamirpur (HP) - 177005	(Ex-officio) Chairman
2	Prof. Hiralal Murlidhar Suryawanshi Director, NIT Hamirpur (HP) - 177005	(Ex-officio) Member
3	Joint Secretary Incharge dealing with Technical Education, Ministry of Human Resource Development, Govt. of India, Shastri Bhawan, New Delhi-110001 [OR His Nominee]	Member
4	Finance Advisor, Department of Higher Education, Ministry of Human Resource Development, Govt. of India, Shastri Bhawan, New Delhi-110001 [OR His Nominee]	Member
5	--- Vacant ----	Member
6	Prof. Anoop Kumar, Professor, Department of Mechanical Engg., NIT Hamirpur (HP)	Member
7	Dr. R.S Banshtu Registrar, NIT Hamirpur (HP) – 177005	Secretary

6.3 BUILDING & WORKS COMMITTEE

The Buildings & Works Committee present incumbents are:

Sr. No.	Name & address	Designation
1	Director, NIT Hamirpur (HP) - 177 005	Ex-officio Chairman
2	Director or Deputy Secretary or His nominee dealing with NITs, Department of Higher Education, Ministry of Human Resource Development, Government of India, Shastri Bhawan, New Delhi – 110 001	Ex-officio Member
3	Director or Deputy Secretary or His nominee dealing with Finance (NITs), Department of Higher Education, Ministry of Human Resource Development, Government of India, Shastri Bhawan, New Delhi – 110 001	Ex-officio Member
4	Nominee of Board of Governor (-Vacant-)	Member
5	Dean (P&D) NIT Hamirpur (HP) - 177 005	Member
6	One Expert from Civil Wing of Central or State Government or Autonomous body of repute	Member
7	One Expert from Electrical Wing of Central or State Government or Autonomous body of repute	Member
8	Registrar, NIT Hamirpur (HP) - 177 005	Ex-officio 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.

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 Chairman
Director,
NIT Hamirpur
 2. Prof. Subrata Ghosh External Member
Professor,
Department of Chemistry
IIT Mandi (HP)
 3. Prof. Roshan Lal Sharma External Member
Professor,
Department of English,
Central University of Himachal Pradesh
 4. Prof. Lillie Dewan External Member
Professor,
Department of Electrical Engineering
NIT Kurukshetra
 5. Prof. Anoop Kumar Member
Professor,
Department of Mechanical Engineering
NIT Hamirpur (HP)
 6. Prof. Ashwani Kumar Member
Professor,
Department of Electrical Engineering
NIT Hamirpur (HP)
 7. Prof. Bhanu Marwaha Member
Professor,
Department of Architecture
NIT Hamirpur (HP)
 8. Prof. (Ms.) Minakshi Jain Member
Professor,
Department of Architecture

	NIT Hamirpur (HP)	
9.	Prof. Narinder Singh Thakur Professor, Centre for Energy Studies NIT Hamirpur (HP)	Member
10.	Prof. Rakesh Sehgal Professor, Department of Mechanical Engineering NIT Hamirpur (HP)	Member
11.	Prof. Rakesh Kumar Dutta Professor, Department of Civil Engineering NIT Hamirpur (HP)	Member
12.	Prof. (Ms.) Rajeevan Chandel Professor, Department of Electronics & Communication Engineering NIT Hamirpur (HP)	Member
13.	Prof. Ram Naresh Sharma Professor, Department of Electrical Engineering NIT Hamirpur (HP)	Member
14.	Prof. Raman Parti Professor, Department of Civil Engineering NIT Hamirpur (HP)	Member
15.	Prof. Ravi Kumar Professor, Department of Materials Science & Engineering NIT Hamirpur (HP)	Member
16.	Prof. Ravi Kumar Sharma Professor, Department of Civil Engineering NIT Hamirpur (HP)	Member
17.	Prof. Sunand Kumar Professor, Department of Mechanical Engineering NIT Hamirpur (HP)	Member
18.	Prof. Sushil Chauhan Professor, Department of Electrical Engineering	Member

NIT Hamirpur (HP)

- | | | |
|-----|--|------------------|
| 19. | Prof. Yogeshver Dutta Sharma
Professor,
Department of Mathematics
& Scientific Computing
NIT Hamirpur (HP) | Member |
| 20. | Registrar
NIT Hamirpur (HP) | Member Secretary |

CENTRAL FACILITIES

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, centres 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.

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. Siddhartha Chauhan
Senior Scientific Officer	:	Sh. Anil Kumar
Senior Scientific Officer	:	Sh. Jagdish Verma
Scientific Officer	:	Sh. Ashwani Kumar Sharma
Technical Assistant (SG-I)	:	Sh. Ravi Singh
Sr. Technician	:	Sh. Rakesh Sharma

4). The detail of the assets/equipment purchased for the Computer Centre during the financial year 2021-2022 is as below:-

Sr. No.	Name of Asset/Equipment	Quantity
1	Matlab Campus / Campus wise Linces	01No.
2.	Deployment of Wireless Network in Academic Area of the Institute(300Nos. WI FI Accespoint, 50 Network Switches	01No.

5). Detail of the Laboratories

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

7.2 WORKSHOP

1. Academic Staff:
Workshop Superintendent = 01

2. Equipment's Acquired:

S. No.	Name of the Equipment	Date of Purchase	Cost (in Rupees)
1.	Nil	Nil	Nil

Name of the Shops:

Sr. No.	Name of the Shops
1.	CNC Shop
2.	Fitting Shops
3.	Welding Shop
4.	Sheet Metal Shop
5.	Pattern Shop
6.	Foundry Shop
7.	Smithy Shop
8.	Turning Shop
9.	Machine Shop
10.	Fabrication Shop
11.	Carpentry Shop

7.3 LIBRARY:

1. No. of print books available up to 31-03-2023 : 94749
2. No. of e-books available up to 31-03-2023 : 471
3. No. of print books added during the year : 142
4. No. of e-books added during the year : 320
5. Expenditure on procurement of Books :
- e-Books : 35,25,190.00
- Print Book: : 1,13,871.00
6. E-resources subscribed by Institute:
- ACM Digital Library
 - Emerald e-Journals
 - IEEE Xplore Digital Library
 - Indiastat e-Database
 - Sage (Urban Studies and Planning) e-Journals

- Science Direct e-Journals
- Taylor and Francis e-Journals

7. e-resources subscribed through e-SodhSindhu :

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

8. 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 08:00 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, Medical Officer (Incharge)
 - (ii) Dr. Pushpender Verma, Medical Officer part time basis
 - (iii) Dr. Rohtash Rattan, Medical Officer part time basis
 - (iv) Dr. Divya Gupta, Medical Officer part time basis
 - (v) Dr. Astha Thakur, Medical 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 = 19414.
- 4) Number of outdoor attendance = 17824
- 5) Number of day care Patients= 90.
- 6) Number of referral cases=1500.
- 7) Ambulance Services are available 24X7 with basic facilities.
- 8) Immunizations Camps are being organized for vaccination against COVID-19.

- Dental OPD has been started by installing the dental chair in the Institute Health Centre.

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, Basketball, 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 ECE Deptt. Got overall champion in Inter Branch tournament. Final year among Boys & Girls got overall trophy in Inter year tournament.

During the session 2022-23 two day 33rd Annual Athletic meet was organized from 17th – 18th march 2023. In this meet the following events were organized such as 100M, 200M, 400M, 800M, 1500M, 5000M, 4x400M and 4x100 relay, Long jump, High jump, triple Jump, shot Put, Discus and Javelin Throw for both boys and girls. Mr. Rahul Kumar (191079) among Boys and Ms. Devanjali sharma (21BCH023) 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 2022-23 our different teams proved their talent in different outside the Institute and performed very well. The detail of the participant game wise given below:-

A:-Boys

S. N.	Game	Date & Year	Name of Tournament	Vanue	Position
1	Football	3-5 Nov,2022	ITUSA Northern Region	TIET Patiala	----
2	Volleyball, Cricket & Chess	6-8 Nov,2022	RANN NEETI-22	IIT Mandi	---
3	Basketball, Athletics	17-20 Nov,2022	All India Inter NIT	MNIT Jaipur	---
4	Badminton & Table Tennis	18-20 Nov,2022	All India Inter NIT	NIT Silchar	---
5	Cricket	4-7 Dec, 2022	All India Inter NIT Faculty & Staff	SVNIT Nagpur	---
6	Badminton, T,T & Chess	17-19 Dec, 2022	All India Inter NIT Faculty & Staff	NIT Hamirpur	Winner Badminton (Above 50) Runner Badminton (Below 50)
7	Volleyball & Kabaddi	20-22 Jan, 2023	All India Inter NIT	NITK Suratkal	---
8	Cricket	16-19 Feb.2023	All India Inter NIT	SVNIT Surat	---

B:-Girls

S. N.	Game	Date & Year	Name of Tournament	Vanue	Position
1	Volleyball,	6-8 Nov,2022	RANN NEETI-22	IIT Mandi	----
2	Basketball, Athletics	17-20 Nov,2022	All India Inter NIT	MNIT Jaipur	---
3	Badminton, T,T & Chess	17-19 Dec, 2022	All India Inter NIT Faculty & Staff	NIT Hamirpur	---
4	Volleyball	20-22 Jan, 2023	All India Inter NIT	NITK Suratkal	---

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, Basketball court, Table tennis, Billiards & pool, Squash Court, Karate & Yoga Hall, Gym Hall (Male & Female)		
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, MESSSES, STAFF QUARTERS, ADMINISTRATION & TELEPHONE EXCHANGE etc.:

There are seven Boys Hostels and two Girls Hostels available in the institute. The statics of boarders of each hostel are as under:-

Name of the Hostel	Type (Single/ Double/ 03 Seated/ 04 seated/ 06 seated)	Capacity
Kailash Boys Hostel	03 seated	703
Vindhyachal Boys Hostel	Single seated	170
Satpura Hostel	Normal Room & Furnished Guest House	106
Mani Mahesh & Aravali Girls Hostel	Single seated	162
Dhauladhar Boys Hostel	Single seated- 91 03 seated- 24 Warden & MMCA office-01 Guest Room=02	163

Neelkanth Boys Hostel	03 seated=21 04 Seated=128	575
Himadri Boys Hostel	Four let= 116 Triplet=82	710
Himgiri Boys Hostel	Single seated-469 Doublet=11	491
Udyagiri Boys Hostel	Triplet room 161	483
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	121
Shivalik Boys Hostel	Six Seated= 90 Four seated=40	130
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 1st year, the Establishment charges, ambulance charges and common room charges are collected from July 1st 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

Sr. No.	Description	Number	Plinth area (approx. In sq. Ft. after renovation)	Total area Sq.Ft	Eqiovalent area in Sq. Mt.
	QTRS.				
1	Type-I	20	345.46	6907.2	642.00
2	Type-II	82	688.51	56457.72	5247.00
3	Type-III	54	907.82	49022.56	4556.00
4	Type-IV	48	1341.41	34387.68	5984.00
5	Type-V	12	1985.22	31763.52	2952.00
6	Duplex Type-V	24	269.22	1076.88	100.00
7	Director Residence	1	3281.80	3281.8	305.00
8	Garages	97	134.5	13046.5	1213.00
9	Type-IV Special (Faculty residence)	48	1827.85	87736.8	8154.00
10	Type-IV Special (Non Teaching residences)	16	1827.85	29245.6	2718.00
11	Total Nos of Hostels Buildings wise Area	1	2121818.2	2121818.20	197195.00
12	Total Nos of Academic Building Area	1	856313.08	856313.08	79583.00
					308649.00
	Gross plinth area = Qtrs area+Hostel area +Academic area				
	Total = 308649.00 Sqm 76.26 Acre				
	Total developed area = Plinth area + garden + Road etc.				
	Total 100.84 Acre =408085.00 Sqm				

7.8 List of Assets Purchased during the year 2022-23 in Construction & Maintenance Section, NIT, Hamirpur (HP).

Sr. No.	Name of work	Agreement No.	Expenditure (In Rs.)	Date of completion
1	Construction of Store for Kitchen at Udaigiri Hostel, NIT Hamirpur (Civil and Electrical work).	08 of 2021-22	1397540	08/07/2022
2	Providing and fixing aluminum partition (SH: Providing/fixing aluminum partition at Hall No. 203 & 204 of Material Science Engineering Department	09 of 2021-22	1273827	14/07/2022
3	Providing protection wall from Admin to Shiwalik Boys Hostel.	10 of 2021-22	1679325	26/05/2022
4	Proposed ornamental carved wooden work in Sarswati Devi Idol in Admin Block	11 of 2021-22	545000	27/03/2022
5	Proposed aluminum cabin in Hall No. 315 at Department of Management Studies at second floor Admin Block in NIT Hamirpur	12 of 2021-22	148676	26/04/2022
6	Construction of stair from Chemistry and Chemical Engg. Deptt. to link Lecture hall in NIT Hamirpur.	16 of 2021-22	394742	26/05/2022
7	Construction of security check post for the security guard of Mani Mahesh Girls Hostel.	18 of 2021-22	355244	18/07/2022

8	Construction of Sculpture workshop shed in Architectural Department in NIT Hamirpur.	19 of 2021-22	452390	04/09/2022
9	Providing power supply to up coming bailing machine and composter at Garbage Plant NIT hamirpur	06 of 2022-23	128000	16/08/2022
10	Procurement of Bailing Machine on GeM	GeM	492000	20/07/2022
11	Procurement of Composter on GeM		440000	01/03/2023
12	Flushing of existing bore well including providing and installation of submersible pump complete with electric connection etc. near Student Activity Centre. E-Class Room & New Computer Centre.	11 of 2022-23	667112	24/02/2023
13	Construction of Computer Centre including internal water supply, sanitary installation drainage appurtenant civil development work and internal work.	CPWD	654700000	05/05/2022
14	Construction of E-Class Room at NIT Hamirpur (HP). (SH: Complete building works, civil services& development work internal electrical installation E-Class Room and fire alarm, firefighting, DG Set lifts and horticulture work for Computer Centre and E-Class Room. Procurement of furniture and network switches. Construction of Computer Centre and E-Class room Building at NIT Hamirpur.			
	Total		662673856	

AUDIT CERTIFICATE

Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of National Institute of Technology, Hamirpur for the year ended 31 March 2023

We have audited the Balance Sheet of the National Institute of Technology Hamirpur (Himachal Pradesh) as at 31 March 2023, Income & Expenditure Account and Receipts & Payments Account for the year ended on that date 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. These financial statements are the responsibility of the Institute's Management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This Separate 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 and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum-performance aspects, etc., if any, are reported through Inspection: Reports/ CAG's Audit Reports separately.

3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis. Evidences supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.

4. Based on our audit, we report that:

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

ii) The Balance Sheet and Income and Expenditure Account/Receipt and Payment Account dealt with by this Report have been drawn up in the format prescribed by the Ministry of Human Resource Development, Government of India vide order No. 29-4/2012-FD dated 17 April 2015.

In our opinion, proper books of accounts and other relevant records have been maintained by the National Institute of Technology, Hamirpur (Himachal Pradesh) in so far as it appears from our examination of such books.

iv) We further report that:

A. Balance Sheet

A.1 Sources of Funds

A.1.1 Current Liabilities and Provisions (Schedule 3) - Unutilised Grants: Nil

As per the prescribed format of accounts, capital advances should not be treated as utilisation of grants. However, the Institute booked capital advances amounting to ₹8.84 crore as utilisation of grant. This has resulted in understatement of unutilized grants and overstatement of Corpus/ Capital Fund by ₹8.84 crore.

This matter was also reported in the previous years' Separate Audit Reports for the year 2020-21 and 2021-22. However, compliance was not made by the Institute.

B.1 Application of Funds

B.1.1 Fixed Assets (Schedule 4)

B.1.1.1 Intangible Assets - Computer Software:0

The above does not include software (Simulia Abaqus) valuing ₹32.33 lakh procured during 2022-23, the payment of this software was made in the next year. However, the purchase of the software has not been accounted for during 2022- 23.

Further, the softwares are depreciable at the rate of 40 per cent per annum. The depreciation amounting to ₹12.93 lakh on these softwares for year has also not been provided.

This has resulted in understatement of Fixed Assets - Intangible Assets by ₹19.40 lakh, understatement of depreciation by ₹12.93 lakh (consequential overstatement of

Corpus Fund due to overstatement of excess of income over expenditure by ₹12.93 lakh) and understatement of Sundry Creditors by ₹32.33 lakh.

B.1.1.2 Intangible Assets - E-Journals: ₹1

As per the prescribed format, rate of depreciation for E-Journals is to be charged @40 percent per annum on straight line method. As such, E-journals get fully depreciated in three financial years.

However, it was noticed that:

(i) The institute has charged depreciation of ₹155.47 lakh on E-Journals instead of ₹174.33 lakh during the year 2022-23.

(ii) There should be Net block of E-Journals amounting to ₹114.58 lakh as on 31- 03-2023 instead of ₹1.

Detail of depreciation on E Journal

Year of purchase	Additions to E-Journals during the year	Depreciation for the year				Net Block Residual value as on 31-03-23
		2020-21	2021-22	2022-23		
2020-21	1,98,30,245	79,32,098	79,32,098	39,66,049	0	
2021-22	2,18,58,537		87,43,414	87,43,414	43,71,707	
2022-23	1,18,10,201			47,24,080	70,86,120	
Total	5,34,98,983	79,32,098	1,66,75,512	1,74,33,543	1,14,57,826	
Net block of E-Journals as per Balance Sheet					1	
Difference in net block as on 31-03-23					1,14,57,827	

Incorrect charging of depreciation on E-journals has resulted in understatement of Fixed Assets - Intangible Assets by ₹114.58 lakh and understatement of Capital Fund by ₹114.58 lakh.

B.2.2 Loans, Advances & Deposits (Schedule 8)

B.2.2.1 Income accrued: ₹1.50 crore

As per the approved format of accounts, accrual entries in respect of the interest accrued but not due on investments of earmarked funds shall be credited to the respective fund. The income from investment on the fund is added to the fund.

(1) The institute had invested funds of ₹222.15 crore in the FDRS with State Bank of India from Corpus Fund. As per the interest certificate provided by the bank as on 31/03/2023, interest amounting to ₹2.62 crore was accrued on these FDRs. The interest accrued account on the FDRs made out of Corpus Fund was not provided in the accounts. This has resulted in understatement of Loans, Advances and Deposits by ₹2.62 crore and understatement of Income from Investments (consequently understatement of Corpus Fund) by ₹2.62 crore.

(ii) The institute had invested funds of ₹5.48 crore in the FDRS with State Bank of India in respect of Pension fund. As per the interest certificate provided by the bank as on 31/03/2023, interest amounting to ₹0.07 crore was accrued on these FDRs. The interest accrued account on the FDRs made out of Pension Fund was not provided in the accounts. This has resulted in understatement of Loans, Advances and Deposits by ₹0.07 crore and understatement of Designated/ Earmarked Fund by ₹0.07 crore.

(iii) The institute had invested funds of ₹20.20 crore in the FDRS with State Bank of India/ Punjab National Bank/ UCO Bank in respect of various project. As per the interest certificate provided by the bank as on 31/03/2023, interest amounting to ₹0.46 crore was accrued on these FDRS. However, interest accrued account on the FDRS made out of Project Funds was not provided in the accounts. This has resulted in understatement of Loans, Advances and Deposits by ₹0.46 crore and Current Liabilities & Provisions by ₹0.46 crore.

C. Contingent Liability and notes on Accounts (Schedule 24)

C.1 The EPFO has raised (February 2022) demand for outstanding statutory liability of ₹81.70 lakh against the institute for not providing benefit of Provident Fund. The institute has deposited (April

2022) ₹16.34 lakh with the EPFO and filed an appeal for waiver of amount. However, the Contingent Liability against the EPFO demand amounting to ₹65.46 lakh has not been disclosed in the accounts.

D. General

D.1 Rule 230(8) of GFR2017 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. As per Schedule 11 and Schedule 12 of the Balance Sheet, the Institute earned interest on saving accounts as well as FDRs amounting to ₹16.83 crore (₹4.91 crore in 2019-20, ₹3.60 crore in 2020-21, ₹2.33 crore in 2021-22 and ₹5.99 crore in 2022-23) which included interest earned on Grants in Aid. Interest earned on grants is not quantifiable, as separate bank accounts in respect of grants are not maintained by the Institute.

This observation was also pointed out in the Separate Audit Reports for the year 2019-20 to 2021-22. However, compliance is still awaited.

D.2 As per the format of accounts prescribed by the Ministry of Education, provision for retirement benefits is to be made on Actuarial Valuation Method.

The Institute made provision in respect of Leave Encashment and Gratuity amounting to ₹11.82 lakh and ₹19.60 lakh respectively as on 31/03/2023. The Institute had worked out these provisions in respect of Leave Encashment and Gratuity payable to employees retired during the year. However, actuarial valuation of liability for Leave Encashment and Gratuity was not done and provided for in contravention to prescribed guidelines. In absence of actuarial valuation, the financial impact could not be quantified.

E. Grant-in-Aid

a) The position of Grant-in-Aid received during the year 2020-21 is as under:

(Amount in ₹ crore)

Particulars	OH 31	OH 35	OH 36	Total
Opening balance as on 01-04-2022 (as per last certified SAR)	0.00	11.59	0.00	11.59
Lapse of Grant of the previous year	0.00	11.59	0.00	11.59
Net Opening balance as on 01-04-2023	0.00	0.00	0.00	0.00
Add: Grant received during the year	40.24	10.02	56.18	106.44
Total available funds	40.24	10.02	56.18	106.44
Less: Utilization as on 31.03.2023	39.28	9.92	49.29	98.49
Unutilised balance as on 31.03.2023	0.96	0.10	6.89	7.95
Less: Lapsed by RBI on 31.03.2023	0.96	0.10	6.89	7.95
Unutilised balance at the end of the year	0.00	0.00	0.00	0.00

F. Management Letter

Some persistent deficiencies are being regularly included in the Audit Report or have been brought to the notice of the Institute's management through a management letter for remedial or corrective action. However, despite being repeatedly pointed out, compliance of these persistent deficiencies is not being made by the Institute.

v) Subject to our observations in the preceding paragraphs, we report that the Balance Sheet, Income & Expenditure Account and Receipt & Payment Account deal with by this report are in agreement with the books of accounts.

vi) In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes to Accounts, and other significant matters stated above, and other matters mentioned in Annexure to this Audit Report give a true and fair view in conformity with accounting principles generally accepted in India:

-
- a. In so far as it relates to the Balance Sheet, of the State of affairs of the National Institute of Technology, Hamirpur (Himachal Pradesh) as at 31 March 2023; and
- b. In so far as it relates to the Income & Expenditure Account, of the surplus for the year on that date.

For and on behalf of the C & AG of India,



Director General of Audit (Central), Chandigarh

Place: Chandigarh

Date:

Annexure to Separate Audit Report

1. Adequacy of Internal Audit System: An Internal Audit Cell has been constituted looking after the pre-audit of vouchers. The Internal audit for the year 2022-23 was conducted by a Chartered Accountant firm.

2. Adequacy of Internal Control System: Internal Control System was found deficient to the following extent:

- a. The internal Audit manual was prepared.
- b. Out of sanctioned posts for faculty and non-faculty, approximately 45 percent and 52 percent of the posts were lying vacant as on 31/03/2023 respectively.
- c. Records related to inventory of the Fixed Assets, depreciated value of assets/block of assets has not been maintained.

3. System of Physical Verification of Fixed Assets: Physical verification of Fixed Assets for the year 2022 -23 was conducted. The Institute has more than 50,000 books in its library; a sample physical verification was conducted during 2020-21, wherein 404 books could not be traced. Detailed verification was under progress.

4. System of Physical Verification of Inventory: Physical verification of Inventory for the year 2022-23 was conducted.

5. Regularity in Payment of Statutory Dues: There was delay in depositing of GST realized from Consultancy services in some of the cases.



Deputy Director

गोयल, आई.ए.ए.एस.
SANJEEV GOYAL, IAAS

महानिदेशक लेखापरीक्षा (केन्द्रीय), चण्डीगढ़
DIRECTOR GENERAL OF AUDIT
(CENTRAL), CHANDIGARH

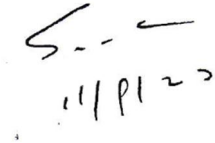
No.:

Date:

The audit of annual accounts of your Institute for the year ended 31 March 2023 was conducted and audit comments in respect of the same have been reported through the Separate Audit Report. In this regard, it is to bring to your kind attention that corrective action, to certain persistent irregularities which are repeatedly included in the Separate Audit Reports/ Management Letters (as briefed in the Part A of the annexure enclosed). has not been taken by the management of the Institute, which needs your immediate intervention. Besides, there are certain other deficiencies noticed which have not been included in the Separate Audit Report but, nevertheless, are significant (as detailed in the Part B of the annexure), are also being brought to your attention for remedial/corrective action.

You are requested to issue instructions for taking corrective measures in this regard.

Yours sincerely,



Prof. Hiralal Murlidhar Suryawanshi
Director
National Institute of Technology, Hamirpur

Annexure to the management letter
PART A: Persistent Irregularities being included in the Separate Audit Reports and Management Letters

Compliance to the following observations included in the previous year Separate Audit Reports on the annual accounts; was not made. As compliance of these observations, was not made, following observations have been repeated in the current year Separate Audit Report for the year 2022-23 (kindly refer to Separate Audit Report):

1. *Contravening the prescribed format, treating of capital advances an utilisation of grants*
 (Comment no. A.1.1 of Separate Audit Report of 2022-23)
 (Comment no. A.1.2 of Separate Audit Report 2021-22)
 (Comment no. D of Separate Audit Report, 2020-21)

2. *Non-Provisioning for retirement benefits on actuarial valuation basis*

(Comment no. D.2 of Separate Audit Report, 2022-23)
 (Comment no. D.5 of Separate Audit Report, 2021-22)=
 (Comment no. B of Separate Audit Report, 2020-21)
 (Comment no. B of Separate Audit Report, 2019-20)
 (Comment no. B.4 of Separate Audit Report, 2018-19)
 (Comment no. C.4 of Separate Audit Report, 2017-18)
 (Comment no. C.2 of Separate Audit Report, 2015-16)

3 *Interest earned on grants is not quantifiable as separate bank account in respect of grants are not maintained by the Institute*

(Comment no. D.I of Separate Audit Report, 2022-23)
 (Comment no. D.4 of Separate Audit Report, 2021-22)
 (Comment no. C.2 of Separate Audit Report, 2020-21)
 (Comment no. C.3 of Separate Audit Report, 2019-20)

4. *Wrong classification of Computer & Peripherals as Office Equipment*

(Comment no. B.1.1.3 of Management Letter, 2022-23)
 (Comment no. B.1.1 of Management Letter, 2021-22)

PART B: Other Irregularities noticed during the audit of accounts of the Institute for the year 2022-23 which have not been included in the Separate Audit Report

B. Balance Sheet**B.1 Application of Funds****B.1.1 Fixed Assets****B.1.1.1 Office Equipment (Additions during the year): ₹859.79lakh**

Above includes computers and laptops amounting to ₹96.18 lakh purchased during the financial year 2021-22, which should have been booked under the head Computers & Peripherals instead of Office Equipment. Prescribed rates of depreciation on Computers & Peripherals and Office Equipment are 20 percent and 7.5 percent per annum respectively. Thus, due to inclusion of these items in office equipment the depreciation was under charged by ₹24.04 lakh (12.50 per cent of ₹96.18 lakh for two years) during 2021-22 and 2022-23. This has resulted in overstatement of Office Equipment by ₹81.75 lakh (after depreciation of ₹7.21 lakh each for the year 2021-22 and 2022-23) understatement of Computers & Peripherals by ₹57.70 lakh (after depreciation of ₹19.23 lakh each for the year 2021-22 and 2022-23) and understatement of depreciation by ₹24.04 lakh (depreciation @12.5% i.e. ₹12.02 lakh for each financial year 2021-22 and 2022-23).



Deputy Director

Annual Accounts

2022-23

NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)
BALANCE SHEET AS AT 31st March, 2023

(Amount-----Rs.)			
	Schedule	Current Year	Previous Year
<u>SOURCES OF FUNDS</u>			
CORPUS/CAPITAL FUND	1	6,22,96,78,294.04	5,87,52,04,534.60
DESIGNATED/EARMARKED/ENDOWMENT FUNDS	2	5,48,05,847.67	4,74,35,039.08
CURRENT LIABILITIES AND PROVISIONS	3	1,02,15,74,824.49	1,02,03,72,790.53
TOTAL		7,30,60,58,966.20	6,94,30,12,364.21
<u>APPLICATION OF FUNDS</u>			
<u>FIXED ASSETS</u>			
Tangible Assets	4	3,37,80,15,326.11	2,12,42,93,228.33
Intangible Assets		1.00	37,37,199.40
Capital Works-In-Progress		14,50,97,155.00	1,40,93,57,418.00
INVESTMENT FROM EARMARKED/ENDOWMENT FUNDS			
Long Term	5	5,48,04,000.00	4,74,33,160.00
Short Term			
INVESTMENT - OTHERS	6	0.00	0.00
CURRENT ASSETS	7	3,62,07,62,087.34	3,24,24,01,553.53
LOANS, ADVANCES & DEPOSITS	8	10,73,80,396.75	11,57,89,804.94
TOTAL		7,30,60,58,966.20	6,94,30,12,364.20
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 31/03/2023

(Amount --Rs.)

<u>INCOME</u>	Schedule	Current Year	Previous Year
ACADEMIC RECEIPTS	9	28,59,88,324.50	21,17,87,819.00
GRANT & SUBSIDIES	10	96,42,00,000.00	1,17,41,35,000.00
INCOME FROM INVESTMENTS	11	5,82,78,856.00	2,09,32,956.00
INTEREST EARNED	12	17,02,919.00	24,00,402.00
OTHER INCOME	13	3,31,60,009.61	2,13,14,903.00
PRIOR PERIOD INCOME	14	0.00	23,38,193.00
TOTAL(A)		1,34,33,30,109.11	1,43,29,09,273.00
<u>EXPENDITURE</u>			
STAFF PAYMENT & BENEFITS (ESTABLISHMENT EXPENSES)	15	59,41,38,769.00	64,63,55,023.50
ACADEMIC EXPENSES	16	11,24,08,258.00	13,15,87,588.00
ADMINISTRATIVE AND GENERAL EXPENSES	17	16,19,18,055.00	13,89,07,519.00
TRANSPORTATION EXPENSES	18	7,74,163.00	9,42,666.00
REPAIR & MAINTENANCE	19	3,17,39,562.00	2,66,59,451.00
FINANCE COSTS	20	0.00	767.00
OTHER EXPENSES	21	0.00	0.00
PRIOR PERIOD EXPENSES	22	0.00	0.00

Depreciation (Net Total at the year-end - corresponding to schedule 4)		15,88,80,908.67	13,09,16,554.58
TOTAL (B)		1,05,98,59,715.67	1,07,53,69,569.08
Balance being excess of Income over Expenditure (A-B)		28,34,70,393.44	35,75,39,703.92
Transfer to /from Designated Fund		0.00	0.00
Building Fund			
Others (specify)		-----	-----
BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CAPITAL FUND		28,34,70,393.44	35,75,39,703.92
SIGNIFICANT ACCOUNTING POLICIES	23		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	24		

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

REGISTRAR
NIT HAMIRPUR (HP)

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NIT HAMIRPUR (HP)

NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P.)
RECEIPTS AND PAYMENTS ACCOUNT FOR THE PERIOD/YEAR ENDED 31/03/2023

(Amount-Rs)

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
I. Opening Balances			1. Expenses		
a) Cash Balances	6,260.05	4,30,082.05	a) Establishment Expenses	59,26,90,814.00	65,34,97,180.50
b) Bank Balance			b) Academic Expenses	10,60,53,993.00	13,45,47,773.00
In Current accounts	6,08,34,271.85		c) Administrative Expenses	17,24,91,081.00	14,31,56,792.00
In Deposit Accounts	21,40,25,047.69	8,57,65,745.94	d) Transportation Expenses	7,86,310.00	9,30,519.00
Savings accounts	3,01,45,52,510.00	2,72,67,49,037.00	e) Repairs & Maintenance	1,37,66,637.00	2,77,05,459.00
			f) Prior period expenses	0.00	767.00
			g) Student curricular Activities		
II. Grants Received			II. Payments against Earmarked/Endowment Funds	0.00	0.00
a) From Government of India	1,06,44,00,000.00	1,17,41,35,000.00			
b) From State Government	0.00	0.00			
c) From other sources (details)	0.00	0.00			
(Grants for capital & revenue exp/ to be shown separately if available)					
III. Academic Receipts	27,75,98,331.50	21,14,78,794.00	III. Payments against Sponsored Projects/Schemes	0.00	0.00
IV. Receipts against Earmarked/Endowment Funds	0.00	0.00	IV. Payments against Sponsored Fellowships/Scholarships	0.00	0.00
V. Receipts against Sponsored Projects/Schemes	0.00	0.00	V. Investments and Deposits made		
			a) Out of Earmarked/Endowments funds	0.00	0.00
VI. Receipts against sponsored Fellowships Scholarships	0.00	0.00	b) Out of own funds (Investments- Others)	0.00	0.00
			VI. Term Deposits with Scheduled Banks	0.00	0.00
VII. Income on Investments from	0.00	0.00	VII. Expenditure on Fixed Assets and capital WIP		
a) Earmarked/Endowment funds	0.00	0.00	b) Other investments a) Fixed Assets	9,92,09,415.00	4,82,72,256.00
b) Other investments	0.00	0.00	b) Capital Works- in- Progress	0.00	3,99,77,400.00

VIII. Interest received on			VIII Other Payments including statutory payments	0.00	0.00
a) Bank Deposits	4,62,26,732.00	3,81,16,358.00			
b) Loans and Advances	0.00	0.00			
c) Savings Bank Accounts	0.00	0.00			
d) Project grant	0.00	0.00			
IX. Investments encashed	0.00	0.00	IX. Grants Laps	20,32,12,036.00	0.00
X. Term Deposits with Scheduled Banks encashed	0.00	0.00	X. Deposits, Advances and Stock	54,35,57,287.95	89,30,24,510.23
			Student curricular Activities Receipts	83,89,993.00	5,79,200.00
XI. Other income (including Prior Period Income)	3,33,21,049.61	2,11,69,578.00	XI. Other Payments	0.00	0.00
XII. Deposits, Advances and Stock	93,95,28,995.64	1,24,38,41,338.83	XII. Closing balances		
			Tfd to Project Cash book	0.00	0.00
			Tfd to Corpus fund	23,50,45,656.00	27,37,54,802.50
Student Curricular Activities Receipt	98,06,304.00	31,78,775.00	a) Cash in hand	4,186.05	6,260.05
			b) Bank balances		
			In Current Accounts	4,81,29,223.26	6,08,34,271.85
			In Savings Accounts	8,67,05,721.08	21,40,25,047.69
			In Deposit Accounts	3,54,02,57,152.00	3,01,45,52,510.00
XIII. Miscellaneous Receipts including	0.00	0.00			
Statutory Receipts					
XIV. Any Other Receipts	0.00	0.00			
TOTAL	5,66,02,99,502.34	5,50,48,64,708.82	TOTAL	5,66,02,99,502.34	5,50,48,64,708.82

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

REGISTRAR
NIT HAMIRPUR (HP)

DIRECTOR
NIT HAMIRPUR (HP)

NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/23

(Amount--Rs.)

	Current Year		Previous year	
SCHEDULE 1 A. CAPITAL FUND :				
Balance as at the beginning of the year		3,98,42,38,935.84		3,83,25,19,768.42
Add : Contribution towards Corpus/Capital fund				
Add: Grants from UGC, Government of India and State Government to the extent utilized for capital expenditure	10,02,00,000.00		6,79,34,266.00	
Add: Assets Purchased out of Earmarked Funds	7,85,74,695.00		0.00	
Add: Assets Purchased out of Sponsored Projects, where ownership vests in the institution	0.00		0.00	
Add: Assets Donated/Gifts Received	0.00		0.00	
Add: Other Additions (Interest on Corpus fund)				
Add: Excess of Income over expenditure transferred from the Income & Expenditure Account	28,34,70,393.44		35,75,39,703.92	
Less: Amount of deposit being tfd a corpus account tfd back	23,50,45,656.00		27,37,54,802.50	
Add: Amount of Income of PY parked in Deposit tfd				
Add: Depreciation excess Charged PY				
Total				
(Deduct) lapsed grant TSA current liabilities	20,32,12,036.00	2,39,87,396.44	0.00	15,17,19,167.42
BALANCE AS AT THE YEAR -- END		4,00,82,26,332.28		3,98,42,38,935.84

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

NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2023

	Current year		Previous Year	
SCHEDULE 1 B. CORPUS:				
Balance as at the beginning of the year		1,89,09,65,598.76		1,51,60,78,630.26
Add : Contribution towards corpus	0.00		0.00	
Add: Grants from UGC, Government to the extent utilized for capital expenditure	0.00		0.00	
Add: Assets purchased out of corpus funds	0.00			
Add: Other additions (interest on corpus fund + PY contribution of excess income)	33,04,86,363.00		37,48,86,968.50	
Add: Appropriation of excess/loss in income & expenditure account for corpus funds	0.00		0.00	
Total		33,04,86,363.00		37,48,86,968.50
(Deduct) deficit transferred from the income & expenditure account		0.00		0.00
BALANCE AS AT THE YEAR -END		2,22,14,51,961.76		1,89,09,65,598.76

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

NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2023

(Amount--Rs.)

SCHEDULE 2 - DESIGNATED/ EARMARKED / ENDOWMENT FUNDS	Fund Wise Breakup		Total	
	Pension Fund	Endowment Funds	Current Year	Previous Year
A.				
a) Opening balance	4,74,35,039.08		4,74,35,039.08	4,39,39,943.08
b) Additions during the year	73,70,808.59		73,70,808.59	41,05,713.00
c) Income from investments made of the funds	0.00		0.00	0.00
d) Accrued Interest on investments/Advances	0.00		0.00	0.00
e) Interest on Savings Bank a/c	0.00		0.00	0.00
f) Other additions (Specify nature)	0.00		0.00	0.00
Total (A)	5,48,05,847.67		5,48,05,847.67	4,80,45,656.08
B.				
Utilization/Expenditure towards objectives of funds	0.00		0.00	0.00
i) Capital Expenditure	0.00		0.00	0.00
ii) Revenue Expenditure	0.00		0.00	6,10,617.00
Total (B)	0.00		0.00	6,10,617.00
Closing balance at the yearend (A-B)	5,48,05,847.67	0.00	5,48,05,847.67	4,74,35,039.08

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

NATIONAL INSTITUTE OF TECHNOLOGY, HAMIRPUR (H.P)
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2023

(Amount--Rs.)

	Current Year		Previous Year	
<u>SCHEDULE 3-CURRENT LIABILITIES AND PROVISIONS</u>				
<u>A. CURRENT LIABILITIES</u>				
1. Deposits from staff (TWS)	11,782.00		11,782.00	
2. Deposits from students				
College Caution Money	1,02,74,640.00		61,95,350.00	
Hostel Caution Money	1,50,22,161.50		1,56,91,911.50	
Library Security	52,13,450.00		67,62,700.00	
3. Sundry Creditors				
a) For Goods & Services	0.00		22,58,267.00	
b) Others	0.00		0.00	
4. Deposit-Others (including EMD, Security Deposit and other)	71,96,41,321.20		72,52,78,144.24	
5. Statutory Liabilities (GPF, TDS, WC TAX, CPF, GIS, NPS):	0.00	75,01,63,354.70	0.00	75,61,98,154.74
<u>B) Others</u>				
6. Other Current Liabilities				
a)Salaries	4,52,65,220.00		4,48,57,111.00	
b)Receipts against sponsored projects& consultancy	5,29,28,955.69		6,52,20,337.69	
c)Receipts against sponsored fellowships & scholarships SC &ST	22,91,909.00		22,30,962.00	
Receipts against sponsored fellowships & scholarships	77,34,040.00		93,54,151.00	
d)Unutilized Grants	0.00		0.00	
e) Grants in advance	0.00		0.00	

f) Other funds	2,13,72,406.00		1,94,17,643.00	
g) Other liabilities	0.00		0.00	
h) Fees received in advance	6,56,51,298.00		5,78,39,142.00	
i) Outstanding Liability UNI	3,65,353.00		3,65,353.00	
j) Interest on project Grant payable	0.00		0.00	
k) Extra Curricular Activities	4,85,71,641.10		4,71,55,330.10	
l) Medical Expenses	7,297.00		1,45,384.00	
m) Legal Fees	66,480.00		66,480.00	
n) Other Misc	3,50,000.00		4,28,768.00	
o) Security Charges	30,55,830.00		30,46,758.00	
p) Seminar Expense payable	0.00		0.00	
q) Professional Development allowance	0.00		0.00	
r) LTC	0.00		0.00	
s) Student Welfare expenses	0.00		0.00	
t) Children Education allowances	31,18,500.00		40,90,500.00	
u) Maintenance of Equipment	0.00		12,147.00	
v) Maintenance of Building	0.00		0.00	
w) Wages	39,24,451.00		1,37,500.00	
x) Convocation	0.00		0.00	
y) NDCPS	22,39,859.00		24,24,536.00	
z) Hostel furniture account payable	0.00	25,69,43,239.79	0.00	25,67,92,102.79
TOTAL (A)		1,00,71,06,594.49		1,01,29,90,257.53
<u>B. PROVISIONS</u>				
1. For Taxation	0.00		0.00	
2. Gratuity	19,60,497.00		5,77,859.00	
3. Superannuation Pension	0.00		0.00	
4. Accumulated Leave Encashment	11,99,351.00		5,49,358.00	
5. Trade Warranties/Claims	0.00		0.00	
6. Others (Specify)	0.00		0.00	
Auditors remuneration payable	5,53,040.00		2,10,000.00	
Consultancy charges payable	1,68,960.00		1,26,480.00	
Telephone charges payable	6,379.00		8,536.00	
Electricity charges payable	10,10,395.00		10,52,808.00	
Salary contract/ part time staff	43,25,419.00		20,46,774.00	

Cleaning and Maintenance	15,36,276.00		14,95,652.00	
Water Charges	22,73,853.00		12,06,731.00	
Stationery expenses	0.00		0.00	
Departmental operating cost	0.00		0.00	
Examination expenses	0.00		0.00	
Leave salary contribution	0.00		0.00	
TA	0.00		0.00	
Provision for contingency, other work & Equipment	14,34,060.00		0.00	
			0.00	
E-Journal Capital expenditure	0.00			
Advertisement Expenses	0.00	1,44,68,230.00	1,08,335.00	73,82,533.00
TOTAL (B)		1,44,68,230.00		73,82,533.00
TOTAL (A+B)		1,02,15,74,824.49		1,02,03,72,790.53

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
A. Plan grants: Government of India		
Balance B/F	20,32,47,830.06	16,71,39,186.56
Add: Receipts during the year	1,06,44,00,000.00	1,17,41,35,000.00
Total (a)	1,26,76,47,830.06	1,34,12,74,186.56
Less Refunds	20,32,12,036.00	
Less: Utilized for Revenue Expenditure	88,57,88,835.00	95,98,38,450.50
Less: Utilized for Capital expenditure	9,92,09,412.00	17,81,87,906.00
Total (b)	1,18,82,10,283.00	1,13,80,26,356.50
Unutilized carried forward (a-b)	7,94,37,547.06	20,32,47,830.06
B. UGC grants: Plan		
Balance B/F		
Add: Receipts during the year		
Total (c)		
Less Refunds		
Less: Utilized for Revenue Expenditure		
Less: Utilized for Capital expenditure		
Total (d)		
Unutilized carried forward (c-d)		
C. UGC Grants Non Plan		
Balance B/F		
Add: Receipts during the year		
Total (e)		

Less Refunds		
Less: Utilized for Revenue Expenditure		
Less: Utilized for Capital expenditure		
Total (f)		
Unutilized carried forward (e-f)		
D. Grants from State Govt.		
Balance B/F		
Add: Receipts during the year		
Total (g)		
Less Refunds		
Less: Utilized for Revenue Expenditure		
Less: Utilized for Capital expenditure		
Total (h)		
Unutilized carried forward (g-h)		
'Grand Total (A+B+C+D)	7,94,37,547.06	

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

SCHEDULE 2A

ENDOWMENT FUNDS

Amount in Rupees

1.Sr. No.	2. Name of the Endowment	Opening Balance		Additions during the year		Total		Expenditure on the object during the year 9	Closing Balance		Total (10+11)
									10. Endowment	11. Accumulated interest	
		3. Endowment	4. Accumulated Interest	5. Endowment	6. Interest	7. Endowment (3+5)	8. Accumulated Interest (4+6)				
Total											

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

SCHEDULE - 3 (a) SPONSORED PROJECTS

Amount in Rupees

1.Sr. No.	2. Name of the Project	Opening Balance		5. Receipts/recoveries during the year	6. Total	7. Expenditure during the year	Closing Balance		
		3. Credit	4. Debit				8. Credit	9. Debit	
1.	Sponsor Projects	1,71,93,375.94	0.00	97,22,499.00	0.00	2,69,15,874.94	1,31,69,587.00	1,37,46,287.94	0.00
Total		1,71,93,375.94	0.00	97,22,499.00	0.00	2,69,15,874.94	1,31,69,587.00	1,37,46,287.94	0.00

SCHEDULE 3 (b) SPONSORED FELLOWSHIPS AND SCHOLARSHIPS

Amount in Rupees

1.Sr. No.	2. Name of Sponsor	Opening Balance		Transaction during the year		Closing Balance	
		3. Credit	4. Debit	5. Credit	6. Debit	7. Credit	8. Debit
1.	Ministry of Social Justice	22,30,962.00	0.00	84,947.00	24,000.00	22,91,909.00	0.00
Total		22,30,962.00	0.00	84,947.00	24,000.00	22,91,909.00	0.00

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

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2023

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	31/03/2023	31/03/2022
1	Land	4,420,551.00	0.00	0.00	44,20,551.00	0.00	0.00	0.00	0.00	44,20,551.00	44,20,551.00
2	Site Development/Roads/other Infrastructure	7,12,15,348.30	2,77,56,593.00	0.00	9,89,71,941.30	5,53,14,289.00	0.00	0.00	5,53,14,289.00	4,36,57,652.30	1,82,81,292.30
3	Buildings	2,97,75,22,290.24	1,21,73,17,207.00	0.00	4,19,48,39,497.24	1,04,34,88,703.91	8,38,96,789.94	0.00	1,12,73,85,493.85	3,06,74,54,003.39	1,93,40,33,586.33
4	Roads & Bridges	23,80,233.00	0.00	0.00	23,80,233.00	0.00	47,604.66	0.00	47,604.66	23,32,628.34	0.00
5	Tube wells & Water Supply	0.00	2,21,75,140.00	0.00	2,21,75,140.00	0.00	4,43,502.80	0.00	4,43,502.80	2,17,31,637.20	0.00
6	Sewerage & Drainage	0.00	2,67,01,462.00	0.00	2,67,01,462.00	0.00	5,34,029.24	0.00	5,34,029.24	2,61,67,432.76	0.00
7	Electrical Installation and equipment	162,450.00	4,28,848.00	0.00	5,91,298.00	24,367.50	29,564.90	0.00	53,932.40	5,37,365.80	1,38,082.50
8	Plant & Machinery	45,95,27,258.04	9,32,000.00	0.00	46,04,59,258.04	41,13,73,566.85	2,30,22,962.90	0.00	43,43,96,529.76	2,60,62,728.28	4,81,53,691.18
9	Scientific & Laboratory Equipment	2,46,65,175.00	4,78,77,923.00	0.00	7,25,43,098.00	45,98,242.24	58,03,447.84	0.00	1,04,01,690.08	6,21,41,407.92	2,00,66,932.76
10	Office Equipment	10,08,79,486.85	1,93,53,408.00	0.00	12,02,32,894.85	2,52,36,513.54	90,17,467.11	0.00	3,42,53,980.65	8,59,78,914.20	7,56,42,973.31
11	Audio Visual Equipment	0.00	4,99,715.00	0.00	4,99,715.00	0.00	37,478.63	0.00	37,478.63	4,62,236.38	0.00
12	Computers & Peripherals	2,47,40,775.00	3,09,17,132.00	0.00	5,56,57,907.00	2,47,40,775.00	1,11,31,581.40	0.00	3,58,72,356.40	1,97,85,550.60	0.00
13	Furniture Fixtures & Fittings	12,48,33,081.04	30,96,179.00	0.00	12,79,29,260.04	10,10,67,922.94	95,94,694.50	0.00	11,06,62,617.44	1,72,66,642.60	2,37,65,158.10
14	Vehicles	87,42,177.00	0.00	0.00	87,42,177.00	89,80,015.00	0.00	2,37,839.88	87,42,176.00	1.00	-2,37,838.88
15	Lib. Books & Scientific Journals	6,21,90,067.06	0.00	0.00	6,21,90,067.06	6,21,90,067.05	0.00	0.99	6,21,90,066.06	1.00	0.01
16	Small Value Assets	1,22,262.00	0.00	0.00	1,22,262.00	53,482.25	12,226.20	0.00	1,05,688.45	16,573.55	28,799.75
	Total(A)	3,86,14,01,154.53	1,39,70,55,607.00	0.00	5,25,84,56,761.53	1,73,71,07,926.17	14,35,71,350.14	2,37,840.87	1,88,04,41,435.43	3,37,80,15,326.11	2,12,42,93,228.34
	Capital Work in Progress (B)	1,40,93,57,418.00	0.00	0.00	14,50,97,155.00					14,50,97,155.00	1,40,93,57,418.00
									TOTAL	3,52,31,12,481.11	3,53,36,50,646.34

S. No.	Intangible Assets	Opening Balance	Additions	Deductions	Closing Balance	Depreciation Opening Balance	Amortization for the year	Deductions / Adjustment	Total Depreciation	31/03/2023	31/03/2022
	Computer Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	E-Journals	7,30,90,037.00	1,18,10,201.00		8,49,00,238.00	6,93,52,837.60	1,55,47,399.40	0.00	8,49,00,237.00	1.00	37,37,199.40
	Patent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL C	7,30,90,037.00	1,18,10,201.00	0.00	8,49,00,238.00	6,93,52,837.60	1,55,47,399.40	0.00	8,49,00,237.00	1.00	37,37,199.40
	Grand Total (A+B+C)	5,34,38,48,609.53	1,40,88,65,808.00	1,26,42,60,263.00	5,48,84,54,154.53	1,80,64,60,763.77	15,91,18,794.54	2,37,840.87	1,96,53,41,672.43	3,52,31,12,482.11	3,53,73,87,845.74

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	31/03/2023	31/03/2022
1	Land	44,20,551.00	0.00	0.00	44,20,551.00	0.00	0.00	0.00	0.00	44,20,551.00	44,20,551.00
2	Site Development	7,12,15,348.30	2,77,56,593.00	0.00	9,89,71,941.30	5,53,14,289.00	0.00	0.00	5,53,14,289.00	4,36,57,652.30	1,82,81,292.30
3	Buildings	2,97,7522,290.24	1,21,73,17,207.00	0.00	4,19,48,39,497.24	1,04,34,88,703.91	8,38,96,789.94	0.00	1,12,73,85,493.85	3,06,74,54,003.39	1,93,40,33,586.33
4	Roads & Bridges	23,80,233.00	0.00	0.00	23,80,233.00	0.00	47,604.55	0.00	47,604.66	23,32,628.34	0.00
5	Tube wells & Water Supply I	0.00	2,21,75,140.00	0.00	2,21,75,140.00	0.00	4,43,502.80	0.00	4,43,502.80	2,17,31,637.20	0.00
6	Sewerage & Drainage	0.00	2,67,01,482.00	0.00	2,67,01,462.00	0.00	5,34,029.24	0.00	5,34,029.24	2,61,67,432.76	0.00
7	Electrical Installation and equipment	1,62,450.00	4,28,848.00	0.00	5,91,298.00	24,367.50	29,564.90	0.00	53,932.40	5,37,365.60	1,38,082.50
8	Plant & Machinery	45,95,27,258.04	9,32,000.00	0.00	46,04,59,258.04	41,13,73,566.86	2,30,22,962.90	0.00	43,43,96,529.76	2,60,62,728.28	4,81,53,691.18
9	Scientific & Laboratory Equipment	2,46,65,175.00	4,78,77,923.00	0.00	7,25,43,098.00	45,98,242.24	58,03,447.84	0.00	1,04,01,690.08	6,21,41,407.92	2,00,66,932.76
10	Office Equipment	10,08,79,486.85	1,93,53,408.00	0.00	12,02,32,894.85	252,36,513.54	90,17,467.11	0.00	3,42,53,980.65	8,59,78,914.20	7,56,42,973.31
11	Audio Visual Equipment	0.00	4,99,715.00	0.00	4,99,715.00	0.00	37,478.63	0.00	37,478.83	4,62,236.38	0.00
12	Computers & Peripherals	2,47,40,775.00	3,09,17,132.00	0.00	5,56,57,907.00	2,47,40,775.00	1,11,31,581.40	0.00	3,58,72,356.40	1,97,85,550.60	0.00
13	Furniture Fixtures & Fittings	12,48,33,081.00	30,96,179.00	0.00	12,79,29,260.04	10,10,67,922.94	95,94,694.50	0.00	11,06,62,617.44	1,72,66,642.60	2,37,65,158.10
14	Vehicles	87,42,177.00	0.00	0.00	87,42,177.00	89,80,015.88	0.00	2,37,839.88	87,42,176.00	1.00	-2,37,838.88
15	Lib. Books & Scientific Journals	6,21,90,067.06	0.00	0.00	6,21,90,067.06	6,21,90,067.05	0.00	0.99	6,21,90,066.06	1.00	0.01
16	Small Value Assets	1,22,262.00	0.00	0.00	1,22,262.00	93,462.25	12,226.20	0.00	1,05,688.45	16,573.55	28,799.75
	Total (A)	3,86,14,01,154.53	1,39,70,55,607.00	0.00	5,25,84,56,781.53	1,73,71,07,926.17	14,35,71,350.14	2,37,840.87	1,88,04,41,435.43	3,37,80,15,326.11	2,12,42,43,93,228.34
	Capital Work in Progress (B)	1,40,93,57,418.00	0.00	1,26,42,60,263.00	14,50,97,155.00					14,50,97,155.00	1,40,93,57,418.00
									TOTAL	3,52,31,12,481.11	3,53,73,87,845.74
S. No	Intangible Assets	Opening Balance	Additions	Deductions	Closing Balance	Depreciation Opening Balance	Amortization for the year	Deductions/ Adjustment	Total Depreciation	31/03/2023	31/03/2022
1	Computer Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2	E-Journals	7,30,90,037.00	1,18,10,201.00	0.00	8,49,00,238.00	6,93,52,837.60	1,55,47,399.40	0.00	8,49,00,237.00	1.00	37,37,199.40
3	Patent	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL C	7,30,90,037.00	1,18,10,201.00	0.00	8,49,00,238.00	6,93,52,837.60	1,55,47,399.40	0.00	8,49,00,237.00	1.00	37,37,199.40
	Grand Total (A+B+C)	5,34,38,48,609.53	1,40,88,65,808.00		5,48,84,54,154.53	1,80,64,60,763.77	15,91,18,749.54	2,37,840.87	1,96,53,41,672.43	3,52,31,12,482.11	3,53,87,845.74

**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	31/03/2023	31/03/2022
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
	Total(A)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Capital Work in Progress (B)	0.00	0.00	0.00	0.00					0.00	0.00
									TOTAL	0.00	0.00
S. No.	Intangible Assets	Opening Balance	Additions	Deductions	Closing Balance	Depreciation Opening Balance	Amortization for the year	Deductions / Adjustment	Total Depreciation	31/03/2023	31/03/2022
-	Computer Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	E-Journals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	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	0.00
	Grand Total (A+B+C)										

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

SCHEDULE 4(C) (i) PATENTS AND COPYRIGHTS

Particulars	Opening Balance 01/04/2021	Additions	Gross	Amortization	Net Block 31/03/2023	Net Block 31/03/2022
A. Patents Granted						
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
Total	0.00	0.00	0.00	0.00	0.00	0.00
Particulars	Opening Balance 01/04/2021	Additions	Gross	Patents Granted/ rejected	Net Block 31/03/2023	Net Block 31/03/2022
B. Patents Pending in respect of Patents applied for						
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
Total	0.00	0.00	0.00	0.00	0.00	0.00
C. Grand Total (A+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	0.00	0.00
2 In State Government Securities	0.00	0.00
3 Other approved Securities	0.00	0.00
4 Shares	0.00	0.00
5 Debentures and Bonds	0.00	0.00
6 Term Deposits with Banks	5,48,04,000.00	4,74,33,160.00
7 Others (to be specified)	0.00	0.00
Total	5,48,04,000.00	4,74,33,160.00

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

Amount in Rupees

	Current Year	Previous Year
1 Endowment Fund Investment Pension FUND FDR	0.00 5,48,04,000.00	0.00 4,74,33,160.00
Total	5,48,04,000.00	0.00

SCHEDULE 6 : INVESTMENTS - OTHERS

Amount in Rupees

	Current Year	Previous Year
1 In Central Government Securities	0.00	0.00
2 In State Government Securities	0.00	0.00
3 Other approved Securities	0.00	0.00
4 Shares	0.00	0.00
5 Debentures and Bonds	0.00	0.00
6 Others (to be specified)	0.00	0.00
Total	0.00	0.00

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

NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2023

(Amount-Rs)

SCHEDULE 7 - CURRENT ASSETS	Current Year		Previous Year	
1. Stock:				
a) Stores and Spares	0.00		0.00	
b) loose Tools	0.00		0.00	
c) Publications	0.00		0.00	
d) laboratory chemicals consumables and glass ware	3,50,000.00		3,00,000.00	
e) Building Material	0.00		0.00	
f) Electrical Material	0.00			
g) Stationery	0.00			
h) Water supply material	0.00	3,50,000.00	0.00	3,00,000.00
2. Sundry Debtors:			0.00	
a) Debts Outstanding for a period exceeding six months	0.00		0.00	
b) Others	0.00	0.00	0.00	0.00
3. Cash and Bank Balances				
a) With Scheduled Banks:				
Cash In Hand	4,186.05		6,260.05	
Current Account/Grant in Transit	4,81,29,223.26		6,08,34,271.85	
Fixed Deposit	3,48,54,53,152.00		2,96,71,19,350.00	
Saving Account Main Account	8,67,05,721.08		21,40,25,047.69	
Saving Account Secrecy Fund	1,19,804.94		1,16,623.94	
b) With non-Scheduled Banks:				
In term deposit Accounts	0.00		0.00	
In Savings Accounts	0.00	3,62,04,12,087.33	0.00	3,24,21,01,553.53
4. Post Office- Savings Accounts				
TOTAL		3,62,07,62,087.33		3,24,24,01,553.53

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

Annexure-A	Amount
1. Grants from UGC A/c	0.00
2. University Receipt a/c	0.00
3. Scholarship A/c	22,91,909.00
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)	97.76
9. Sponsored Projects Fund A/c	22,46,287.94
10. Sponsored Fellowship A/c	
11. Endowment & Chair A/c (EMF)	1,847.67
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	27,63,825.71
18. Student Fund A/c	
19. Student Aid Fund A/c	
20. Plan Grants for specific schemes	
I. TSA Balance	7,94,01,753.00
II. Current Account (Cash in Hand)	4,81,29,223.26
III Term deposit with Scheme Banks with SBI	3,54,02,57,152.00
	3,67,50,92,096.34

**NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31/03/2023**

Amount (Rs.)

SCHEDULE 8- LOANS ADVANCES & DEPOSITS	Current Year		Previous Year	
1. Advances to employees: (Non-interest bearing)				
a) Salary	0.00		0.00	
b) Festival	0.00		0.00	
c) Medical Advance	0.00		0.00	
d) Other (to be specified)	38,23,906.51	38,23,906.51	36,48,996.70	36,48,996.70
2. Long Term Advances to employees: (Interest bearing)				
a) Vehicle loan	0.00		0.00	
b) Home loan	0.00		0.00	
c) Others (to be specified)	0.00	0.00	0.00	0.00
3. Advances and other amounts recoverable in cash or in kind or for value to be received:				
a) On Capital Account	8,84,86,073.24		11,06,61,213.24	
b) to Suppliers	0.00		0.00	
c) Others	0.00	8,84,86,073.24	0.00	11,06,61,213.24
4. Prepaid Expenses				
a) Insurance			0.00	
b) Other expenses		0.00	0.00	0.00
5. Deposits				
a) Telephone '	0.00		0.00	
b) Lease Rent	0.00		0.00	
c) Electricity	0.00		0.00	
d) AI GTE if applicable	0.00		0.00	
e) Others (to be specified)	0.00	0.00	0.00	0.00
6. Income Accrued:				

a) On Investments from Earmarked/ Endowment Funds	0.00		0.00	
b) On Investments-FDR	1,49,50,942.00		11,99,080.00	
c) On Loans and Advances	0.00		0.00	
d) Others (includes income due unrealized) Saving Bank	0.00	1,49,50,942.00	0.00	11,99,080.00
7. Other- Current assets receivable from UGC/sponsored projects				
a) Debit balances in Sponsored Projects	0.00		0.00	
b) Debit balances in Sponsored Fellowships & Scholarships	0.00		0.00	
c) Grants Receivable	0.00		0.00	
d) Other receivables from UGC	0.00	0.00	0.00	0.00
8. Claims Receivable				
Misc. Income	7200.00		59,732.00	
License Fees	1,06,875.00		2,15,063.00	
Garage Rent	5400.00		5,720.00	
Interest on loan & Advances from Staff	0.00		0.00	
Income receivable from Forest Department	0.00		0.00	
Rent from Guest House	0.00		0.00	
Rent from Shop	0.00	1,19,475.00	0.00	2,80,515.00
TOTAL		10,73,80,396.75		11,57,89,804.94

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 31/03/2023

SCHEDULE 9- ACADEMIC RECEIPT		(Amount-Rs)	
		Current Year	Previous Year
FEES FROM STUDENTS			
Academic			
1. Tuition fee		25,68,10,273.50	20,05,68,667.00
2. Admission fee		8,93,200.00	12,81,550.00
3. Enrolment fee		0.00	0.00
4. Library Admission fee		35,47,900.00	10,22,350.00
5. Laboratory fee		0.00	0.00
6. Art & Craft fee		0.00	0.00
7. Registration fee		16,700.00	0.00
8. Syllabus fee		0.00	0.00
	Total (A)	26,12,68,073.50	20,28,72,567.00
Examinations			
1. Admission test fee		0.00	0.00
2. Annual Examination fee		62,46,873.00	46,87,350.00
3. Mark sheet certificate fee		0.00	76,750.00
4. Entrance examination fee		0.00	0.00
5. Supplementary fees		55,509.00	3,41,650.00
6. Phd thesis submission		5,25,000.00	2,92,500.00
	Total (B)	68,27,382.00	53,98,250.00
Other Fees			
1. Identity card fee		3,29,925.00	3,09,025.00
2. Fine/ Miscellaneous fee		80,60,068.00	0.00
3. Medical fee		38,22,125.00	12,45,850.00
4. Transportation fee		0.00	0.00
5. Hostel fee		0.00	0.00
6. Grade Card Fee		14,03,301.00	6,87,927.00
7. Common Facility Fee		42,57,850.00	12,74,200.00

Total(C)	1,78,73,269.00	35,17,002.00
Sale of Publications		
1. Sale of Admission forms	0.00	0.00
2. Sale of syllabus and Question Paper etc.	0.00	0.00
3. Sale of prospectus including admission forms	0.00	0.00
Total (D)	0.00	0.00
Other Academic Receipts		
1. Registration fee for workshops programmes	19,600.00	0.00
2. Registration fees (Academic Staff College)	0.00	0.00
Total (E)	19,600.00	0.00
GRAND TOTAL (A+B+C+D+E)	28,59,88,324.50	21,17,87,819.00

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	20,32,47,830.06	0.00	0.00	0.00	0.00	20,32,47,830.06	16,71,39,186.56
Add: Receipts during the year	1,06,44,00,000.00	0.00	0.00	1,06,44,00,000.00	0.00	1,06,44,00,000.00	1,17,41,35,000.00
Total	1,26,76,47,830.06	0.00	0.00	1,26,76,47,830.06	0.00	1,26,76,47,830.06	1,34,12,74,186.56
Less: Refund to UGC	20,32,12,036.00	0.00	0.00	20,32,12,036.00	0.00	20,32,12,036.00	0.00
Balance	1,06,44,35,794.06	0.00	0.00	1,06,44,35,794.06	0.00	1,06,44,35,794.06	1,34,12,74,186.56
Less: Utilized for Capital expenditure (A)	9,92,09,412.00	0.00	0.00	9,92,09,412.00	0.00	9,92,09,412.00	17,81,87,906.00
Balance	96,52,26,382.06	0.00	0.00	96,52,26,382.06	0.00	96,52,26,382.06	1,16,30,86,280.56
Less: utilized for Revenue Expenditure (B)	88,57,88,835.00	0.00	0.00	88,57,88,835.00	0.00	88,57,88,835.00	95,98,38,450.50
Balance C/F (C)	7,94,37,547.06	0.00	0.00	7,94,37,547.06	0.00	7,94,37,547.06	20,32,47,830.06

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

SCHEDULE 11- INCOME FROM INVESTMENTS

Amount in Rupees

Particulars	Earmarked/ Endowment Fund		Other Investments	
	Current Year	Previous Year	Current Year	Previous Year
1. Interest a. On Government Securities b. Other Bonds/Debentures				
2. Interest on Term Deposits	0.00	0.00	5,82,78,856.00	2,09,32,956.00
3. Income accrued but not due on Term Deposits/Interest bearing advances to employees			0.00	
4. Interest on Savings Bank Accounts			0.00	
5. Others (On Project Grants)				
TOTAL	0.00	0.00	5,82,78,856.00	2,09,32,956.00
Transferred to Earmarked/Endowment Funds Balance				

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 31/03/2023

SCHEDULE 12- INTEREST EARNED

(Amount-Rs.)

Particulars	Current Year	Previous Year
1 On Savings Accounts With Schedule Bank	17,02,919.00	24,00,402.00
2 On Loans:		
a) Employees/Staff	0.00	0.00
b) Others	0.00	0.00
3. On Debtors and Other Receivables	0.00	0.00
<u>TOTAL</u>	17,02,919.00	24,00,402.00

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 31/03/2023

SCHEDULE 13-OTHER INCOME

(Amount-Rs)

	Current Year		Previous Year	
1. Hostel Room Rent	1,99,42,250.00		1,50,03,532.50	
2. License fee	20,60,167.40		24,78,390.00	
3. Hire Charges of Auditorium/Shop/Convention Centre etc.	10,58,828.20		11,43,742.00	
4. Electricity charges recovered	0.00		0.00	
5. Water charges recovered	0.00		0.00	
6. Rent from Guest House	12,00,500.00		4,20,900.00	
7. Rent from Garage	69,180.00		71,600.00	
Total	2,43,30,925.60	2,43,30,925.60	1,91,18,164.50	1,91,18,164.50
B. Sale of Institute's publications		0.00	0.00	0.00
C. Income from holding events				
1. Gross Receipts from annual function/ sports carnival		0.00	0.00	
Less: Direct expenditure incurred on the annual function/ sports carnival				
2. Gross Receipts from fetes		0.00	0.00	
Less: Direct expenditure incurred on the fetes				
3. Gross Receipts for educational tours		0.00	0.00	
Less: Direct expenditure incurred on the tours				
4. Others (to be specified and separately disclosed)		0.00	0.00	
Total	0.00	0.00	0.00	0.00

D. Others					
1. Income from consultancy		0.00		0.00	
2. RTI fees		1,714.00		7,890.00	
3. Income from Royalty		0.00		0.00	
4. Sale of application form (recruitment)		0.00		0.00	
5. Misc. receipts (Sale of tender form waste paper Grass tree etc.)		79,05,851.01		17,76,520.50	
6. Profit on Sale/disposal of Assets/Stock		0.00		0.00	
a) Owned assets		0.00		0.00	
b) Assets received free of cost		0.00		0.00	
7. Grants/Donations from Institutions Welfare Bodies and International Organizations		0.00		0.00	
8 Others (specify) Overhead Charges		9,21,519.00		4,12,328.00	
10. Charges for use of transport		0.00		0.00	
	Total	88,29,084.01	88,29,084.01	21,96,738.50	21,96,738.50
Grand Total (A+B+C+D)			3,31,60,009.61		2,13,14,903.00

SCHEDULE 14- PRIOR PERIOD INCOME

Amount In Rupees

Particulars	Current Years	Previous Year
1. Academic Receipts	0.00	0.00
2. Income from Investments	0.00	0.00
3. Interest earned	0.00	23,38,193.00
4. Other Income	0.00	0.00
Total	0.00	23,38,193.00

DEPUTY REGISTRAR (F&A)
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NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)
SCHEDULE FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31/03/2023

SCHEDULE 15- STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)

	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Salaries	0.00	46,12,27,664.00	46,12,27,664.00	0.00	49,03,37,447.00	49,03,37,447.00
b) Allowances and Bonus	0.00	0.00	0.00	0.00	0.00	0.00
c) Contribution to New Pension Fund	0.00	2,54,08,732.00	2,54,08,732.00	0.00	2,90,54,428.00	2,90,54,428.00
d) Contribution to Other Fund	0.00	0.00	0.00	0.00	0.00	0.00
e) Staff Welfare Expenses	0.00	3,01,979.00	3,01,979.00	0.00	3,27,106.50	3,27,106.50
D Retirement and Terminal Benefits	0.00	8,35,80,964.00	8,35,80,964.00	0.00	11,78,48,505.00	11,78,48,505.00
g) LTC facility	0.00	30,14,189.00	30,14,189.00	0.00	5,37,264.00	5,37,264.00
h) Medical facility	0.00	34,75,683.00	34,75,683.00	0.00	38,08,773.00	38,08,773.00
i) Children Education Allowance	0.00	9,85,500.00	9,85,500.00	0.00	44,41,500.00	44,41,500.00
j) Honorarium	0.00	0.00	0.00	0.00	0.00	0.00
l) Others (specify) Professional development allowance	0.00	48,65,841.00	48,65,841.00	0.00	0.00	0.00
Overtime Drivers	0.00	0.00	0.00	0.00	0.00	0.00
Leave Encashment	0.00	1,12,78,217.00	1,12,78,217.00	0.00	0.00	0.00
TOTAL	0.00	59,41,38,769.00	59,41,38,769.00	0.00	64,63,55,023.50	64,63,55,023.50

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

SCHEDULE 15 A- EMPLOYEES RETIREMENT AND TERMINAL BENEFITS

	Pension	Gratuity	Leave Encashment	Total
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				
Total (A+B+C+D+E)				

DEPUTY REGISTRAR (F&A)
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NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)
SCHEDULE FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31/03/2023

SCHEDULE 16- ACADEMIC EXPENSES						
	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Laboratory expenses	0.00	0.00	0.00	0.00	0.00	0.00
b) Field work/Participation in Conferences	0.00	0.00	0.00	0.00	0.00	0.00
c) Expenses on Seminars/Workshops	0.00	81,900.00	81,900.00	0.00	63,728.00	63,728.00
d) Payment to visiting faculty	0.00	13,45,878.00	13,45,878.00	0.00	0.00	0.00
e) Examination	0.00	2,81,517.00	2,81,517.00	0.00	7,75,612.00	7,75,612.00
f) Student Welfare expenses	0.00	3,01,983.00	3,01,983.00	0.00	2,55,062.00	2,55,062.00
g) Admission expenses --	0.00	0.00	0.00	0.00	0.00	0.00
h) Convocation expenses	0.00	16,05,913.00	16,05,913.00	0.00	7,96,800.00	7,96,800.00
i) Publications	0.00	0.00	0.00	0.00	0.00	0.00
j) Stipend/means-cum-merit scholarship	0.00	9,30,01,286.00	9,30,01,286.00	0.00	12,32,63,431.00	12,32,63,431.00
k) Subscription Expenses	0.00	0.00	0.00	0.00	0.00	0.00
l) Others (specify) academic expenses	0.00	1,09,63,281.00	1,09,63,281.00	0.00	49,000.00	49,000.00
m) Accreditation to AICTE Expenses	0.00	2,46,000.00	2,46,000.00	0.00	1,59,000.00	159,000.00
n) Departmental Operating costless closing stock of consumable material.	0.00	45,80,500.00	45,80,500.00	0.00	62,24,955.00	62,24,955.00
Total	0.00	11,24,08,258.00	11,24,08,258.00	0.00	13,15,87,588.00	13,15,87,588.00

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 31/03/2023
SCHEDULE 17- ADMINISTRATIVE AND GENERAL EXPENSES

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
A Infrastructure						
a) Electricity and power	0.00	1,52,99,461.00	1,52,99,461.00	0.00	1,23,24,972.00	
b) Water charges	0.00	64,04,879.00	64,04,879.00	0.00	49,20,438.00	
c) Insurance	0.00	0.00	0.00	0.00	0.00	
d) Rent Rates and Taxes (including property tax)	0.00	0.00	0.00	0.00	0.00	1,72,45,410.00
B Communication						
e) Postage and Stationery	0.00	0.00	0.00	0.00	1,00,000.00	
f) Telephone Fax and Internet Charges	0.00	1,07,358.00	1,07,358.00	0.00	1,26,223.00	2,26,223.00
C Others						
g) Printing and Stationery (consumption)	0.00	5,88,881.00	5,88,881.0	0.00	4,86,699.00	
h) Travelling and Conveyance Expenses	0.00	19,18,055.00	19,18,055.00	0.00	2,411,147.00	
i) Hospitality	0.00	0.00	0.00	0.00	0.00	
j) Auditors Remuneration	0.00	3,43,040.00	3,43,040.00	0.00	1,52,670.00	
k) Professional Charges	0.00	4,32,880.00	4,32,880.00	0.00	0.00	
l) Advertisement and Publicity	0.00	10,20,599.00	10,20,599.00	0.00	5,97,995.00	
m) Magazines & Journals	0.00	0.00	0.00	0.00	0.00	
n) Others Misc. Administrative expenses	0.00	65,98,162.00	65,98,162.00	0.00	32,58,752.00	
o) Security Charges	0.00	3,47,84,258.00	3,47,84,258.00	0.00	348,52,561.00	
p) Legal expenses	0.00	4,92,414.00	4,92,414.00	0.00	19,83,402.00	
r) Wages/ Outsourcing	0.00	87,56,602.00	87,56,602.00	0.00	5,92,65,063.00	
s) Salary Contract/ part time staff	0.00	8,51,71,466.00	8,51,71,466.00	0.00	1,84,27,597.00	12,14,35,886.00
Total	0.00	16,19,18,055.00	16,19,18,055.00	0.00		13,89,07,519.00

SCHEDULE 18-TRANSPORTATION EXPENSES

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
						0.00
1 Vehicles (owned by institution)						
a) Running expenses	0.00	5,72,770.00	5,72,770.00	0.00	5,93,110.00	5,93,110.00
b) Repairs & maintenance	0.00	1,36,206.00	1,36,206.00	0.00	1,37,891.00	1,37,891.00
c) Insurance expenses	0.00	65,187.00	65,187.00	0.00	2,11,665.00	2,11,665.00
2 Vehicles taken on rent/lease	0.00	0.00	0.00	0.00	0.00	0.00
a) Rent/lease expenses	0.00	0.00	0.00	0.00	0.00	0.00
3 Vehicle (Taxi) hiring expenses	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	7,74,163.00	7,74,163.00	0.00	9,42,666.00	9,42,666.00

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 31/03/2023

SCHEDULE 19- REPAIR & MAINTENANCE	Amount in Rupees					
	Particulars	Current Year			Previous Year	
Plan		Non-Plan	Total	Plan	Non-Plan	Total
a) Buildings	0.00	1,09,73,885.00	1,09,73,885.00	0.00	55,37,270.00	55,37,270.00
b) Furniture & Fixtures	0.00	0.00	0.00	0.00	0.00	0.00
c) Plant & Machinery	0.00	47,550.00	47,550.00	0.00	0.00	0.00
d) Office Equipment	0.00	21,22,898.00	21,22,898.00	0.00	20,65,093.00	20,65,093.00
e) Computers	0.00	3,42,200.00	3,42,200.00	0.00	2,900.00	2,900.00
f) Laboratory & Scientific equipment	0.00	0.00	0.00	0.00	4,57,159.00	4,57,159.00
g) Audio Visual equipment	0.00	0.00	0.00	0.00	0.00	0.00
h) Cleaning Material & Services	0.00	1,79,72,925.00	1,79,72,925.00	0.00	1,85,97,029.00	1,85,97,029.00
i) Book binding charges	0.00	0.00	0.00	0.00	0.00	0.00
j) Gardening	0.00	0.00	0.00	0.00	0.00	0.00
k) Estate Maintenance	0.00	0.00	0.00	0.00	0.00	0.00
l) Others Water supply	0.00	0.00	0.00	0.00	0.00	0.00
m) Road	0.00	0.00	0.00	0.00	0.00	0.00
n) Street light/Electric Installation	0.00	2,80,104.00	2,80,104.00	0.00	0.00	0.00
o) Oxidation Pond	0.00	0.00	0.00	0.00	0.00	0.00
p) Maintenance of Entrance Flayer In Admin Block	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	3,17,39,562.00	3,17,39,562.00	0.00	2,66,59,451.00	2,66,59,451.00

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

SCHEDULE 20- FINANCE COSTS

Particulars	Amount in Rupees					
	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Bank charges	0.00	0.00	0.00	0.00	767.00	767.00
b) Others (specify)	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	767.00	767.00

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 31/03/2023

SCHEDULE 21- OTHER EXPENSES

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
a) Provision for Bad and Doubtful Debts/Advances	0.00	0.00	0.00	0.00	0.00	0.00
b) Irrecoverable Balances Written- off	0.00	0.00	0.00	0.00	0.00	0.00
c) Grants/Subsidies to other institutions/organizations	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00

SCHEDULE 22: PRIOR PERIOD EXPENSES

Amount in Rupees

Particulars	Current Year			Previous Year		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1 Establishment expenses	0.00	0.00	0.00	0.00	0.00	0.00
2 Academic expenses	0.00	0.00	0.00	0.00	0.00	0.00
3 Administrative expenses	0.00	0.00	0.00	0.00	0.00	0.00
4 Transportation expenses	0.00	0.00	0.00	0.00	0.00	0.00
5 Repairs & Maintenance	0.00	0.00	0.00	0.00	0.00	0.00
6 Other expenses	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00

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

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 Saving 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/ 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	Building	2%
4	Roads & Bridges	2%
5	Tubes 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	Computer & 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 Re.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 application for that asset head.
- 3.7 Assets created out of Earmarked Funds and funds 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.
- 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.

4.1 PATENTS: No such expenditure incurred.

- 4.2 Electronics 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 computer 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 Computer & 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 31st 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: The Actual payments of Pension, Gratuity and Leave encashment are debited in the Accounts to the respective provisions. Other retirement benefits viz. Deposit Linked Insurance, Contribution to New Pension Scheme and Travel to Home town on retirement are accounted on accrual basis (actual payments plus outstanding bills at the end of the year).

Future Obligations in respect of Leave Encashment and Gratuity will be met from the Capital/Corpus Fund. However the Institute is in process to appoint Actuary for estimating the provisions on actuarial valuation 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****8.2 Pension Fund: Pension fund is maintained by the Institutions.****9. GOVERNMENT AND UGC GRANTS**

9.1 Government Grant are now on TSA of PFMS portal.

9.2 Total capital Grant is transferred to Income Fund and on TSA, any unutilized grant automatically lapsed in beginning next financial year.

9.3 Total revenue grant is transferred to Income and Expenditure account and on TSA any unutilized grant automatically lapsed in beginning of next 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 projects 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) of the Income Tax Act. 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 31.03.2023: Court Cases are filed** against the Institution; however contingent liability if any cannot be ascertained at present stage.

1.2 Letters of credit established by the Bank on behalf of the Institution and outstanding on 31.03.2023-Rs NIL

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 31.3.2023 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.**2.3** Fixed assets as set out in Schedule-4 include assets purchased out of funds of sponsored projects, held and used by the Institution, as in appropriate project contracts include stipulations that all such assets purchased out of projects funds will remain the property of the Institution.

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. 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.
6. Schedules 1 to 24 are annexed to and form an integral part of the Balance sheet at 31st March 2023 and the Income & Income & Expenditure account for the year ended on that date.

DEPUTY REGISTRAR (F&A)
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NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)
GENERAL PROVIDENT FUND
RECEIPTES AND PAYMENTS ACCOUNT
FOR THE YEAR 1/4/2022 TO 31/3/2023

PREVIOUS YEARS (Rs.)	RECEIPTS HEAD OF ACCOUNT	AMOUNT (Rs.)
49,34,23,605.57	CASH IN BANK	46,96,95,189.57
6,13,89,812.00	SUBSCRIPTION	5,49,76,835.00
17,41,550.00	REFUND OF ADVANCE	16,43,500.00
0.0	MIS RECEIPT	4,717.00
3,25,80,166.00	BANK INTEREST	2,88,16,332.42
<u>58,91,35,133.57</u>		<u>55,51,36,573.99</u>
	PAYMENT	
6,55,000.00	TEM. ADVANCE TO STAFF	25,20,000.00
11,87,84,944.00	WITHDRAWAL	6,49,17,248.00
0.0	BANK CHARGES	0.00
<u>46,96,95,189.57</u>	GENERAL ACCOUNT OF INSTITUTE	4,39,000.00
		<u>48,72,60,325.99</u>
<u>58,91,35,133.57</u>	CLOSING BANK BALANCE	<u>55,51,36,573.99</u>

DEPUTY REGISTRAR (F&A)
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NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)
GENERAL PROVIDENT FUND
INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR 1/4/2022 TO 31/3/2023

PREVIOUS YEARS (Rs.)	EXPENDITURE HEAD OF ACCOUNT	AMOUNT (Rs.)
3,25,19,253.00	Interest credited to the	3,24,61,978.00
0.00	Subscribers accounts	0.00
	Bank Charges	
-52,19,984.00	Excess of + Income/-loss	-1,18,16,866.58
<u>2,72,99,269.00</u>		<u>2,06,45,111.42</u>
	INCOME	
	Income from Investment	
3,25,80,166.00	Bank Interest received	2,88,16,332.42
1,47,75,501.00	Add: Interest due for 2022-2023	66,04,280.00
<u>2,00,56,398.00</u>	Less: Due of year 2021-2022	1,47,75,501.00
2,72,99,269.00		2,06,45,111.42
<u>2,72,99,269.00</u>		<u>2,06,45,111.42</u>

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NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR (H.P)
GENERAL PROVIDENT FUND
BALANCE SHEET
AS ON 31/3/2023

PREVIOUS YEARS (Rs.)	HEAD OF ACCOUNT	AMOUNT (Rs.)	
	LIABILITIES		
	Subscription Account (PF Contribution)		
68,57,26,366.55	Upto 2022	74,71,16,178.55	
6,13,89,812.00	DURING THE YEAR	5,49,76,835.00	
74,71,16,178.55		80,20,93,013.55	
	Add: Interest		
29,55,97,807.45	Upot 2022	32,81,17,060.45	
3,25,19,253.00	During the year	3,24,61,978.00	
32,81,17,060.45		36,05,79,038.45	
	Less : Withdrawal		
47,42,36,859.00	upto 2022	59,30,21,803.00	
11,87,84,944.00	During the year	6,49,17,248.00	
59,30,21,803.00		65,79,39,051.00	50,47,33,001.00
48,22,11,436.00			
	Income & Expenditure Account		
88,66,461.57	upto 2022	36,46,477.57	
-52,19,984.00	During the year	-1,18,16,866.58	-81,70,389.01
36,46,477.57			
3,69,442.00	Wrong credit in GPF Account Op Bal	3,69,442.00	3,74,159.00
	Add: CY	4,717.00	
48,62,27,355.57			49,69,36,770.99
	ASSETS		
	Temporary Advance		
4,46,81,048.00	upto 2022	4,53,36,048.00	
6,55,000.00	During the year	25,20,000.00	
4,53,36,048.00		4,78,56,048.00	
	Less : Refund		
4,18,37,833.00	upto 2022	4,35,79,383.00	
17,41,550.00	During the year	16,43,500.00	
4,35,79,383.00		4,52,22,883.00	26,33,165.00
17,56,665.00			
	Bank Interest Accrued		
2,00,56,398.00	Opening Balance	1,47,75,501.00	
1,47,75,501.00	Add : (C-Year accrued)	66,04,280.00	
3,48,31,899.00		2,13,79,781.00	
2,00,56,398.00	Less : Interest received on Maturity	1,47,75,501.00	66,04,280.00
1,47,75,501.00	RECOVERABLE FROM GENERAL ACCOUNT		4,39,000.00
46,96,95,189.57			48,72,60,325.99
48,62,27,355.57	Closing Balance Bank		48,72,60,325.99
			49,69,36,770.99

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ANNEXURE IV**ANNUAL REPORT**

Group	Representation of SCs/STs/OBCs/EWS (As on 1 st January)					Number of Teacher appointed during the preceding year				
	Total number of Teacher	SCs	STs	OBCs	EWS	Total	SCs	STs	OBCs	EWS
1	2	3	4	5	6	7	8	9	10	11
Professor HAG	04	0	0	0	0	0	0	0	0	0
Professor GP 10500/-	14	0	0	0	0	0	0	0	0	0
Associate Professor	41	01	01	0	0	0	0	0	0	0
Assistant Professor GP 8000/-	27	04	0	02	0	0	0	0	0	0
Assistant Professor GP 7000/-	10	03	0	01	0	0	0	0	0	0
Assistant Professor (Contract) GP 6000/-	48	08	04	19	0	0	0	0	0	0
Total	144	16	04	22	0	0	0	0	0	0