Mandatory Disclosure

First AICTE File No.	:	**F.NO. 06/05/UT/ENGG/2008-09/002, Dated : May 07,2008**
Current AICTE File No.	:	**F.No. Northern/1-36450256028/2023/EOA**
Date & Period of last approval	:	**02-06-2023 (for 2023-2024)**

1. **Name of the Institution** : Shivalik College of Engineering
   Address of the Institution : Sihiniwala,Shimla Road, P.O.Sherpur, Dehra Dun

   City & Pin Code : Dehra Dun
   State / UT : Uttarakhand
   Phone number with STD code : 0135-2693401
   Mobile No. : +91-9997155111
   E-Mail ID : info@sce.org.in

2. **Name and address of the Society** : Rijan Educational Society
   Address of the Society : Shishambada, Sihiniwala,Shimla Road, P.O. Sherpur,Dehradun, Uttarakhand.

   Phone number with STD code : 0135-2693401
   Mobile No. : +91-9997997584
   E-Mail ID : vc@sce.org.in

3. **Name of Principal / Director** : Dr. Prahalad Singh
   Exact Designation : Director
   Phone number with STD code : 0135-2693401 (O)
   FAX number with STD code : 0135-2693425
   Mobile No. : +91-7900800057
   Email : director@sce.org.in
   Highest Degree : Ph.D
   Field of specialization : Mechanical Engineering

4. **Name of the affiliating University** : VMSB Uttarakhand Technological University **(For B.Tech course)**
   Address : Suddhowala, Dehradun, Uttarakhand.
   Website : www.uktech.ac.in
   Latest affiliation period : 2022-2023

   Name of the affiliating Board : Uttarakhand Board of Technical Education **(For Diploma Course)**
   Address : Sunhera Road, Roorkee, Haridwar,Uttarakhand.
   Website : www.ubter.in
   Latest affiliation period : 2023-2024

5. **Governance**
   Governing Board Members
   ✓ List of Governing Body members:

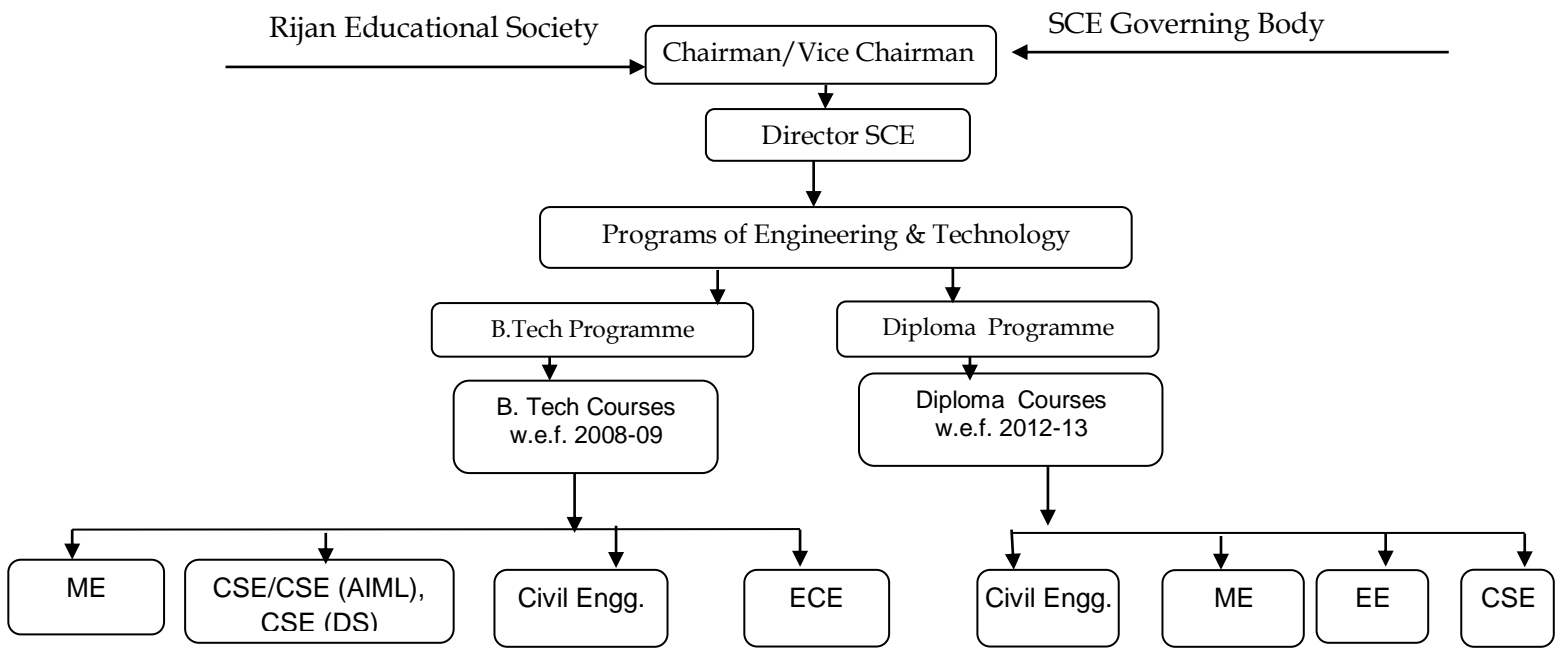|		
▪ Chairman	Prof. Akshay Dewedi	Professor IIT, Roorkee
▪ Vice Chairman	Mr. Ajay Kumar	Business Person
▪ Member	Ms. Navita Sinha	Business

	Member	Mr.Harsh Sinha	Business
	Member	Ms. Babita Kumari	Business
	Member	Ms. Malti Kumari	Business
	Member	Prof.(Dr.) Sunil Rai	Vice Chancellor (UPES)
	Member	Prof.(Dr.) Ramkaran Singh	Vice Chancellor (ICFAI University)
	Member	Prof.(Dr.) S.P.Srivastava	Professor (Retd.), IIT, Roorkee

- Member   Prof.(Dr.) Raj Agnihotri   Dean Fellow in Marketing and Director of Professional Sales Forum (Lowa State University)
- Member   Prof(Dr.) Raksha Sharma   Assistant Professor, IIT Roorkee
- Member   Prof (Dr.) Millie Pant   Professor, IIT Roorkee.
- AICTE Regional Officer / Northern Region   -   Ex. Officio
- AICTE Nominee   -   Nomination Awaited
- Dir. Technical Education (Ex Officio) Uttarakhand State   -   Ex. Officio
- Nominee of Uttarakhand Technical University   -   Dr. Vishal Ramola Professor, UTU, Dehradun
- Faculty Member   -   (Prof.)Dr. Kuldeep Panwar
- Director of Institute (Member Secretary)   -   Dr. Prahalad Singh

Frequency of meetings & date of last meeting:

Academic Advisory Body   **:**

S.No.	Name of Person	Designation	Position
1.	Prof.(Dr.) Prahalad Singh	Director	Chairperson
2.	Prof.(Dr.) U.C.Gupta	Professor/Head Applied Science	Member
3.	Prof.(Dr.) Kuldeep Panwar	Associate Professor/ Dean IQAC	Member
4.	Mr. Sartaj Khan	Assistant Professor/HOD CSE	Member
5.	Mr. Ashish Kumar Gupta	Assistant Professor/HOD ECE	Member
6.	Ms. Ankita Sawai	Assistant Professor/HOD Civil Engg.	Member
7.	Mr.Kuldeep Godiyal	Assistant Professor/HOD EEE.	Member
8.	Mr. Ajay Kumar Verma	Assistant Professor/HOD ME.	Member

Frequency of meetings & date of last meeting   :   Quarterly, Dated 23-10-2023

Organizational Chart and process   :

Rijan Educational Society   SCE Governing Body

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                    ┌─────────────────────────┐
                    │  Chairman/Vice Chairman │
                    └─────────────────────────┘
                              │
                    ┌──────────────────┐
                    │   Director SCE    │
                    └──────────────────┘
                              │
          ┌──────────────────────────────────────────┐
          │  Programs of Engineering & Technology     │
          └──────────────────────────────────────────┘
                    │                        │
       ┌─────────────────────┐      ┌─────────────────────┐
       │  B.Tech Programme   │      │  Diploma Programme  │
       └─────────────────────┘      └─────────────────────┘
                    │                        │
       ┌─────────────────────┐      ┌─────────────────────┐
       │  B. Tech Courses    │      │  Diploma Courses    │
       │   w.e.f. 2008-09    │      │   w.e.f. 2012-13    │
       └─────────────────────┘      └─────────────────────┘
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| ME | CSE/CSE (AIML), CSE (DS) | Civil Engg. | ECE | Civil Engg. | ME | EE | CSE |

(*) Professor / Asstt. Professor / Sr. Lecturer / Lecturer & Other Supporting / Technical / Administrative Staff Members

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Nature and Extent of involvement of Faculty and students in academic affairs/improvements.---?

Mechanisms/Norms and Procedure for democratic/good Governance.-   ?

Student feedback mechanism on Institutional Governance/faculty performance   :   Yes

Grievance redressal mechanism
for faculty, staff and students   **:** Yes, We have constituted a Grievance Redressal Cell as per AICTE directives, headed by Professor Surmadhur Pant, Dean Student Welfare.

Establishment of Anti Ragging Committee : Yes, We have constitute Anti Ragging Committee and Anti Ragging Squad as per AICTE directives, headed by The Director.

Establishment of Online Grievance Redressal
       Mechanism   : Yes, We have developed online Grievance Redressal Mechanism through College website/ERP of the College. www.shivalik.edu.in

Establishment of Grievance Redressal Committee : Yes, College has established Grievance
in the Institution and Appointment of   Redressal Committee in the Institution and
OMBUDSMAN by the University.   University has appointed ombudsman in the University.

Establishment of Internal Complaint Committee (ICC) : Yes, We have constitute a committee for hearing Internal Complaint as per AICTE directives under the supervision by The Director.

Establishment of Committee for SC/ST	: Yes, We have constitute of Committee for SC/ST and OBC as per AICTE norms and guidelines, headed By Mr. Nikhil Kannojiya, Assistant Professor / Department of Mechanical Engineering www.shivalikcollege.edu.in/.........
Internal Quality Assurance Cell	: Yes, We have constitute Internal Quality Assurance Cell as per AICTE directives, headed by The Director. https://www.shivalikcollege.edu.in/iqac-sce

6. Programmes : Engineering & Technology

(i) **Name of Programme approved by AICTE**
  (A) B. Tech with four Braches: 1. CSE   2.ECE   3.ME   4.CE   5. CSE AIML 6. CSE DS
  (B) Diploma with four branches   1. CE   2. ME   3.EE   4. CSE
(ii) Name of Programme Accredited by NBA :   Nil
(iii) Status of Accreditation of the courses: applied 2017 but rejected, and applied 2024.
(iv) Total number of courses; Nil
(v) Institute Accredeted by NAAC with grade A+

(vi) Year wise Sanctioned Intake:
A) Four Years Under Graduate B. Tech Degree Seats

Name of Course		No of Seats	Duration
• Computer Science & Engineering	-	180	4 Years
• Computer Science & Engineering (DS)	-	30	
• Computer Science & Engineering (AIML)	-	60	
• Civil Engineering	-	30	
• Electronics & Communication Engineering	-	30	
• Mechanical Engineering	-	30	

(B) Three Years Diploma course 300 Seats

• Civil Engineering	–	60
• Mechanical Engineering	-	60
• Electrical Engineering	-	60
• Computer Science & Engineering	-	90

(vii) FEE

Details of Fee, As approved by State Fee Committee the	: a. Rs. 62000/- per year Tuition Fee fixed by State Fee Fixation Committee for B.Tech Rs. 35000/- per year Tuition Fee for Diploma courses.
Time Schedule for payment of Fee for the entire Programme	: Semester wise fee payment System : For 1st Installment (July-December)- 15th July : For 2nd Installment (January-June)- 15th January
Fee Waivers:	
Estimated Cost of Boarding and Lodging in	: College Campus Hostel Boarding and Lodging Charges :-**College HosteL** Rs. 85000/- per annum (for Girls Hostel) Rs. 85000/-per annum (for Boys Hostel)

7. Details of working faculty:

Branch wise list of faculty members:

S.No.	Name of Faculty.	Designation	Educational Qualification
1	Prof.(Dr.) Prahlad Singh	Director	Ph.D, M.Tech, B.Tech
MECHANICAL ENGINEERING			
1.	Dr. Kuleep Panwar	Professor	Ph.D.,M.Tech,B.Tech
2.	Mr. Ajay Kumar Verma	Assistant Professor	M.Tech, B.Tech
3.	Mr. Ayushman Srivastava	Assistant Professor	M.Tech, B.Tech
4.	Mr. Kuldeep Rawat	Assistant Professor	M.Tech, B.Tech
5.	Mr. Jagdeep Singh	Assistant Professor	M.Tech, B.Tech
6.	Dr. Abhishek Jha	Assistant Professor	Ph.D, M.Tech, B.Tech
7.	Dr. Sono Bhardwaj	Assistant Professor	Ph.D, M.Tech, B.Tech
8.	Mr.Subhan Ali	Assistant Professor	M.Tech, B.Tech
9.	Mr. Jay Prakash Misharwan	Assistant Professor	M.Tech, B.Tech
10	Dr. Hemant Nautiyal	Assistant Professor	Ph.D, M.Tech, B.Tech
11.	Mr. Vipin Uniyal	Assistant Professor	M.Tech, B.Tech
12.	Mr. Nikhil Kanojia	Assistant Professor	M.Tech, B.Tech
13.	Mr. Ashish Kesharwani	Assistant Professor (POP)	M.Tech, B.Tech
14.	Mr. Ayush Panwar	Lecturer	B.Tech
15.	Mr. Satish Kumar	Lecturer	B.Tech
16.	Mr. Gurnam Singh	Lecturer	B.Tech
17.	Mr. Naseem Ahmad	Lecturer	B.Tech
CIVIL ENGINEERING			
1.	Ms. Ankita Sawai	Assistant Professor	M.Tech, B.Tech
2.	Mr. Bhuwan Chandra Bhatt	Assistant Professor	M.Tech, B.Tech
3.	Mr. Mohammad Shuaib Ibrahim	Assistant Professor	M.Tech, B.Tech.
4.	Mr. Vimal Mohan Uniyal	Assistant Professor	M.Tech, B.Tech
5.	Mr. Archit Priyadarshi	Assistant Professor	M.Tech, B.Tech.
6.	Ms. Monika Chauhan	Assistant Professor	M.Tech, B.Tech.
7.	Mr. Sudhir Singh Rana	Assistant Professor	M.Tech, B.Tech
8.	Mr. Pankaj Kirthwan	Assistant	M.Tech, B.Tech

		Professor	
9.	Mr. Pankaj Goswami	Assistant Professor	M.Tech, B.Tech
10.	Mr. Bhanu Prakash Tiwari	Lecturer	B.Tech
11	Mr. Anurag Rawat	Lecturer	B.Tech
12.	Mr. Pankaj Gariya	Lecturer	B.Tech
13	Mr. Ankit Chauhan	Lecturer	B.Tech
B.TECH COMPUTER SCIENCE AND ENGINEERING (CSE/DS/AIML)			
1.	Dr. Ekta Upadhyay	Professor	Ph.D., M.Tech.
2.	Dr. Rajiv Kumar	Professor	Ph.D.M.Tech, MCA
3.	Dr. Umesh Chandra Gupta	Professor	Ph.D., M.Sc. B.Sc.
4.	Dr. Santosh Kumar Joshi	Professor	Ph.D.,M.Sc.,B.Sc.
5.	Dr. Vijay Laxmi Sajwan	Associate Professor	Ph.D, M.Tech, B.Tech
6.	Mr. Sartaj Khan	Assistant Professor	M.Tech, B.Tech
7.	Mr. Himanshu Suyal	Assistant Professor	M.Tech, B.Tech
8.	Mr. Pradeep Chauhan	Assistant Professor	M.Tech, B.Tech
9.	Ms. Anvita Bhandhari	Assistant Professor	M.Tech, B.Tech
10.	Mr. Shiv Singh	Assistant Professor	M.Tech, B.Tech
11.	Mr. Mithul Rao	Assistant Professor	M.Tech, B.Tech
12.	Ms. Priyanka Garg	Assistant Professor	M.Tech, B.Tech
13.	Dr. Uruj Jaleel	Associate Professor	Ph.D, M.Tech, B.Tech
14.	Ms. Diksha Dhiman	Assistant Professor	M.Tech, B.Tech
15.	Mr. Sandeep Sharma	Assistant Professor	M.Tech, B.Tech
16.	Ms. Pooja Tamta	Assistant Professor	M.Tech, B.Tech
17.	Mr. Sanjay Kumar Tudu	Assistant Professor	M.Tech, B.Tech
18.	Mr. Mukesh Pandey	Assistant Professor	M.Tech, B.Tech
19.	Mr. Dinesh Bafila	Assistant Professor	M.Tech, B.Tech
20.	Mr. Harshit Sharma	Assistant Professor	M.Tech, B.Tech
21.	Mr. Abhishek Bhatt	Assistant Professor	M.Tech, B.Tech
22.	Mr. Govind Kumar	Assistant	M.Sc.B.Sc.NET Qualified

		Professor	
23.	Ms. Prerna Bhargava	Assistant Professor	M.Sc., B.Sc.
24.	Mr. Ankur Sharma	Assistant Professor	M.Tech, B.Tech
25.	Mr. Deepak Singh Rawat	Assistant Professor	M.Sc., B.Ed. NET
26.	Dr. Nisha Mehra	Assistant Professor	Ph.D.,M.Sc.,B.Sc.
27.	Mr. Ronit Kumar	Assistant Professor	M.Tech, B.Tech
28.	Ms. Pallavi Gupta	Assistant Professor	M.A., B.Ed
29.	Mr. Shekhar Joshi	Lecturer	B.Tech
30.	Mr. Manoj Prajapati	Lecturer	B.Tech
31.	Ms. Meenu Rana	Lecturer	B.Tech
32.	Mr. Adharveer Singh	Lecturer	B.Tech
33.	Mr. Ram Bansal	Lecturer	B.Tech
34.	Mr. Prashant Jindal	Lecturer	B.Tech
1.	Ms. Akanksha Pundir	Assistant Professor	M.Tech, B.Tech
2.	Dr. HemendraTripathi	Associate Professor	Ph.D.,M.Sc.,B.Sc.
3.	Mr. Anurag Nagar	Assistant Professor	PGDBA,M.Com.,.B.Com
4.	Dr. Pawan Joshi	Assistant Professor	Ph.D.,M.Sc.,B.Sc.
5.	Ms. Pooja Pal	Assistant Professor	M.Tech, B.Tech
6.	Mr. Umesh Chanda	Assistant Professor	M.Tech, B.Tech
7.	Mr. Akshay Rawat	Assistant Professor	M.Tech, B.Tech
1.	Ms.Nisha Rana	Assistant Professor	M.Tech, B.Tech
2.	Dr. Rachna Sharma	Associate Professor	Ph.D., M.A.
3.	Ms.Akanksha Joshi	Assistant Professor	M.Tech, B.Tech
4.	Mr. Abhishek Sinha	Assistant Professor	M.Tech, B.Tech
5.	Ms. Anvita Bhandhari	Assistant Professor	M.Tech, B.Tech
6.	Mr. Gaurav Juyal	Assistant Professor	M.Tech, B.Tech
ELECTRONICS & COMMUNICATION ENGINEERING/ VLSI/ACT			
1.	Dr.S.P.Srivastava	Emeritus Professor	Ph.D. M.Tech
2.	Ms. Shabnam Ara	Asst. Professor	M.Tech,B.Tech
3.	Ms. Arpita Gupta	Asst. Professor	M.Tech,B.Tech
4.	Mr. Vipin Chandra Bhatt	Asst. Professor	M.Tech,B.Tech

5.	Mr. Kuldeep Godiyal	Asst. Professor	M.Tech,B.Tech
6.	Mr. Rajkumar Singh	Asst. Professor	M.Tech, Ph.D(P)
7.	Mr. Mukul Kumar	Asst. Professor	M.Tech,B.Tech
8.	Mr.Ashish Kumar Gupta	Asst. Professor	M.Tech,B.Tech
9.	Mr. Rajat Jain	Asst. Professor(POP)	M.Tech,B.Tech
10.	Mr. Sunil Sharma	Asst. Professor	M.Tech,B.Tech
11.	Ms. Priyamvada	Asst. Professor	M.Tech,B.Tech
12.	Mr. Amit Kumar	Asst. Professor	M.Tech,B.Tech
13.	Mr. Vipul Sharma	Asst. Professor	M.Tech,B.Tech
14.	Mr. Arvind Singh Bisht	Asst. Professor	M.Tech,B.Tech
15.	Dr. Saba Sabir	Associate Professor	Ph.D., M.Sc.B.Sc.
ELECTRICAL ENGINEERING			
1.	Ms. Ankita Barthwal	Lecturer	B.Tech
2.	Mr. Vikas Mahar	Lecturer	B.Tech
3.	Ms. Labiba	Lecturer	B.Tech
4.	Mr. Vinay Kumar Verma	Lecturer	B.Tech
1.	Prof. Atul Razdan	Professor	Ph.D, MBA, BBA
2.	Dr. Amrita Singh	Asst. Professor	Ph.D, MBA, BBA
3.	Dr. Bhawana Raghav	Asst. Professor	Ph.D, M.Com, B.Com
1.	Mr. Aniruddha Kulkarni	Asst. Professor	PGDM, MA, B.Com
2.	Mrs. Vaishali Prakash	Asst. Professor	MBA, BBA
3.	Mr. Kishan Kumar Mishra	Asst. Professor	MBA, BBA
4.	Mr. Manish Lohani	Asst. Professor	MBA, BBA
5.	Ms. Ankita Butola	Asst. Professor	MBA, BBA
6.	Ms. Swati Goyal	Asst. Professor	MBA, BBA
1.	Mr. Gaurav Dheer	Asst. Professor	MCA, BCA
2.	Mr. Gaurav Lakhera	Asst. Professor	MCA, BCA
3.	Mr. Manish Bhatt	Asst. Professor	MCA, B.Sc
4.	Ms. Ayesha Sharma	Asst. Professor	MCA, B.Sc
5.	Mr. Garima Bhandari	Asst. Professor	MCA, BCA
6.	Mr. Ashish Belwal	Asst. Professor	MCA, BCA

Permanent Faculty Student Ratio (Degree)   **1:20**
                                      (Diploma)   **1:25**

8. Profile of the Director

Name	Dr. Prahalad Singh			
Date of Birth	01-01-1972			
Unique ID	1-10776341471			
Educational Qualification	Ph.D., M.Tech			
Work Experience	Teaching- 25	Research-	Industry - 01	Others-
Area of Specialization				

	Industrial Tribology			
Course taught at Diploma/PG/UG/Others Level.	**UG: SOM,MV,Machine Design, Management** **PG: Industrial Tribology, Tribology in Manufacturing.**			
Research Guidance	No. of Paper Published	National Journals	International Journals	Conference
	Master	04	Ph.D	0
Project Carried Out	01		Patents	
Technology Transfer :				
Research Publications	12		**No. of Books published with details**- 02 1.A first Course in the Finite Element Method- Published -2010 ISBN-10:0-495-66791-9 2.Basics of Mechanical Engineering Published -2003.	

9. Fee

No. of Fee waivers granted with amount and name of students   :

Number of scholarship offered by the Institution, duration and amount   :

10. Admission

Approved Intake in the Academic Year 2023-24;

B) Four Years Under Graduate B. Tech Degree 360 Seats

- Computer Science & Engineering   -   180
- Computer Science & Engineering (DS)   -   30
- Computer Science & Engineering (AIML)   -   60
- Civil Engineering   -   30
- Electronics & Communication Engineering   -   30
- Mechanical Engineering   -   30

(B) Three Years Diploma course 270 Seats

- Civil Engineering   –   60
- Mechanical Engineering   -   60
- Electrical Engineering   -   60
- Computer Science & Engineering   -   90

Number of students admitted under various categories each year in the last three years :

	Courses	2023-24						2022-23						2021-22					
B. TECH.		Sanctioned intake	Actual Admissions					Sanctioned intake	Actual admissions					Sanctioned intake	Actual admissions				
			Gen	SC	ST	OBC	Total		Gen	SC	ST	OBC	Total		Gen	SC	ST	OBC	Total
UG(FT)	CSE	180	144	4	2	40	190	150	114	3	1	32	150	120	90	4	2	26	122
	CE	30	4	0	0	0	4	30	8	1	1	0	10	60	9	0	1	1	11
	ECE	30	24	1	0	9	34	30	7	0	0	2	9	60	0	1	0	1	2
	ME	30	14	1	2	7	24	30	7	1	0	2	10	60	1	0	0	1	2
	EEE	00	0	0	0	0	0	00	0	0	0	0	0	00	0	0	0	0	0
	CSE (DS)	30	25	0	1	7	33	30	27	0	0	3	30	00	0	0	0	0	0
	CSE (AIML)	60	48	2	0	10	60	30	20	0	1	5	26	00	0	0	0	0	0
	TOTAL	360						300						300	100	5	3	29	137

	Branch	Intake						Intake						Intake					
Diploma	CE	60	8	1	3	3	15	90	15	2	3	5	25	120	6	2	4	7	19
	ME	60	8	0	0	5	13	60	4	0	1	1	6	60	4	0	0	1	5
	EE	60	0	0	0	0	0	60	9	2	0	4	15	60	7	1	2	1	11
	CSE	90	41	4	0	10	55	60	28	3	1	6	38	60	7	2	0	1	10
	Total	270						270						300	24	5	6	10	45

Number of applications received during last year for admission under Management Quota and number admitted :

11. Admission Procedure:

 B.Tech Courses: VMSB Uttarakhand Technological University the affiliating university of the colleges is conduct online counseling in a year on the basis JEE-2023 result. Please visit University website: https://uktech.ac.in/under-graduate-3/.

 Diploma Courses: Uttarakhand Board of Technical Education, Roorkee has conduct JEEP-2023 entrance exam for all the Diploma courses. After conducting the Entrance Exam online counseling in a year on the basis of JEEP-2023 result. Please visit Board website: http://www.ubtejeep.in/

12. Criteria and Weightages for Admission:

 Students are admitted in the college in Uttarakhand on the basis of their scores in the JEE (Main). Uttarakhand does not have its own state level engineering entrance exam.

 Admissions take place through an online counseling procedure that is conducted every year by the VMSB Uttarakhand Technological University, Dehradun. All seats are allotted through this online counseling procedure.

 The VMSB Uttarakhand Technological University, Dehradun conducts this online counseling procedure in 2 rounds. The first round is for all the seats that are available for admission in all B.Tech courses. If seats are left vacant after the 1st round, another round of counseling is conducted. After 1st and 2nd rounds of the counseling if seats are left vacant than 3rd round of counselling is conducted by the Institute at Institute level.

 As per the Government of Uttarakhand rules Admission criteria, weightage and allocation of seats to all Technical colleges in the State of Uttarakhand are as follows criteria :-

All India Category Seats-35%
Uttarakhand State Seats- 50%
Management Seats-15%

Branch/ Course	Approved Intake	All India Category 35%			State Category 50%				Management Seats (15%)				TFW *	KM *	Total
		Open	SC	ST	Open (63%)	SC (19%)	ST (4%)	OBC (14%)	Open (63%)	SC (19%)	ST (4%)	OBC (14%)	5%		
CE	30	17	3	1	19	06	01	04	6	2	0	1	3	2	65
CSE	180	34	6	2	38	12	02	08	12	4	0	2	6	4	130
ECE	30	17	3	1	19	06	01	04	6	2	0	1	3	2	65
ME	30	17	3	1	19	06	01	04	6	2	0	1	3	2	65
CSE DS	30														
CSE AIML	60														
	360	85	15	05	95	30	05	20	30	10	0	5	15	10	325

*-**TFW**- Tuition Fee waiver **KM**- Kashmiri migrants.

For B.Tech Courses:- Applicant will be eligible for admission if he has passed his Class 12th examinations from a school/board in Uttarakhand and if he is a domicile of Uttarkhand or are of Uttarakhand origin. This will make him eligible for seats under the State Quota.**To be eligible for admission (If do not belong to the state of Uttarakhand), he should have passed his/her Class 12th from a school in Uttarakhand. This will allow her/him to be eligible for seats under the State Domicile Category as well for seats under the 'All India Quota'.Candidates who are not of Uttarakhand origin and have passed their Class 12th examinations from a school/board outside of Uttarakhand are eligible for admission only for the seats that are reserved under the 'All India Quota'.All candidates who seek admission into the B.E/B.Tech in the colleges of Uttarakhand, need to have passed their Class 12th or equivalent examinations with Physics, Math and either one of Chemistry/Biotechnology/Biology/ a Technical Vocational Subject as their main subjects with a minimum aggregate percentage of 45% (40% for SC/ST candidates) As per AICTE rule. Additionally, candidate will only be eligible for admission if they have appeared for the JEE (Main) examination in the same year as the one they're seeking admission in.What is the counseling procedure? To apply for the online counseling procedure, the first thing you would need to do is make the payment for the counseling fee.Visit the Uttarakhand Counseling website (**_http://ukcounseling.nic.in),_** enter you JEE (Main) Roll number and E – mail ID and download and print the Bank Challan form. candidate will need to deposit the counseling fee payment in cash along with this Bank Challan form at any branch of the State Bank of India (SBI).Once candidate have made the fee payment, candidate would need to register themself on the above mentioned website by filling in necessary details and information about themself. Candidate will receive a confirmation message once he/she has been successfully registered on the website. Take a print out of this message for future reference.Once the first round of the online counseling starts, he/she will be able to log on to the website and choose the colleges his/her wish to join. He/she will only be able to choose from the colleges/courses he/she is eligible for, based on her/him reservation category and other details. They will be allowed to change and modify their choices till a certain date.Once the allotment results are out, log on to the website and see whether he/she has been allotted a seat or not. In case he/she has been allotted a seat, he/she will see a 'Provisional Allotment Letter' from the institute/college online.If he/she is satisfied with the seat he/she has been allotted and does not wish to participate in the 2nd round of counseling, print this allotment letter and take it along with copies and originals of all their important documents (mentioned in Provisional Allotment Letter) and report to the institute/college in person. He/she will also need to submit the necessary admission fee to confirm their admission.If their documents are found to be genuine, then their admission will be confirmed online and they will be provided with an 'Admission Letter'. They will have to submit the fee deposit to confirm their seat.If candidate choose to upgrade their seat to a better college, or if candidates have not been allotted a seat in the 1st round, candidate will have to visit the above mentioned website and apply for the 2nd round of counseling.If candidate wish to participate in the 2nd round of counseling, candidate should not report to the college/institute candidate has been allotted a seat in. Wait for the 1st round of counseling to get over and then make their choices for the 2nd round of counseling through the Uttarakhand Counseling website.**

For Diploma courses: Admission Process for Diploma Courses same as above. Applicant will be eligible for admission if he has passed his Class 10th examinations from a school/board in Uttarakhand and if he is a domicile of Uttarakhand or are of Uttarakhand origin. This will make him eligible for seats under the State Quota.

To be eligible for admission (If do not belong to the state of Uttarakhand), he should have passed his/her Class 10th from a school in Uttarakhand. This will allow her/him to be eligible for seats under the State Domicile Category as well as for seats under the 'All India Quota'.

Candidates who are not of Uttarakhand origin and have passed their Class 10th examinations from a school/board outside of Uttarakhand are eligible for admission only for the seats that are reserved under the 'All India Quota'.

All candidates who seek admission into the Diploma courses in the colleges of Uttarakhand, need to have passed their Class 10th or equivalent examinations with Science, Maths-2 (not primary maths) as

their main subjects with a minimum aggregate percentage of 35% (at least obtained 33% marks qualifying examination) As per AICTE rule.

Additionally, candidate will only be eligible for admission if they have appeared for the JEEEP examination in the same year as the one they are seeking admission in.

To apply for the online counseling procedure, the first thing you would need to do is make the payment for the counseling fee.

Visit the Uttarakhand Counseling website (*http://ukcounseling.nic.in),* enter you JEEEP Roll number and E – mail ID and download and print the Bank Challan form. candidate will need to deposit the counseling fee payment in cash along with this Bank Challan form at any branch of the State Bank of India (SBI).

As per the Government of Uttarakhand rules and Uttarakhand Technical University rules the college conduct counselling for admission against management seats/ vacant seats.

- Last date of request for application/registration: 08-08-2023 2nd Round 30-09-2023 & 3rd Round 13-10-2023
- Last date of submission of applications: 08-08-2023 2nd Round 30-09-2023 & 3rd Round 13-10-2023
- Release of admission list(main list and waiting list announced on the same day):- 08-08-2023 2nd Round 09-2023 & 3rd Round 13-10-2023
- Date for acceptance by the candidate: 15-08-2023 2nd Round 05-10-2023 & 3rd Round 15-10-2023

- Last date for closing of admission: 13-10-2023
- Starting of the academic session 1st Year : 16-08-2023

Policy of Refund of the fee in case of withdrawal: Refund will process as per AICTE norms and guidelines.

13-14. List of Applicants/Results of Admission Under Management/Vacant Seats:

UTTARAKHAND TECHNICAL UNIVERSITY, DEHRADUN						
B.TECH-2023-24						
INSTITUTE NAME :	041-SHIVALIK COLLEGE OF ENGINEERING DEHRADUN					
BRANCH: COMPUTER SCIENCE ENGG.	Vacant Seats: 45		Management Seats: 09			Total Seats- 54

S.No.						
1	AARIF	JAINUDEEN	CSE	Male	OBC	55.4
2	AAYUSH	LT SAMAYDEEN	CSE	Male	General	77.4
3	AAYUSH KUMAR	RANDHIR KUMAR SINGH	CSE	Male	General	67.20
4	ABDUL SAMAD IQBAL	SHAHID EQBAL	CSE	Male	General	73.6
5	ABRAR MALIK	JULFUKAR ALI	CSE	Male	General	64.8
6	ADARSH KUMAR	PANKAJ KUMAR	CSE	Male	General	73.4
7	ADITYA PATHAK	AVDESH SHARMA	CSE	Male	General	85.00
8	ADITYA KUMAR SINGH	RANJAN SINGH	CSE	Male	General	63.00
9	ADITYA SINGH RAWAT	SARDAR SINGH RAWAT	CSE	Male	General	64.00
10	AKASH KUMAR JHA	BINAY KUMAR JHA	CSE	Male	General	65
11	AMAN KUMAR	RAM BABU CHAUDHARY	CSE	Male	General	65.00
12	AMAN KUMAR	GAUTAM KUMAR	CSE	Male	OBC	63.2
13	AMAN PANDEY	BABLU PANDEY	CSE	Male	General	80.16
14	AMAN KUMAR CHANDAN	PRAMOD KUMAR	CSE	Male	OBC	69.00
15	AMAN KUMAR MORYA	RAMU MORYA	CSE	Male	General	79
16	AMAN KUMAR SINGH	DHANANJAY SINGH	CSE	Male	General	52.00

17	AMAN RAJ SINGH	RAMESH SINGH	CSE	Male	General	70
18	AMANDEEP KUMAR	JAIPRAKASH YADAV	CSE	Male	General	62.80
19	AMIT KUMAR	MANJI RAM	CSE	Male	SC	65
20	AMRIT NARAYAN	LALIT MOHAN SEMWAL	CSE	Male	OBC	67
21	ANANYA PANDEY	SATYA PRAKASH PANDEY	CSE	Female	General	76
22	ANCHAL BHANDARI	SHAMBU SINGH BHANDARI	CSE	Female	General	64
23	ANIRUDH SINGH	BHOOP SINGH	CSE	Male	General	75.17
24	ANISHA RAMOLA	SUNIL CHAND RAMOLA	CSE	Male	General	72
25	ANKIT KUMAR	MITUL KUMAR CHOUDHARY	CSE	Male	General	63
26	ANKIT KUMAR	PRADIP KUMAR SINGH	CSE	Male	General	73.2
27	ANKIT KUMAR	MUNNA KUMAR GUPTA	CSE	Male	General	86.8
28	ANKIT KUMAR	AKHILESH KUMAR	CSE	Male	General	62.6
29	ANKUL KUMAR	SANJAY MANJHI	CSE	Male	SC	73.40
30	ANSHUL KUMAR	MR SULEKH CHAND	CSE	Male	General	58.00
31	ANUJ BHARTARI	LATE RAKESH BHARTARI	CSE	Male	General	60
32	ANURAG YADAV	UMESH CHANDR	CSE	Male	OBC	71
33	ANURAG KUMAR SINGH	MANOJ KUMAR SINGH	CSE	Male	General	65.6
34	ARPIT BISHT	SHEESHPAL SINGH BISHT	CSE	Male	General	65
35	ARYAN KALRA	LATE SUNIL KALRA	CSE	Male	General	62
36	ARYAN RAJ	NIRBHAY SHANKAR	CSE	Male	OBC	68.00
37	ASHU SHARMA	MANOJ SHARMA	CSE	Male	General	71.2
38	ASHUTOSH KUMAR RAI	SANJAY RAI	CSE	Male	General	73.4
39	ATHARV VERMA	AKASH VERMA	CSE	Male	General	60.60
40	ATUL BORA	BALVIR SINGH BORA	CSE	Male	General	89.6
41	AYUSH DUBEY	RAJEEV KUMAR	CSE	Male	General	72.60
42	AYUSH KUMAR	SACHIN KUMAR	CSE	Male	General	74
43	AYUSH NEGI	RAMESH SINGH	CSE	Male	General	78
44	AYUSH RANA	ASHISH SINGH RANA	CSE	Male	General	60.8
45	AYUSHA	RAKESH SINGH	CSE	Female	General	65.80
46	AYUSHMAN JAISWAL	BINOD PD JAISWAL	CSE	Male	General	59.40
47	DEEPAK SINGH MEHTA	GOKARAN SINGH	CSE	Male	General	71.00
48	DHRUV KUMAR	MANOJ KUMAR	CSE	Male	General	60.4
49	DIKSHA AGRAWAL	AMIT AGRAWAL	CSE	Female	General	58.2
50	DIVYANSH KAPOOR	SURJEET KAPOOR	CSE	Male	General	55.2
51	GANESH KUMAR SINGH	SHYAM SUNDER SINGH	CSE	Male	General	66.4
52	GARIMA JOSHI	DEEPAK KR JOSHI	CSE	Female	General	67.9
53	GARIMA SHARMA	ANUJ SHARMA	CSE	Female	OBC	79
54	GAURAV SAHENDRA	SAHENDRA SINGH	CSE	Male	OBC	80
55	GOURAV KUMAR	KAMLESH SINGH	CSE	Male	General	73
56	GUDDU KUMAR	KAMLESHWARI SAH	CSE	Male	General	86.6
57	HARDIK	SATPAL SINGH	CSE	Male	OBC	86.54
58	KALPANA	MANOJ BIHARI PANDEY	CSE	Female	General	59.8
59	Karan Kumar	Basudev Prasad	CSE	Male	General	78.8
60	KARTIK KAUSHIK	NEERAJ KUMAR	CSE	Male	General	82
61	KARTIK KUMAR	MUKESH KUMAR	CSE	Male	General	58
62	KASHISH SHARMA	SURESH SHARMA	CSE	Female	General	92
63	KHUSHI KUMARI	KUNDAN KUMAR	CSE	Male	General	73
64	KHUSHI KUMARI	PAWAN KUMAR	CSE	Female	General	66
65	KHUSHI KUMARI SHUKLA	AMARNATH SHUKLA	CSE	Female	General	59.00
66	KRISHNA KUMAR	PRAKASH CHAND	CSE	Male	OBC	67
67	KRRISH KESHAV	RAJESH KUMAR	CSE	Male	OBC	67.20
68	KULDEEP YADAV	GANGA RAM YADAV	CSE	Male	OBC	83
69	MAHADEV JOSHI	PRAKASH JOSHI	CSE	Male	General	66.6

70	MAHESH SINGH PAWAR	SUNDAR SINGH	CSE	Male	General	79.7
71	MAHIMA RATHI	VINOD KUMAR	CSE	Female	General	72.00
72	MANAN SHAHI	RAJENDRA SHAHI	CSE	Male	General	59
73	MANAS KUMAR	SHUKLENDRA KUWAR	CSE	Male	General	72
74	MANISH	DHARMENDRA KUMAR	CSE	Male	General	69.80
75	MANSHI KUMARI	UDAY KUMAR SINGH	CSE	Female	OBC	78
76	MANSI DEVI	ASHWANI KUMAR	CSE	Female	General	90.8
77	MANYA RAWAT	BALVINDAR SINGH RAWAT	CSE	Female	General	95
78	MAYANK CHAUDHARY	UMANATH CHAUDHARY	CSE	Male	General	73
79	MAYUR SINGH	AJAY SINGH	CSE	Male	General	71
80	MD SHAHBAZ ALAM	MD MANSOOR ALAM	CSE	Male	OBC	58.2
81	MD SHAHZAD	MD HARUN SHEKH	CSE	Male	General	60.8
82	MD SOHAIL	MD SHOAIB ANSARI	CSE	Male	General	60.60
83	Md Sohail ansari	Hakim ansari	CSE	Male	OBC	58
84	MISS MONIKA	MANGAL SINGH	CSE	Female	OBC	81.80
85	MOHAMMAD SAIF	MOHAMMAD SABIR	CSE	Male	General	72.60
86	MOHD AAYAN	PHOOL HASAN	CSE	Male	OBC	60.1
87	MOHD ALISH KHAN	MOHD AMIR KHAN	CSE	Male	General	67.8
88	MOHD ANAS	MODH ILIYAS	CSE	Male	OBC	71
89	MOHD AZHAR	MAHBOOB ALI	CSE	Male	OBC	68.80
90	MOHD MAHTAB	SARWAR ALI	CSE	Male	General	62.00
91	MOHIT KUMAR	VED PRAKASH SHARMA	CSE	Male	General	60
92	MOHIT UNIYAL	RAVINDER DUTT UNIYAL	CSE	Male	General	67.2
93	MUKUL RANJAN	INDRAJEET BAITHA	CSE	Male	SC	66
94	MUSKAN KUMARI	SANJAY KUMAR SAH	CSE	Female	General	60.4
95	MUSKAN KUMARI YADAV	INDRA MOHAN RAI	CSE	Male	General	70
96	NARESH RAWAT	PANCHAN SINGH RAWAT	CSE	Male	General	62
97	NAVEEN KUMAR PANDIT	VAKIL PANDIT	CSE	Male	General	88.4
98	NAVNEET PAINULY	KAMAL KRISHAN PAINULY	CSE	Male	General	83
99	NIKHIL TOMAR	GUMAN SINGH	CSE	Male	General	64
100	NIMESH SINGH RANA	SRAVAN KUMAR	CSE	Male	ST	63
101	NITIN RAJ	MUKESH KUMAR	CSE	Male	General	70.00
102	NITISH MANDAL	KAILASH MANDAL	CSE	Male	General	62.6
103	OMISHA PHARSWAN	SUKHDEV SINGH	CSE	Female	General	66.00
104	PARAS MANDOLA	CHANDAN SINGH	CSE	Female	General	79
105	Pavan kumar	Santosh kumar singh	CSE	Male	General	70.2
106	PAWAN KUMAR	RAJDEW PRASAD SAW	CSE	Male	OBC	70.00
107	PAWAN PANDEY	TIRLOK PANDEY	CSE	Male	General	65.5
108	PAWAN PANT	YAMUNA PRASAD PANT	CSE	Male	General	69.6
109	PIYUSH KUMAR SINGH	RAJIV KUMAR SINGH	CSE	Male	General	60.00
110	POOJA KUMARI	AWADESH KUMAR	CSE	Female	OBC	54.4
111	PRASHANT	MANOJ KUMAR	CSE	Male	General	68.00
112	PRASHANT PANDEY	SURESH CHANDRA PANDEY	CSE	Male	General	71.20
113	PRASHANT SHEKHAR	KUMAR ALOK	CSE	Male	OBC	79.8
114	PRINCE KUMAR	PRADEEP KUMAR	CSE	Male	OBC	83.5
115	PRINCE KUMAR	TAPESHWAR YADAV	CSE	Male	General	60.8
116	PRINCE KUMAR MISHRA	NARAHARI NARAYAN	CSE	Male	General	68
117	PRINCE KUMAR VERMA	MANOJ KUMAR VERMA	CSE	Male	General	62.40
118	PRITISHA SINGH	MANENDRA SINGH	CSE	Female	General	88.00
119	PRIYANKA	SURESH CHAND	CSE	Female	General	74.8
120	PRIYANSHI	SUSHIL KUMAR	CSE	Female	OBC	71.00
121	PRIYANSHU KUMAR	DINESH SINGH	CSE	Male	General	65.40
122	PRIYANSHU KUMAR	SHIV KUMAR SINGH	CSE	Male	General	61.40

123	PRIYANSHU PANWAR	NIRBHAY PAL	CSE	Male	General	72
124	PRIYANSHU	SUNEEL KUMAR	CSE	Male	General	61.6
125	PRIYANSHU YADAV	CHANDRA BHUSHAN YADAV	CSE	Male	General	62.8
126	RAHUL SINGH	SARVESH KUMAR	CSE	Male	General	87
127	RAJEEV KHANDURI	SHAILENDRA PRASAD	CSE	Male	OBC	80
128	RISHABH KUMAR	RANDHIR KUMAR	CSE	Male	OBC	63.8
129	RISHABH RAWAT	ANAND SINGH RAWAT	CSE	Male	General	65
130	RISHABH SATI	SANJAY SATI	CSE	Male	General	74
131	RISHAV RAJ	MANOJ KUMAR GHOSH	CSE	Male	General	77.6
132	RISHI RAJ	RAJAN MISHRA	CSE	Male	General	60.40
133	RISHU KUMAR	RAM BABU RAI	CSE	Male	General	50.80
134	RISHU RAJ	GOPAL KUMAR	CSE	Male	General	58.4
135	RITIK	DAYASHANKAR	CSE	Male	OBC	69.00
136	RIYA	VIKRAM DUTT	CSE	Female	General	71
137	ROHAN KUMAR YADAV	SHAMBHUNATH YADAV	CSE	Male	General	69.4
138	ROHIT KUMAR SINGH	RAJESH SINGH	CSE	Male	General	61.00
139	ROUSHAN KUMAR	NAND KISHOR YADAV	CSE	Male	General	63.2
140	SACHIN KUMAR	VINOD LAL SHARMA	CSE	Male	General	61.32
141	SAHIL SINGH	JITENDRA SINGH	CSE	Male	General	56.4
142	SAMBHAWI KUMARI	UMA SHANKAR PANDEY	CSE	Female	General	61.20
143	SAMIR RAJ	SHAILENDRA SINGH	CSE	Male	General	75.00
144	Santan Kumar	Ramlal Prashad	CSE	Male	General	71.2
145	SATYA PRAKASH PANDEY	GOBARDHAN PANDEY	CSE	Male	General	70.8
146	SATYAM KUMAR	BAMBAM KUMAR	CSE	Male	General	62.8
147	SATYAM PANDEY	SRIKRISHNA KUMAR	CSE	Male	General	64.80
148	SAURABH DWIVEDI	SUKDEO DWIVEDI	CSE	Male	General	63.8
149	SAURABH KUMAR	MANOJ SINGH	CSE	Male	General	63
150	SAURAV KUMAR	MURARI PANDIT	CSE	Male	General	60.00
151	SHAHZEB ANSARI	AFSAR HUSSAIN ANSARI	CSE	Male	OBC	62.40
	SHASHI KUMAR	SANJAY SINGH	CSE	Male	General	64.40
152	SHASHWAT PANDEY	LATE KRIPA SHANKAR	CSE	Male	General	70.00
153	SHIKSHA NAUTIYAL	RAJESH PRASAD NAUTIYAL	CSE	Female	OBC	89
154	SHISHIR PANT	SUNIL PANT	CSE	Male	General	57.4
155	SHIVANG	NEETU KUMAR	CSE	Male	OBC	70
156	SHUBHAM	YASHWANT SINGH	CSE	Male	OBC	89.40
157	SHUBHAM KUMAR	RAMJAY KUMAR	CSE	Male	General	74.2
158	SHUBHAM KUMAR SINGH	BHARAT BHUSHAN	CSE	Male	General	60
159	Shubhashish Shrey	Krishandeo Yadav	CSE	Male	General	65
160	SHUBHI SUMAN	ARVIND KUMAR VERMA	CSE	Female	General	72
161	SIDDHANT SHEKHAR	RAJKUMAR SHARMA	CSE	Male	OBC	68
162	SIDHANT SRESHTHA	SANJEEV KUMAR	CSE	Male	General	69.4
163	SIMRAN THAPLIYAL	JAYANTI PRASAD THAPLIYAL	CSE	Male	General	78.8
164	SOUMYA	RAVI SHANKAR	CSE	Female	OBC	81.2
165	SRIJAN KUMAR	SUJIT KUMAR	CSE	Male	General	79.6
166	SUDEEP SINGH	SUDARSHAN SINGH	CSE	Male	General	76.2
167	SUJAL VERMA	NAVIN VERMA	CSE	Male	OBC	95.40
168	SUJEET KUMAR	HARISHCHANDRA SAH	CSE	Male	General	68
169	SUMIT SINGH	HUSHIAR SINGH	CSE	Male	ST	92
171	SUNDRAM KUMAR SINGH	DHARMENDRA KUMAR	CSE	Male	General	64.5
172	SURUCHI KUMARI	NEWALI SINGH	CSE	Male	General	61.20
173	SUSHANT KUMAR SAROJ	UMA SHANKAR OJHA	CSE	Male	N/A	63.40
174	SUSHIL KUMAR	CHANDRA PRAKASH	CSE	Male	OBC	66.6
175	TANISHK RAJ	SANTOSH KUMAR	CSE	Male	General	76.8

S.No.	Student Name	Father Name	Course	Category	Gender	12th Per
176	TANU DIXIT	ANOOP KUMAR DIXIT	CSE	Female	General	63.8
177	TANYA	MANOJ KUMAR	CSE	Female	General	64.00
178	TRIYAN GUPTA	THAKUR JI PRASAD	CSE	Male	OBC	53.8
179	UJJWAL SINGH KHATI	GOPAL SINGH KHATI	CSE	Male	General	61.20
180	VAIBHAVI DIWAKAR	SONU KUMAR	CSE	Female	SC	82.6
181	VIKKY KUMAR GUPTA	PRADEEP KUMAR GUPTA	CSE	Male	General	72.6
182	VIMAL KUMAR	DIGAMBER PRASAD	CSE	Male	General	64
183	VINAM	DINESH PAL	CSE	Male	General	74.6
184	VINAY CHAUHAN	VIJENDRA SINGH CHAUHAN	CSE	Male	General	75.00
185	VINIT KUMAR	SANJAY TIWARI	CSE	Male	General	79.4
186	VISHAL KUMAR	ASHOK KUMAR	CSE	Male	General	69.00
187	VISHAL YADAV	SANJAY YADAV	CSE	Male	OBC	81.4
188	VIVEK KUMAR	VIJAY PRASAD YADAV	CSE	Male	OBC	84.2
189	VIVEK YADAV	RAJENDER YADAV	CSE	Male	OBC	81.6
190	YASH RAJ	DILIP KUMAR	CSE	Male	OBC	74

INSTITUTE NAME :	041-SHIVALIK COLLEGE OF ENGINEERING DEHRADUN					
BRANCH: MECHANICAL ENGG.	**Vacant Seats: 50**		**Management Seats: 09**			**Total Seats- 54**
S.No.	Student Name	Father Name	Course	Category	Gender	12th Per
1	AAYUSH KUMAR SINGH	LATE DIPESH KUMAR SINGH	ME	Male	General	65.6
2	ABHAY KUMAR	SUNIL KUMAR	ME	Male	OBC	55.6
3	ABHISHEK RANA	VIJAY PAL SINGH RANA	ME	Male	General	58
4	ADITYA SINGH	UPENDRA SINGH	ME	Male	General	69
5	AMANDEEP RANA	KULDEEP SINGH	ME	Male	General	79
6	AMRIT RAJ	RAMESHVAR RAI	ME	Male	General	
7	BRIJ KUMAR SINGH	SUNIL SINGH	ME	Male	General	84.4
8	DEVANSH SINGH	AZAD SINGH	ME	Male	OBC	58
9	ISHANT	NANDA BALLABH	ME	Male	General	82.6
10	KHUNDRAKPAM ROCKEY	KHUNDRAKPAM HEMANTA	ME	Male	General	78
11	LAISHRAM RONALDO	L RAJA SINGH	ME	Male	OBC	59.60
12	MANIK KUMAR	SOM RAJ	ME	Male	SC	63.4
13	MAYANK BHATT	MUKESH BHATT	ME	Male	General	68
14	NILSON TIRIYA	UPENDRA NATH TIRIYA	ME	Male	ST	54.6
15	PRINCE KUMAR	SUMAN KUMAR GAUTAM	ME	Male	General	55.8
16	RISHITA NAUTIYAL	RAJKISHORE NAUTIYAL	ME	Female	General	87.40
17	ROHIT KUMAR	SANJAY SINGH	ME	Male	General	83.2
18	SAMEER KUMAR	ANIL KUMAR	ME	Male	OBC	71.8
19	SANDEEP SINGH	PHOOL SINGH	ME	Male	OBC	51.6
20	Sunny Kumar	Arjun Pandit	ME	Male	General	58
21	TOSHIB ALI	MASOOM ALI	ME	Male	OBC	87
22	VISHAL ADHIKARI	HUKUM SINGH ADHIKARI	ME	Male	General	69
23	Vishal Kumar	Ramkishun Chaurasiya	ME	Male	OBC	77
24	WASIM JAFFER	MOHD JAFFER	ME	Male	ST	69.8

INSTITUTE NAME :	041-SHIVALIK COLLEGE OF ENGINEERING DEHRADUN					
BRANCH: ELECTRONICS & COMMU. ENGG.	**Vacant Seats: 50**		**Management Seats: 09**			**Total Seats- 54**
S.No.	Student Name	Father Name	Course	Category	Gender	12th
1	AKANKSHA RAJ	RAJESH KUMAR PANDIT	ECE	Female	OBC	75.8
2	AKHIL DEV SINGH	NARAYAN SINGH	ECE	Male	General	81

S.No.	Student Name	Father Name	Course	Gender	Category	12th Per
3	AMRIT RAJ	AKHILESH KUMAR	ECE	Male	OBC	64.67
4	ANAND PATHAK	ANIL KUMAR PATHAK	ECE	Male	General	53
5	ANIKET KUMAR	VIJAY KUMAR	ECE	Male	General	67
6	ANKIT RAJ	SUNIL SINGH	ECE	Male	General	56
7	ARADHYA GUPTA	RAKESH KUMAR	ECE	Female	OBC	90.2
8	BHAVISHYA SHARMA	SATISH KUMAR	ECE	Male	General	84.2
9	DHEERAJ KUMAR	SUDESH KUMAR	ECE	Male	SC	69
10	Dhiraj Kumar	Ranjit Pathak	ECE	Male	General	64.2
11	FAISHAL IMAM	ABRE ALAM	ECE	Male	General	54.6
12	HARSH RAJ	SANDEEP KUMAR	ECE	Male	General	91.6
13	HARSHIT KUMAR SINGH	DINESH SINGH	ECE	Male	General	55.1
14	HIMANI MEHRA	KAMAL KUMAR	ECE	Female	OBC	81.2
15	KRISH KUMAR SINHA	RAKESH KUMAR SINHA	ECE	Male	General	75.2
16	KRISHNA VATS	BHOLA PRASAD SINGH	ECE	Male	General	66.4
17	MD SAHIL	MD SHAUKAT RAIN	ECE	Male	OBC	71
18	MRINAL SHEKHAR	ANIL KUMAR	ECE	Male	General	63.6
19	PANKAJ KUMAR SHARMA	MAINEJAR SHARMA	ECE	Male	General	58.6
20	PRASHANT KUMAR	SANJAY KUMAR	ECE	Male	General	55.6
21	PRINCE KUMAR	ARVIND SWARNKAR	ECE	Male	OBC	62.6
22	PRITESH KUMAR	BABLU KUMAR	ECE	Male	OBC	55.6
23	PRIYA DEVI	LATE AJAY SHARMA	ECE	Female	General	74.6
24	RITIK RAJ	RAJENDRA PRASAD	ECE	Male	OBC	51.8
25	SAIYAM MALLICK	SATYENDRA KUMAR	ECE	Male	General	50.8
26	SANJIT KUMAR	RAJU SAH	ECE	Male	General	64.00
27	SAURAV KUMAR	SUNIL KUMAR	ECE	Male	OBC	58.8
28	SHIVANSHU CHATTERJEE	PINAKI CHATTERJEE	ECE	Male	General	58.6
29	SHREYANSH JUGRAN	CHANDRA PRAKASH	ECE	Male	General	64.60
30	SUDHANSHU GUPTA	DEEPAK KUMAR GUPTA	ECE	Male	General	52.4
31	UTKARSH ARYAN	UDAY NARAYAN SINGH	ECE	Male	General	53.00
32	VAYOM PRADHAN	SANJEEV PRADHAN	ECE	Male	General	57
33	VISHAL KUMAR	RAMASHANKAR PASI	ECE	Male	General	63.60
34	VISHAL KUMAR	KISHORI LAL SAH	ECE	Male	General	73

INSTITUTE NAME : **041-SHIVALIK COLLEGE OF ENGINEERING DEHRADUN**

BRANCH: CIVIL ENGG.	Vacant Seats: 50	Management Seats: 09				Total Seats-59
S.No.	Student Name	Father Name	Course	Gender	Category	12th Per
1	ASHISH SHARMA	DESRAJ SHARMA	CE	Male	General	84.6
2	PIYUSH SHARMA	ANIL KUMAR	CE	Male	General	81.6
3	SHIVAM KUMAR	SHYAM LAL	CE	Male	General	70
4	SUMAN CHHETRI	PREM CHHETRI	CE	Male	General	68.60

INSTITUTE NAME : **041-SHIVALIK COLLEGE OF ENGINEERING DEHRADUN**

BRANCH: CSE (DS)	Vacant Seats: 50	Management Seats: 09				Total Seats-59
S.No.	Student Name	Father Name	Course	Gender	Category	12th Per
1	AADITYA RATHORE	LATE JAGPAL SINGH	CSE	Male	OBC	CSE
2	AKHILESH GUPTA	JAGDISH GUPTA	CSE	Male	OBC	CSE
3	AMAN SUNDRIYAL	NARESH KUMAR SUNDRIYAL	CSE	Male	General	CSE
4	AMAN KUMAR	ANAND VISHWAKARMA	CSE	Male	OBC	CSE

5	ASHUTOSH KUMAR	NANDKISHOR DATTA	CSE	Male	General	CSE
6	ASHWANI VATS	YOGENDER SHARMA	CSE	Male	General	CSE
7	Chandraket Kumar	Mohan Prasad	CSE	Male	General	CSE
8	DEEPAK RAWAT	DAYAL SINGH	CSE	Male	General	CSE
9	DIPESH TATRARI	GANESH DATT	CSE	Male	General	CSE
10	DIVYANSH KUMAR	RAJESH KUMAR	CSE	Male	General	CSE
11	DIVYANSHU NAUTIYAL	PRAVEEN NAUTIYAL	CSE	Male	General	CSE
12	Harsh Raj	Ramesh kumar	CSE	Male	General	CSE
13	ISHITA GOSWAMI	VIRENDRA GIRI	CSE	Female	General	CSE
14	KANAK	PRAMOD SINGH	CSE	Female	General	CSE
15	KANISKA JAISWAL	PRASHANT KUMAR	CSE	Female	General	CSE
16	KARTIK MODHAL	SANJEEV KUMAR	CSE	Male	General	CSE
17	KRISH GOGIA	RAM GOGIA	CSE	Male	General	CSE
18	KRISHNA SINGH	SANTOSH KUMAR SINGH	CSE	Male	General	CSE
19	PRITAM KUMAR	SURESH KUMAR	CSE	Male	General	CSE
20	PRIYANSHU TIWARI	SHAILESH KUMAR TIWARI	CSE	Male	General	CSE
21	RIYANSHI JOSHI	LALIT MOHAN JOSHI	CSE	Female	General	CSE
22	SAGAR SINGH	JASPAL SINGH	CSE	Male	General	CSE
23	SAKSHAM BHADRI	PRAMOD KUMAR BHADRI	CSE	Male	General	CSE
24	SANDEEP KUMAR YADAV	MAHESH YADAV	CSE	Male	OBC	CSE
25	SATYAM KUMAR	LATE RAMESH GUPTA	CSE	Male	OBC	CSE
26	SHARDA	RAJESH	CSE	Female	ST	CSE
27	SHIVANGI RAWAT	VINOD RAWAT	CSE	Female	General	CSE
28	SYED FAISAL HAQUE	SYED MOINUL HAQUE	CSE	Male	General	CSE
29	TANISHA JAMUAR	MOHAN JAMUAR	CSE	Female	General	CSE
30	UGAR SINGH	SHRINIWAS SINGH	CSE	Male	OBC	CSE
31	VEER TIWARI	VIJAY KUMAR TIWARI	CSE	Male	General	CSE
32	VISHWAJEET SINGH	VIJAY SINGH	CSE	Male	General	CSE
33	VIVEK LASIYAL	JAGDAMBA PRASAD LASIYAL	CSE	Male	OBC	CSE

INSTITUTE NAME :		041-SHIVALIK COLLEGE OF ENGINEERING DEHRADUN				
BRANCH: CSE (AIML)	Vacant Seats: 45		Management Seats: 09			Total Seats-54

S.No.						
1	AAKRITI	ASHOK KUMAR	CSE	Female	OBC	CSE
2	AAYUSHMANT PAINULY	VISHNU PRASAD PAINULY	CSE	Male	OBC	CSE
3	ABHIGYAN SRIVASTAVA	SUMANT KUMAR	CSE	Male	General	CSE
4	ADITI CHAUHAN	GABAR SINGH	CSE	Female	General	CSE
5	ADITI SINGH	RAJENDRA KUMAR	CSE	Female	General	CSE
6	ADITYA CHAUHAN	RAKESH KUMAR	CSE	Male	General	CSE
7	ADITYA PANDEY	RAM PRAVESH PANDEY	CSE	Male	General	CSE
8	AMRIT JHA	ANIL KUMAR JHA	CSE	Male	General	CSE
9	ANAND SINGH RAWAT	VIRENDRA SINGH	CSE	Male	General	CSE
10	ANANT JYOTI	MUKESH KUMAR	CSE	Male	General	CSE
11	ANKESH KUMAR	DEEPAK KUMAR	CSE	Male	General	CSE
12	ANKIT JINKWAN	SURENDRA SINGH	CSE	Male	General	CSE
13	ANMOL SHARMA	NEETA RAM	CSE	Male	General	CSE
14	ANURAG NAUTIYAL	AJAY NAUTIYAL	CSE	Male	General	CSE
15	AVIRAL SAXENA	AJAY SAXENA	CSE	Male	General	CSE
16	AYUSH	PUSHKAR SINGH	CSE	Male	General	CSE
17	AYUSH BHAT	DEEPAK KUMAR BHAT	CSE	Male	General	CSE

18	AYUSH PANWAR	ANIL PANWAR	CSE	Male	General	CSE
19	DEEPAK SINGH BISHT	DEEWAN	CSE	Male	General	CSE
20	DEVANSH DANGWAL	YOGESH DANGWAL	CSE	Male	General	CSE
21	DHRUV BHAT	AVTAR KRISHAN BHAT	CSE	Male	General	CSE
22	DHURUV KUMAR GUPTA	RAJEEV KUMAR	CSE	Male	General	CSE
23	DIVYANSHU KOHLI	BHUWAN CHANDRA	CSE	Male	SC	CSE
24	GAURAV GANGWAR	NARENDRA KUMAR	CSE	Male	OBC	CSE
25	HARSH KUMAR	AKHILESH KUMAR SINGH	CSE	Male	OBC	CSE
26	HARSHIT RAJ	KRISHNA PRASAD GUPTA	CSE	Male	General	CSE
27	JAYESH RAJESH KALPE	RAJESH KAMLAKAR KALPE	CSE	Male	General	CSE
28	KAJAL	BASUDEV SINGH	CSE	Male	General	CSE
29	KARAN RAJ	JITENDRA PRASAD	CSE	Male	General	CSE
30	MAHIPAL VERMA	MANJEET VERMA	CSE	Male	General	CSE
31	MAYANK PANT	RAMESH CHANDRA PANT	CSE	Male	General	CSE
32	MENDRANI AVINASH	MENDRANI DAMODHAR	CSE	Male	General	CSE
33	MOHIT SINGH KARAYAT	RATAN SINGH KARAYAT	CSE	Male	General	CSE
34	NEELAM DEVNATH	DIPAK KUMAR NATH	CSE	Male	General	CSE
35	OM CHAUBEY	RUDRANAND CHAUBEY	CSE	Male	General	CSE
36	PRACHI KUMARI	NIRAJ KUMAR	CSE	Female	General	CSE
37	PRATHAM PETWAL	PRAMOD PETWAL	CSE	Male	General	CSE
38	PRINCE KUMAR	RAM MADAN	CSE	Male	General	CSE
39	PRINCE KUMAR	VIRENDRA KUMAR SINGH	CSE	Male	OBC	CSE
40	PRINSU KUMAR	SANJAY SINGH YADAV	CSE	Male	OBC	CSE
41	PRITHVI RAJ	SANJEEV KUMAR SINGH	CSE	Male	General	CSE
42	PRIYANSHU RAWAT	RAGHUVIR SINGH	CSE	Male	General	CSE
43	RAJAT RAJPUT	SANTOSH KUMAR	CSE	Male	General	CSE
44	RIFAT PARVEZ QURESHI	MOHD PARVEZ QURESHI	CSE	Male	General	CSE
45	RISHI PRADEEPKUMAR	LATE PRADEEP	CSE	Male	General	CSE
46	RIYA SHRITI	MARSHAL KUMAR SINGH	CSE	Female	General	CSE
47	SAGAR SINGH RAWAT	VIKRAM SINGH	CSE	Male	General	CSE
48	SAHIL	FAKHRUDDIN ALI	CSE	Male	OBC	CSE
49	SANDEEP KUMAR	SUNIL KUMAR	CSE	Male	General	CSE
50	SHALINI BHANDARI	RAJESH SINGH BHANDARI	CSE	Female	General	CSE
51	SUBHAM CHETTRI	BONOD CHETTRI	CSE	Male	OBC	CSE
52	SUNAKSHI CHAUHAN	SHIV KUMAR	CSE	Female	General	CSE
53	SURAJ KUMAR	PRABHAT KUMAR GUPTA	CSE	Male	OBC	CSE
54	UMANG VASHISHTHA	AJAY KUMAR	CSE	Male	General	CSE
55	Utsav Kumar	Kamta Prasad	CSE	Male	General	CSE
56	VIPUL SHARMA	PUSHPENDRA SHARMA	CSE	Male	General	CSE
57	VIVEK SHARMA	AMBAR SUDHIR	CSE	Male	General	CSE
58	YUG MAHAWAN	KISHAN KUMAR	CSE	Male	SC	CSE
59	YUVRAJ SINGH	GIRDHAR SINGH	CSE	Male	OBC	CSE
60	ZISHAN HODA ANSARI	SAMSUL HODA	CSE	Male	General	CSE

DIPLOMA COURSE:

UTTARAKHAND BOARD OF TECHNICAL EDUCATION , ROORKEE [HARIDWAR]			
INSTITUTE NAME :	084-SHIVALIK COLLEGE OF ENGINEERING DEHRADUN		
BRANCH NAME :	14-MECHANICAL ENGINEERING(Shift-II)		
SEM/YEAR : 1	Vacant seat- 90	Management Seat-18	Total Seat:-108

Øe la0	Nk= dk uke	firk dk uke	tUe frfFk	dSVsxjh GEN/SC/ST/OBC/EWS/TFW	vYil a[;d YES/NO	gkbZL dwy esa izfr'kr	b.Vj esa izfr'kr	thi jSa d	vk/kkj u0	dkmaf lfyax Qhl
1	ANKIT RAWAT	PAN SINGH	29/01/2004	OBC	NO	62.2			2915371796	800
2	ANURAG	MELARAM	05/02/2003	OBC	NO	52	51		4446752634	800
3	BITTU KUMAR	JITENDRA	11/06/2004	General	NO	51	60		3936515426	800
4	HIMANSHU NEGI	BIJENDRA	10/06/2005	General	NO	65	64		4699368130	800
5	JITENDRA	LATE HARIBHAN	11/06/2000	OBC	NO	73	60.4		4878027138	800
6	KUNDAN	SURYA NATH	15/12/2002	General	NO	57.28			4819092293	800
7	NIHAS KHAN	SHOKAT ALI	18/11/2006	OBC	Yes	45.8			8777605129	800
8	RISHABH NEGI	DHANVEER	30/07/2005	General	NO	56.8			6405001898	800
9	RIZWAN ALI	SAUKAT ALI	04/02/2005	General	NO	57	74.4		9690435275	800
10	SURAJ KUMAR	LAXMAN SAH	01/01/2004	General	NO	52.2	44		6017591312	800
11	VIKAS	AVADH KUMAR	19/10/2006	General	NO	65			4132873293	800
12	VINAY KUMAR	NAND KUMAR	26/01/2005	OBC	NO	40.6			2404124060	800
13	VISHAL	VICKY	30/03/2004	General	NO	59			6622648736	800

BRANCH NAME : **05-COMPUTER SCIENCE & ENGINEERING(Shift-II)**

SEM/YEAR : 1	Vacant Seats-37		Management Seat-09			Total Seats: 46

Øe la0	Nk= dk uke	firk dk uke	tUe frfFk	dSVsxjh GEN/SC/ST/OBC/EWS/TFW	vYila[;d YES/NO	gkbZL dwy esa izfr'kr	b.Vj esa izfr'kr	thi jSa d	vk/kkj u0	dkmaf lfyax Qhl
1	AASHISH	BRAJESH	27/02/2006	Gener	NO	70			35180397195	800
2	ADITI BHATT	VISHAL MANI	11/09/2007	Gener	NO	57			26148354565	800
3	ADITI BHOWMIK	RAJESH	20/10/2004	OBC	NO	79			38481296938	800
4	AHSANUL	AMIRUL HODA	01/03/2005	Gener	NO	43			78794015229	800
5	AKHIL MISHRA	VISHNU	27/03/2007	OBC	NO	51			36366655527	800
6	AMAN KUMAR	AJAY KUMAR	20/09/2007	SC	NO	76			58260337136	500
7	ANIKET SINGH	SHYAM BABU	01/11/2005	Gener	NO	2.4			-	800
8	ANSHU KUMAR	MAHESH	01/01/2007	Gener	NO	49			23551548583	800
9	ANSHUL KUMAR	ASHOK KUMAR	10/01/2007	Gener	NO	67.5			60298224402	800
10	ANUJ SAUD	JANAK SINGH	03/05/2005	Gener	NO	2.8			-	800
11	ANUSHKA	MAHIPAL SINGH	29/11/2005	SC	NO	84			94889020719	500
12	ARYAN KUMAR	SUJIT KUMAR	09/10/2008	Gener	NO	80.6			95866467634	800
13	ASHISH PUNDIR	RANVEER	16/06/2002	Gener	NO	64.8	66.8		89666875155	800
14	AYUSH	SUSHIL MOHAN	03/12/2008	OBC	NO	56.4		2.3	45588962455	
15	DIVY RAJ	HARENDRA	15/01/2004	Gener	NO	2.90			-	800
16	DIVYANSHU	RAJESH KUMAR	15/10/2006	Gener	NO	45.6			38306885937	800
17	FARHAN ALI	MOHAMMAD ALI	23/04/2007	OBC	Yes	52			56008726154	800
18	HAMID ALI	AHSAN	30/03/2007	Gener	NO	61.4			91283646547	800
19	HARSH VAIBHAV	MANKESH	21/06/2004	Gener	NO	44			85096190094	800
20	KARAN SINGH	PRASNNA	06/08/2002	Gener	NO	61	75		87148591722	800
21	KARTIK KUMAR	DHARMENDER	08/02/1999	Gener	NO	44.6			95972351474	800
22	KASHISH LODH	BASANT KUMAR	01/11/2006	Gener	NO	50.2			50127761811	800
23	KUMAR AMRIT	SUNIL KUMAR	15/12/2003	Gener	NO	59			91587025558	800
24	KUNAL KASHYAP	ASHOK KUMAR	28/08/2005	Gener	NO	58			98584989468	800
25	MADHURI RATHI	YASHPAL	03/03/2007	SC	NO	50			20392990357	500

Øe la0	Nk= dk uke	firk dk uke		dSVsxjh GEN/SC/ST/OBC/EWS/TFW	vYila [;d YES/NO	gkbZ Ldwy esa izfr'kr	b.Vj esa izfr'kr	thi jSa d	vk/kkj u0	dkmaf lfyax Qhl
26	MANVENDRA	DEVENDRA	25/08/2009	OBC	NO	75.9			20587025658	800
27	MOHIT BISHT	DIGAMBAR	28/03/2003	Gener	NO	62.4	55.9		29462447661	800
28	MOHIT KUMAR	KUNDAN	01/04/2007	Gener	NO	43.2			97142827897	800
29	MOHIT KUMAR	ABHIMANYU	07/01/2008	Gener	NO	74			95345654585	800
30	PANKAJ CHAND	RAJENDRA	07/03/2004	OBC	NO	55.2	54.4		40619609622	800
31	PARTH	VIMAL KUMAR	23/02/2008	Gener	NO	78			24458754810	800
32	PIYUSH	DURGESH	01/01/2006	Gener	NO	55			50655330801	800
33	PRACHI KUDIYAL	SUNDER LAL	26/06/2004	Gener	NO	61.8			83977944963	800
34	RISHU RAJ	RAKESH	13/02/2003	Gener	NO	45.8			36705802606	800
35	ROHAN SINGH	NARAYAN	18/02/2004	Gener	NO	72	58		27097692504	800
36	ROHIT KUMAR	KAMLA SINGH	16/11/2003	OBC	NO	46.6			97821823256	800
37	SACHIN	NANDLAL	26/10/2001	Gener	NO	40			55287400947	800
38	SACHIN KUMAR	SANTOSH RAY	17/10/2008	OBC	NO	68.2			34614157734	800
39	SACHIN RAWAT	BIRENDRA	18/03/2006	Gener	NO	79			61184474430	800
40	SAIF ALI	EKBAL	06/12/2007	OBC	Yes	54			69446994663	800
41	SALMAN ALI	ABDUL GAFUR	22/02/2008	OBC	Yes	49.6			36908495173	800
42	SAMEER ALAM	MD CHAND	16/01/2007	Gener	NO	51			30980389837	800
43	SARVESH	LATE MUKESH	20/12/2007	Gener	NO	62.6			70643119049	800
44	SAURABH	SUBHASH	03/08/2001	Gener	NO	65.8	71.8		61340738836	800
45	SAURABH	ASHOK KUMAR	25/09/2004	Gener	NO	67.4			79008844066	800
46	SHAHNAWAZ	MD YUSUF	15/04/2003	Gener	NO	56.2			21908636374	800
47	SIMRAN TOMAR	ANAND SINGH	04/12/2004	Gener	NO	68			93839130735	800
48	SUMIT PAL	VEER PAL	12/03/2008	SC	NO	50			97415350529	500
49	SUNIL SINGH	RAJENDRA	15/07/2002	Gener	NO	67	58.2		59281105680	800
50	SUSHIL KUMAR	PRAVEEN	10/09/1996	Gener	NO	51			86386053794	800
51	BABLU KUMAR	GYAN BAHADUR	29/07/2005	Gener	NO	70			-	800
52	TNISHKA	SUBHASH	14/09/2006	Gener	NO	69			91448759630	800
53	UTTKARSH	BIRENDRA	10/02/2005	Gener	NO	69			58141577527	800
54	VINAY KUMAR	RAMU	11/04/2003	Gener	NO	44.8			23746193482	800
55	VISHAL SINGH	GANESH SINGH	30/11/2008	Gener	NO	56.4			57729567286	800

BRANCH NAME :	02-CIVIL ENGINEERING(Shift-II)									
SEM/YEAR : 1			Vacant seat-66			Management Seat-18			Total Seat:-84	

Øe la0	Nk= dk uke	firk dk uke		dSVsxjh GEN/SC/ST/OBC/EWS/TFW	vYila [;d YES/NO	gkbZ Ldwy esa izfr'kr	b.Vj esa izfr'kr	thi jSa d	vk/kkj u0	dkmaf lfyax Qhl
1	ANSHUL NEGI	VIJAY PAL	28/02/2006	Gener	NO	48.8	51.8		861916962519	800
2	HIMANSHU	GANGA RAM	01/01/2006	OBC	NO	57			519198847747	800
3	KARAN KUMAR	ASHOK KUMAR	01/06/2004	SC	NO	42.4	63.6		658148839802	500
4	MOHD AYAN	MUNAWAR ALI	27/08/2005	Gener	NO	74			335824579125	800
5	MUNTAZIR	VILAYAT ALI	28/08/2004	ST	Yes	64.4			000000006426	500
6	PARAS NEGI	SARDAR SINGH	13/05/2005	ST	NO	59.2			611923701240	500
7	RISHABH	SHANTI RAM	10/07/2007	Gener	NO	55.2			865148960278	800
8	SAHIL	FARUKH ALI	10/03/2005	OBC	Yes	51	46.2		715021084996	800
9	SHUBHAM	SHIV SHANKAR	15/04/2006	Gener	NO	48.8			403289856771	800
10	TANISH	LATE KULDEEP	19/01/2005	Gener	NO	53			417752394370	800
11	TANISH	RAJESH SINGH	27/06/2008	Gener	NO	54			558050839370	800
12	TANISHK ASWAL	KEDAR SINGH	29/09/2005	OBC	NO	57	60		724231757917	800
13	VINEET RANA	KEDAR SINGH	13/04/2006	Gener	NO	83			892269571230	800
14	VISHAL KUMAR	BHOLA SINGH	05/06/2003	Gener	NO	49.6			566250952116	800

15	YUVRAJ	PRABHU SINGH	11/08/2006	ST	NO	48.2			834572304327	500

UTTARAKHAND BOARD OF TECHNICAL EDUCATION , ROORKEE [HARIDWAR]

INSTITUTE NAME :	084-SHIVALIK COLLEGE OF ENGINEERING DEHRADUN
BRANCH NAME :	02-CIVIL ENGINEERING(Shift-II) LE

SEM/YEAR : 3	3rd SEMESTER	APPROVED INTAKE: 12	VACANT SEAT: 09

Ø e la 0	Nk= dk uke	firk dk uke	tUe frfFk	dSVsxjh GEN/SC/ST/OBC/EWS/TFW	vYila [;d YES/NO	gkbZ Ldwy esa izfr'kr	b.Vj esa izfr'kr	thi jSa d	vk/kkj u0	dkmaf lfyax Qhl
1	ANANYA	MIJAN SINGH	08/03/200	ST	NO	70	81		415101194217	500
2	AYUSHI	ASHOK KUMAR	06/07/200	General	NO	67.8	65.4	232	688924206000	
3	AYUSHI	SURESH KUMAR	27/03/200	General	NO	88	71.7		943201403886	800

BRANCH NAME :	08-ELECTRICAL ENGINEERING(Shift-II) LE

SEM/YEAR :	3rd SEMESTER	APPROVED INTAKE: 6	VACANT SEAT:06	

Ø e la 0	Nk= dk uke	firk dk uke	tUe frfFk	dSVsxjh GEN/SC/ST/OBC/EWS/TFW	vYila [;d YES/NO	gkbZ Ldwy esa izfr'kr	b.Vj esa izfr'kr	thi jSa d	vk/kkj u0	x Qhl
1	ASHISH	SHAILENDRA	20/11/2002	General	NO	50	55		500802806953	800

BRANCH NAME :	14-MECHANICAL ENGINEERING(Shift-II) LE

SEM/YEAR :	3rd SEMESTER	APPROVED INTAKE: 6	VACANT SEAT:06	

Ø e la 0	Nk= dk uke	firk dk uke	tUe frfFk	dSVsxjh GEN/SC/ST/OBC/EWS/TFW	vYila [;d YES/NO	gkbZ Ldwy esa izfr'kr	b.Vj esa izfr'kr	thi jSa d	vk/kkj u0	x Qhl
1	RAHUL	PARAG SHARMA	15/01/1998	OBC	NO	78	69		864211642770	800
2	SACHIN	GYAN SINGH	05/06/2003	SC	NO	60	57.6		332470703954	500

BRANCH NAME :	05-COMPUTER SCIENCE & ENGINEERING(Shift-II) LE

SEM/YEAR :	3rd SEMESTER	APPROVED INTAKE: 6	VACANT SEAT:06	

Ø e la 0	Nk= dk uke	firk dk uke	tUe frfFk	dSVsxjh GEN/SC/ST/OBC/EWS/TFW	vYila [;d YES/NO	gkbZ Ldwy esa izfr'kr	b.Vj esa izfr'kr	thi jSa d	vk/kkj u0	x Qhl
1	DEEPAK	MR GAJPAL LAL	26/10/2002	SC	NO	57	77		588227279827	500
2	VAIBHAV	SATISH	15/10/2004	General	NO	59	59		838235868189	800

15. Information of Infrastructure and Other Resources Available:

Numbers of Class Room and size of each	30	69 Sqmtr.
Numbers of Tutorial Room and size of each	05	33 Sqmtr.
Numbers of Laboratories	55	69 Sqmtr.
Numbers of Drawing Halls with	02	132 Sqmtr.

capacity of each		
Number of Computer Centre with capacity of each	01	150 Sqmtr.
Central Workshop	01	1023.54 Sqmtr.
Central Examination Facility Numbers of Rooms	02	40 Sqmtr.
Online examination facility (Number of Nodes, internet Bandwidth, etc.)	300 50mbps	150 sqmtr.
Barrier free Built Environment for disabled and elderly persons		Yes, Left and Ramp Available
Occupancy Certificate		Yes
Fire and Safety Certificate		Yes
Hostel Facilities		Yes

Library

Number of Library books/ Titles/Journals Available

Number of Titles	:	3826
Number of Volume	:	32479
Journals	:	50/27
E-Library facilities	:	Yes
National Digital Library(NDL) subscription	:	Yes

Laboratory and Workshop

I. **NAME OF LABORATORY:** APPLIED THERMODYNAMICS **(BMEP-401)**

II. DEPARTMENT: MECHANICAL ENGINEERING

III. LOCATION AND NO. : Second floor, New Block

IV. COURSE NAME : B.Tech   BRANCH: Mechanical Engineering   Semester: 4th

V. TOTAL NO. OF EXPERIMENTS   REQUIRED :   10

VI. (AS PER UTU SYLLABUS)

VII. TOTAL NO. OF EXPERIMENTS SETUP IN THE LAB.:12

VIII. NO. OF MANUALS IN THE LAB.:   12

IX. NAME OF THE TEACHER IN CHARGE: Mr. Ayushman Srivastav

X. NAME OF THE LAB ASSISTANT : NA

XI. OBJECTIVE OF LAB.: To establish a relationship between practical and theoretical approach and enhance skill of students.

Table: Laboratory experiments

S.No	Name of experiment	Equipment	Status
1	Study of Fire Tube boiler	Model of Fire Tube boiler	Available
2	Study of Water Tube boiler	Model of Water Tube boiler	Available
3	Study of Refrigerator	Model of Refrigerator	Available
4	Study of Steam Engine	Model of Steam Engine	Available
5	Study and working of Four stroke petrol Engine	Model of Four stroke petrol Engine	Available

6	Study and working of Two stroke petrol Engine	Model of Two stroke petrol Engine	Available
7	Study of Gas Turbine Model	Model of Gas Turbine	Available
8	Study and working of Four stroke Diesel Engine.	Model of Four stroke Diesel Engine	Available
9	Study and working of Two stroke Diesel Engine.	Model of Two stroke Diesel Engine	Available
10	Determination of Indicated H.P. of I.C. Engine by Morse Test	Morse Test Set Up	Available
11	Study of Impulse & Reaction turbine.	Impulse & Reaction turbine test Rig	Available
12	Study of Gas Turbine Model.	Turbine Model	Available

I. **NAME OF LABORATORY:** Automobile Engineering Lab (PME-852)

II. **DEPARTMENT:** MECHANICAL ENGINEERING

III. **LOCATION AND NO. :**Central Workshop

IV. **COURSE NAME :**B.Tech   **BRANCH:** Mechanical Engineering   **Semester:** 8th

V. **TOTAL NO. OF EXPERIMENTS   REQUIRED** :   08
   (AS PER UTU SYLLABUS)

VI. **TOTAL NO. OF EXPERIMENTS SETUP IN THE LAB.:**   11

VII. **NO. OF MANUALS IN THE LAB.:** 11

VIII. **NAME OF THE TEACHER IN CHARGE:** Mr Subhan Ali

IX. **NAME OF THE LAB ASSISTANT :**Mr. Rajendra singh Gusain

X. **OBJECTIVE OF LAB.:** To understand different components of different machine for designing

Table: Laboratory experiments

S.No	Name of experiment	Equipment/software's used	Status
1	Study of Layout of different components in an IC Engine	IC Engine setup	Available & working
2	Study of valve actuating mechanisms of an multi cylinder engine	multi cylinder engine apparatus	Available & working
3	Study of different carburetors in Indian Make vehicles	carburetors	Available & working
4	Study of different injection in Indian Make vehicles	Fuel injection apparatus	Available & working
5	Morse test diesel Engines	multi cylinder engine apparatus	Available & working
6	Exhaust emission analyais of SI and CI engines	multi cylinder engine apparatus	Available & working
7	Performance analysis of four stroke C.I & S.I engine ,thermal Efficiency, indicated power , specific fuel consumption at different loads, heat balance	multi cylinder engine apparatus SI and CI	Available & working

8	Study of different gear mechanism of vehicle	Gear mechanism	Available & working
9	Study of steering mechanism system	Automobile steering mechanism system	Available & working
10	Study of automobile braking system	Aautomobile braking system	Available & working
11	Study of ignition system of I C engine	IC Engine setup	Available & working

XI. **APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):** The above experiments are very use full to understand of basic functioning of internal combustion engine and Automobiles

XII. **USEFULNESS FOR THE DEPARTMENT :**
   a) Development of industry relation
   b) R & D projects
   c) Consultancy/ Testing

I. NAME OF LABORATORY: **BASICS OF MECHANICAL ENGINEERING (BMEP 102)**

II. DEPARTMENT: MECHANICAL ENGINEERING

III. LOCATION AND NO. : First floor, Block C

IV. COURSE NAME : B.Tech   BRANCH: Mechanical Engineering   Semester: I/II

V. TOTAL NO. OF EXPERIMENTS REQUIRED :   8
   a. (AS PER UTU SYLLABUS)

VI. NO. OF MANUALS IN THE LAB.:   10

VII. NAME OF THE TEACHER IN CHARGE: Mr.

VIII. NAME OF THE LAB ASSISTANT : Mr. Jaypal singhRawat

IX. OBJECTIVE OF LAB.: To understand the basics concept of Mechanical Engineering

Table: Laboratory experiments

S.No	Name of experiment	Equipment	Status
1	Study of Universal Testing Machine	UTM Machine	Available
2	Linear and angular measurement using Micrometer,Slip Gauges , Dial Gauges and Sine Bar	Linear & Angular Measurement Instrument	Available
3	Hardness Testing	Hardness Testing Machine	Available
4	Impact Testing	Impact testing Machine	Available
5	Verification of Bernoulli's Theorem	Bernoulli's Apparatus	Available
6	Study of various types of Boilers	Model of Boilers	Available

7	Study of different IC Engines	Model of 2 stroke and 4stroke petrol and diesel Engines	Available
8	Study of different types of Boilers Mountings and accessories	Model of Boilers	Available

XIII. **APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):** The above experiments are very use full to understand of Basic of mechanical engineering like thermo, som etc.

XIV. **USEFULNESS FOR THE DEPARTMENT :**
   d) Development of industry relation
   e) R & D projects

I. **NAME OF LABORATORY:** CAD/CAM Lab (PME-751)

II. **DEPARTMENT:** MECHANICAL ENGINEERING

III. **LOCATION AND NO. : R.No. 301,** Second Floor, New Building

IV. **COURSE NAME :**B.Tech   **BRANCH:** Mechanical Engineering   **Semester:**7th

V. **TOTAL NO. OF EXPERIMENTS   REQUIRED :**08(AS PER UTU SYLLABUS)

VI. **TOTAL NO. OF EXPERIMENTS SETUP IN THE LAB.:**   09

VII. **NO. OF MANUALS IN THE LAB.:**   09

VIII. **NAME OF THE TEACHER IN CHARGE :** Mr. Ashish Joshi

IX. **NAME OF THE LAB ASSISTANT :** Mr. Rohit Singh

X. **OBJECTIVE OF LAB.:** Making students sound in design software & preparing students for modern industries

Table: Laboratory experiments

S.No	Name of experiment	Equipment/software's used	Status
1	Line drawing or Circle drawing algorithm experiment	Computer system / AUTO CAD	Available & working
2	Transformations algorithm experiment for translation/rotation/scaling	Computer system / AUTO CAD	Available & working
3	writing the program for design of machine element	Computer system/ C & C++	Available & working
4	writing a program for optimizing a function	Computer system/ C & C++	Available & working
5	understanding and use of Auto CAD commands	Computer system/ C & C++/AUTO CAD	Available & working

6	Writing a small program for FEM for 2 spring system	Computer system/ Ansys	Available & working
7	Use of pro Engineer	Computer system/ Pro-E	Available & working
8	Writing a part-programming (in word address format or in APT) for a job for drilling operation	Computer system/ NC Program	Available & working
9	Experiment on Robots and it programs	Computer system/ MAT Lab	Available & working

XV. **APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):** The above experiments are very useful to understand basic designing and manufacturing of various machine components with the help of computer programming.

XVI. **USEFULNESS FOR THE DEPARTMENT :**
   f) Create industry ready students for designing
   g) R & D projects
   h) Consultancy/ testing

I.   NAME OF LABORATORY: Computer Aided Machine Drawing Lab (BMEP 406)

II.   DEPARTMENT: MECHANICAL ENGINEERING

III.   LOCATION AND NO. : first floor , Block B

IV.   COURSE NAME : B.Tech   BRANCH: Mechanical Engineering   Semester: 3RD

V.   TOTAL NO. OF EXPERIMENTS   REQUIRED :   08
     (AS PER UTU SYLLABUS)

VI.   NO. OF MANUALS IN THE LAB.:   10

VII.   NAME OF THE TEACHER IN CHARGE: Mr.AyushmanSrivastav

VIII.   NAME OF THE LAB ASSISTANT : NA

IX.   OBJECTIVE OF LAB.: To Establish a relation between practical and theory and enhance the technical skills of students.

Table: Laboratory experiments

S.No	Name of experiment	Equipment/software	Status
1	Representation of Threads	Computer System	Available
2	Representation of Threads	Computer System	Available
3	Representation of Keys	Computer System	Available
4	Representation of Cotter Joints	Computer System	Available
5	Assembly Drawing of Stuffing Box	Computer System	Available
6	Drawing of Universal Coupling	Computer System	Available
7	Drawing of Oldham Coupling	Computer System	Available
8	Drawing of Riveted Joints	Computer System	Available

9	Representation of Threads	Computer System	Available
10	Representation of Threads	Computer System	Available

XVII.   **APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):** The above experiments are very use full to understand of machine design & programming

XVIII.   **USEFULNESS FOR THE DEPARTMENT :**
   x.   Development of industry relation
   xi.   R & D projects
   xii.   Consultancy/Testing

NAME OF LABORATORY: ENGINEERING DRAWING (PED-101/201)

   I.   DEPARTMENT: MECHANICAL ENGINEERING
   II.   LOCATION AND NO. :
   III.   COURSE NAME : B.Tech   BRANCH: Mechanical Engineering   Semester: 1st/2nd
   IV.   TOTAL NO. OF EXPERIMENTS   REQUIRED : 08
   V.   (AS PER UTU SYLLABUS)
   VI.   NO. OF MANUALS IN THE LAB.:   10
   VII.   NAME OF THE TEACHER IN CHARGE: Mr. Ayushman Srivastav
   VIII.   NAME OF THE LAB ASSISTANT : NA
   IX.   OBJECTIVE OF LAB.: To understand the basics of Engineering Drawing

Table: Laboratory experiments

S.No	Name of experiment	Equipment/Software used	Status
1	Lettering and Dimensioning	Drawing Board/Computer System	Available
2	Projection of Points	Drawing Board/Computer System	Available
3	Projections of Lines	Drawing Board/Computer System	Available
4	Projection of Planes	Drawing Board/Computer System	Available
5	Principal of auxiliary planes	Drawing Board/Computer System	Available
6	Projection of Solids	Drawing Board/Computer System	Available
7	Section of Solids	Drawing Board/Computer System	Available
8	Development of Surfaces	Drawing Board/Computer System	Available
9	Orthographic Projection	Drawing Board/Computer System	Available
10	Isometric Projection	Drawing Board/Computer System	Available

XIX.   **APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):** The above experiments are very use full to understand of engineering drawing and how to imagine the object.

XX.   **USEFULNESS FOR THE DEPARTMENT :**
   i)   Development of industry relation
   j)   R & D projects

I. **NAME OF LABORATORY: FLUID MECHANICS (BMEP-404)**

II. DEPARTMENT: MECHANICAL ENGINEERING

III. LOCATION AND NO. : Ground floor, block A

IV. COURSE NAME : B.Tech   BRANCH: Mechanical Engineering   Semester: 4th

V. TOTAL NO. OF EXPERIMENTS REQUIRED : 07

VI. (AS PER UTU SYLLABUS)

VII. NO. OF MANUALS IN THE LAB.: 12

VIII. NAME OF THE TEACHER IN CHARGE: Mr. Ashish Joshi

IX. NAME OF THE LAB ASSISTANT : Mr. Jaypal Singh Rawat

X. OBJECTIVE OF LAB.: To establish a relationship between practical and theoretical approach and enhance skill of the students.

Table: Laboratory experiments

S.No	Name of experiment	Equipment	Status
1	To determine the metacentric height of ship model	Metacentric Height Apparatus	Working
2	To verify Bernoulli Theorem	Bernoulli Apparatus	Working
3	To verify Momentum equation	Jet Apparatus	Working
4	To determine the coefficient of discharge, velocity and contraction of orifice	Coefficient of Fluid Apparatus	Working
5	To study the transition from laminar to turbulent flow and determine the lower critical Reynolds Number	Reynold's Apparatus	Working
6	To study the variation of friction factor "f" for turbulent flow in commercial pipe	Pipe Friction Apparatus	Working
7	To determine the discharge through an orifice and Venturimeter	Orifice and Venturimeter Apparatus	Working
8	To find the velocity distribution in a pipe and hence to compute the discharge by integrating the velocity profile obtained	Pitot Tube Apparatus	Working
9	To study the flow behavior in pipe and calibrate the pipe bend for discharge measurement	Pipe Bend Apparatus	Working
10	To determine the loss coefficient of various pipe fittings	Different fittings Apparatus	Working
11	To determine the surface tension of liquid	Surface Tension Apparatus	Working
12	To determine the coefficient of discharge for rectangular and triangular Notches	Notch Apparatus	Working

XXI. **APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):** students understand the fluid property , calculation of friction , pressure drop etc

XXII. **USEFULNESS FOR THE DEPARTMENT :**

    k) Development of industry relation

    l) R & D projects

I. **NAME OF LABORATORY:** Fluid Machinery (PME-654)

II. **DEPARTMENT:** MECHANICAL ENGINEERING

III. **LOCATION AND NO. :** Central Workshop

IV. **COURSE NAME :** B.Tech   BRANCH: Mechanical Engineering   Semester: 6th

V. **TOTAL NO. OF EXPERIMENTS REQUIRED** : 08
   (AS PER UTU SYLLABUS)
VI. **TOTAL NO. OF EXPERIMENTS SETUP IN THE LAB.:**   08

VII. **NO. OF MANUALS IN THE LAB.:**   08

VIII. **NAME OF THE TEACHER IN CHARGE** :

IX. **OBJECTIVE OF LAB.:** To establish a relationship between practical and theoretical approach and enhance skill of students.

Table: Laboratory experiments

S.No	Name of experiment	Equipment/software's used	Status
1	Impact of Jet experiment	Impact of Jet	Available and working
2	Turbine exp. on Pelton wheel.	Pelton wheel	Available and working
3	Turbine exp. on Francis turbine	Francis turbine	Available and working
4	Exp. on Reciprocating pump	Reciprocating pump	Available and working
5	Exp. on centrifugal pump.	centrifugal pump	Available and working
6	Exp. on Hydraulic Jack/Press	Hydraulic Jack/Press	Available and working
7	Exp. on Hydraulic Brake	Hydraulic Brake	Available and working
8	Study through any pumping station/plant		Industrial visit of pumping station

I. **APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):** gives a detailed analysis of hydro power plant components and various application of fluid.
II. **USEFULNESS FOR THE DEPARTMENT :**
   Development of industry relation
   R & D projects
   Consultancy/Testing
I. **NAME OF LABORATORY:** Heat and Mass Transfer Lab (PME-555)
II. **DEPARTMENT:** MECHANICAL ENGINEERING
III. **LOCATION AND NO. :** Second Floor, New Block C

IV. **COURSE NAME :**B.Tech   BRANCH: Mechanical Engineering   Semester: 5th

V. **TOTAL NO. OF EXPERIMENTS REQUIRED :** 08
   (AS PER UTU SYLLABUS)
VI. **TOTAL NO. OF EXPERIMENTS SETUP IN THE LAB.:**   08

VII. **NO. OF MANUALS IN THE LAB.:**   08

VIII. **NAME OF THE TEACHER IN CHARGE :**Kuldeep Rawat

IX. **NAME OF THE LAB ASSISTANT :** Mr. Jaypal Singh Rawat

X. **OBJECTIVE OF LAB.:** To understand various modes of heat transfer.

TABLE: LABORATORY EXPERIMENTS

S.No	Name of experiment	Equipment/software's used	Status
1	Conduction - Composite wall experiment	Composite wall Apparatus	Available and working
2	Convection - Heat Pipe experiment	Heat Pipe Apparatus	Available and working
3	Convection - Heat transfer through fin-natural convection	Pin-fin Apparatus (natural	Available and working
4	Convection - Heat transfer through fin-forced convection	Pin-fin Apparatus (forced)	Available and working
5	experiment on Stefen's Law (radiation detrmination of emissivity)	Stefan's Boltzmann Apparatus	Available and working
6	To find critical insultation thickness	critical insultation thickness Apparatus	Available and working
7	Convection - Pool Boiling experiment	Two phase heat transfer apparatus)	Available and working
8	Heat exchanger - Parallel flow experiment	Computer System/Virtual Lab	Available and working
9	Heat exchanger - Counter flow experiment	Computer System/Virtual Lab	Available and working

i. **APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):** The above experiments are very use full to understand of machine design & programming

I. **USEFULNESS FOR THE DEPARTMENT :**
   a) Development of industry relation
   b) R & D projects

I. **NAME OF LABORATORY:** Machine Design Lab (PME-554)

II. **DEPARTMENT:** MECHANICAL ENGINEERING

III. **LOCATION AND NO. :** Room No. 301, Second Floor, New Building

IV. **COURSE NAME :** B.Tech   **BRANCH:** Mechanical Engineering   **Semester:** 6th

V. **TOTAL NO. OF EXPERIMENTS   REQUIRED** :   08 **(AS PER UTU SYLLABUS)**

VI. **TOTAL NO. OF EXPERIMENTS SETUP IN THE LAB.:** Computer system

VII. **NO. OF MANUALS IN THE LAB.:** 08

VIII. **NAME OF THE TEACHER IN CHARGE** : Mr. Deepak Kumar

IX. **NAME OF THE LAB ASSISTANT :** Mr. Rohit Singh

X. **OBJECTIVE OF LAB.:** To understand different components of different machine for designing using software

Table: Laboratory experiments

S.No	Name of experiment	Equipment/software's	Status

1	WAP to Design a Spur Gear (C++)	Computer system/ C Compiler	Available & working
2	WAP to Design a Helical Gear (C++)	Computer system/ C Compiler	Available & working
3	WAP to Design a Bevel Gear (C++)	Computer system/ C Compiler	Available & working
4	WAP to Design a Worm Gear (C++)	Computer system/ C Compiler	Available & working
5	WAP to Design a Rolling contact Bearing (C++)	Computer system/ C Compiler	Available & working
6	WAP to Design a sliding contact Bearing (C++)	Computer system/ C Compiler	Available & working
7	WAP to Design a Key (C++)	Computer system/ C Compiler	Available & working
8	WAP to Design a shaft (C++)	Computer system/ C Compiler	Available & working

a) **APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):** The above experiments are very use full to understand of machine design & programming

b) **USEFULNESS FOR THE DEPARTMENT :**

c) Development of industry relation
d) R & D projects
e) Consultancy/Testing
f) **NAME OF LABORATORY: MANUFACTURING SCIENCE LAB –I (BMEP-305)**
g) DEPARTMENT: MECHANICAL ENGINEERING
h) LOCATION AND NO. : Central workshop
i) COURSE NAME : B.Tech   BRANCH: Mechanical Engineering   Semester: 3rd
j) TOTAL NO. OF EXPERIMENTS   REQUIRED : 08
k) (AS PER UTU SYLLABUS)
l) TOTAL NO. OF EXPERIMENTS SETUP IN THE LAB.:08
m) NO. OF MANUALS IN THE LAB.:   08
n) NAME OF THE TEACHER IN CHARGE: Mr.Ashish Joshi
o) NAME OF THE LAB ASSISTANT : Mr. RajendrasinghGuasin
p) OBJECTIVE OF LAB.: To understand the various manufacturing processes.

Table: Laboratory experiments

S.No	Name of experiment	Equipment	Status
1	Design of pattern for a desired casting (containing hole)	Carpentry Tools & Lathe	Available & Working

2	Forging: hand forging processes.	Furnace ,Hammer and holding tools	Available & Working
3	Bending & spring back.	Tube bending Machine	Available & Working
4	Study of Linear Measuring Instruments.	Measuring Tape,VernierCalliper and other measuring tools	Available & Working
5	Measurement of Taper Angle Using Slips, Rollers & Sine bar	Slips, Rollers & Sine Bar	Available & Working
6	Jigs & Fixture experiment	Jigs & fixtures Setup	Available & Working
7	Sand testing (at least one such as grain fineness number determination)	Mould Making Test	Available & Working
8	Making a mould	Mould Making Set	Available & Working

I. **NAME OF LABORATORY:** Refrigeration and air Conditioning Lab (PME-655)
II. **DEPARTMENT:** MECHANICAL ENGINEERING
III. **LOCATION AND NO. : R.No. 304,** Second Floor, New Building
IV. **COURSE NAME :** B.Tech   **BRANCH:** Mechanical Engineering   **Semester:** 6th
V. **TOTAL NO. OF EXPERIMENTS REQUIRED** :08 (AS PER UTU SYLLABUS)
VI. **TOTAL NO. OF EXPERIMENTS SETUP IN THE LAB.:** 09
VII. **NO. OF MANUALS IN THE LAB.:** 09
VIII. **NAME OF THE TEACHER IN CHARGE :** Mr. Ajay Verma
IX. **NAME OF THE LAB ASSISTANT:** Mr. Jaypal Singh Rawat
X. **OBJECTIVE OF LAB.:** To provide a practical exposure to the students regarding refrigeration and air conditioning

Table: Laboratory experiments

S.No	Name of experiment	Equipment	Status
1	Study & determination of volumetric efficiency of compressor	compressor	Available & working
2	To study different types of expansion devices used in refrigeration system	Expansion Devices	Available & working
3	Study of window air conditioner	window air conditioner	Available & working
4	Experiment on air-conditioning test rig & calculation of Latent Heat factor	Latent Heat load system	Available & working
5	Experiment on air-conditioning test rig & calculation of Sensible Heat factor	Sensible Heat load system	Available & working
6	To study different types of evaporators used in refrigeration systems	Evaporators Devices	Available & working
7	Experiment on refrigeration test ring and calculation of various performance parameters.	Vapour compression refrigeration Test Rig	Available & working
8	To study basic components of air-	Model of AC system	Available

| 9 | To study different types of condensers used in refrigeration system | Condensers | Available & working |

APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS): The above experiments are very use full to understand regarding refrigeration and air conditioning used in day to day life.

USEFULNESS FOR THE DEPARTMENT:

q) Create Industry Ready Students in field of RAC Industry
r) R & D projects
s) Consultancy /Testing

I. **NAME OF LABORATORY:**Strength of Materials Lab (BEMP-304)

II. **DEPARTMENT:** MECHANICAL ENGINEERING

III. **LOCATION AND NO. :**Ground Floor, old Bulding, Block C

IV. **COURSE NAME :**B.Tech BRANCH: Mechanical Engineering   Semester: 3rd

V. **TOTAL NO. OF EXPERIMENTS   REQUIRED :**   08
   a. (AS PER UTU SYLLABUS)

VI. **TOTAL NO. OF EXPERIMENTS SETUP IN THE LAB.:**   08

VII. **NO. OF MANUALS IN THE LAB.:** 08

VIII. **NAME OF THE TEACHER IN CHARGE :**Kuldeep Rawat

IX. **NAME OF THE LAB ASSISTANT :** Mr. Jaypal Singh Rawat

X. **OBJECTIVE OF LAB.:**To demonstrate the basic principles in the area of strength and mechanics of materials

TABLE: LABORATORY EXPERIMENTS

S.No	Name of experiment	Equipment/software's used	Status
1	Determine tensile Strength of a given specimen using UTM.	UTM	Available and working
2	Determine the deflection and bending stress of simply supported subjected to	Beam apparatus	Available and working
3	To conduct torsion test on mild steel specimen to find modulus of rigidity or tofind angle of twist of the materials	Torsion M/C	Available and working
4	Determine the stiffness of the spring and modulus of rigidity of the spring wire	Spring Testing M/C	Available and working
5	To determine the Impact strength (Specific impact factor) through Izod test.	Impact Test M/C	Available and working
6	Find out the Shear strength of a given specimen using UTM.	UTM	Available and working
7	To perform the Charpy impact test on materials.	Impact Test M/C	Available and working
8	To determine a material's fatigue behavior by using Fatigue test machine.	Fatigue Test Machine	Available and working

I. **APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):** The above experiments are very use full to understand of machine design & programming

II. **USEFULNESS FOR THE DEPARTMENT :**
   t) Development of industry relation
   u) R & D projects.

I. **NAME OF LABORATORY:** Theory of Machines lab (BMEP-403)
II. **DEPARTMENT:** MECHANICAL ENGINEERING
III. **LOCATION AND NO. :**Second Floor, New Block
IV. COURSE NAME : B.Tech   BRANCH: Mechanical Engineering   Semester: 4th
V. **TOTAL NO. OF EXPERIMENTS   REQUIRED :** 08
   (AS PER UTU SYLLABUS)
VI. **TOTAL NO. OF EXPERIMENTS SETUP IN THE LAB.:** 8
VII. **NO. OF MANUALS IN THE LAB.:**   8
VIII. **NAME OF THE TEACHER IN CHARGE :** Mr. Kuldeep Rawat
IX. **NAME OF THE LAB ASSISTANT :** Mr. Rajendra Singh Gusain
X. **OBJECTIVE OF LAB.:** To understand different components of different machine for designing

Table: Laboratory experiments

S.No	Name of experiment	Equipment	Status
1	Study of simple linkage	Linkage models/mechanisms	Available
2	Study of inversions of four bar linkage	Four bar linkage (models)	Available
3	Experiment of Gear trains	Gear trains (both simple and compound)	Available
4	Exp. on Governor	Governor	Available
5	Exp. on critical speed of shaft	whirling of shaft apparatus	Available
6	Exp. on Gyroscope	Gyroscope	Available
7	Exp. on Balancing	Balancing M/C (static & dynamic)	Available
8	Exp. on Gears (tooth profile, interference)	tooth profile, interference Apparatus	Available

APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS): The above experiments are very use full to understand of machine design & programming

USEFULNESS FOR THE DEPARTMENT :

xiii. Development of industry relation

xiv. R & D projects

DEPARTMENT OF CIVIL ENGINEERING

DETAILS OF LABORATRIES

III SEMESTER

S.NO	NAME OF LABORATORY
1	SURVEYING LAB
2	STUDY OF HISTORICAL &ANCIENT CIVIL ENGINEERING PRACTICES LAB
3	BUILDING PLANNING AND ARCHITECTURE LAB
4	STRENGTH OF MATERIAL LAB
5	

IV SEMESTER

S.NO	NAME OF LABORATORY
1	ENGINEERING GEOLOGY & REMOTE SENSING
2	TRANSPORTATION ENGINEERING I LAB
3	STRUCTURE ANALYSIS I LAB
4	CONCRETE TECHNOLOGY LAB
5	SOFTWARE LAB

V SEMESTER

S.NO	NAME OF LABORATORY
1	SOIL MECHANICS LAB
2	STRUCTURE LAB

VI SEMESTER

S.NO	NAME OF LABORATORY
1	TRANSPORTAION LAB
2	ENVIRONMENT LAB

VII SEMESTER

S.NO	NAME OF LABORATORY
1	CAD LAB-1

VIII SEMESTER

S.NO	NAME OF LABORATORY
1	CAD LAB-2

(I) NAME OF LABORATORY: (BCEP 303) SURVEYING LAB

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION AND NO: FIRST FLOOR

(IV) COURSE NAME: B.TECH   BRANCH: CIVIL ENGINEERING   **SEMESTER: III**

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 11

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF EXPERIMENTS SET UP IN LAB: 11

(VII) NO OF MANUALS IN THE LAB: 01(containing 11 experiments)

(VIII) NAME OF TEACHER IN CHARGE: Mr. Nidhi Chauhan

(IX) NAME OF LAB INSTRUCTOR: Mr. PERVESH GAUR

(X) OBJECTIVES OF LAB: To provide an exposure to the students regarding basic engineering survey.

TABLE: LABORATORY EXPERIMENTS

S.NO	NAME OF EXPERIMENT	EQUIPMENT/ SOFTWARE'S USED	STATUS
1	Chain survey of small area.	Chain and Accessories	Available and Working
2	Traversing an area with a Plane Table Surveying.	Plane Table & Accessories	Available and Working
3	To find out difference of level between two distant point by different methods of Leveling (dumpy/Auto/ tilting).	Dumpy/Auto/ tilting level.	Available and Working
4	Measurement of horizontal, vertical angle and closed traverse with Theodolite.	Vernier / Electronic Theodolite & Accessories	Available and Working
5	Setting out of building.	Theodolite/Levelling	Available and Working
6	Setting out a simple circular curve by Rankine Method.	Tape/Theodolite and Accesssories	Available and Working
7	Height of object with and without accessible bases.	Vernier Theodolite	Available and Working
8	To measuring horizontal distances and difference in elevations by Tachometry.	Theodolite/ Levelling	Available and Working
9	To prepare a contour plan of a road by taking cross section.	Levelling and Staff	Available and Working
10	To find out the co-ordinates by GPS	GPS	Available and Working
11	Demonstration of working of Total Station	Total Station & Accessories	Available and Working

(XI) APPLICATIONS of LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
The survey lab practical are useful to understand procedure for various basic engineering survey.
(XII) USEFULLNESS FOR THE DEPARTMENT:
(i) To provide help for various construction work in college campus.
(ii) Consultancy

(II) NAME OF LABORATORY: (BCEP 306) STUDY OF HISTORICAL & ANCIENT CIVIL ENGINEERING PRACTICES

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION AND NO: Not Required

(IV) COURSE NAME: B.TECH   BRANCH: CIVIL ENGINEERING   **SEMESTER: III**

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 05

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF EXPERIMENTS SET UP IN LAB: Not Required

(VII) NO OF MANUALS IN THE LAB: Not Required

(VIII) NAME OF TEACHER IN CHARGE: Dr. Sujeet Kumar

(IX) NAME OF LAB INSTRUCTOR: Mr. Pervesh gaur

(X) OBJECTIVES OF LAB: To provide an exposure to the students regarding historical and Ancient Civil Engineering Practices.

S.NO	MODULE	EQUIPMENT/ SOFTWARE'S USED	STATUS
1	Basic Understanding of Civil Engineering.	Laptop & Projector.	Available and Working
2	History of Civil Engineering.	Laptop & Projector.	Available and Working
3	Overview of National Planning for Construction and Infrastructure Development	Laptop & Projector.	Available and Working
4	Repair & Rehabilitation of Structures.	Laptop & Projector	Available and Working
5	Case Studies of Civil engineering Projects.	Laptop & Projector	Available and Working

XI) APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
This practical will be useful to understand the draftsmanship within students of civil engineering.

(III) NAME OF LABORATORY: (BCEP 304) BUILDING PLANNING & ARCHITECTURE LAB

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION: SECOND FLOOR

(IV) COURSE NAME: B.TECH   BRANCH: CIVIL ENGINEERING   **SEMESTER: III**

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 05

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF EXPERIMENTS SET UP IN LAB: 50

(VII) NO OF MANUALS IN THE LAB: Not Required

(VIII) NAME OF TEACHER IN CHARGE: Mr. Pankaj Goswami

(IX) NAME OF LAB INSTRUCTOR: Mr. RAMCHARAN BADONI

(X) OBJECTIVES OF LAB: To provide an exposure to the students regarding historical and Ancient Civil Engineering Practices.

S.NO	MODULE	EQUIPMENT/ SOFTWARE'S USED	STATUS

1	Sketches of Various Building components.	Drawing Board & Accessories	Available and Working
2	Drawing of Various building components.	Drawing Board & Accessories.	Available and Working
3	Drawings of services and interiors of buildings.	Drawing Board & Accessories	Available and Working
4	Drawings of one /two bedroom buildings.	Drawing Board & Accessories	Available and Working
5	Drawing of residential and institutional buildings.	Drawing Board & Accessories	Available and Working

XI) APPLICATIONS of LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
This practical will be useful to understand the evolution and current practices in civil engineering.

(IV) NAME OF LABORATORY: (BCEP 304) BUILDING PLANNING & ARCHITECTURE LAB

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION: SECOND FLOOR

(IV) COURSE NAME: B.TECH   BRANCH: CIVIL ENGINEERING   **SEMESTER: III**

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 05

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF EXPERIMENTS SET UP IN LAB: 50

(VII) NO OF MANUALS IN THE LAB: Not Required

(VIII) NAME OF TEACHER IN CHARGE: Mr. Pankaj Goswami

(IX) NAME OF LAB INSTRUCTOR: Mr. RAMCHARAN BADONI

(X) OBJECTIVES OF LAB: To provide an exposure to the students regarding historical and Ancient Civil Engineering Practices.

S.NO	MODULE	EQUIPMENT/ SOFTWARE'S USED	STATUS
1	Sketches of Various Building components.	Drawing Board & Accessories	Available and Working
2	Drawing of Various building components.	Drawing Board & Accessories.	Available and Working
3	Drawings of services and interiors of buildings.	Drawing Board & Accessories	Available and Working
4	Drawings of one /two bedroom buildings.	Drawing Board & Accessories	Available and Working
5	Drawing of residential and institutional buildings.	Drawing Board & Accessories	Available and Working

XI) APPLICATIONS of LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
This practical will be useful to understand the evolution and current practices in civil engineering.

(V) NAME OF LABORATORY: (BCEP 406) SOFTWARE LAB

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION: SECOND FLOOR

(IV) COURSE NAME: B.TECH   BRANCH: CIVIL ENGINEERING   **SEMESTER: IV**

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 05

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF SET UP IN LAB: 20

(VII) NO OF MANUALS IN THE LAB: 02

(VIII) NAME OF TEACHER IN CHARGE: Dr. Amiya Ranjan Pandit

(IX) NAME OF LAB INSTRUCTOR: Mr. RAMCHARAN BADONI

(X) OBJECTIVES OF LAB: To provide an exposure to the students regarding latest software packages of Civil Engineering.

S.NO	MODULE	EQUIPMENT/ SOFTWARE'S USED	STATUS
1	Introduction of general commands of Autocadd.	Autocadd.	Available and Working
2	Application of general commands of Autocadd.	Autocadd.	Available and Working
3	Introduction & Application of modified commands of Autocadd.	Autocadd.	Available and Working
4	Drawings of door, window, floor, coloumn etc using Autocadd	Autocadd.	
5	Drawing of complete house plan using wall command.	Autocadd.	Available and Working

XI) APPLICATIONS of LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
This practical will be useful to understand the evolution and current practices in civil engineering.

VI) NAME OF LABORATORY: CONCRETE TECHNOLOGY LAB

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION AND NO: GROUND FLOOR

(IV) COURSE NAME: B.TECH   BRANCH: CIVIL ENGINEERING   SEMESTER: IV

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 06

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF EXPERIMENTS SET UP IN LAB: 06

(VII) NO OF MANUALS IN THE LAB: 01(containing 6 experiments)

(VIII) NAME OF TEACHER IN CHARGE: Dr. Saleema Panda

(IX) NAME OF LAB TECHNICIAN: Mr. AMANDEEP SINGH

(X) OBJECTIVES OF LAB: To provide an exposure to the students regarding concrete technology.

TABLE: LABORATORY EXPERIMENTS

S.NO	NAME OF EXPERIMENT	EQUIPMENT/ SOFTWARE'S USED	STATUS
1	Fineness modulus and grain size distribution	Set Of I.S sieves, Weighing Balance with weight box	Available and Working
2	Abrasion test on aggregate	Loss Angeles abrasion machine steel spheres(12	Available and Working

			NOS), Set of IS Sieves	
3	Slump Test	Slump Mould,Trowel, weighing machine and steel temping rod	Available and Working
4	Workability of concrete	Compaction Factor Appratus Vibrating table	Available and Working
5	Concrete mixed design as per Indian Standard recommendation guidelines.	CTM, Moulds, Cylinders	Available and Working
6	Effect of water cement ratio on the strength of concrete	CTM, Flexure Testing Machine, Moulds	Available and Working

(XI) APPLICATIONS PF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)

Above experiments are useful to understand basic concepts of testing of building material and concrete.

(XII) USEFULLNESS FOR THE DEPARTMENT:

(i) Development of relation with industry

(ii) Consultancy

iii) project

iv)testing laboratory

(VII) NAME OF LABORATORY: BCEP-403 STRUCTURE ANALYSIS I LAB

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION AND NO: FIRST FLOOR (CE203)

(IV) COURSE NAME: B.TECH BRANCH: CIVIL ENGINEERING   SEMESTER: IV

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 6

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF EXPERIMENTS SET UP IN LAB:

(VII) NO OF MANUALS IN THE LAB: 01(containing 11 experiments)

(VIII) NAME OF TEACHER IN CHARGE: Mr. ABHISEKH KALA

(IX) NAME OF LAB INSTRUCTOR: Mr. N N MILKANI

(X) OBJECTIVES OF LAB:

TABLE: LABORATORY EXPERIMENTS

S.NO	NAME OF EXPERIMENT	EQUIPMENT/ SOFTWARE'S USED	STATUS
1	Experiment on a 2 hinged arch for horizontal thrust and influence line for horizontal thrust	2 hinged arch	Available and Working
2	Experimental and analytical study of a 3 bar pin jointed truss	Pin joint truss apparatus	Available and Working
3	Experimental and analytical study of deflection and unsymmetrical bending of a cantilever beam	Elastically coupled beam	Available and working
4	Sway in portal frames-demonstration	Portal frame	Available and Working
5	To study the cable geometry and statics for different loading condition	Chain or cable and weight blocks	Available and Working
6	To plot stress –strain curve for concrete. Use of mechanical and electrical strain	Mechanical strain gauges	Available and Working

(XI) APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)

To analyse the structures like framed structure, hinge arch ,reductant joint, and trusses

(VIII) NAME OF LABORATORY: (BCEP 404) Transportation Engineering Lab

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION AND NO: Workshop

(IV) COURSE NAME: B.TECH   BRANCH: CIVIL ENGINEERING   **SEMESTER: III**

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 12

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF EXPERIMENTS SET UP IN LAB: 11

(VII) NO OF MANUALS IN THE LAB: 01(containing 11 experiments)

(VIII) NAME OF TEACHER IN CHARGE: Mr. Vimal Mohan

(IX) NAME OF LAB INSTRUCTOR:Mr. Pravesh Gaur

(X) OBJECTIVES OF LAB: to determine some of the properties of coarse aggregates and bitumen.

TABLE: LABORATORY EXPERIMENTS

S.NO	NAME OF EXPERIMENT	EQUIPMENT/ SOFTWARE'S USED	STATUS
1	Determination of aggregate crushing value.	Compressiontesting machine	Available and Working
2	Determination of Los Angeles abrasion value of aggregates.	Los Angeles machine	Available and Working
3	Determination of aggregate impact value.	Impact testing machine	Available and Working
4	Determination of penetration value of bitumen.	penetrometer	Available and Working
5	Determination of softening point value of bitumen.	Ring and Ball apparatus	Available and Working
6	Determination of ductility value of bitumen.	Briquettemould	Available and Working
7	Determination of flash and fire point of bitumen.	Pensky-Martensopencuptester	Available and Working
8	Determination of specific gravity of bitumen.	Bath thermometer	Available and Working
9	Determination of stripping value of aggregate	Thermostatically controlled water bath	Not Available
10	Determination of flakiness index and elongation index of coarse aggregate	Standard thickness gauge and length gauge	Available and Working
11	Determination of specific gravity and water absorption of coarse aggregate.	Thermostatically controlled Oven	Available and Working
12	CBR test for soil.	Loadingmachine	Available and Working

(XI) APPLICATIONS of LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
The transportation lab practicals are useful to understand the standard specification and characteristics of good pavements.
(XII) USEFULLNESS FOR THE DEPARTMENT:
(i) Helpful in testing required for research projects.
(ii) Consultancy

(IX) NAME OF LABORATORY: ENGINEERING GEOLOGY & REMOTE SENSING LAB

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION AND NO: FIRST FLOOR

(IV) COURSE NAME: B.TECH.   BRANCH: CIVIL ENGINEERING   SEMESTER: IV

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 8

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF EXPERIMENTS SET UP IN LAB: 11

(VII) NO OF MANUALS IN THE LAB: 01(containing 11 experiments)

(VIII) NAME OF TEACHER IN CHARGE: Mr.

(IX) NAME OF LAB INSTRUCTOR: Mr.

(X) OBJECTIVES OF LAB: The main objective of lab is to identification and classification of the rocks.

TABLE: LABORATORY EXPERIMENTS

S.NO	NAME OF EXPERIMENT	EQUIPMENT/ SOFTWARE'S USED	STATUS
1	Study of physical properties of minerals	Pycnometer	Available and Working
2	Study of different group of minerals	Samples of Rocks	Available and Working
3	Study of Crystal and Crystal system	Samples of Rocks	Available and Working
4	Identification of minerals: Silica group: Quartz, Amethyst, Opal; Feldspar group	Sample of rocks/	Available and Working
5	Orthoclase, Plagioclase; Cryptocrystalline group: Jasper; Carbonate group:	Samples of Rocks/Microscope	Sample Available/Microscope not available
6	Calcite element group: Graphite; Pyroxene group: Talc; Mica group: Muscovite	Samples of Rocks	Available
7	Amphibole group: Asbestos, Olivine, Hornblende, Magnetite, Hematite, Corundum, Kyanite, Garnet, Galena, Gypsum	Samples of Rocks/Microscope	Sample Available/Microscope not available
8	Identification of rocks (Igneous Petrology)	Samples of Rocks/Microscope/Micro scope	Sample Available/Microscope not available
9	Sedimentary Petrology	Samples of rocks/Microscope	Sample Available/Microscope not available
10	Metamorphic Petrology	Samples of rocks	ASample Available/Microscope not available
11	Study of topographical features from Geological maps, Identification of symbols in maps	Geological map	Available

(XI) APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)

Above experiments are useful tounderstand basic fundamentals of different types of rocks and their identification on the basis of several techniques

(XII) USEFULLNESS FOR THE DEPARTMENT:

   (i)   Study and projects.

   (ii) Consultancy

(X) NAME OF LABORATORY: SOIL MECHANICS LAB

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION AND NO: SOIL MECANICS LAB WORKSHOP

(IV) COURSE NAME: B.TECH   BRANCH: CIVIL ENGINEERING   SEMESTER: V

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 12

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF EXPERIMENTS SET UP IN LAB: 10

(VII) NO OF MANUALS IN THE LAB: 01

(VIII) NAME OF TEACHER IN CHARGE: Mr. ABHINAV RAWAT

(IX) NAME OF LAB TECHNICIAN: Mr. PERVESH GAUR

TABLE: LABORATORY EXPERIMENTS

S.NO	NAME OF EXPERIMENT	EQUIPMENT/ SOFTWARE'S USED	STATUS
1	To conduct sieve analysis of soil to classify the given coarse grained soil.	Set of Sieve, weighing Balance, Oven, Sieve Shaker	Available and Working
2	To conduct hydrometer analysis of soil. To study the grain size distribution of the fine grain soil.	Hydrometer, Dispersion Cup with Assessory, stop watch	Available and Working
3	To determine liquid limit and plastic limit of the given soil sample and to find the flow index and toughness index of the soil	Casagrande Liquid limit device, Oven, Sieve, Spatula.	Available and Working
4	To determine the shrinkage limit of the given soil sample.	Shrinkage dish, mercury, balance	Available and Working
5	To determine optimum moisture content and maximum density for a soil by conducting standard Proctor Compaction Test	Cylindrical Mould, Rammer, balance	Available and Working
6	To Determine the relative Density of Cohesion less Soil	Vibrating table of steel deck , mould with guide, sleves, density mould, dial gauge	Available and Working
7	To Determine the field density of soil at a given location by core cutter method and sand replacement method	Core cutter, rammer, steel trolley, balance	Available and Working
8	To determine the coefficient of permeability by the conducting constant head method and variable head test	Permeability apparatus with accessories, stop watch, measuring jar	Available and Working
9	To determine the shearing strength of the soil using the direct shear apparatus	Shear Box Apparatus, Grid Plates, Porous Stone	Available and Working
10	To determine the specific gravity of the soil solids	Pycnometer, balance, oven, distilled water	Available and Working

(XI) NAME OF LABORATORY: STRUCTURE LAB

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION AND NO: GROUND FLOOR(ME02)

(IV) COURSE NAME: B.TECH   BRANCH: CIVIL ENGINEERING   **SEMESTER: V**

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 10

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF EXPERIMENTS SET UP IN LAB: 11

(VII) NO OF MANUALS IN THE LAB: 01(containing 11 experiments)

(VIII) NAME OF TEACHER IN CHARGE: Mr. ABHISEKH KALA

(IX) NAME OF LAB INSTRUCTOR: Mr. N N MILKANI

TABLE: LABORATORY EXPERIMENTS

S.NO	NAME OF EXPERIMENT	EQUIPMENT/ SOFTWARE'S USED	STATUS
1	Comparison of experimental and theoretical result of forces in the members and the components displacements of the loaded joint D of a three bar suspension system for vertical loads.	Redundant joint apparatus	Available and Working
2	To calculate experimentally and theoretically the loads in the three suspensions rods supporting an elastic beam with a concentrated load hung midway between two of the suspension rods under two conditions	Elasticity coupled beam apparatus	Available and Working
3	To verify Clerk' Maxwell theorem of reciprocal deflection with the help of truss model	Truss apparatus	Available and Working
4	To determine the horizontal thrust in a three hinged arch for a given system of loads experimentally and verify the same with calculated values	Three hinged arch apparatus	Available and Working
5	To study the behavior of a cantilever beam under symmetrical and unsymmetrical bending	unsymmetrical bending apparatus	Available and Working
6	To study experimentally a two hinged arch for the horizontal displacement of the roller end for a given system of loading and to compare the same with those obtained analytically	Two hinged arch apparatus	Available and Working
7	To determine the moment required to produce a given rotation at one end of beam when the other end is - 1- pinned 2- fixed	Deflected beam apparatus	Available and Working
8	To study the behavior of different types of columns and to calculate the Euler's buckling load for each case	Struts apparatus	Available and Working
9	Analysis of portal frame apparatus due to horizontal varying loads	Portal framed apparatus	Available and Working
10	To determine the elastic displacements of the curved members excrementally and compare these values with those obtained theoretically	Curved members	Available and Working
11	To verify Clarks Maxwell's theorem by means of a mild steel beam	Mild steel arrangement	Available and Working

(XI) APPLICATIONS PF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)

To analyse the structures like framed structure, hinge arch ,reductant joint, and trusess

(XII) NAME OF LABORATORY: **TRANSPORTATION LAB**

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION AND NO: TRANSPORTATION LAB (WORK SHOP)

(IV) COURSE NAME: B.TECH   BRANCH: CIVIL ENGINEERING   **SEMESTER: VI**

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 15

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF EXPERIMENTS SET UP IN LAB: 15

(VII) NO OF MANUALS IN THE LAB: 01

(VIII) NAME OF TEACHER IN CHARGE: Mr. ANAND KHEMWAL

(IX) NAME OF LAB TECHNECIAN: Mr. AMANDEEP

(X) OBJECTIVES OF LAB:

TABLE: LABORATORY EXPERIMENTS

S.NO	NAME OF EXPERIMENT	EQUIPMENT/ SOFTWARE'S USED	STATUS
1	Specific gravity test of bitumen	Pycnometer	Available and Working
2	Ductility test of bitumen	Ductility machine	Available and Working
3	Flush point and fire point test of bitumen	Penesky	Available and Working
4	Float test of bitumen	Not available	-
5	Penetration test of bitumen	Penetrometer	Available and Working
6	Softening test of bitumen	Ring and Ball	Available and Working
7	Viscosity test of bitumen	Tar viscometer	Available and Working
8	Water content test of bitumen	Not required	-
9	Abrasion test of aggregate	Los Angeles abrasion machine	Available and Working
10	Shape test (flakiness and elongation) of aggregate	Flakiness and elongation apparatus	Available and Working
11	Impact value test of aggregate	Specific gravity apparatus	Available and Working
12	Compressive strength test of aggregate	Compressive Testing Machine	Available and Working
13	Viscosity of tar	Tar viscometer	Available and Working
14.	Marshal test for stability and flow value	Marshal apparatus	Available and Working

(XI) APPLICATIONS PF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)

All the experiments are helpful in judging the suitability of soil, bitumen, tar, cut backs, aggregates and bituminous mix of pavement design.

(XIII) NAME OF LABORATORY: **ENVIRONMENTAL LAB**

(II) DEPARTMENT: CIVIL ENGINEERING

(III) LOCATION AND NO: GROUND FLOOR

(IV) COURSE NAME: B.TECH   BRANCH: CIVIL ENGINEERING   SEMESTER: VI

(V) TOTAL NO OF EXPERIMENTS REQUIRED: 7

(AS PER UTU SYLLABUS)

(VI) TOTAL NO OF EXPERIMENTS SET UP IN LAB: 7

(VII) NO OF MANUALS IN THE LAB: 01(containing 11 experiments)

(VIII) NAME OF TEACHER IN CHARGE: Dr. ANJANA RAJPUT

(IX) NAME OF LAB INSTRUCTOR: Mr. PERVESH GAUR

(X) OBJECTIVES OF LAB:

TABLE: LABORATORY EXPERIMENTS

S.NO	NAME OF EXPERIMENT	EQUIPMENT/ SOFTWARE'S USED	STATUS
1	DETERMINATION OF TURBIDITY, COLOUR, AND CONDUCTIVITY	CONDUCTIVITY AND TURBIDITYMETER, NEPHELOMETERE	Available and Working
2	DETERMINATION OF PH, ALKALINITY AND ACIDITY.	pH Meter, Potentiometer Alkalinity and Acidity(Analytical method) Burette, Pipette, conical flask, funnel	Available and Working
3	DETERMINATION OF HARDNESS AND CHLORIDES	Complex metric titration , burette,pipette,conical flask, funnel	Available and Working
4	DETERMINATION OF RESIDUAL CHLORINE AND CHLORINE DEMAND	Chloroscopy	Available and Working
5	DETERMINATION OF DISSOLVED OXYGEN	DO meter	Available and Working
6	MEASUREMENT OF AIR POLLUTANTS WITH HIGH VOLUME SAMPLER.	HIGH VOLUME SAMPLER	Available and Working
7	MEASUREMENT OF SOUND LEVEL WITH SOUND LEVEL METER.	Sound Level Meter	Available and Working

(XI) APPLICATIONS PF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)

The environmental lab practical are useful to understand procedure for various water quality parameters.

(XII) USEFULLNESS FOR THE DEPARTMENT:

(i) To provide help for various water quality parameters.

(ii) Consultancy

XIV). NAME OF LABORATORY   : CAD LAB -1

II) DEPARTMENT: CIVIL ENGINEERING

II). LOCATION AND NO. : GROUND FLOOR

IV). COURSE NAME: B-TECH   BRANCH: CIVIL ENGINEERING   **SEM   VII**

V).TOTAL NO. OF EXPERIMENTS REQUIRED: 3

        (AS PER UTU SYLLABUS)

VI). TOTAL NUMBER OF EXPERIMENTS SET UP IN THE LAB: 3

VII). NO. OF MANUALS IN LABS: 3

VIII). NAME OF TEACHER INCHARGE: MR. VARUN JOSHI

IX). NAME OF LAB INSTRUCTOR: MR. AMANDEEP SINGH

X). OBJECTIVES OF LAB: TO PROVIDE KNOWLEDGE TO THE STUDENTS REGARDING DESIGNING BY USING CAD SOFTWARE.

S.No	Name of Experiments	Equipment Software Used	Status
1.	Basic Commands used in Cad software	Cad Software	Working & Available

2.	3 BHK building Plan	Cad Software	Working & Available
3.	Design of Overhead water Tank	Cad Software	Working & Available
4.	Design Of Intz Tank	Cad Software	Working & Available
5.	Layout Of Ground Floor	Cad Software	Working & Available

(XI) APPLICATIONS PF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)

The CAD lab practical are useful to understand procedure for Designing Various Civil Engineering Projects

(XII) USEFULLNESS FOR THE DEPARTMENT:

(i) To provide help for various construction work in college campus.

(ii) Consultancy

XV). NAME OF LABORATORY   : CAD LAB -2

II) DEPARTMENT: CIVIL ENGINEERING

II). LOCATION AND NO. : GROUND FLOOR

IV). COURSE NAME : B-TECH   BRANCH : CIVIL ENGINEERING   **SEM VIII**

V).TOTAL NO. OF EXPERIMENTS REQUIRED: 3

       (AS PER UTU SYLLABUS)

VI). TOTAL NUMBER OF EXPERIMENTS SET UP IN THE LAB: 3

VII). NO. OF MANUALS IN LABS: 3

VIII). NAME OF TEACHER INCHARGE: MR.VARUN JOSHI

IX). NAME OF LAB INSTRUCTOR: MR. AMANDEEP SINGH

X). OBJECTIVES OF LAB: TO PROVIDE KNOWLEDGE TO THE STUDENTS REGARDING DESIGNING BY USING CAD SOFTWARE.

S.No	Name of Experiments	Equipment Software Used	Status
	Design Of Beams	Cad Software	Working & Available
	Design of a column	Cad Software	Working & Available
	Design of a Multi storey Building	Cad Software	Working & Available
	Design Of a Circular water tank	Cad Software	Working & Available

(XI) APPLICATIONS PF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)

The CAD lab practical are useful to understand procedure for Designing Various Civil Engineering Projects

 (XII) USEFULLNESS FOR THE DEPARTMENT:

(i) To provide help for various construction work in college campus.

(ii) Consultancy

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

DETAILS OF LABORATORIES

III SEMESTER

S.N.	Name of the Laboratory
1.	Electronic Devices Lab
2.	Digital Electronics Lab

IV SEMESTER

S.N.	Name of the Laboratory
1.	Analog Circuit Lab
2.	Analog Communication Lab

V SEMESTER

S.N.	Name of the Laboratory
1.	Microprocessors & Interfacing Lab.
2.	EMFT Lab. (List of practical and equipment not available)
3.	Simulation Software Lab (Mat Lab, Multisim etc) (List of practical and equipment not available)
4.	VLSI Lab (List of practical and equipment not available)

VI SEMESTER

S.N.	Name of the Laboratory
1.	Digital Communication Lab.
2.	Open Source S/w Lab (List of practical and equipment not available)
3.	DSP Lab
4.	Antenna and Wave Propagation Lab (List of practical and equipment not available)

VII SEMESTER

S.N.	Name of the Laboratory
1.	OFC Lab

VIII SEMESTER

S.N.	Name of the Laboratory
1.	CAD of Electronics Lab

I. **NAME OF LABORATORY:**   Electronic Devices Lab (BECP - 304)

II. **DEPARTMENT:** ECE

III. **LOCATION AND NO. :** II Floor, ECE 01

IV. **COURSE NAME :** B.Tech   **BRANCH:** ECE   **Semester:** III

V. **TOTAL NO. OF EXPERIMENTS   REQUIRED :** 8
(AS PER UTU SYLLABUS)

VI. **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 10

VII. **NO. OF MANUALS IN THE LAB:** 10

VIII. **NAME OF THE TEACHER IN CHARGE:** Mr. Ashish Kr. Gupta

IX. **NAME OF THE LAB ASSISTANT:**

X. **OBJECTIVE OF LAB:** To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	Study of Lab Equipment and Components	CRO, multimeter, and function generator, power supply- active, passive components and bread board	Working
2	P-N Junction diode Characteristics	Digital Multimeters, PN Diode, Resistor, Connecting Wires, Breadboard	Working
3	Study of Half wave and full wave rectifier circuit	Digital Multimeters, PN Diode, resistors, Connecting Wires, Breadboard, Step Down transformer, CRO	Working
4	Study of characteristics of Zener Diode	Digital Multimeters, Zener Diode, Connecting Wires, Breadboard	Working
5	Characteristics of Photo diode	Digital Multimeters, Photodiode, Connecting Wires, Breadboard	Working
6	V-I Characteristics of Solar cell	Digital Multimeters, Solar cell, resistors , Connecting Wires, Breadboard	Solar Cell Not Available
7	Zener Diode as Voltage Regulator	Digital Multimeters, Zener Diode, Capacitor, Connecting Wires, Breadboard	Working

8	Determination of characteristics of BJT in CE configuration.	BJT Kit, DMM, Discrete Components.	BJT kit is not Available
9	FET gain vs frequency determination	FET Kit, DMM, Discrete Components.	BJT kit is not Available
10	MOSFET gain vs frequency determination	MOSFET Kit, DMM, Discrete Components.	BJT kit is not Available

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of theory with the help of practical to make fundamentals of electronics clear to them.

Remark: One function Generator SCE\ECE\EC\FG\05 is not working in the lab

I. **NAME OF LABORATORY:** Digital Electronics Lab (BECP 303)
II. **DEPARTMENT:** ECE
III. **LOCATION AND NO. :** II Floor, ECE 02
IV. **COURSE NAME :** B.Tech   **BRANCH:** II Year ECE   **Semester:** III
V. **TOTAL NO. OF EXPERIMENTS   REQUIRED :** 8
     (AS PER UTU SYLLABUS)
VI. **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:9**
VII. **NO. OF MANUALS IN THE LAB:** 9
VIII. **NAME OF THE TEACHER IN CHARGE:** Mr Sunil Sharma
IX. **NAME OF THE LAB ASSISTANT :**
X. **OBJECTIVE OF LAB:** To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	Implementation of basic gates using universal gates.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
2	Bread-board implementation of various flip-flops.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
3	Bread-board implementation of counters & shift registers.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
4	Experiments with clocked Flip-Flop	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
5	Design of Counters	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
6	Bread Board implementation of Adder/Subtractor (Half, Full)	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
7	Transfer characteristics of TTL inverters	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
8	Monoshot multivibrators using 74121 and 74123.	Digital lab Trainer, Bread Board, DMM, Connecting wires,	Working

		Digital ICs	
9	Clock circuit realization using 555	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
10	Demultiplexer / Decoder operation using IC-74138.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of Digital Electronics theory with the help of practical Knowledge for better understanding.

Remark:-IC -7408, IC-555 NOT PRESENT

- UNIVERSAL TRAINER KIT 558-SUPPLY IS MORE THEN 5V FOR TTL LOGIC
- PROJECT BOARD-01- FUSE NOT PRESENT

I. **NAME OF LABORATORY:** Electronic Measurement & Instrumentation Lab (BECP 302)
II. **DEPARTMENT:** EEE
III. **LOCATION AND NO. :** III Floor, EEE 02
IV. **COURSE NAME :** B.Tech **BRANCH:** II Year ECE **Semester:** III
V. **TOTAL NO. OF EXPERIMENTS REQUIRED :** 8
(AS PER UTU SYLLABUS)
VI. **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 10
VII. **NO. OF MANUALS IN THE LAB:** 10
VIII. **NAME OF THE TEACHER IN CHARGE:**
IX. **NAME OF THE LAB ASSISTANT :**
X. **OBJECTIVE OF LAB:** Measurement of various electrical quantities (Voltage, Current, Power).

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	Study of L.C.R. Bridge and determination of the value of the given components	LCR Bridge	Not Working
2	Study of the PT-100 Transducer, J Type, K Type and pressure transducer	PT-100 Transducer	Working
3	Measurement of voltage, current and resistance using dc Potentiometer.	Voltmeter, ammeter and load	Not Working
4	Measurement of phase difference and frequency using CRO (Lissajous Pattern	CRO and function generator	Working
5	Measurement of low resistance Kelvin's double bridge.	Kelvin's Double Bridge	Not Working
6	Measurement of inductance by Anderson bridge.	Anderson bridge	Not Working
7	Measurement of capacitance by Owen's bridge.	Owen's bridge	Not Working
8	Measurement of Capacitance by De	De Sauty bridge	Not

	Sauty bridge.		Working
9	Measurement of inductance by Hay's Bridge	Hay's Bridge	Not Working
10	Study of A to D converter	Analog to Digital Converter Kit	Working

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of Measurement theory with the help of practicals for better knowledge.

    I.   **NAME OF LABORATORY:**   Analog Communication Lab (BECP 403)

    II.   **DEPARTMENT:** ECE

    III.   **LOCATION AND NO. :** II Floor, ECE 04

    IV.   **COURSE NAME :** B.Tech   **BRANCH:** II Year ECE   **Semester:** IV

    V.   **TOTAL NO. OF EXPERIMENTS   REQUIRED :** 8
        (AS PER UTU SYLLABUS)

    VI.   **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 10

    VII.   **NO. OF MANUALS IN THE LAB:** 10

    VIII.   **NAME OF THE TEACHER IN CHARGE:** Mrs. Shabnam Ara

    IX.   **NAME OF THE LAB ASSISTANT :**

    X.   **OBJECTIVE OF LAB:** To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	To study amplitude modulation & determine its modulation factor & power in side bands.	CRO, Probes, Function Generator, Amplitude Mod/Demod kit, Connecting Wires	Kit Not Working
2	To study amplitude demodulation	CRO, Probes, Function Generator, Amplitude Mod/Demod kit, Connecting Wires	Kit Not Working
3	To study frequency modulation and determine its modulation factor	CRO, Probes, Function Generator, Frequency Mod/Demod kit, Connecting Wires	Working
4	To study frequency demodulator	CRO, Probes, Function Generator, Frequency Mod/Demod kit, Connecting Wires	Modulation part Working but demodulation part not working
5	To study sampling and reconstruction	CRO, Probes, Function Generator, Sampling and Reconstruction Kit, Connecting Wires	Kit Not Working
6	To study Pulse Amplitude Modulationa	CRO, Probes, Function Generator, Pulse Amplitude Mod/Demod kit, Connecting Wires	Kit Not Working
7	To study Pulse Width Modulation	CRO, Probes, Function Generator, Pulse Width Mod/Demod kit, Connecting Wires	Kit Not Working
8	To study Pulse Position Modulation	CRO, Probes, Function Generator, Pulse Position Mod/Demod kit, Connecting Wires	Kit Not Working
9	To study DSB SC Modulation & Demodulation	CRO, Probes, Function Generator, DSB-SC Mod/Demod kit, Connecting Wires	Working

10	To study SSB SC Modulation & Demodulation	CRO, Probes, Function Generator, SSB-SC Mod/Demod kit, Connecting Wires	Working

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of Analog Communication theory with the help of practicals for bettwr understanding.

I. **NAME OF LABORATORY:** Analog Circuits Lab (BECP 405)
II. **DEPARTMENT:** ECE
III. **LOCATION AND NO. :** II Floor, ECE 02
IV. **COURSE NAME :** B.Tech   **BRANCH:** II Year ECE   **Semester:** IV
V. **TOTAL NO. OF EXPERIMENTS REQUIRED :** 10
(AS PER UTU SYLLABUS)
VI. **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 10
VII. **NO. OF MANUALS IN THE LAB:** 10
VIII. **NAME OF THE TEACHER IN CHARGE:** Mr. Sunil Sharma
IX. **NAME OF THE LAB ASSISTANT :**
X. **OBJECTIVE OF LAB:** To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	Adder and subtractor circuit using OPAMP.	Bread Board, Function generator, CRO, Probes, Wires, Discrete components, IC 741, Multimeter	Working
2	Log and antilog amplifiers.	Bread Board, Function generator, CRO, Probes, Wires, Discrete components, IC 741, Multimeter	Working
3	Voltage comparator and zero crossing detectors.	Bread Board, Function generator, CRO, Probes, Wires, Discrete components, IC 741, Multimeter	Working
4	Study of Differentiator circuit using OPAMP.	Bread Board, Function generator, CRO, Probes, Wires, Discrete components, IC 741, Multimeter	Working
5	Study of Integrator circuit using OPAMP	Bread Board, Function generator, CRO, Probes, Wires, Discrete components, IC 741, Multimeter	Working
6	Second order filters using operational amplifier for Low pass filter of cutoff frequency 1 KHz.	Bread Board, Function generator, CRO, Probes, Wires, Discrete components, IC 741, Multimeter	Working
7	Second order filters using operational amplifier for High pass filter of frequency 12 KHz	Bread Board, Function generator, CRO, Probes, Wires, Discrete components, IC 741, Multimeter	Working
8	Wien bridge oscillator using operational amplifier	Bread Board, Function generator, CRO, Probes, Wires, Discrete components, IC 741, Multimeter	Working
9	Astable multivibrator using IC 555	Bread Board, Function generator, CRO, Probes, Wires, Discrete components, IC 741, Multimeter	Working
10	Monostable multivibrator using IC 555	Bread Board, Function generator, CRO, Probes, Wires, Discrete components, IC 741, Multimeter	Working

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of Analog Integrated circuit theory with the help of practical for better understanding.

I. **NAME OF LABORATORY:** Microprocessors & Interfacing Lab (BECP 501)
II. **DEPARTMENT:** ECE
III. **LOCATION AND NO. :** II Floor, ECE 05
IV. **COURSE NAME :** B.Tech   **BRANCH:** III Year ECE   **Semester:** V

V. **TOTAL NO. OF EXPERIMENTS REQUIRED :** 8
(AS PER UTU SYLLABUS)

VI. **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 10

VII. **NO. OF MANUALS IN THE LAB:** 10

VIII. **NAME OF THE TEACHER IN CHARGE:** Mr. Sunil Sharma

IX. **NAME OF THE LAB ASSISTANT :**

X. **OBJECTIVE OF LAB:** To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	Study of 8085 microprocessor kit	8085 microprocessor kit	Working
2	To perform Addition of two 8 bit numbers	8085 microprocessor kit	Working
3	To perform Multiplication of two 8 bit numbers	8085 microprocessor kit	Working
4	To Find the maximum value in an array	8085 microprocessor kit	Working
5	To perform BCD to Hex conversion & Hex to BCD conversion	8085 microprocessor kit	Working
6	To Design Counter using timer	8085 microprocessor kit	Working
7	Study of 8086 microprocessor kit	8086 microprocessor kit	Working
8	Programming with 8086 –16-bit, 32 bit multiplication	8086 microprocessor kit	Working
9	Programming with 8086 –16-bit, 32 division	8086 microprocessor kit	Working
10	Interfacing with 8085/8086/8051 – 8279,8251	8085/8086 microprocessor kit, peripherals	Working

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of microprocessor theory with the help of practical for better understanding.

I. **NAME OF LABORATORY:** Circuit Design on PCB Lab (BECP 506)

II. **DEPARTMENT:** ECE

III. **LOCATION AND NO. :** II Floor, ECE 03

IV. **COURSE NAME :** B.Tech   **BRANCH:** III Year ECE   **Semester:** V

V. **TOTAL NO. OF EXPERIMENTS REQUIRED :** 6
(AS PER UTU SYLLABUS)

VI. **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 6

VII. **NO. OF MANUALS IN THE LAB:** 6

VIII. **NAME OF THE TEACHER IN CHARGE:** Mr. Sunil Sharma

IX. **NAME OF THE LAB ASSISTANT :**

X. **OBJECTIVE OF LAB:** To design PCBs for the circuits.

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	Study of Electronic Components and PCB machines	Discrete Components, PCB Machines	Working
2	Artwork and printing of simple PCB	Roller Tinning machine, UV Exposure, and Oven	Working
3	Etching & Drilling of PCB	Dye Developer Machine, Drilling Machine	Working
4	Fabrication of regulated power supply	Roller Tinning machine, UV Exposure, Oven, Dye Developer Machine, Drilling Machine	Working
5	Testing of power supply fabricated in Exp. 4	Roller Tinning machine, UV Exposure, Oven, Dye Developer Machine, Drilling Machine	Working
6	Testing and designing of any Modulator and Demodulator Circuit	Roller Tinning machine, UV Exposure, Oven, Dye Developer Machine, Drilling Machine	Working

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of theory with the help of Circuit designing and testing.

I. **NAME OF LABORATORY:** DSP Lab (BECP 601)

II. **DEPARTMENT:** ECE

III. **LOCATION AND NO. :** III Floor, ECE 07

IV. **COURSE NAME :** B.Tech   **BRANCH:** III Year ECE   **Semester:** VI

V. **TOTAL NO. OF EXPERIMENTS REQUIRED :** 8
(AS PER UTU SYLLABUS)

VI. **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 9

VII. **NO. OF MANUALS IN THE LAB:** 9

VIII. **NAME OF THE TEACHER IN CHARGE:** Mr. Ashish Kumar Gupta

IX. **NAME OF THE LAB ASSISTANT :**

X. **OBJECTIVE OF LAB:** To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	Linear Convolution.	PC with Latest configuration and MatLab	
2	Circular Convolution	PC with Latest configuration and MatLab	
3	Fast Fourier Transform.	PC with Latest configuration and MatLab	
4	FIR Filter implementation	PC with Latest configuration and MatLab	
5	IIR Filter implementation using Window Function	PC with Latest configuration and MatLab	Desktop Systems required
6	IIR Filter implementation using various windows.	PC with Latest configuration and MatLab	
7	Amplitude Modulation	PC with Latest configuration and MatLab	
8	Frequency Modulation	PC with Latest configuration and MatLab	
9	Computational Experiments with Digital bank of Filters	PC with Latest configuration and MatLab	

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of DSP theory with the help of practical for better understanding.

I. **NAME OF LABORATORY:** Digital Communication Lab (BECP 603)

II. **DEPARTMENT:** ECE

III. **LOCATION AND NO. :** II Floor, ECE 04

IV. **COURSE NAME :** B.Tech   **BRANCH:** III Year ECE   **Semester:** VI

V. **TOTAL NO. OF EXPERIMENTS   REQUIRED :** 8
(AS PER UTU SYLLABUS)

VI. **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 9

VII. **NO. OF MANUALS IN THE LAB:** 9

VIII. **NAME OF THE TEACHER IN CHARGE:** Mrs. Shabnam Ara

IX. **NAME OF THE LAB ASSISTANT :**

X. **OBJECTIVE OF LAB:** To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	To study sampling and reconstruction of the sampled signal	sampling and reconstruction kit,CRO, probes,connecting wires	Working
2	To study Pulse Code Modulation and Demodulation	Pulse Code Modulation kit,CRO, probes,connecting wires	Working
3	To study Delta Modulation and Demodulation	Delta Modulation kit,CRO, probes,connecting wires	Working
4	To study Adaptive Delta Modulation and Demodulation	Adaptive Delta Modulation kit,CRO, probes,connecting wires	Working
5	To study ASK modulation system	ASK modulation kit,CRO, probes,connecting wires	Working
6	To study PSK modulation system	PSK modulation kit,CRO, probes,connecting wires	Kit Not Working
7	To study FSK modulation system	FSK modulation kit,CRO, probes,connecting wires	Kit Not Working
8	To Study TDM/PCM Transmitter /Receiver	TDM/PCM Kit,CRO, probes,connecting wires	Working
9	To Study different Line Coding Techniques	Communication traine kit,CRO, probes,connecting wires	Working

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of Digital Communication theory with the help of practical for better understanding.

I. **NAME OF LABORATORY:**   OFC and VLSI Simulation Lab (PEC 751)

II. **DEPARTMENT:** ECE

III. **LOCATION AND NO.:** II Floor, ECE 06

IV. **COURSE NAME:** B. Tech   **BRANCH:** IV Year ECE   **Semester:** VII

V. **TOTAL NO. OF EXPERIMENTS   REQUIRED:** 8
(AS PER UTU SYLLABUS)

| | VI. | **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 10 |

VI.   **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 10

VII.   **NO. OF MANUALS IN THE LAB:** 10

VIII.   **NAME OF THE TEACHER IN CHARGE:** Mr. Ashish Kr. Gupta

IX.   **NAME OF THE LAB ASSISTANT:**

X.   **OBJECTIVE OF LAB:** To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	To set up Fiber Optic Analog link.	Optical Trainer Kit, Connecting Wires, CRO, Probes	Working
2	To set up fiber Optic Digital link.	Optical Trainer Kit, Connecting Wires, CRO, Probes	Working
3	Measurement of Propagation loss and numerical aperture.	Optical Trainer Kit, Connecting Wires, CRO, Probes	Working
4	Characterization of laser diode and light emitting diode.	Optical Trainer Kit, Connecting Wires, CRO, Probes	Working
5	3-input NAND gate.	PC with latest configuration, VHDL software	Simulation Lab
6	Half adder, Full Adder	PC with latest configuration, VHDL software	Simulation Lab
7	D-Latch, T Flip Flop	PC with latest configuration, VHDL software	Simulation Lab
8	Serial in-serial out shift register	PC with latest configuration, VHDL software	Simulation Lab
9	Bidirectional shift Register	PC with latest configuration, VHDL software	Simulation Lab
10	3 Bit synchronous counter	PC with latest configuration, VHDL software	Simulation Lab

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of Optical Fiber and VLSI Design theory with the help of practical for better understanding.

Remark: - Repair required in Optical Trainer Kit no. SCE/ECE/OFC/EFOT-01

        Repair required in Optical Trainer Kit no. SCE/ECE/OFC/FOT-01

I.   **NAME OF LABORATORY:**   CAD of Electronics Lab(PEC852)

II.   **DEPARTMENT:** ECE

III.   **LOCATION AND NO. :** III Floor, ECE 07

IV.   **COURSE NAME :** B.Tech   **BRANCH:** IV Year ECE   **Semester:** VIII

V.   **TOTAL NO. OF EXPERIMENTS REQUIRED :** 8
(AS PER UTU SYLLABUS)

VI.   **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 8

VII.   **NO. OF MANUALS IN THE LAB:** 8

VIII.   **NAME OF THE TEACHER IN CHARGE:** Mr. Khalid Ali Khan

IX.   **NAME OF THE LAB ASSISTANT :**

X.   **OBJECTIVE OF LAB:** To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	Design, simulation and analysis of two input NAND and NOR gate	PC with latest configuration, EDWIN XP software	
2	Design, simulation and analysis of Push Pull Amplifier.	PC with latest configuration, EDWIN XP software	
3	Design, simulation and analysis of NMOS and CMOS inverter.	PC with latest configuration, EDWIN XP software	
4	Design, simulation and analysis of Differential amplifier.	PC with latest configuration, EDWIN XP software	
5	Design, simulation and analysis of Full Adder, Sub-tractors circuit.	PC with latest configuration, EDWIN XP software	Desktop Systems required
6	Design, simulation and analysis of Up/ Down, Mod-m counter.	PC with latest configuration, EDWIN XP software	
7	Design, simulation and analysis of 512X8 ROM.	PC with latest configuration, EDWIN XP software	
8	Design, simulation and analysis of Static/ Dynamic hazards removal circuits.	PC with latest configuration, EDWIN XP software	

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of Circuit Simulation for better understanding.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DETAILS OF LABORATORIES

I/II SEMESTER

S.N.	Name of the Laboratory
1.	Fundamentals of Computer Programming Lab

III SEMESTER

S.N.	Name of the Laboratory
1.	Computer Workshop (Using Python)
2.	Data Structure Lab
3.	Digital Electronics Lab
4	Object Oriented Programming Lab

IV SEMESTER

S.N.	Name of the Laboratory
1.	Software Engineering Lab
2.	Database Management System Lab Lab
3.	Theory of Automata and Formal Languages Lab
4.	Computer Org. & Architecture Lab
5.	Programming Practices (Introduction to MATLAB)

V SEMESTER

S.N.	Name of the Laboratory
1.	Operating System Lab.
2.	Computer Network Lab.
3.	Design and analysis and Algorithm Lab.
4.	Virtual Lab(Advance Java Lab)

VI SEMESTER

S.N.	Name of the Laboratory
1.	Microprocessors and Applications Lab.
2.	Compiler Design Lab.
3.	Data Analytics lab
4.	Open Source Lab/ Matlab Programming

VII & VIII SEMESTER

S.N.	Name of the Laboratory
1.	System Administration Lab
2.	Web Technology Lab

I.   **NAME OF LABORATORY:** C Programming Lab (BCSP101\BCSP201)

II.   **DEPARTMENT:** Computer Science Engineering

III. **LOCATION AND NO.**   **:**I FLOOR, LAB NO. 1

IV.   **COURSE NAME:** B. TECH.   **BRANCH:** I YEAR   **SEMESTER:**I/II

V.   **TOTAL NO. OF EXPERIMENTS REQUIRED:**12
(AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

VI.   **TOTAL NO OF EXPERIMENTS SET UP IN LAB:**12

VII.   **NO OF MANUALS IN LAB:**15

VIII. **OBJECTIVE OF LAB:** Introduction to C programming language, its usage & application to learn various programming concepts and constructs

TABLE: LIST OF LABORATORY EXPERIMENTS

S. No.	Name of Experiment	Equipment/Software's used	Status
1.	Familiarization with programming environment.	PC/ LINUX Vi Editor, gcc	Working
2.	WAP to implement Simple computational problems using arithmetic expressions.	PC/ LINUX Vi Editor, gcc	Working
3.	WAP to implement Problems involving if-then-else structures	PC/ LINUX Vi Editor, gcc	Working
4.	WAP to implement Iterative problems e.g., sum of series.	PC/ LINUX Vi Editor, gcc	Working
5.	WAP to implement 1D Array manipulation.	PC/ LINUX Vi Editor, gcc	Working
6.	WAP to implement Matrix problems, String operations.	PC/ LINUX Vi Editor, gcc	Working
7.	WAP to implement Simple functions.	PC/ LINUX Vi Editor, gcc	Working
8.	WAP to implement Programming for solving Numerical methods problems 1.	PC/ LINUX Vi Editor, gcc	Working
9.	WAP to implement Programming for solving Numerical methods problems 2.	PC/ LINUX Vi Editor, gcc	Working
10.	WAP to implement Recursive functions.	PC/ LINUX Vi Editor, gcc	Working
11.	WAP to implement Pointers and structures.	PC/ LINUX Vi Editor, gcc	Working
12.	WAP to implement File operations Laboratory.	PC/ LINUX Vi Editor, gcc	Working

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):
   a) Study and understand basic concept of programming using C Language
   b) Improves the logical and conceptual ability

I.   **NAME OF LABORATORY:** Computer Workshop (Using Python) BCSP-306

II-   **DEPARTMENT:** Computer Science Engineering

IV-   **COURSE NAME:** B. TECH.   **BRANCH:** CSE   **SEMESTER:** III

V-   **TOTAL NO. OF EXPERIMENTS REQUIRED:** 15
(AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

VI-   **TOTAL NO OF EXPERIMENTS SET UP IN LAB:** 15

VII-   **NO OF MANUALS IN LAB:** 15

VIII-   **OBJECTIVE OF LAB:** Solving Numerical Problems using C programming language, as per the methods in CBNST.

TABLE: LIST OF LABORATORY EXPERIMENTS

S. No.	Name of Experiment	Equipment/Software's used	Status
1.	Installation & working with IDE	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
2.	How to declare and use variables and operators	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
3.	Programming using Basic Libraries (Numpy, Pandas, SK Learn etc)	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
4.	To write a Python program to print HELLO INDIA.	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
5.	To write a Python program that takes in command line arguments as input and print the number of arguments.	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
6.	To write a Python program find the division of student.	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
7.	To write a program implements Fibonacci series.	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
8.	To write a Python program for factorial.	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
9.	To write a Python program to use of functions.	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
10.	To write a Python program to implement list.	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
11.	To write a Python program to implement tuples.	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
12.	To write a Python program Insertion sort.	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
13.	To write a Python program merge sort.	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
14.	To write a Python program first n prime numbers.	PC, WINDOWS/LINUX, IDE/Python 3.7	Working
15.	Implementation of Data Science concepts using Python	PC, WINDOWS/LINUX, IDE/Python 3.7	Working

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):
   a) The course is designed to provide Basic knowledge of Python. Python programming is intended for software engineers, system analysts, program managers and user support personnel who wish to learn the Python programming language.
   b) Learning Outcomes: Problem solving and programming capability.

I.   **NAME OF LABORATORY:** Data Structure Lab BCSP- 303

II.   **DEPARTMENT:** Computer Science Engineering

III.   **LOCATION AND NO. :** I FLOOR LAB NO. 2

IV.   **COURSE NAME:** B. TECH.   **BRANCH:** CSE   **SEMESTER:** III

V. **TOTAL NO. OF EXPERIMENTS REQUIRED:** 12
(**AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS**)

VI. **TOTAL NO OF EXPERIMENTS SET UP IN LAB:** 12

VII. **NO OF MANUALS IN LAB:** 15

VIII. **OBJECTIVE OF LAB:** Implement the basic concepts of Data Structure and to learn usage

TABLE: LIST OF LABORATORY EXPERIMENTS

S. No.	Name of Experiment	Equipment/Software's used	Status
1.	Implementation of Array ADT and String ADT	PC, WINDOWS/LINUX, TURBO C++ IDE/Vi Editor, gcc	Working
2.	Programs for Stack, Queues and Circular Queues using Arrays	PC, WINDOWS/LINUX, TURBO C++ IDE/Vi Editor, gcc	Working
3.	Program to convert an Infix Expression into Postfix and Postfix Evaluation	PC, WINDOWS/LINUX, TURBO C++ IDE/Vi Editor, gcc	Working
4.	Program to implement a Singly Linked List	PC, WINDOWS/LINUX, TURBO C++ IDE/Vi Editor, gcc	Working
5.	Programs to implement Stack & Queues using Linked Representation	PC, WINDOWS/LINUX, TURBO C++ IDE/Vi Editor, gcc	Working
6.	Programs implement Double Linked List and Circular Linked List	PC, WINDOWS/LINUX, TURBO C++ IDE/Vi Editor, gcc	Working
7.	Program for Polynomial Arithmetic using Linked List	PC, WINDOWS/LINUX, TURBO C++ IDE/Vi Editor, gcc	Working
8.	Program to implement Hashing	PC, WINDOWS/LINUX, TURBO C++ IDE/Vi Editor, gcc	Working
9.	Programs to implement Insertion Sort, Selection Sort, Heap Sort, and Shell Sort	PC, WINDOWS/LINUX, TURBO C++ IDE/Vi Editor, gcc	Working
10.	Program to implement Quick Sort and Merge Sort	PC, WINDOWS/LINUX, TURBO C++ IDE/Vi Editor, gcc	Working
11.	Programs to implement Tree Traversals on Binary Trees and Graphs Search Methods	PC, WINDOWS/LINUX, TURBO C++ IDE/Vi Editor, gcc	Working
12.	Programs to implement operations on AVL Trees and Splay Trees	PC, WINDOWS/LINUX, TURBO C++ IDE/Vi Editor, gcc	Working

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):
From student point of view, concepts of data structure help the students to think about proper utilization of computer memory & processor. It also helps to understand how to organize the data in computer system for better performance.

XI. **NAME OF LABORATORY :** Digital Electronics Lab (BECP 303)
XII. **DEPARTMENT** **:** Computer Science Engineering
XIII. **LOCATION AND NO. :** II Floor, ECE 02
XIV. **COURSE NAME :** B.Tech **BRANCH:**CSE**S emester:** III

XV. **TOTAL NO. OF EXPERIMENTS   REQUIRED :** 10
(AS PER UTU SYLLABUS)
XVI. **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 10

XVII. **NO. OF MANUALS IN THE LAB:** 10

XVIII. **OBJECTIVE OF LAB:** To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	Introduction to Digital Electronics lab- nomenclature of digital ICS.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
2	Implementation of the given Boolean function using logic gates in both sop and pos forms.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
3	Verification of state tables of RS, JK, T and D flip-flops using NAND & NOR gates.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
4	Implementation and verification of decoder/de-multiplexer and encoder using logic gates.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
5	Implementation of 4x1 multiplexer using logic gates.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
6	Implementation of 4-bit parallel adder using 7483 IC.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
7	To design and verify operation of half adder and full adder.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
8	To design & verify the operation of magnitude comparator.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
9	Design and verify the 4-bit synchronous counter.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working
10	Design and verify the 4-bit asynchronous counter.	Digital lab Trainer, Bread Board, DMM, Connecting wires, Digital ICs	Working

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of Digital Electronics theory with the help of practical Knowledge for better understanding.

I. **NAME OF LABORATORY:** Object Oriented Programming & Methodology BCSP-305

II. **DEPARTMENT:** Computer Science Engineering

III. **LOCATION AND NO. :** I FLOOR LAB NO. 2

IV. **COURSE NAME:** B. TECH. **BRANCH:** CSE **SEMESTER:** III

V. **TOTAL NO. OF EXPERIMENTS REQUIRED:** 13
(AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

VI. **TOTAL NO OF EXPERIMENTS SET UP IN LAB:**13

VII. **NO OF MANUALS IN LAB:** 15

OBJECTIVE OF LAB: Implement the basic concepts of Object Oriented Programming and to learn its usage.

TABLE: LIST OF LABORATORY EXPERIMENTS

S.	Name of Experiment	Equipment/Software's	Status

No.		used	
1.	To write a Java program to print HELLO INDIA.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
2.	To write a java program that takes in command line arguments as input and print the number of arguments.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
3.	To write a java program find the division of student.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
4.	To write a program implements the concept of inheritance.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
5.	To write a java program method overloading.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
6.	To write a java program for method over riding.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
7.	To write a java program exception handling.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
8.	To write a java program to run applet for drawing various shapes.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
9.	To write a java program to design a login using JFrame.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
10.	To write a java program to validate the logging details of user using JDBC concept.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
11.	To write a Java program Insertion sort.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
12.	To write a Java program merge sort.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
13.	To write a Java program first n prime numbers.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):

From student point of view, concept of object oriented programming is very important from point of view of modularity and customizability.

I. **NAME OF LABORATORY:** Software Engineering Lab BCSP-403
II. **DEPARTMENT:** Computer Science Engineering
III. **LOCATION AND NO. :** I FLOOR, LAB NO. 3
IV. **COURSE NAME:** B. TECH.   **BRANCH:** CSE   **SEMESTER:** IV
V. **TOTAL NO. OF EXPERIMENTS REQUIRED:** 11
   (AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)
VI. **TOTAL NO OF EXPERIMENTS SET UP IN LAB:** 11
VII. **NO OF MANUALS IN LAB:** 15
VIII. **OBJECTIVE OF LAB:** To make students familiar with UNIX Environment, commands and Shell Script.
   TABLE: LIST OF LABORATORY EXPERIMENTS

S. No.	Name of Experiment	Equipment/Software's used	Status
1.	Phases in software development project, overview, need, coverage of topics	PC/ LINUX LUCID Chart	Working
2.	To assign the requirement engineering tasks	PC/ LINUX LUCID Chart	Working
3.	To perform the system analysis : Requirement analysis, SRS	PC/ LINUX LUCID Chart	Working
4.	To perform the function oriented diagram : DFD and Structured chart	PC/ LINUX LUCID Chart	Working
5.	To perform the user's view analysis : Use case diagram	PC/ LINUX LUCID Chart	Working
6.	To draw the structural view diagram : Class diagram, object diagram	PC/ LINUX LUCID Chart	Working
7.	To draw the behavioral view diagram : Sequence diagram, Collaboration diagram	PC/ LINUX LUCID Chart	Working
8.	To draw the behavioral view diagram : State-chart diagram, Activity diagram	PC/ LINUX LUCID Chart	Working
9.	To draw the implementation view diagram: Component diagram	PC/ LINUX LUCID Chart	Working
10.	To draw the environmental view diagram : Deployment diagram	PC/ LINUX LUCID Chart	Working

| 11. | To perform various testing using the testing tool unit testing, integration testing. | PC/ LINUX LUCID Chart, Selenium | Working |

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):

Students will be capable to acquire the generic software development skill through various stages of software life cycle. He will also be able to ensure the quality of software through software development with various protocol based environment. After completion of course student will be able to generate test cases for software testing. Students will also be able to handle software development models through rational method. Rational Rose Enterprise Edition software is used to serve the objectives. The course contains Basic Structural Modeling, Advance Structural Modeling, Basic Behavioral Modeling, Advance Behavioral Modeling, Architectural Modeling, UML Notation, UML Stranded Elements, Designing Test cases, Test Suits, Rational Unified Process etc.

I. NAME OF LABORATORY: Database Management System Lab BCSP-402

II. DEPARTMENT: Computer Science Engineering

III. LOCATION AND NO. : I FLOOR LAB NO. 6

IV. COURSE NAME: B. TECH. **BRANCH:** CSE **SEMESTER:** IV

V. TOTAL NO. OF EXPERIMENTS REQUIRED: 10
    (AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

VI. TOTAL NO OF EXPERIMENTS SET UP IN LAB: 10

VII. NO OF MANUALS IN LAB: 15

VIII. OBJECTIVE OF LAB: Implement the basic concepts of DBMS and give basic knowledge of SQL Environment and to learn its usage

TABLE: LIST OF LABORATORY EXPERIMENTS

S. No.	Name of Experiment	Equipment/Software's used	Status
1.	Write the queries for Data Manipulation and Data Definition Language.	PC, Windows, mysql	Working
2.	Write SQL queries using logical operations and operators.	PC, Windows, mysql	Working
3.	Write SQL query using group by function.	PC, Windows, mysql	Working
4.	Write SQL queries for group functions.	PC, Windows, mysql	Working
5.	Write SQL queries for sub queries, nested queries.	PC, Windows, mysql	Working
6.	Write programme by the use of PL/SQL.	PC, Windows, mysql	Working
7.	Write SQL queries to create views	PC, Windows, mysql	Working

8.	Write an SQL query to implement JOINS.	PC, Windows, mysql	Working
9.	Write a query for extracting data from more than one table.	PC, Windows, mysql	Working
10.	Write a query to understand the concepts for ROLL BACK, COMMIT & CHECK POINTS.	PC, Windows, mysql	Working

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):

Students understand the importance and issues related to Database Management System as it is very important from the point of view of industries

NAME OF LABORATORY: Computer Organization & Architecture Lab (BCSP -404)
  XI.   **DEPARTMENT:** Computer Science Engineering

XII.   LOCATION AND NO. : I FLOOR LAB NO. 5

  XIII.   **COURSE NAME :** B.Tech   **BRANCH:** CSE   **Semester:** IV

XIV.   TOTAL NO. OF EXPERIMENTS   REQUIRED : 16
         (AS PER UTU SYLLABUS)
XV.   TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB: 16

XVI.   NO. OF MANUALS IN THE LAB: 10

XVII.   OBJECTIVE OF LAB: To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	Bread-board implementation of various flip-flops.	Bread Board Kit	Working
2	Bread-board implementation of counters & shift registers.	Bread Board Kit	Working
3	Determination of Delay time and NAND, NOR, Ex-OR, AND & OR Gates.	Bread Board Kit	Working
4	Bread Board Implementation of Flip-Flops.	Bread Board Kit	Working
5	Experiments with clocked Flip-Flop.	Bread Board Kit	Working
6	Design of Counters.	Bread Board Kit	Working
7	Bread Board implementation of counters & shift registers.	Bread Board Kit	Working
8	Implementation of Arithmetic algorithms.	Bread Board Kit	Working
9	Bread Board implementation of Adder/Subtractor (Half, Full)	Bread Board Kit	Working
10	Transfer characteristics of TTL inverters & TTL Schmitt Trigger inverter.	Bread Board Kit	Working
11	Transfer characteristics of CMOS inverters series and CD40 series and	Bread Board Kit	Working
12	Estimation of Gate delay of CD40 series CMOS inverter.	Bread Board Kit	Working
13	Monoshot multivibrators using 74121 and 74123.	Bread Board Kit	Working

14	Clock circuit realization using 555 and CMOS inverter and quartz crystal.	Bread Board Kit	Working
15	Adder/ subtractor operation using IC7483 4 bit/ 8 bit.	Bread Board Kit	Working
16	Demultiplexer / Decoder operation using IC-74138.	Bread Board Kit	Working

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of Computer Organization with the help of practical Knowledge for better understanding.

NAME OF LABORATORY: Theory of Automata & Formal Languages Lab (BCSP -405)
- I. **DEPARTMENT:** Computer Science Engineering
- II. **LOCATION AND NO. :** I FLOOR LAB NO. 4
- III. **COURSE NAME :** B.Tech   **BRANCH:** CSE   **Semester:** IV
- IV. **TOTAL NO. OF EXPERIMENTS   REQUIRED :** 15
  (AS PER UTU SYLLABUS)
- V. **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 15
- VI. **NO. OF MANUALS IN THE LAB:** 15
- VII. **OBJECTIVE OF LAB:** To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	Design a Program for creating machine that accepts three consecutive one.	PC, Windows, JFLAP	Working
2	Design a Program for creating machine that accepts the string always ending with 101.	PC, Windows, JFLAP	Working
3	Design a Program for Mode 3 Machine	PC, Windows, JFLAP	Working
4	Design a program for accepting decimal number divisible by 2.	PC, Windows, JFLAP	Working
5	Design a program for creating a machine which accepts string having equal no. of 1's and 0's.	PC, Windows, JFLAP	Working
6	Design a program for creating a machine which count number of 1's and 0's in a given string.	PC, Windows, JFLAP	Working
7	Design a Program to find 2's complement of a given binary number.	PC, Windows, JFLAP	Working
8	Design a Program which will increment the given binary number by 1.	PC, Windows, JFLAP	Working
9	Design a Program to convert NDFA to DFA.	PC, Windows, JFLAP	Working
10	Design a Program to create PDA machine that accept the well-formed parenthesis.	PC, Windows, JFLAP	Working
11	Design a PDA to accept WCWR where w is any string and WR is reverse of that string and C is a Special symbol.	PC, Windows, JFLAP	Working
12	Design a Turing machine that's accepts the following language L = {anbncn	where n > 0}.	PC, Windows, JFLAP	Working
13	Introduction, Setup & Installation of JFLAP software/relevant software for Theory of Automata & Formal Languages.	PC, Windows, JFLAP	Working
14	Create DFA to NFA and vice versa using JFLAP software/relevant software for Theory of Automata & Formal Languages.	PC, Windows, JFLAP	Working
15	Convert Regular Expression into NFA using JFLAP software/relevant software for Theory of Automata & Formal Languages	PC, Windows, JFLAP	Working

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

After completing the lab, the student will be able to: Model, compare and analyse different computational models using combinatorial methods. Apply rigorously formal mathematical methods to prove properties of languages, grammars and automata.

- I. **NAME OF LABORATORY:** Programming Practices (Introduction to MATLAB) Lab (BCSP -406)
- II. **DEPARTMENT:** Computer Science Engineering
- III. **LOCATION AND NO. :** I FLOOR LAB NO. 3
- IV. **COURSE NAME :** B.Tech   **BRANCH:** CSE   **Semester:** IV
- V. **TOTAL NO. OF EXPERIMENTS   REQUIRED :** 8
  (AS PER UTU SYLLABUS)
- VI. **TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB:** 10
- VII. **NO. OF MANUALS IN THE LAB:** 10
- VIII. **OBJECTIVE OF LAB:** To implement the theoretical aspects in the practical work

Table: List of Laboratory experiments

S.No	Name of experiment	Equipment/Software's Used	Status
1	Study of 8085 microprocessor kit	8085 microprocessor kit	Working
2	To perform Addition of two 8 bit numbers	8085 microprocessor kit	Working
3	To perform Multiplication of two 8 bit numbers	8085 microprocessor kit	Working
4	To Find the maximum value in an array	8085 microprocessor kit	Working
5	To perform BCD to Hex conversion & Hex to BCD conversion	8085 microprocessor kit	Working
6	To Design Counter using timer	8085 microprocessor kit	Working
7	Study of 8086 microprocessor kit	8086 microprocessor kit	Working
8	Programming with 8086 –16-bit, 32 bit multiplication	8086 microprocessor kit	Working
9	Programming with 8086 –16-bit, 32 division	8086 microprocessor kit	Working
10	Interfacing with 8085/8086/8051 – 8279,8251	8085/8086 microprocessor kit, peripherals	Working

(XI) APPLICATION OF LAB EXPERIMENTS (From the point of view of students)

To get the maximum exposure of microprocessor theory with the help of practical for better understanding.

- I. **NAME OF LABORATORY:** Operating Systems Lab BCSP- 501
- II. **DEPARTMENT:** Computer Science Engineering
- III. **LOCATION AND NO. :** I FLOOR LAB NO. 2
- IV. **COURSE NAME:** B. TECH.   **BRANCH:** CSE   **SEMESTER:** V
- V. **TOTAL NO. OF EXPERIMENTS REQUIRED:** 8
  (AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

VI.   **TOTAL NO OF EXPERIMENTS SET UP IN LAB:** 8

VII.   **NO OF MANUALS IN LAB:** 15

VIII.   **OBJECTIVE OF LAB:** Implement the concepts of Operating System.

TABLE: LIST OF LABORATORY EXPERIMENTS

S. No.	Name of Experiment	Equipment/Software's used	Status
1.	Simulation of the CPU scheduling algorithms a) Round Robin b) SJF c) FCFS d) Priority	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
2.	Simulation of MUTEX and SEMAPHORES..	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
3.	Simulation of Bankers Deadlock Avoidance and Prevention algorithms	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
4.	Implementation of Process Synchronization (Reader-Writer, Sleeping Barber and Dining Philosopher's Problem)	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
5.	Simulation of page Replacement Algorithms a) FIFO b) LRU c) LFU	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc 6	Working
6.	Simulation of paging techniques of memory management	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
7.	Simulation of file allocation Strategies a) Sequential b) Indexed c) Linked	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
8.	Simulation of file organization techniques a) Single Level Directory b) Two Level c) Hierarchical d) DAG	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):

a) Understand and learn basic concepts related to Operating System so that students could understand the basics of interaction between hardware and OS.

b) Important to understand the concept from the point of view of developing hardware dependent applications

I.   **NAME OF LABORATORY:** Computer Networks Lab BCSP 502

II.   **DEPARTMENT:** Computer Science Engineering

III.   **LOCATION AND NO. :** I FLOOR LAB NO. 6

IV.   **COURSE NAME:** B. TECH.   **BRANCH:** CSE   **SEMESTER:** V

V.   **TOTAL NO. OF EXPERIMENTS REQUIRED:** 7
(AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

VI.   **TOTAL NO OF EXPERIMENTS SET UP IN LAB:** 7

VII.   **NO OF MANUALS IN LAB:** 15

VIII.   **OBJECTIVE OF LAB:** Implement the basic concepts of Computer Networks and work on Simulators

TABLE: LIST OF LABORATORY EXPERIMENTS

S. No.	Name of Experiment	Equipment/Software's used	Status

1.	Implementation of the Data Link Layer framing method such as character stuffing and bit stuffing.	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
2.	Implementation of CRC algorithm	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
3.	Implementation of a Hamming (7,4) code to limit the noise. We have to code the 4 bit data in to 7 bit data by adding 3 parity bits.	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
4.	Implementation of LZW compression algorithm.	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
5.	Write a socket program to implement a listener and a talker.	PC, WINDOWS, NetBeans IDE/JDK1.6	Working
6.	Simulation of a network of 3 nodes and measure the performance on the same network.	Cisco Packet Tracer	Working
7.	Write a program to encrypt 64-bit text using DES algorithm	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):
   a) Very important to understand the basic concept of networks
   b) Establishing Networks and communication system

   I.   NAME OF LABORATORY: AlgorithmsLab BCSP 503

   II.   DEPARTMENT: Computer Science Engineering

   III. LOCATION AND NO. : I FLOOR LAB NO. 2

   IV.   COURSE NAME: B. TECH.   **BRANCH:** CSE   **SEMESTER:** V

   V.   TOTAL NO. OF EXPERIMENTS REQUIRED: 7
   (AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

   VI.   TOTAL NO OF EXPERIMENTS SET UP IN LAB: 7

   VII. NO OF MANUALS IN LAB: 15

   VIII. OBJECTIVE OF LAB: Implement different Algorithm Techniques.

TABLE: LIST OF LABORATORY EXPERIMENTS

S. No.	Name of Experiment	Equipment/Software's used	Status
1.	Divide and conquer method (quick sort, merge sort, Strassen's matrix multiplication)	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
2.	Greedy method (knapsack problem, job sequencing, optimal merge patterns, minimal spanning trees).	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
3.	Dynamic programming (multistage graphs, OBST, 0/1 knapsack, traveling sales person problem).	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
4.	Back tracking (n-queens problem, graph coloring problem, Hamiltonian cycles).	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
5.	Sorting: Insertion sort, Heap sort, Bubble sort	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc6	Working
6.	Searching: Sequential and Binary Search	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
7.	Selection: Minimum/ Maximum, Kth smallest element	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):
   a) To be able to give a program structure to the Algorithms
   b) Increase Logical Thinking

c) Improves ability to build industry based applications

I. **NAME OF LABORATORY:** Virtual Lab(Advance Java Lab)BCSP-506
II. **DEPARTMENT:** Computer Science Engineering
III. **LOCATION AND NO. :** I FLOOR LAB NO. 2
IV. **COURSE NAME:** B. TECH.　　**BRANCH:** CSE　　**SEMESTER:** V
V. **TOTAL NO. OF EXPERIMENTS REQUIRED:** 7
(AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)
VI. **TOTAL NO OF EXPERIMENTS SET UP IN LAB:** 7
VII. **NO OF MANUALS IN LAB:** 15
VIII. **OBJECTIVE OF LAB:** Implement the concepts of Advance Java and their usage.

TABLE: LIST OF LABORATORY EXPERIMENTS

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):
a) Use standard IDE namely NetBeans
b) Understand the JAVA Technology Road Map that includes J2SE and J2EE and its various libraries
c) Understand Client side Web Technologies like JavaScript along with server side Technologies
d) Improves ability to build industry based applications

I. **NAME OF LABORATORY:** Microprocessor and application Lab BCSP-601

II. **DEPARTMENT:** Computer Science Engineering

III. **LOCATION AND NO. :** I FLOOR LAB NO. 2

IV. **COURSE NAME:** B. TECH.　　**BRANCH:** CSE　　**SEMESTER:** VI

V. **TOTAL NO. OF EXPERIMENTS REQUIRED:** 8
(AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

VI. **TOTAL NO OF EXPERIMENTS SET UP IN LAB:** 8

VII. **NO OF MANUALS IN LAB:** 15

VIII. **OBJECTIVE OF LAB:** Implement the concepts of Operating System.

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):
c) Understand and learn basic concepts related to Operating System so that students could understand the basics of interaction between hardware and OS.
d) Important to understand the concept from the point of view of developing hardware dependent applications

I. **NAME OF LABORATORY:** Compiler Design Lab BCSP-602

II. **DEPARTMENT:** Computer Science Engineering

III. **LOCATION AND NO. :**　I FLOOR LAB NO. 2

IV.   **COURSE NAME:** B. TECH.   **BRANCH:** CSE   **SEMESTER:** VI

V.   **TOTAL NO. OF EXPERIMENTS REQUIRED:** 5
    (AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

VI.   **TOTAL NO OF EXPERIMENTS SET UP IN LAB:** 5

VII.   **NO OF MANUALS IN LAB:** 15

VIII.   **OBJECTIVE OF LAB:** Implement and understanding working of phases of compiler and learn to use tools like YACC and LEX.

TABLE: LIST OF LABORATORY EXPERIMENTS

S. No.	Name of Experiment	Equipment/Software's used	Status
1.	Simulation of a Finite state Automata to recognize the tokens of various control statements.	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
2.	Simulation of a Finite state machine to distinguish among Integers, Real Numbers & Numbers with Exponents.	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
3.	Program in LEX tool to recognize the tokens and to return the token found for a C like Language	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
4.	Parsing of arithmetic and algebraic expressions and equations.	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc	Working
5.	Use of YACC tool to parse the statements of C like Language.	PC, Windows/Linux, TURBO C++ IDE/Vi Editor, gcc 6, YACC tool	Working

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):
    a) Understand the working of different phases of compilers.
    b) Understand how to program different phases of Language translators and interpreters

I.   **NAME OF LABORATORY:** Data Analytics Lab BCSP-603

II.   **DEPARTMENT** Computer Science Engineering

III.   **LOCATION AND NO. :** I FLOOR LAB NO. 6

IV.   **COURSE NAME:** B. TECH.   **BRANCH:** CSE   **SEMESTER:** VI

V.   **TOTAL NO. OF EXPERIMENTS REQUIRED:** 7
    (AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

VI.   **TOTAL NO OF EXPERIMENTS SET UP IN LAB:** 7

VII.   **NO OF MANUALS IN LAB:** 15

VIII.   **OBJECTIVE OF LAB:** Implement the concepts of Artificial Intelligence and their usage.

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):
    a) Understand the fields related to AI.
    b) As our industries are progressing and technologies are changing the students should know about new technologies and research going on.
    c) Understand how to program small applications related to AI domain

NAME OF LABORATORY: Open Source Lab/Matlab Programming BCSP-606

I.   **DEPARTMENT:** Computer Science Engineering

II. **LOCATION AND NO. :** I FLOOR LAB NO. 5

III. **COURSE NAME:** B. TECH.   **BRANCH:** CSE   **SEMESTER:** VI

IV. **TOTAL NO. OF EXPERIMENTS REQUIRED:** 7
     (AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

V.   **TOTAL NO OF EXPERIMENTS SET UP IN LAB:** 7

VI. **NO OF MANUALS IN LAB:** 15

VII. **OBJECTIVE OF LAB:** Understanding the basic concepts of OOPs and .Net Framework
XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):
Understand basic concepts related to visual programming and how they can be used to build projects and industry based applications

I.   **NAME OF LABORATORY:** System Administration LabPCS-751/PIT-751

II. **DEPARTMENT:** Computer Science Engineering

III. **LOCATION AND NO. :** I FLOOR LAB NO. 4

IV. **COURSE NAME:** B. TECH.   **BRANCH:** CSE   **SEMESTER:** VII

V.   **TOTAL NO. OF EXPERIMENTS REQUIRED:** 10
(AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

VI. **TOTAL NO OF EXPERIMENTS SET UP IN LAB:** 10

VII. **NO OF MANUALS IN LAB:** 15

VIII. **OBJECTIVE OF LAB:** To learn basic concept of System Administration in LINUX and WINDOWS Environment
TABLE: LIST OF LABORATORY EXPERIMENTS

S. No.	Name of Experiment	Equipment/Software's used	Status
1.	Installation of operating system (Window 7 and LINUX)	PC, Windows 7, LINUX	Working
2.	Installation of office productivity software (MS Office/ Open Office)	PC, Windows 7, LINUX	Working
3.	User Management	PC, LINUX	Working
4.	Security Management	PC, LINUX	Working
5.	Startup & Shutdown scripts	PC, LINUX	Working
6.	Network planning – subnet creation	PC, LINUX	Working
7.	Firewall configuration	PC, LINUX	Working
8.	Basic properties of Windows Registry	PC, Windows 7	Working
9.	Study of Important Windows Services	PC, Windows 7	Working
10.	Study of Important LINUX Services	PC, LINUX	Working

I.   **NAME OF LABORATORY:** Web Technology Lab PCS-852

II. **DEPARTMENT:** Computer Science Engineering

IV.   **COURSE NAME:** B. TECH.   **BRANCH:** CSE   **SEMESTER:** VIII

V.   **TOTAL NO. OF EXPERIMENTS REQUIRED:** 6

(AS PER UTTARAKHAND TECHNICAL UNIVERSITY SYLLABUS)

VI.   **TOTAL NO OF EXPERIMENTS SET UP IN LAB:** 6

VII.   **NO OF MANUALS IN LAB:** 15

VIII.   **OBJECTIVE OF LAB:** To learn basic concept of Web Development

TABLE: LIST OF LABORATORY EXPERIMENTS

S. No.	Name of Experiment	Equipment/Software's used	Status
1.	Installation and configuration of Apache server	PC, Windows 7, Netbeans	Working
2.	Development of static website of an online Departmental Store. The website should be user friendly and should have the following pages: ▢▢Home page ▢▢Registration and user login ▢▢User profile page ▢▢Items catalog ▢▢Shopping cart ▢▢Payment by credit card ▢▢Order confirmation	PC, Windows 7, Netbeans	Working
3.	Add validations to the above site for registration, user login, user profile and payment by credit card using Java Script.	PC, Windows 7, Netbeans	Working
4.	Installation and configuration of TOMCAT web server. Convert the static web pages of Prog. 2 into dynamic web pages using servlets and cookies.	PC, Windows, TOMCAT web server	Working
5.	Creation of a XML document of 20 students of UKTech. Add their roll numbers, marks obtained in 5 subjects, total and percentage and save this XML document at the server. Write a program that takes students' roll number as an input and returns the students marks, total and percentage by taking the students' information from the XML document.	PC, Windows 7, Notepad ++, Web Browser	Working
6.	Design a website using existing web services (Google map, weather forecast, market information etc.) using AJAX.	AJAX	Working

XI APPLICATION OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS):
Understand basic concepts related to Web Technology and how they can be used to build projects and industry based applications.

ELECTRICAL AND ELECTRONICS ENGINEERING
LAB DETAILS

(I)NAME OF LABORATORY   : (PEE- 553   Applied Instrumentation Laboratory)

(ii) DEPARTMENT   :EEE

(iii) LOCATION AND NO.   : III rd floor Academic Block
(IV)COURSE NAME   : B.Tech Branch:EEE   SEMESTER   V
(V)TOTAL NO. OF EXPERIMENTS REQUIRED: 11
(AS PER UTU SYLLABUS)
(VI)TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB.:   11

(VII)NO OF MANUALS IN THE LAB.:6
(VIII)NAME OF TEACHER IN CHARGE: Vipin Chandra Bhat
(IX)OBJECTIVES OF LAB : To learn about the control of operation of machines
TABLE: LABORATORY EXPERIMENTS

S.NO.	Name of Experiments	Apparatus required	Status
1	Measurement of Displacement using LVDT	LVDT Demonstration kit	Available & working
2	Measurement using Strain Gauge based displacement	Strain Guage	Available & working
3	Measurement of Temperature by RTD	RTD demonstration kit	Available & working
4	Measurement of temperature by thermocouple	Thermo couple demonstration kit	Available & working
5	Study of P,PI,PID controllers	PID controller KIT	Available & working
6	Study of Storage oscilloscope and determination of Transient response of RLC circuit	Oscilloscope	Available & working
7	asurement of flow rate by anemometer	Air velocity trainer kit	Available & working
8	Measurement of load using strain gauge based load cell.	Load cell & strain guage	Available & working
9	Design and test a signal conditioning circuit for any transducer	oscilloscope	Available & working
10	Measurement of displacement using magnetic pickup.	Displacement transducer	Available & working
11	Measurement of water level using strain gauge based water level transducer		Available & working

(XI)APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
Study of how to control motors and other electrical machines studied in past semester, achieved.
(XII)USEFULNESS FOR THE DEPARTMENT:
   (i)   Development of industry relation
   (ii) R&D projects
   (iii) Consultancy/Testing

(I)NAME OF LABORATORY   (BEEP-101/201 BASIC ELECTRICAL ENGINEERING LAB)
(ii) DEPARTMENT   :EEE
(iii) LOCATION AND NO.   III rd floor Academic Block
(IV)COURSE NAME   : B.Tech Branch: All   SEMESTER   I/II
(V)TOTAL NO. OF EXPERIMENTS REQUIRED: 10
(AS PER UTU SYLLABUS)
(VI)TOTAL NO. OF EXPERIMENTS SET UP IN THE
                                              LAB.:10
(VII)NO OF MANUALS IN THE LAB.: 10

(VIII)NAME OF TEACHER IN CHARGE: Kuldeep Godiyal

(IX)OBJECTIVES OF LAB : To learn about basic concepts of machines and networks
TABLE: LABORATORY EXPERIMENTS

S.NO.	Name of Experiments	Apparatus required	Status

S.NO.	Name of Experiments	Apparatus required	Status
1	Basic safety precautions. Introduction and use of measuring instruments	Voltmeter, ammeter, multi-meter, oscilloscope. Real-life resistors, capacitors and inductors.	Available & working
2	Measuring the steady-state and transient time-response of R-L, R-C, and R-L-C circuits to a step change in voltage	storage oscilloscope	Available & working
3	Observation of the no-load current waveform on an oscilloscope	storage oscilloscope	Available & working
4	Voltage and Current relationships (line-line voltage, phase-to-neutral voltage, line and phase currents). Phase-shifts between the primary and secondary side. Cumulative three-phase power in balanced three-phase circuits.	Two wattmeter with voltmeter and ammeter	Available & working
5	Demonstration of cut-out sections of machines	dc machine (commutator-brush arrangement), induction machine (squirrel cage rotor), synchronous machine (field winging - slip ring arrangement) and single-phase induction machine	Available & working
6	Synchronous speed of two and four-pole, three-phase induction motors. Direction reversal by change of phase-sequence of connections.	three-phase induction motor	Available & working
7	Synchronous Machine operating as a generator: stand-alone operation with a load. Control of voltage through field excitation	Parallel operation kit	Available & working
8	Demonstration of Components of LT switchgear.	LT switchgear.	Available & working

(XI)APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
Study of electrical machines and basic networks studied during semester through a practical approach.

(XII)USEFULNESS FOR THE DEPARTMENT:

- (iv) Development of industry relation
- (v) R&D projects
- (vi) Consultancy/Testing

(I)NAME OF LABORATORY   : (PEE- 652   Control System Laboratory)

(ii) DEPARTMENT   :EEE

(iii) LOCATION AND NO.   : III rd floor Academic Block
(IV)COURSE NAME   : B.Tech Branch: EEE   SEMESTER   V   I
(V)TOTAL NO. OF EXPERIMENTS REQUIRED: 11
(AS PER UTU SYLLABUS)
(VI)TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB.:   11
(VII)NO OF MANUALS IN THE LAB.:6
(VIII)NAME OF TEACHER IN CHARGE: Rahul Dubey
(IX)OBJECTIVES OF LAB : To learn about the control of operation of machines
TABLE: LABORATORY EXPERIMENTS

S.NO.	Name of Experiments	Apparatus required	Status

1	To use D.C. potentiometers as an error detectors.	Potentiometers error detectors.	Available & working
2	To verify characteristics of (a) self excited magnetic amplifiers, with (i) Positive feedback (ii) Negative feedback	Magnetic amplifiers, Demonstration unit ,Solid state power supply, variac transformer,C.R.O.	Available & working
3	To draw characteristics of (a) Series connected (b) Parallel connected magnetic amplifier.	Magnetic amplifiers Demonstration unit ,Solid state power supply, variac transformer,C.R.O.	Available & working
4	To draw characteristics of synchro torque transmitters. Also draw the characteristics error detector using of two synchros.	Synchro transmitter receiver pair	Available & working
5	To study speed control of universal motor using SCR and stroboscope	C.R.O. ,Tachometer Universal motor trainer kit	Available & working
6	Speed control of AC motor using TRAIC.	Speed control kit of induction motor, induction motor 1/8 H.P.	Available & working
7	determine time domain response of a second order system for step input and obtain performance parameters	Software based (matlab)	Available & working
8	To convert transfer function of a system into state space form and vice-versa.	Software based (matlab)	Available & working
9	Plot root locus diagram of an open loop transfer function and determine range of gain 'k' stability	Software based (matlab)	Available & working
10	To plot a Bode diagram of an open loop transfer function	Software based (matlab)	Available & working
11	To draw a Nyquist plot of an open loop transfer function and examine the stability of the closed loop system.	Software based (matlab)	Available & working

(XI)APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
        Study of how to control motors and other electrical machines studied in past semester, achieved.
(XII)USEFULNESS FOR THE DEPARTMENT:
     (vii) Development of industry relation
     (viii)R&D projects
     (ix) Consultancy/Testing

(I)NAME OF LABORATORY   : (PEE- 652   Control System Laboratory)

(ii) DEPARTMENT   :EEE

(iii) LOCATION AND NO.   : III rd floor Academic Block
(IV)COURSE NAME   : B.Tech Branch: ME   SEMESTER   V   I
(V)TOTAL NO. OF EXPERIMENTS REQUIRED: 11
(AS PER UTU SYLLABUS)
(VI)TOTAL NO. OF EXPERIMENTS SET UP IN THE LAB.:   11
(VII)NO OF MANUALS IN THE LAB.:6
(VIII)NAME OF TEACHER IN CHARGE: Rahul Dubey
 (IX)OBJECTIVES OF LAB : To learn about the control of operation of machines
                    TABLE: LABORATORY EXPERIMENTS

S.NO.	Name of Experiments	Apparatus required	Status
1	To use D.C. potentiometers as an error detectors.	Potentiometers error detectors.	Available & working
2	To verify characteristics of (a) self excited magnetic amplifiers, with (i) Positive feedback (ii) Negative feedback	Magnetic amplifiers, Demonstration unit ,Solid state power supply, variac transformer,C.R.O.	Available & working
3	To draw characteristics of (a) Series connected (b) Parallel connected magnetic amplifier.	Magnetic amplifiers Demonstration unit ,Solid state power supply, variac transformer,C.R.O.	Available & working
4	To draw characteristics of synchro torque transmitters. Also draw the characteristics error detector using of two synchros.	Synchro transmitter receiver pair	Available & working
5	To study speed control of universal motor using SCR and stroboscope	C.R.O. ,Tachometer Universal motor trainer kit	Available & working
6	Speed control of AC motor using TRAIC.	Speed control kit of induction motor, induction motor 1/8 H.P.	Available & working
7	determine time domain response of a second order system for step input and obtain performance parameters	Software based (matlab)	Available & working
8	To convert transfer function of a system into state space form and vice-versa.	Software based (matlab)	Available & working
9	Plot root locus diagram of an open loop transfer function and determine range of gain 'k' stability	Software based (matlab)	Available & working
10	To plot a Bode diagram of an open loop transfer function	Software based (matlab)	Available & working
11	To draw a Nyquist plot of an open loop transfer function and examine the stability of the closed loop system.	Software based (matlab)	Available & working

(XI)APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
      Study of how to control motors and other electrical machines studied in past semester, achieved.

(XII)USEFULNESS FOR THE DEPARTMENT:

    (x)   Development of industry relation
    (xi) R&D projects
    (xii) Consultancy/Testing

(I)NAME OF LABORATORY : (ELECTROMECHANICAL ENERGY CONVERSION- I LAB (PEE-301)
(ii) DEPARTMENT   :EEE
(iii) LOCATION AND NO.   : Ground Floor (EMEC-Lab)

(IV)COURSE NAME   : B.Tech Branch:EEE   SEMESTER   III

(V)TOTAL NO. OF EXPERIMENTS REQUIRED: 10
(AS PER UTU SYLLABUS)

(VI)TOTAL NO. OF EXPERIMENTS SET UP IN THE
                                                                LAB.:10

(VII)NO OF MANUALS IN THE LAB.: 10

(VIII)NAME OF TEACHER IN CHARGE: Arvind Singh Bisht

(IX)OBJECTIVES OF LAB : To learn about the controlling and testing of rotating and stationary electrical machines.
TABLE: LABORATORY EXPERIMENTS

S No	Name of Experiment	Equipment/Software's used	Status
1	To obtain magnetization characteristics of a d.c. shunt generator	d.c. shunt generator and measuring instruments	working
2	To obtain load characteristics of a d.c. compound generator (a) Cummulatively compounded (b) Differentially compounded	compound generator and measuring instruments	Working
3	To obtain load characteristics of a dc shunt generator	dc shunt generator and measuring instruments	Working
4	To obtain efficiency of a dc shunt machine using Swinburn's test	dc shunt machine and measuring instruments	Working
5	To obtain speed-torque characteristics of a dc shunt motor	dc shunt motor and measuring instruments	Working
6	To obtain speed control of dc shunt motor using (a) armature resistance control (b) field control	dc shunt motor and measuring instruments	Working
7	To obtain efficiency and voltage regulation of a single phase transformer by Sumpner's test		Working
8	To obtain equivalent circuit efficiency and voltage regulation of a single phase transformer using OC. and SC test.	single phase transformer and measuring instruments	Working
9	To obtain speed-torque characteristics of a dc series motor	dc series motor and measuring instruments	Working
10	To rotate a dc motor clockwise as well as anticlockwise.	dc motor	Working

P.T.O

(XI)APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
Use of particular machine in industry.

(XII)USEFULNESS FOR THE DEPARTMENT:
   (i)   Development of industry relation
   (ii) R&D projects
   (iii) Consultancy/Testing
(XIII)   PHOTO OF LAB.

(I)NAME OF LABORATORY   : (ELECTROMECHANICAL ENERGY CONVERSION- II LAB (PEE-454)
(ii) DEPARTMENT   :EEE
(iii) LOCATION AND NO.   : Ground Floor

(IV)COURSE NAME   : B.Tech Branch:EEE   SEMESTER   IV
(V)TOTAL NO. OF EXPERIMENTS REQUIRED: 10
(AS PER UTU SYLLABUS)

(VI)TOTAL NO. OF EXPERIMENTS SET UP IN THE
**   LAB.:10**

(VII)NO OF MANUALS IN THE LAB.: 10
(VII)NAME OF LAB ASSISTANT: Rahul Sharma

(X)OBJECTIVES OF LAB : To learn about the controlling and testing of rotating and stationary electrical machines.
TABLE: LABORATORY EXPERIMENTS

S No	Name of Experiment	Equipment/Software's used	Status
1	To obtain magnetization characteristics of a d.c. shunt generator	d.c. shunt generator and measuring instruments	working
2	To obtain load characteristics of a d.c. compound generator (a) Cummulatively compounded (b) Differentially compounded	compound generator and measuring instruments	Working
3	To obtain load characteristics of a dc shunt generator	dc shunt generator and measuring instruments	Working
4	To syudy blocked rotor test on single phase induction motor	Single induction motor and supply	Working
5	To obtain speed-torque characteristics of a dc shunt motor	dc shunt motor and measuring instruments	Working
6	To obtain speed control of dc shunt motor using (a) armature resistance control (b) field control	dc shunt motor and measuring instruments	Working
7	To obtain efficiency and voltage regulation of a single phase transformer by Sumpner's test	single phase transformer and measuring instruments	Working
8	To study blocked rotor test on three phase induction motor	Three phase induction motor and measuring instruments.	Working
9	To obtain speed-torque characteristics of a dc series motor	dc series motor and measuring instruments	Working
10	To study V and inverted V curves of synchronous motor	Three phase synchronous motor and measuring instruments.	Working

P.T.O

XI)APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
Use of particular machine in industry.

(XII)USEFULNESS FOR THE DEPARTMENT:

   (i)   Development of industry relation
   (ii) R&D projects
   (iii) Consultancy/Testing

(XIII)   PHOTO OF LAB.

(I)NAME OF LABORATORY   : (Electric Drive LAB PEE 851)
(ii) DEPARTMENT   :EEE
(iii) LOCATION AND NO.   : Ground floor Academic Block

(IV)COURSE NAME   : B.Tech Branch:EEE   SEMESTER   VIII
(V)TOTAL NO. OF EXPERIMENTS REQUIRED: 10
(AS PER UTU SYLLABUS)

(VI)TOTAL NO. OF EXPERIMENTS SET UP IN THE
                                              LAB.:10

(VII)NO OF MANUALS IN THE LAB.:10

(VIII)NAME OF TEACHER IN CHARGE: Kuldeep Godiyal

(IX)NAME OF LAB ASSISTANT: Rahul Sharma

(X)OBJECTIVES OF LAB : : Measurement and Study of Characteristics of various electrical Drives.

TABLE: LABORATORY EXPERIMENTS

S No	Name of Experiment	Equipment/Software's used	Status
1	To study speed control of separately excited dc motor by varying armature voltage using fully controlled bridge converter	Panel for dc motor by varying armature voltage using fully controlled bridge converter	working
2	To study speed control of separately excited dc motor by varying armature voltage using Single phase half controlled bridge converter.	Panel for varying armature voltage using Single phase half controlled bridge converter.	working
3	To study speed control of separately excited dc motor by varying armature voltage using Single phase half controlled bridge converter.	Panel for separately excited dc motor with Single phase half controlled bridge converter.	working
4	To study speed control of separately excited dc motor using single phase dual converter (Static Ward-Leonard Control)	Panel for separately excited dc motor with single phase dual converter (Static Ward-Leonard Control)	Working
5	To study closed loop control of separately excited dc motor	Panel for closed loop control of separately excited dc motor	Working
6	To study speed control of single phase induction motor using single phase ac voltage controller.	Panel for speed control of single phase induction motor with single phase ac voltage controller.	working
7	To study speed control of three phase induction motor using three phase ac voltage controller	To study speed control of three phase induction motor using three phase ac voltage controller	working
8	To study starting transient response of three phase induction motor	MAT LAB	working
9	To study speed control of three phase induction motor	MAT LAB	working

| 10 | To study starting transient response of separately excited dc motor | MAT LAB | | working |

(XI)APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
         Study of how to measure electrical quantities studied in theory classes, achieved.
(XII)USEFULNESS FOR THE DEPARTMENT:

   (i)   Development of industry relation
   (ii) R&D projects
   (iii) Consultancy/Testing

(I)NAME OF LABORATORY   : (NETWORK LAB) **BEEP 305**
(ii) DEPARTMENT   :EEE
(iii) LOCATION AND NO.   : III rd floor Academic Block

(IV)COURSE NAME   : B.Tech Branch:EEE/ECE   SEMESTER   III
(V)TOTAL NO. OF EXPERIMENTS REQUIRED: 10
(AS PER UTU SYLLABUS)

(VI)TOTAL NO. OF EXPERIMENTS SET UP IN THE
                                  LAB.:9

(VII)NO OF MANUALS IN THE LAB.:10

(VIII)NAME OF TEACHER IN CHARGE: Vipin Chandra Bhatt

(IX)NAME OF LAB ASSISTANT: Rahul Sharma

(X)OBJECTIVES OF LAB : : Measurement of various electrical quantities (Voltage, current, power, passive elements)

TABLE: LABORATORY EXPERIMENTS

S No	Name of Experiment	Equipment/Software's used	Status
1	Verification of principle of superposition with dc and ac sources	DC Network Theorem Kit	working
2	Verification of Thevenin, Norton and Maximum power transfer theorems in ac circuits	AC Network Theorem Kit	working
3	Verification of Tellegin's theorem for two networks of the same topology.	AC Network Theorem Kit	working
4	Determination of transient response of current in RL and RC circuits with step voltage input	DSO	working
5	Determination of transient response of current in RLC circuit with step voltage input for under damp, critically damp and over damp cases	DSO	Working

6	Determination of frequency response of current in RLC circuit with sinusoidal ac input	DSO	Working
7	Determination of z and h parameters (dc only) for a network and computation of Y and ABCD parameters	Network Kit	Working
8	Determination of driving point and transfer functions of a two port ladder network and verify with theoretical values.	Network Kit	Working

(XI)APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
  Study of how to measure electrical quantities studied in theory classes, achieved.

(XII)USEFULNESS FOR THE DEPARTMENT:
  (i)   Development of industry relation
  (ii) R&D projects
  (iii) Consultancy/Testing

(I)   NAME OF LABORATORY   : (Power Electronics LAB PEE 653)
(ii) DEPARTMENT   :EEE
(iii) LOCATION AND NO.   : III rd floor Academic Block

(IV)COURSE NAME   : B.Tech Branch:EEE   SEMESTER   VI
(V)TOTAL NO. OF EXPERIMENTS REQUIRED: 10
(AS PER UTU SYLLABUS)

(VI)TOTAL NO. OF EXPERIMENTS SET UP IN THE   LAB.:10

(VII)NO OF MANUALS IN THE LAB.:10

(VIII)NAME OF TEACHER IN CHARGE: Arvind Singh Bisht

(IX)OBJECTIVES OF LAB : : Measurement and Study of Characteristics of various electrical Drives.
TABLE: LABORATORY EXPERIMENTS

S No	Name of Experiment	Equipment/Software's used	Status
1	To study V-I characteristics of SCR and measure latching and holding currents.	SCR Characteristic kit	working
2	To study UJT trigger circuit for half wave and full wave control.	UJT Trainer Kit	working
3	To study single-phase half wave controlled rectified with (i) resistive load (ii) inductive load Without freewheeling diode	1-phase fully controlled bridge rectifier trainer kit	working
4	To study MOSFET/IGBT based single-phase bridge inverter.	Triggering of IOGBT/MOSFET Trainer kit	Working
5	To study single phase (i) fully controlled (ii) half controlled	1-phase fully controlled bridge rectifier trainer kit	Working

	bridge rectifiers with resistive And inductive loads		
6	To study MOSFET/IGBT based single-phase series-resonant inverter.	Triggering of IOGBT/MOSFET Trainer kit	working
7	To study three-phase fully/half controlled bridge rectifier with resistive and inductive load.	1-phase fully controlled full and half bridge rectifier trainer kit	working
8	To study triggering of (i) IGBT (ii) MOSFET (iii) power transistor	Triggering of IOGBT/MOSFET Trainer kit	working
9	To study single-phase ac voltage regulator with resistive and inductive loads.	1-phase fully controlled bridge rectifier trainer kit	working
10	To obtain simulation of SCR and GTO thyristor.	MAT LAB	working

(XI)APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
Study of how to measure electrical quantities studied in theory classes, achieved.
(XII)USEFULNESS FOR THE DEPARTMENT:

(i) Development of industry relation
(ii) R&D projects
(iii) Consultancy/Testing

(I)NAME OF LABORATORY : (Power System LAB **PEE 751**)
(ii) DEPARTMENT :EEE
(iii) LOCATION AND NO. : Ground floor Academic Block

(IV)COURSE NAME : B.Tech Branch: EEE   SEMESTER VII
(V)TOTAL NO. OF EXPERIMENTS REQUIRED: 10
(AS PER UTU SYLLABUS)

(VI)TOTAL NO. OF EXPERIMENTS SET UP IN THE
                   LAB.:10

(VII)NO OF MANUALS IN THE LAB.:10

(VIII)NAME OF TEACHER IN CHARGE: Rahul Dubey

(IX)OBJECTIVES OF LAB : : Measurement of various electrical quantities (Voltage, current, power, passive elements)
TABLE: LABORATORY EXPERIMENTS

S No	Name of Experiment	Equipment/Software's used	Status
1	To determine direct axis reactance (xd) and quadrature axis reactance (xq) of a salient pole Alternator.	salient pole Alternator.	working
2	To determine negative and zero sequence reactances of an alternator.	Panel for negative and zero sequence reactances of an alternator.	working
3	To determine sub transient direct axis reactance (xd) and sub transient quadrature axis reactance (xq) of an alternator	Panel for an alternator	working
4	To determine fault current for L-G, L-L, L-L-G and L-L-L faults at the terminals of an alternator at very low excitation	Panel for L-G, L-L, L-L-G and L-L-L faults	Working
5	To study the IDMT over current relay and determine the time current characteristics	IDMT over current relay	Working
6	To study percentage differential relay	differential relay	working
7	To obtain steady state, transient and sub-transient short circuit currents in an alternator	a salient pole Alternator.	working
8	To obtain formation of Y-bus and perform load flow analysis	MAT LAB	working
9	To perform symmetrical fault analysis in a power system	MAT LAB	working
10	To perform unsymmetrical fault analysis in a power system	MAT LAB	working

P.T.O

(XI)APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
        Study of how to measure electrical quantities studied in theory classes, achieved.
(XII)USEFULNESS FOR THE DEPARTMENT:
     (i) Development of industry relation
     (ii) R&D projects
     (iii) Consultancy/Testing

(I)NAME OF LABORATORY : (MEASUREMENT LAB) **BEEP 301**
(ii) DEPARTMENT :EEE

(iii) LOCATION AND NO.   **: III rd floor Academic Block**

(IV)COURSE NAME   **: B.Tech Branch:EEE/ECE**   **SEMESTER   III**
(V)TOTAL NO. OF EXPERIMENTS REQUIRED: 8
(AS PER UTU SYLLABUS)

(VI)TOTAL NO. OF EXPERIMENTS SET UP IN THE
                             LAB.:8

(VII)NO OF MANUALS IN THE LAB.:8

(VIII)NAME OF TEACHER IN CHARGE: Vipin Chandra Bhatt

(IX)NAME OF LAB ASSISTANT: Rahul Sharma

(X)OBJECTIVES OF LAB : : Measurement of various electrical quantities (Voltage, current, power, passive elements)

TABLE: LABORATORY EXPERIMENTS

S No	Name of Experiment	Equipment/Software's used	Status
1	Calibration of AC voltmeter and AC ammeter	Calibration of AC voltmeter and AC ammeter STANDARD AND PRACTICAL	working
2	Measurement of inductance using Maxwell's Bridge	Maxwell's Bridge	working
3	Measurement of capacitance using Schering Bridge	Schering Bridge	working
4	Measurement of low resistance using Kelvin's Double Bridge	KELVIN BRIDGE	working
5	Measurement of Power using CT and PT	CT & PT	Working
6	Measuring displacement using LVDT	LVDT	Working
7	PC based data logging of temperature sensor using Lab VIEW/ MATLAB	MATLAB	Working
8	Signal conditioning of analog signal using Lab VIEW/ MATLAB	MATLAB	Working

P.T.O

(XI)APPLICATIONS OF LAB EXPERIMENTS (FROM THE POINT OF VIEW OF STUDENTS)
         Study of how to measure electrical quantities studied in theory classes, achieved.

(XII)USEFULNESS FOR THE DEPARTMENT:
     (i)   Development of industry relation
     (ii)   R&D projects
     (iii)   Consultancy/Testing

DEPARTMENT OF APPLIED SCIENCES
Detail of chemistry lab

S.no	List Of practical	Required Apparatus/ Chemical
1.	Determination of alkalinity in the given water sample	Burette, pipette, volume metric flask, Conical flask, beaker, dropper Hcl, phenolphthalein and methyl orange
2.	Determination of temporary & permanent hardness in water sample using EDTA as standard solution.	Burette, pipette, volume metric flask, Conical flask, beaker EDTA, EBT
3.	Determination of Equivalent weight of Iron by the chemical displacement Method. The equivalent weight of copper is 63.5	Burette, pipette, desiccators Conical flask, beaker, dropper Copper sulphate, KI, Starch
4.	Determination of iron content in the given ore by using external indicator	Burette, pipette, volume metric flask, Conical flask, beaker, tiles, Iron ore, Potassium dichromate, Potassium Ferricyanide
5.	Determination of available chlorine in bleaching powder	Burette, pipette, volume metric flask, Conical flask, beaker, dropper, motor and pestle Bleaching powder ,KI, Acetic acid, Starch
6.	Determination of chloride content in the given water sample by Mohr"s method	Burette, pipette, volume metric flask, Conical flask, beaker, dropper, Silver Nitrate, Potassium chromate
7.	Determination of viscosity index of lubricating oil.	Ostwald Viscometer Stop watch, Thermostat Polystyrene and benzene or toluene
8.	Determination of iron concentration in sample of water by colorimetric method. Measurements are carried out at λmax 480nm.	Spectrophotometer, Ammonium iron(III)sulphate, hydrochloric acid, PotassiumPermanganate ,Bromine water, Nitric acid,Potassiumthiocyanate
9.	Determination of heat of neutralization of Hydrochloric acid & Sodium hydroxide	Thermos Flask, Glass Stirrer, Thermometer,Stopwatch,beaker,Measuring Cylinder,SodiumHydroxide, Hydrochloric acid
10.	Determination of saponification value of lubricating oil & vegetable oil.	Water bath,condenser, round bottomFlask, Burette, pipette, Conical flask, Hydrochloric acid,KOH and phenolphthalein
11.	Separation of metal ions by paper chromatography	Filter paper sheet, sporting capillaries ,developing tank with cover, potassium chromate, Lead Nitrate, Silver Nitrate, Nitric acid

Other apparatus and chemical

S.no	INSTRUMENTS & CHEMICALS		
		31.	Ammonium Chloride
1.	Ph meter	32.	Calcium Chloride
2.	Digital Spectro- colorimeter	33.	Calcium carbonate
3.	Separating Funnel	34.	Oxalic acid
4.	Magnetic Stirrer	35.	Buffer solutions
5.	Heating Mental	36.	Acetone
6.	Water Bath	37.	Ammonia buffer solution
7.	Oven	39.	Citric acid
8.	Digital Balance	40.	Ferrous Sulphate
9.	Gas supply(30 connection)	41.	Ferrous Sulphide
10.	Burner	42.	Methylene Blue
11.	Distillation Plant	43.	Iodine

12.	Spirit lamp	44.	Sodium Hydroxide
13.	Desiccators	45	Sodium Carbonate
14.	Sheet of filter paper	46.	Sulphuric acid
15.	Watch glass	47.	Sodiumdisulphate
16.	Special brushes	48.	Sodium Sulphite
17.	Round Bottom Flask(3000ml)	49	Sodium Chloride
18.	Stop Watch	50	Potassium Chloride
19.	Porcelain Dish	51	O-Cresol
20.	Burette	52	Phenol
21.	Burette stand with clamps	53	Silicon Grease
22.	Beaker (glass)(500ml, 250ml,100ml)	54	Ranksolv
23.	Pipette Glass	55	Copper Sulphate Hydrate
24.	Measuring Cylinder (100ml,50ml, 10ml)	56	Potassium Hexa- Cynoferrate
25.	Funnel(glass)	57	Iron sulphatehepta hydrate
26.	Funnel(plastic)	58.	Heptene
27.	Measuring Cylinder (500ml,250ml)	59	Propene 2-ol
28.	Separating funnel holder	60	Ammonium Chloride
29.	tongs		
30.	Reagent bottles		

Detail of Physics lab

(i)	**Name of laboratory**	**Physics (PPH-101/201)**
(ii)	Department	Applied Science
(iii)	Location and No.	First Floor (AS P 02)
(iv)	Course name : B.Tech. Branch : I Year Lab Year Lab Semester : I/II		
(v)	Total no. of experiments required (as per UTU sullabus)	10
(vi)	Total no. of experiments setup in the lab	12
(vii)	No. of manuals in the lab	12
(x)	Objectives of lab	To provide basic knowledge of engineering physics related equipment handling and to get familiar students with various physical phenomenon.

S.No.	Name of Experiment	Equipment/Software's used	Status
1	To study the Hall effect and calculate the Hall coefficient, carrier density and mobility of the charge carrier.	Constant current source, electromagnetic Hall effect setup, Hall probe, manual, digital Guass meter.	Working
2	To draw hysteresis curve for a given specimen of Ferromagnetic material and calculate the retentivity, coercivity and magnetic susceptibility.	CRO, hyteresis loop tracer, sample thin rod, pick up coil, laboratory manual, connecting wire, oscillascope operating manual.	Working
3	To determine the value of coefficient of viscosity of water by Poiscuille's method	Capillary tube of uniform bore and a constant level raiser board manometer, stop watch, travelling microscope, clip stand.	Working
4	To determine the specific resistance of a given wire material by using Carey Foster's bridge.	Leclanche cell, Carrey foster bridge, decimal Ohm box, galvanometer, thick copper strip, one way plug key, sliding rheostate of 10 ohm, connecting wire, jokey, resistance wire, screw guage, ammonium chloride (500g)	Working
5	To verify the Stefan's law of radiation by electrical method.	Stefan's setup	Working

6	To determine the variation of magnetic field along the axis of current carrying circular coil and estimate the radius of coil.	Compass box, constant current source, commutator, set of wire for connection, coil bench, sprit level.	Working
7	Determination of focal length of two lenses by Nodal slide and locate the position of cardinal points.	nodal slide arrangement, optical bench, plane mirror, cross slit, lamp, convex lens (f = 20cm), lens stand.	Working
8	To calibrate given ammeter and voltmeter by using the potentiometer.	Potentiometer (1200cm), jokey, rheostate (105 ohm), rheostate (22 ohm), galvanometer, ammeter, voltmeter, standardcell (carrying a 1.26 V, 1.5 V and 2.8 V), two way key, , resister box (1 ohm), connecting wires.	Working
9	To determine the specific rotation of cane-sugar solution using Half Shade Polarimeter.	Light source + keeping box, polarimeter (with a sensitive device), flask (100 cc), beaker, funnel, pipette, analytical balance and weight box.	Working
10	Determination of wavelength of monochromatic light with Newton's ring method.	plano-convex lens, plane glass palte, optical arrangement for Newton' ring, sodium lamp + keeping box, travelling microscope, sodium lamp transformer.	Working
11	To determine the wavelength of spectral lines using Plane Transmission Grating	Spectrometer, mercury lamp, prism, reading lens, plane transmission grating.	Working
12	Determination of wavelength of monochromatic light by Fresenal's Biprism.	Optical bench with four upright stand, convex lens, Fresnel's biprism micromrter eyepiece, sodium lamp + keeping box, tourch and reading lens.	Working

Computing Facilities:

Internet Bandiwith	:	100 MBPS
Number and configuration of system	:	452 system
Total no. of system connected by LAN	:	1:1
Total no. of system connected by WAN	:	1:1
Major software packages available	:	Yes
Special purpose facilities available	:	Yes

(Conduct of online Meetings/Webinars/Workshops,etc.)

Facilities for Conduct of classes/courses in online Mode (Theory & Practical)	:	Yes

Innovation Cell	:	Yes
Social Media Cell	:	Yes
Games and sports Facilities	:	Yes

List of facilities available
A. Games and Sports Facilities

• The college has playfields within its campus for Athletics events, Football, Cricket, Volleyball, Basketball, Badminton court etc.

• Every year the affiliating university conducts Inter-Institute sports activities and the college conduct Inter-Department Tournaments for Football, Cricket, Volleyball, Basket Ball, Table Tennis, Badminton, Carom, Chess and Yoga Camp .

• The college has teams for above mentioned games who participate in different competitions at various levels.

• The college provides training facilities for the college team for each game including athletics, requisite equipment, and also has facility of Gymnasium with all exercise and physical training instruments along with qualified trainer.

• The college has a constituted a committee who are responsible for overall planning, supervision and execution of all sports related activities.

Sports Facilities To Develop The Fitness and Concentration Level of The Students.

Nowadays, students are so busy compiling their projects and assessment, so they need time to restrain and boost their power. Since there is a fuss in the academics and it is hard for each student to excel in studies so, it is an advantage to be a part of any extracurricular activity. It will not only help you to reduce your stress but can also help you to develop yourself as a successful athlete. Therefore, it is necessary to have **sports** facilities in college. The **Shivalik College of Engineering Dehradun** is one of the most popular colleges known for its Sports facilities.

Today, I am going to discuss some points about the importance of Sports in College.

Active Students
The right promotion of the sports facilities in the college will result in the engagement of a large number of students and faculty. The sports always attract students and it will lead to a healthier environment. The sports facility in a common area in the college campus will force the students to be more active. The authorities have to take responsibility to ensure the engagement and participation of the students in the sports.

Hosting Sports events
Sports facilities at the **college campus** will allow the college to host various events. Some events like Inter College Sports Fest, Sports Meet, Indoor Games Competitions, Sports Function, etc. These events will attract the students to come to college. The events will engage the students and help them to discover their talent in sports.

Attracts students and visitors

In the current scenario, the students like the college, which have better facilities. Sports facility is one of those facilities, which attract students and visitors. A good sports facility in the college will conduct a message to the visitors that, the college is diligence and dedicated to providing a friendly and healthy environment for the students.

Improve the Academic performance

The students engaged in sports have good academic performance in college. The students evolve the coordination and enthusiasm for the studies as well as the athletic program. The sports facilities will improve and develop the fitness and concentration level of the students.

Skills Development
Playing sports build many skills in a student like teamwork, leadership, self- confidence, etc. Other than these qualities, student succeeds in developing the ability of thinking in critical situations. Time management is one focused ability a student develops which will help him in managing time between college, friends, and family.
If you do not want to play these sports than engage yourself in less intense sports like swimming, martial arts, yoga, and gymnastics. These sports provide physical fitness and mental peace to the students.

1. Outdoor and Indoor Sports Facilities: Every student is encouraged to take active part in at least one outdoor activity. Shivalik College of Engineering has set up facilities/grounds for Cricket, Football, Basketball, Volleyball, Table-Tennis, Badminton, Chess, Carrom, etc., and league matches are encouraged. We are also planning an inter-college sports tournaments to develop a spirit of healthy competition.
2**. Special Coaching**: We are proud to have quite a few states-level players who have played in the Nationals. One of our students was selected for the heats of a 5000 meter race in the Commonwealth games. Another student has represented India in Basketball .We plan to arrange special coaching for them so that they make our nation proud.
3. **Gymnasium:** In order to ensure a sound body and mind, students are given special attention on health and fitness. A modern gym, with all the latest gadgets has been set up in the hostel.
4. **Adventure:** Taking advantage of the natural beauty of the surrounding Shivalik hills, an 'adventure club' has been formed by students, who organize camps for nature-walks, trekking and hiking.
5. While games, sports and athletics directly contribute to physical development of students, other co-curricular activities also indirectly contribute to it. These activities provide a useful channel for the growth and development of the body.

B. Cultural events/ activities.
• The Shivalik College of Engineering organizes its annual cultural and techno-managerial festival "*SHIVAFEST*" with great fan fair and enthusiasm. This event brings to the campus artists and celebrity of

national and international repute. Inter department Competitions in cultural events like Music, Dance, Debate, Quiz, management and technical events are also organized periodically.

• The college provides special trainings to cultural team members and supports with requisite   (musical instruments, sound systems, peripherals etc.).

• The Shivalik College of Engineering has National Service Scheme (NSS) and National Cadet Corps(NCC) cell with a large number of student volunteers and programme officers who conduct several societal and need-based programmes in the college and also outside by adopting villages and slums.

• The programmes usually undertaken by NSS units are plantation of trees, blood donation camps, participation in National Integration camp, health check- up camps, yoga and meditation camp, awareness rallies etc.

• Students also learn from activities that are centric to their course of study by participating in activity clubs.

Extra- Curricular Activities	:	Yes
Soft Skill Development Facilities	:	Yes
Teaching Learning Process	:	Yes
Academic Sessions	:	2023-2024
Examination system	:	Semester wise
Period of declaration of results	:	As per university calendar
Counseling / Mentoring	:	Teacher mentoring system in followed.
Career Counseling:		A full fledged training and Placement cell is functioning in the College
Medical facilities	:	Yes
Student Insurance	:	Yes
Students Activity Body	:	Yes
Cultural activities	:	Yes (College and University level)
Sports activities	:	Yes (College and University level)
Literary activities	:	Yes (College and University level)
Magazine / Newsletter	:	Yes (College and University level Monthly/Yearly Magazine)
Technical activities / TechFest	:	Yes
Industrial Visits / Tours	:	Yes (In accordance to the syllabus requirement)
Alumni activities	:	Yes, https://alumni.shivalikcollege.edu.in
Name of the Information Officer for RTI	:	Dr. Prahalad Singh
Designation	:	Director
Phone number with STD code	:	0135-2693401-02
FAX number with STD code	:	0135-2693425
Email	:	info@sce.org.in

CAY=Current Academic Year

*Repeat this template for each department / staff.

#Repeat this template for additional quota, if any.

16. Placement Facilities
Campus Placement in last three years
 Total Students Placed : 296

         B.Tech : 162
         Diploma : 134

Average Pay package, Rs./Year   B.Tech : 3.43 Lakh/year
                                   Diploma : 1.70 Lakh/year
Students opted for Higher Studies B.Tech : 6 %
                                   Diploma : 12%

17. List of Research Projects/Consultancy Works.   **: Yes,** https://www.shivalikcollege.edu.in/academics/research

  Number of Projects carried out, funding agency, Grant received.

  Publication (if

  MOUs with Industries/Societies: **: Yes,** https://www.shivalikcollege.edu.in/campus/strategic-alliance

18. LOA and Subsequent EOA till the current Academic Year   **:** Yes,

https://www.shivalikcollege.edu.in/assets/docs/ApprovalLetter.pdf

19. Accounted Audited Statement for last three years   : Yes,
                                  https://www.shivalikcollege.edu.in/assets/docs/BalanceSheet2018-
21.pdf

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