

Appendix 10

Format for Mandatory Disclosure

Mandatory Disclosure – Updated On – 20/03/2019

AICTE File No - AICTE/FNO.740-89-341(E) ET/12.7.99

10.1 Name of the Institution

Name	SHRI ANNASAHEB DANGE COLLEGE OF ENGINEERING AND TECHNOLOGY
Address	A/p- Old Air Port, Ashta, Tal- Walwa Dist- Sangli
City & Pincode	Ashta, 416301
State	Maharashtra
Phone No with STD Code	02342 -241107
Fax No. with STD Code	02342- 241106
Office hours at the Institution	10.00 am to 6.00 pm
Academic hours at the Institution	8.45 to 4.15 pm
E-Mail	info@adcet.in
Web site	www.adcet.in
Nearest Rly Station	Sangli
Nearest Airport	Kolhapur

10.1 Name and Address of the Trust/Society/Company and the Trustees of the Institution

Name of the organization running the Institution	Sant Dnyaneshwar Shikshan Sanstha
Type of the organization	Society
Address of organization	Kachare Galli, At, Po. - Islampur, Tal. – Walwa,

	District : Sangli
Registered with	Government of Maharashtra (1860/MAH/1599/Sangli / dt 28July 1986)
Registration Date	Bpt/1950 F-1546/ dt 30Sept 1986
Website of the organization	www.santdnyaneshwar.org

10.1 Name and Address of the Vice Chancellor/Principal/Director

Name of Principal /Director	Dr.Laxman Yadu Waghmode
Exact Designation	Director
Phone No with STD code	02342 241115
Email	director@adcet.in
Highest Degree	M.E., Ph.D.
Field of Specialization	Mechanical
State	Maharashtra
Phone	(02342) 241107
Fax No.	(02342) 241106
E-mail	director@adcet.in

10.1 Name of the Affiliating University

Name of the affiliating University / Board	Shivaji University, Kolhapur
Address	Kolhapur
Website	www.unishivaji.ac.in

10.5 Governance

10.5.1 Governing Body (2017-18 to 2018-19)

Name of Member	Affiliation	Position
Chairperson		
Hon. Ramchandra Mahadev alias Annasaheb Dange	Chairman, Sant Dnyaneshwar Shikshan Sanstha	Chairman

Members of the Trust/Society/Management		
Adv. Shri. R. R. Dange	Secretary, Sant Dnyaneshwar Shikshan Sanstha	Member
Shri. R. S. Zanvar	Chairman, Zanvar Group of Industries	Member
Prof. R. A. Kanai	Executive Director, Sant Dnyaneshwar Shikshan Sanstha	Member
Dr. S. B. Bapat	Medical Practice and Social Work	Member
Teachers of College		
Dr. S.P. Chavan	Professor, Annasaheb Dange College of Engineering and Technology	Member
Educationist/Industrialist		
Prof. Rajkumar S. Pant	Aerospace Engineering Department, IIT Bombay	Member
UGC Nominee		
Prof. A. B. Pandit	Fellow, Indian Academy of Sciences and National Academy of Sciences, Department of Chemical Technology, Institute of Chemical Technology, Mumbai	Member
State Government Nominee		
Dr. D. R. Nandanwar	Joint Director, Directorate of Technical Education, Pune	Member
University Nominee		
Dr. B. N. Pawar	Principal, Arts, Commerce and Science College, Palus	Member
Director of College		
Dr. L. Y. Waghmode	Director, Annasaheb Dange College of Engineering and Technology	Member - Secretary

10.5.1 ACADEMIC COUNCIL

Academic Year: 2017-2019

Sr. No	Name	Category	Position
1.	Dr. L. Y. Waghmode Director, ADCET, Ashta	Director of the College	Chairman
2.	<u>Dr. B. N. Chaudhari</u> Deputy Director, College of Engineering, Pune	Experts/Academicians from outside the College representing areas such as Industry, R & D, Technical Education etc. nominated by the Governing Body	Member
3.	Dr. P. J. Kulkarni Ex. Deputy Director, Walchand College of Engineering, Sangli		Member
4.	Dr. P. Bangaru Babu Department of Mechanical		Member

Sr. No	Name	Category	Position
	Engineering, NIT, Warangal		
5.	Dr. Vitthal Bandal , Principal, Government Polytechnic College, Karad		Member
6.	Dr. A. G. Kharat Professor, Rajarshi Shahu College of Engineering, Pune		Member
7.	Mr. Govind G. Oza Director, Precision Automation and Robotics India Limited (PARI) Satara		Member
8.	Mr. Manish Malojirao Patil Director, Samruddhi Tbi Foundation, Sangli		Member
9.	Prof. R. A. Kanai Executive Director, ADCET, Ashta	Teachers of the college representing different categories of teaching staff	Member
10.	Dr. R. B. Patil Dean R & D, ADCET, Ashta		Member
11.	Mr. S. B. Hivarekar Dean Faculty and Students Welfare, ADCET, Ashta	Teachers of the college representing different categories of teaching staff	Member
12.	Mr. P. D. Kulkarni Department of Mechanical Engineering, ADCET, Ashta		Member
13.	Dr. B. S. Gawali Professor, Department of Mechanical Engineering, Walchand College of Engineering, Sangli	Nominees of the University not less than Professors	Member
14.	Dr. R.R. Kumbhar Principal, PDVPC, Tasgaon		Member
15.	Prof. J. P. Jadhav Professor, Biochemistry Department, Shivaji University, Kolhapur.		Member
16.	Dr. S. P. Chavan Head of Department, Mechanical Engineering, ADCET, Ashta		Member
17.	Mrs. S. S. Shinde		Member

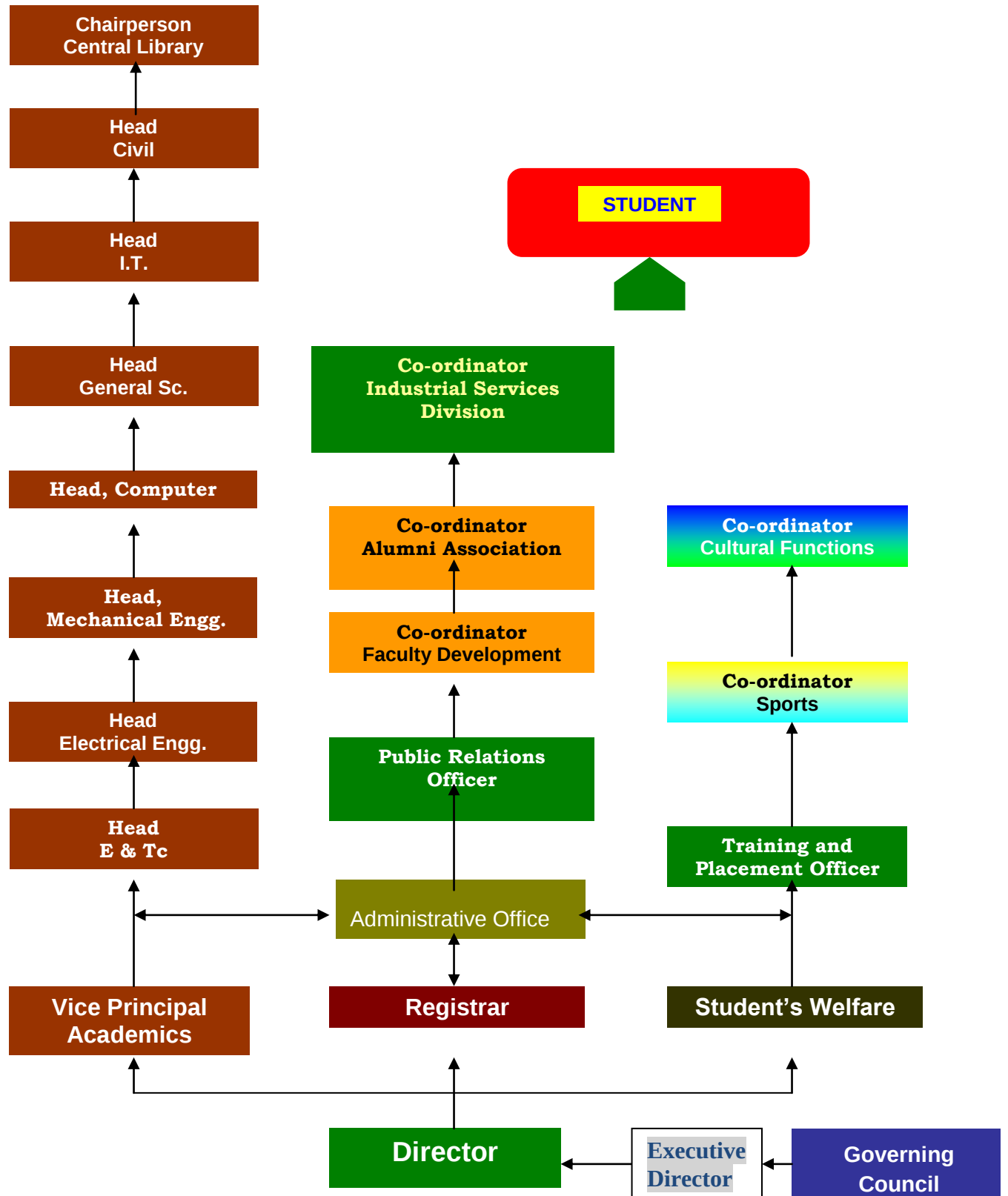
Sr. No	Name	Category	Position
	Head of Department, Electronic & Telecommunication, ADCET, Ashta	Heads of Departments in the college	
18.	Dr. S. H. Bhandari Head of Department, Computer Science & Engineering, ADCET, Ashtai		Member
19.	Mr. M. D. Patil Head of Department, Electrical Engineering, ADCET, Ashta		Member
20.	Mr. S. S. Mohite Head of Department, Civil Engineering, ADCET, Ashta		Member
21.	Dr. I. M. Jamadar Head of Department, Automobile Engineering, ADCET, Ashta		Member
22.	Dr. Amalesh Barai Head of Department, Aeronautical Engineering, ADCET, Ashta		Member
23.	Dr. N. D. Sangle Dean Academics, ADCET, Ashta	Faculty member nominated by the Director	Member Secretary

10.5.3

Frequency of Meeting & Date of Last Meeting		
Governing Body	Two Meetings in Annual	
Academic Advisory Board		

10.5.4

Organization Chart



PROCESSES, PROCESS OWNERS; THEIR RESPONSIBILITIES AND AUTHORITIES :

The Institute is ISO 9001:2008 certified since July 2004. We are continuously monitoring and improving our QMS through periodic reviews of performance. The responsibilities and authorities are delegated among process owners as under

Process Owner	Responsibility	Authority
Governing Council	1. Frame directive principles and policies 2. Monitor progress. 3. Provide Support for implementation of policies	1. Amend policies as per needs from time to time. 2. Approve annual budget.
Director	1. Design and define Organization structure. 2. Define and delegate responsibilities of various positions in org. structure. 3. Ensure periodic monitoring and evaluation of various processes and sub- processes. 4. Mobilize external resources to strengthen the institute. 5. Plan and provide for necessary facilities / equipment / development. 6. Ensure effective procurement procedure. 7. Instill confidence and devotion in every member of the institute. 8. Define quality policy and objectives	1. Based on evaluation of performance of individuals, offer incentives and charge penalties to individuals Concerned. 2. Issue certificates of various types to individuals. 3. Handling accounts related matters 4. Approving the recruitments. 5. Approval of Casual leaves to DEANs Medical and earned leave to all.
Vice Principal Academics	1. Execute academic calendar with the help of HODs. 2. Carry out result analysis and inform corrective measures to the Principal. 3. Promote faculty publications 4. Promote faculty participation in w/s, seminars, conferences etc. 5. Initiate supplementary teaching measures. 6. Plan and execute CEP for faculty.	1. Releasing circulars to HODs Concerned with academics. 2. Sign the seminar reports. 3. Recommend applications from students, faculty in connection with academics.

Process Owner	Responsibility	Authority
Registrar	1. Compliance to AICTE, DTE, University requirements. 2. Office Administration 3. Identifying training needs of faculty / staff. 4. Provide for necessary facilities / equipment / development 5. Handling purchases for the institute 6. Faculty & Staff recruitment 7. Provide resources for Students' projects 8. Handling Admissions 9. ISTE faculty chapter 10. Maintain the environment neat and clean	1. Approve logistic support to student / faculty activity 2. Approval of casual leaves to HODs and office staff. 3. Looking after the routine work of the institute in absence of the Principal 4. Recommend applications from students, faculty in connection with general Administration.
Student's Welfare	1. Arranging Sports activities 2. Training & Placement activities 3. Students council 4. Students associations 5. Cultural activities 6. ISTE Students' chapter 7. Preparation of budgets for above	1. Approval to expenditure within sanctioned budget 4. Recommend applications from students, faculty in connection with student activities.
HOD	1. Plan and execute academic activities of the department 2. Maintain discipline and culture in the department 3. Maintain the department neat and clean 4. Pick and promote strengths of students / faculty / staff	1. Approval of casual leaves to department faculty 2. Assigning work to faculty / staff 3. Recommend applications from students, faculty, staff
Chairman, Library Committee	1. Plan and execute modus operandi of routine activity of the library 2. Plan and propose expansion / development 3. Maintain discipline and culture	1. Recommend applications from library staff 2. Approve casual leave of library staff

Training and Placement Officer	1. Liaison with industry 2. Identify and provide for training needs of students 3. Arrange campus interviews	1. To undertake tours to promote T & P activity
In Charge Admission Cell	1. Propose admission policy 2. Arrange campaign 3. Design and print admission brochure	1. Approve incidental expenses for the process.

	4. Execute the admission process	
Management Representative / AMR	1. Establish, implement and maintain quality management system 2. Communicating customer specific requirement to the down line. 3. Arranging internal audits 4. Arranging MRM 5. Maintain up-to-date master documents with history of revision.	1. Effect changes in documents as per the need
Process Owner	Responsibility	Authority

10.5.5 Involvement of faculty in academic affairs / improvements and students in academic affairs / improvements

- Faculty meetings are conducted fortnightly in respective programme departments.
- Two meetings per semester are conducted by the Principal with faculty.
- Free interaction is successfully encouraged in these meetings.
- **Academic diaries** are being strictly maintained by faculty for past 2 years.
- Student representatives are often invited to participate in the meetings for decision on students related policy issues such as mid-term test, attendance, sponsored projects.
- Valuable suggestions are received from students.
- Student participation in such meetings takes place at least once in a semester.
- Counseling of students by the Principal and other members of Academic Advisory Board.

10.5.6 Mechanism/Norms & Procedure for democratic/good Governance

- ISO 9001:2000 based Quality Management System and associated quality system procedures provides Mechanism for democratic and good governance

10.5.7 Student Feedback on Institutional Governance/faculty performance

- Student feedback on faculty performance is obtained on a well designed format. The feedback is further evaluated and discussed with the faculty with an aim to motivate the person concerned for improvement.
- Formal student feedback is presently not being taken on institutional performance. It will be introduced from next semester

10.5.8 Grievance redressal mechanism for faculty, staff and students

- Decentralized functioning being quite effectively practiced, the redressal of majority of the grievances is eventually taken care by respective department and the faculty.

- A few common grievances are dealt with at the level of the dean.
- Very few left are attended to by the Principal.
- Moreover suggestions box has been kept for the students.

10.5.9 Anti-Ragging Committee

Academic Year: 2018-19

Sr. No.	Name	Designation	Contact Number
1.	Prof. R. A. Kanai	Chairman	9604000786
2.	Dr. M. M. Awati	Member	9902988138
3.	Dr. L. Y. Waghmode	Member	8600600777
4.	Mr. S. B. Hivarekar	Nodal Officer	9689895057
5.	Mr. S. N. Shingare	Management Representative	9822088005
6.	Ms. V. M. Patil	Ladies Representative	7387102650
7.	Mr. S. A. Jamadar (PI Ashta)	Police Representative	9422654930
8.	Mr. A. Y. Jadhav	Parent Representative	8600600704
9.	Mr. D. V. Adsul	Staff Representative	9960674000
10.	Mr. S. L. Shiralkar	Journalist	9604254109
11.	Mr. Rushikesh Rajendra Dhebe	Fresher's Representative	9011980841
12.	Mr. Manohar Pandurang Maralkar	Seniors Representative	9130914998
13.	Mr. S. M. Chavan	Member Secretary	9370056335

Anti-Ragging Squad

Sr. No.	Name	Designation	Contact Number
14.	Prof. R. A. Kanai	Chairman	9604000786
15.	Dr. M. M. Awati	Member	9902988138
16.	Dr. L. Y. Waghmode	Member	8600600777
17.	Mr. S. B. Hivarekar	Nodal Officer	9689895057
18.	Mr. S. N. Shingare	Management Representative	9822088005
19.	Ms. V. M. Patil	Ladies Representative	7387102650
20.	Mr. S. M. Chavan	Member Secretary	9370056335

10.5.10 Grievance Redressal Cell

Sr. No.	Name of Member	Affiliation	Designation
01	Prof. R. A. Kanai	Executive Director	Chairman
02	Dr. L. Y. Waghmode	Director	Member
03	Dr. S. P. Chavan	Senior Faculty Member	Member
04	Mrs. S. S. Shinde	Ladies Faculty Member	Member
05	Mr. S. B. Hivarekar	Dean, Faculty and Student Affairs	Member
06	Mr. Shubham Chougule	Student Representative	Member
07	Mr. A. S. Dange	Faculty Member	Member-Secretary

10.5.11 Special Cell Standing Committee for SC/ST student

Sr.No.	Name of the Member	Designation
1	Prof. R.A. Kanai	Executive Director-Chairman
2	Mr.S.S.Mohite	Head of the Dept - Member
3	Dr. L.Y. Waghmode	Senior Faculty - Member
4	Mr. V.A. Mane (SC)	Senior Faculty- Member
5	Mr. D.V. Adsul	Non Teaching Staff -Member
6	Ms. R.R. Jagtap (OBC)	Category Ladies Nominee – Teaching Member
7	Ms. N.A. Pol (SC)	Category Ladies Nominee - Non – Teaching Member
8	Mr. A.V. Ghorpade	Member –Secretary

10.6**Name of the Programme Approved & Accredited by AICTE****UG Level**

1. Mechanical Engineering
2. Electronics and Telecommunication Engineering
3. Computer Science and Engineering
4. Electrical Engineering
5. Civil Engineering
6. Automobile Engineering
7. Aeronautical Engineering

Name of the Programme Approved by AICTE**PG Level**

1. Electrical Power System
2. Structural Engineering

Status of Accreditation of the Courses

Total Number Courses - 07

☐ **For each Programme the following details are to be given:**

- Name
- Number of seats
- Duration
- Cut off mark/rank of admission during for last three years

Sr.No.	Courses	Sanctioned Intake	Duration of Course
UG Level			
1	Mechanical Engineering	180	4 years
2	Electronics & Telecommunication	60	4 years
3	Computer Science & Engineering	120	4 years
4	Electrical Engineering	120	4 years
5	Civil Engineering	60	4 years
6	Automobile Engineering	60	4 years
7	Aeronautical Engineering	60	4 years
PG Level			
3	Electrical Power System	18	2 years
4	Structural Engineering	18	2 years

Cut of Marks/Ranks of admission during last three years

Sr.No.	Courses	Sanctioned Intake					
		2016-17		2017-18		2018-19	
		Actual Admission	Cut of Marks	Actual Admission	Cut of Marks	Actual Admission	Cut of Marks
	UG Level						
1	Mechanical Engineering	138	52	217	45	191	47
2	Electronics & Telecommunication	35	63	56	49	48	48
3	Computer Science & Engineering	59	51	55	47	61	49
4	Electrical Engineering	65	54	107	46	104	42
5	Civil Engineering	58	46	56	42	51	37
6	Automobile Engineering	38	43	47	47	35	48
7	Aeronautical Engineering	35	68	56	43	57	54
	PG Level						
1	Mechanical Design Engineering	01	1.54	05	1.18	7	2.35
2	Electronics & Telecommunication	01	2.06	03	3.06	2	1.09
3	Electrical Power System	15	1.94	05	1.13	7	3.15
4	Structural Engineering	18	2.42	18	9.47	13	5.48
5	Computer Science & Engineering	6	1.47	00	00	00	00

Placement Facilities

Facilities at T&P for Campus and Joint campus placement activities

- Dedicated Cabins / room for Campus Interview and Group Discussion
- Best Facilities for Pool / Joint Campus Interview Process
- 800 Seating Capacity Auditorium Equipped with Projector, Screen and Sound System
- Best Facilities for online test with 500 PC's at single place with complete uninterrupted power supply
- Networking Details (LAN, WAN, Email, Internet, Dial Up, Dedicated Leased Lines, 155 Mbps Bandwidth) 100/1000 Gigabit Campus wide LAN, Optical Fiber back bone to interconnect PC and Servers
- Online Test with PC is on single floor. Networking Details
- 100/1000 Gigabit Campus Wide LAN, Optical fiber back bone to interconnect PC and Servers.
- 155 MBPS dedicated leased line for internet connectivity.
- Dell(TM) Power Edge(TM) R-700 Series Rack Mount Server - 3.5- Inch Chassis NM187
- Dell(TM) Power Edge(TM) R710 Rack Mount Server Y373J -1x6.
- IBM X-226 processor SERVER with RAID Disks

Campus Process Infrastructure

- Sufficient class rooms for written test
- Separate cabins for interviews and GD
- Auditorium with capacity of 800 students is equipped with latest PA System & Presentation facilities .

Campus placement in last three years

Year	Discipline	Total no. of students placed	minimum salary PA in Lacks	maximum salary PA in Lacks	average salary PA in Lacks
2016-17	Mechanical Engineering	118	0.96	3.35	2.2
	Electronics & Telecommunication	69			
	Computer Science & Engineering	54			
	Electrical Engineering	55			
	Civil Engineering	37			
	Automobile Engineering	36			
	Aeronautical Engineering	25			
2017-18	Mechanical Engineering	94	1.2	12	2.4
	Electronics & Telecommunication	61			
	Computer Science & Engineering	32			
	Electrical Engineering	37			
	Civil Engineering	29			
	Automobile Engineering	24			
	Aeronautical Engineering	35			
2018-19	Mechanical Engineering	91	1.2	3.36	2.85
	Electronics & Telecommunication	45			
	Computer Science & Engineering	30			
	Electrical Engineering	27			
	Civil Engineering	25			
	Automobile Engineering	24			
	Aeronautical Engineering	25			

- Twinning & Collaboration with Foreign Collaborations, if any : Not Applicable

10.9 Profile of Vice Chancellor /Director/Principal/Faculty

i. Name – Dr. Govind Narayan Kulkarni

ii. Date of Birth – 04th August 1966

iii. Unique ID –

iv. Educational Qualification –Ph.D. IIT Bombay

v. Work Experience – 30

Teaching – 27

Research – 03

vi. Area of Specialization – Solar Thermal Energy, Energy Conservation Management, Power Plant Engineering.

vii. Course Taught at Diploma/Post Diploma/Under Graduate/Post Graduate/Post Graduate Diploma Level – UG/PG – NCSE, PPE, FM, H.T., ECM

viii Research guidance

- No of papers published in National/International Journals/Conference – 8+
- Masters – 12
- Ph.D. – 1+3

ix. Project carried out – 4

x. Patents – Nil

xi. Technology Transfer – Nil

xii. Research Publications - 8+

10.9 Fee

- Details of Fees Approved by State Fee Committee for the Institute

Year	Fees in Rs.
2019-2020	101000/-
2018-2019	87000/-
2017-2018	93000/-

- Time Schedule for payment of fee for the entire programme – **At the time of admission**

- **Number of Fee Waivers offered :**

Year	Number of Fee Waivers offered
2016-2017	26
2017-2018	28
2018-2019	26

- Number of scholarship offered by the Institution, duration & amount : ----Nil-----
- Criteria for fee waivers/scholarship /EBC:

Scholarship Student

1. Admission of the student through CAP
2. CAP confirmation letter
3. SSC marksheet
4. HSC marksheet
5. Caste Certificate
6. Caste Validity
7. Income certificate Tasildar below 8 lakh (for SC student no limit of income)
8. Non-Creamy Layer certificate (for OBC/NT/VJ/SBC students only)
9. Adhar Card
10. Bank Pass Book

EBC Student

1. Admission of the student through CAP
2. CAP confirmation letter
3. SSC marksheet
4. HSC marksheet
5. Income certificate Tasildar below 8 lakh
6. Adhar Card
7. Bank Passbook

- Estimated cost of Boarding and Lodging in Hostels :

Academic Year	Particulars	New Hostel Fee		Old Hostel Fee	
		Boys	Girls	Boys	Girls
2019-2020	For One Year	25000/-	25000/-	20000/-	20000/-

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10.10 Name, Number of Seats & Duration of Courses:

Sr.No.	Courses	Sanctioned Intake	Year of Approval	Duration of Course
UG Level				
1	Mechanical Engineering	180	1999	4 years
2	Electronics & Telecommunication	60	1999	4 years
3	Computer Science & Engineering	60	2001	4 years
4	Electrical Engineering	120	2004	4 years
5	Civil Engineering	60	2010	4 years
6	Automobile Engineering	60	2011	4 years
7	Aeronautical Engineering	60	2013	4 years
PG Level				
3	Electrical Power System	18	2011	2 years
4	Structural Engineering	18	2016	2 years

10.11 Admission Procedure :

- **Admission Quota :** MH-CET – 65%
AIEEE – 15%
Management Quota : 20%

- **Entrance test / admission criteria :**

Qualifying Examination:- XIIth standard Science Examination passing with min 50% for Open category and 45% for BC category, and passing the MH-CET.

The admissions are purely governed by merit in MH-CET exam.

Mention the minimum level of acceptance, if any. - 50% for open and 45% for BC candidates in the 12th standard science branch exam.

10.12 Criteria and Weightages for admission

- **Cut Off / last Candidate Admitted for Last Three Years**

Year	Discipline	Cut Off / last candidate admitted
2016-2017	Mechanical Engineering	52
	Electronics & Telecommunication	63

	Computer Science & Engineering	51
	Electrical Engineering	54
	Civil Engineering	46
	Automobile Engineering	43
	Aeronautical Engineering	68
2017-2018	Mechanical Engineering	45
	Electronics & Telecommunication	49
	Computer Science & Engineering	47
	Electrical Engineering	46
	Civil Engineering	42
	Automobile Engineering	47
	Aeronautical Engineering	43
2018-2019	Mechanical Engineering	47
	Electronics & Telecommunication	48
	Computer Science & Engineering	49
	Electrical Engineering	42
	Civil Engineering	37
	Automobile Engineering	48
	Aeronautical Engineering	54

10.14 Result of Admission Under Management Seats/Vacant seats

Sr.	Merit	Candidate Name	Categor	Course Name	Seat
1	56	Bhosale Prathmesh Deepak	Open	Aeronautical	ACAP
2	54	Gurav Abhishek Vijaykumar	OBC	Aeronautical	ACAP
3	60	Jadhav Shrutika Suhas	Open	Aeronautical	ACAP
4	57	Jadhav Vaishnavi Sambhaji	Open	Aeronautical	ACAP
5	61	Kasurde Gaurav Kisan	Open	Aeronautical	ACAP
6	67	Mujawar Asharaf Aljar	OBC	Aeronautical	ACAP
7	56	Patil Ganesh Avinash	Open	Aeronautical	ACAP
8	62	Patil Mayur Tukaram	Open	Aeronautical	ACAP
9	76	Patil Pooja Anil	Open	Aeronautical	ACAP
10	75	Shelar Ashitosh Pradip	Open	Aeronautical	ACAP
11	0	Suryawanshi Pratik Ashish	Open	Aeronautical	ACAP
12	95	Bhosale Satyajeet Tanaji	Open	Aeronautical	IL
13	0	Chavan Vaibhav Dhanaji	Open	Aeronautical	IL
14	56	Harshvardhan Rajendra	Open	Aeronautical	IL
15	56	Jadhav Rajvardhan Yashwant	Open	Aeronautical	IL
16	71	Khatavkar Nishant Sanjay	Open	Aeronautical	IL
17	76	Mane Prathmesh Jalindar	Open	Aeronautical	IL
18	62	Manglekar Shubham Nagnath	Open	Aeronautical	IL
19	71	Patil Pratik Vinayak	Open	Aeronautical	IL
20	66	Tanmay Balu Gholap	Open	Aeronautical	IL

21	76	Wadkar Pratiksha Jitendra	Open	Aeronautical	IL
22	75	Patil Sangram Dilip	Open	Automobile Engineering	ACAP
23	57	Dange Shubham Shivaji	Open	Civil Engineering	ACAP
24	36	Desai Pratik Vikas	Open	Civil Engineering	ACAP
25	57	Ghorpade Sandesh Sunilrao	Open	Civil Engineering	ACAP
26	0	Pawar Aniket Mohan	Open	Civil Engineering	ACAP
27	37	Shinde Suraj Tanaji	SC	Civil Engineering	ACAP
28	50	Akshada Arun Patil	Open	Civil Engineering	IL
29	49	Choudhary Sumit Kanhaiyalal	Open	Civil Engineering	IL
30	47	Dhiraj Sunil Patil	Open	Civil Engineering	IL
31	51	Manepatil Maheshwari	Open	Civil Engineering	IL
32	58	Patil Abhishek Jaywant	Open	Civil Engineering	IL
33	63	Prathmesh Shivaji Shelare	Open	Civil Engineering	IL
34	46	Shinde Vinod Tanaji	Open	Civil Engineering	IL
35	51	Wategaonkar Kaustubh	NT-C	Civil Engineering	IL
36	65	Chougule Prathamesh Prakash	Open	Computer Science and	ACAP
37	49	Ghurde Gauri Umesh	NT-C	Computer Science and	ACAP
38	77	Kore Shivling Gajanan	Open	Computer Science and	ACAP
39	47	Patil Pallavi Hemant	Open	Computer Science and	ACAP
40	51	Patil Sandesh Sanjay	OBC	Computer Science and	ACAP
41	53	Rana Piyush Indrajit	Open	Computer Science and	ACAP
42	44	Shinde Shraddha Arun	Open	Computer Science and	ACAP
43	79	Suryawanshi Karan Deepak	Open	Computer Science and	ACAP
44	68	Vijaysinh Sambhaji Kodag	Open	Computer Science and	ACAP
45	77	Herwade Sakshi Vinod	Open	Computer Science and	IL
46	68	Jadhav Akshaya Arun	Open	Computer Science and	IL
47	55	Kalgutgi Riteeka Nagesh	Open	Computer Science and	IL
48	49	Patil Komal Rajaram	Open	Computer Science and	IL
49	46	Patil Pratik Tanaji	Open	Computer Science and	IL
50	54	Sukate Sahil Anil	Open	Computer Science and	IL
51	76	Dhole Prajakta Shivaji	Open	Electrical Engineering	ACAP
52	53	Kedar Hemant Kulkarni	Open	Electrical Engineering	ACAP
53	49	Dhabu Pratik Adinath	Open	Electrical Engineering	IL
54	54	Khot Prajakta Hanamant	Open	Electrical Engineering	IL
55	55	Mali Harshad Hanmant	OBC	Electrical Engineering	IL
56	69	Suyash Shivaji Kadam	Open	Electrical Engineering	IL
57	55	Chippalkatti Rachana	Open	Electronics and	IL
58	53	Patil Chaitrali Adgounda	Open	Electronics and	IL
59	50	Shivani Uday Kushire	Open	Electronics and	IL
60	81	Jadhav Rushikesh Baburao	Open	Mechanical Engineering	ACAP
61	52	Jadhav Sanket Ramchandra	Open	Mechanical Engineering	ACAP
62	61	Kulkarni Harshad Atul	Open	Mechanical Engineering	ACAP
63	59	Landage Mahadev Malapa	Open	Mechanical Engineering	ACAP
64	51	Mali Akash Shashikant	Open	Mechanical Engineering	ACAP
65	49	Patil Nikhil Vilasrao	Open	Mechanical Engineering	ACAP

66	52	Thorat Shubhamraje Pratap	Open	Mechanical Engineering	ACAP
67	80	Abhishek Mahesh Patil	Open	Mechanical Engineering	IL
68	62	Jadhav Indrajeet Vijay	Open	Mechanical Engineering	IL
69	54	Jakhale Pratik Balasaheb	Open	Mechanical Engineering	IL
70	70	Kadam Atharva Sunil	Open	Mechanical Engineering	IL
71	53	Mangalekar Rutik Vijay	Open	Mechanical Engineering	IL
72	50	Mulla Sahil Dilawar	OBC	Mechanical Engineering	IL
73	58	Patil Sanket Madhukar	Open	Mechanical Engineering	IL
74	55	Sourabh Ashok Patil	Open	Mechanical Engineering	IL

Placement Facilities

Facilities at T&P for Campus and Joint campus placement activities

- Dedicated Cabins / room for Campus Interview and Group Discussion
- Best Facilities for Pool / Joint Campus Interview Process
- 800 Seating Capacity Auditorium Equipped with Projector, Screen and Sound System
- Best Facilities for online test with 500 PC's at single place with complete uninterrupted power supply
- Networking Details (LAN, WAN, Email, Internate, Dial Up, Dedicated Leased Lines ,155 Mbps Bandwidth)100/1000 Gigabit Campus wide LAN, Optical Fiber back bone to interconnect PC and Servers
- Online Test with PC is on single floor. Networking Details
- 100/1000 Gigabit Campus Wide LAN, Optical fiber back bone to interconnect PC and Servers.
- 155 MBPS dedicated leased line for internet connectivity.
- Dell(TM) Power Edge(TM) R-700 Series Rack Mount Server - 3.5- Inch Chassis NM187 -Dell(TM) Power Edge(TM) R710 Rack Mount Server Y373J -1x6.
- IBMX-226 processor SERVER with RAID Disks

Campus Process Infrastructure

- Sufficient class rooms for written test
- Separate cabins for interviews and GD
- Auditorium with capacity of 800 students is equipped with latest PA System & Presentation facilities .

Campus placement in last three years

Year	Discipline	Total no. of students	minimum salary PA	maximum salary PA	average salary PA
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		placed	in Lacks	in Lacks	in Lacks
2016-17	Mechanical Engineering	118	0.96	3.35	2.2
	Electronics & Telecommunication	69			
	Computer Science & Engineering	54			
	Electrical Engineering	55			
	Civil Engineering	37			
	Automobile Engineering	36			
	Aeronautical Engineering	25			
2017-18	Mechanical Engineering	94	1.2	12	2.4
	Electronics & Telecommunication	61			
	Computer Science & Engineering	32			
	Electrical Engineering	37			
	Civil Engineering	29			
	Automobile Engineering	24			
	Aeronautical Engineering	35			
2018-19	Mechanical Engineering	91	1.2	3.36	2.85
	Electronics & Telecommunication	45			
	Computer Science & Engineering	30			
	Electrical Engineering	27			
	Civil Engineering	25			
	Automobile Engineering	24			
	Aeronautical Engineering	25			

- Twinning & Collaboration with Foreign Collaborations, if any : Not Applicable

10.7 Faculty

Chart for Total No. of Ph.D./Ph.D.Pursuing/M.E.Staff

Sr.No.	Branch	Total No. of Staff	No. of Ph.D. Staff	No. of Ph.D. Reg. Staff	No. of M.E. Staff
1	Mechanical Engineering 1 st Shift	37	05	05	27
2	Mechanical Engineering 2 nd Shift	13	0	01	12
3	Electronics & Telecommunication	20	02	07	11
4	Computer Science & Engineering	24	01	04	19
5	Electrical Engineering	23	01	04	18
6	Civil Engineering	23	02	09	12
7	Automobile Engineering	13	01	02	10
8	Aeronautical Engineering	14	03	01	10
9	Basic Science	19	03	07	09
	Total	186	18	40	128

Required/Available of Faculty Postwise

Post	Required	Available			Total	Vacant
		University Approved	University Not Approved	Adjunct		
Professor	13	3	4	1	8	4
Associate Professor	26	16	2	-	18	8
Assistant Professor	92	84	76	-	160	--
Total	131	103	82	1	186	--

Faculty Position Required/Available for the existing programmes (Department Wise): UG/ PG

Name of the Programme	Total number of Faculty Required	Details of Faculty Available										Total no. of Faculty Uni. App.	Total no. Faculty Uni. not App.	Total number of Faculty Available
		Professors			Associate Professors			Assistant Professor			Adjunct			
		Required	Available		Required	Available		Required	Available					
			Uni. App.	Uni. not App.		Uni. App.	Uni. not App.		Uni. App.	Uni. not App.				
Mechanical Engg I Shift	36	4	1	2	8	4	1	24	18	11	-	23	14	37
Mechanical Engg. II Shift	11	1	-	-	2	1	-	8	8	4	-	9	4	13
Electronics & Telecomm. Engg.	12	1	-	1	2	3	-	9	14	2	-	17	3	20
Computer Science & Engg.	11	1	1	-	2	1	-	8	11	11	-	13	11	24
Electrical Engg	16	2	-	-	3	1	-	11	9	13	-	10	13	23
Civil Engg.	17	2	-	1	3	3	-	12	8	11	-	11	12	23
Automobile Engg.	13	1	-	-	2	1	-	10	8	4	-	9	4	13
Aeronautical Engg	11	1	1	-	2	1	1	8	4	6	1	6	8	14
Mathematics	5	-	-	-	1	1	-	4	0	6	-	1	6	7
Physics	2	-	-	-	0	0	1	2	1	1	-	1	2	3
Chemistry	2	-	-	-	0	0	-	2	1	2	-	1	2	3
Professional Comm.	3	-	-	-	1	0	-	2	2	4	-	2	4	6
Total	139	13	3	4	26	16	3	100	84	75	1	103	83	186

Faculty Position for the existing programmes (Department Wise): UG/PG

Programme: - Mechanical Engineering (First Shift)– 37

S.N .	Name (s) of the Teaching Faculty	Designation	Qualifications with field of specialization with class/division of passing			Date of Birth	Date of Joining the Institution	Gross total salary as on date with scale& Basic pay	Nature of Appointment	University Approval Letter No. & date in this institute
			UG	PG	Doctorate					
1.	Prof.Kanai Rafiq Abu	Executive Director	B.E. Mech	ME Production	-	14.02.1965	01.01.2009	175000/- 37000-67000	Adhoc	Local Selection Committee
2.	Dr. Waghmode LaxmanYadu	Director	B.E. Mech	ME Design	Ph.D.	27.09.1979	18.07.2002	140940/- 37400-67000	Regular	esayau ÀsaMlganata ÀTo.5À esaesaÀ422 id.13.04.2015
3.	Dr. Chavan Shrirang Pandurang	Professor	B.E. Mech	ME Design	Ph.D.	22.03.1974	16.06.2017	130000/- 37400-67000	Adhoc	Local Selection Committee
4.	Dr. Patil Rajkumar Bhimgonda	Assistant Professor	BE Mech	M.E. Design	Ph.D.	28.01.1979	16.06.2014	47008/- 15600-39100	Regular	esayau ÀsaMlganata Àto.5À eeesaÀ785 id.30.04.2014
		Associate Professor								Awaited From University
5.	Dr. Shinde Anil Bhagwan	Associate Professor	B.E. Mech	ME CAD/CAM	Ph.D.		01.04.2019	94337/- 15600-39100	Regular	Awaited From University
6.	Dr.Md.Hamid Siddique	Associate Professor	B.E. Mech	MTech Petroleum Engg.	Ph.D.	01.01.1988	20.06.2018	100056/- 37400-67000	Adhoc	Local Selection Committee

7.	Mr. Pirjade Akhatharhusen Mubarak	Associate Professor	B.E. Mech	ME Design	Pursuing	20.05.1975	08.08.1999	94337/-15600-39100	Regular	Aaya ÀTI 15À vhlÀ 4364 id.25July 03,
8.	Mr. Kulkarni Prasad Dattatraya	Associate Professor	B.E. Mech	ME Heat & Power	Pursuing	01.06.1973	01.07.2001	94337/-15600-39100	Regular	saMlganata ÀTI.5À vhlÀ 7105 id.20 SEP 05
9.	Mr. Jadhav Manoj Mahatamaji	Assistant Professor	B.E. Mech	M.E. Design	Pursuing	21.06.1981	09.08.2005	65191/-15600-39100	Regular	saMlganata ÀTI.5À saaTmaÀ 13080 id.27 JAN 09
10.	Smt.Jadhav Jyoti Sunil	Assistant Professor	BE Mech	M.E. Production	-	04.06.1986	22.07.2008	51283/-15600-39100	Regular	saMlganata Àto.5À saaTmaÀ 15546 id.1 AUG 09
11.	Mr.Mane Ajit R.	Assistant Professor	BE Mech	M.Tech. Thermal	-	11.04.1984	15.06.2012	52803/-15600-39100	Regular	esayau ÀsaMlganata Àto.5À eeesaÀ728 id.22.04.13
12.	Mr. Shekhar (Patil) Sumit Vitthal	Assistant Professor	BE Mech	M.Tech. CAD/CAM/ CAE	-	26.03.1984	06.07.2013	49820/-15600-39100	Regular	esayau ÀsaMlganata Àto.5À eeesaÀ10368 id.29.01.13
13.	Mr.Burle Kiran Jinpal	Assistant Professor	BE Mech	M.Tech. Robotics	-	26.03.1984	24.12.2012	55995/-15600-39100	Regular	esayau ÀsaMlganata Àto.5À eeesaÀ 10368 id.29.01.13
14.	Mr.Daingade Prashant Shrikant	Assistant Professor	BE Mech	M.E. Automobile	-	01.06.1983	07.08.2010	48395/-15600-39100	Regular	esayau ÀsaMlganata Àto.5À eeesaÀ785 id.30.04.2014

15.	Mr.Mullya Satish Anand	Assistant Professor	BE Mech	M.Tech. CIM	Pursuing	27.06.1986	27.06.2013	48395/-15600-39100	Regular	esayau ÀsaMlganata Àto.5À eeesaÀ785 id.30.04.2014
16.	Mr. Ballal Yuvaraj Prakash	Assistant Professor	BE Mech	M.Tech. Production	-	15.05.1988	25.06.2012	49820/-15600-39100	Regular	esayau ÀsaMlganata Àto.5À eeesaÀ10368 id.29.01.13
17.	Mr.Salgar Manojkumar Madhukar	Assistant Professor	BE Mech	M.Tech	-	27.05.1979	01.07.2014	47008/-15600-39100	Regular	esayau ÀsaMlganata Àto.5À eeesaÀ3707 id.23.06.2014
18.	Mr.Nargatti Kiran Ishawar	Assistant Professor	BE Mech	M.Tech	-	11.11.1987	16.06.2014	47008/-15600-39100	Regular	esayau ÀsaMlganata Àto.5À eeesaÀ6964 id.17.09.2014
19.	Mr. Bhosale Sachin Shripatrao	Assistant Professor	BE Mech	M.E. Design	-	01.11.1979	24.06.2015	54399/-15600-39100	Regular	esayau ÀsaMlganata Àto.5À esaesaesaÀ339 id.11.04.2016
20.	Mr.Pawar Girish Bhimrao	Assistant Professor	BE Mech	M.E. Design	-	10.11.1988	26.06.2012	47008/-15600-39100	Regular	esayau ÀsaMlganata Àto.5À esaesaesaÀ339 id.11.04.2016
21.	Mr.Chendke Ghanshyam Mahaling	Assistant Professor	BE Mech	M.E. Design	-	13.10.1987	06.07.2015	51891/-15600-39100	Regular	esayau ÀsaMlganata Àto.5À esaesaesaÀ339 id.11.04.2016

22.	Mr.Boargaonkar Avinash Vitthal	Assistant Professor	BE Mech	ME Design	Pursuin g	01.02. 1987	16.06. 2014	37088 15600- 39100	Regular	esayau ÀsaMlganata Àto.5À esaesaesaÀ339 id.11.04.2016
23.	Mr.Salunkhe Vishal Ganpatrao	Assistant Professor	BE Mech	ME Design	-	24.06. 1990	16.06. 2014	44348/- 15600- 39100	Regular	esayau ÀsaMlganata Àto.5À esaesaesaÀ339 id.11.04.2016
24.	Mr.Ghutugade Santosh Tanaji	Assistant Professor	BE Mech	ME Production	-	05.08. 1988	01.01. 2016	44348/- 15600- 39100	Regular	esayau ÀsaMlganata Àto.5À esaesaesaÀ339 id.11.04.2016
25.	Mr.Gondkar Vivek Suresh	Assistant Professor	BE Mech	ME Production	-	07.06.19 88	01.01. 2016	44348/- 15600- 39100	Regular	esayau ÀsaMlganata Àto.5À esaesaesaÀ339 id.11.04.2016
26.	Mr.Chittewar Suresh Laxman	Assistant Professor	BE Mech	ME Design	-	01.06.19 88	01.01. 2016	44348/- 15600- 39100	Regular	esayau ÀsaMlganata Àto.5À esaesaesaÀ339 id.11.04.2016
27.	Mr.Chavan Sandip Shamrao	Assistant Professor	BE Mech	M.E. Design	-	25.12. 1987	26.06 .2012	40465/- 15600- 39100	Adhoc	Local Selection Committee
28.	Mr. Patil Rajkumar Tukaram	Assistant Professor	BE Mech	M.E. Design App	-	31.01. 1964	01.12. 2009	45659/- 15600- 39100	Adhoc	Local Selection Committee
29.	Mr.Patil Pradip Bhaskar	Assistant Professor	BE Mech	ME Design	-	04.04. 1983	10.07. 2013	38180/- 15600- 39100	Adhoc	Local Selection Committee

30.	Mr. Bepari Muzammil Mehabub	Assistant Professor	BE Mech	ME Prod.	-	13.07.1988	20.12.2018	49820/- 15600-39100	Adhoc	Local Selection Committee
31.	Mr.Desai Sumit S.	Assistant Professor	BE Mech	ME Prod.	-	25.08.1988	20.12.2018	60000/- 15600-39100	Adhoc	Local Selection Committee
32.	Mr.Tate Abhijit Shankar	Assistant Professor	BE Mech	MTech Prod.	-	11.04.1992	01.07.2016	30000/-	Adhoc	Local Selection Committee
33.	Mr.Pawar Prashant Bapurao	Assistant Professor	BE Mech	M.E. H & T Power	-	01.06.1993	18.01.2016	30000/-	Adhoc	Local Selection Committee
34.	Mr.Bhokare Prasad Ramkrishna	Assistant Professor	BE Mech	ME Design	-	18.11.1990	04.07.2016	30000/-	Adhoc	Local Selection Committee
35.	Mr.Mhamane Digvijay Achyut	Assistant Professor	BE Mech	MTech Prod.	-	08.01.1991	25.06.2018	30000/-	Adhoc	Local Selection Committee
36.	Mr.Chavan Deepak A.	Assistant Professor	BE Mech	ME Design	-	23.04.1992	17.12.2018	25000/-	Adhoc	Local Selection Committee
37.	Mr.Patil Dhiraj Dhananjay	Assistant Professor	BE Mech	MTechCIM	-	12.05.1985	17.12.2018	25000/-	Adhoc	Local Selection Committee

Programme: - Mechanical Engineering (Second Shift)– 13

S.N	Name (s) of the Teaching Faculty	Designation	Qualifications with field of specialization with class/division of passing			Date of Birth	Date of Joining the Institution	Gross total salary as on date with scale & Basic pay	Nature of Appointment	University Approval Letter No. & date in this institute
			UG	PG	Doctorate					

1.	Mr. Patil Vijay Balkrishana	Associate Professor	B.E. Mech	ME Design	-	20.07.1972	25.06.2009	94337/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ7135 id.03.12.11
2.	Mr.Jadhav Abhijit Ananda	Assistant Professor	BE Mech	M.E. Design	-	26.03.1984	01.08.2010	55995/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ785 id.30.04.2014
3.	Mr.Patil Harshvardhan Hambirrao	Assistant Professor	BE Mech	M.E. Design	-	30.03.1989	20.06.2013	48395/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5 À eeesaÀ785 id.30.04.2014
4.	Mr.Ganachari Vaibhav Sidraya	Assistant Professor	BE Mech I st	M.Tech Production	-	01.12.1989	25.06.2012	48395/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5 À eeesaÀ 785id.30.04. 14
5.	Mr.Rakate Ganesh Narayan	Assistant Professor	BE Mech	M.E. Design	-	07.06.1984	24.12.2012	48395/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ785 id.30.04.2014
6.	Mr. Gaji Rahul Rajkumar	Assistant Professor	BE Mech	M.E. CAD/CAM/CAE	Pursuing	07.02.1988	03.01.2012	45659 15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ785 id.30.04.2014

7.	Mr.Mali Pritam Vasantrao	Assistant Professor	BE Mech	M.Tech	-	28.04.1987	16.06.2014	47008/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ4547 id.14.07.2014
8.	Mr.Wadekar Paresh M	Assistant Professor	BE Mech	M.Tech Heat Power	-	15.10.1989	20.01.2014	44348/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À esaesaesaÀ3 39 id.11.04.2016
9.	Mr. Nishandar Siddhanath Vishvanath	Assistant Professor	BE Mech	M.E. Heat Power Engg	-	24.09.2016	18.07.2016	37088/-15600-39100	Adhoc	Awaited from University
10.	Mr.Patil Abhijit Vijay	Assistant Professor	BE Mech	M.E. Design	-	10.01.1989	23.12.2013	38180/-15600-39100	Adhoc	Local Selection Committee
11.	Mr.Yadav Sujit Vijay	Assistant Professor	BE Mech	M.E. Heat Power Engg	-	03.09.1987	04.07.2014	39306/-15600-39100	Adhoc	Local Selection Committee
12.	Mr.Kumbhar Vinayak Tatoba	Assistant Professor	BE Mech	M.Tech Design	-	25.06.1986	02.07.2016	39306/-15600-39100	Adhoc	Local Selection Committee
13.	Mr.Dabhole Akshaykumar S.	Assistant Professor	BE Mech	M.Tech CAD/CAM. CAA	-	24.03.1993	04.07.2016	30000/-	Adhoc	Local Selection Committee

Programme: - Electronics & Telecommunication (First Shift): 20

S.N .	Name (s) of the Teaching Faculty	Designation	Qualifications with field of specialization with class/division of passing	Date of Birth	Date of Joining the	Gross total salary as on date with	Nature of Appointment	University Approval Letter
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			UG	PG	Doctorate		Institution	scale & Basic pay		No. & date in this institute
1.	Dr. John Ashok	Professor	BE EE	M.Tech. Applied Electronics	Ph.D.	12.01.1980	04.01.2017	103381/-37400-6700	Adhoc	Local Selection Committee
2.	Mrs. Shinde Sunita Sunil	Associate Professor	B.E. (Electronics)	M.E. E & Tc	Pursuing	30.05.1975	01.06.2001	94337/-15600-39100	Regular	saMlganata ÀTI.5ÀvhiÀ 7105 id.20 SEP 2005
3.	Ms. Jagtap Rupali Ramesh	Associate Professor	B.E. (Electronics)	M.E. (Electronics)	-	09.02.1977	10.08.2001	80600/-15600-39100	Regular	Aaya ÀTI 15ÀvhiÀ 4364 id.25 July 2003,
4.	Mr. Mane Vikaram Aanant.	Associate Professor	B.E. (Electronics)	M.E. (Electronics)	-	06.03.1977	01.01.2004	94337/-15600-39100	Regular	Aaya ÀTI 15ÀvhiÀ 7720 id.20 Nov 04,
5.	Mrs. Raste Madhura Makrand	Assistant Professor	B.E. (Electronics)	M.E. (Electronics)	-	19.11.1973	01.07.2003	58180/-15600-39100	Regular	saMlganata ÀTI.5À saaTmaÀ 6116 id.20 SEP 2007
6.	Dr. Tamboli Shabnam Shabbir	Assistant Professor	B.E. (Electronics)	M.E. (Electronics)	Ph.D.	24.05.1980	20.07.2005	58180/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ 7135 id.03.12.11

7.	Mr. Bidwai Sandeep Sakahari	Assistant Professor	B.E. (Electronic s)	M.E. (Electronic s)	Pursuing	28.05. 1980	15.06. 2009	55976/- 15600-39100	Regular	iSavaajal ivaÄpljal saMlganata À balesapiÀ 3500 id.19 July 2012
8.	Mrs. Bidwai Sayali Sandeep	Assistant Professor	B.E. (Electronic s)	M.E. (Electronic s)	Pursuing	01.03. 1984	15.06. 2009	53221/- 15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ7135 id.03.12.11
9.	Mrs.Chavan Manjusha N.	Assistant Professor	B.E. (Electronic s)	M.E. (Electronic s)	Pursuing	26.06. 1979	25.06. 2010	49801/- 15600-39100	Regular	esayau ÀsaMlganata ÀTo.5Àeeesa À 10368 id.04.12.2012
10.	Mr.Sannakashappan avar Basavraj S.	Assistant Professor	B.E. (Electronics & Telecomm)	M. Tech. Digital Comm.	Pursuing	05.08. 1985	20.07 .2012	49801/- 15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ728 id.22.04.2013
11.	Ms. Patil Viddulata Appasaheb	Assistant Professor (UGC in PG)	B.E. (Electronic s)	M.E. (Electronic s)	-	18.06. 1976	17.08. 2007	48395/- 15600-39100	Regular	saMlganata ÀTo.5À vhITIDIÀ1230 0 id.09.03.2016
12.	Mr.Patil Sachin Sambhaji	Assistant Professor	B.E. E & Tc	ME (Electronic s)	-	04.02. 1987	22.07. 2008	49801/- 15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ10368 id.29.01.2013

13.	Smt.Shinde Ashwini Shivdas	Assistant Professor	B.E. (Electronics & Telecomm)	M. Tech. Electronics	Pursuing	26.10.1972	01.07.2013	48395/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ10368 id.29.01.2013
14.	Mr.Patil Kiran Nivarutti	Assistant Professor	B.E. (Electronics & Telecomm)	ME Electronics	-	10.04.1978	01.07.2013	48395/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ10368 id.29.01.2013
15.	Ms.Mirajkar Pradnya Prakash	Assistant Professor	B.E. (Electronic s)	M.Tech. E& Tc	-	29.07.1989	16.07.2012	49801/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5 À eeesaÀ785 id.30.04.2014
16.	Mr.Kumbhar Mahesh Manik	Assistant Professor	B.E. (Electronic s)	M.Tech. E& Tc	Pursuing	13.02.1989	16.06.2014	47008/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À esaesaesaÀ339 id.11.04.2016
17.	Mr.Dange Kumarsagar Mohan	Assistant Professor	B.E. (Electronic s)	M.Tech. E& Tc	-	25.03.1985	16.06.2014	47008/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5 À esaesaesaÀ2120 id.04.06.2016

18.	Smt.Lakesar Archana Laxman	Assistant Professor	B.E. (Electronics & Telecomm)	ME E&Tc	-	16.08.1988	17.06.2013	44348/- 15600-39100	Regular	esayau ÀsaMlganata ÀTo.5 À esaesaesaÀ2 120 id.04.06.2016
19.	Mr.Daingade Harshad Shankar	Assistant Professor	B.E. (Electronics & Telecomm)	M.E. VLSI & Embedded System	-	04.04.1991	16.07.2012	30000/-	Adhoc	Local Selection Committee
20.	Smt.Pujari Arati AppGaso	Assistant Professor	B.E. (Electronics & Telecomm)	M.E. E& Tc	-	21.08.1990	17.06.2013	25000/-	Adhoc	Local Selection Committee

Programme: - Computer Science & Engineering : 24

S.N .	Name (s) of the Teaching Faculty	Designation	Qualifications with field of specialization with class/division of passing			Date of Birth	Date of Joining the Institution	Gross total salary as on date with scale& Basic pay	Nature of Appointment	University Approval Letter No. & date in this institute
			UG	PG	Doctorate					
1.	<i>Dr.Smt.Bhandari Smiriti H.</i>	<i>Professor</i>	<i>B.E. C.S.E</i>	<i>M.E. C.S.E.</i>	<i>Ph.D.</i>	<i>15.11.1971</i>	<i>07.01.2019</i>	<i>120000/- 37400-39100</i>	<i>Adhoc</i>	<i>Awaited from University</i>
2.	<i>Mrs. Mulla Anisafatima Nazim</i>	<i>Associate Professor</i>	<i>B.E. C.S.E</i>	<i>M.E. C.S.E.</i>	<i>Pursuing</i>	<i>20.05.1978</i>	<i>01.07.2001</i>	<i>94337/- 15600-39100</i>	<i>Regular</i>	<i>Aaya ÀTI 15À vhIÀ 4364 id.25 July 2003,</i>

3.	Mr.Sutar Sandeep Gajanan	Assistant Professor	B.E. C.S.E	M.E. C.S.E.	-	07.12. 1981	04.07. 2005	63025/- 15600- 39100	Regular	saMlganata ÀTI.5À vhiÀ 7105 id.20 SEP 05
4.	Mr.Kamble Vishal Appasaheb	Assistant Professor	B.E. C.S.E	M.E. CSE App	-	06.09. 1982	01.07. 2006	55976/- 15600- 39100	Regular	saMlganata ÀTI.5À saaTmaÀ 6116 id.20 SEP 2007
5.	Mr.Khatavkar Shrihari Dilip	Assistant Professor	BE CSE	M.E. C.S.E.	-	11.04. 1985	25.05. 2007	63025/- 15600- 39100	Regular	saMlganata ÀTI.5À saaTmaÀ 1202 id.5 May 2009
6.	Mr.Dange Amol Subhash	Assistant Professor	BE CSE	M. Tech. C.S.E.	-	25.06. 1983	20.07. 2009	56641/- 15600- 39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ7135 id. 03.12.11
7.	Mr. Sayyad Suhel Shabbir.	Assistant Professor	BE CSE	M. Tech. C.S.E.	-	01.05. 1986	13.07. 2009	65976/- 15600- 39100	Regular	esayau ÀsaMlganata ivaBaaga ÀTo.5À saaTmaÀ501 1 id.01.09.12

8.	Mr. Patil Sachin Popat	Assistant Professor	BE I.T	M.E. C.S.E.	-	11.11. 1983	05.07. 2005	61581/- 15600- 39100	Regular	esayau ÀsaMlganata ÀTo.5À esaesaesaÀ3 39 id.11.04.2016
9.	Mr.Kamble Rajesh Mahadev	Assistant Professor	BE IT	M. Tech. C.S.E.		27.10. 1988	01.01. 2016	44348/- 15600- 39100	Regular	esayau ÀsaMlganata ÀTo.5À esaesaesaÀ3 39 id.11.04.2016
10.	Mr.Patil Sachin Dattaraya	Assistant Professor	BE IT	M. Tech. C.S.E.	Pursuing	10.06. 1987	24.07. 2012	36623 15600- 39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ728 id.22.04.13
11.	Mrs. Tamboli Arifa Shabbir	Assistant Professor	BE I.T M.E. CSE	M.E C.S.E.	Pursuing	27.05. 1982	01.06. 2006	30240 15600- 39100	Regular	saMlganata ÀTI.5À saaTmaÀ 13080 id.27 JAN 09
12.	Mr. Patil Siddheshwar Vilas	Assistant Professor (UGC in PG)	BE I.T	M.Tech. CSE	Pursuing	27.05. 1986	17.07. 2007	29390/- 15600- 39100	Regular	saMlganata ÀTo.5À vhITIDIÀ1230 0 id.09.03.2016
13.	Mr. Pradnyavant Ajit Ratnakar	Assistant Professor (UGC in PG)	BE IT	M. Tech. CSE	-	27.10. 1988	01.01. 2016	44348/- 15600- 39100	Regular	saMlganata ÀTo.5À vhITIDIÀ1230 0 id.09.03. 16

14.	Mr.Taranpreet Singh Ruprah	Assistant Professor	BE IT, -	M.E. IT	-	31.01.1986	23.01.2014	40465/- 15600-39100	Adhoc	Local Selection Committee
15.	Mr.Shinde Chandrakant Anandrao	Professor	BE Etc	-	-	13.11.1972	11.06.2018	97491/- 37400-67000	Adhoc	Local Selection Committee
16.	Mr. Dabade Mahesh Vasant	Assistant Professor	BE CSE	ME CSE	-	30.01.2018	17.12.2018	37088/- 15600-39100	Adhoc	Local Selection Committee
17.	Ms.Shinde Shradha Babasaheb	Assistant Professor	BE IT	ME IT	-	24.01.1990	18.01.2016	30000/-	Adhoc	Local Selection Committee
18.	Mr.More Pravin Baban	Assistant Professor	BE CSE	ME CSE	-	02.01.1986	15.06.2016	30000/-	Adhoc	Local Selection Committee
19.	Smt. Patil Ashvini Sandip	Assistant Professor	BE CSE	ME CSE	-	04.03.1984	16.01.2017	30000/-	Adhoc	Local Selection Committee
20.	Smt.Pawar Shubhangi Uday	Assistant Professor	BE CSE	ME CSE	-	08.10.1991	07.02.2017	25000/-	Adhoc	Local Selection Committee
21.	Mr.Chougule Vijay Dashrath	Assistant Professor	BE Computer	ME CSE	-	01.11.1983	01.07.2014	30000/-	Adhoc	Local Selection Committee
22.	Mr. Lubal Yogesh Shanar	Assistant Professor	BE Computer	ME CSE	-	10.06.1984	20.07.2015	25000/-	Adhoc	Local Selection Committee
23.	Mr.Yadav Sachin Patangrao	Assistant Professor	BE Computer	ME CSE	-	01.06.1984	19.06.2018	30000/-	Adhoc	Local Selection Committee
24.	Mrs.Patil Pallavi Suhas	Assistant Professor	BE Computer	ME CSE	-	19.11.1991	03.01.2019	25000/-	Adhoc	Local Selection Committee

Programme: - Electrical Engineering : 23

S.N .	Name (s) of the Teaching Faculty	Designation	Qualifications with field of specialization with class/division of passing	Date of Birth	Date of Joining the	Gross total salary as on date with	Nature of Appointment	University Approval Letter
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			UG	PG	Doctorate		Institution	scale & Basic pay		No. & date in this institute
1.	<i>Dr. S. Gopinath</i>	<i>Associate Professor</i>	<i>BE Electrical</i>	<i>ME Electrical</i>	<i>Ph.D.</i>	<i>31.08.1980</i>	<i>16.02.2019</i>	<i>94337/-37400-67000</i>	<i>Regular</i>	<i>Awaited from University</i>
2.	Mr.Patil Manoj Dhondiram	Assistant Professor	BE Electrical	ME Electrical	Pursuing	22.09.1987	14.07.2010	65039/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eesaÀ12562 id.14.03.2012
3.	Mr.Patil Vishal Balaso	Assistant Professor	BE Electrical	ME Electrical	-	31.08.1986	15.01.2010	45659/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À esaesaÀ339 id.11.04.2016
4.	Ms.Kharade Jyoti Mohan	Assistant Professor	BE Electrical	M.E. Power Sys	Pursuing	31.10.1991	06.01.2015	44348/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À esaesaÀ339 id.11.04.2016
5.	Mr.Makanadar Yakub Anwar	Assistant Professor	BE Electrical	M.Tech Power Sys	-	18.05.1982	15.12.2015	44348/-15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À esaesaÀ339 id.11.04.2016

6.	Mr.Mali Prashant Shivajirao	Assistant Professor	BE Electrical	M.E. Power Sys	-	10.11.1990	26.12.2015	45659/-15600-39100	Regular	essayau ÀsaMlganata ÀTo.5À esaesaesaÀ2 120 id.04.06.2016
7.	Mr.Patil Swapnil Dadaso	Assistant Professor (UGC in PG)	BE Electrical	M.E. Power Sys	Pursuing	05.05.1988	16.06.2014	44348/-15600-39100	Adhoc	saMlganata ÀTo.5À vhITIDIÀ1230 0 id.09.03. 2016
8.	Mr. Bagwan Sameer Usman	Assistant Professor	BE Electrical	M.E. Power Sys	-	17.12.1989	15.12.2015	44161/-15600-39100	Regular	essayau ÀsaMlganata ÀTo.5À esaesaesaÀ3 39 id.11.04.2016
9.	Mr.Kanase Digvijay Bhimrao	Assistant Professor	BE Electrical	M.Tech Power Sys	-	24.05.1991	15.12.2015	37088/-15600-39100	Adhoc	Awaited from University
10.	Mr.Madake Rajendra Bhimraj	Assistant Professor	BE Electrical	M.E. EPS	-	25.06.1991	14.06.2016	37088/-15600-39100	Adhoc	Awaited from University
11.	Mr.Makula Charan Sekhar	Assistant Professor	BE Electrical	ME Power Sys	-	04.08.1987	02.06.2014	39306/-15600-39100	Adhoc	Local Selection Committee
12.	Mr. Shaikh Suhel Kaiser	Assistant Professor	BE Electrical	ME EPS	-	05.12.1986	14.07.2009	37088/-15600-39100	Adhoc	Local Selection Committee
13.	Mr.Jamadar Najmuddin Moula-ali	Assistant Professor	BE Electrical	M.Tech. Power Sys	-	16.04.1990	19.12.2016	37088/-15600-39100	Adhoc	Local Selection Committee

14.	Mr.Pawar Suraj Deelip	Assistant Professor	BE Electrical	M.E. Control System	Pursuing	15.07.1993	05.06.2017	37088/-15600-39100	Adhoc	Local Selection Committee
15.	Mrs.Gurav Puja Deelip	Assistant Professor	BE Electrical	ME EPS	-	14.07.1992	15.06.2018	37088/-15600-39100	Adhoc	Local Selection Committee
16.	Mr.Jadhav Amit Bhimrao	Assistant Professor	BE Electronics	ME Electronic Dig.Sys	-	11.12.1990	15.06.2015	39306/-15600-39100	Adhoc	Local Selection Committee
17.	Mr.Patil Santosh Vilas	Assistant Professor	BE Electrical	M.E. EPS	-	25.01.1986	04.02.2019	37088/-15600-39100	Adhoc	Local Selection Committee
18.	Ms.Suryawanshi Deepali Anandrao	Assistant Professor	BE Electrical	M.Tech Power Sys	-	26.10.1990	02.08.2017	30000/-	Adhoc	Local Selection Committee
19.	Ms.Patil Vidya Sampatrao	Assistant Professor	BE Electrical	ME EPS	-	12.12.1994	01.06.2018	25000/-	Adhoc	Local Selection Committee
20.	Ms.Jadhav Madhuri Pandurang	Assistant Professor	BE Electrical	M.Tech Power Sys	-	03.07.1994	01.06.2018	25000/-	Adhoc	Local Selection Committee
21.	Mr.Patil Sagar Sanjay	Assistant Professor	BE Electrical	M.Tech Power Sys	-	04.04.1994	14.06.2018	20000/-	Adhoc	Local Selection Committee
22.	Ms.Koli Pratiksha Murlidhar	Assistant Professor	BE Electrical	M.Tech Power Sys	-	26.07.1992	19.06.2018	30000/-	Adhoc	Local Selection Committee
23.	Smt.Kumbhar Bhupali Popat	Assistant Professor	BE Electrical	M.Tech Power Sys	-	10.05.1992	16.06.2018	25000/-	Adhoc	Local Selection Committee

Programme: - Civil Engineering: 23

S.N	Name (s) of the Teaching Faculty	Designation	Qualifications with field of specialization with class/division of passing	Date of Birth	Date of Joining the	Gross total salary as on date with	Nature of Appointment	University Approval Letter
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			UG	PG	Doctorate		Institution	scale & Basic pay		No. & date in this institute
1.	<i>Dr. Vijay Rmachandra Thombare</i>	<i>Professor</i>	<i>BE Civil</i>	<i>ME Civil</i>	<i>Ph.D.</i>	<i>01.06.1963</i>	<i>04.01.2018</i>	<i>96370/- 37400- 67000</i>	Regular	<i>Local Selection Committee</i>
2.	<i>Mr. Hivarekar Shailendra B.</i>	<i>Associate Professor</i>	<i>B.E. Civil</i>	<i>ME Environmental</i>	<i>Pursuing</i>	<i>15.07.1976</i>	<i>02.05.2011</i>	<i>94337/- 37400- 67000</i>	<i>Regular</i>	<i>esayau ÀsaMlganata ÀTo.5À eeesaÀ7135 id.03.12.11</i>
3.	<i>Mr. Mohite Santosh Shankar</i>	<i>Associate Professor</i>	<i>B.E. Civil</i>	<i>ME Structures</i>	<i>Pursuing</i>	<i>28.02.1979</i>	<i>02.05.2012</i>	<i>94337/- 37400- 67000</i>	<i>Regular</i>	<i>esayau ÀsaMlganata ÀTo.5À eeesaÀ10368 id.29.01.2013</i>
4.	<i>Dr. Patil Amit Prakash</i>	<i>Associate Professor</i>	<i>B.E. Civil</i>	<i>MTech CTM</i>	<i>Ph.D.</i>	<i>10.06.1987</i>	<i>15.12.2018</i>	<i>100056/- 37400- 67000</i>	<i>Regular</i>	<i>Awaited from University</i>
5.	Mr. Patil Rahul Anandrao	Assistant Professor	B.E. Civil	ME. Structures App.	-	01.06.1976	15.01.2007	55976/- 15600- 39100	Regular	saMlganata ÀTI.5À saaTmaÀ 6116 id.20 SEP 2007
6.	Smt. Patil Vidya Magonda	Assistant Professor	B.E. Civil	ME Structures	Pursuing	06.10.1988	01.07.2013	48395/- 15600- 39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ10368 id.29.01.2013

7.	Mr.Chandak Piyush Govind	Assistant Professor	B.E.Civil	ME Const.& Mgt.	Pursuing	05.01.1988	17.06.2013	48395/- 15600-39100	Regular	essayau ÀsaMlganata ÀTo.5À eeesaÀ785 id.30.04.2014
8.	Mr.Jadhav Raviraj Vinayak	Assistant Professor	B.E. Civil	ME Const.& Mgt.	Pursuing	08.05.1983	15.06.2012	48395/- 15600-39100	Regular	essayau ÀsaMlganata ÀTo.5À eeesaÀ785 id.30.04.2014
9.	Mr.Kate Ganesh Sadashiv	Assistant Professor	B.E. Civil	ME Const.& Mgt. App	Pursuing	25.04.1988	16.06.2014	47008/- 15600-39100	Regular	essayau ÀsaMlganata ÀTo.5À eeesaÀ785 id.30.04.2014
10.	Mr. Mujawar Ajim Gulab	Assistant Professor	B.E. Civil	M.Tech Stru	-	07.10.1989	15.06.2015	45659/- 15600-39100	Regular	essayau ÀsaMlganata ÀTo.5 À esaesaesaÀ2 120 id.04.06.2016
11.	Mr.Mali Pritam Arun	Assistant Professor	BE Mech	ME C & M	-	02.04.1992	01.01.2016	44348/- 15600-39100	Regular	essayau ÀsaMlganata ÀTo.5 À esaesaesaÀ2 120 id.04.06.2016
12.	Mr.Bhatkar Ashish Ashok	Assistant Professor	B.E. Civil	MTech Trans. Mgt	-	27.05.1992	01.06.2018	30000/-	Regular	Awaited from University

13.	Mr.Bhagawati Prashant B.	Assistant Professor	B.E. Civil	M.Tech.En vironmenta l	Pursuing	09.09. 1986	07.01. 2013	41641/- 15600- 39100	Adhoc	Local Selection Committee
14.	Mr. Chavarekar Rajiv Ramchandra	Assistant Professor	B.E. Civil	ME Str uctures	-	27.02. 1972	15.06. 2011	40465/- 15600- 39100	Adhoc	Local Selection Committee
15.	Mr.Shah Chetan Rajendra	Assistant Professor	B.E. Civil	ME Const.& Mgt.	-	08.08. 1989	15.06. 2015	38180/- 15600- 39100	Adhoc	Local Selection Committee
16.	Mr.Pisal Pandurang Anadrao	Assistant Professor	BSc	MSc. Geology	NET	01.04. 1984	15.06. 2015	38180/- 15600- 39100	Adhoc	Local Selection Committee
17.	Mr.Patil Abhijeet Dilip	Assistant Professor	B.E. Civil	MTech Cont.Mgt,	Pursuing	22.06. 1991	01.06. 2018	37088/- 15600- 39100	Adhoc	Local Selection Committee
18.	Mr.Sathe Sandip S.	Assistant Professor	B.E. Civil	M.Tech. Water Resou.	Pursuing	17.06. 1986	18.06. 2018	50227/- 15600- 39100	Adhoc	Local Selection Committee
19.	Mr.Samanthula Varada Rajan	Assistant Professor	B.E. Civil	M.Tech. Transp.	-	15.08. 1993	07.01. 2019	37088 15600- 39100	Adhoc	Local Selection Committee
20.	Mr.Shinde Kiran Kondiba	Assistant Professor	B.E. Civil	M.Tech. Transp.	-	16.02. 1982	07.01. 2019	46476 15600- 39100	Adhoc	Local Selection Committee
21.	Mr.Patil Subodh Sambhaji	Assistant Professor	B.E. Civil	ME . Structures	-	30.07. 1993	19.12. 2016	30000/-	Adhoc	Local Selection Committee
22.	Mr.Bhanuse Maheshkumar Mahadev	Assistant Professor	B.E. Civil	ME . Structures	-	14.07. 1987	26.07. 2017	30000/-	Adhoc	Local Selection Committee
23.	Mr.Mursal Majahammad Abdulsattar	Assistant Professor	B.E. Civil	MTech Structure	-	31.05. 1993	05.06. 2018	25000/-	Adhoc	Local Selection Committee

Programme: - Automobile Engineering: 13

S.N	Name (s) of the Teaching Faculty	Designation	Qualifications with field of specialization with class/division of passing			Date of Birth	Date of Joining the Institution	Gross total salary as on date with scale & Basic pay	Nature of Appointment	University Approval Letter No. & date in this institute
			UG	PG	Doctorate					
1.	Dr.Jamadar Imran Moulaali	Assistant Professor	B.E. Auto	M. Tech. M/c Design	Ph.D	01.03.1987	15.07.2012	97168/- 15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ728 id.22.04.2013
		Associate Professor UGC								Awaited from University
2.	Mr.Chavan Shailendra Shriranh	Assistant Professor	B.E. Auto	M. Tech. Design	-	23.05.1986	17.06.2013	48395/- 15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ785 id.30.04.2014
3.	Mr.Patil Sushant Mohan	Assistant Professor	B.E. Auto	ME Design App	Pursuing	04.07.1988	25.06.2012	48395/- 15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ785 id.30.04.2014
4.	Mr.Gawade Swapnil Shahaji	Assistant Professor	B.E. Auto	M. Tech Design	-	25.08.1986	17.06.2013	48395/- 15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ785 id.30.04.2014

5.	Mr.Patil Vijay Ravindra	Assistant Professor	B.E. Mechanical	ME Design	Pursuing	20.10.1988	15.06.2015	45659/-15600-39100	Regular	essayau ÀsaMlganata ÀTo.5À esaesaesaÀ3 39 id.11.04.2016
6.	Ms.Mali Asmita Ramesh	Assistant Professor	B.E. Mechanical	M.E. Design	-	10.02.1991	01.07.2015	44348/-15600-39100	Regular	essayau ÀsaMlganata ÀTo.5À esaesaesaÀ3 39 id.11.04.2016
7.	Mr.Barawade Rohit Ashok	Assistant Professor	B.E. Mechanical	M.Tech Design	-	28.05.1988	01.02.2014	48395/-15600-39100	Regular	essayau ÀsaMlganata ÀTo.5À esaesaesaÀ3 39 id.11.04.2016
8.	Mr.Narayankar Bhagwat Prakash	Assistant Professor	B.E. Mechanical	M.Tech Auto	-	03.06.1990	01.01.2016	44348/-15600-39100	Regular	essayau ÀsaMlganata ÀTo.5À esaesaesaÀ3 39 id.11.04.2016
9.	Mr. Kengar Prasad Vijay	Assistant Professor	BE Mech	M.Tech Heat & Power	-	24.12.1989	31.08.2015	44348/-15600-39100	Regular	essayau ÀsaMlganata ÀTo.5À esaesaesaÀ3 39 id.11.04.2016

10.	Mr.Gavali Pradipkumar Marutirao	Assistant Professor	B.E. Mechanical	M.Tech Design	-	17.08.1989	07.07.2014	38180/- 15600-39100	Adhoc	Local Selection Committee
11.	Mr.Shinde Prasad Vishwasrao	Assistant Professor	B.E. Mechanical	M.E. Design	-	06.05.1992	16.06.2014	37088/- 15600-39100	Adhoc	Local Selection Committee
12.	Mr.Mohite Yogesh Bhaurao	Assistant Professor	B.E. Auto	ME CAD/CAM/CAE	-	01.06.1983	16.06.2014	25000/-	Adhoc	Local Selection Committee
13.	Mr.Shinde Abhijeet Pandurang	Assistant Professor	B.E. Auto	MTech Auto	-	15.07.1992	17.12.2018	25000/-	Adhoc	Local Selection Committee

Programme: - Aeronautical Engineering -14

S.N	Name (s) of the Teaching Faculty	Designation	Qualifications with field of specialization with class/division of passing			Date of Birth	Date of Joining the Institution	Gross total salary as on date with scale& Basic pay	Nature of Appointment	University Approval Letter No. & date in this institute
			UG	PG	Doctorate					
1.	<i>Dr.A. Barai</i>	<i>Professor</i>	<i>BTech Aero</i>	<i>ME Aero</i>	<i>Ph.D.</i>	<i>16.02.1956</i>	<i>21.05.2018</i>	<i>160000/- 37400-67000</i>	<i>Adhoc</i>	<i>Awaited from University</i>
2.	<i>Dr. Kulkarni Kamlesh Vasudev</i>	<i>Associate Professor</i>	<i>AMIE</i>	<i>M.Tech Applied Mechanics</i>	<i>Ph.D.</i>	<i>04.05.1986</i>	<i>12.06.2017</i>	<i>91601/- 37400-67000</i>	<i>Adhoc</i>	<i>Awaited from University</i>
3.	Mr.Kumbhar Yogesh Balaso	Assistant Professor	B.E.Mech	M.TechAerospace	-	21.03.1988	23.01.2015	49820/- 15600-39100	Adhoc	<i>Awaited from University</i>
4.	Mr.K.M. Kiran Babu	Assistant Professor	B.E. Aeronautical	M.E Aeronautical	Pursuing	02.04.1990	18.01.2016	51302/- 15600-39100	Adhoc	<i>Awaited from University</i>
5.	Mr. Nikhil Franklin P.	Assistant Professor	B.E. Aeronautical	M.Tech Aeronautical	-	22.03.1991	01.06.2016	55995/- 15600-39100	Adhoc	<i>Awaited from University</i>

6.	Smt.Patil Pooja Bhausaheb	Assistant Professor	BE Mech	MTech Prod.	-	09.10.1991	04.07.2016	30000/-	Adhoc	<i>Awaited from University</i>
7.	Dr. Nanadagiri Venkata Ragvendra	Associate Professor	BTech Aero	ME Aero	Ph.D.	02.10.1976	07.03.2019	110000/- 37400-67000	Adhoc	Local Selection Committee
8.	Mr.Reju R.	Assistant Professor	B.TechAeronautical	M.E. Aeronautical	-	15.04.1993	20.06.2017	43075/- 15600-39100	Adhoc	Local Selection Committee
9.	Mr.Anil Kumar Nakkala	Assistant Professor	B.TechAeronautical	M.E. Aeronautical	-	19.04.1990	31.08.2017	43075/- 15600-39100	Adhoc	Local Selection Committee
10.	Mr.Shuvendra Mohan	Assistant Professor	B.TechAeronautical	M.Tech,Aeronautical	-	01.03.1992	18.06.2018	37088/- 15600-39100	Adhoc	Local Selection Committee
11.	Mr.Sanoj P. Suresh	Assistant Professor	B.TechAeronautical	M.Tech,Aeronautical	-	07.03.1985	09.07.2018	59586/- 15600-39100	Adhoc	Local Selection Committee
12.	Ms.Suryawanshi Saraswati Rajendra	Assistant Professor	B.TechAeronautical	M.Tech,Aeronautical	-	06.03.1992	14.01.2019	37088/- 15600-39100	Adhoc	Local Selection Committee
13.	Ms.K.Babita	Assistant Professor	B.TechAeronautical	M.Tech,Aeronautical	-	13.05.1989	07.01.2019	37088/- 15600-39100	Adhoc	Local Selection Committee
14.	Prof.T.M.Naidu	Adjunct Professor	M.E. Aerospace	M.TechAerospace	-	01.07.1949	01.06.2017	80000/-	Adhoc	Local Selection Committee

Programme: - Basic Science & Engineering: 19

S.N	Name (s) of the Teaching Faculty	Designation	Qualifications with field of specialization with class/division of passing			Date of Birth	Date of Joining the Institution	Gross total salary as on date with scale & Basic pay	Nature of Appointment	University Approval Letter No. & date in this institute
			UG	PG	Doctorate					
	Mathematics – 07									
1.	Dr. Sangle Navneet Dhondiba	Professor (UGC in ASP)	B.Sc. Maths	M.Sc. Maths	Ph.D	10.12.1976	14.07.2003	125573/- 37400-67000	Regular	saMlganata ÀTI.5À vhlÀ 7105 id.20 SEP 05 saMlganata ÀTo.5À saaTmaÀ 12919 id.24 Feb 2010
2.	Mrs.Barge Savita Bhagvan	Assistant Professor	B.Sc. Maths	M.Sc. Maths	Pursuing	27.05.1982	18.06.2012	55995/- 15600-39100	Adhoc	Local Selection Committee
3.	Mr. Khedekar Mansing Dattatraya	Assistant Professor	B.Sc. Maths	M.Sc. Maths	Pursuing	17.05.1986	01.07.2015	44564/- 15600-39100	Adhoc	Local Selection Committee
4.	Mr. Metakari Anandrao Nivarutti	Assistant Professor	B.Sc. Maths	M.Sc. Maths	Pursuing	30.11.1983	20.07.2012	45659/- 15600-39100	Adhoc	Local Selection Committee
5.	Mr.Powar Sanjay Mahadev	Assistant Professor	B.Sc. Maths	M.Sc. Maths	-	05.06.2017	05.06.2017	43075/- 15600-39100	Adhoc	Local Selection Committee
6.	Mr. Suryawanshi Chetankumar Vasant	Assistant Professor	B.Sc. Maths	M.Sc. Maths	-	15.06.1987	20.07.2010	37088/- 15600-39100	Adhoc	Local Selection Committee

7.	Ms.Warekar Sarita Sadashiv	Assistant Professor	B.Sc. Maths	M.Sc. Maths	NET,SET	29.01.1992	16.07.2018	25000/-	Adhoc	Local Selection Committee
	Physics-03									
8.	Ms. Jadhav Surekha Khanderao	Assistant Professor	B.Sc. Phy	M.Sc. Phy.	-	27.06.1978	24.09.2001	66198/- 15600-39100	Regular	Aaya ÀTI 15À vhlÀ 4739 id.4 Aa^gasT 2001
9.	<i>Dr. Patil Suresh H.</i>	<i>Associate Professor</i>	<i>B.Sc. Phy</i>	<i>M.Sc. Phy</i>	<i>Ph.D. MBA</i>	<i>30.11.1983</i>	<i>15.06.2015</i>	<i>55000/-</i>	<i>Adhoc</i>	<i>Local Selection Committee</i>
10.	Mr.Deshmukh Rahul Bhimrao	Assistant Professor	B.Sc. Phy	M.Sc. Phy.	Pursuing	27.07.1982	15.06.2012	37088/- 15600-39100	Adhoc	Local Selection Committee
	Chemistry - 03									
11.	Mrs. Vairat Vijayalaxmi Maruti	Assistant Professor	B.Sc. Chem	M.Sc., Mphil Chem	-	12.07.1968	22.09.2001	62455/- 15600-39100	Regular	Aaya ÀTI 15À vhlÀ 4739 id.4 Aa^gasT 2001
12.	Mr. Sande Ziyauddin Dastgir	Assistant Professor	B.Sc.Chem	M.Sc.Chem	Pursuing	20.11.1978	15.06.2011	37088/- 15600-39100	Adhoc	Local Selection Committee
13.	Mr.Gaikwad Pratapsingh Vijaysingh	Assistant Professor	B.Sc. Maths	M.Sc. Maths	Pursuing	11.03.1986	15.07.2016	25000/-	Adhoc	Local Selection Committee
	Professional Communication - 06									

14.	Mr. Chavan Sachin Manohar	Assistant Professor	B.A. Eng	M.A. English SET	Pursuing	14.07. 1983	01.08. 2008	47008/- 15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ785 id.30.04.2014
15.	Mr. Shinde Audumbar Gangaram	Assistant Professor	B.A. Eng.	M.A. Eng. NET, SET	Pursuing	12.04. 1984	01.07. 2011	47008/- 15600-39100	Regular	esayau ÀsaMlganata ÀTo.5À eeesaÀ785 id.30.04.2014
16.	Mrs.Nayal Sanjeet	Assistant Professor	B.Com.	-	-	13.10.19 67	25.07. 2016	22000/-	Adhoc	Local Selection Committee
17.	Dr. Abdul Sathar	Assistant Professor	B.A. Eng	M.A. English	Ph.D.	14.07. 1983	01.08. 2018	35000/-	Adhoc	Local Selection Committee
18.	Mr.Barge Sandip Bhagwan	Assistant Professor	B.A. Eng	M.A. English SET	-	14.07. 1983	01.08. 2018	20000/-	Adhoc	Local Selection Committee
19.	Mr.Lalit Kapil Mahadev	Counselor	BA	MA, Mphil	--		16.08. 2015	46042/- 15600-39100	Adhoc	Local Selection Committee

Permanen Faculty Ratio – 78.62

Number of Faculty Employed & Left During Last Three Years

Year	Number of Faculty employed & left last three years
2016-17	14
2017-18	50

2018-19	11
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10.15 Information of Infrastructure and Other Resources Available

Number & Size of Class Rooms, Tutorilas, Labrotories, Drawing Hall, Computer centers & Others :

Date: 07/02/2019

CERTIFICATE

To whomsoever it may concern

This is to certify that the institute Sant Dnyaneshwar Shikshan Sanstha's, Annasaheb Dange College of Engineering and Technology, Ashta, Tal – Walwa, Dist – Sangli on C.S. no. 1312/1/2 and 1312/3/2 has constructed and provided built up area as per following details. The buildings are complete in all respect including flooring, painting, and electrification and are equipped with the required furniture.

Building Name	Building Number	Instruc tional Area (INA)	Administ rative Area (ADA)	Amenit ies Area (AMA)	Total (INA+A DA+AM A)	Circulati on Area (CIA) (Sqm)	Total Carpe t Area (Sqm)	Total Built-Up Area (Sqm)
A	1	5536	2093	1025	8654	2252	10906	11880
B	2	1710	78	30	1818	116	1934	2221.66
C	3	3928	566	300	4794	1260	6054	6502.54
D	4	4938	2425	624	7987	2402	10389	11275.67
E	5	1085	5	0	1090	20	1110	1179.68
F	6	0	0	1405	1405	470	1875	2071.95
G	7	0	0	1808	1808	635	2443	2656.99
H	8	0	0	1808	1808	635	2443	2656.99
I	9	0	0	215	215	40	255	277
J	10	0	0	1189	1189	416	1605	1999.37
K	11	0	0	866	866	220	1086	1193.44
L	12	0	0	172	172	55	227	290
Gross Total (Sqm)		17197	5167	9442	31806	8521	40327	44205.29

The details regarding carpet area of each room are also provided with this certificate.

Instructional Area:

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
Building - A						
1	ALG2	Laboratory	100	Complete	Complete	Complete
2	ALG3	Laboratory	158	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
3	ALG4	Laboratory	72	Complete	Complete	Complete
4	ALG5	Departmental library	35	Complete	Complete	Complete
5	ALG6	Laboratory	80	Complete	Complete	Complete
6	ALG10	Class Room	79	Complete	Complete	Complete
7	ALG11	Class Room	81	Complete	Complete	Complete
8	ALG12	Seminar Hall	165	Complete	Complete	Complete
9	ALG13	Seminar Hall	165	Complete	Complete	Complete
10	ALG15	Tutorial Room	56	Complete	Complete	Complete
11	AG1	Laboratory	87	Complete	Complete	Complete
12	AG2	Laboratory	85	Complete	Complete	Complete
13	AG3	Tutorial Room	56	Complete	Complete	Complete
14	AG4	Departmental library	27	Complete	Complete	Complete
15	AG5	Laboratory	97	Complete	Complete	Complete
16	AG6	Laboratory	87	Complete	Complete	Complete
17	AG7	Laboratory	90	Complete	Complete	Complete
18	AG8	Laboratory	90	Complete	Complete	Complete
19	AG9	Tutorial Room	37	Complete	Complete	Complete
20	AG10	Laboratory	69	Complete	Complete	Complete
21	AG13	Class Room	78	Complete	Complete	Complete
22	AG14	Class Room	79	Complete	Complete	Complete
23	AG15	Class Room	80	Complete	Complete	Complete
24	AG39	Laboratory	66	Complete	Complete	Complete
25	AG41	Laboratory	66	Complete	Complete	Complete
26	AF1	Laboratory	66	Complete	Complete	Complete
27	AF2	Laboratory	70	Complete	Complete	Complete
28	AF3	Laboratory	67	Complete	Complete	Complete
29	AF4	Departmental library	56	Complete	Complete	Complete
30	AF5	Laboratory	89	Complete	Complete	Complete
31	AF6	Laboratory	81	Complete	Complete	Complete
32	AF7	Laboratory	79	Complete	Complete	Complete
33	AF8	Laboratory	83	Complete	Complete	Complete
34	AF9	Laboratory	49	Complete	Complete	Complete
35	AF10	Class Room	79	Complete	Complete	Complete
36	AF14	Class Room	77	Complete	Complete	Complete
37	AF15	Class Room	79	Complete	Complete	Complete
38	AF16	Class Room	80	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
39	AF17	Laboratory	66	Complete	Complete	Complete
40	AF19	Tutorial Room	50	Complete	Complete	Complete
41	AF20	Laboratory	66	Complete	Complete	Complete
42	AF21	Class Room	68	Complete	Complete	Complete
43	AF22	Class Room	80	Complete	Complete	Complete
44	AF26	Laboratory	66	Complete	Complete	Complete
45	AF27	Laboratory	95	Complete	Complete	Complete
46	AF28	Laboratory	95	Complete	Complete	Complete
47	AF29	Seminar Hall	132	Complete	Complete	Complete
48	AF30	Seminar Hall	132	Complete	Complete	Complete
49	AF31	Laboratory	86	Complete	Complete	Complete
50	AF32	Class Room	84	Complete	Complete	Complete
51	AF33	Laboratory	77	Complete	Complete	Complete
52	AS3	Tutorial Room	56	Complete	Complete	Complete
53	AS4	Laboratory-PG	66	Complete	Complete	Complete
54	AS5	Laboratory	66	Complete	Complete	Complete
55	AS7	Laboratory	69	Complete	Complete	Complete
56	AS9	Laboratory	90	Complete	Complete	Complete
57	AS10	Seminar Hall	150	Complete	Complete	Complete
58	AS15	Class Room	83	Complete	Complete	Complete
59	AS16	Class Room	81	Complete	Complete	Complete
60	AS21	Departmental library	50	Complete	Complete	Complete
61	AS22	Laboratory	66	Complete	Complete	Complete
62	AS24	Laboratory	66	Complete	Complete	Complete
63	AS25	Laboratory	66	Complete	Complete	Complete
64	AS26	Tutorial Room	33	Complete	Complete	Complete
65	AS27	Tutorial Room	33	Complete	Complete	Complete
66	AS28	Class Room	86	Complete	Complete	Complete
Building - B						
67	BS1	Laboratory-PG	66	Complete	Complete	Complete
68	BS2	Class Room-PG	66	Complete	Complete	Complete
69	BS3	Tutorial Room-PG	66	Complete	Complete	Complete
70	BS4	TU Room-PG	33	Complete	Complete	Complete
71	BS5	Tutorial Room-PG	42	Complete	Complete	Complete
72	BS6	Class Room-	58	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
		PG				
73	BS7	Laboratory-PG	66	Complete	Complete	Complete
74	BS8	Laboratory-PG	89	Complete	Complete	Complete
75	BS9	Class Room-PG	39	Complete	Complete	Complete
Building - C						
76	CLG1	Laboratory	107	Complete	Complete	Complete
77	CLG2	Laboratory	82	Complete	Complete	Complete
78	CLG3	Laboratory	67	Complete	Complete	Complete
79	CLG4	Laboratory	133	Complete	Complete	Complete
80	CLG5	Laboratory	67	Complete	Complete	Complete
81	CLG6	Laboratory	67	Complete	Complete	Complete
82	CLG7	Laboratory	117	Complete	Complete	Complete
83	CLG10	Tutorial Room	50	Complete	Complete	Complete
84	CLG11	Laboratory	107	Complete	Complete	Complete
85	CG4	Laboratory	67	Complete	Complete	Complete
86	CG5	Laboratory	66	Complete	Complete	Complete
87	CG6	Laboratory	66	Complete	Complete	Complete
88	CG7	Laboratory	66	Complete	Complete	Complete
89	CG8	Laboratory	66	Complete	Complete	Complete
90	CG9	Classroom	76	Complete	Complete	Complete
91	CG10	Classroom	76	Complete	Complete	Complete
92	CG11	Classroom	76	Complete	Complete	Complete
93	CG14	Departmental library	30	Complete	Complete	Complete
94	CG15	Seminar Room	132	Complete	Complete	Complete
95	CF3	Laboratory	66	Complete	Complete	Complete
96	CF4	Laboratory	66	Complete	Complete	Complete
97	CF5	Laboratory	66	Complete	Complete	Complete
98	CF6	Laboratory	66	Complete	Complete	Complete
99	CF7	Laboratory	66	Complete	Complete	Complete
100	CF8	Classroom	76	Complete	Complete	Complete
101	CF9	Classroom	76	Complete	Complete	Complete
102	CF10	Classroom	76	Complete	Complete	Complete
103	CF13	Tutorial Room	50	Complete	Complete	Complete
104	CF14	Laboratory	66	Complete	Complete	Complete
105	CF15	Laboratory	66	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
106	CF16	Departmental library	20	Complete	Complete	Complete
107	CS1	Classroom	76	Complete	Complete	Complete
108	CS2	Classroom	76	Complete	Complete	Complete
109	CS3	Classroom	76	Complete	Complete	Complete
110	CS4	Classroom	76	Complete	Complete	Complete
111	CS5	Classroom	76	Complete	Complete	Complete
112	CS6	Drawing Hall	254	Complete	Complete	Complete
113	CS7	Classroom	76	Complete	Complete	Complete
114	CS8	Classroom	76	Complete	Complete	Complete
115	CS11	Classroom	76	Complete	Complete	Complete
116	CT2	Laboratory	76	Complete	Complete	Complete
117	CT3	Laboratory	75	Complete	Complete	Complete
118	CT4	Laboratory	75	Complete	Complete	Complete
119	CT5	Laboratory	125	Complete	Complete	Complete
120	CT6	Tutorial Room	51	Complete	Complete	Complete
121	CT7	Tutorial Room	51	Complete	Complete	Complete
122	CT8	Tutorial Room	51	Complete	Complete	Complete
123	CT9	Classroom	76	Complete	Complete	Complete
124	CT10	Classroom	76	Complete	Complete	Complete
Building - D						
125	DLG1	Laboratory	135	Complete	Complete	Complete
126	DLG2	Laboratory	217	Complete	Complete	Complete
127	DLG5	Laboratory	217	Complete	Complete	Complete
128	DLG6	Laboratory	78	Complete	Complete	Complete
129	DLG7	Laboratory	78	Complete	Complete	Complete
130	DLG8	Laboratory	136	Complete	Complete	Complete
131	DG1	Laboratory	68	Complete	Complete	Complete
132	DG2	Tutorial Room	39	Complete	Complete	Complete
133	DG3	Tutorial Room	39	Complete	Complete	Complete
134	DG4	Laboratory	68	Complete	Complete	Complete
135	DG5	Laboratory	68	Complete	Complete	Complete
136	DG6	Laboratory	68	Complete	Complete	Complete
137	DG9	Laboratory-PG	68	Complete	Complete	Complete
138	DG10	Laboratory	68	Complete	Complete	Complete
139	DG11	Classroom	78	Complete	Complete	Complete
140	DG12	Classroom	78	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
141	DG13	Classroom	78	Complete	Complete	Complete
142	DG20	Tutorial Room	39	Complete	Complete	Complete
143	DG21	Classroom	78	Complete	Complete	Complete
144	DG22	Classroom	78	Complete	Complete	Complete
145	DG23	Classroom	78	Complete	Complete	Complete
146	DG26	Laboratory	68	Complete	Complete	Complete
147	DG27	Drawing Hall	136	Complete	Complete	Complete
148	DG28	Laboratory	68	Complete	Complete	Complete
149	DG29	Laboratory	68	Complete	Complete	Complete
150	DF1	Departmental library	39	Complete	Complete	Complete
151	DF3	Laboratory	68	Complete	Complete	Complete
152	DF4	Laboratory	68	Complete	Complete	Complete
153	DF5	Laboratory	150	Complete	Complete	Complete
154	DF8	Laboratory	150	Complete	Complete	Complete
155	DF9	Laboratory	68	Complete	Complete	Complete
156	DF10	Laboratory	68	Complete	Complete	Complete
157	DF13	Class Room	78	Complete	Complete	Complete
158	DF14	Class Room	78	Complete	Complete	Complete
159	DF15	Class Room	78	Complete	Complete	Complete
160	DF16	Class Room	78	Complete	Complete	Complete
161	DF17	Class Room	78	Complete	Complete	Complete
162	DF20	Laboratory	68	Complete	Complete	Complete
163	DF21	Laboratory	68	Complete	Complete	Complete
164	DF22	Laboratory	68	Complete	Complete	Complete
165	DF23	Laboratory	68	Complete	Complete	Complete
166	DF24	Tutorial Room	50	Complete	Complete	Complete
167	DS1	Laboratory	68	Complete	Complete	Complete
168	DS2	Laboratory	68	Complete	Complete	Complete
169	DS3	Laboratory	68	Complete	Complete	Complete
170	DS4	Laboratory	68	Complete	Complete	Complete
171	DS5	Laboratory	68	Complete	Complete	Complete
172	DS8	Laboratory	68	Complete	Complete	Complete
173	DS9	Laboratory	68	Complete	Complete	Complete
174	DS10	Laboratory	68	Complete	Complete	Complete
175	DS11	Laboratory	68	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
176	DS12	Laboratory	68	Complete	Complete	Complete
177	DS15	Laboratory	78	Complete	Complete	Complete
178	DS16	Drawing Hall	78	Complete	Complete	Complete
179	DS17	Laboratory	78	Complete	Complete	Complete
180	DS18	Class Room	78	Complete	Complete	Complete
181	DS19	Class Room	78	Complete	Complete	Complete
182	DS22	Class Room	78	Complete	Complete	Complete
183	DS23	Tutorial Room	66	Complete	Complete	Complete
184	DS25	Departmental library	54	Complete	Complete	Complete
185	DS27	Seminar Hall	153	Complete	Complete	Complete
Building - E						
186	WS1	Workshop	415	Complete	Complete	Complete
187	WS2	Additional workshop	600	Complete	Complete	Complete
188	WS3	Laboratory	70	Complete	Complete	Complete
Instructional Area - Common Facilities						
S. N.	Room ID	Room Type	Area in Sqm	Complete	Complete	Complete
1	AG40	Central Computer Facility	338	Complete	Complete	Complete
2	CT13	Language laboratory	132	Complete	Complete	Complete
3	BLG/B G/BF	Library	1185	Complete	Complete	Complete
Total Instructional Area			17197 Sqm			
Administrative Area						
Building - A						
1	ALG1	Departmental Store	50	Complete	Complete	Complete
2	FEE1	Faculty Cabin	8	Complete	Complete	Complete
3	FEE2	Faculty Cabin	9	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
4	FEE3	Faculty Cabin	8	Complete	Complete	Complete
5	FEE4	Faculty Cabin	7	Complete	Complete	Complete
6	FEE5	Faculty Cabin	8	Complete	Complete	Complete
7	FIT1	Faculty Cabin	7	Complete	Complete	Complete
8	FIT2	Faculty Cabin	8	Complete	Complete	Complete
9	FIT3	Faculty Cabin	8	Complete	Complete	Complete
10	ALG8	Departmental office	24	Complete	Complete	Complete
11	ALG9	HOD Cabin	28	Complete	Complete	Complete
12	ALG14	Departmental Store	29	Complete	Complete	Complete
13	FIT4	Faculty Cabin	8	Complete	Complete	Complete
14	FIT5	Faculty Cabin	8	Complete	Complete	Complete
15	FIT6	Faculty Cabin	8	Complete	Complete	Complete
16	FIT7	Faculty Cabin	8	Complete	Complete	Complete
17	FIT8	Faculty Cabin	8	Complete	Complete	Complete
18	FIT9	Faculty Cabin	9	Complete	Complete	Complete
19	FIT10	Faculty Cabin	9	Complete	Complete	Complete
20	FIT11	Faculty Cabin	9	Complete	Complete	Complete
21	FME1	Faculty Cabin	10	Complete	Complete	Complete
22	FME2	Faculty Cabin	9	Complete	Complete	Complete
23	FME3	Faculty Cabin	8	Complete	Complete	Complete
24	FME4	Faculty Cabin	10	Complete	Complete	Complete
25	FME5	Faculty Cabin	8	Complete	Complete	Complete
26	FME6	Faculty Cabin	8	Complete	Complete	Complete
27	FME7	Faculty Cabin	10	Complete	Complete	Complete
28	FME8	Faculty Cabin	9	Complete	Complete	Complete
29	FME9	Faculty Cabin	9	Complete	Complete	Complete
30	FME10	Faculty Cabin	9	Complete	Complete	Complete
31	FME11	Faculty Cabin	9	Complete	Complete	Complete
32	FME12	Faculty Cabin	9	Complete	Complete	Complete
33	FME13	Faculty Cabin	10	Complete	Complete	Complete
34	FME14	Faculty Cabin	8	Complete	Complete	Complete
35	FME15	Faculty Cabin	8	Complete	Complete	Complete
36	FME16	Faculty Cabin	8	Complete	Complete	Complete
37	FME17	Faculty Cabin	8	Complete	Complete	Complete
38	AG17	HOD Cabin	13	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
39	AG18	Departmental office	40	Complete	Complete	Complete
40	AG20	VP Cabin	36	Complete	Complete	Complete
41	AG22	Admisssion cell	38	Complete	Complete	Complete
42	AG24	Principal's Office	41	Complete	Complete	Complete
43	AG25	Board Room	61	Complete	Complete	Complete
44	AG26	Director's Office	47	Complete	Complete	Complete
45	AG28	Training Placement Office	82	Complete	Complete	Complete
46	AG29	Examination Control Room	30	Complete	Complete	Complete
47	AG30	Pantry	24	Complete	Complete	Complete
48	AG33	Central Stores	30	Complete	Complete	Complete
49	AG34	House Keeping	11	Complete	Complete	Complete
50	AG35	Maintenance	11	Complete	Complete	Complete
51	AG37	Physical Director's Cabin	13	Complete	Complete	Complete
52	AG38	Security	15	Complete	Complete	Complete
53	AG42	Reception	26	Complete	Complete	Complete
54	AG43	Office all Inclusive	205	Complete	Complete	Complete
55	FET1	Faculty Cabin	7	Complete	Complete	Complete
56	FET2	Faculty Cabin	6	Complete	Complete	Complete
57	FET3	Faculty Cabin	9	Complete	Complete	Complete
58	FET4	Faculty Cabin	6	Complete	Complete	Complete
59	FET5	Faculty Cabin	9	Complete	Complete	Complete
60	FET6	Faculty Cabin	6	Complete	Complete	Complete
61	FET7	Faculty Cabin	6	Complete	Complete	Complete
62	FET8	Faculty Cabin	6	Complete	Complete	Complete
63	FET9	Faculty Cabin	9	Complete	Complete	Complete
64	FET10	Faculty Cabin	9	Complete	Complete	Complete
65	FET11	Faculty Cabin	9	Complete	Complete	Complete
66	FET12	Faculty Cabin	6	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
67	FET13	Faculty Cabin	7	Complete	Complete	Complete
68	FET14	Faculty Cabin	10	Complete	Complete	Complete
69	FET15	Faculty Cabin	9	Complete	Complete	Complete
70	FET16	Faculty Cabin	9	Complete	Complete	Complete
71	FET17	Faculty Cabin	9	Complete	Complete	Complete
72	FET18	Faculty Cabin	7	Complete	Complete	Complete
73	FET19	Faculty Cabin	9	Complete	Complete	Complete
74	FEE6	Faculty Cabin	10	Complete	Complete	Complete
75	FEE7	Faculty Cabin	10	Complete	Complete	Complete
76	FEE8	Faculty Cabin	10	Complete	Complete	Complete
77	FEE9	Faculty Cabin	9	Complete	Complete	Complete
78	FEE10	Faculty Cabin	9	Complete	Complete	Complete
79	FEE11	Faculty Cabin	9	Complete	Complete	Complete
80	FEE12	Faculty Cabin	9	Complete	Complete	Complete
81	FEE13	Faculty Cabin	9	Complete	Complete	Complete
82	FEE14	Faculty Cabin	9	Complete	Complete	Complete
83	FEE15	Faculty Cabin	6	Complete	Complete	Complete
84	FEE16	Faculty Cabin	6	Complete	Complete	Complete
85	FEE17	Faculty Cabin	6	Complete	Complete	Complete
86	FEE18	Faculty Cabin	9	Complete	Complete	Complete
87	FME21	Faculty Cabin	6	Complete	Complete	Complete
88	FME22	Faculty Cabin	6	Complete	Complete	Complete
89	FME23	Faculty Cabin	6	Complete	Complete	Complete
90	FME24	Faculty Cabin	6	Complete	Complete	Complete
91	AS2	Office	37	Complete	Complete	Complete
92	FET20	Faculty Cabin	8	Complete	Complete	Complete
93	FET21	Faculty Cabin	8	Complete	Complete	Complete
94	FET22	Faculty Cabin	10	Complete	Complete	Complete
95	FET23	Faculty Cabin	14	Complete	Complete	Complete
96	FET24	Faculty Cabin	9	Complete	Complete	Complete
97	FET25	Faculty Cabin	8	Complete	Complete	Complete
98	FET26	Faculty Cabin	8	Complete	Complete	Complete
99	AS11	Store	20	Complete	Complete	Complete
100	AS14	Central Office	124	Complete	Complete	Complete
101	AS18	Store	26	Complete	Complete	Complete
102	FEE19	Faculty Cabin	13	Complete	Complete	Complete
103	FEE20	Faculty Cabin	9	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
104	F-1	Faculty Cabin	10	Complete	Complete	Complete
105	F-2	Faculty Cabin	10	Complete	Complete	Complete
106	F-3	Faculty Cabin	10	Complete	Complete	Complete
107	AS23	Training Centre	302	Complete	Complete	Complete
108	AS29	Board Room	50	Complete	Complete	Complete
Building - B						
109	BLG1	Reprographics Facility	10	Complete	Complete	Complete
110	BLG2	Acquisition Room	23	Complete	Complete	Complete
111	BLG4	Acquisition Room	20	Complete	Complete	Complete
112	BG1	Librarian Cabin	25	Complete	Complete	Complete
Building - C						
113	FCV1	Faculty Cabin	10	Complete	Complete	Complete
114	FCV2	Faculty Cabin	10	Complete	Complete	Complete
115	FCV3	Faculty Cabin	10	Complete	Complete	Complete
116	FCV4	Faculty Cabin	10	Complete	Complete	Complete
117	FCV5	Faculty Cabin	9	Complete	Complete	Complete
118	FCV6	Faculty Cabin	10	Complete	Complete	Complete
119	FCV7	Faculty Cabin	10	Complete	Complete	Complete
120	FCV8	Faculty Cabin	9	Complete	Complete	Complete
121	FCV9	Faculty Cabin	9	Complete	Complete	Complete
122	FCV10	Faculty Cabin	10	Complete	Complete	Complete
123	FCV11	Faculty Cabin	10	Complete	Complete	Complete
124	FEE23	Faculty Cabin	10	Complete	Complete	Complete
125	CG1	Departmental office	30	Complete	Complete	Complete
126	CG2	HOD Cabin	20	Complete	Complete	Complete
127	FCV12	Faculty Cabin	9	Complete	Complete	Complete
128	FCV13	Faculty Cabin	5	Complete	Complete	Complete
129	FCV14	Faculty Cabin	5	Complete	Complete	Complete
130	FCV15	Faculty Cabin	5	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
131	FCV16	Faculty Cabin	5	Complete	Complete	Complete
132	FCV17	Faculty Cabin	5	Complete	Complete	Complete
133	FCV18	Faculty Cabin	5	Complete	Complete	Complete
134	FCV19	Faculty Cabin	5	Complete	Complete	Complete
135	FCV20	Faculty Cabin	5	Complete	Complete	Complete
136	FCV21	Faculty Cabin	5	Complete	Complete	Complete
137	FCV22	Faculty Cabin	5	Complete	Complete	Complete
138	CF1	HOD Cabin	25	Complete	Complete	Complete
139	CF2	Departmental office	50	Complete	Complete	Complete
140	FCSE1	Faculty Cabin	5	Complete	Complete	Complete
141	FCSE2	Faculty Cabin	5	Complete	Complete	Complete
142	FCSE3	Faculty Cabin	5	Complete	Complete	Complete
143	FCSE4	Faculty Cabin	5	Complete	Complete	Complete
144	FCSE5	Faculty Cabin	5	Complete	Complete	Complete
145	FCSE6	Faculty Cabin	5	Complete	Complete	Complete
146	FCSE7	Faculty Cabin	5	Complete	Complete	Complete
147	FCSE8	Faculty Cabin	5	Complete	Complete	Complete
148	FCSE9	Faculty Cabin	5	Complete	Complete	Complete
149	FCSE10	Faculty Cabin	5	Complete	Complete	Complete
150	FCSE11	Faculty Cabin	5	Complete	Complete	Complete
151	FCSE12	Faculty Cabin	5	Complete	Complete	Complete
152	CS12	Faculty Cabin	20	Complete	Complete	Complete
153	CS13	Faculty Cabin	30	Complete	Complete	Complete
154	FBS1	Faculty Cabin	10	Complete	Complete	Complete
155	FBS2	Faculty Cabin	10	Complete	Complete	Complete
156	FBS3	Faculty Cabin	10	Complete	Complete	Complete
157	FBS4	Faculty Cabin	10	Complete	Complete	Complete
158	FBS5	Faculty Cabin	9	Complete	Complete	Complete
159	FBS6	Faculty Cabin	9	Complete	Complete	Complete
160	FBS7	Faculty Cabin	9	Complete	Complete	Complete
161	FBS8	Faculty Cabin	9	Complete	Complete	Complete
162	FBS9	Faculty Cabin	9	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
163	FBS10	Faculty Cabin	9	Complete	Complete	Complete
164	FBS11	Faculty Cabin	9	Complete	Complete	Complete
165	FBS12	Faculty Cabin	9	Complete	Complete	Complete
166	FBS13	Faculty Cabin	9	Complete	Complete	Complete
167	FBS14	Faculty Cabin	9	Complete	Complete	Complete
168	FBS15	Faculty Cabin	9	Complete	Complete	Complete
169	FBS16	Faculty Cabin	16	Complete	Complete	Complete
Building - D						
170	FAE1	Faculty Cabin	12	Complete	Complete	Complete
171	FAE2	Faculty Cabin	12	Complete	Complete	Complete
172	FAE3	Faculty Cabin	12	Complete	Complete	Complete
173	FAE4	Faculty Cabin	12	Complete	Complete	Complete
174	FAE5	Faculty Cabin	12	Complete	Complete	Complete
175	FAE6	Faculty Cabin	12	Complete	Complete	Complete
176	FAU1	Faculty Cabin	12	Complete	Complete	Complete
177	FME25	Faculty Cabin	5	Complete	Complete	Complete
178	FME26	Faculty Cabin	5	Complete	Complete	Complete
179	FAU2	Faculty Cabin	10	Complete	Complete	Complete
180	FME27	Faculty Cabin	10	Complete	Complete	Complete
181	FME28	Faculty Cabin	5	Complete	Complete	Complete
182	FME29	Faculty Cabin	5	Complete	Complete	Complete
183	FME30	Faculty Cabin	5	Complete	Complete	Complete
184	FME31	Faculty Cabin	5	Complete	Complete	Complete
185	FME32	Faculty Cabin	5	Complete	Complete	Complete
186	FME33	Faculty Cabin	5	Complete	Complete	Complete
187	FME34	Faculty Cabin	5	Complete	Complete	Complete
188	FME35	Faculty Cabin	5	Complete	Complete	Complete
189	FME36	Faculty Cabin	5	Complete	Complete	Complete
190	FME37	Faculty Cabin	5	Complete	Complete	Complete
191	FME38	Faculty Cabin	5	Complete	Complete	Complete
192	FME39	Faculty Cabin	5	Complete	Complete	Complete
193	FME40	Faculty Cabin	5	Complete	Complete	Complete
194	FME41	Faculty Cabin	5	Complete	Complete	Complete
195	FME42	Faculty Cabin	5	Complete	Complete	Complete
196	FME43	Faculty Cabin	5	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
197	DG15	Office	55	Complete	Complete	Complete
198	DG16	Pantry	4	Complete	Complete	Complete
199	DG18	HOD Cabin	20	Complete	Complete	Complete
200	DG19	Departmental office	35	Complete	Complete	Complete
201	DF2	Departmental Store	39	Complete	Complete	Complete
202	FAE7	Faculty Cabin	10	Complete	Complete	Complete
203	FAE8	Faculty Cabin	10	Complete	Complete	Complete
204	FAE9	Faculty Cabin	10	Complete	Complete	Complete
205	FAE10	Faculty Cabin	10	Complete	Complete	Complete
206	FAE11	Faculty Cabin	10	Complete	Complete	Complete
207	FAE12	Faculty Cabin	10	Complete	Complete	Complete
208	FAE13	Faculty Cabin	10	Complete	Complete	Complete
209	FAE14	Faculty Cabin	10	Complete	Complete	Complete
210	FAE15	Faculty Cabin	10	Complete	Complete	Complete
211	FAE16	Faculty Cabin	10	Complete	Complete	Complete
212	FAE17	Faculty Cabin	10	Complete	Complete	Complete
213	DF11	Departmental office	39	Complete	Complete	Complete
214	DF12	HOD Cabin	39	Complete	Complete	Complete
215	FAU3	Faculty Cabin	10	Complete	Complete	Complete
216	FAU4	Faculty Cabin	10	Complete	Complete	Complete
217	FAU5	Faculty Cabin	10	Complete	Complete	Complete
218	FAU6	Faculty Cabin	10	Complete	Complete	Complete
219	FAU7	Faculty Cabin	10	Complete	Complete	Complete
220	FAU8	Faculty Cabin	10	Complete	Complete	Complete
221	FAU9	Faculty Cabin	10	Complete	Complete	Complete
222	FAU10	Faculty Cabin	10	Complete	Complete	Complete
223	FAU11	Faculty Cabin	10	Complete	Complete	Complete
224	FAU12	Faculty Cabin	10	Complete	Complete	Complete
225	DS13	Departmental office	39	Complete	Complete	Complete
226	DS14	HOD Cabin	39	Complete	Complete	Complete
227	FAU13	Faculty Cabin	6	Complete	Complete	Complete
228	FAU14	Faculty Cabin	6	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
229	FAU15	Faculty Cabin	6	Complete	Complete	Complete
230	FAU16	Faculty Cabin	6	Complete	Complete	Complete
231	FAU17	Faculty Cabin	6	Complete	Complete	Complete
232	FAU18	Faculty Cabin	6	Complete	Complete	Complete
233	FAU19	Faculty Cabin	6	Complete	Complete	Complete
234	FAU20	Faculty Cabin	6	Complete	Complete	Complete
235	DT1	Training Centre	806	Complete	Complete	Complete
236	DT4	Exam. Section	858	Complete	Complete	Complete
Building - E						
237	WS4	Faculty Cabin	5	Complete	Complete	Complete
Total Administrative Area			5167 Sqm			
Amenities Area						
Building-A						
1	ALG7	Toilet Ladies	20	Complete	Complete	Complete
2	AG11	Toilet Gents	20	Complete	Complete	Complete
3	AG16	Toilet	3	Complete	Complete	Complete
4	AG19	Toilet	3	Complete	Complete	Complete
5	AG22	Toilet	5	Complete	Complete	Complete
6	AG23	Toilet	6	Complete	Complete	Complete
7	AG27	Toilet	5	Complete	Complete	Complete
8	AG31	Toilet Gents	28	Complete	Complete	Complete
9	AG32	Toilet Ladies	25	Complete	Complete	Complete
10	AG36	Reprography Facility	22	Complete	Complete	Complete
11	AG44	Toilet	3	Complete	Complete	Complete
12	AG45	Girl's Common Room	50	Complete	Complete	Complete
13	AF11	Toilet Ladies	20	Complete	Complete	Complete
14	AF18	Common Room	58	Complete	Complete	Complete
15	AF25	Toilet Gents	25	Complete	Complete	Complete
16	AS1	Toilet Gents	18	Complete	Complete	Complete
17	AS6	Auditorium	538	Complete	Complete	Complete
18	AS8	Toilet Gents	20	Complete	Complete	Complete
19	AS12	Guest Room	46	Complete	Complete	Complete
20	AS13	Toilet Gents	6	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
21	AS17	First aid cum sick room	27	Complete	Complete	Complete
22	AS19	Toilet Ladies	42	Complete	Complete	Complete
23	AS20	Toilet Gents	35	Complete	Complete	Complete
Building-B						
24	BLG5	Toilet Ladies	10	Complete	Complete	Complete
25	BG2	Toilet	3	Complete	Complete	Complete
26	BG7	Toilet	17	Complete	Complete	Complete
Building - C						
27	CLG8	Toilet Gents	22	Complete	Complete	Complete
28	CLG9	Toilet Ladies	22	Complete	Complete	Complete
29	CG3	Toilet	26	Complete	Complete	Complete
30	CG12	Toilet Gents	22	Complete	Complete	Complete
31	CG13	Toilet Ladies	22	Complete	Complete	Complete
32	CF11	Toilet Gents	22	Complete	Complete	Complete
33	CF12	Toilet Ladies	22	Complete	Complete	Complete
34	CS9	Toilet Gents	22	Complete	Complete	Complete
35	CS10	Girl's Common Room	76	Complete	Complete	Complete
36	CT11	Toilet Gents	22	Complete	Complete	Complete
37	CT12	Toilet Ladies	22	Complete	Complete	Complete
Building - D						
38	DLG3	Toilet Ladies	27	Complete	Complete	Complete
39	DLG4	Toilet Gents	27	Complete	Complete	Complete
40	DLG9	Stationary Store	56	Complete	Complete	Complete
41	DG7	Toilet Ladies	27	Complete	Complete	Complete
42	DG8	Toilet Gents	27	Complete	Complete	Complete
43	DG17	Toilet	4	Complete	Complete	Complete
44	DG24	Toilet Gents	27	Complete	Complete	Complete
45	DG25	Toilet Ladies	27	Complete	Complete	Complete
46	DF6	Toilet Ladies	27	Complete	Complete	Complete
47	DF7	Toilet Gents	27	Complete	Complete	Complete
48	DF18	Toilet Gents	27	Complete	Complete	Complete
49	DF19	Toilet Ladies	27	Complete	Complete	Complete
50	DS6	Toilet Ladies	27	Complete	Complete	Complete
51	DS7	Toilet Gents	27	Complete	Complete	Complete

S. N.	Room ID	Room Type	Area in Sqm	Completion of Flooring	Completion of Walls and painting	Completion of Electrification and lighting
52	DS20	Toilet Gents	27	Complete	Complete	Complete
53	DS21	Toilet Ladies	27	Complete	Complete	Complete
54	DS24	Boy's Common Room	78	Complete	Complete	Complete
55	DT2	Toilet Ladies	27	Complete	Complete	Complete
56	DT3	Toilet Gents	27	Complete	Complete	Complete
57	DT5	Toilet Gents	27	Complete	Complete	Complete
58	DT6	Toilet Ladies	27	Complete	Complete	Complete
59	F	Boys Hostel	1405	Complete	Complete	Complete
60	G	Boys Hostel	1808	Complete	Complete	Complete
61	H	Girls Hostel	1808	Complete	Complete	Complete
62	I	Cafeteria	215	Complete	Complete	Complete
63	J	Gymnasium	1189	Complete	Complete	Complete
64	K	Guest House	866	Complete	Complete	Complete
65	L	Principal's Quarter	172	Complete	Complete	Complete
Total Amenities Area			9442 Sqm			

Total (INA+ADA+AMA) Area	31806 Sqm
Total Circulation Area	8521Sqm
Total Carpet Area	40327 Sqm
Total Built-up Area	44205.29 Sqm

Occupancy Certificate

संत गाडगेबाबा शहर स्वच्छता अभियानामध्ये महाराष्ट्र राज्यात द्वितीय क्रमांक विजेती नगरपालिका (सन २००३-०४)

स्थापना ६ डिसेंबर १८५३

 **आष्टा नगरपरिषद, आष्टा.** 

ता. वाळवा, जि. सांगली. ☎: (०२३४२) २४२०२३ फॅक्स: (०२३४२) २४१२५९
E-mail :- coashtame@gmail.com

जावक क्रमांक : ३४३४/२०१६-१७ दिनांक : २९/११/२०१६

Occupancy Certificate

To,

Sant Dnyaneshwar Shikshan Sanstha
A/P Islampur,
Tal. Walwa, Dist. Sangli.
- Pin - 415 409

The part/ full development work / erection / re-erection or alteration in of building / part building no. -- Plot No S.No./CTS No.1312/1/2 and 1312/3/2 Mauje Ashta, situated at road / street Dange College (Polytechnic Building) (Extensin building-2) - completed under the supervision on License No CA/93/16472/2014-15 Ar. Prakash Jadhav & Associates, Sangli may be occupied. As per Sanction Plan No. P.W.D./W.S./15/1772/2013-14 Dated 18/06/2013. We have completed the construction of Basement, Ground Floor, First Floor and Second Floor,

- As set of certified completion plans is returned herewith.

 **Chief Officer**
Ashta Municipal Council, Ashta.

संत गाडगेबाबा शहर स्वच्छता अभियानामध्ये महाराष्ट्र राज्यात द्वितीय क्रमांक विजेती नगरपालिका (सन २००३-०४)

स्थापना ६ डिसेंबर १८५३



आष्टा नगरपरिषद, आष्टा.

ता. वाळवा, जि. सांगली. ☎: (०२३४२) २४२०२३ फॅक्स: (०२३४२) २४१२५९

E-mail :- coashtame@gmail.com



जावक क्रमांक : ३८३२/२०१६-१७

दिनांक : २९/१२/१६

Occupancy Certificate

To, -

Sant Dnyaneshwar Shikshan Sanstha
A/P Islampur,
Tal. Walwa, Dist. Sangli.
Pin - 415 409

The part/ full development work / erection / re-erection or alteration in of building / part building no. -- Plot No S.No./CTS No.1312/1/2 and 1312/3/2 Mauje Ashta, situated at road / street Dange College (Central Library) - completed under the supervision on License No CA/93/16472/2014-15 Ar. Prakash Jadhav & Associates, Sangli may be occupied. As per Sanction Plan No. P.W.D./W.S./16/1773/2013-14 Dated 18/06/2013. We have completed the construction of Basement, Ground Floor, First Floor and Second Floor,

As set of certified completion plans is returned herewith.




Chief Officer
Ashta Municipal Council, Ashta.

संत गाडगेबाबा शहर स्वच्छता अभियानामध्ये महाराष्ट्र राज्यात द्वितीय क्रमांक विजेती नगरपालिका (सन २००३-०४)

स्थापना ६ डिसेंबर १८५३



आष्टा नगरपरिषद, आष्टा.

ता. वाळवा, जि. सांगली. ☎: (०२३४२) २४२०२३ फॅक्स: (०२३४२) २४१२५९

E-mail :- coashtamc@gmail.com



जावक क्रमांक : - 3831/2016-17

दिनांक : 29/12/2016

Occupancy Certificate

To,

Sant Dnyaneshwar Shikshan Sanstha
A/P Islampur,
Tal. Walwa, Dist. Sangli.
Pin - 415 409

The part/ full development work / erection / re-erection or alteration in of building / part building no. -- Plot No S.No./CTS No.1312/1/2 and 1312/3/2 Mauje Ashta, situated at road / street Dange College (Annasaheb Dange College of Engineering and technology, Ashta) -- completed under the supervision on License No CA/93/16472/2014-15 Ar. Prakash Jadhav & Associates, Sangli may be occupied. As per Sanction Plan No. P.W.D./W.S./898/2004-05 Dated 23/07/2004. We have completed the construction of Basement, Ground Floor, First Floor and Second Floor,

As set of certified completion plans is returned herewith.




Chief Officer
Ashta Municipal Council, Ashta.

संत गाडगेबाबा शहर स्वच्छता अभियानामध्ये महाराष्ट्र राज्यात द्वितीय क्रमांक विजेती नगरपालिका (सन २००३-०४)

स्थापना ६ डिसेंबर १८५३



आष्टा नगरपरिषद, आष्टा.

ता. वाळवा, जि. सांगली. ☎: (०२३४२) २४२०२३ फॅक्स: (०२३४२) २४१२५९

E-mail :- coashtame@gmail.com



जावक क्रमांक : ३४३३/२०१६-१७

दिनांक २९/१२/२०१६

Occupancy Certificate

To,

Sant Dnyaneshwar Shikshan Sanstha
A/P Islampur, -
Tal. Walwa, Dist. Sangli.
Pin - 415 409 -

The part/ full development work / erection / re-erection or alteration in of building / part building no. -- Plot No S.No./CTS No.1312/1/2 and 1312/3/2 Mauje Ashta, situated at road / street Dange College (Civil department & P.G. Building) (Extensin building-1) - completed under the supervision on License No CA/93/16472/2014-15 Ar. Prakash Jadhav & Associates, Sangli may be occupied. As per Sanction Plan No. P.W.D.W.S./17/1774/2013-14 Dated 18/06/2013. We have completed the construction of Basement, Ground Floor, First Floor and Second Floor,

As set of certified completion plans is returned herewith.




Chief Officer
Ashta Municipal Council, Ashta.

Fire and Safety Certificate



INDIAN FIRE PROTECTION

Cell. : 8268323339
8655355620

Spl. FIRE FIGHTING SYSTEM
Authorised Licenced Agency
(ISO 9001-2008 Certified)

FORM B

(See Section 3(3) and Rule 4(2))

Certificate by Licensed Agency Regarding the Compliance

Of The Fire Prevention and Life Safety Measures.

SIX MONTHLY CERTIFICATES

Certificate that I/we have carried out inspection of the Fire prevention and life safety measures installed in the Following Building or premises, namely

Description and Location of Building or premises
Annasaheb Dange Collage Of Engineering and Technology,
Ashta, Tal. Walwa, Dist. Sangli,
Maharashtra

I/We Further certify that these installation in above mentio9ned buildings are maintained in good repair and efficient condition during the period 01 January 2019 To30 Jun 2019 as required under the provision of the Maharashtra Fire Prevention and Life Safety Measures Act, 2006 (Mah.III of 2007) The details of installations carried out by/us are mentioned in the report appended herewith.

Sr. No.	Type Of Fire Extinguishers	Quantity
1	Dry Powder ABC Stored Pressure Type Fire Extinguishers 2 Kg	3
2	Dry Powder ABC Stored Pressure Type Fire Extinguishers 5 Kg	15
3	Dry Powder ABC Stored Pressure Type Fire Extinguishers 6 Kg	23
4	Dry Powder ABC Stored Pressure Type Fire Extinguishers 9 Kg	1
5	Dry Powder BC Type Fire Extinguishers 2 Kg	1
6	CO2 Type Fire Extinguisher 2 Kg	2

Place: Sangli

Date: 31/12/2018

Address of the Licensed Agency

License No. MFS-LA/F-0551

Indian Fire Protection



Authorized Signature

Room No.3, Dinesh Nagar, Kanchangaon, Khambalpada, Thakurli (East), Thane - 421 201
Email: indianfire40@gmail.com



INDIAN FIRE PROTECTION

Cell. : 8268323339
8655355620

Spl. FIRE FIGHTING SYSTEM
Authorised Licenced Agency
(ISO 9001-2008 Certified)

Next Refilling Due Date: - 21/01/2022

To,

Annasaheb Dange Collage Of Engineering and Technology,
Ashta, Tal. Walwa, Dist. Sangli,
Maharashtra

CERTIFICATE

As Per Instruction laid Down is IS 2190-1979 (Code of Practice for selection installation and maintained of portable first aid fire appliance) we have carried out the job in your premises as under.

Sr. No.	Type Of Fire Appliances	Quantity	Refilling	Servicing	H.P Testing	Remarks
1	Dry Powder ABC Stored Pressure Type Fire Extinguishers 2 Kg	3	Ok	Ok	Ok	Ok
2	Dry Powder ABC Stored Pressure Type Fire Extinguishers 5 Kg	15	Ok	Ok	Ok	Ok
3	Dry Powder ABC Stored Pressure Type Fire Extinguishers 6 Kg	23	Ok	Ok	Ok	Ok
4	Dry Powder ABC Stored Pressure Type Fire Extinguishers 9 Kg	1	Ok	Ok	Ok	Ok
5	Dry Powder BC Type Fire Extinguishers 2 Kg	1	Ok	Ok	Ok	Ok
6	CO2 Type Fire Extinguisher 2 Kg	2	Ok	Ok	Ok	Ok

Material Used: All Type Of Fire Extinguisher Refilling & Servicing Ok

Place: Sangli

Date: 31/12/2018

Address of the Licensed Agency

License No. MFS-LA/F-0551

Indian Fire Protection



Authorized Signature

Room No.3, Dinesh Nagar, Kanchangaon, Khambalpada, Thakurli (East), Thane - 421 201
Email: indianfire40@gmail.com

Hostel Facility

- Hot & Cold water
- Purified water
- RO System
- Generator Facility available

10.15 Library

• Number of Library Books/Titles/Journals available (Program-wise)

Sr. No.	Course	Number of Titles (Including e-books)	Number of Volumes (Including e-books)	No. of Journals
1	Aeronautical	776	1946	7
2	Automobile	1007	2353	6
3	Civil	1752	4473	9
4	Electrical	1461	5377	9
5	Electronics & Telecommunication	3030	8124	11
6	Food Technology	15	56	0
7	Humanities	425	2285	0
8	Information Technology/ Computer Science	3671	10618	15
9	Management	396	1663	0
10	Mechanical	3387	11838	14
11	Mechanical & Automation	818	1683	6
12	Science	405	3338	6
	Total	17143	53754	83

• List of National International Journals Subscribed

Print Journals- 83

E-Journals-924

Science direct- 275

ASME-29

ASCE-35

IEEE-185
DELNET- 400

●**E-library Facilities**

- | | | |
|----|--|--|
| 1 | Multimedia PCs with Internet Connectivity | 48 Nos. |
| 2 | NPTEL Video Lectures | |
| 3 | Interview Simulation Software | |
| 4 | Multimedia CD's & DVD's | 3668 Nos. |
| 5 | Softech E-learning CDs | |
| 6 | E-Books | 9726 Nos. |
| 7 | E-Journals | 924
(Science Direct, ASME, ASCE, IEEE, DELNET) |
| 8 | DELNET Membership | |
| 9 | National Digital Library (NDL) Membership | |
| 10 | Database of Previous Years Question Papers | |
| 11 | BBKKRC Institutional Membership | |

10.15 Laboratory and Workshop

List of Major Equipment

Mechanical Engineering Department

List of Major Equipment (Costing more than Rs. 50,000/-)

Sr. No.	Name of Equipment	Amount in Rs.
1	Tool Maker Microscope TM 50 MQC	72000
2	Thermal Conductivity Of Insulating Powder/ Emissivity Apparatus HMT	116000
3	Shell and tube type heat exchanger HMT	207900
4	Computerized Engine Set Up For Three Cylinder Four Stroke Petrol MPFI Engine Test Rig ICE	533992
5	Engine performance analysis software ICE	260998
6	Ice Plant Tutor RAC	85000
7	Air conditioning tutor RAC	85000
8	Refrigeration tutor RAC	85000

9	Cascade refrigeration RAC	220000
10	Heat pump RAC	85000
11	Vortex tube RAC	60000
12	Steam power plant (1KW) ATD	767813
13	Lathe Machine(13 QTY) WORKSHOP	740000
14	Drilling machine WORKSHOP	103075
15	Lathe Machine(07 QTY) WORKSHOP	346106
16	Lathe Machine(20 QTY) WORKSHOP	1575000
17	All geared Lathe Machine(02 QTY) WORKSHOP	606488
18	Universal milling machine WORKSHOP	196875
19	Surface grinding machine WORKSHOP	196875
20	Furnace tool vices WORKSHOP	538483
21	Electro pneumatic trainer kit with PLC IFP	226530
22	Kaplan turbine test rig FTM	138720
23	Francis turbine rest rig FTM	120884
24	Educational License of solid cast Flowcast&Opticast COM L II	270400
25	Electro Hydraulic Trainer kit with PLC IFP	222743
26	Hydraulic Trainer with Servo System IFP	65000
27	LM52208/Upright Metallurgical Microscope with camera and image analysis software	513000
28	Allen BradelyMicrologix 1400 PLC MECH	129500
30	Vibration Lab II TOM	58800
32	Computers DELL opitex 3010 (qty 25) CAD CAM	589875
34	CNC lath trainer CAD CAM	619647
36	Emerson UPS CAD CAM	63000
37	ANSYS 14.0 (25 User) CAD CAM	410760
39	CATIAV5 UDL PLM Discover pack(30 User) CAD CAM	625000
40	TIG Welding Machine WORKSHOP	110000
41	MIG Welding Machine WORKSHOP	106000
42	Shaping Machine jeet Brand Grade WORKSHOP	105000
43	Radial Driling Machine Capacity 40 mm WORKSHOP	150000
44	4- Channel FFT Analyzer data collector and Balancer with Software NV	1755000
45	Shaft align OS3 Shaft Package NV	384668
46	Variable Frequency drive system with controller NV	140042
47	BSWA308 Class-1.1/1 octave Sound Level Meter NV	134720
48	VM-25 Vibration/RPM/Temperature Meter Instrument NV	209956
49	Vibration Lab 2 NV	75000
50	Set up for measurement of vibration parameter NV	62370
	Total Investment in Rs.	14168220

Electronics & Telecommunication

Sr. No.	Name of Equipment	Amount in Lakhs
01	Antenna trainer (Scientech)	87,062.50
02	Satellite Trainer(Falcon Electrotech)	1,02,060/-
03	Radar Trainer(Falcon Electrotech)	76,845/-
04	Antenna Trainer(Falcon Electrotech)	80,797.5/-
05	ISDN Trainer(Scientech)	1,60,312.5/-
06	Mobile Trainer(Scientech)	53,550/-
07	AMITEC MAKE (X-Band)Microwave Power meter with Sensor(8.2GHz-12.4GHz)Model XPM10	1,20,000/-
08	Cathode Ray Oscilloscope(100MHz)	50,600/-
09	FOM 1D Dual wavelength fiber optic laser source & Detector module	1,20,000/-
10	Woobulator(Signet make)1-240MHz,+VHF Modes	1,05,716/-
11	Devkit 3250 NXPLPC3250 processor, 266MHz ARM 9 ES – core	2,40,581.25/-
12	Dell optiplex 3020MT (Ci3/3.40/4GB/500/DRW/3Year) 18.5 Dell wide LED Monitor	60000.00/-
13	Klystron based microwave bench	66,445.31/-
14	Micro strip Training system lab	3,25,125/-
15	Spectrum Analyzer	2,87,560/-
Total Investment in Rs.		19,36,655.06/-

Computer Science & Engineering

Sr. No.	Name of the Lab	Major Equipments
01	Computer Vision and Graphics Laboratory	Dell Power edge T410 Tower Server Intel Quad core E5504 Xeon@2.0Ghz,4.86 GT/s QPI-1 CPU 4 GB (2X2GB)DDR2 RAM ,2X146 GB RPM SAS Hard Drive Hot Swappable Emerson Make True Online UPS 6 KVA
02	Database Lab	Emerson Make True Online UPS 6 KVA
03	Project Laboratory	Emerson Make True Online UPS 6 KVA
		Dell Precision T7810 (Xeon/1.9/32GB/1.8X2/DRW/2GB Graphics /Win10 pro/3 Yrs)
04	Programming Laboratory	Emerson Network Power UPS 6 KVA MTLIB and 12V 7Ampere X 20 Batteries
05	Operating System Laboratory	Eatson UPS Model EDX6000H-LCD
06	HP Vertica / Open source Technology Lab	LIBERT UPS GXT MT+ 6KVA(1x1) with 12v Batteries
07	Research Laboratory	LIBERT UPS GXT MT+ 6KVA(1x1) with 12v Batteries
08	General Dead stock	Projector Epson EB470i

Electrical Engineering

Name of Laboratory	Major Equipments
Computer -1	Lenovo computer
	Epson Projector With Set
	UPS (Lab1)
Computer -2	Dell computer 3020
	UPS (Lab2)
Computer - 3	Dell computer 3020
	UPS (Lab3)
Research and Project	Project lab – Lenovo computers
	Ups(Project Lab)

	Power Control Analyzer(Fluke)
Measurement and Instrumentation	PLC trainer Kit
Electrical Machines	Control Panel For Dc Shunt Motor / Dc Generator * 2 Panel
	Control Panel For Dc Shunt Motor / 3ph Alternator
	Control Panel For 3ph Syn Motor/Dc Shunt Generator
	Control Panel For 3ph Induction Motor/Dc Shunt Generator
	Control Panel For 3ph Slip Ring Ind Motor/Dc Shunt Generator
	Control Panel For Dc Shunt Motor With Mechanical Arrange.
	Control Panel For Dc Comp Motor/Dc Comp. Generator
High Voltage Engineering	62.5mm Sphere Gap With Micrometer Scale & Water Resistor
	50Kv AC / 70KV DC Test Set With Control Panel
	Electrolytic Tank With Electrodes & Control Panel
	150kv,225 Joules, 5 Stages Impulse Generator With Oscilloscope
Power System	Electromechanically over current relay
	Microprocessor based O/C relay
	Electromechanical over voltage relay with universal relay
	Microprocessor based directional over current relay
	Microprocessor based Impedance relay
	Transmission line trainer kit

Civil Engineering

S.N.	Major Equipment
1.	Total Station (Pentax)
2.	Total Station (Sokkia)
3.	Automatic Level(Pentax)
4.	Dell OptiPlex 3020MT 18.5" Dell Wide LED Monitor
5.	Dell OptiPlex 390
6.	Projector EPSON EB470i
7.	Projector EPSON EB x02
8.	Direct Shear Test
9.	CBR Test apparatus
10.	Unconfined Compressive Test
11.	Three Gauge Consolidation test apparatus
12.	Triaxial load Frame
13.	Computerized Universal Testing Machine TUE-C-1000

14.	Tilting Flume 10 m long
15.	HA 42.150 Los Angeles Abrasion Testing Machine
16.	HA 42.150 Concrete Mixture
17.	HC 37.50 Flow Table (Hand Operated)
18.	Digital Compression Testing Machine 3000kN Capacity
19.	Ribon Mixture

Department Of Automobile Engineering

Lab No.	Name of Laboratory	Major Equipments
1	Fluid Mechanics	Wind tunnel
		Venturimeter and orifice-meter
		Parallel pipe & G. I. - PVC pipes apparatus
2	Fluid Machines	Kaplan Turbine
		Francis Turbine
		Pelton Wheel Turbine
		Reciprocating Air Compressor
3	Measurement Techniques -I	Vibration Measurement and acoustic measurement
		Flow Measurement
		Experiment on DC/AC Motor speed control
4	Engineering Thermodynamics	Steam Calorimeter.
		Calorific value of fuel
		Steam Condenser
5	Metallurgy & Metal Treatment	Digital impact testing m/c. AIT-300-D.
		Metzger metavision material pro.3.0
		Metzger metavision inclined binocular metallurgical microscope model VFM-9011 BINO
6	Kinematics Of Machines	Double slider crank mechanism
		a) Elliptical Trammel
		b) Scotch yoke mechanism
		c) Oldham's coupling
		d) Watt's mechanism
		e) Geneva Drive
		f) Universal coupling
		Single slider crank mechanism
		a) Oscillating cylinder mechanism
		b) Rotary Engine mechanism
		c) Reciprocating Engine mechanism

		d) crank & slotted mechanism
		e) With worm quick return mechanism
		Porter governor & Hartnell governor.
7	Hydraulics & Pneumatics	Oil Hydraulic Trainer
		Pneumatic Circuit Trainer
8	Dynamics Of Machines	Determination of logarithmic decrement (Free Damped Vibrations) – Water damping
		Determination of logarithmic decrement (Free Damped Vibrations) – Air damping
		Experiment set up for Forced vibration characteristics (Undamped and Damped vibrations)
9	Vehicle Maintenance-I	Final drive and differential overhaul
		Dismantling & Assembly of sliding mesh gear box
		Clutch overhaul of light and heavy duty vehicle
10	Vehicle Maintenance-Ii	Board Mounted AC System of a Car
		Engine Top overhaul (Four Wheel Engine)
		Air Conditioning System Overhaul -Cut Section Model of AC System for Car (Non Working)
11	Automotive Transmission	Cut-Section Model Of Chassis Diesel (2 Wheel Drive)
		Model Of Differential And Final Drive (Fully Floating)
		Model Of Continuous Variable Transmission Unit (CVT)
12	Automotive Chassis-A & B	Computerized Wheel Alignment Machine
		Computerized Wheel Balancing Machine
		Tyre Changer
		Demonstration Model Of Power Steering (Electronic)
		Brake System -Air Brake
13	Vehicle Body Engineering	Experimental Test Set Up For Automobile Driver Seat Ergonomics (Including Its Position, Dimensions, And Postures Etc.)
		To Study The Construction Of Typical Truck Body And Draw Sketches.
		Study Of Typical Car- Body Construction With Sketches
14	I.C.Engines	Electronic fuel injection system(CRDI)
		Cut section model of four cylinder petro engine(four stroke)

		Cut section model of three cylinder petro engine(four stroke MPFI)
15	Metrolory & Quality Control	Measurement of template using tool makers microscope
		Screw thread measurement using floating carriage diameter measuring machine
		Slip gauge set
16	Heat & Mass Transfer	Condensation Heat Transfer.
		Determination of fin efficiency and effectiveness.
		Determination of forced convection heat transfer coefficient in internal pipe flow.
17	Automotive Electronics Lab	Automotive electrical & electronic system
		Battery charging & testing equipment
		Starter & Alternator test bench
		Multi scan for automobile
18	Engine And Machine Design	Experiment on photo elastic bench
		Experiment on journal bearing
19	Cad/Cam (Fea) Lab	ADAMS MD Motion bundle (Unlimited Nodes)
		50 users
		Dell Optiplex 3020 MT
		Projector Epson EB 470i
		Projecto Epson Ebxo2
		UPS 136 LIEBERT UPS GXT MT + 6 KVA
20	Vehicle Performance	Motor-cycle chassis Dynamometer

Aeronautical Engineering Department

List of Available Laboratories

Sl.No	Name of the Laboratory	Faculty In-Charge
1	Aircraft Component Drawing Laboratory	Ms. Pooja B Patil
2	Fluid Mechanics Laboratory	Mr. Reju R
3	Mechanics of Solids Laboratory	Dr. Kamlesh V Kulkarni
4	Thermodynamics Laboratory	Mr. Yogesh Kumbhar
5	Aerodynamics Laboratory	Mr. Sanoj P Suresh

6	Mechanics of Machines Laboratory	Ms. Sushant M Patil
7	Propulsion Laboratory	Mr. Nikhil Franklin
8	Aircraft Structures Laboratory	Mr. Shuvendra Mohan
9	Vibrations Laboratory	Ms. Pooja B Patil
10	Computer Aided Design Laboratory	Mr. K. M. Kiran Babu
11	Computational Fluid Dynamics Laboratory	Mr. K. M. Kiran Babu
12	Aircraft Maintenance Lab	Mr. K. Balaji
13	Project Laboratory	Mr. Anil Kumar Nakkala
14	Aircraft Engine Laboratory	Mr. Nikhil Franklin

Fluid Mechanics Laboratory

Sl.No	Name of the Equipment	Cost in Rs.
1	Heleshaw Apparatus	45,500
2	Reynolds Apparatus	43,700
3	Bernoulli's Apparatus	43,700
4	Venturi Meter Apparatus	48,100
5	Determination of Head Loss Apparatus	62,700
6	Calibration of Notches Apparatus	65,800
7	Pipe Friction Apparatus (Minor Losses)	58,200
8	Orifice Apparatus	55,800
9	Pelton Wheel	1,89,700
10	Kaplan Turbine	3,42,200
11	Francis Turbine	2,18,000
12	Centrifugal Pump	67,000
13	Reciprocating Pump	66,900
14	Reciprocating Compressor	87,000
15	Centrifugal Blower	97,700

16	Gear Pump Test Apparatus	58,200
Total		15,04,700

Mechanics of Solids Laboratory

Sl.No	Name of the Equipment	Cost in Rs.
1	Direct Tension Test Setup	70,000
2	Bending of Beams	30,000
3	Digital Torsion Test Setup	85,000
4	Spring Test	73,430
5	Shear Test Setup	74,000
6	Impact Test Setup	60,000
Total		3,92,430

Thermodynamics Laboratory

Sl.No	Name of the Equipment	Cost in Rs.
1	Red Wood Viscometer	8,100
2	Bomb Calorimeter	74,200
3	Penetrometer Apparatus	11,800
4	Drop Point Apparatus	8,250
5	Flash & Fire Point Apparatus	6,000
6	Cloud & Pour Point Apparatus	4,750
7	Carbon Residue Apparatus	8,100
8	Aniline Point Apparatus	3,250
9	Double Stage Air Compressor Test Rig	92,500
10	Lever Safety Valve	1,750
11	Spring Loaded Safety Valve	1,550
12	Dead Weight Safety Valve	1,550
13	Combined High Steam Water Safety	2,700
14	Stop Valves – Hopkison Type	2,350
15	Feed Check Valve	2,375

16	Pressure Gauge	1,550
17	Expansion Stream Trap	1,850
18	Green Economizer	5,000
19	Super Heater	4,000
20	Blow of Lock	1,250
21	Boiler Cochram Boiler	7,200
22	Vertical Water Tube Boiler	7,200
23	Water Cooing Tower	58,800
24	Throtelling & Separating Calorimeter	81,000
Total		3,97,075

Aerodynamics Laboratory

Sl.No	Name of the Equipment	Cost in Rs.
1	Wind Tunnel with Models	1,98,000
Total		1,98,000

Mechanics of Machines Laboratory

Sl.No	Name of the Equipment	Cost in Rs.
1	Gyroscopic Machines	49,000
2	Balancing of Rotating Masses	35,000
Total		84,000

CAD & CFD Laboratory

Sl.No	Name of the Equipment	Cost in Rs.
1	Dell Optiplex 3020 –(39 Computers)	13,20,000
2	ANSYS 19.1 (Mechanical & CFD) 25 Tasks, Perpetual License	6,00,000

Aircraft Structures Laboratory

Sl.No	Name of the Equipment	Cost in Rs.
1	Mechanical Extensometer	20,750
2	Electrical Extensometer	30,000

3	Beam Test Setup	16,500
4	Riveted & Bolted Joint Specimen	4,000
5	NDT Equipment – Dye Penetrant	10,000
6	NDT Test Bench	20,000
7	NDT Magnetic Particle Testing	20,000
8	NDT Ultrasonic Flaw Detector	2,20,000
9	Measurement of Strain Using Strain Gauge	14,250
10	Combined Bending & Torsion	28,000
11	Shear Centre for Z Section	12,000
12	Shear Centre for C Section	12,150
13	Shear Centre for D Section	13,300
14	Wagnor Beam	39,000
15	Vibration of Beam Setup	60,000
16	Dial Gauges	6,000
17	Column Test Apparatus	60,000
18	Thin Wall Setup	12,000
19	Thin Wall Cylinder	25,000
Total		6,22,950

Vibrations Laboratory

Sl.No	Name of the Equipment	Cost in Rs.
1	Equivalent Spring Mass System	60,000
2	Coupled Pendulum	
3	Double Pendulum	
4	Vibration Test Rig	
5	Vibrations Table	70,000
Total		1,30,000

Aircraft Engines Laboratory

Sl.No	Name of the Equipment	Cost in Rs.
1	Piston Engine	21,00,000
2	Radial Piston Engine	
3	Turbojet Engine With After Burner	
4	Turbo Prop Engine	
5	Turboshaft Engine	
Total		21,00,000

Aircraft Maintenance Laboratory

Sl.No	Name of the Equipment	Cost in Rs.
1	Cessna 152 Aircraft	24,00,000
Total		24,00,000

Propulsion Laboratory

Sl.No	Name of the Equipment	Cost in Rs.
1	Force Convection Apparatus	35,000
2	Free Convection Apparatus	40,000
3	Propeller Test Rig	85,000
4	Fuel Injection Characterization Test Rig	35,000
5	Study of Nozzle Flow	40,000
6	Subsonic Free/Wall Jet	80,000
7	Solid Propellant Test Rig	40,000
8	Ramjet Test Rig	40,000
Total		3,95,000

PROJECT Laboratory

Sl.No	Name of the Equipment	Cost in Rs.
1	Tools & Equipment's	31,884
Total		31,884

Printers, Projectors & Miscellaneous Equipment

Sl.No	Name of the Equipment	Cost in Rs.
1	Epson EBX02 Projector	26,500

2	Epson 470i Projector	88,737
3	Beetle Blast Speaker	7,185
4	Dell Optiplex System	17,809
5	Projector Rack	4,000
6	UPS	1,523
7	Epson M200 Printer	11,500
8	Epson M100 Printer	7,550
9	Epson EBX31 Projector – 2 Nos	59,800
Total		2,24,604

Basic Science Department**Laboratory List****Physics Laboratory:**

Sr. No.	Description	Quantity	Dead Stock Register No.	Total Cost (Rs.)
1.	0-30 V Power Supply	05	ADCET/PHY/DLD.C.R.P/9900/P-02/08	27,500/-
2.	Spectrometer	15	ADCET/PHY/SPECTRO	74,707/-
3.	FOUR Probe Method Set	05	ADCET/PHY/BG/	29,266/-
4.	Optical Bench (170 cm length) Research	02	ADCET/PHY/OB/1-2	1,23,500/-
5.	Inverse Square Law Set-up.	15	ADCET/PHY/ISL	1,35,088/-
6.	2 MW He-Ne LASER Source	12	ADCET/PHY/LS	1,80,230/-
7.	Determination of e/m of electron	05	ADCET/PHY/e/m/1-5	48556/-
8.	Laurentz Half Shade Polarimeter	13	ADCET/PHY/LHSP	59,388/-
9.	Crystal Models	20	ADCET/PHY/MCM	1,77,450/-

Chemistry Laboratory:

Sr. No.	Description	Quantity	Identification No.	Total Cost (Rs.)
01	P ^H Meter-Digital	01	ADCET/CHEM/P ^H 2005-06	4,600/-
02	Distilled water plant	01	ADCET/CHEM/BS/DW/2005	3,900/-

03	Photo calorimeter	01	ADCET/CHEM/PC-1-2008/445/GEN	5,800/-
04	Oven thermostatic	01	ADCET/CHEM/07-08/447/GEN	8,900/-
05	Electronic balance	02	ADCET/CHEM/EB-01-02	47,000/-
06	Potentiometer	01	ADCET/CHEM/P-2010	8,000/-
07	P ^H Meter-Digital	01	ADCET/CHEM/P ^H 2-2010	6,500/-
08	Water distillation plant	01	ADCET/CHEM/BS/DW-2/2013-14	16,960/-
09	Magnetic stirrer with hot plate	01	ADCET/CHEM/ MS -01/2013-14	5,050/-
10	Muffle furnace	01	ADCET/CHEM/ MF-1/2013-14	17,000/-
11	Digital balance	02	ADCET/CHEM/DB1-2/14-15	5,600/-
12	P ^H Meter-Digital	02	ADCET/CHEM/P ^H 3,4/2017-18	15,095/-
13	Photocalorimeter	01	ADCET/CHEM/PC-2/2017-18	8,200/-

Basic Science Project & Research Laboratory

Sr.No	Description of Items	Quantity	Total cost.Rs.
1	Digital Manometer	01	9,800/-
2	Distilled water Plant	01	6,800/-
3	PH Meter with electrode	01	6,800/-
4	Water bath Digital	01	12,900/-
5	Electric stirrer	01	8,900/-

Language Laboratory: Software's & Computing Facility

Sr. No.	Description	Quantity	Total Price (Rs.)
Software's details			
01	Language Lab Software (ETNL)	01+20 Console	1,24,800/-
02	Language Lab Software (SANAKO)	01+20 Users	1,40,000/-
Computing Facility			
03	Dell Desktop Optiplex 3020MT 4 th Gen. Dual Core 2GB DiMM 500 GB Intel H 81 chip set MB HD Graphics	20	5,00,000/-
04	LIEBERT UPS GXT MT + 6K VA (1x1)	1	44,650/-
05	LENOVO Think Centre Desktop PC	20	4,70,000/-
06	UPS LIBERT POWER BANK 6000	1	55,528/-

Experimental Setup

Mechanical Engineering

MECHANICAL MEASUREMENT & CONTROL (T & M) __		
Equipment Setup Name	Experiment Name	Dead Stock No.
Dead Weight Pressure Gauge	Dead Weight Pressure Gauge	ADCET/MECH/MMC/DWPG-1
Water Flow Measurement by Watermeter&Rota meter	Water Flow Measurement by Watermeter&Rota meter	ADCET/MECH/MMC/WFMWR

Angular speed measurement using stroboscope photoelectric pickup magnetic pickup	Angular speed measurement using stroboscope photoelectric pickup magnetic pickup	ADCET/MECH/MMC/ASMPM-1
Formation of thermocouple & calibration of thermocouple	Formation of thermocouple & calibration of thermocouple	ADCET/MECH/ MMC/FOTCT-1

Energy Engineering Lab

Measurement of temperature using thermocouple RTD Thermistor	Measurement of temperature using thermocouple RTD Thermistor	ADCET/MECH/ MMC/MOTUTRT-1
Measurement of displacement using LVDT	Measurement of displacement using LVDT	ADCET/MECH/ MMC/MDUL -1
Force & Torque measurement using strain gauge	Force & Torque measurement using strain gauge	ADCET/MECH/ MMC/FTMSG -1
Vibration testing using contact & contact type instruments	Vibration testing using contact & contact type instruments	ADCET/MECH/ MMC/VTI-1
Design of measuring system for flow temperature pressure	Design of measuring system for flow temperature pressure	ADCET/MECH/ MMC/DMS-1

Sr. No.	Equipment Setup Name	Experiment Name	Dead stock Number
1	Battery 7.2Ah, 12V	Study of Battery Structure	ADCET/MECH/EE/SM-01
2	Inverter 100W	Study of Inverter Structure	ADCET/MECH/EE/SM-02
3	Rheostat 100 ohms 2.5A	Performance on PV Cell (I-V Characteristics)	ADCET/MECH/EE/SM-03
4	Solar Cell (4*4)	Dependence of solar Cell I-V Characteristics on Light Intensity and Temperature	ADCET/MECH/EE/SS-01
5	4 Quadrant Supply	Study of 4 Quadrant Supply	ADCET/MECH/EE/SS-02
6	Life time Testing	Energy Audit Case Study of an organization	ADCET/MECH/EE/LT-01
7	PV Module kit	Performance on PV Cell (I-V Characteristics)	ADCET/MECH/EE/SM-04
8	Solar Simulator		ADCET/MECH/EE/SS-03
9	Multimeter	Performance on PV Cell (I-V Characteristics)	ADCET/MECH/EE/MM-01
10	Multimeter	Performance on PV Cell (I-V Characteristics)	ADCET/MECH/EE/MM-02
11	Spectral Response Meter	Study of Spectral Response Meter	ADCET/MECH/EE/SRM-01
12	Small Scale Wind Turbine	Visit to Wind Power farm with Detailed Report	ADCET/MECH/EE/SSWT-01

Theory Of Machine LAB			
Sr. no	Equipment Setup Name	Experiment name	Dead Stock No.
1	Kinematic Pairs	Study of basic mechanisms and its inversions.	ADCET/MECH/TOM/KP-1
2	Inversion of Four Bar Chain Mechanism	Study of basic mechanisms and its inversions.	ADCET/MECH/TOM/IFBC M-1
3	Inversion of Single Slider Crank Chain Mechanism	Study of basic mechanisms and its inversions.	ADCET/MECH/TOM/ISCC M-1
4	Inversion of Double Slider Crank Chain Mechanism	Study of basic mechanisms and its inversions.	ADCET/MECH/TOM/IDSS CCM-1
5	Generation of Involute Gear Tooth Mechanism	Generation of involutes tooth profile/ Verification of the Law of Gearing.	ADCET/MECH/TOM/GIG TM-01
6	Cam Analysis Apparatus with Three Types of Cam & Follower	Experimental analysis of various types of cam and follower to draw displacement diagrams.	ADCET/MECH/TOM/CA-01
7	Governor Apparatus a) Porter b) Hart Nell	Experiment on governor	ADCET/MECH/TOM/GA-01
8	Double Hooke's Joint	Verification of ratio of angular velocities of shafts connected by Hooks joint	ADCET/MECH/TOM/DHJ-01
9	Motorized Gyroscope	Experiment on Gyroscope.	ADCET/MECH/TOM/MG-01
10	Static, Dynamic Balancing	Experiment on Balancing of rotary masses (Static and Dynamic).	ADCET/MECH/TOM/SDB -01
11	Trifler suspension	Determination of M.I. using Trifler Suspension system	ADCET/MECH/TOM/TS-01
12	Hooks Joint	Verification of ratio of angular velocities of shafts connected by Hooks joint	ADCET/MECH/TOM/HJ-01
13	Static, Dynamic & balancing	Experiment on Balancing of rotary masses (Static and Dynamic).	ADCET/MECH/TOM/SDB -2
14	Epicyclic gear train	Experiment on Torque Measurement in epicyclic Gear Train.	ADCET/MECH/TOM/EGT -01
15	Experiment motorized Gyroscope	Experiment on Gyroscope	ADCET/MECH/TOM/EMG -02
16	Experiment on set up rope	Experiment on rope break	ADCET/MECH/TOM/ESR

	break dynamometer	dynamometer	BD-01
17	Experiment on set up cam profile	Problems on cam profile.	ADCET/MECH/TOM/ECP-01
18	Experiment on Belt drive	Experiment on belt drive.	ADCET/MECH/TOM/EBD-01
19	Generation of involute gear tooth	Generation of involutes tooth profile/ Verification of the Law of Gearing	ADCET/MECH/TOM/GIG T-01
20	Board model of kinematic links	Verification of ratio of angular velocities of shafts connected by Hooks joint	ADCET/MECH/TOM/BM KL-01
21	Board model of kinematic pairs	Verification of ratio of angular velocities of shafts connected by Hooks joint	ADCET/MECH/TOM/BM KP-01
22	Inversion of four bar mechanism	Verification of ratio of angular velocities of shafts connected by Hooks joint	ADCET/MECH/TOM/IFB M-02
23	Inversion of single slider mechanism	Verification of ratio of angular velocities of shafts connected by Hooks joint	ADCET/MECH/TOM/ISS M -02
24	Inversion of double slider mechanism	Verification of ratio of angular velocities of shafts connected by Hooks joint	ADCET/MECH/TOM/IDS M-02
25	Board model types of gears	----	ADCET/MECH/TOM/BMT G-01
26	Board model types of gear train	----	ADCET/MECH/TOM/BM GT-01
27	Differential gear box	----	ADCET/MECH/TOM/DGB -01
28	Board model of law of gearing	----	ADCET/MECH/TOM/BML G-01
29	Board model of gear terminology	Generation of involutes tooth profile/ Verification of the Law of Gearing.	ADCET/MECH/TOM/BM GT-01
30	Study And Demonstration of Gyroscope effect on rolling Chair	----	ADCET/MECH/TOM/SAD GERC-01
31	Seed Extraction Machine	----	ADCET/MECH/TOM/SEM -01
32	Design and Development Wilson Harte Nell Governor.	----	ADCET/MECH/TOM/DD WHG-01

Refrigeration And Air Conditioning			
Sr. No.	Equipment Setup Name	Experiment Name	Dead Stock No.
1	Refrigeration Test Rig	Trial On Refrigeration Test Rig	ADCET/09-10/MECH/RAC/RTR - 01
2	Air Conditioning Test Rig	Trial On Window Air Conditioner Or Air Conditioning Test Rig	ADCET/09-10/MECH/RAC/ACTR - 01
3	Ice Plant Test Rig	Trial On ICE Plant Test Rig	ADCET/09-10/MECH/RAC/IPTR - 01
4	Heat Pump Test Rig	Trial On Heat Pump Test Rig	ADCET/09-10/MECH/RAC/HPTR - 01
5	Vortex Tube Test Rig	Study Of Various Conventional And Nonconventional Methods Of Refrigeration	ADCET/09-10/MECH/RAC/VTR - 01
6	Cascade Refrigeration System	Trials On Two Stage Cascade System	ADCET/09-10/MECH/RAC/CRS - 01
7	Live Refrigeration System with Emerson Compressor	Study And Demonstration Of Refrigeration Tools & Gas Charging	ADCET/15-16/MECH/RAC/LRS - 01
8	Gas Charging and Tool Kit	Study And Demonstration Of Refrigeration Tools & Gas Charging	ADCET/15-16/MECH/RAC/GCTK - 01

Noise And Vibration Lab			
Sr. No.	Equipment Setup Name	Experiment Name	Dead Stock No.
1	Set Up for equipment spring mass system	Experiment on equivalent spring mass system.	ADCET/MECH/NV/SMS-1
2	Set up for logarithmic decrement of single DOF damped System	Determination of logarithmic decrement for single DOF damped system.	ADCET/MECH/NV/LDSDDS-1
3	Set up for two rotor system without damping	Experiment on torsional vibration of two rotor without damping.	ADCET/MECH/NV/TVTRWD-1

4	Set up for coupled pendulum and double pendulum	Experiment on free vibration of coupled pendulum and / or double pendulum.	ADCET/MECH/NV/CPDP-1
5	Set up for three rotor system without damping	Experiment on torsional vibration of three rotor without damping	ADCET/MECH/NV/TVTRWD-1
6	Set up for different exciters for vibration analysis	NA	ADCET/MECH/NV/DTEVA-01
7	Set up for measurement of vibration parameter	Measurement of vibration parameters using vibration measuring instruments	ADCET/MECH/NV/MVPUVI-1
8	Vibration Lab 1	Determination of logarithmic decrement for single DOF damped system.	ADCET/MECH/NV/VBL-1
9	Vibration Lab 2	Experiment on study of forced vibration characteristics.	ADCET/MECH/NV/VBL-2
10	VM-25 Vibration/RPM/Temperature Meter Instrument	Measurement of vibration parameters using vibration measuring instruments/Consultancy	ADCET/MECH/NV/VM25-1
11	a) BSWA308 Class-1.1/1 octave Sound Level Meter	Sound measurement/consultancy	ADCET/MECH/NV/BOSLM-1
	b) 1/3 OCT: 1/3 Octave option for 308	Sound measurement/consultancy	ADCET/MECH/NV/
12	Variable Frequency drive system with controller	Project/research and consultancy	ADCET/MECH/NV/VFDSWC-1
13	Induction Motor 5HP foot and Flange Mount,3000RPM Class 5,IE2 Compliance	Project/research and consultancy	ADCET/MECH/NV/IM-1
14	Shaft align OS3 Shaft Package	Project/research and consultancy	ADCET/MECH/NV/SOS3SP-1
15	Whirling Of Shafts Apparatus	-----	ADCET/MECH/NV/WSA-1
16	4- Channel FFT Analyzer data collector and Balancer with Software + Data Acquisition system + vibration exciter + High end Laptop	Introduction to FFT analyzer, and prediction of spectral response of vibrating machine from workshop.	ADCET/MECH/NV/FFTA-1

Metrology & Quality Control Lab

Sr. No.	Equipment Setup Name	Experiment Name	Dead Stock No.
1	Sine Bar With Sine Centre	Study and Use Of Angle Measuring Instrument	ADCET/MECH/MQC/SBSC-1
2	Angle Slip Gauge	Study and Use Of Angle Measuring Instrument.	ADCET/MECH/MQC/ASG-1
3	Demonstration Gauge Kit	Study of Different Guage sets.	ADCET/MECH/MQC/DGK
4	Optical Flat with Specimens	Study and use of Optical flat	ADCET/MECH/MQC/OF-1
5	Standard Balls & Rollers With Specimen For Angle Measurement	Study and Use Of Angle Measuring Instrument.	ADCET/MECH/MQC/SBR-1
6	Profile Projector (PPT-150)	Spur Gear Measurements	ADCET/MECH/MQC/OPP-1
7	Slip Gauge Box (Grade I)	Study of Different Guage sets.	ADCET/MECH/MQC/SG-1
8	Vernier Caliper	Study and use of linear Measuring Instrument	ADCET/MECH/MQC/VC-1
9	Micrometer a) 0to 25 mm	Study and use of linear Measuring Instrument	ADCET/MECH/MQC/M-1
	Micrometer a) 25 to 50 mm	Study and use of linear Measuring Instrument	ADCET/MECH/MQC/M-2
10	Vernier Height Gauge	Study and use of linear Measuring Instrument	ADCET/MECH/MQC/VHG-1
11	Dial Gauge 0 to 1 mm	Study and use of Comparators	ADCET/MECH/MQC/DG-1
	Dial Gauge 0 to 10 mm	Study and use of Comparators	ADCET/MECH/MQC/DG-2
12	Lever Type Dial Gauge	Study and use of Comparators	ADCET/MECH/MQC/LTDG-1
13	Gear Tooth Vernier Caliper	Spur Gear Measurements	ADCET/MECH/MQC/GTV-1
14	Magnetic Stand	Study and use of Comparators	ADCET/MECH/MQC/MS-1
15	Monochromatic Light Unit	Study and use of Optical flat.	ADCET/MECH/MQC/MLU-1
16	Universal Bevel Protector	Study and Use Of Angle Measuring Instrument	ADCET/MECH/MQC/BP-1
17	Vernier Depth Gauge	Study and use of linear Measuring Instrument	ADCET/MECH/MQC/VDG-1
18	Floating Carriage Machine	Screw Thread Measurements	ADCET/MECH/MQC/FCM-1
19	Tool Makers Microscope TM 50	Demonstration of tool makers microscope	ADCET/MECH/MQC/TMM-1

20	Bore Dial Guage	Study and use of Comparators	ADCET/MECH/MQC/BDG-1
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Metallurgy Lab			
Sr. No.	Equipment Setup Name	Experiment Name	Dead stock No
1	Rockwell cum Brunel Hardness Testing Machine	Hardness Test:	ADCET/MECH/META/RBH-1
2	Impact Testing Machine	Impact Test:	ADCET/MECH/META/ITM-01
3	Single Disc Polishing Machine	Nil	ADCET/MECH/META/SDP-1
4	Trinocular Metallurgical Microscope	Examination of microstructure of steels:	ADCET/MECH/META/M-1
		Examination of microstructure of cast iron	
		Examination of microstructure of non-ferrous alloys.	
5	Jominey End Quench Setup	Jominy End-Quench test for Hardenability	ADCET/MECH/META/JEQT-01
6	Muffle Furnace Model-I	Jominy End-Quench test for Hardenability	ADCET/MECH/META/MF-01
7	Metallurgical Micro Specimens Samples (24 Nos)	Examination of microstructure of steels:	ADCET/MECH/META/MSP 1
		Examination of microstructure of cast iron	
		Examination of microstructure of non-ferrous alloys.	
8	Metallurgical Micro Specimens Samples (6 Nos)	Examination of microstructure of steels:	ADCET/MECH/META/MSP2
		Examination of microstructure of cast iron	
		Examination of microstructure of non-ferrous alloys.	
9	LM52208/Upright Metallurgical Microscope with camera and image analysis software	Examination of microstructure of steels:	ADCET/MECH/META/LLMU MM1to 3
		Examination of microstructure of cast iron	
		Examination of microstructure of non-ferrous alloys.	

Mechatronics Lab			
Sr. No.	Equipment Setup Name	Experiment Name	IdentificationNo
1	Model PLC-2 Allen Bradley Micrologix 1000 Part A, Basic PLC unit	Study of ladder diagrams, symbols and implementation of logic function.	ADCET/MECH/MECHA/PLC-1 PART A
2	Model PLC-2 Part B, 5 number of hardware's	Basic Ladder Programming	ADCET/MECH/MECHA/PLC-2 PART B
3	PC P4 HHP Compaq AMD Athlon X ₂ Dual	Demonstrative models for application of PLC in real time cases.	ADCET/06-07/MECH/MECHA-1
4	RCS 06 Universal Robotic Kit with all mechanical hardware drive card and software on PC	Demonstrative Robotics Kit	ADECT/MECH/MECHA/ROBO-1
5	Computer-Dell Optiplex3010 Qty-1	Trial on Sensors: Limit switch, level sensor, thermistor, load cell, Encoder, Proximity Sensors.	ADCET/MECH/13-14/MECHA/C-1
6	Allen Bradley Micrologix 1400 1766L32BWAA system	PLC programming on industrial applications based on timers & counters and internal relays.	ADCET/MECH/13-14/MECHA/AB1400 PLC
7	Sensor interface module with different sensors	PLC Data handling and Fault finding	ADCET/MECH/13-14/MECHA/SIM-1
8	Motor interface module		ADCET/MECH/13-14/MECHA/AIM-1
9	Bottle filling application	Demonstrative models for application of PLC in real time cases.	ADCET/MECH/13-14/MECHA/BFA-1
10	Linear conveyor belt system		ADCET/MECH/13-14/MECHA/CONVEYER-1
11	RS-Logix starter lite software	Software for PLC-Ladder Programming	ADCET/MECH/13-14/MECHA/RSL-1

Manufacturing Processes Lab			
Sr. No.	Equipment Set Up Name	Experiment Name	Dead Stock No.
1	Clay Washer Model: VCW	Sand Clay content testing	ADCET/MECH/MP/CWM-1
2	Sieve Shaker with set of Sieves Model: VGH	Sand Testing and Grain Fineness Number	ADCET/MECH/MP/SS-1
3	Permeability Maker Model: VP	Finding Permeability Number	ADCET/MECH/MP/PMM-1
4	Universal Strength Machine Model: VUM	Compressive Strength testing	ADCET/MECH/MP/USM-1
5	Core Hardness Tester Model: VCH	Core Hardness	ADCET/MECH/MP/CHT-1
6	Mould Hardness Tester B Scale Model: VMH(B)	Mould Hardness	ADCET/MECH/MP/CPPA-1
7	Rapid Moisture Tester Model: VM	Moisture Percentage	ADCET/MECH/MP/RMT-1
8	Sand Rammer Model: VR	Study of types of patterns and core boxes	ADCET/MECH/MP/SRM-1

Industrial Fluid Power Lab			
Sr. No.	Equipment Setup Name	Experiment name	Identification No
1	Hydraulic Trainer with Servo System	Study & demonstration basic hydraulic system & Five circuit preparations on hydraulic trainer kit.	ADCET/MECH/IHP/HT-1
2	Pneumatic Trainer.	Study & demonstration basic hydraulic system & Five circuit preparations on pneumatic trainer k accumulators /actuators/intensifiers/hy draulic and pneumatic power brakes it.	ADCET/MECH/IHP/PT-1
3	Pneumatic pick & place material handling system.	Study & demonstration basic hydraulic system/ Five circuit preparations on pneumatic trainer kit	ADCET/MECH/IHP/PPAPM HS-1
4	JTKg-2 Electro Pneumatic Trainer kit with PLC (With S7200PLC)	Study of Electro-Hydraulic/Pneumatic systems	ADCET/MECH/IFP/EPTK-1
5	Hydraulic Sheet Bending Machine	Study & demonstration basic hydraulic system Design of hydraulic / pneumatic system for any one application	ADCET/MECH/IFP/SDHSB-01
6	Electro Hydraulic Trainer kit with PLC	Study of Electro-Hydraulic/Pneumatic systems	ADCET/MECH/IFP/20018-19/EHTK-1

Internal Combustions Engines			
Sr.No	Equipment Setup Name	Experiment Name	Dead Stock Number
1	Brand New Slow Speed Diesel Engine with Rope Brake Dynamometer	Trial On Slow Speed Diesel Engine With Rope Brake	ADCET/MECH/ICE/FSDE-1

		Dynamometer	
2	4 Stroke, 4Cylinder Petrol Engine Test Rig. With Hydraulic Dynamometer	Test On Four Stroke Multi Cylinder Petrol Engine.	ADCET/MECH/ICE/4S4CPE-1
3	Cut Section Model of Single Cylinder 4-Stroke Diesel Engine	STUDY OF CONSTRUCTIONAL Detailssingle Cylinder 4-Stroke Diesel Engine	ADCET/MECH/ICE/4SSCDE-1
4	Single Cylinder Petrol Engine Test Rig.(2stroke Scooter Engine)	To Conduct Trial On Single Cylinder Petrol Engine	ADCET/MECH/ICE/SCPETR-1
5	Single Cylinder Petrol Engine Cut Section Model	STUDY OF CONSTRUCTI ONAL DETAILS Singlecylinder Petrol Engine	ADCET/MECH/ICE/SCPECS-1
6	Computerized Engine Test Setup Engine Performance Analyzer software with License	Test On Four Stroke Multi Cylinder Petrol Engine Computer Cont	ADCET/MECH/ICE/CETS-1 ADCET/MECH/ICE/EPA-1
7	Mass Flow Measurement of fuel by using Loed Cell	Test On Four Stroke Multi Cylinder Petrol Engine.	ADCET/MECH/ICE/MFM/1

Heat & Mass Transfer Lab			
Sr. No.	Equipment Setup Name	Experiment Name	IdentificationNo
1	Thermal conductivity of insulating powder	Determination of thermal conductivity of insulating Powder	ADCET/MECH/HT/TCIP-1
2	Emissivity apparatus	Determination of emissivity	ADCET/MECH/HT/EA-1
3	Stefan Boltzmann apparatus	Determination of Stefan Boltzmann constant	ADCET/MECH/HT/SBA-1
4	Natural convection apparatus	Determination of heat transfer coefficient for natural convection	ADCET/MECH/HT/NCA-1
5	Forced convection apparatus	Determination of heat transfer coefficient for forced convection	ADCET/MECH/HT/FCA-1
6	Critical heat flux (Pool Boiling)	Boling heat transfer	ADCET/MECH/HT/PB-1

7	Thermal conductivity of composite wall	Determination of thermal conductivity of composite wall	ADCET/MECH/HT/TCCW A-1
8	Heat Pipe	Demonstration on heat pipe	ADCET/MECH/HT/HP-1
9	Condensation in Drop & Film Form	Condensation heat transfer	ADCET/MECH/HT/TCID AFF-1
10	Parallel Flow , Counter Flow Heat Exchanger	Trial on heat exchanger	ADCET/MECH/HT/PFCF HE-1
11	Heat exchanger Temp. controller module	Trial on heat exchanger	ADCET/MECH/HT/STHX -1
	Noiseless Air Compressor		
	SCADA Application Software		
	DELL OPTIPLEX 755 PC	SCADA Application Software	ADCET/MECH/HT/PC-1
12	Thermal conductivity of insulating powder	Determination of thermal conductivity of insulating Powder	ADCET/MECH/HT/TCIP-2
13	Thermal conductivity of metal rod of diff. Temp.	Determination of Thermal conductivity of metal rod of different Temperatures	ADCET/MECH/HT/TCMR -1
14	Natural convection apparatus	Determination of heat transfer coefficient for natural convection	ADCET/MECH/HT/NCA-2
15	Forced convection apparatus	Determination of heat transfer coefficient for forced convection	ADCET/MECH/HT/FCA-2
16	Emissivity Apparatus	Determination of emissivity	ADCET/MECH/HT/EA-2
17	Stefan Boltzmann Apparatus	Determination of Stefan Boltzmann constant	ADCET/MECH/HT/SBA-2
18	Parallel Flow , Counter Flow Heat Exchanger	Trial on heat exchanger	ADCET/MECH/HT/PFCF HE-2
19	Unsteady State Heat Transfer	Experiment on unsteady state heat transfer	ADCET/MECH/HT/USHT -1
20	Boling Heat Flux (Pool Boiling)	Boling heat transfer	ADCET/MECH/HT/PB-2
21	Thermal Conductivity of Lagged Pipe	Determination of thermal conductivity of Lagged Pipe	ADCET/MECH/HT/TCLP-1

Hydraulic Machines Lab			
Sr. No.	Equipment Setup Name	Experiment Name	Dead stock Number
01	Centrifugal Pump Test Rig	Trial on Centrifugal Pump for plotting operating characteristics.	ADCET/MECH/FM/CPTR-1
02	Reciprocating Pump Test Rig	Trial on Reciprocating Pump for plotting operating characteristics.	ADCET/MECH/FM/RPTR-1
03	Centrifugal Blower Test Rig	Trial on Centrifugal Blower	ADCET/MECH/FM/CBTR-1
04	Test Rig of Two Stage Reciprocating Air Compressor	Trial on Two Stage Reciprocating Air Compressor	ADCET/MECH/FM/TSRAC-1
05	Pelton Turbine Test Rig	Trial on Pelton Wheel Turbine for plotting main characteristics.	ADCET/MECH/FM/PWT-1
06	Kaplan Turbine Test Rig	Trial on Kaplan Turbine for plotting main characteristics.	ADCET/MECH/FTM/006/2010
		Trial on Kaplan Turbine for plotting operating characteristics.	
07	Francis Turbine Test Rig	Trial on Francis Turbine for plotting main characteristics.	ADCET/MECH/FTM/007/2010
		Trial on Francis Turbine for plotting operating characteristics.	
08	Hydraulic Ram	Demonstration of Hydraulic Ram	ADCET/MECH/FTM/HR/01
09	Multistage Pump	Demonstration of Multistage Pump	ADCET/MECH/FTM/MP-01

Fluid Mechanics Lab			
Sr. No.	Equipment Setup Name	Experiment Name	Dead stock Number
01	Heleshaw Apparatus	Flow Visualization by plotting of stream lines	ADCET/MECH/FM/HA-1
02	Reynold's Apparatus	Reynold's Experiment	ADCET/MECH/FM/RA-1A
03	Bernoulli's Apparatus	Verification of Bernoulli's equation	ADCET/MECH/FM/BA-1A
04	Venturimeter&Orificemeter Apparatus	Calibration of Venturimeter& Calibration of Orifice meter	ADCET/MECH/FM/FMVOM-1A
05	Notch Apparatus	Calibration of Notches	ADCET/MECH/FM/NA-1A
06	Pipe Friction Apparatus	Determination of coefficient of friction in pipes of different materials	ADCET/MECH/FM/PF-1A
07	Losses in Pipe Fittings	Determination of losses in pipe fittings	ADCET/MECH/FM/LPF-1
08	Laminar Flow Apparatus	Determination of velocity profile through circular pipes	ADCET/MECH/FM/LFA-1

		for laminar flow	
09	Orifice under steady & Unsteady flow Condition Apparatus	Orifice under steady flow condition	ADCET/MECH/FM/OSUFC-1
10	Equivalent pipe for pipe in parallel	Study & demonstration of equivalent pipe for pipes in parallel	ADCET/MECH/FM/EPPP

COMPUTER LAB 2			
Sr.No	Equipment Setup Name	Experiment Name	Dead Stock Number
1	Computer DELLOptiplex - 3010(Qty -24)	Computer DELLOptiplex - 3010(Qty -24)	ADCET/14-15/240/ME/CL2/31-54
2	Printer –EPSON LQ 300+ (Qty-01)	Printer –EPSON LQ 300+ (Qty-01)	ADCET/06-07/231/ME/CL2/1
3	Liebrt UPS Gxt MT+6KVA	Liebrt UPS Gxt MT+6KVA	ADCET/14-15//ME/CL2/1
4	Switch 8 Port, Switch 24 Port, 24 Port Patch Panel Rack –Dlink .	Switch 8 Port, Switch 24 Port, 24 Port Patch Panel Rack –Dlink .	ADCET/14-15/ME/CL2/1
5	Projector Epson EB X31	Projector Epson EB X31	ADCET/17-18//ME/CL 2/1

COMPUTER LAB1			
Sr.No	Equipment Setup Name	Experiment Name	Dead Stock Number
1	Computer –HP Compaq DX2255 (Qty-06)	Computer –HP Compaq DX2255 (Qty-06)	ADCET/06-07/240/ME/CL1/1-6
2	Computer- DELL Optiplex -755 (Qty -10)	Computer- DELL Optiplex - 755 (Qty -10)	ADCET/07-08/ME/CL1/1-10
3	Computer- Lenovo Think	Computer- Lenovo Think	ADCET/10-

	Center (Qty- 10)	Center (Qty- 10)	11/ME/CL1/11-20
4	Computer DELL Optiplex - 3010(Qty -05)	Computer DELL Optiplex - 3010(Qty -05)	ADCET/13-14/ME/CL1/26-30
5	Printer –EPSON LQ 300+ (Qty-01)	Printer –EPSON LQ 300+ (Qty-01)	ADCET/06-07/237/ME/CL1/1
6	Printer –HP Laserjet (Qty-01)	Printer –HP Laserjet (Qty-01)	ADCET/06-07/237/ME/CL1/1
7	Switch 24 Port, 24 Port Patch Panel Rack –Dlink .	Switch 24 Port, 24 Port Patch Panel Rack –Dlink .	ADCET/14-15/240/ME/CL1/1
8	P.B 6000 Liebet U.P.S 12V 26 Ah Exide Battery	P.B 6000 Liebet U.P.S 12V 26 Ah Exide Battery	ADCET/17-18/ME/CL1/UPS /1
9	Projector Epson EB X31(Qty-01)	Projector Epson EB X31(Qty-01)	ADCET/17-18/ME/CL1/PROJECTER /1

COMPOSITE LAB			
Sr. No.	Equipment Setup Name	Experiment Name	Dead stock Number
1	0.5 HP,3 Phase 440 VAC geared motor (02nos)	PROJECT	ADCET/MECH/PC Lab /MOTOR -01 to 02
2	3 Phase Induction Motor v/f drive with panel	PROJECT	ADCET/MECH/PC Lab /CONTROL PANEL -01
3	Mandrel	PROJECT	ADCET/MECH/PC Lab /MANDREL -01
4	Carriage	PROJECT	ADCET/MECH/PC Lab /CARRIAGE -01
5	Drop weight m/c	PROJECT	ADCET/MECH/PC Lab /DWMC -01
6	Extraction m/c	PROJECT	ADCET/MECH/PC Lab /EXTMC -01
7	Automatic And Manual Controller for FW Machine	PROJECT	ADCET/MECH/PC Lab /AMCF -01
8	Finite Element Analysis of Composite Material with Different Direction Orientation of fibers.	PROJECT	ADCET/MECH/PC Lab /FEACMDDOF -01

CAD/CAM LAB			
Sr. No.	Equipment Setup Name	Experiment Name	Dead stock Number
1	Computers -DELL Optiplex-3010 (Qty-25)	-----	ADCET/13-14/ME/CADCAM/01 - 25
2	CNC lathe trainer	-----	ADCET/08-09/MECH/CNC - 01
3	Emerson UPS	-----	ADCET/10-11/MECH/CL/UPS-1
4	Trendnet 24-port switch	-----	ADCET/10-11/MECH/CL/SW-1
5	Printer - EPSON LQ 300 ⁺ (Qty-01)	-----	ADCET/10-11/MECH/CL/02
6	Printer - Canon LBP2900 (Qty-01)	-----	ADCET/11-12/MECH/CL/C-1
7	Projector Epson EB X31	-----	ADCET/17-18/ME/CL/PRO -02
8	Autodesk Inventor Series 8.0(Educational version)	Experiment on Autocad	ADCET/MECH/04/ACAD /1-3
9	ANSYS academic teaching introductoryANSYS14.0 (25 users.)	Experiment on Ansys	ADCET/12-13/MECH/CL/ANSYS 04 (CD-1-3)
10	CATIA V6 UDL, PLM Discover Pack (30users)	Experiment on Catia	ADCET/13-14/MECH/CL/05
11	Hyper works V14.0	Experiment on Hyperworks	ADCET/16-17/MECH/CL/HW1
12	Solidworks software Educational version (40users)	Experiment on Solidworks	ADCET/18-19 /MECH/CL/SS-1
13	Seqrite End point security	-----	ADCET/18-19 /MECH/CL/S-1

Automobile Engineering Lab			
Sr. No.	Equipment Setup Name	Experiment Name	Dead stock Number
1	Maruti 800cc engine	Cut section model of Maruti 800cc engine ,Gear box, clutch & radiator working	ADCET/MECH/AE/001/2010

2	Hydraulic brake two disc and two drum brakes.	Cut section model of hydraulic brake unit -four wheeldtype with two disc and two drum brakes.	ADCET/MECH/AE/002/2010
3	Rack and Pinion steering gear	Cut section model of rack and pinion steering gear box	ADCET/MECH/AE/003/2010

Applied Thermodynamics Lab

4	worm and roller steering gear box	Cut section model of worm and roller steering gear box.	ADCET/MECH/AE/004/2010
5	ball type steering gear box	Cut section model of recalculating ball type steering gear box	ADCET/MECH/AE/005/2010
6	Power steering gear box	Cut section model of Power steering gear box	ADCET/MECH/AE/006/2010
7	synchronous gear box	Cut section model of synchronous gear box.	ADCET/MECH/AE/007/2010
8	automatic transmission of a car.	Cut section model of automatic transmission of a car.	ADCET/MECH/AE/008/2010
9	centrifugal clutch	Cut section model of centrifugal clutch (Honda activa).	ADCET/MECH/AE/009/2010
10	floating differential and wheelmechanism	Cut section model of semi floating differential and wheelmechanism.	ADCET/MECH/AE/010/2010
11	Maruti car wiring	Cut section model of mock layout of a Maruti car wiring(electrical system of a car) working model.	ADCET/MECH/AE/011/2010
12	self starter	Cut section model of self starter	ADCET/MECH/AE/012/2010
13	Dynamo	Cut section model of Dynamo	ADCET/MECH/AE/013/2010
14	Shock Absorber	Cut section model of Shock Absorber	ADCET/MECH/AE/014/2010
15	Brake cylinder and Master cylinder	Cut section model of Brake cylinder and Master cylinder	ADCET/MECH/AE/015/2010
16	Propeller Shaft	Cut section model of Propeller Shaft	ADCET/MECH/AE/016/2010
17	centrifugal clutch	Cut section model of centrifugal clutch(Luna)	ADCET/MECH/AE/017/2010
18	Alternator	Cut section model of Alternator	ADCET/MECH/AE/018/2010
19	Macphersonsuspension	Cut section model of complete one side Macphersonsuspension strut with drive shaft, disk brake.	ADCET/MECH/AE/019/2010
20	Alkaline Battery	Cut section model of Alkaline Battery	ADCET/MECH/AE/020/2010

Sr. No.	Equipment Setup Name	Excrement Name	Dead stock No.
1	Redwood Viscometer	Test on Redwood viscometer and Aniline point apparatus	ADCET/MECH/TD/RV/1
2	Aniline Point Test Apparatus	Test on Redwood viscometer and Aniline point apparatus	ADCET/MECH/APT/1
3	Carbon Residue Apparatus Single Test	Test on Carbon residue, Cloud and Pour point apparatus	ADCET/MECH/TD/CRA-1
4	Cloud & Pour point Apparatus		ADCET/MECH/TD/CPPA-1
5	Drop Point of Grease Apparatus	Test on Grease Penetrometer and dropping point apparatus.	ADCET/MECH/TD/DPG A-1
6	Penetrometer Apparatus		ADCET/MECH/TD/PA-1
7	Flash & Fire Point Apparatus	Determination of flash and fire point of a lubricating oil.	ADCET/MECH/TD/FFPA-1
8	Aniline Point Apparatus.	Test on Redwood viscometer and Aniline point apparatus	ADCET/MECH/TD/APA-1
9	Model of Cochran Boiler	Study and Demonstration of water tube and fire tube boilers	ADCET/MECH/TD/CB-1
10	Model of Lancashire Boiler	Study and Demonstration of boiler mountings, Accessories and Steam calorimeters.	ADCET/MECH/TD/LB-1
11	Model of Cornish Boiler	Study and Demonstration of boiler mountings, Accessories and Steam calorimeters.	ADCET/MECH/TD/CB-1
12	Model of Locomotive Boiler	Study and Demonstration of condenser and study of cooling towers	ADCET/MECH/TD/LB-1
13	Model of Babcock & Wilcox Boiler	Study and Demonstration of condenser and study of cooling towers	ADCET/MECH/TD/WB-1
14	Fusible Plugs	Significance and relevance of lubrication properties and systems	ADCET/MECH/TD/FP-1
15	Spring Loaded Safety Valve	Study and Demonstration of condenser and study of cooling towers	ADCET/MECH/TD/SLSV-1
16	Steam Power Plant with all Accessories (1 kw capacity)	Study / Trial on steam power plant	ADCET/MECH/TD/SPP/01

Experiments List

Course : Programming Lab-IV (TE)

Expt. No	Title
01	Introduction to .NET Architecture
02	Demonstrate C# Basic Types, Variables, Operators
03	Make use of OOPS concepts in like Class, Objects and Types.
04	Implement the concept of inheritance and interface
05	Implementation of Multidimensional & Jagged array
06	Implementation of Operator overloading
	Review I
07	String manipulation using String & String builder
08	Implement concept of Exception Handling
09	Implement concept of Threading
10	Implement concept of I/O files.
11	Implement ADO.NET connectivity
	Review II

Course : Programming Lab-II (SY)

Exp.No	Title of Experiment
1	Program based on Variables, Operators, Strings, Input and Output.
2	Program based on concept of Class and Object.
3	Program based on concept of Overloading.
4	Program based on Static Fields and Static Methods.
5	Program based on concept of Inheritance like single inheritance, multilevel inheritance, hierarchical inheritance etc.

6	Program based on Multiple inheritance using Interface.
7	Program based on concept of Polymorphism.
8	Program based on concept of super keyword, final classes and final methods.
9	Program based on Abstract classes and methods.
10	Program based on Multiple inheritance using Interface.
11	Program based on concept of Package and sub packages
12	Program based on concept of Exception and custom exception
13	Program based on file read write
14	Program to develop GUI using swing.
15	Program to develop GUI using JApplet
16	Program based on Layout Management.
17	Program based on concept of Key and mouse event.
18	Program based on Socket programming using Swing GUI.
19	Program based on threading.
20	Program based on Database.
21	Program to demonstrate Collection classes.

Course : Web Technology-II (BE)

Sr. No.	TITLE OF THE EXPERIMENT
1	Create registration form using different server controls.
2	Accepting and validating user entered data in registration form using ASP.NET
3	Write a program to manage session in ASP.Net.
4	Reading and writing HTML contents with JQuery.
5	Write a sample application to demonstrate AJAX.
6	Display database contents from SQL server or Oracle database using SQL Command class from ASP.NET.
7	Display parameterized data using SQL DataReader and GridView in ASP.NET
8	Database access using DataSet in ASP.NET
9	Installing Apache and PHP on Linux, Configuring PHP at Build Time on Linux. Or Installation of XAMPP.

10	Hello world Program-Embedded HTML with PHP.
11	Program based on PHP variables, Expression, arrays, control structure.
12	Experiment Based on OOP and Advance OOP PHP.
13	Form validation using PHP using regular expressions.
14	Upload various types of file from client side to server with validation.
15	Write a program to send Mail using PHP.
16	Insert user entered data in form to MySQL database using PHP.
17	Update user's data stored in MySQL database using PHP.
18	Write a program to manage session in PHP having login facility in any web application.

Database Engineering Lab

2018-19 Sem-II

Experiments List

Course : Programming Lab-II (SY)

Exp.No	Title of Experiment
1	Program based on Variables, Operators, Strings, Input and Output.
2	Program based on concept of Class and Object.
3	Program based on concept of Overloading.
4	Program based on Static Fields and Static Methods.
5	Program based on concept of Inheritance like single inheritance, multilevel inheritance, hierarchical inheritance etc.
6	Program based on Multiple inheritance using Interface.
7	Program based on concept of Polymorphism.
8	Program based on concept of super keyword, final classes and final methods.
9	Program based on Abstract classes and methods.
10	Program based on Multiple inheritance using Interface.
11	Program based on concept of Package and sub packages
12	Program based on concept of Exception and custom exception
13	Program based on file read write
14	Program to develop GUI using swing.
15	Program to develop GUI using JApplet
16	Program based on Layout Management.
17	Program based on concept of Key and mouse event.

18	Program based on Socket programming using Swing GUI.
19	Program based on threading.
20	Program based on Database.
21	Program to demonstrate Collection classes.

Course : Database Engineering (TE)

Expt. No	Title
01	Introduction to E-R Diagram
02	Converting E-R Diagrams in Relational Tables
03	Installation & Demonstration of Oracle DBMS
04	Study and Implementation of Data Definition Language (DDL) Queries
05	Study and Implementation of Data Manipulation Language (DML) Queries
06	Study and Implementation of Basic SQL SELECT statement for displaying / extracting data from single table or multiple tables.
07	Study and implementation of SQL constructs for aggregating data, use of group by, having clauses.
08	Study and implementation of nested sub-queries, complex queries, views and Joins
09	Database connectivity using Java Programming language
10	Creating Indexes for the table

Operating System Lab

2018-19 Sem-II

Experiments List

Course : Operating System-II (TE)

Exp.No.	Title of Experiment
1	Study of Linux Operating System
2	Introduction to Study of Linux commands and installation of Linux.
3	Study of buffer management in UNIX operating System.
4	Demonstration of inodes in Linux operating system.

5	Study and implementation of File management system calls–open(), close().
6	Review – I
-	Demonstration of File management system calls – read(), write() &lseek()
7	Study and implementation of Process management system call – fork().
8	Demonstration of advanced process management system calls – pipe() & fork().
9	Write a shell script to check the regular file & append data in a file through cat command.
10	Write a shell script that displays a list of all the files in the current directory to which the user has read, write and execute permissions.

Course : Operating System-I (SY)

Exp. No.	Title of Experiment
1.	Installation of windows operating system.
2.	Installation of Linux operating system.
3.	Program based on CPU Scheduling Algorithms.
4.	Program based on Bankers algorithm for Deadlock Avoidance.
5.	Program based on Bankers Algorithm for Deadlock Prevention.
6.	Program based on Page Replacement Policies.
7.	Program based on various system calls of UNIX operating system.
8.	Program based on various I/O System calls of UNIX operating System.
9.	Program based on various UNIX commands.
10.	Program to solve Producer-Consumer problem using semaphores (Using UNIX system calls)

Course : Web Technology-II (BE)

Exp. No.	Title Of The Experiment
1	Create registration form using different server controls.
2	Accepting and validating user entered data in registration form using ASP.NET
3	Write a program to manage session in ASP.Net.
4	Reading and writing HTML contents with JQuery.
5	Write a sample application to demonstrate AJAX.
6	Display database contents from SQL server or Oracle database using SQL Command class from ASP.NET.
7	Display parameterized data using SQL DataReader and GridView in ASP.NET

8	Database access using DataSet in ASP.NET
REVIEW I	
9	Installing Apache and PHP on Linux, Configuring PHP at Build Time on Linux. Or Installation of XAMPP.
10	Hello world Program-Embedded HTML with PHP.
11	Program based on PHP variables, Expression, arrays, control structure.
12	Experiment Based on OOP and Advance OOP PHP.
13	Form validation using PHP using regular expressions.
14	Upload various types of file from client side to server with validation.
15	Write a program to send Mail using PHP.
16	Insert user entered data in form to MySQL database using PHP.
17	Update user's data stored in MySQL database using PHP.
18	Write a program to manage session in PHP having login facility in any web application.

Project Lab

2018-19 Sem-II

Experiments List

Course : Internet of Things (BE)

Expt. No.	Title of Experiment
1.	Introduction
2.	IoT Framework and Basics
3.	Fundamental IoT Mechanisms and key technologies
4.	Radio Frequency Identification Technology (RFID)
5.	Wireless Technologies for IoT
6.	Review –I
7.	Governance of the Internet of Things
8.	Case Studies on IoT applications
9.	Raspberry Pi Installation and configuration
10.	Sensor Data management using Raspberry Pi
11.	Application implantation using Raspberry Pi (Part-I)

12.	Review-II
13.	Application implantation using Raspberry Pi (part-II)
14.	Submission

Course : Computer Graphics (TE-IT)

Expt . No.	Title of Experiment
1	Implementation of different graphics primitives for drawing shapes
2	Study of different graphical devices and its application
3	Implementation of 2D transformation
4	Implementation of 3D transformation
5	Creating Simple Dimensional Shapes
6	Creating Text and Fonts
7	Implementation of flood fill algorithm.
8	Study of Bezier curve and its properties
9	Introduction to OpenGL and GLUT.
10	Implementation of moving object and study of multimedia technique

Computer Graphics & Vision Lab

2018-19 Sem-II

Course : Operating System-II (TE)

Exp.No.	Title of Experiment
1	Study of Linux Operating System
2	Introduction to Study of Linux commands and installation of Linux.
3	Study of buffer management in UNIX operating System.
4	Demonstration of inodes in Linux operating system.
5	Study and implementation of File management system calls–open(), close().

6	Review – I
-	Demonstration of File management system calls – read(), write() & lseek()
7	Study and implementation of Process management system call – fork().
8	Demonstration of advanced process management system calls – pipe() & fork().
9	Write a shell script to check the regular file & append data in a file through cat command.
10	Write a shell script that displays a list of all the files in the current directory to which the user has read, write and execute permissions.

Course : Internet Technology (TE-IT)

Exp No.	Title of Experiment
1.	Study of TCP/IP protocol suite and Linux socket system calls.
2.	Implementation of client program using UDP to connect to well-known services (ECHO, TIME OF DAY).
3.	Implementation of iterative UDP client-server.
4.	Implementation of Concurrent TCP client-server.
5.	Implementing and Study of Network Sniffing Tool-tcpdump.
6.	Implementing and Study of Network Protocol Analyzer-wireshark.
7.	Implementation of Echo Server using IPv6.
8.	Study of DNS client utilities (nslookup, dig, host, whois).
9.	Developing Personal Website with database connectivity.
10.	Study of various streaming multimedia protocols in Internet.

Course : Computer Graphics (TE-IT)

Expt . No.	Title of Experiment
1	Implementation of different graphics primitives for drawing shapes
2	Study of different graphical devices and its application

3	Implementation of 2D transformation
4	Implementation of 3D transformation
5	Creating Simple Dimensional Shapes
6	Creating Text and Fonts
7	Implementation of flood fill algorithm.
8	Study of Bezier curve and its properties
9	Introduction to OpenGL and GLUT.
10	Implementation of moving object and study of multimedia technique

Network & Internet Technology Lab

2018-19 Sem-II

Course : Computer Networks (SY)

Exp. No.	Title of Experiment
1	Demonstrate topologies of Computer Networks along with its types.
2	Configure and organize networking control devices.
3	Design Network cross-wired cable using crimping tool.
4	Design Network straight through cable using crimping tool.
5	Make use of Network configuration and troubleshooting commands.
6	Design a LAN by Configuring Host IP, Subnet Mask and Default Gateway of System.
7	Implementation of Dijkstra's Shortest Path Routing algorithm.
8	Implementation of a file transfer application using TCP Socket program
9	Implementation of a file transfer application using UDP Socket program
10	Develop FTP Configuration for transfer files between systems in LAN.
11	Install Print server in a LAN and share the printer in a network.
12	Installation of network analyzer tool (Wireshark).
13	Make use of packet tracer tool for analyze network
14	Case study: To study network of any organization and submit report.

Course : Web Technology-II (BE)

Sr. No.	TITLE OF THE EXPERIMENT
1	Create registration form using different server controls.
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7	Display parameterized data using SQL DataReader and GridView in ASP.NET
8	Database access using DataSet in ASP.NET
REVIEW I	
9	Installing Apache and PHP on Linux, Configuring PHP at Build Time on Linux. Or Installation of XAMPP.
10	Hello world Program-Embedded HTML with PHP.
11	Program based on PHP variables, Expression, arrays, control structure.
12	Experiment Based on OOP and Advance OOP PHP.
13	Form validation using PHP using regular expressions.
14	Upload various types of file from client side to server with validation.
15	Write a program to send Mail using PHP.
16	Insert user entered data in form to MySQL database using PHP.
17	Update user's data stored in MySQL database using PHP.
18	Write a program to manage session in PHP having login facility in any web application.

Course : **Compiler Construction** (TE)

Expt. No.	Title of Experiment
1	Study of flex and bison tools.
2	Program using LEX to count the number of characters, words, spaces and lines in a given input file.
3	Program using LEX to count the numbers of comment lines in a given C program. Also eliminate them and copy the resulting program into separate file.
4	Program using LEX to recognize a valid arithmetic expression and to recognize the identifiers and operators present. Print them separately.
5	Program using LEX to recognize whether a given sentence is simple or compound.
6	YACC program to recognize a valid arithmetic expression that uses operators +, -, * and /.
7	YACC program to recognize strings 'aaab', 'abbb', 'ab' and 'a' using the grammar (anbn, n >= 0).
8	Write a program to parse source code strings of C-language and identify tokens in terms of keywords and identifiers.
9	Convert infix notation into postfix notation using YACC programming
10	Implement any phase of compiler.

Research Lab

2018-19 Sem-II

Course : Programming Lab-IV (TE)

Expt. No	Title
01	Introduction to .NET Architecture
02	Demonstrate C# Basic Types, Variables, Operators
03	Make use of OOPS concepts in like Class, Objects and Types.
04	Implement the concept of inheritance and interface
05	Implementation of Multidimensional & Jagged array

06	Implementation of Operator overloading
	Review I
07	String manipulation using String & String builder
08	Implement concept of Exception Handling
09	Implement concept of Threading
10	Implement concept of I/O files.
11	Implement ADO.NET connectivity
	Review II

Course : Web Technology-II (BE)

Sr. No.	TITLE OF THE EXPERIMENT
1	Create registration form using different server controls.
2	Accepting and validating user entered data in registration form using ASP.NET
3	Write a program to manage session in ASP.Net.
4	Reading and writing HTML contents with JQuery.
5	Write a sample application to demonstrate AJAX.
6	Display database contents from SQL server or Oracle database using SQL Command class from ASP.NET.
7	Display parameterized data using SQL DataReader and GridView in ASP.NET
8	Database access using DataSet in ASP.NET
REVIEW I	
9	Installing Apache and PHP on Linux, Configuring PHP at Build Time on Linux. Or Installation of XAMPP.
10	Hello world Program-Embedded HTML with PHP.
11	Program based on PHP variables, Expression, arrays, control structure.
12	Experiment Based on OOP and Advance OOP PHP.
13	Form validation using PHP using regular expressions.

14	Upload various types of file from client side to server with validation.
15	Write a program to send Mail using PHP.
16	Insert user entered data in form to MySQL database using PHP.
17	Update user's data stored in MySQL database using PHP.
18	Write a program to manage session in PHP having login facility in any web application.

HP Vertica & OSTU Lab

2018-19 Sem-II

Course : Data Analytics (BE)

Exp No.	Title of Experiment
1.	Introduction
2.	Installation of Hadoop and R.
3.	Building Hadoop MapReduce application for counting frequency of word/phrase in simple text file.
4.	Study of Hadoop YARN Administration command and User commands.
5.	Study of Hadoop Hive DDL commands, like create database, Viewing database, Dropping database, Altering database, creating tables, Dropping and altering tables.
6.	Revision-I
7.	Study of Hadoop Hive DML commands like Insert, delete, update, data retrieval queries and Join-inner and outer.
8.	Working with operators in Pig- FOREACH, ASSERT, FILTER, GROUP, ORDER BY, DISTINCT, JOIN, LIMIT, SAMPE, SPLIT, FLATIEN.
9.	Study of R-declaring variables, expressions, functions and executing R script.
10.	Working with R with data sets- create, read, write and R Tables- create, read, write.

11.	Manipulating and processing data in R- merging datasets, sorting data, putting data into shape, managing data using matrices managing data using data frames.
12.	Revision-II

Electrical Engineering

Measurements and Instrumentation Lab.			
Sr. No.	Equipment Setup Name	Experiment Name	Dead stock Number
1	LVDT	To Measure the unknown distance by using LVDT	ADCET/EE/IT/005
2	RTD	Temperature measurement by using RTD PT100	ADCET/EE/IT/003
3	Energy Meter	Calibration of single phase induction type energy meter	ADCET/EE/EM/50
4	CRO	Measurement of voltage, current, time period and frequency using CRO & frequency measurement by lissajous pattern	ADCET/EE/EM/141-144
5	Power Measurement	Active and reactive power measurement by using two wattmeter method	ADCET/EE/EM/56-65 ADCET/EE/EM/81-90 ADCET/EE/EM/101-106
6	Strain Gauge	Measurement of unknown weight by using Strain Gauge	ADCET/EE/IT/14
High Voltage Engineering Lab			
1	Transformer Oil test kit	To determine breakdown voltage of transformer oil	ADCET/EE/HV/11-12/01

2	0-5KV High Voltage Tester	5kV insulation test	ADCET/EE/HV/11-12/02
3	62.5mm sphere gap With Micrometer Scale & water resistor	Measurement of breakdown voltage of air using sphere gap assembly	
4	Electrolytic Tank With Electrodes & Control panel	Field Mapping using Electrolytic tank method	ADCET/EE/HV/11-12/05
5	150KV,225 Joules, 5 Stages Impulse Generator With	Study of impulse generator and to measure wave shape of impulse wave.	ADCET/EE/HV/11-12/06
6.	50 kV AC & 70 kV DC test set with Control Panel	Measurement of breakdown voltage of insulator	ADCET/EE/HV/11-12/04
Computer Lab. I			
1	PC, MATLAB, ETAP, LabView	Matrix Manipulation , Signal Manipulation & Plotting of Continuous and Discrete signals in MATLAB	ADCET/EE/COMP/41-60
2		Programming of Newton Raphson method to solve nonlinear equations using MATLAB Programming	
3		Simulation of Single Phase Transformer and evaluation of system performance	
4		Simulation and Analysis of AC-DC Converter (Rectifier) Using MATLAB	
5		Study of Logic Gates using LABVIEW	
6		Design of Single Line Diagram using AutoCAD	
7		Design of distribution transformer core using AutoCAD.	

8		Design of DC Motor armature using AutoCAD	
9		Design of Control Panel using AutoCAD	
10		Short Circuit Analysis of Transformer by using ETAP	
Computer Lab II			
1	PC, MATLAB Software	To solve non-linear (Differential) equations	ADCET/EE/COMP II/13-14/1-20
2		To solve numerical on dynamics of synchronous machine	
3		To solve numerical on multi machines power system	
4		To study methods of improving power system stability.	
5		To understand the power angle curve of SMIB system under transient instabilities	
6		To understand the natural response of the rotor angle and frequency of SMIB system under small disturbance.	
7	PC, MATLAB Software	To understand the application of equal area criteria to a critically cleared system.	ADCET/EE/COMP II/13-14/1-20
8		To understand the step response of automatic load frequency control (ALFC) system.	
9		To understand the step response of the automatic voltage regulator (AVR) of a generator.	

10		To find the optimal dispatch and the total cost in Rs/h of three thermal plants by neglecting line losses and generator limits.	
Computer Lab. III			
1	PC,AutoCAD 2004 software	Drawing Sheet on various parts of Electrical Machines	ADCET/EE/PRO./01--- 10, ADCET/EE/PRO./13- 14/16-20
2		Drawing Different types of core by using AutoCAD	
3		*Design Small Transformer by using MS Excel sheet	
4		Details and layout of AC winding with design report using Auto-CAD	
5		Details and layout of AC winding with design report using Auto-CAD	
6		Complete layout on core type Three Phase Transformer using Auto-CAD	
7		Repeat the above Practical	
8		Details and Complete Layout of D.C Machines using Auto-CAD	
9		Repeat the above Practical	
10		Design of Three Phase Induction Motor by using AutoCAD	
11		Repeat the above Practical	

12		Drawing sheet on stator and rotor Laminations	
13		Report based on Industrial visit to a manufacturing unit. (Transformer or Induction motor)	

Electrical Machine Lab			
1	3 Phase IM # DC Shunt Generator	1) Determination of Efficiency & Speed Regulation of 3 Ph.SCIM by Direct loading Method	ADCET/EE/MC/0100
2	3 Phase Slip Ring IM # DC Shunt Generator	1) Speed Control of 3 Ph. Slip Ring IM by Using Stator Voltage Control	ADCET/EE/MC/0100
3	3 Phase Induction Motor	1) Speed Control of 3 Ph. SCIM by Using Stator Voltage Control 2) Determination of Equivalent Circuit Parameter of 3 Ph.SCIM by Conducting No Load & Blocked Rotor Test	ADCET/EE/MC/0105
4	Universal Motor		ADCET/EE/MC/0104
5	Single Phase IM	1) Determination of Efficiency & Speed Regulation of 1Ph. IM by Direct loading Method	ADCET/EE/MC/0104
6	Three Phase Transformer	1) Load Test on Three	ADCET/EE/MC/0015,16,17

		Phase Transformer	
7	Single Phase Transformer	1) Load Test on Single Phase Transformer 2) Performance Open Circuit And Short Circuit Test on Single Phase Transformer	ADCET/EE/MC/0012,13,14
8	DC Compound Motor # DC Compound Generator		ADCET/EE/MC/0103
9	DC Shunt Motor	1) Speed Control of DC Shunt Motor by Armature Voltage Control / Rheostat Control & Flux Control	ADCET/EE/MC/0007
10	DC Shunt Motor # Compound Shunt Generator	1) Load Test on DC Shunt Motor	ADCET/EE/MC/0097 01-02
11	DC Shunt Motor # DC Shunt Generator	1) Determination of OCC Characteristics of DC Generator. 2) Swinburn Test	ADCET/EE/MC/0097 01-02
12	Three Phase Synchronous Motor # DC Shunt Generator	1) Determination of V & Inverted V Curve of Synchronous Motor.	ADCET/EE/MC/0099
13	DC Shunt Motor # Three Phase Alternator	1) Determination of Voltage Regulation of an Alternator by EMF Method. 2) Determination of Voltage Regulation of an Alternator by Direct Loading Method	ADCET/EE/MC/0098
14	Synchronizing Panel		ADCET/EE/MC/0081
Power electronics and Electrical Drives Lab			
1	DC Drive Trainer Kit	Microcontroller Based DC Drive Trainer	ADCET/EE/IDC/15

2	Chopper Motor Controller Kit	Chopper Controller Using MOSFET/IGBT	ADCET/EE/IDC/009 ADCET/EE/IDC/009
3	V/F Scheme	Three Phase IM Controller(V/F) Scheme Using IGBT	ADCET/EE/IDC/013
4	SPR Scheme	Three Phase IM Speed Control by SPR Scheme	ADCET/EE/IDC/004
5	Rectifier fed DC Drive	Three Phase Controlled Rectifier Fed DC Drive	ADCET/EE/PE/014
6	Chopper Control	Chopper Control of DC Series Motor	ADCET/EE/IDC/007
Control System Lab.			
1	Digital Control System-Simulation Kit	---	Adcet/Ee/Cs/01
2	Analog Simulation Kit To Study The Effect Of Compensation Lead & Lag Network Circuit Boards	--	Adcet/Ee/Cs/02- 1 Adcet/Ee/Cs/02- 2
3	Pid Controller Microprocessor Based Temp. Controller	To Perform Temperature Control Using Pid Controller	Adcet/Ee/Cs/03- 1 Adcet/Ee/Cs/03- 2
4	Bode Plot Trainer	To Perform Analysis Of System In Frequency Domain.	Adcet/Ee/Cs/04
5	Adc/Dac Interface For Pc With Serial Communication	Adc/ Dac Interfacing With 8085	Adcet/Ee/Cs/05
6	Closed Loop Control System Trainer Kit		Adcet/Ee/Cs/06
7	Stepper Motor Controller Stepper Motor Demonstration Unit Stepper Motor With Angular Displacement	To Perform Position Control Using Stepper Motor.	Adcet/Ee/Cs/07- 1 Adcet/Ee/Cs/07- 2
8	A)Lead Network B)Lag Network	To Perform Design Of Lead Compensator And Lag	Adcet/Ee/Cs/08- 1 Adcet/Ee/Cs/08- 2

		Compensator	
9	Linear System Simulator		Adcet/Ee/Cs/09
10	D.C.Voltage Regulator As A Closed Loop System A)Power Supply Unit With Dvm B) D.C.Voltage Regulator		Adcet/Ee/Cs/10- 1 Adcet/Ee/Cs/10- 2
11	Control Engg. Tutor		Adcet/Ee/Cs/11
12	Pid Control Of D.C. Motor A)D.C.Motor Speed Controller B)D.C.Servomotor With Break Load Arrangement	To Perform Speed Control Of Dc Motor Using Pid Controller.	Adcet/Ee/Cs/12-1 Adcet/Ee/Cs/12-2
13	Pid Simulator		Adcet/Ee/Cs/13
14	D.C. Position Control System	To Perform Position Control Of Dc Motor.	Adcet/Ee/Cs/14
Power System Lab			
1	Electromechanical overcurrent relay unit	Study and plot different characteristics of Electromechanical based over current relay	ADCET/EE/SWP/2011-12/1
2	Secondary current injection unit for over current relay unit	Study and plot different characteristics of Electromechanical based over current relay	ADCET/EE/SWP/2011-12/2
3	Microprocessor based over current relay unit	Study and plot different characteristics of microprocessor based over current relay	ADCET/EE/SWP/2011-12/3
4	Secondary current injection unit for over current relay	Study and plot different characteristics of microprocessor based over	ADCET/EE/SWP/2011-12/4

		current relay	
5	Electromechanical over voltage relay unit	Study and plot PSM vs Operating time characteristics of Electromechanical Overvoltage t relay	ADCET/EE/SWP/2011-12/5
6	Universal relay test kit	Study of unrestricted earth fault relay	ADCET/EE/SWP/2011-12/6
7	Microprocessor based over voltage & under voltage relay	Determine the microprocessor based over voltage relay characteristics Determine the microprocessor based undervoltage relay characteristics	ADCET/EE SWP/2011-12/7
8	Over voltage/under voltage relay test kit	Determine the microprocessor based over voltage relay characteristics Determine the microprocessor based undervoltage relay characteristics	ADCET/EE/SWP/2011-12/8
9	Microprocessor based impedance relay unit	Study and plot the characteristics of impedance relay	ADCET/EE/SWP/2011-12/09
10	Impedance relay test kit	Study and plot the characteristics of impedance relay	ADCET/EE/SWP/2011-12/10
11	Transmission line trainer kit unit	A) Ferranti effect B) Determination of Voltage regulation and efficiency of transmission line C) Demonstration of voltage regulation and power factor improvement	ADCET/EE/SWP/2011-12/11
12	Demo Panel of circuit breaker unit	Demonstration of LT side Circuit breaker operation	ADCET/EE/SWP/2011-12/12
13	Demo Panel of Relays & circuit breaker unit	Demonstration of Circuit breaker operation	ADCET/EE/SWP/2011-12/13

14	Power world software	Determination of Power flows Determination of parameters under fault condition	ADCET/EE/SWP/2011-12/14
Project Lab			
1	Three Phase Power Analyzer	Measurement of Voltage, Current, Harmonics etc	ADCET/05-06/22/ISD
Basic Electrical Engineering Lab			
1	RLC	Analysis of Series RLC Circuit	ADCET/EE/BEE/09 (9-11) (2013-14)
2	B-H Curve	To plot B-H Curve of Magnetic material	ADCET/EE/BEE/52 (52-54) (2013-14)
3	RLC	Analysis of Series RLC Circuit	ADCET/EE/BEE/88 (88-90) (2014-15)
4	B-H Curve	To plot B-H Curve of Magnetic material	ADCET/EE/BEE/91 (91-93) (2014-15)

Civil Engineering

List of Experimental Setup in Civil Laboratories

1) Engineering Geology

Sr. No.	Title of Experiment
1	Introduction, Objectives & outcomes of laboratory work.
2	Study of geological maps a)Single horizontal series,
3	Study of geological maps b)Single inclined series
4	Study of geological maps c)One horizontal and one inclined series
5	Study of geological maps d)Both series are inclined with sill
6	Study of geological maps e) Both series are inclined with dyke
7	Megascopic study of Rock forming minerals
8	Megascopic study of Ore forming minerals
9	Megascopic study of Igneous rocks
10	Megascopic study of Secondary rocks
11	Megascopic study of Metamorphic rocks

12	Study tour to the places of Engineering Geological importance
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2) Engineering Mechanics

List of Experiments	
Sr. No.	Title of Experiments
1	To verify law of polygon of forces using force table
2	To verify lami's theorem using force table
3	To verify law of moments by Bell crank lever
4	To calculate support reactions of beam
5	To compute centroid of plain lamina
6	To calculate coefficient of friction of different material surfaces
7	To find support reactions of a beam by graphical method
8	Assignments based on each unit

3) Transportation Engineering lab

Sr. No.	Title of Experiment
1	Impact Test on Aggregate
2	Abrasion Test on Aggregate
3	Crushing Test of Aggregate
4	Penetration Test on Bitumen
5	Softening Point Test on Bitumen
6	Flash and Fire point Test on Bitumen
7	Ductility Test on Bitumen
8	Velocity Test on Bitumen
9	Stripping Value Test
10	Flakiness and Elongation Index of Aggregate

4) Surveying

5) Material Testing Lab

Sr. No.	Title of Experiment
1	To determine Constants of Tacheometer.
2	To determine linear distance and elevation by Fixed Hair Method of Tacheometer
3	To determine area of polygon by Tacheometer
4	To determine gradient of line by Tacheometer.
5	To Setting Out Simple Curve by any one method of Survey (namely, Deflection Angle Method or Rankine's Method).
6	To Setting out transition curve
7	To determination of Reduced level by using Total station.
8	To Study GPS.
Project 1	Road project – at least 500m /cannel alignment of at least 1km by total station
Project 2	Radial contouring by using total station
Sr. No.	Title of Experiment
1	Study of Universal Testing Machine
2	Tensile Test on Mild Steel and TMT Steel
3	Compression Test on MS and C.I., Cement Bricks or Paving Blocks
4	Compression Test on Timber
5	Direct Shear Test on MS
6	Charpy or Izod Impact Test on Different Metals
7	Bending Test on MS Bar and Timber
8	Water Absorption and Compression Test on Burnt Bricks
9	Hardness Test on Metals
10	Torsion Test on Mild Steel

6) Fluid Mechanics Lab

Sr. No.	Title of Experiment
1	Study of Pressure Measuring Device
2	Calibration of Measuring Tank
3	Measurement of Discharge
4	Determination of Metacentric Height of Floating Bodies
5	Calibration of Venturimeter
6	Verification of Bernoulli's Theorem
7	Calibration of Orificemeter
8	Determination of Hydraulic Co-efficient of orifice.
9	Reynold's Experiment
10	Determination of Friction factor for given pipe
11	Determination of minor losses in a given pipe
12	Study of Moody's chart.

7) Environmental Engg. Lab

Sr. No.	Title of Experiment
1	Determination of pH of water
2	Determination of Acidity of Water
3	Determination of Alkalinity of Water
4	Determination of Chloride content of water
5	Determination of Hardness of Water
6	Determination of Turbidity of Water
7	Determination of Residual Chlorine in Water
8	Determination of Total Dissolved Solids
9	Determination of Dissolved Oxygen of Water
10	Determination of Most Probable Number of Water
11	Determination of Optimum Dose of Alum by Jar Test
12	Determination of BOD of Wastewater
13	Determination of COD of Wastewater

8) Geotechnical Engg. Lab

Sr. No.	Title of Experiment
1	Specific Gravity Determination by Pycnometer / density Bottle
2	Particle Size Distribution –Mechanical Sieve Analysis, Wet Sieve Analysis
3	Determination of Consistency Limits And Its use in soil Classification
4	Field Density Test by Core cutter , Sand Replacement Method
5	Determination of Co-efficient of Permeability by Constant Head and by Variable Head Method
6	Standard Proctor Test / Modified Proctor test
7	Direct Shear Test
8	Unconfined Compression Test
9	Triaxial Test
10	One Dimensional Consolidation Test

9) Concrete Technology Lab

Sr. No.	Title of Experiment
01	Standard Consistency test on cement.
02	Fineness test on cement
03	Soundness test on cement
04	Initial and final setting time of cement
05	Compressive strength on cement

06	Particle size distribution of fine and coarse aggregate
07	Determination of specific gravity of fine aggregates
08	Specific gravity and water absorption of coarse aggregates
09	To determine flakiness and elongation index of coarse aggregates
10	Workability of fresh concrete by slump cone
11	Compaction factor test on fresh concrete
12	Workability of fresh concrete by using Vee Bee Consistometer
13	Compressive strength on concrete

10) Basic Civil Engineering.

Sr. No.	Title of Experiment
1.	Plotting the outline of building by chaining, ranging and offsetting.
2.	Traversing by Compass.
3.	Determination of reduced levels for different points by HI method.
4.	Determination of reduced levels by rise and fall method.
5.	Measurement of area of irregular figure by mechanical and digital planimeter.
6.	Study of total station and Linear measurement.
7.	Angular measurement by using total station.
8.	Measurement of area by using total station.
9.	Visit to construction site and draw various building components.
10.	Draw a line plan of residential building by applying principles of planning.

Basic Science Department

LAB SETUP EQUIPMENTS AND EXPERIMENTS

Applied Physics Lab.			
Sr. No.	Equipment Setup Name	Experiment Name	Dead stock Number
1	Spectrometer	Use of 'plane diffraction grating' for determination of wavelength.	ADCET/PHY/SPECTRO-01./99-00/P-02/09 ADCET/PHY/SPECTRO-1-2./99-00/P-03/03

2	Spectrometer	Determination of resolving power of grating.	ADCET/PHY/SPECTRO-01./99-00/P-02/09 ADCET/PHY/SPECTRO-1-2./99-00/P-03/03
3	Polarimeter With One Glass Tube With Lorentz Half Shade	Use of 'Laurent's half shade polarimeter' to calculate specific rotation.	ADCET/PHY/PM/1-3/2009-10/P-9/13
4	Kund's Tube Set-up (with amplifier & frequency generator)	Determination of velocity of sound by using 'Kundt's tube'.	ADCET/PHY/K.T./01-02/2017-18/P-16/05
6	Laser source-2MW He-Ne Laser	Calculation of divergence of Laser beam.	ADCET/PHY/LS/1-10/2013-14/P-11/09
7	Laser beam	Determination of wavelength of Laser beam using plane diffraction grating.	ADCET/PHY/LD/1-2/2009-10/P-8/03
8	Inverse square Law Kit	Verification of 'Inverse square law'.	ADCET/PHY/IS/1-5/2009-10/P-8/06
9	Four Probe Method (Energy Band Gap) Kit	Measurement of 'band gap energy' of semiconductor.	ADCET/PHY/B.G.E./1-7/2013-14/P-12/17
10	Crystal models for Symmetry elements of cube Crystal Model Related to Miller Indices	Study of 'Fourteen Bravais Lattices'.	ADCET/PHY/S.C.M./1-10/2013-14/P-12/19 ADCET/PHY/M.C.M./1-10/2013-14/P-12/20

LAB SETUP EQUIPMENTS AND EXPERIMENTS

Applied Chemistry Lab.			
Sr. No.	Equipment Setup Name	Experiment Name	Dead stock Number
1	p ^H Meter-Digital	Determination of pH of sample solution.	ADCET/CHEM/DB1-2/14-15
2	Photo colorimeter	Demonstration of photo-colorimeter / spectrophotometer.	ADCET/CHEM/PC-2/2017-18

3	Muffle furnace	Determination of moisture, volatile and ash content in a given coal sample by proximate analysis.	ADCET/CHEM/ MF-1/2013-14
4	Digital balance	Preparation of phenol-formaldehyde resin.	ADCET/CHEM/DB1-2/14-15
5	Oven thermostatic	Determination of rate of corrosion of aluminium in acidic and basic medium.	ADCET/CHEM/07-08/447/GEN
6	Rough balance	Preparation of urea-formaldehyde resin.	ADCET/CHEM/RB-1
7	Electronic balance	Determination of rate of corrosion of aluminium in acidic and basic medium.	ADCET/CHEM/EB-01-02

LAB SETUP EQUIPMENTS AND EXPERIMENTS

Professional Communication-Language Laboratory			
Sr. No.	Equipment Setup Name	Experiment Name	Dead stock Number
1	Language Lab Session I	Language Lab Software (ETNL)	(ADCET/09-10/ETNL SOFT/BS)
2	Language Lab Session II	Language Lab Software (SANAKO)	(ADCET/13-14/SANAKO SOFT/BS)

10.15 Computing Facility

Sr. No.	Name of Facilities	Qty
1	Internet Bandwidth	155 Mbps

		ISP Gazon india ltd.
2	Number and Configuration of System	886
	Configuration of System	Dell Optiplex 3020 (i5)
		Dell Optiplex 380 (C2D)
		Dell Optiplex 390 (i3)
		Dell Optiplex 390 (C2D)
		Dell Optiplex 3010 (DC)
		Dell Optiplex 3020 (i3)
		Dell Optiplex 3020 (DC)
		Dell Optiplex 3040 (i3)
		Dell Optiplex 3020 (DC)
		Dell Optiplex 3050 (i3)
		Dell T110 / 710 Server
		Dell Server T 20
		Dell Server Workstation
		Dell Server T 410
		HP Server ProLiant DL60
3	Total number of system connected by LAN	886
4	Total number of system connected by WAN	500
5	Major software packages available	Yes
6	Special Purpose facilities available	Yes

10.15 Teaching & Learning Process

Curricular and syllabus for each programmes as approved bu University



Annasaheb Dange College of Engineering and Technology, Ashta
(An Autonomous Institute)

Structure and Curriculum
F.Y. B. Tech.
Academic Year 2017-2018

Teaching and Evaluation Scheme
B. Tech: Semester I (Physics Group)
(Common to All Branches)

Course Code	Course	Teaching Scheme				Evaluation Scheme				
		L	T	P	Credits	Scheme	Theory (Marks)		Practical (Marks)	
							Max	Min. for Passing	Max	Min. for Passing
0BSB S101	Applied Physics	3	-	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0BSB S102	Applied Mathematics I	3	-	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0BSE S103	Basic Electrical Engineering	3	-	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0BSE S104	Basic Civil Engineering	3	-	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0BSE S105	Engineering Graphics	3	-	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0BSH S106	Professional Communication	2	-	--	2	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0BSB S107	Applied Mathematics I Tutorial	--	1	--	1	ISE	--	--	25	10
0BSE S151	Workshop Practice I	--	-	2	1	ISE	--	--	50	20
0BSB S152	Applied Physics Laboratory	--	-	2	1	ISE	--	--	25	10
0BSE S153	Basic Electrical Engineering Laboratory	--	-	2	1	ISE	--	--	25	10
0BSE S154	Basic Civil Engineering	--	-	2	1	ISE	--	--	25	10

OBSE S155	Engineering Graphics Laboratory	--	- -	2	1		ISE	--	--	25	10
OBSH S156	Professional Communication Laboratory	--	- -	2	1		ISE	--	--	25	10
Total		1	1	1	24			600		200	
Total Contact Hours/Week: 30 hrs											

Course Category	HS	BS	ES	PC	PE	OE	MC	AC
Credits	3	8	13	--	--	--	--	--
Cumulative Sum	3	8	13	--	--	--	--	--

Teaching and Evaluation Scheme
B. Tech: Semester I (Chemistry Group)

Course Code	Course	Teaching Scheme				Evaluation Scheme				
		L	T	P	Credits	Scheme	Theory (Marks)		Practical (Marks)	
							Max	Min. for Passing	Max	Min. for Passing
OBSB S108	Applied Chemistry	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
OBSB S102	Applied Mathematics I	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
OBSE S109	Basic Electronic Engineering	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
OBSE S110	Engineering Mechanics	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
OBSE S111	Basic Mechanical Engineering	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
OBSE S112	Computer Programming	2	--	--	2	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--

						ESE	50		--	--
0BSB S107	Applied Mathematics I Tutorial	--	1	--	1	ISE	--	--	25	10
0BSE S157	Basic Electronic Engineering	--	--	2	1	ISE	--	--	50	20
0BSB S158	Applied Chemistry Laboratory	--	--	2	1	ISE	--	--	25	10
0BSE S159	Engineering Mechanics	--	--	2	1	ISE	--	--	25	10
0BSE S160	Basic Mechanical Engineering	--	--	2	1	ISE	--	--	25	10
0BSE S161	Computer Programming	--	--	4	2	ISE	--	--	50	20
Total		1	1	1	24		600		200	
Total Contact Hours/Week: 30 hrs										

Course Category	HS	BS	ES	PC	PE	OE	MC	AC
Credits	0	8	16					
Cumulative Sum	0	8	16					

Teaching and Evaluation Scheme
B. Tech: Semester II (Physics Group)

Course Code	Course	Teaching Scheme				Evaluation Scheme				
		L	T	P	Credits	Scheme	Theory (Marks)		Practical (Marks)	
							Max	Min. for Passing	Max	Min. for Passing
0BSB S101	Applied Physics	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0BSB S113	Applied Mathematics II	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0BSE S103	Basic Electrical Engineering	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0BSE S104	Basic Civil Engineering	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0BSE S105	Engineering Graphics	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--

						ESE	50		--	--
0BSH S106	Professional Communication	2	--	--	2	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0BSB S114	Applied Mathematics II	--	1		1	ISE	--	--	25	10
0BSE S151	Workshop Practice I	--	--	2	1	ISE	--	--	50	20
0BSB S152	Applied Physics Laboratory	--	--	2	1	ISE	--	--	25	10
0BSE S153	Basic Electrical Engineering	--	--	2	1	ISE	--	--	25	10
0BSE S154	Basic Civil Engineering	--	--	2	1	ISE	--	--	25	10
0BSE S155	Engineering Graphics Laboratory	--	--	2	1	ISE	--	--	25	10
0BSH S156	Professional Communication Laboratory	--	--	2	1	ISE	--	--	25	10
Total		1	1	1	24		600		200	
Total Contact Hours/Week: 30 hrs										

Course Category	HS	BS	ES	PC	PE	OE	MC	AC
Credits	3	8	13					
Cumulative Sum	3	16	29					

Teaching and Evaluation Scheme
B. Tech: Semester II (Chemistry Group)

Course Code	Course	Teaching Scheme				Evaluation Scheme				
		L	T	P	Credits	Scheme	Theory (Marks)		Practical (Marks)	
							Max	Min. for Passing	Max	Min. for Passing
0BSB S108	Applied Chemistry	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0BSB S113	Applied Mathematics II	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--

OBSE S109	Basic Electronic Engineering	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
OBSE S110	Engineering Mechanics	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
OBSE S111	Basic Mechanical Engineering	3	--	--	3	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
OBSE S112	Computer Programming	2	--	--	2	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
OBBS S114	Applied Mathematics II	--	1	--	1	ISE	--	--	25	10
OBSE S157	Basic Electronic Engineering	--	--	2	1	ISE	--	--	50	20
OBBS S158	Applied Chemistry Laboratory	--	--	2	1	ISE	--	--	25	10
OBSE S159	Engineering Mechanics	--	--	2	1	ISE	--	--	25	10
OBSE S160	Basic Mechanical Engineering	--	--	2	1	ISE	--	--	25	10
OBSE S161	Computer Programming	--	--	4	2	ISE	--	--	50	20
Total		1	1	12	24		600		200	
Total Contact Hours/Week: 30 hrs										

Course Category	HS	BS	ES	PC	PE	OE	MC	AC
Credits	0	8	16					
Cumulative Sum	3	16	29					

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSBS101 Applied Physics
Prerequisite/s	---
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10 / 30 / 10 / 50

Course Objectives: The course aims to	
01	Explain basic concepts of Physics in optics and sound waves.
02	Make students aware of the importance of physics in today's developing world and growing society.
03	Provide knowledge and problem solving skills in the classroom learning environment.

Course Outcomes (COs): After successful completion of this course, the student will be able to:	
0BSBS101_1	Describe different concepts related to diffraction, polarization, ultrasonic's, acoustics, laser and optical fibre. (2 nd cognitive level)
0BSBS101_2	Explain various phenomenon and properties in nuclear energy, crystallography and nano physics. (2 nd cognitive level)
0BSBS101_3	Derive formulae related to optics, acoustic and crystallography. (2 nd cognitive level)
0BSBS101_4	Calculate energy released in nuclear reactions like fission and fusion. (3 rd cognitive level)
0BSBS101_5	Solve relevant problems in optics, acoustic and crystallography. (3 rd cognitive level)

Course Contents:		Hrs.
Unit 1	Diffraction and Polarization : I) Diffraction: Introduction, Propagation of electromagnetic waves, Plane diffraction grating:- construction, theory, determination of wavelength, resolving power, Numerical. II) Polarization: Introduction, Concept of Polarization, Brewster's Law, Malus law, Huygen's theory of double refraction (positive and negative crystals, ordinary and extraordinary rays), Optical activity, Laurent's half shade Polarimeter, Numerical.	07
Unit 2	Ultrasonic and Architectural acoustics: I) Ultrasonic waves: Introduction, Production of ultrasonic waves (magnetostriction method), Detection, Properties, Determination of wavelength and velocity and applications of ultrasonic waves, Numerical. II) Architectural Acoustics: Introduction, Basic requirement for the acoustically good halls, Reverberation, Reverberation time, Absorption coefficient, Sabine's formula (no derivation), Factors affecting architectural acoustics and their remedies, Numerical.	07
Unit 3	Laser and Fibre Optics : I) Laser: Introduction, Basic concepts of Laser:- Absorption, spontaneous emission, stimulated emission, pumping, population inversion. Characteristics of laser, Solid State laser, Applications of laser, Holography (construction and reconstruction). II) Optical fibre: Introduction, Basic principle (total internal reflection), Structure of optical fibre, Propagation of light through clad fibre, Acceptance angle and acceptance cone (no derivation), Numerical aperture (no derivation), Classification of optical fibre, Advantages and disadvantages of optical fibre, Applications of optical fibres, Numerical.	07

Unit 4	Nuclear Energy: I) Fission: Introduction, Discovery, Energy released by 1 Kg. of ${}_{92}\text{U}^{235}$, Chain reaction, Explosive chain reaction and critical size, Nuclear reactor (essentials and their classification) Numerical. II) Fusion: Introduction, Stellar thermonuclear reactions (P-P chain and C-N cycle), Conditions for fusion reaction, Fusion power reactor, Distinguish between fission and fusion.	07.
Unit 5	Solid State Physics : Crystallography: Introduction, Unit cell, Bravais lattices, Properties of unit cell (number of atoms per unit cell, coordination number, atomic radius, packing fraction), Calculation of lattice constant, Symmetry elements in cube, Miller indices:- Procedure, Features and Sketches for different planes, X-ray diffraction (Laue method), Bragg's law, X-ray diffractometer, Numerical.	07
Unit 6	Nano Physics : Introduction, Concept of nanotechnology, Production techniques:- Top-down (eg. Ball milling) and Bottom-up (eg. Sol-gel process), Tools – Scanning Electron Microscope (SEM) and Atomic Force Microscope (AFM), Applications of nano-materials, Carbon Nano Tube (CNT):- Structure, two types, properties and applications.	07

Text Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
1	Engineering Physics	P. K. Palanisamy	Sci Tech pub. (P) Ltd.	2 nd	2009
2	Engineering Physics	G Vijayakumari	Vikas Pub. House (P) Ltd	3 rd	2009
3	A Text Book of Engineering Physics	M.N.Avadhanulu & P. G. Kshirsagar	S. Chand Publication.	12 th	2006
4	Introduction to Nano science and Nanotechnology:	K.K. Chattopadhyay and A.N. Banerjee,	PHI Learning	3 rd	2009

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
1	Engineering Physics	R. K. Gaur & Gupta S. L	Dhanapat Rai Publication	8 th	2008
2	Engineering Physics	Resnick Halliday, Krane,	John Wiley & Sons Pub.	8 th	2008
3	Introduction to Solid State Physics	Charles Kittel,	Wiley India Pvt. Ltd	7 th	2008
4	Solid State Physics:	S. O. Pillai	New Age International Ltd.	6 th	2007

5	Materials Science and Engineering –	V. Raghvan,	PHI Learning.	5 th	2006
6	Engineering Physics:	D.K. Bhattacharya and A.Bhaskaran,	Oxford University Press	6 th	(2010)

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSBS152 Applied Physics Laboratory
Prerequisite/s	--
Teaching Scheme: Practical/Tutorial	02/00
Credits	01
Evaluation Scheme: ISE /ESE	25/00

Laboratory Objectives : The students carrying out experiments are expected to,

1	Determine band gap energy, lattice constant and refractive index of water.
2	Calculate various properties of light and laser such as wavelength, divergence, intensity and specific rotation.
3	Perform experimental task and obtain final results as per instructions by faculty.
4	Obtain and interpret experimental results individually.
5	Complete desired task and respond to the instructions by faculty.

Laboratory Outcomes : The students will be able to

0BSBS152_1	Calculate band gap energy, lattice constants of crystal and refractive index of water. (2 nd cognitive level)
0BSBS152_2	Apply various optical formulae to determine wavelength, Divergence, Intensity and Specific rotation of light. (3 rd cognitive level)
0BSBS152_3	Follow written or verbal instructions to carry out experimental task in Applied Physics Laboratory. (1 st Psychomotor Domain)
0BSBS152_4	Perform the experimental task individually in laboratory and interpret the results. (2 nd Psychomotor Domain)
0BSBS152_5	Respond willingly to question asked by faculty. (2 nd Affective Domain)

LIST OF EXPERIMENTS

Expt. No	Title of the Experiment
1	Plane Diffraction Grating
2	R.P. of Grating
3	R.P. of telescope
4	Laurent's Half Shade Polarimeter
5	Kund's tube for determination of velocity of sound
6	Divergence of The LASER Beam
7	Wavelength of LASER

8	Inverse Square Law
9	Band Gap of Semiconductor
10	Seven Crystal System
11	Symmetry Element of Cube
12	Angle of deviation of prism
13	Double Refraction
14	R.I. of water using microscope

Minimum Eight experiments should be performed from the list.

Course Details:

Class	F.Y. B. Tech Sem.-I
Course Code and Course Title	0BSBS102 Applied Mathematics I
Prerequisite	---
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISEI/ MSE/ISEII/ESE	10/30/10/50

Course Objectives: The course aims	
01	To develop mathematical logical thinking power of students.
02	To produce graduates with mathematical knowledge, computational skills and the ability to deploy these skills effectively in the solution of problems in the area of engineering.
03	To teach mathematical methodologies to provide students with skills in linear algebra, complex numbers and infinite series which would enable them to devise engineering solution for given situations they may encounter in their profession.

Course Outcomes : After successful completion of this course, the students will be able to:	
0BSBS102_1	Reduce matrices to normal and echelon form and apply the concept of rank of a matrix to solve system of linear equations. (3 rd Cognitive level)
0BSBS102_2	Utilize the knowledge of vector space, subspace and examine the dependence and independence of vectors. (3 rd Cognitive level)
0BSBS102_3	Identify Eigen values and make use of it for finding Eigen vectors and use Cayley-Hamilton theorem to find higher power of matrix. (3 rd Cognitive level)
0BSBS102_4	Solve problems involving complex numbers making use of different forms and properties of complex numbers, hyperbolic functions. (3 rd Cognitive level)
0BSBS102_5	Apply Taylor theorem to find the expansion of functions and identify the indeterminate forms. (3 rd Cognitive level)
0BSBS102_6	Identify the convergence of infinite series. (3 rd Cognitive level)

Course Contents:		Hrs.
Unit1	Matrices and Solution of Linear System Equations: Rank of Matrix: Definition, Normal form, Echelon form, Consistency of linear system of	06

	Equations.	
Unit2	Vector Spaces: Vector spaces, subspaces, orthogonal vectors, linear dependence and independence of vectors, basis, dimension, four fundamental subspaces, linear transformation.	07
Unit3	Eigen Values and Eigen Vectors: Eigen values, Properties of Eigen values, Eigen vectors, Properties of Eigen vectors, quadratic forms, Cayley-Hamilton Theorem, Inverse and Higher powers of matrix using Cayley-Hamilton's theorem.	08
Unit4	Complex Numbers: De Moivre's Theorem, Roots of complex numbers, Expansion of $\sin n\theta$ and $\cos n\theta$ in powers of $\sin\theta$ and/or $\cos\theta$, Circular functions of a complex variable—definitions, Hyperbolic Functions, Relation between Circular & Hyperbolic functions, Inverse Hyperbolic Functions, Separation into real and imaginary parts.	08
Unit5	Expansion of Functions (One Variable) and Indeterminate Forms: Maclaurin's theorem, Taylor's theorem, Standard expansions, Expansion of function in power series by using Standard series method, Indeterminate forms and L' Hospital's rule.	06
Unit6	Infinite Series: Introduction of sequence and series, comparison test, Integral test, D'Alemberts Ratio test, Raabe's test, Logarithmic test, Cauchy's Root test.	07

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Higher Engineering Mathematics	Dr. B. S Grewal	Khanna Publishers	40 th	2010
02	Advanced Engineering Mathematics	N. P. Bali, Manish Goyal	Infinity science press	7 th	2010
03	Advanced Engineering Mathematics	Erwin Kreyszig	Wiley Publishers	9 th	2013
04	Advanced Engineering Mathematics	H. K. Das	S. Chand	19 th	2010
05	Linear Algebra and Its Applications	Gilbert Strang	Thomson Publication (USA)	4 th	2006
06	Linear Algebra	Seymour Lipschutz, Marc Lars Lipson	McGraw-Hill	4 th	2009

Note: - Refer the following books for respective unit.

1. Higher Engineering Mathematics by Dr. B. S. Grewal for Unit no.- 1, 3, 4, 5 & 6
2. Linear Algebra and Its Applications by Gilbert Strang or Linear Algebra by

Course Details:

Class	F.Y. B. Tech Sem.-I
Course Code and Course Title	0BSBS107 Applied Mathematics-I Tutorial
Prerequisite	---
Teaching Scheme: Practical/Tutorial	00/01
Credits	01
Evaluation Scheme: ISE/ESE	25/00

Laboratory Objectives: The course aims	
01	To develop mathematical logical thinking power of students.
02	To produce graduates with mathematical knowledge, computational skills and the ability to deploy these skills effectively in the solution of problems in the area of engineering.
03	To teach mathematical methodologies to provide students with skills in liner algebra, complex numbers and infinite series which would enable them to devise engineering solution for given situations they may encounter in their profession.

Course Outcomes : After successful completion of this course, the students will be able to:	
0BSBS107_1	Reduce matrices to normal and echelon form and apply the concept of rank of a matrix to solve system of linear equations. (3 rd Cognitive level)
0BSBS107_2	Utilize the knowledge of vector space, subspace and examine the dependence and independence of vectors. (3 rd Cognitive level)
0BSBS107_3	Identify Eigen values and make use of it for finding Eigen vectors and use Cayley-Hamilton theorem to find higher power of matrix. (3 rd Cognitive level)
0BSBS107_4	Solve problems involving complex numbers making use of different forms and properties of complex numbers, hyperbolic functions. (3 rd Cognitive level)
0BSBS107_5	Apply Taylor theorem to find the expansion of functions and identify the indeterminate forms. (3 rd Cognitive level)
0BSBS107_6	Identify the convergence of infinite series. (3 rd Cognitive level)

List of Tutorials

Sr. No.	Title of Tutorials
1	Matrices and Solution of Linear System of Equations
2	Vector spaces
3	Eigen Values and Eigen Vectors–I
4	Eigen Values and Eigen Vectors -II
5	Complex Numbers
6	Hyperbolic Functions
7	Expansion of Functions (One Variable) and Indeterminate Forms
8	Infinite Series

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSES103 Basic Electrical Engineering
Prerequisite/s	--
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10/30/10/50

Course Educational Objectives(CEOs): The course aims to:

01	To explore the students with the field of Electrical Engineering
02	To frame and solve problems on electric and magnetic circuits
03	To introduce concepts in single phase and three phase AC circuits
04	To explain the prerequisites of electrical machines and correlations of electric and magnetic circuits.
05	To describe the construction, working and characteristic of electrical Machines viz. transformer, DC Motor and single phase AC Motor

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:

0BSES103_1	Define various terms related to electric & magnetic circuits. (1 st Cognitive Level)
0BSES103_2	State the significance of power factor improvement in single phase AC system. (1 st Cognitive Level)
0BSES103_3	Express the relations of line and phase quantities in balanced star and delta connected three phase system. (2 nd Cognitive Level)
0BSES103_4	Explain working principle, construction & applications of transformer, DC Motor, single phase AC motor & universal motor (2 nd Cognitive Level)
0BSES103_5	Apply conceptual understanding to solve numerical related to DC circuits, energy conversions, magnetic circuits, single phase AC circuits, transformer. (3 rd Cognitive Level)

Course Contents		Hrs.
Unit 1	DC Circuits Definitions: EMF, Current, Work, Power, Energy, Ohm's Law, Temperature Coefficient of Resistance, Voltage & Current Source, Kirchhoff's Law, Analysis of DC Circuit using KCL & KVL, Conversion between Electrical, Mechanical & Thermal quantities	8
Unit 2	AC Circuits A. Single Phase A.C Circuit: Faraday's law of Electromagnetic Induction, Generation of Sinusoidal voltage, RMS value, Average value, Form Factor, Peak factor, phasor representation of AC quantities R, L, C, R-L, R-C, R-L-C	10

	series circuit, R-L & R-L-C parallel circuit, Power, Power factor, power factor improvement by shunt capacitor. B. Three Phase A.C Circuit: Generation of three phase A.C voltage, Balanced three phase system, Relation between line and phase quantities.	
Unit 3	Magnetic Circuit: Concept of Magnetic Circuit and Definition, Comparison between Electric and Magnetic Circuit, Series magnetic circuit, Magnetization (B-H curve), Magnetic Leakage and Fringing	5
Unit 4	Single Phase Transformer: Working principle, construction, Types, EMF equation, Transformer ratio, operation of transformer on no load and on load, losses, efficiency and voltage regulation, Transformer testing.	9
Unit 5	DC Motor Working principle, construction, Back EMF, Necessity of starters, Types of Starters, characteristics (T-N), equation of torque, speed control methods, application.	5
Unit 6	Single Phase AC Motor Operating principle, Construction, Double field revolving theory, Types: Split phase I.M, Shaded pole I.M, Universal Motor: Construction, operating principle, application.	5

Text Books:			
Sr. No	Title	Author	Publisher
01	Fundamentals of Electrical Technology	V. K. Mehta	S. Chand Publications, New Delhi
02	A Textbook of Electrical Technology	B L Theraja & A K Theraja	S. Chand Publications, New Delhi

Reference Books:			
Sr. No	Title	Author	Publisher
1	Electrical Engineering Concepts and Applications	PV Prasad & S. Shivanaraju	CENGAGE Learning
2	Fundamentals of Electrical Engineering	Bharati Dwivedi, Anurag Tripathi	Wiley
3	Electrical Engineering Fundamental	Vincent Del Toro	Pearson Publication
4	Basic Electrical Engineering	I.J. Nagrath, D. P. Kothari	Tata McGraw Hill
5	Fundamentals of Electrical Engineering	Ashfaq Husain	Dhanpat Rai & co.
6	Basic Electrical & Electronics Engineering	S. K. Bhattacharya	Pearson Publication

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSES153 Basic Electrical Engineering Laboratory
Prerequisite/s	--

Teaching Scheme: Practical /Tutorial	02/00
Credits	01
Evaluation Scheme: ISE/ESE	25/00

Laboratory Education Objectives (LEOs): Course aims to	
01	To explain safety precautions in electrical engineering practices
02	To familiarize with electrical components and equipment & their testing
03	To outline working of different electrical measuring equipment
04	To perform hands on experiments with electrical appliances
05	To relate mathematical treatments (Laws and Theorems) with real world case studies

Laboratory Outcomes (LOs): Upon completion of this course students will be able to	
0BSES153_1	Identify electrical components & equipment (1 st Cognitive Level)
0BSES153_2	Practice safety precautions required for electrical engineering practices. (2 nd Cognitive Level)
0BSES153_3	Perform the measurement of different electrical parameters with appropriate measuring instruments. 3 rd Cognitive Level)
0BSES153_4	Perform different tests and evaluate performance parameters of Transformer. (3 rd Cognitive Level)
0BSES153_5	Correlate the observations and results of experiment with different laws and theorem. (3 rd Cognitive Level)

Expt. No	Title of Experiment
1	Study of laboratory tools, symbols, measuring instruments, Energy meter
2	Electrical Safety Precaution and Earthing
3	Wiring Circuits and Single line diagram
4	Lamps and illumination Schemes
5	Kirchhoff's Voltage and Kirchhoff's Current Law
6	RTD PT-100 with Wheatstone bridge for temperature measurement
7	RLC series Circuit
8	Power Factor improvement
9	B-H curve for magnetic material
10	Transformer Testing
11	Three Phase power measurement
12	Electrical Appliances
13	Study of solar PV system for home lighting

Any ten experiments should be performed from above listed table.

Self-learning content for students:

Study of different Renewable Energy Sources and its environmental impact, Single line diagram of power system, construction and working of Fuse, MCB, different types of Batteries, Electricity Bill.

Note: The assessment of above listed self-learning content will be based on oral exam of each student.

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSES104, Basic Civil Engineering
Prerequisite	--
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10/30/10/50

Course Objectives The course aims	
1	To understand the scope of civil engineering and suitability of materials for construction.
2	To apply surveying, leveling techniques with the help of various instruments.
3	To discuss principles of planning with building byelaws and Property transaction.
4	To understand various building components.
5	To understand fundamentals of Transportation, Environmental and Irrigation Engineering

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:	
0BSES104_1	Describe scope of civil engineering and suitability of materials for construction (2 nd Cognitive Level)
0BSES104_2	Apply the knowledge of surveying techniques. (3 rd Cognitive Level)
0BSES104_3	Discuss the principles of planning with building bye laws and property transaction. (2 nd Cognitive Level)
0BSES104_4	Explain various building components. (2 nd Cognitive Level)
0BSES104_5	Discuss fundamentals of Transportation, Environmental and Irrigation Engineering. (2 nd Cognitive Level)

Course Contents:		Hrs.
Unit 1	Introduction to Civil Engineering and Building Materials Introduction, branches of civil engineering, application of civil engineering in other allied fields, Role of civil engineer in various construction activities. Use and properties of the following materials: Bricks, Steel, Aluminum, Cement, Aggregate, Plastic. Concrete - Ingredient, grades of concrete. Introduction to Plain and Reinforced Cement Concrete, Pre stressed, Precast, Post tensioned and Ready Mix Concrete.	09

Unit 2	Surveying Principles of surveying, Classification of surveys, Chain Surveying Introduction to metric chain and tapes, correction in tape, ranging. Measurement of horizontal angle: Meridian, bearing and its types, system of bearing, Types of compass, Calculation of included angles, correction for local attraction.	07
Unit 3	Leveling and Advanced surveying instrument Terms used in leveling, leveling instruments, methods of reduction of levels, types of leveling. Contours: Characteristics of contours use of contour maps. Measurement of area by Planimeter: Mechanical and Digital. Introduction to EDM and Total station.	07
Unit 4	Building Planning and Property Transaction Principles of planning. Building bye laws - building line, Height of building, Open space requirements, FSI. Introduction to Property Transaction: Documents, flow chart.	05
Unit 5	Building Components Introduction to types of structures - load bearing and framed structures, types of loads Sub-structure Elements of sub structure and their functions, types of soil and rocks, concept of bearing capacity, types of foundations i.e. shallow and deep and their suitability. Super-structure Elements of super-structures and their functions	07
Unit 6	Introduction to Transportation, Environmental and Irrigation Engineering Components of rigid and flexible pavement, Cross section of road in cutting and filling, components of railway track (Broad Gauge), Components of water supply scheme (flow diagram), Green building concept and rating system. Introduction to Gravity and Earthen Dam.	07

Text Books					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Basic Civil Engineering	G. K. Hiraskar	Dhanpatrai Publications	First	2008
02	Surveying	N. Basak	Tata Mac Graw Hill., Publications	First	2008
03	Basic Civil Engineering	S. S. Bhavikatti	New Age International Publications	Second	2003
04	Surveying Vol. I, II, II	B. C. Punmia	Laxmi Publications	Second	2001

Reference Books

Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Civil Engineering Handbook	P.N.Khanna	Engineer's Publishers	17 th	1999
02	The A To Z of Practical Building Construction and its Management	Sandeep Mantri	Satya Prakashan	1 st	2010
03	Advanced Surveying: Total Station, GIS and Remote Sensing	Satheesh Gopi, R. Sathikumar, N. Madhu	Pearson Education India;	1 st	2006
04	Engineering Surveying	Schofield W.	Taylor and francies	6 th	2007
05	Surveying	A.Bannister, S.Raymond, R.Baker	Pearson	7 th	2002

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSES154, Basic Civil Engineering Laboratory
Prerequisite	--
Teaching Scheme: Practical /Tutorial	02/00
Credits	01
Evaluation Scheme: ISE	25/00

Laboratory Objectives:- The course aims	
C-I	To locate building outline by using chaining, ranging and offsetting.
C-II	To study working and use of compass.
C-III	To study working and use of dumpy level .
C-IV	To measure area of an irregular shape of figure.
C-V	To understand working of Total Station.
C-VI	To discuss various building components.
C-VII	To understand and apply principles of planning.

Laboratory Outcomes (COs):- Upon completion of this course, students will be able to		
1	Draw building outline by using chaining, ranging and offsetting.	(3 rd Cognitive Level)
2	Calculate corrected included angles of traverse by compass.	(3 rd Cognitive Level)
3	Calculate reduced levels of different points by leveling.	(3 rd Cognitive Level)
4	Compute the area of an irregular shape of figure mechanical and digital Planimeter.	(3 rd Cognitive Level)
5	Calculate linear and angular measurement by Total Station.	(3 rd Cognitive Level)

6	Identify various building components. (2 nd Cognitive Level)
7	Draw line plan of residential building by applying principles of planning. (3 rd Cognitive Level)

List of Experiments	
Sr. No.	Experiments
1	Plotting the outline of building by chaining, ranging and offsetting.
2	Traversing by Compass.
3	Determination of reduced levels for different points by HI method.
4	Determination of reduced levels by rise and fall method.
5	Measurement of area of irregular figure by mechanical and digital planimeter.
6	Study of total station and Linear measurement.
7	Angular measurement by using total station.
8	Measurement of area by using total station.
9	Visit to construction site and draw various building components.
10	Draw a line plan of residential building by applying principles of planning.

Course Details:

Class	B. Tech, Sem.-I & II
Course Code and Course Title	0BSES105 Engineering Graphics
Prerequisite/s	--
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10/30/10/50

Course Objectives: The course aims	
01	To explain the basic knowledge of drawing, drawing tools and methods of projection.
02	To explain the application of drawing in different disciplines of engineering.
03	To develop skills in extracting information from schematic diagrams to produce different drawings

Course Outcomes: Upon successful completion of this course, the student will be able to		
0BSES105_1	Explain basic concepts in drawing and its application.	(2 nd Cognitive Level)
0BSES105_2	Sketch projection of simple geometries.	(3 rd Cognitive Level)
0BSES105_3	Sketch projection of solids.	(3 rd Cognitive Level)
0BSES105_4	Prepare sectional views of solids & develop the lateral surfaces of solids.	(3 rd Cognitive Level)
0BSES105_5	Sketch the Orthographic projections.	(3 rd Cognitive Level)
0BSES105_6	Prepare the Isometric view of simple objects.	(3 rd Cognitive Level)

Course Contents:		Hrs.
Unit 1	Fundamentals of Engineering Graphics and Engineering Curves A) Fundamentals of Engineering Graphics: Introduction to Drawing instruments and their uses. Different types of lines used in drawing practice, Dimensioning system as per BSI (Theoretical treatment only) B) Engineering curves: Construction of regular Polygons up to hexagon). Ellipse, Parabola, Hyperbola, Involute, Archimedian spiral and Cycloid only.	06
Unit 2	Projections of Lines and Planes A) Projections of Lines: Introduction to First angle and third angle methods of projection. Projections of points on regular and auxiliary reference planes. Projections of lines (horizontal, frontal, oblique and Profile lines) on regular and auxiliary reference planes. True length of a line, Point View of a line, angles made by the line with reference planes. Projections of intersecting lines, Parallel lines, perpendicular lines, and skew lines. Grade and Bearing of a line. B) Projections of Planes: Projections on regular and on auxiliary reference planes. Types of planes (horizontal, frontal, oblique and Profile planes), Edge view and True shape of a Plane. Angles made by the plane with Principle reference planes. Projections of plane figures inclined to both the planes. (Circle & regular polygon).	09
Unit 3	Projections of Solids Projections of Prisms, Pyramids, Cylinder and Cones inclined to both reference planes. (Excluding Frustum and Sphere)	06
Unit 4	Orthographic Projections Lines used, selection of views, spacing of views, dimensioning and sections. Drawing required views from given pictorial views (conversion of pictorial views in to orthographic views), including sectional orthographic views.	07
Unit 5	Isometric Projections Introduction to isometric. Isometric scale, Isometric projections and Isometric views /drawings. Circles in isometric view. Isometric views of simple solids and objects.	06
Unit 6	Sections of Solids and Development of surfaces: Sections of solids: Prisms, Pyramids, Cylinders and Cones in simple positions and inclined to one reference plane and parallel to other. Development of plane and curved surfaces: Prisms, Pyramids, Cylinders and Cones along with cutting planes.	08

Text Books					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Engineering Drawing,	N. D. Bhatt	Charotor Publication House, Bombay	53 rd	2014
02	Engineering Drawing	Dhananjay A. Jhole	Tata McGraw Hill International	5 th	2011

Reference Books					
Sr. No	Title	Author	Publisher	Edition	Year of

					Edition
01	Engineering Drawing and Graphics	K. Venugopal	New Age Publication	5 th	2004
02	Machine Drawing	K. L. Narayana	New Age Publication	3 rd	2006
03	Engineering Drawing	N. B. Shaha and B. C. Rana	Pearson Education	2 nd	2012
04	Fundamentals of Engineering Drawing	W. J. Luzadder	Prentice Hall of India.	1 st	1964

Course Details:

Class	B. Tech, Sem.-I & II
Course Code and Course Title	0BSES155, Engineering Graphics Laboratory
Prerequisite/s	---
Teaching Scheme: Practical/Tutorial	02/00
Credits	01
Evaluation Scheme: ISE / ESE	25/00

Course Objectives: The course aims

01	To make familiar about effective use of drawing tools and engineering drawing formats.
02	To develop and interpret basic drawing concepts.
03	To develop visualization skills and implement in various types of drawings

After successful completion of this lab work, the student will be able to

0BSES155-1	Draw the projections the different lines, Planes and Solids in different positions develop the lateral surface of object. (3 rd Cognitive Level)
0BSES155-2	Draw orthographic, sectional and isometric views. (3 rd Cognitive Level)
0BSES155-3	Use/Handle different engineering drawing instruments accurately & carefully. (2 nd Psychomotor Domain, Manipulation.)
0BSES155-4	Produce drawings with accuracy and proficiency. (3 rd Psychomotor Domain, Precision)
0BSES155-5	Display a high degree of certainty in drawings and projections of complex components. (3 rd Affective Domain, Valuing)

List of Practical's :

Sheet No.	Title of Drawing Sheet
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01	Types of Lines and Lettering.
02	Engineering Curves
03	Projections of Straight lines and Projections of Planes (2 Sheets)
04	Projections of Solids
05	Orthographic projections (2 Sheets)
06	Isometric projections
07	Sections of Solids
08	Development of Lateral Surface

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSHS106, Professional Communication
Prerequisite/s	---
Teaching Scheme: Lecture/Practical	02/00
Credits	02
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10/30/10/50

Course Objectives: The course aims	
01	Illustrate importance and usage of ICT based communication.
02	Explain importance of communication and communicative competence in English.
03	Describe importance of soft skills and nourish students' behavioral skills.
04	Explain professional correspondence and its use in their profession.
05	Illustrate tenses, types of sentences in English and strengthen students' vocabulary.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to	
0BSHS106_1	Recognize ICT based communication and its importance. (1 st Cognitive Level)
0BSHS106_2	Illustrate concepts and facets of Oral and written Communication. (2 nd Cognitive Level)
0BSHS106_3	Describe need of behavioral skills and professional correspondence in profession. (2 nd Cognitive Level)
0BSHS106_4	Write emails, professional letters and reports effectively. (3 rd Cognitive Level)
0BSHS106_5	Use knowledge of English grammar properly. (3 rd Cognitive Level)

Course Contents:		Hrs.
Unit 1	Remedial Grammar Sentence Correction: Subject verb concord, Articles, Prepositions, Common Errors, Vocabulary: One word substitutes, Confused words. Reading a dictionary.	06

Unit 2	Communication Introduction, Process, Basic types: Verbal & Non-verbal, Barriers and filters of communication.	04
Unit 3	Oral & Written Communication Techniques of Oral Communication, Elocution, Group Discussion Interview. Basics of Written Communication, Paragraph writing, Essay Writing	06
Unit 4	Professional Correspondence Importance and techniques of Correspondence, Types of letters: Application Letter and Resume writing, Enquiry letter and its reply. Professional Report writing: Introduction, Survey Report.	05
Unit 5	ICT Based Communication Introduction, Language laboratory, email, blog, website, PPT, Seminar.	03
Unit 6	Behavioral skills Understanding Self, SWOT Analysis, Johari Window, Developing positive attitude, Stress management, Time management, Professional and personal ethics.	04

Text Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Publication
01	Business Communication	Urmila Rai & S.M. Rai	Himalaya Publishing House	3 rd	2012
02	Communication Skills	Meenakshi Raman & Sangeeta Sharma	Oxford University Press	3 rd	2015
03	Effective Technical Communication	Ashraf Rizvi	Tata McGraw-Hill	5 th	2014
04	Business Correspondence & Report-writing	R.C.Sharma & Krishna Mohan	Tata McGraw-Hill	2 nd	2010

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Publication
01	Technical Writing & Professional Communication for non-native speakers of English	Thomas N.Huckin & Leslie A.Olsen	Tata McGraw-Hill	1 st	2004
02	Better English pronunciation.	J. D. O'Connor,	Universal Book Stall	1 st	1997
03	High-school English Grammar and Composition	Wren and Martin	S. Chand and Co., New Delhi	1 st	2011

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Publication
05	The Ace of Soft Skills	Gopal swami Ramesh, Mahadevan	Pearson Publication, Delhi.	2 nd	2011

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSHS156, Professional Communication Laboratory
Prerequisite/s	---
Teaching Scheme: Lab/Tutorial	02/00
Credits	01
Evaluation Scheme: ISE/ESE	25/00

Course Objectives: The course aims	
01	To motivate and guide students to perform better in formal communicative event.
02	To encourage students to write well organized essays, paragraphs and News.
03	To develop students' team spirit for effective participation in team.
04	To make students' familiar with formal situations by using Language Lab Software to understand and perform in their professional life.
05	To improve students' performance in written communication necessary in profession.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to	
0BSHS156_1	Prepare and perform better in formal communicative events. (3 rd Psychomotor Skill Level)
0BSHS156_2	Write well organized essays and paragraphs. (3 rd Psychomotor Skill Level)
0BSHS156_3	Strengthen their team spirit and perform effectively in a team. (3 rd Attitude/ Affective Domain level)
0BSHS156_4	Improve their intonation, vocabulary and communicative performance. (1 st Psychomotor Skill Level)
0BSHS156_5	Write relevant professional emails, letters and reports effectively. (3 rd Cognitive Level)

Unit 1	Grammar & Vocabulary	
	1	Grammar Activities & Dictionary Reading
Unit 2	Communication	

	2	Elocution
Unit 3	Oral & Written Communication	
	3	Group Discussion
	4	Essay Writing
Unit 4	Professional Correspondence	
	5	Application Letter and Resume writing
	6	Professional Report writing
Unit 5	ICT Based Communication	
	7	Language Lab Session- I
	8	Language Lab Session- II
	9	E-mail writing
	10	Power Point Presentation
Unit 6	Behavioral skills	
	11	Teamwork: Developing positive attitude

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSES151 Workshop Practice - I
Prerequisite/s	-
Teaching Scheme: Lab/Tutorial	02/00
Credits	01
Evaluation Scheme: ISE/ESE	50/00

Course Objectives: The course aims	
01	To explain causes of accident and safety precautions while working in shop.
02	To demonstrate different measuring instruments and their applications.
03	To present different welding joints by using electric arc welding.
04	To demonstrate different tools for fitting operations.
05	To demonstrate different sheet metal working operations and tools.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:	
0BSES151-1	Apply appropriate instruments and handle them carefully and safely to make measurements of the physical quantity. (3 rd cognitive level)
0BSES151-2	Make male female joint by carrying out different fitting operations. (3 rd cognitive level)
0BSES151-3	Prepare a job with different joining operations by electric arc welding. (3 rd cognitive level)
0BSES151-4	Produce a component using different sheet metal operations and tools. (3 rd cognitive level)

Course Contents:		Hrs.
Unit No.1	Safety: Concept of accidents causes of accidents, safety precautions while working in shop, safety equipments and their use.	04

	Measuring Instruments: Brief introduction to instruments like – Steel rule, Calipers, Vernier Caliper, Micrometer, Vernier height Gauge etc. Least counts, common errors and care while using them, Use of marking gauge, ‘V’ block and surface plate.	
Unit No.2	Fitting: Study of various tools like- files, drills, taps, dies. Fitting operations. Fitting: One job Male/Female fitting with operations- Marking, cutting, drilling, tapping filing etc	10
Unit No.3	Welding: Importance of welding in Engineering, Introduction to different welding tools. Welding: One job on Arc welding- Lap / Butt Joint etc. (For individual student)	06
Unit No.4	Sheet metal working: Introduction to sheet metal working operations like- cutting, bending, forming, riveting. Introduction of sheet metal tools. Sheet metal working: One job on sheet metal working involving sheet metal cutting, bending, forming, riveting etc.	08

Text Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Workshop Technology -I & II	S K Hajara Choudhury, A K Hajara Choudhury, Nirjhar Roy	MMP Pvt. Ltd.	14 th	2003

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Workshop Technology, Vol-I	S. Raghuvanshi	Dhanpat Rai and Sons	9 th	2007
02	Workshop Practice	H.S.Bawa	TMH Publications, New Delhi	2 nd	2012

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSBS108 Applied Chemistry
Prerequisite/s	---
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISEI /MSE/ISE II/ESE	10/30/10/50

Course Objectives: The course aims

01	To discuss basic concepts of chemistry in engineering.
02	To develop the ability to understand the effect of various impurities on water quality.
03	To outline the characteristics of fuels and alloys in domestic and industrial use.
04	To justify the properties of metal and alloys and effect of corrosion on them.

Course Outcomes : Upon successful completion of this course, the students will be able to:	
0BSBS108_1	Identify water quality parameters and methods for water softening. (2 nd Cognitive Level)
0BSBS108_2	Discuss properties and applications of fuels and some alloys. (2 nd Cognitive Level)
0BSBS108_3	Summarize different methods to prevent metals from corrosion. (2 nd Cognitive Level)
0BSBS108_4	Describe principles of analytical instruments and properties of some advanced materials with their uses. (2 nd Cognitive Level)
0BSBS108_5	Calculate total hardness of water and calorific values of fuel. (3 rd Cognitive Level)

Course Contents:		Hrs.
Unit 1	Water Technology: Introduction, impurities in natural water, Water Testing: Total solids, acidity, alkalinity and chlorides, hardness of water (definition, causes and significance), disadvantages of hard water. Scale and sludge: formation in boilers and removal, Introduction to caustic-embrittlement, boiler corrosion, priming and foaming in boilers. Calculations of total hardness, Treatment of hard water by ion exchange process, Desalination of brackish water by Reverse Osmosis, Disinfection of domestic water by chlorination and ozone.	07
Unit 2	Instrumental Techniques: Introduction, advantages and disadvantages of instrumental methods. p^H-metry: Introduction, pH measurement using glass electrode and applications. Spectrometry: Introduction, Laws of spectrometry (Lamberts and Beer-Lambert's law). Principles, instrumentation and applications of single beam spectrophotometer and flame photometry. Chromatography: Introduction, Principle, instrumentation and applications of gas-liquid chromatography (GLC) and high performance liquid chromatography (HPLC).	07
Unit 3	Metallic materials & Green Chemistry: Introduction, alloy definition and classification, purposes of making alloys. Ferrous alloys: Plain carbon steels (mild, medium and high). Nonferrous alloys: Copper alloy (Brass), Nickel alloy (Nichrome), Aluminum alloy (Duralumin and Alnico). Green Chemistry: Definition, Twelve principles of green chemistry, Research and industrial applications.	07

Unit 4	Fuels and Batteries: Introduction, classification, characteristics of good fuels, comparison between solid, liquid and gaseous fuels, types of calorific value (higher and lower), Bomb calorimeter and Boy's calorimeter. Numericals on Bomb and Boy's calorimeter. Batteries: Rechargeable alkaline storage batteries, Rechargeable Li- ion batteries (Diagram, charging-discharging reactions, advantages and applications). Fuel Cells: Introduction, H ₂ -O ₂ Fuel cell (Construction, working and applications), applications of fuel cells.	07
Unit 5	Corrosion: Introduction, causes, classification, atmospheric corrosion (oxidation corrosion), electrochemical corrosion (hydrogen evolution and oxygen absorption mechanism), factors affecting rate of corrosion. Prevention of corrosion by proper design and material selection, hot dipping (galvanizing and tinning), cathodic and anodic protection methods, electroplating.	07
Unit 6	Advanced Materials: Polymers: Introduction, plastics, thermosoftening and thermosetting plastics, industrially important plastics like phenol formaldehyde, urea formaldehyde. Conducting polymers, biopolymers (preparation, properties and applications). Nanomaterials: Introduction, applications of nanomaterials- Catalysis, Electronics and Telecommunication, Medicines, Energy Sciences. Composites: Introduction, composition, properties and uses of fiber reinforced plastics (FRP) and glass reinforced plastic (GRP).	07

Text Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	A Text Book of Engineering Chemistry	S. S. Dara	S. Chand & Co. Ltd., New Delhi.	11 th	2008
02	A Text book of Engineering Chemistry	ShashiChawala	Dhanpat Rai Publishing Co. New Delhi.	3 rd	2007

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Engineering Chemistry	Jain & Jain	Dhanpat Rai Publishing Co., New Delhi.	15 th	2010
02	Industrial Chemistry	B. K. Sharma	Goel publication (P) Ltd.	10 th	1999
03	Fundamentals of Engineering Chemistry	S. K. Singh	New Age International (P) Ltd, New Delhi.	1 st	2009

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
04	Instrumental Methods of Chemical Analysis	Chatwal and Anand	Himalaya Publishing House, Mumbai.	5 th	2005
05	Engineering Chemistry	Wiley India	Wiley India Pvt. Ltd., New Delhi.	1 st	2012

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSBS158 Applied Chemistry Laboratory
Prerequisite/s	---
Teaching Scheme: Practical/Tutorial	02/00
Credits	01
Evaluation Scheme: ISE/ESE	25/00

Laboratory Objectives:	
01	To test water quality parameters like hardness, acidity and chloride content.
02	To synthesize polymers and plastics.
03	To understand the mechanism of corrosion of metals in different environments.
04	To know the handling of different analytical Instruments.

Laboratory Outcomes : Upon successful completion of this course, the student will be able to:	
0BSBS158_1	Identify hardness, acidity, alkalinity and chloride content of water and percentage of elements in some alloys.
0BSBS158_2	Produce various advanced materials and analyze aqueous solutions using instruments. (3 rd)
0BSBS158_3	Carry out experimental tasks by handling different glassware's. (1 st Psychomotor)
0BSBS158_4	Perform various experiments by following written instructions. (2 nd Psychomotor Domain)
0BSBS158_5	Express involvement by understanding concepts in applied chemistry. (2 nd Affective Domain) Responds to

List of Experiments:	
Sr. No.	Title of Experiments
1	Determination of acidity of water.

2	Determination of alkalinity of water.
3	Determination of chloride content of water by Mohr's method.
4	Determination of total hardness of water by EDTA method.
5	Determination of moisture, volatile and ash content in a given coal sample by proximate analysis.
6	Preparation of urea-formaldehyde resin.
7	Preparation of phenol-formaldehyde resin.
8	Estimation of zinc in brass solution.
9	Estimation of copper percentage in brass solution.
10	Determination of rate of corrosion of aluminium in acidic and basic medium.
11	Determination of pH of sample solution.
12	Demonstration of photo-colorimeter / spectrophotometer.
13	Demonstration of paper chromatography.

Minimum 8 experiments should be performed from the list out of which two experiments should be on instrumental methods.

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSES109, Basic Electronic Engineering
Prerequisite/s	--
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10/30/10/50

Course Objectives: The course aims to:

01	Provide an introduction to digital logic design, leading to understand number system, Boolean algebra and its relevance to digital logic design.
02	Illustrate combinational & sequential digital circuits.
03	Provide basic knowledge in solid state electronics including passive and active components.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:

0BSES109_1	Explain fundamental concept of number system and its conversion amongst them. (2 nd Cognitive level)
0BSES109_2	Interpret logic functions, circuits, truth tables and Boolean algebra expression. (2 nd Cognitive level)
0BSES109_3	Implement Combinational and Sequential circuits using standard gates by applying reduction techniques. (3 rd Cognitive level)
0BSES109_4	Explain characteristics and working of basic electronic components like diode, BJT and FET. (2 nd Cognitive level)
0BSES109_5	Apply knowledge of electronic components to explain working of electronic circuits such as rectifiers, amplifiers. (2 nd Cognitive level)

Course Contents:		Hrs.
Unit 1	Number Systems: Decimal, Binary, Octal & Hex number system. Inter-conversion of number system, Unsigned and Signed binary numbers (Sign magnitude, 1's complements, 2's complement) binary addition, subtraction, division, multiplication.	06
Unit 2	Logic Gate and boolean algebra: Basic gates, derived gates, NAND & NOR as universal gates, Boolean Laws, Theorems, simplification of logic expressions. Algebraic minimization (min-terms, max- terms), K-map reduction with examples.	07
Unit 3	Combinational & sequential Logic circuits: Combinational logic: Adders, Subtractors, Decoders, Encoders, Multiplexers, Demultiplexers. Sequential Logic: Introduction to Counters, Shift registers & Flip-flops	08
Unit 4	Introduction to Electronics Components: Passive Components: Resistors, Capacitors, Inductors (Various Types, Construction, Color coding, Specifications, Mathematical representation.), SMD Technology Active Components: Diode & Applications Construction, Diode biasing, V-I characteristics, Types of Diode (Zener diode, PIN diode, Photo diode, LED- symbol, construction, working, characteristics) Rectifier circuits.	09
Unit 5	Bipolar Junction Transistor and applications Construction, V-I Characteristics of transistor (CE configuration), biasing of transistor, saturation, cut off mode and active mode of operations, Leakage current, dc load line, operating point, Need for stabilization, fixed bias, emitter bias, self bias, Stability factors Applications: Transistor as a switch, transistor as an amplifier. (RC coupled CE Amplifier).	08
Unit 6	Field Effect Transistor FET: Construction, Working Principle, V-I Characteristics MOSFET: P-channel, n- Channel MOSFET Handling Precautions for MOS Devices.	04

Text Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Fundamentals of Digital Design	Anand Kumar	PHI	2	2009
02	Electronic Devices and Circuits	R. Boylestad & L. Nashelsky	PHI	11	2012
03	Principle of Electronics	V.K. Mehta	S. Chand	1	2010
04	A Text Book of Applied Electronics	R S Sedha	S. Chand	2	2013
05	Digital Principals & Applications	Albert Malvino, Donald Leach	TMGH Publication	3	1981

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Basic Electronics: Solid State	B. L. Thareja	S. Chand	1	2007
02	Fundamental of Electronics Engineering	R.Prasad	CENGAGE- Learning	3	2012
03	Digital Design	John Wakerly	Prentice Hall India Publication	4	2005

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSES157, Basic Electronic Engineering Laboratory
Prerequisite/s	--
Teaching Scheme: Practical/Tutorial	02/00
Credits	01
Evaluation Scheme: ISE / ESE	25/00

Course Objectives:- The Course aims to,

1	Familiarize the students with basic electronics equipments and components
2	Develop the ability to analyze analog and digital electronics circuits

Course Outcomes (COs): After successful completion of this course, the student will be able to,

0BSES157_1	Implement combinational & sequential circuits by applying the knowledge of logic gates. (2 nd Cognitive Level)
0BSES157_2	Explain the characteristics of different electronics devices such as diodes, transistors etc. and simple circuits like rectifiers, amplifiers. (2 nd Cognitive Level)
0BSES157_3	Use Laboratory equipments for testing and measurement of various electronic components. (3 rd Psychomotor Domain) Precision
0BSES157_4	Construct and take measurement of various circuits to compare experimental results in the laboratory with theoretical analysis. (3 rd Psychomotor Domain) Precision
0BSES157_5	Interact effectively with the instructor and the teaching assistant(s) during lab hours and discussions in order to further their learning experience and their interest. (3 rd Affective Domain) Valuing

List of Experiments:

Expt. No.	Title of Experiment
01	Familiarization with Laboratory Instruments (Oscilloscope, Function Generator, Digital Multimeter, DC Power Supply) and electronics components (R, L, C, Diodes, Transistor,

	LED, Switches)
02	Implement logic gates and verify its truth table. (OR, AND, NOT, NAND, NOR, EXOR, EXNOR)
03	Implement logic gates using universal gates. (NAND, NOR)
04	Design and implement adders and Subtractors.
05	Design and implement Encoders and Decoders.
06	Design and implement Multiplexers & De-multiplexers.
07	Verify V-I Characteristics of PN junction diode and Zener diode.
08	Calculate and compare various parameters of Half and Full wave rectifier.
09	Biasing of a transistor.
10	Observe the performance of single stage RC coupled CE amplifier.

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSES110 Engineering Mechanics
Prerequisite/s	---
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISEI /MSE/ISE II/ESE	10/30/10/50

Course Objectives: The Course aims	
01	To understand various force systems and their effects on static and moving bodies
02	To study the concept of equilibrium
03	To analyze a truss
04	To understand the concept of Centroid and Moment of Inertia
05	To understand dynamics of rigid bodies

Course Outcomes: Upon successful completion of this course, the student will be able to:	
0BSES110_1	Apply knowledge of resolution and composition of forces. (3 rd Cognitive Level)
0BSES110_2	Apply the concepts of equilibrium to find unknown forces acting on rigid bodies. (3 rd Cognitive Level)
0BSES110_3	Calculate forces in members of truss with their nature. (3 rd Cognitive Level)
0BSES110_4	Compute Centroid and Moment of Inertia of a given plane lamina.(3 rd Cognitive Level)
0BSES110_5	Apply the knowledge of dynamics to analyse rigid bodies (in motion). (3 rd Cognitive Level)

Course Contents:	Hrs.
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Unit 1	Introduction to Engineering mechanics: Basic concepts - Particle, Body, Rigid body, Force, Types of force systems, Law of transmissibility of force, Resolution of a force, Resultant force, Moment of a force, couple, Varignon's theorem.	07
Unit 2	Equilibrium of forces Concept of equilibrium, Conditions of equilibrium, Free Body Diagram, Lami's theorem, Law of moments, Introduction to surface friction. Beams: Types of Loads, Types of supports, Types of Beams, Analysis of Simple and Compound beams using conditions of equilibrium.	07
Unit 3	Analysis of Truss Introduction of roof truss, Types of Trusses, Determinacy of a Truss, Assumptions for analysis of truss, Analysis of truss using method of Joints and method of Sections.	06
Unit 4	Centroid and Moment of Inertia Introduction to Centroid and Center of Gravity, Centroid of plain laminae, Moment of Inertia, Moment of Inertia of Standard shapes from first principle, Parallel and perpendicular axis theorem, Moment of Inertia of plain and composite figures, Radius of Gyration.	07
Unit 5	Kinematics of Linear and Circular motion Kinematics of linear motion, Newton's Laws of motion, motion under gravity, Motion under variable acceleration, Kinematics of Circular Motion, Super elevation, banking of roads.	06
Unit 6	Kinetics of Linear and Circular motion Kinetics of linear motion, D'Alembert's Principle, Work- Energy Principle, Impulse Momentum Principle, Kinetics of Circular Motion.	09

Text Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Engineering Mechanics	S.Ramamrutham	Dhanpat Rai Publishing Company (P). Ltd	9 th	2010
02	Engineering Mechanics	R.S. Khurmi	S.Chand	Revised	2006
03	Engineering Mechanics	R. K. Bansal and Sanjay Bansal	Laxmi Publications Pvt. Ltd.	6 th	2013
04	Engineering Mechanics	K. L. Kumar	Tata McGraw Hill Education	4 th	2012
05	Engineering Mechanics	S. B. Junnarkar	Charotar Publications	16 th	2011
06	Engineering Mechanics	S.S. Bhavikatti	New Age International Pvt. Ltd.	4 th	2012

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Engineering Mechanics	Irving H. Shames	Prentice Hall of India, New Delhi	5 th	2011

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
02	Vector Mechanics for Engineers Vol.-I and II	F. P. Beer and E. R. Johnson	Tata McGraw Hill Education	6 th	2011
03	Engineering Mechanics: Statics & Dynamics	Ferdinand Singer	Harper and Row Publications	9 th	2009
04	Fundamentals of Engineering Mechanics	S.Rajasekaran	Vikas Publishing House Pvt. Ltd.	3 rd	2005
05	Mechanics of Materials	Dr. B. C. Punmia	Laxmi Publications Pvt. Ltd.	Reprint	2010

Course Details:

Class	B. Tech, Sem.-I / II
Course Code and Course Title	0BSES159 Engineering Mechanics Laboratory
Prerequisite/s	---
Teaching Scheme: Practical/Tutorial	02/00
Credits	01
Evaluation Scheme: ISE /ESE	25/00

Laboratory Objectives: The course aims to	
01	Study law of polygon of forces using Universal Force Table
02	Study the law of moments using Bell Crank Lever
03	Find support reactions of a simply supported beam using Parallel force apparatus.
04	Verify Lami's Theorem using force table
05	Compare Centroid of a given lamina by experimental and analytical methods
06	Coefficient of friction of different material surfaces.
07	Compute support reactions by graphical method
08	Study rigid bodies in static and dynamic states

Laboratory Outcomes : Upon successful completion of laboratory work, the student will be able to	
0BSES159_01	Compute resultant, moments of a force system to verify the Laws for forces. (3 rd Cognitive level)
0BSES159_02	Calculate and compare support reactions of a simply supported beam by experimental and analytical methods. (3 rd Cognitive level)
0BSES159_03	Calculate and compare centroid of lamina by experimental and analytical methods. (3 rd Cognitive level)
0BSES159_04	Solve numerical for rigid bodies in static and dynamic states. (3 rd Cognitive level)
0BSES159_05	Calculate coefficient friction of different material surfaces. (3 rd Cognitive level)
0BSES159_06	Follow the teacher and repeat the experiment performances individually and interpret the results. (3 rd Psychomotor domain) Precision.

0BSES159_07	Express involvement and understanding concepts and applications in the laboratory. (3 rd Affective domain) Valuing
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List of Experiments	
Sr. No.	Title of Experiments
1	To verify law of polygon of forces with the help of force table
2	To verify lami's theorem using force table
3	To verify law of moments with the help of Bell crank lever
4	To calculate support reactions of beam
5	To compute center of gravity of plain lamina
6	To calculate coefficient of friction of different material surfaces.
7	To find support reactions of a beam by graphical method
8	Assignments based on each unit

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSES111 Basic Mechanical Engineering
Prerequisite/s	--
Teaching Scheme: Lecture/Practical	03/00
Credits	03
Evaluation Scheme: ISE1/ MSE /ISEII/ ESE	10/30/10/50

Course Objectives: The course aims	
1.	To make students aware Laws of Thermodynamics, Principles of Thermal Machines and Power Transmitting Devices.
2.	To cognize knowledge of engineering materials and manufacturing process.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:	
BS111_1	Define different manufacturing processes and properties of material. (1 st Cognitive Level)
BS111_2	Describe power generation processes from different energy sources. (2 nd Cognitive Level)
BS111_3	Explain the basic concept of refrigeration and classify the different refrigerants. (2 nd Cognitive Level)
BS111_4	Explain principles of power transmission devices and its types. (2 nd Cognitive Level)
BS111_5	Calculate the various thermodynamic Properties. (3 rd Cognitive Level)
BS111_6	Determine the efficiency of air standard cycles (3 rd Cognitive Level)

Course Contents:	Hrs.
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Unit 1	Energy Sources & power plant Renewable and nonrenewable, Solar-flat plate collector, concentric collector–Parabolic and cylindrical, Photovoltaic cell, Wind, Geothermal, Tidal, Hydropower plant, Steam Power plant.	07
Unit 2	Fundamentals of Thermodynamics Thermodynamics state, Process, Cycle, Thermodynamic system, Heat & Work, Concept of Internal energy, First Law- Joule’s experiment and application of First law to steady flow processes, Limitation of first Law of Thermodynamics, Introduction of Modes of Heat transfer.	07
Unit 3	Gas laws & I.C. Engine Ideal Gases – Concept of Constant Pressure, Constant Volume, Constant Temperature, Adiabatic, Polytropic and their representation on p-V and T-s diagrams, Power Cycles -Carnot Cycle, Otto cycle, Joule Cycle. Basic Components of IC Engines and Terminology, Four stroke and Two stroke engines.	07
Unit 4	Introduction to Refrigeration and Air Conditioning Carnot Refrigerator, Vapour compression and vapour absorption system, Selection of Refrigerants. Study of household refrigerator, window air conditioner.	07
Unit 5	Mechanical Power Transmission and Energy Conversion Devices Belt drives, gears drives, Construction, working and applications of Pumps & Compressors - Centrifugal and Reciprocating and Hydraulic turbines - Pelton, Francis and Kaplan.	07
Unit 6	Engineering Materials and Manufacturing Processes Material properties, tensile, compressive and shear strength, ductility, malleability, hardness, toughness, resilience, creep, thermal and electrical conductivity and Stress-Strain curve. Casting process -Sand casting and metal joining processes - Arc welding, Gas welding, soldering and brazing, Metal Removing Process	07

Text Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Solar Energy	Dr. S. P. Sukathame	Tata Mc- Graw Hill Publication	4	2012
02	Non Conventional Sources of Energy	G. D. Rai	Khanna Publication	5	2012
03	Engineering Thermodynamics	R. K. Rajput	Laxmi Publication, Delhi.	8	2011
04	IC Engines	V. Ganesan	Tata Mc- Graw Hill Publication	4	2013
05	Workshop Technology	HajraChoudhary, Bose	Media Promoters & publishers Pvt. Ltd. (Vol.-I & II).	13	2011

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Thermodynamics	Yunus A. Cengel and Boles	Tata Mc-Graw Hill Publication	7	2012
02	Manufacturing Technology	P. N. Rao	Tata Mc-Graw Hill Publication	2	1999
03	Theory of machines	S.S. Ratan	Tata-McGraw Hill Publications.	3	2012
04	Thermal engineering	P.L Ballaney	Khanna Publications	22	2000

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSES160 Basic Mechanical Engineering Laboratory
Prerequisite/s	--
Teaching Scheme:Practical /Tutorial	02/00
Credits	01
Evaluation Scheme: ISE/ESE	25/00

Course Objectives :The course aims to

1.	Understand the concept of different energy conversion devices.
2.	To impart knowledge of thermal machines and manufacturing processes.

Course Outcomes (COs):-Upon successful completion of this course, the student will be able to:

BS160_1	Gain knowledge of different conventional and non conventional energy recourses. (2 nd Cognitive Level)
BS160_2	Illustrate construction and working of Pump, Compressor and Air conditioner. (2 nd Cognitive Level)
BS160_3	Perform experiment of calculation thermal conductivity and COP of Refrigeration system. (3 rd Cognitive Level)
BS160_4	Follow the teacher and repeat the experiment performance individually and interpret the results. (3 rd Psychomotor Domain)
BS160_5	Express involvement and understanding of concepts and their applications in the laboratory. (3 rd Affective Domain)

Course Contents:

1.	Demonstration of working Solar photovoltaic cell.
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2.	Calculate the thermal conductivity of given metal rod
3.	Demonstration of Two stroke and Four stroke Engines with the help of models.
4.	Demonstration of Hydro-Electric Power Plant and Study of Hydraulic turbines.
5.	Visit and Demonstration of steam power plant.
6.	To determine the COP of Vapour Compression Refrigeration system.
7.	Demonstration of Window Air Conditioner
8.	Demonstration of working of Pumps and compressors.
9.	Study and demonstration of electric arc welding process.

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSES112 Computer Programming
Prerequisite/s	--
Teaching Scheme: Lecture/Tutorial	02/00
Credits	02
Evaluation Scheme: ISE I /MSE/ ISE II / ESE	10/30/10/50

Course Objectives: The course aims	
01	To understand C programming environment.
02	To develop problem solving skills amongst the students.
03	To write, compile and debug programs in C language.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:	
0BSES112_1	Use structured approach to solve a problem. (2 nd Cognitive Level)
0BSES112_2	Comprehend C programming fundamentals. (2 nd Cognitive Level)
0BSES112_3	Comprehend concepts like array, functions, structures, and pointers and file handling in C Programming language. (2 nd Cognitive Level)
0BSES112_4	Apply C Programming constructs to solve a given problem. (3 rd Cognitive Level)

Course Contents:		Hrs.
Unit 1	Basics of Programming The meaning of algorithms, Flowcharts, Pseudo codes, Writing algorithms and drawing flowcharts for simple exercises, Memory concepts, C Program development environment	03
Unit 2	C Fundamentals Importance of 'C' Language, History, Structure of 'C' Program, Sample 'C' Program, Constants, variables and data types. Operators and expressions, Managing input / output operations, Control statements-Decision making, Case control & Looping Constructs	06
Unit 3	Array	04

	The meaning of an array, one dimensional and two dimensional arrays, declaration and initialization of arrays, reading , writing and manipulation of above types of arrays, multidimensional arrays. Strings-Declaring and initialing character array, reading and writing string to/from terminal, arithmetic operations on characters, putting strings together, string handling functions	
Unit 4	Functions Need of user defined functions, elements of User defined functions, defining functions, return values and their types, function calls, function declaration, methods of parameter passing, Scope rule of functions, user defined and library functions	04
Unit 5	Structure & Pointers Need of Structure, Defining a structure, declaring and accessing structure variables, structure initialization, copying and comparing structure variables, array of structures, structures and functions, Unions. Understanding pointers, accessing the address space of a variable, declaring and initialization pointer variables, accessing a variable through its pointer, pointer expressions, pointers and arrays, pointer and character strings, pointer and structure	06
Unit 6	File Handling Defining and opening a file, closing a file, input/output operations on files, error handling during I/O operations, random access files, command line arguments, C preprocessor.	03

Text Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Programming And Problem Solving Using C Language	ISRD Group	McGraw-Hill Publications	-	2012
02	Let Us C	Yashwant Kanetkar	BPB	3 rd	2011
03	C How to Program	Harvey M. Deitel , Paul J. Deitel, Abbey Deitel	Pearson	2 nd	2009

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	The 'C' Programming Language	D. M. Ritchie	Pearson	2 nd	1998
02	C Programming Laboratory: Handbook for Beginners	Sidnal	Wiley India Limited	-	-

Course Details:

Class	F.Y. B. Tech Sem.-I & II
Course Code and Course Title	0BSES161 Computer Programming Laboratory
Prerequisite/s	-
Teaching Scheme: Practical /Tutorial	04/00
Credits	02
Evaluation Scheme: ISE/ESE	50/00

Course Objectives: The Course aims to

01	Expose programming constructs of C language to the students
02	Develop problem solving skills amongst the students
03	Learn how to write modular and efficient C programs.
04	Implement C programs for various problem statements.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to

0BSES161_1	Write, compile and debug programs in C language. (2 nd Cognitive Level)
0BSES161_2	Make use of different data types in a computer program. (3 rd Cognitive Level)
0BSES161_3	Make use of conditional expressions and looping statements to solve problems associated with conditions and repetitions. (3 rd Cognitive Level)
0BSES161_4	Construct the C code using a modular approach. (3 rd Cognitive Level)
0BSES161_5	Demonstrate C Programs for various problem statements. (3 rd Affective Domain)

Course Contents:

1	2-3 Exercises based on construction of flowcharts and algorithms for a given problem statement
2	Program based on data types and operators in C
3	2 Programs based on If, If Else and If Else If Else
4	Program based on Switch
5	2 Program based on Loops (For, While, Do-While)
6	Program based on one dimensional array
7	Program based on Two dimensional array
8	Program based on Character Array, Strings
9	Program based on Functions
10	2 Program based on Recursion
11	Program based on Structure
12	Program based on Array of Structures
13	2 Program based on Pointers
14	Program based on File Handling

Course Details:

Class	F.Y. B. Tech Sem.- II
Course Code and Course Title	0BSBS113 Applied Mathematics II

Prerequisite	---
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISEI/ MSE/ISEII/ESE	10/30/10/50

Course Objectives: The course aims	
01	To develop mathematical logical thinking power of students.
02	To produce graduates with mathematical knowledge, computational skills and the ability to deploy these skills effectively in the solution of problems in the area of engineering.
03	To teach mathematical methodologies to provide students with skills in differential calculus and integral calculus which would enable them to devise engineering solution for given situations they may encounter in their profession.

Course Outcomes : After successful completion of this course, the students will be able to:	
0BSBS113_1	Identify different types of ordinary differential equations and use analytical methods to solve them. (3 rd Cognitive level)
0BSBS113_2	Using partial derivatives solve the problems based on functions of two or more variables. (3 rd Cognitive level)
BSBS113_3	Make use of differential equations for finding orthogonal trajectories, to solve simple electrical problems and to calculate maxima and minima of functions of two variables. (3 rd Cognitive level)
0BSBS113_4	Apply the concept of Beta function, Gamma function and DUIS rules to solve improper integrals. (3 rd Cognitive level)
0BSBS113_5	Identify and sketch the approximate shape of the curve in cartesian and polar form and estimate their length by integration method. (3 rd Cognitive level)
0BSBS113_6	Solve multiple integrals and make use of it to find area and mass. (3 rd Cognitive level)

Course Contents:		Hrs.
Unit 1	Differential Equations of First Order and First Degree Linear differential equations, Equation reducible to Linear differential equation, Bernoulli's equation, Exact differential equations, Equation reducible to Exact differential equation.	06
Unit 2	Partial Differentiation Function of two or more variables, Partial derivatives, Homogeneous functions, Total derivative, Euler's theorem on Change of variables.	07
Unit 3	Applications of Differential Equations of First Order and First Degree and Partial Differentiation Applications to Orthogonal trajectories (Cartesian and Polar equations), Applications to Simple Electrical Circuits, Jacobian, Errors and approximation, Maxima and Minima of Functions of two variables.	08
Unit 4	Special Functions Gamma function, Beta function, relation between Beta and Gamma functions and its properties, Differentiation under integral sign (DUIS).	06

Unit 5	Curve Tracing Tracing of Standard curves in Cartesian form, Tracing of Standard curves in Polar form, Rectification of Cartesian curves and Rectification of Polar curves.	07
Unit 6	Multiple Integration and its applications Double Integrals, Change of order of integration, Double Integrals in Polar Coordinates, Area enclosed by plane curves, Mass of a plane lamina, Triple integrals.	08

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Higher Engineering Mathematics	Dr. B. S. Grewal	Khanna Publishers	40 th	2010
02	Higher Engineering Mathematics	B. V. Ramana	Tata McGraw Hill	19 th	2013
03	Advanced Engineering Mathematics	N. P. Bali, Manish Goyal	Infinity science press	7 th	2010
04	Advanced Engineering Mathematics	Erwin nKreyszig	Wiley Publishers	9 th	2013
05	Advanced Engineering Mathematics	H. K. Das	S. Chand	19 th	2010

Course Details:

Class	F. Y. B. Tech, Sem.-II
Course Code and Course Title	0BSBS114 Applied Mathematics-II Tutorial
Prerequisite	---
Teaching Scheme: Practical/Tutorial	00/01
Credits	01
Evaluation Scheme: ISE/ESE	25/00

Laboratory Objectives: The course aims	
01	To develop mathematical logical thinking power of students.
02	To produce graduates with mathematical knowledge, computational skills and the ability to deploy these skills effectively in the solution of problems in the area of engineering.
03	To teach mathematical methodologies to provide students with skills in differential calculus and integral calculus which would enable them to devise engineering solution for given situations they may encounter in their profession.

Course Outcomes : After successful completion of this course, the students will be able to:	
0BSBS114_1	Identify different types of ordinary differential equations and use analytical methods to solve them. (3 rd Cognitive level)

0BSBS114_2	Using partial derivatives solve the problems based on functions of two or more variables. (3 rd Cognitive level)
0BSBS114_3	Make use of differential equations for finding orthogonal trajectories, to solve simple electrical problems and to calculate maxima and minima of functions of two variables. (3 rd Cognitive level)
0BSBS114_4	Apply the concept of Beta function, Gamma function and DUIS rules to solve improper integrals. (3 rd Cognitive level)
0BSBS114_5	Identify and sketch the approximate shape of the curve in cartesian and polar form and estimate their length by integration method. (3 rd Cognitive level)
0BSBS114_6	Solve multiple integrals and make use of it to find area and mass. (3 rd Cognitive level)

List of Tutorials	
Sr. No.	Title of Tutorials
1	Differential Equations of First Order and First Degree
2	Partial Differentiation
3	Applications of Differential Equations of First Order and First Degree
4	Applications of Partial Differentiation
5	Special Functions
6	Curve Tracing
7	Multiple Integration
8	Application of Multiple Integration

Head of Department

Dean Academics

Principal

Executive Director



Annasaheb Dange College of Engineering and Technology, Ashta
An Autonomous Institute Affiliated to Shivaji University, Kolhapur

Curriculum

S. Y. B. Tech.

AUTOMOBILE ENGINEERING

SEM III & SEM IV

(Academic Year 2018-2019)

S.Y.B. Tech: Semester III

Course Code	Course	Teaching Scheme				Evaluation Scheme				
		L	T	P	Credits	Scheme	Theory (Marks)		Practical (Marks)	
							Max	Min. for Passing	Max	Min. for Passing
0AUBS201	Applied Mathematics – III	03	01	--	04	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC202	Applied Thermodynamics	03	--	--	03	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC203	Fluid Mechanics and Machinery	03	--	--	03	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC204	Automotive Materials and Heat Treatments	03	--	--	03	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC205	Elements of Automotive Engineering	03	--	--	03	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC251	Applied Thermodynamic Laboratory	--	--	02	01	ISE	--	--	25	10
						ESE	--	POE	25	10
0AUPC252	Fluid Mechanics Laboratory	--	--	02	01	ISE	--	--	25	10
						ESE	--	POE	25	10
0AUPC253	Metallurgy Laboratory	--	--	02	01	ISE	--	--	25	10
0AUPC254	Automotive Component Drawing Laboratory	--	--	02	01	ISE	--	--	50	20
0AUPC255	Workshop Practice-II Laboratory	--	--	02	01	ISE	--	--	25	10
0AUES256	Electrical Technology	--	--	02	01	ISE	--	--	25	10

	Laboratory									
0AUHS25 7	Communication Skills	--	--	0 2	01	ISE	--	--	50	20
Total		1 5	0 1	1 4	23	Total	500	--	300	--
Total Contact Hours/Week= 30 Hrs						Total Marks= 800				

Course Category	HS	BS	ES	PC	PE	OE	MC	AC
Credits	1	4	1	17	--	--	--	--
Cumulative Sum	1	4	1	17	--	--	--	--

S.Y.B. Tech: Semester IV

Course Code	Course	Teaching Scheme				Evaluation Scheme				
		L	T	P	Credits	Scheme	Theory (Marks)		Practical (Marks)	
							Ma x	Min. for Passing	Ma x	Min. for Passing
0AUPC20 6	Automotive Chassis	03	--	--	03	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC20 7	Theory of Machines	03	--	--	03	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC20 8	Manufacturing Engineering	04	--	--	04	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC20 9	Strength of Materials	03	--	--	03	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC21 0	Transport Management	03	--	--	03	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUMC21 11	Environmental Studies	02	--	--	--	ESE	50	20	--	--
0AUPC25	Automotive	--	--	02	01	ISE	--	--	25	10

8	Engineering Laboratory						ESE	--	POE	25	10
0AUPC259	Theory of Machines Laboratory	--	--	02*	01		ISE	--	--	25	10
0AUPC260	Strength of Materials Tutorial	--	01	--	01		ISE	--	--	25	10
0AUPC261	Instrumentation & Measurement Laboratory	--	--	02	01		ISE	--	--	25	10
						ESE	--	POE	25	10	
0AUPC262	Hydraulics & Pneumatics Laboratory	--	--	02	01		ISE	--	--	50	20
0AUBS263	Programming In C++	--	--	02*	01		ISE	--	--	25	10
0AUHS264	Professional Skills Development – I	--	--	02	01		ISE	--	--	25	10
Total		18	01	10	23		Total	550	--	250	--
Total Contact Hours/Week= 29 hrs							Total Marks=800				
*Indicates lab session to be conducted every alternative week											

Course Category	HS	BS	ES	PC	PE	OE	MC	AC
Credits	1	1	--	21	--	--	--	--
Cumulative Sum	2	5	1	38	--	--	--	--

Course Details: Applied Mathematics III

Class	S.Y. B. Tech, Sem.-III
Course Code and Course Title	0AUBS201, Applied Mathematics-III
Prerequisite/s	0BSBS102, 0BSBS113
Teaching Scheme: Lecture/Tutorial	03/01
Credits	04
Evaluation Scheme: ISE I /MSE/ ISE II / ESE	10/30/10/50

Course Objectives:

The course enables students to:	
01	Improve mathematical skills for enhancing logical thinking power of students.
02	Acquire knowledge with a sound foundation in mathematics and prepare them for graduate studies in Automobile Engineering.
03	Aware about mathematics fundamental necessary to solve and analyze engineering problem.

Course Outcomes (COs): After successful completion of this course, the students will be able to:	
0AUBS201.1	Solve the problems on Fourier Series and Laplace Transform. (K³)
0AUBS201. 2	Make use of Linear Differential Equation to solve the Automobile Engineering problems. (K³)
0AUBS201.3	Make use of Partial Differential Equation to solve the Automobile Engineering problems. (K³)
0AUBS201. 4	Solve the problems of vector calculus. (K³)
0AUBS201. 5	Apply numerical methods to find out roots of equations and least squares method for curve fitting. (K³)
0AUBS201.6	Develop numerical ability to solve the problem. (S²)
0AUBS201.7	Demonstrate professional and ethical behavior to carry forward in their life. (A²)

Course Contents:		
Sr. No.	Title	Contact Hrs.
Unit 1	Vector Calculus Introduction, Scalar and vector point functions - vector operator del, Del applied to scalar point functions - gradient, Directional derivative, Del applied to vector point functions - Divergence and curl, Line integral , Green's theorem in the plane.	07
Unit 2	Linear Differential Equations and its Application Linear Differential Equations, Definition, Complete solution, Operator D , Rules for finding the Complementary function, Inverse operator, Rules for finding the Particular integral, Working procedure to solve the equation, Applications of Linear Differential Equations to Automobile Engineering.	07
Unit 3	Computational methods Introduction , Solution of algebraic and transcendental equations- Bisection method, Newton- Raphson method, Interpolation: Newton forward and backward interpolation formula, Curve fitting: Principle of least squares, fitting of straight line and parabolic curve.	07
Unit 4	Fourier Series Introduction, Euler's Formulae, Conditions for a Fourier expansion, Functions having points of discontinuity, Change of interval, Expansion of odd or even periodic functions, Half range series.	07

Unit 5	Laplace Transform Introduction, Laplace transform of elementary functions, Properties of Laplace Transforms, Transforms of derivatives, Transforms of integrals, Multiplication by t^n , division by t , Evaluation of integrals by Laplace Transforms, Inverse Laplace transforms - Method of Partial Fractions, convolution theorem., Applications of Laplace transform to solve linear differential equations.	07
Unit 6	Partial Differential Equations and its Application Introduction –Formation of partial differential equations, Linear equation of the first order (Lagrange's equation), Method of separation of variables, Vibration of a stretched string, One dimensional wave equation (Using separation of variables), One dimensional heat flow equation (using separation of variables).	07

List of Tutorials:		
Sr. No.	Title of Tutorial	Contact Hrs.
01.	Vector Differential Calculus	02
02.	Linear Differential Equations and its Application	02
03.	Numerical Methods- Bisection Method, Newton- Raphson method	01
04.	Numerical Methods-Regula-falsi method, Secant Method	02
05.	Curve Fitting	01
06.	Fourier Series	01
07.	Laplace Transform	02
08.	Partial Differential Equations and its applications	01

Text Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Higher Engineering Mathematics	B. S. Grewal	Khanna Publication, New Delhi.	40	2007
02	Higher Engineering Mathematics.	H. K. Das	S. Chand and company ltd., New Delhi.	1	2011
03	Higher Engineering Mathematics.	B.V. Ramana	Tata McGraw Hill Education Private limited	1	2007
04	A text book of Engineering	N.P.Bali,	Laxmi	7	2007

	Mathematics	Manish Goyal	Publication New Delhi		
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Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Advanced Engineering Mathematics	Erwin Kreyszig	John Wiley & Sons, Inc.	9	2007
02	Advanced Engineering Mathematics.	Potter Merle C.	Oxford University Press,	3	2005
03	Engineering Mathematics Volume I and II	ITL Education	Cengage Learning India Private limited, Delhi	1	2015
04	Advanced Engineering Mathematics.	ONeil Peter V	Cengage Learning India Pvt. Ltd. , Delhi	1	2012
05	Engineering Mathematics Vol- I.	Kandasamy P. , Thilagavathy K. and Gunavathy K.	S Chand & Company Ltd, New Delhi	3	2000
06	Engineering Mathematics Vol- II.	Kandasamy P. , Thilagavathy K. and Gunavathy K.	S. Chand & Company Ltd, New Delhi	4	1999

Course Details: Applied Thermodynamics

Class	B. Tech, Sem.-III
Course Code and Course Title	0AUPC202, Applied Thermodynamics
Prerequisite/s	0BSBS101, 0BSES111
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10/30/10/50

Course Objectives: Course aims to,	
01	Gain knowledge of Laws of Thermodynamics and their applications.

02	Acquire the knowledge of the basics concepts like enthalpy, entropy, availability and pure substances etc. in applied thermodynamics.
03	Use mathematical skills to solve applied thermodynamic problems.
04	Evaluate performance of steam turbine, air compressor.

Course Outcomes (COs):

Upon successful completion of this course, student will be able to:

0AUPC202.1	Define the fundamentals of the first and second laws of thermodynamics and explain their application to the system. (K^2)
0AUPC202.2	Illustrate the concept of entropy and evaluate entropy changes in different processes. (K^3)
0AUPC202.3	Estimate the performance of steam power plant and explain the concept of availability, properties of pure substances and (K^3)
0AUPC202.4	Distinguish between impulse and reaction turbine and Compute the performance of steam turbine. (K^2)
0AUPC202.5	Explain construction and working of compressor with its performance characteristics. (K^2)

Course Contents:

Sr.No.	Contents	Contact Hrs.
Unit 1	Review of Laws of thermodynamics: Review of Zeroth, First, second and third law, Equation of state for ideal gas and real gases; behavior of real gases and its deviation from Ideal gas, compressibility factor, Law of corresponding states and use of generalized compressibility chart.	06
Unit 2	Entropy: Clausius inequality, entropy as a property of system. entropy of pure substance. T-s and h-s planes, entropy change in reversible and irreversible processes, increase of entropy principle, calculation of entropy changes of gases and vapors. Entropy of generation, entropy change for various processes.	06
Unit 3	Availability and Properties of Pure substances: Availability of a closed and open system, availability of work and heat reservoirs, energy and exergy .Properties of steam, use of steam table and Mollier chart, P-V-T surface. Carnot and Rankin steam power plant.	07
Unit 4	Impulse Turbine Impulse Turbines: Principles of operation, Classification, Impulse and reaction steam turbine, compounding of steam turbines. Flow through impulse turbine blades, Velocity diagrams, Work done, Efficiencies, End thrust, Blade friction, Influence of ratio of blade speed to steam speed on efficiency of single and multistage turbines and its condition curve and reheat factors.	09
Unit 5	Reaction Turbine Flow through impulse reaction blades, Velocity diagram, and degree of reaction, Parson's reaction turbine, Back pressure and pass out turbine.	07

	Governing of steam turbines. Losses in steam turbines, Performance of steam turbines. Function of diaphragm, Glands, Turbine troubles like Erosion, Corrosion, Vibration, Fouling etc.	
Unit 6	Air compressors Application of compressed air, classification of air compressor, reciprocating air compressors construction, work & power input, effect of clearance volume, volumetric efficiency, necessity of cooling, isothermal efficiency, necessity of multistage	07

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Thermal Engineering	R. K. Rajput	Laxmi Publications, New Delhi.	8	2011
02	A Text Book of Thermal Engineering	R.S. Khurmi/ J.K.Gupta	S. Chand and Company, New Delhi.	1	2011
03	Thermal Engineering	G.N. Shah	Narosa Publications, New Delhi.	2	2010

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Engineering Thermodynamics	P.K. Nag	Tata McGraw Hill ,New Delhi	5	2013
02	Thermodynamics: An Engineering Approach	YunusCengel	Tata McGraw Hill ,New Delhi	7	2011
03	Introduction to Thermodynamics	Y.V.C. Rao	University Press,Hyderabad.	1	2012
04	Basic Engineering Thermodynamics	Rayner Joel	Oxford University Press, Oxford.	5	1999

Course Details: Fluid Mechanics and Machinery

Class	SY B. Tech, Sem.-III
Course Code and Course Title	0AUPC203, Fluid Mechanics and Machinery
Prerequisite/s	0BSBS102,0BSBS113, 0BSES111
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10/30/10/50

Course Objectives: The course enables students to,

01	Acquire knowledge of different types of fluids with important properties.
02	Understand fundamental principles of fluid statics, kinematics and dynamics.
03	Demonstrate concept of laminar flow, pipe flow with different losses in fluid flow.
04	Impart knowledge of dimensional analysis techniques for different flow problems.
05	Introduce and explain fundamentals of hydraulic machines with applications.

Course Outcomes (COs): After successful completion of this course, the student will be able to,	
0AUPC203.1	Explain different types of fluids with its properties and units (K²)
0AUPC203.2	Illustrate fundamental principles of fluid statics, kinematics and dynamics (K²)
0AUPC203.3	Derive fundamental equations of laminar flow, pipe flow and apply for different fluid flow systems (K³)
0AUPC203.4	Finding solutions for problems of fluid flow analysis using appropriate principles and equations (K³)
0AUPC203.5	Explain constructional details, classification of hydraulic machines with applications. (K²)

Course Contents:		
Sr. No.	Contents	Contact Hrs.
Unit 1	Basic concepts and properties of Fluids: Definition of fluid, Properties of fluid- Mass density, specific weight, specific volume, specific gravity, viscosity, types of fluids, vapor pressure, cavitations, compressibility, surface tension and capillarity. Hydrostatic law, Pressure head, Absolute, gauge, Vacuum, Atmosphere pressures their relationship, Measurement of pressure by Piezometers, Manometers.	06
Unit 2	Fluid Statics and Kinematics: Fluid Statics: Pascal's law and its applications, numerical treatment on finding total pressure, centre of pressure on horizontal, vertical and inclined rectangular, triangular and circular plane Surface, Buoyancy, Centre of Buoyancy, Meta Centre, Metacentric Height. Fluid Kinematics: Description of fluid motion, Types of fluid flows, Streamline, Path line, Streak line, Stream tube, flow rate and discharge, Velocity and acceleration of fluid particles, local and convective acceleration, Continuity Equation in Cartesian Coordinates in Three dimensional forms, Stream function, velocity potential function	07
Unit 3	Fluid Dynamics: Equation of Motion, Euler's Equation, Bernoulli's equation & its practical applications, Venturimeter, Orifice meter, Pitot tube, Flow over triangular and rectangular notches, Impulse momentum equation, Applications of momentum equation for pipe bend, kinetic energy and momentum correction factors	08
Unit 4	Laminar Flow and Pipe Flow: Laminar Flow: Laminar flow through circular pipes, Hagen Poiseuille equation, Laminar flow through parallel plates. Pipe Flow: Energy losses in transition, expansion and contraction, Darcy	08

	Weisbach and Chezy's Equation, Parallel pipes, Siphon pipes, Branching pipes and equivalent pipe, Hydraulic gradient line, Total energy line	
Unit 5	Dimensional analysis and Similitude: Methods of dimensional analysis, Fundamental and derived units and dimensions, Dimensionally homogeneous equations, Buckingham's Pi theorem, calculation of dimensionless parameters, dimensionless numbers and their significance in fluid flow analysis, Mach number, Similitude - geometric, kinematic and dynamic similarity, Model studies.	06
Unit 6	Fluid Machinery: Introduction and classification of fluid machines, The angular momentum principle, Euler's equation for rotodynamic machines, Application to fluid systems, Pump classification, Centrifugal pump – Construction, operation, need of priming, applications, performance characteristics of centrifugal pumps, Reciprocating pumps- Construction, operation and utility of air vessels, comparison with centrifugal pumps, Rotary pumps: working principle of gear and vane pumps, Hydraulic accumulator, Hydraulic intensifier, hydraulic press, Hydraulic jacks, applications.	07

Text Books:

Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Fluid Mechanics and Hydraulic Machines	R.K.Bansal	Laxmi Publications, New Delhi.	9	2010
02	Fluid Mechanics and Hydraulic Machines	R.K.Rajput	S. Chand Publications, New Delhi.	9	2011
03	Fluid mechanics and hydraulic machines	P. N. Modi, S.M.Seth	Standard Book House, Delhi.	8	2011
04	Fluid Mechanics and Hydraulic Machines	S. Ramamrutham	Dhanpat Rai Publishing Company, Delhi.	9	2014
05	Engineering Fluid Mechanics	K.L.Kumar	Eurasia Publishing House (P) Ltd. New Delhi.	8	2009

Reference Books:

Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Fluid Mechanics	Frank M. White	McGraw- Hill, Delhi.	8	2016
02	Fluid Mechanics	V. L. Streeter	McGraw- Hill Education, Delhi.	9	1998
03	Fluid Mechanics and Fluid Power engineering	D. S. Kumar	S. K. Kataria and sons, New Delhi.	8	2013
04	Introduction to fluid Mechanics	Edward J. Shaughnessy	Oxford University press, New Delhi.	3	2008

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
05	Fluid Mechanics-fundamentals & applications	Y.A.Cengel	McGraw-Hill, New Delhi.	5	2008

Course Details:Automotive Materials & Heat Treatments

Class	B. Tech, Sem.-III
Course Code and Course Title	0AUPC204, Automotive Materials & Heat Treatments
Prerequisite/s	0BSBS101
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10/30/10/50

Course Objectives:Students undergoing this course are expected to:

01	Acquaintance about basic understanding of ferrous and non-ferrous material, properties and their automotive applications.
02	Gain fundamental knowledge about classification, properties and applications of non-metallic materials.
03	Know about of modern materials such as light-weight materials, smart materials, dual phase alloys etc.
04	Acquire the knowledge about different types of phase diagrams and constitution of metals & alloys.
05	Gain knowledge of various heat treatment used in automobile industries.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:

0AUPC204.1	Distinguish the different ferrous and non-ferrous material, properties and its automotive applications.(K ²)
0AUPC204.2	Explain the classification, properties and applications of different non- metallic materials. (K ²)
0AUPC204.3	Select the material for automotive components. (K ³)
0AUPC204.4	Interpret the phase diagrams of materials & constitution of metals & alloys. (K ²)
0AUPC204.5	Select suitable heat-treatment process to achieve desired properties of metals and alloys. (K ³)

Course Contents:

Sr. No.	Contents	Contact Hrs.
Unit 1	Constitution of Alloys And Phase Diagrams: Constitution of alloys -Types of solid solution, Substitutional and interstitial, Hume Rothary's rules for solid solution,Construction and interpretation of	06

	Binary equilibrium diagram, Isomorphous, Eutectic and Peritectic diagrams, Intermediate phases and phase rule, cooling curves, plotting of equilibrium diagram, lever arm rule, Iron-Carbon diagram.	
Unit 2	Automotive Engineering Materials: Classification, Effect of common alloying elements on plain carbon steels, Properties and uses of High speed steels and Stainless steel, HSLA steel, HCHC steel, free cutting steel, specifications of steel-AISI, SAE, Cast irons, characteristics, Types of Cast irons, Properties and application of cast irons, allotropy, polymorphism. Non-ferrous metals and alloys: Properties and uses of important non-ferrous metals like Cu, Al, Pb, Sn, Zn.	08
Unit 3	Automotive Non Metallic Materials Polymeric materials, Formation of polymers, Classification, properties and applications of engineering polymers, Overview of Ceramic Materials, Ceramics for Advanced Applications, General Behavior, Composite materials: Types, production techniques, structure, properties and applications, Powder metallurgy, steps involved, applications, Modern Metallic Materials- Dual phase alloys, Light-weight materials, Micro alloyed steels, Ni and Ti aluminides, Nano crystalline materials.	07
Unit 4	Automotive Components & Material Selection Selection of Materials for different components & implications on vehicle design, Materials for Power train components like cylinder block, head & liner, piston & piston rings, gudgeon pin, connecting rod, bearings, crankshaft, flywheel, camshaft, valves, valves seats, springs, gears, chain & belts used for power transmission, Materials for Automobile body components, components of suspension system, dashboard.	06
Unit 5	Heat treatment I: Principles of heat treatments, transformation products of austenite, TTT diagram, CCT diagram, effect of alloying on TTT diagram, cooling media, Critical cooling rate, Heat treatment, objectives of heat treatment.	07
Unit 6	Heat treatment II: Full annealing, isothermal annealing, spheroidise annealing, subcritical annealing, normalizing, hardening, tempering, Concept of hardenability - the Jominy end quench test, other heat treatments – Austempering, patenting, isoforming, Surface hardening, chemical heat treatments, Precipitation hardening - mechanism and steps, heat treatments atmospheres, furnaces, heat treatment defects.	08

Text Books:

Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Material Science and Metallurgy	V.D. Kodgire, S. V. Kodgire	Everest Publishers, Pune	36	2015
02	Heat Treatments Principles and Techniques	T.V. Rajan, C.P. Sharma, Ashok Sharma	Prentice Hall of India Pvt Ltd, New Delhi.	2	2011
03	A Textbook of Material	O. P. Khanna	Dhanpat Rai	2	2009

	Science And Metallurgy		Publications, New Delhi.		
04	Material Science and Metallurgy	A.V. K. Suryanarayana	B. S. Publications, Andhra Pradesh, India	1	2014

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Introduction to Physical Metallurgy	S.H.Avner	McGraw-Hill Companies, New Delhi.	2	1990
02	Materials Selection in Mechanical Design	Michael F Ashby	Butterworth Heinemann, Cambridge, U.S.	5	2017
03	Materials Science and Engineering-An Introduction	William D. Callister Jr.	John Wiley & Sons (ASIA) Pvt.	9	2013
04	Foundation of Material Science & Engineering	W.F.Smith	McGraw Hill, New Delhi.	5	2003

Course Details: Elements ofAutomotive Engineering

Class	B. Tech., Sem.-III
Course Code and Course Title	0AUPC205,Elements ofAutomotive Engineering
Prerequisite/s	--
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10/30/10/50

Course Objectives:

The course enables students:

01	To know about Automobile market in India and basic systems of automobile vehicles.
02	Understand the vehicles performance parameters and also the detailed construction features of automobile chassis and body types.
03	Understand and identify various engines and control system components with their functions.
04	Know various advanced features in modern automobile vehicles.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:	
0AUPC205.1	Explain classification of automobile vehicles and types of automobile vehicles. (K ²)
0AUPC205.2	Describe transmission system and suspension systems of automobiles and their components. (K ²)
0AUPC205.3	Explain steering geometry and requirements and describe Braking system of automobiles. (K ²)
0AUPC205.4	Describe necessity of suspension system along with functions of wheels and tyres. (K ²)
0AUPC205.4	Describe lighting system as well as recent trends in automobile engineering. (K ²)

Course Contents:		
Sr. No.	Contents	Contact Hrs.
Unit 1	Introduction to Automobiles: Market in India, Vehicle layouts, the concept of aerodynamic shape of vehicle, Classification of automobile vehicles, Layout of vehicle such as front engine rear wheel drive, four wheels drive, types of automobile power plants- petrol engine, diesel engine, gas operated (LPG, CNG), electric power plants, hybrid power Plants.	06
Unit 2	Transmission Systems: Clutch: Function and purpose, types and construction of clutches as coil spring type and diaphragm type Gear box: constant mesh and synchromesh gear boxes, Epicyclic gear box their construction and operation. Overdrive, transfer case, Propeller shaft types and construction, functions of universal and slip joints. Differential: need, construction and working, differential action and operation Axle: Hotchkiss and torque tube drives, Rear- full floating axle, semi floating and three quarter floating axle.	09
Unit 3	Control Systems: Steering System: Purpose, construction and working of - recirculating ball type and rack and pinion. Wheel Geometry- caster, camber, king pin inclination, Toe In and Toe Out. Power steering. Braking System: Need, types of automotive braking systems for two and four wheeler vehicles –, hydraulic and air operated.	06
Unit 4	Suspension Systems, Wheels and Tyres: Necessity and Classification, Front and rear suspension system construction and working of Wishbone type, Mac Pherson type, Trailing link type, coiled springs, leaf spring and shock absorbers, air suspension system. Types of wheel-spoked, disc, light alloy cast. Tyres-Desirable Properties, types. Tyre specifications. Wheel alignment and balancing.	06
Unit 5	Electrical Systems: Battery: Automotive battery construction and operation.	09

	Charging System: Construction and operation of charging system, Alternator principle ,construction and working Starting System : Need, layout, construction of starting motor Lighting System : Layout of lighting system of two wheeler and four wheeler, Wiring harness, cable color codlings Ignition System and its components: Battery, magneto, electronic ignition system.	
Unit 6	Recent trends in Automotive engineering: Introduction to Pollution norms, Introduction to off-road vehicles, recent trends in fuel technology, Aerial vehicles, V2V (vehicle to vehicle) communication system, Introduction to Automotive embedded systems.	06

Text Books:

Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Automobile Engineering	William Crouse	Tata- McGraw Hill, New Delhi	2	2009
02	Automobile Engineering	K.K.Jain, R.B.Asthana	Tata- McGraw Hill, New Delhi	3	2011
03	Automobile Engineering	Kirpal Singh	Standard Publications, Delhi	1	2009
04	Automotive Mechanics	Joseph Heitner	Wiley, Madison USA	2	2002

Reference Books:

Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Automotive Embedded Systems	Nicolas Navet	CRC Press Taylor & Francis Group, Florida, USA	2	2009
02	Automotive Engineering Fundamentals	Richard Stone, Jeffrey K. Ball	SAE International, Warrendale, USA	1	2004
03	Advanced Vehicle Technology	Heinz Heisler	Butterworth Heinemann, London, UK	2	2002
04	Automotive Computer Controlled Systems	Allan W. M. Bonnick	Butterworth Heinemann, London, UK	1	2001

Course Details: Applied Thermodynamics Laboratory

Class	B. Tech, Sem.-III
Course Code and Course Title	0AUPC251, Applied Thermodynamics Laboratory
Prerequisite/s	0BSBS101, 0BSES160
Teaching Scheme: Practical	02
Credits	01
Evaluation Scheme: ISE / ESE	25/25

Course Objectives: Course aims to,

01	Acquire knowledge about importance of lubricants in thermodynamics.
02	Develop ability to conduct the test and be acquainted with the significance of penetration number and drop point of sample grease.
03	Develop ability to conduct the test and be acquainted with the significance of aniline point, flash and fire, carbon residue of sample lubricant oil.
04	Understand the impact of temperature on viscosity of oil, cloud point and pour point.
05	Evaluate performance characteristics of compressor and blower.

Course Outcomes (COs):

Upon successful completion of this course, the student will be able to:

0AUPC251.1	Compute properties of lubricants like viscosity, drop Point, fire point etc. using observations made during performance. (K³)
0AUPC251.2	Demonstrate construction and working of compressor and blower also evaluate the performance. (K²)
0AUPC251.3	Function effectively as an individual, and as a team member for performing laboratory work (S³)
0AUPC251.4	Communicate effectively, both orally and in writing journals, (S³)
0AUPC251.5	Engage in independent and life-long learning in the broadest context of technological change. (A³)
0AUPC251.6	Follow professional and ethical principles during laboratory work, (A³)

List of Experiments:

Expt. No.	Title	Contact Hrs.
01	Performance test on Grease Penetrometer.	02
02	Determine drop point of grease.	02
03	Determine percentage of carbon in given lubricating oil.	02
04	Determine cloud and pour point of lubricating oil.	02
05	Determine flash and fire point of a lubricating oil.	02
06	Determine Aniline point of lubricating oil.	02
07	Performance test on Redwood Viscometer.	02
08	Performance test on reciprocating air compressor.	02
09	Performance test on of Centrifugal air blower.	02
10	Demonstration on Bomb calorimeter.	02
11	Report on industrial visit to a steam/Gas power plant.	02

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Thermal Engineering	R. K. Rajput	Laxmi Publications, New Delhi.	8	2011
02	A Text Book of Thermal Engineering	R.S. Khurmi/ J.K.Gupta	S. Chand and Company, New Delhi.	1	2011
03	Thermal Engineering	G.N Shah	Narosa Publications, New Delhi.	2	2010

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Engineering Thermodynamics	P.K. Nag	Tata McGraw Hill ,New Delhi	5	2013
02	Thermodynamics: An Engineering Approach	YunusCengel	Tata McGraw Hill ,New Delhi	7	2011
03	Introduction to Thermodynamics	Y.V.C. Rao	University Press,Hyderabad.	1	2012
04	Basic Engineering Thermodynamics	Rayner Joel	Oxford University Press.	5	1999

Course Details: Fluid Mechanics Laboratory

Class	SY B. Tech, Sem.-III
Course Code and Course Title	0AUPC252, Fluid Mechanics Laboratory
Prerequisite/s	0BSBS102,0BSBS113, 0BSES111
Teaching Scheme: Practical	02
Credits	01
Evaluation Scheme: ISE /ESE	25/25

Course Objectives: The course enables students to,	
01	Gain knowledge of fluid pressure measuring devices and concept of flow visualization.
02	Differentiate type of fluid flow based on Reynolds number along with its significance in fluid analysis.
03	Acquire knowledge of Bernoulli's theorem and energies associated with fluid by experimentation.
04	Describe fundamentals of flow measuring devices like Venturimeter, Orifice meter, Notches.
05	Determine coefficient of friction and head loss for pipes with different materials.

Course Outcomes (COs): After successful completion of this course, student will be able to,
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0AUPC252.1	Compute Reynolds number for given fluid flow and visualize flow lines. (K³)
0AUPC252.2	Determine hydraulic coefficients and discharge for flow through different measuring devices. (K³)
0AUPC252.3	Find out losses in pipe flow for different cross sections and different arrangements. (K³)
0AUPC252.4	Exhibit professional and ethical attitude through behavior in lab sessions and co-operate with members of batch during lab work. (A²)
0AUPC252.5	Communicate effectively about laboratory work and exhibit technical curiosity in the lab work (S²)

List of Experiments:		
Expt. No.	Title	Contact Hrs.
01	Visualization of flow lines in fluid flow by Heleshaw's apparatus.	02
02	Determination of Reynolds number for given pipe flow and differentiate flow based on Reynolds number.	02
03	Study of flow through a variable area duct and verify Bernoulli's energy equation.	02
04	Determination of coefficient of discharge (Cd) of given Venturimeter and Orifice-meter.	02
05	Determination of head loss in a pipe line due to sudden expansion, sudden contraction and bend.	02
06	Determination of hydraulic coefficients (Cd, Cv, Cc) for flow through an orifice under steady condition.	02
07	Determination of coefficient of discharge (C _d) of given V-notch.	02
08	Determination of loss of head and discharge in parallel pipe.	02
09	Determination of loss of head and discharge in series pipe.	02
10	Determination of coefficient of friction in pipe flow for pipes with different materials.	02

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Fluid Mechanics and Hydraulic Machines	R.K.Bansal	Laxmi Publications, New Delhi.	9	2010
02	Fluid Mechanics and Hydraulic Machines	R.K.Rajput	S. Chand Publications, New Delhi.	9	2011
03	Fluid mechanics and hydraulic machines	P. N. Modi, S.M.Seth	Standard Book House, Delhi.	8	2011
04	Fluid Mechanics and Hydraulic Machines	S. Ramamrutham	Dhanpat Rai Publishing Company, Delhi.	9	2014

05	Engineering Fluid Mechanics	K.L.Kumar	Eurasia Publishing House (P) Ltd. New Delhi.	8	2009
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Reference Books:

Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Fluid Mechanics	Frank M. White	McGraw- Hill, Delhi.	8	2016
02	Fluid Mechanics	V. L. Streeter	McGraw- Hill Education, Delhi.	9	1998
03	Fluid Mechanics and Fluid Power engineering	D. S. Kumar	S. K. Kataria and sons, New Delhi.	8	2013
04	Introduction to fluid Mechanics	Edward J. Shaughnessy	Oxford university press, New Delhi.	3	2008
05	Fluid Mechanics- fundamentals & applications	Y.A.Cengel	McGraw-Hill, new Delhi.	5	2008

Course Details: Metallurgy Laboratory

Class	B. Tech, Sem.-III
Course Code and Course Title	0AUPC253, Metallurgy Laboratory
Prerequisite/s	0BSBS101
Teaching Scheme: Practical	02
Credits	01
Evaluation Scheme: ISE / ESE	25/00

Course Objectives:

01	Attain knowledge in metallography.
02	Acquire the knowledge about destructive and non-destructive testing methods
03	Gain knowledge in various heat treatment processes.
04	Acquire the knowledge about in hardenability and hardness.

Course Outcomes (COs):

Upon successful completion of this course, the student will be able to:

0AUPC253.1	Distinguish ferrous and nonferrous materials through macroscopic examination. (K²)
0AUPC253.2	Describe destructive and non-destructive testing methods. (K²)
0AUPC253.3	Express microstructures of steel, cast iron and non-ferrous alloys. (S²)
0AUPC253.4	Exhibit professional and ethical attitude through behavior in lab sessions and co-operate with members of batch during lab work. (A²)
0AUPC253.5	Communicate effectively about laboratory work and Exhibit Technical Curiosity in the lab work. (S²)

List of Experiments:

Expt. No.	Title	Contact Hrs.
01	Classification of given samples of the materials in to ferrous and non-ferrous category by conducting spark test.	02
02	Cram The procedure for preparation specimen for metallographic inspection.	02
03	Examination of microstructure for different types of steels to observe and compare phases present.	02
04	Examination of microstructure for different types of cast iron to observe and compare phases present.	02
05	Examination of microstructure for different types of non-ferrous alloys to observe and compare phases present.	02
06	Determination of different properties of given material in tension like yield strength, tensile strength, ductility by conducting tensile test and to draw stress strain curve.	02
07	Determination of hardness of given materials by conducting Rockwell hardness test.	02
08	Determination of hardness of given materials by conducting Brinell hardness test.	02
09	Determination of impact strength of given materials by conducting Izod impact test and Charpy impact test.	02
10	Determination of hardenability of given material by conducting Jominy End Quench Test.	02
11	Industrial visit to observe non-destructive testing methods used in automotive industries/ Industrial visit to observe heat treatments used in automotive industries.	02
12	Case study on selection of materials for Automotive applications	02

Text Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Material Science and Metallurgy	V.D. Kodgire, S. V. Kodgire	Everest Publishers, Pune	36	2015
02	Heat Treatments Principles and Techniques	T.V. Rajan, C.P. Sharma, Ashok Sharma	Prentice Hall of India Pvt Ltd, New Delhi.	2	2011
03	A Textbook of Material Science and Metallurgy	O. P. Khanna	DhanpatRai Publications, New Delhi.	2	2009
04	Material science and Metallurgy	A.V. K. Suryanarayana	B. S. Publications, Andhra Pradesh, India	1	2014

Reference Books:

Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Introduction to Physical Metallurgy	S.H.Avner	McGraw-Hill Companies, New Delhi.	2	1990
03	Materials Selection in Mechanical Design	Michael F Ashby	Butterworth Heinemann, Cambridge, U.S.	5	2017
04	Materials Science and Engineering-An Introduction	William D. Callister Jr.	John Wiley & Sons (ASIA) Pvt. U.S.	9	2013
05	Foundation of Material Science & Engineering	W.F.Smith	McGraw Hill, New Delhi.	5	2003

Course Details: Automotive component drawing laboratory

Class	B. Tech, Sem.-III
Course Code and Course Title	0AUPC254, Automotive component drawing laboratory
Prerequisite/s	0BSES105
Teaching Scheme: Practical	02
Credits	01
Evaluation Scheme: ISE / ESE	50/00

Course Objectives: Course enables to,

01	Acquire knowledge of BIS convention used in machine drawing.
02	Gain knowledge of principles of free hand sketching and sketches of different machine components.
03	Acquire knowledge of limits, fits tolerances used in machine drawing.
04	Familiar with 2D CAD drafting software for 2D component drawing.

Course Outcomes (COs):

Upon successful completion of this course, the student will be able to:

0AUPC254.1	Use BIS conventions in assembly drawing. (S ²)
0AUPC254.2	Prepare freehand drawing. (S ³)
0AUPC254.3	Prepare given details and assembly by using 2D drafting software. (S ³)
0AUPC254.4	Apply limits, fits tolerances used in machine drawing. (S ³)
0AUPC254.5	Exhibit professional and ethical attitude through behavior in lab sessions and co-operate with members of batch during lab work. (A ²)

Course Contents:

Sheet No.	Content	Contact Hrs.
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01	BIS conventions Significance and importance of BIS Conventions, Conventional representation of engineering Materials, all type of gear and assemblies, helical and leaf springs, Internal and external threads, square head, spline shaft, diamond knurling, BIS conventions for sectioning, type of sections, BIS methods of linear and angular dimensioning. Symbolic representation of welded joints.	04
02	Free sketching Based on sketching (Free hand drawing) of various Automotive components mentioned Sketches of nut, bolts, Various types of rivets and riveted joints, Various types of keys, Coupling, Bearings, Piston, Connecting rod, Cam shaft, Crank shaft etc.	04
03	Automotive Details: Any AutomotiveDetails drawing by 2D Drafting software entering limits, fits, tolerances, surface finish symbols, geometrical requirements etc.	04
04	Automotive assembly: Automotiveassembly from given drawing of details by 2D Drafting software.	02

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Introduction to Machine Drawing	R.K. Dhavan,	S. Chand and Company, New Delhi.	1	2007
02	Introduction to Machine Drawing.	N. D. Bhatt, V.M. Panchal	Charotar Publication House, Mumbai.	32	1999
03	Production Drawing,	Narayana, Kannaiah and Venkatareddy,	New Age International, New Delhi.	3	2010
04	Machine Drawing	P.S. Gill	S.K. Kataria and Sons, Delhi.	4	2013

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Machine Drawing	BA sudev Bhattachary	Oxford University Press.	4	2013
02	Machine Drawing with AutoCad	Pohit Ghosh	Pearson, Delhi.	1	2007
03	Machine Drawing	Ajeet Singh	McGraw Hill, New Delhi.	2	2012
04	Machine Drawing	N.D. Mujumdar	Pearson, Delhi.	4	2012

Course Details: Workshop Practice-II Laboratory

Class	B. Tech, Sem.-III
Course Code and Course Title	0AUPC255, Workshop Practice-II Laboratory
Prerequisite/s	0BSES151
Teaching Scheme: Practical	02
Credits	01
Evaluation Scheme: ISE/ESE	25/00

Course Objectives:

The course enables students to:

01	Acquire knowledge of working principle, application of lathe machine.
02	Gain knowledge about unconventional machining.
03	Acquire knowledge of sheet metal working and joining processes.

Course Outcomes (COs):

Upon successful completion of this course, the student will be able to:

0AUPC255.1	Explain working principle, application of lathe machine. (K²)
0AUPC255.2	Construct assembly of two parts by using operations like- plain turning, taper turning, external threading, internal threading, knurling and prepare process sheet for given job. (S²)
0AUPC255.3	Describe unconventional machine processes, sheet metal working and joining processes. (K²)
0AUPC255.4	Exhibit professional and ethical attitude through behavior in lab sessions and co-operate with members of batch during lab work. (A²)
0AUPC255.5	Communicate effectively about laboratory work and exhibit technical curiosity in the lab work (S²)

List of Experiments:

Expt. No.	Title	Contact Hrs.
01	Study construction, working principle and application of Lathe along with various machine tools such as drilling, boring, shaping machine etc.	02
02	Perform job (assembly of two parts) of plain turning, taper turning, external threading, internal threading and knurling operation with its process sheet.	14
03	Industry visit to study unconventional machining.	02
04	Industry visit to study sheet metal working and metal joining processes	02

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Manufacturing Science	A.Ghosh, Asok Kumar Malik	Affiliated East-West Press Pvt. Ltd., New Delhi	2	2010
02	Manufacturing Processes	J. P. Kaushish	PHI Learning Pvt. Ltd., Delhi	2	2010
03	Processes and Materials of Manufacturing	Roy A. Lindberg	Prentice Hall of India Pvt. Ltd., New Delhi	4	2004
04	Manufacturing Engineering and Technology	S. Kalpakjian, Steven R. Schmid	Pearson Education, Dorling Kindersley (India) Pvt. Ltd., Noida	4	2013
05	Manufacturing Processes and Systems	Phillip F. Ostwald, Jairo Munoz	Wiley India (P.) Ltd, New Delhi	9	2012

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Principles of Modern Manufacturing	Mikell P. Groover	Wiley India Pvt. Ltd., New Delhi	5	2014
02	Metal Cutting Principles	Milton C. Shaw	Oxford University Press, New Delhi	2	2016
03	Materials and Processes in Manufacturing	E. P. DeGarmo, J. T. Black, Ronald A. Koher	Prentice Hall of India Pvt. Ltd., New Delhi	8	2003
04	Automation, Production Systems, and Computer Integrated Manufacturing	M. P. Groover	PHI Learning Pvt. Ltd. ,New Delhi	3	2012
05	A Text Book of Production Technology	P. C. Sharma	S. Chand and Company Ltd., New Delhi	4	2014

Course Details:Electrical Technology Laboratory

Class	B. Tech, Sem. - III
Course Code and Course Title	0AUES256, Electrical Technology Laboratory
Prerequisite/s	0BSES103
Teaching Scheme: Practical	02
Credits	01
Evaluation Scheme: ISE/ESE	25/00

Course Objectives:

The course enables students:

01	Understand various loading test on electrical generator.
02	Acquire knowledge of effect for speed controls on DC shunt motor.
03	Impart knowledge of semiconductor devices.
04	Understand concept of electrical measurement
05	Acquire knowledge of rectification system for electric supply conversion.

Course Outcomes (COs):

Upon successful completion of this course, the student will be able to:

0AUES256.1	Analyze the operation of electric machines under different conditions. (K⁴)
0AUES256.2	Draw and analyze characteristics of Power converter. (K⁴)
0AUES256.3	Build and test different electrical circuits at the time of conduction of experiment. (S²)
0AUES256.4	Work in groups for perforating experiment. (A²)
0AUES256.5	Demonstrates acceptable presentation skills through experiment report. (A²)

Course Content:

Sr. No.	Contents	Contact Hrs.
Unit 1	Electrical generators:- Introduction to DC generators, load test on DC generators.	2
Unit 2	Electrical Motor:- Introduction to electrical motor, types of motors, speed control of motors (DC & AC).	2
Unit 3	Power Semiconductor devices and applications:- Introduction to semi -converter devices, power converters.	2
Details of Practical: Students in group of 3-4 will be engaged in following activities so as to improve English communication and overall personality development.		

Course Contents:		
List of Experiments:		
Expt. No.	Title	Contact Hrs.
1.	Load test on DC generator.	02
2.	Speed control of D.C. Shunt Motors by Flux control.	02
3.	Speed control of D.C. Shunt Motors by armature control method.	02
4.	Speed control of AC motors.	02
5.	Load test on DC motors.	02
6.	Determination of efficiency & speed regulation of 1 phases induction motor.	02
7.	Draw Characteristics of SCR/TRIAC/ MOSFETS / IGBT.	02
8.	Conduct the performance of single phase rectifier (full wave & half wave)and plot the output waveforms.	02
9.	Conduct the performance of single phase fully controlled bridge converter and plot the output waveforms.	02
10.	Conduct the performance of single phase full bridge inverter and plot the output waveforms.	02
11.	To study electrical safety precautions and wiring systems.	02

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Principal of electrical machine	V.K. Mehta and Rohit Mehta	S. Chand, New Delhi	2	2010
02	Electrical technology	B L Thereja	S. Chand, New Delhi	2	2012
03	Principal and application of electrical engineering	M. A. Salam	Narosa, New Delhi	1	2010
04	A course in electric and electronic measurement and instrumentation	A.K. Sowhney	Dhanpatrai and Co., New Delhi	17	2010

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
1	Electrical Machinery	P S Bhimbhra	Khanna Publications, New Delhi	2	1998
2	Electric Machinery	A. E. Fitzgerald	Mc-Graw Hill publications, New	4	2004

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
			Delhi		
3	Power Electronics Circuits, Devices, and Application	M.H. Rashid	Prentice Hall of India, New Delhi	2	1999
4	Power Electronics	M.D. Singh and K.B. Khanchandani	Tata Mc-Graw-Hill, New Delhi	6	1998

Course Details: Communication Skill

Class	B. Tech, Sem.-III
Course Code and Course Title	0AUHS257, Communication Skill
Prerequisite/s	0BSHS106
Teaching Scheme: Practical	02
Credits	01
Evaluation Scheme: ISE / ESE	50/00

Course Objectives: Course enables to,

01	Attain the significance of communication skills
02	Achieve communicative competency through interpersonal skills.
03	Acquire relevant skills for lifelong learning.
04	Understand the method of decision making.
05	Gain knowledge of written communication.

Course Outcomes (COs):

Upon successful completion of this course, the student will be able to:

0AUHS257.1	Create awareness on importance of communication skills. (K³)
0AUHS257.2	Explain the concept of communicative and natural English. (S²)
0AUHS257.3	Develop interpersonal skills on current problems and events. (S³)
0AUHS257.4	Apply ethics to realize the responsibilities in the society. (S³)
0AUHS257.5	Engage in analytical and critical dialogue orally. (A³)

Course Contents:

Unit. No.	Contents	Contact Hrs.
1	Communicative Concepts: Greeting people; Inviting people; Leave taking; Likes and dislikes; Agreement and disagreement; Expressing – joy, fear, surprise, worry; Opinions, beliefs, disbeliefs; Possibility and ability; Prediction and probability; Permission.	2
2	Natural English: Begin the conversation, Keep the conversation moving, Ask questions, Receive visitors, asking for information, Making offers, Friendly warnings and instructions, Giving advice and making suggestions.	2
3	Interpersonal Skills: Self-esteem and strategies for developing self-confidence; SMART goal setting; Dealing with emotions – anger, conflict,	

	depression; Developing assertiveness.	
4	Lifelong Learning: Steps in lifelong learning, Tips to achieve effective learning, Challenges in lifelong learning, Misconceptions about lifelong learning.	2
5	Body Language: on verbal communication – Eye contact, Facial expressions, Gestures, Posture and body orientation, Proximity, Vocal; Non-verbal behavior interpretation.	
Details of Practical: Students in group of 3-4 will be engaged in following activities so as to improve English communication and overall personality development.		

Course Contents:		
List of Activities:		
Activity No.	Title	Contact Hrs.
01	Personality Type Testing (This will be done in introductory session)	02
02	Goal Setting	02
03	Interpersonal Skills and Body Language - A Case Study	02
04	Presentation Skills	04
05	Teamwork	02
06	Debate	04
07	Decision Making - A Case Study	02
08	Preparation of project proposals	02

Text Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Personality Development	Hurlock, E.B	Tata McGraw Hill, New Delhi	4	2006
02	Technical English for Communication: Principle and Practice	Meenakshi Raman, Sangeetha Sharma	Oxford University Press, New Delhi	1	2009
03	Communication Skills & Soft Skills: An integrated Approach	E. Suresh Kumar, P. Sreehari, J.Savithri	Pearson Education India, New Delhi	1	2010
04	Professional Communication Skill	Dr. Pravin Bhatia, A.M.Sheikh	S Chand Publications, New Delhi	2	2001

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
01	Personal Development for	Masters, L. Ann	Cengage Learning,	1	2012

Reference Books:					
Sr. No	Title	Author	Publisher	Edition	Year of Edition
	Life and Work		New Delhi		
02	The ACE of Soft Skills: Attitude, Communication and Etiquette for Success	Gopalaswamy Ramesh	Pearson Education, New Delhi	1	2012
03	Communication Skills for Engineers	MuraliKrishna and SunithaMoishra	Pearson, New Delhi	1	2011
04	English and Communication for Students of Science and engineering	S.P.Danavel	Orient Blackswan, Chennai	1	2011

S.Y.B. Tech: Semester IV

Course Code	Course	Teaching Scheme				Evaluation Scheme				
						Scheme	Theory (Marks)		Practical (Marks)	
		L	T	P	Credits		Max	Min. for Passing	Max	Min. for Passing
0AUPC206	Automotive Chassis	03	--	--	03	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC207	Theory of Machines	03	--	--	03	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC208	Manufacturing Engineering	04	--	--	04	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC209	Strength of Materials	03	--	--	03	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--
0AUPC210	Transport Management	03	--	--	03	ISE I	10	40	--	--
						MSE	30		--	--
						ISE II	10		--	--
						ESE	50		--	--

0AUMC211	Environmental Studies	02	--	--	--		ESE	50	20	--	--
0AUPC258	Automotive Engineering Laboratory	--	--	02	01		ISE	--	--	25	10
0AUPC259	Theory of Machines Laboratory	--	--	02*	01		ESE	--	POE	25	10
0AUPC260	Strength of Materials Tutorial	--	01	--	01		ISE	--	--	25	10
0AUPC261	Instrumentation & Measurement Laboratory	--	--	02	01		ISE	--	--	25	10
							ESE	--	POE	25	10
0AUPC262	Hydraulics & Pneumatics Laboratory	--	--	02	01		ISE	--	--	50	20
0AUBS263	Programming In C++	--	--	02*	01		ISE	--	--	25	10
0AUHS264	Professional Skills Development – I	--	--	02	01		ISE	--	--	25	10
Total		18	01	10	23		Total	550	--	250	--
Total Contact Hours/Week= 29 hrs							Total Marks=800				
*Indicates lab session to be conducted every alternative week											

Course Category	HS	BS	ES	PC	PE	OE	MC	AC
Credits	1	1	--	21	--	--	--	--
Cumulative Sum	2	5	1	38	--	--	--	--

Course Details: Automotive Chassis

Class	B. Tech, Sem.-IV
Course Code and Course Title	0AUPC206, Automotive Chassis
Prerequisite/s	0AUPC205, 0AUPC210
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISE I/MSE/ISE II/ESE	10/30/10/50

Course Objectives: The course enables student to,	
01	Gain basic knowledge of automotive chassis system.
02	Acquire the comprehensive knowledge of various chassis sub-systems.
03	Improve the logical ability of thinking to solve steering and brake problems.
04	Acquire the knowledge about modern chassis systems of an automobile.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to,	
0AUPC206.1	Elaborate different types of chassis frames. (K ³)
0AUPC206.2	Justify the selection of steering geometry and types of axle for a given automotive application. (K ⁴)
0AUPC206.3	Examine elements/types of suspension, brakes, wheels and tyre systems for given application of automobile. (K ⁴)
0AUPC206.4	Solve problems on steering and braking system. (K ³)
0AUPC206.5	Explain chassis systems used in modern automobiles. (K ³)

Course Contents:		
Sr.No.	Contents	Contact Hrs.
Unit 1	Layout & Frames: Types of chassis layout with reference to power plant locations and drives, two wheeler and three wheeler chassis layout, vehicle frames, various types of frames, constructional details, materials, testing of vehicle frames, unitized frame body construction, study of loads, moments and stresses on frame member, chassis lubrication.	06
Unit 2	Front Axle: Front and stub axles- functions, types, construction details, and materials. Steering System: Front wheel geometry and alignment, conditions for true rolling motion, Ackermann and Davis steering system, steering linkages and layouts, steering gear boxes, steering dampers and kinematics, rear and four wheel steering, power and power assisted steering, steering systems used for off-road vehicles, Numerical problems on Ackerman's steering.	08
Unit 3	Suspension System: Need and functions of suspension, constructional details and characteristics of leaf, coil, rubber, composite and torsion bar spring, front & rear suspensions- rigid/conventional, independent, pneumatic and hydro – elastic suspension, suspension dampers- need, principles, types of fittings-pressurized and non-pressurized	06
Unit 4	Braking Systems: requirements, functions, braking fundamentals and numerical problems, drum and disc brakes- constructional details and fundamentals, hydraulic braking system, servo assisted brake system, air brake system, parking brake, retarded engine brakes- eddy and hydraulic, power and ABS system.	09
Unit 5	Rear Axles: types and their construction of rear axles, loads acting on rear axles, twist beam rear axle, multi axles vehicles. Wheels and Tyres: functions, requirements and various designs, specifications, constructional details, tread pattern, material, and parameters affecting life.	08

Unit 6	Advanced Chassis Systems: Electric and electronic power steering systems, Active and electronic controlled suspension system, automatic traction and stability control (ESC/ESP), regenerative braking system, tire pressure monitoring system, X-by wire technology.	04
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Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year
01	Automobile Mechanics	Dr. N. K. Giri	Khanna publishers, Dehli	8	2013
02	Automobile Engineering	G. B. Narang	Khanna publishers, Dehli	5	2007
03	Automobile Engineering	R. B. Gupta	SatyaPrakashan, New Delhi	9	2014
04	Automotive Mechanics	William Crouse	McGraw Hill Publishers, New Delhi	10	2013

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year
01	The Motor Vehicle	Garrett, Newton, Steeds	Butterworth-Heinemann, London	13	2001
02	Automotive technology - A system approach	Jack Erjavac	SAE publication, USA	5	2009
03	Automotive Chassis and Body	Crouse W. H.	McGraw-Hill, New York	1	1971
04	Chassis design	William, Douglas, Olley,	SAE, USA	1	2012

Course Details: Theory of Machines

Class	B. Tech, Sem.-IV
Course Code and Course Title	0AUPC207, Theory of Machines
Prerequisite/s	0BSES111,0BSES105
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10/30/10/50

Course Objectives: The course enables students to,	
01	Study basic concept of kinematics and kinetics of machine elements and mechanism.
02	Develop competency in graphical and analytical method for solving problems in static and dynamic force analysis.
03	Illustrate the terminology of gear and gear train.
04	Explain types of Cam with followers and select according to their applications.
05	Explain with working principles and applications of governors.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:
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0AUPC207.1	Develop velocity and acceleration diagrams for various mechanisms.(K ³)
0AUPC207.2	Illustrate force analysis of engine mechanism. (K ²)
0AUPC207.3	Explain the characteristics of meshing gears and select the gear train according to application. (K ²)
0AUPC207.4	Develop profile of cam to obtain specified follower motion for an application.(K ³)
0AUPC207.5	Solve the example on governor height for corresponding change in speed and sleeve displacement. (K ³)

Course Contents:		
Sr.No.	Contents	Contact Hrs.
Unit 1	Basic Concept of Mechanisms Links, kinematics pair, kinematics chain, mechanism, inversions of mechanisms, types of constraints, Grubler's criterion, slider crank chain and its inversions, Double slider crank chain and its inversions, four bar chain and its inversions.	06
Unit 2	Kinematic Analysis of Mechanisms A) Velocity Analysis of Mechanisms Velocity analysis for the given mechanism by relative velocity method. B) Acceleration Analysis of Mechanism Velocity and Acceleration analysis for the given mechanism by relative method including pairs involving corioli's acceleration. C) Synthesis of Mechanism Type of synthesis, quantitative synthesis, dimensional synthesis. Function generation for given Mechanism.	10
Unit 3	Static and dynamic force analysis of IC Engine mechanism: Analytical method for displacement, velocity and acceleration of IC Engine mechanism, D'Alembert's principle, static and dynamic force analysis of IC Engine mechanism, dynamically equivalent system, correction couple, graphical and analytical method for determination of torque on crankshaft.	06
Unit 4	Gear and Gear train A) Terminology of Gear, Interference in involute gears, Practical Example on critical Numbers of teeth for interference free motion. Methods to control interference in involute gears with practical examples. B) Types of Gear trains- Simple, Compound, Reverted, Epicyclic gear train, Tabular method for finding the speeds of elements in epicyclic gear train, Automotive differential gear box.	06
Unit 5	Cam Mechanism Cams and its Classification, Followers and its Classification, Follower Motion analysis and plotting graph of displacement, velocity and acceleration in time domain, Construct diagrams of displacement, Velocity and Acceleration for follower motion such as Uniform velocity, SHM, Uniform acceleration and retardation, cycloidal motion, Construction of Cam profile for radial and offset followers.	08

Unit 6	Governor Mechanisms Introduction, Types of Governor, Practical Example on governor effort and governor power, Controlling force analysis, sensitivity, stability, isochronisms and hunting, friction, insensitiveness.	06
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Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Theory of Machines.	S.S. Ratan	McGraw Hill Education, New Delhi.	4	2014
02	Theory of Machines.	V.P. Singh	Dhanpat Rai and Sons, New Delhi	5	2017
03	Theory of machines.	Dr. R. K. Bansal Dr. J. S. Brar	Laxmi Publication, New Delhi	5	2016
04	Theory of Machines.	P. L. Ballany	Khanna Publication, Delhi.	25	2003

Reference Books

Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	The Theory of Machines.	Thomas Bevan	CBS Publishers, New Delhi.	3	2005
02	Theory of Machines and Mechanism.	J. E. Shigley	Oxford University press, Oxford, UK	3	2014
03	Theory of machines: Kinematics and Dynamics	Sadhu Singh	Pearson Education, Noida, Delhi	3	2011
04	Theory of machines and Mechanism.	Dr. Jagdish Lal	Metropolitan Book Company, New Delhi	2	1998

Course Details: Manufacturing Engineering

Class	B. Tech., Sem. - IV
Course Code and Course Title	0AUPC208, Manufacturing Engineering
Prerequisite/s	0BSBS101, 0AUPC204, 0AUPC211
Teaching Scheme: Lecture/Tutorial	04/00
Credits	04
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10/30/10/50

Course Objectives:

The course enables students to :

01	Acquire knowledge of casting process in detail along with various types of casting.
02	Acquire knowledge of forming, plastic shaping and welding processes.
03	Understand procedure to calculate stresses and components of machining forces
04	Broaden knowledge of conventional and unconventional machining processes

05	Understand part programming and importance of part programming.
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Course Outcomes (COs): Upon successful completion of this course, the student will be able to:	
0AUPC208.1	Explain casting process in detail along with various types of casting. (K ²)
0AUPC208.2	Describe forming, plastic shaping and joining processes with neat sketch. (K ²)
0AUPC208.3	Solve problems on metal cutting.(K ³)
0AUPC208.4	Describe conventional and unconventional machining processes with neat sketch. (K ²)
0AUPC208.5	Develop part programs for various machining processes (K ³)

Course Contents:		
Sr.No.	Contents	Contact Hrs.
Unit 1	Casting Importance of casting as manufacturing Process, Pattern making- types of allowances, Moulding sand, its types and properties, types of moulding process, investment casting, gravity and pressure die-casting, centrifugal casting, continuous casting. melting and pouring, gating system, runners and risers, types of furnaces, Cleaning-fettling and inspection of casting, casting defects.	12
Unit 2	Forming and Plastic Shaping Processes Forming: rolling, forging, extrusion and drawing, bending, Sheet metal working- blanking, piercing, punching, and trimming. Plastic Shaping: Introduction to blow moulding, injection moulding, extrusion, calendaring and Thermo forming, processing of thermosets. Selection of manufacturing process for automotive components.	08
Unit 3	Joining Processes Introduction and classification of welding processes, welding positions, welding joints types and selection. A.C. metal arc welding, resistance welding, submerged arc welding, tungsten inert gas welding, metal inert gas welding, electron beam welding, laser beam welding, ultrasonic welding, welding defects, soldering, brazing.	08
Unit 4	Theory of Metal Cutting Basic machining operations, single and multi-point cutting tools, Mechanism of chip formation and types, cutting forces, cutting tool materials, Heat generation and cutting tool temperature, tool wear and tool life, machinability.	12
Unit 5	Conventional Machining Introduction to Lathe: Centre, Capstan and Turret Lathes, Drilling & Boring Machine, Milling Machine, Grinding Machine: Working principles, types, specifications, principal parts.	08
Unit 6	Unconventional Machining Working principle and application of EDM, ECM, LBM, AJM, Photo-chemical, CNC, VMC, HMC, introduction to NC part programming	08

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Manufacturing Science	A.Ghosh, Asok Kumar Malik	Affiliated East-West Press Pvt. Ltd., New Delhi	2	2010
02	Manufacturing Processes	J. P. Kaushish	PHI Learning Pvt. Ltd., Delhi	2	2010
03	Processes and Materials of Manufacturing	Roy A. Lindberg	Prentice Hall of India Pvt. Ltd., New Delhi	4	2004
04	Manufacturing Engineering and Technology	S. Kalpakjian, Steven R. Schmid	Pearson Education [Dorling Kindersley (India) Pvt. Ltd., Noida]	4	2013
05	Manufacturing Processes and Systems	Phillip F. Ostwald, Jairo Munoz	Wiley India (P.) Ltd, New Delhi	9	2012

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Principles of Modern Manufacturing	Mikell P. Groover	Wiley India Pvt. Ltd., New Delhi	5	2014
02	Metal Cutting Principles	Milton C. Shaw	Oxford University Press, New Delhi	2	2016
03	CAD/ CAM Computer – Aided Design and Manufacturing	M.Groover, E. Zimmers	Pearson Education [Dorling Kindersley (India) Pvt. Ltd., Noida]	1	2013
04	Materials and Processes in Manufacturing	E. P. DeGarmo, J. T. Black, Ronald A. Koher	Prentice Hall of India Pvt. Ltd., New Delhi	8	2003
05	Automation, Production Systems, and Computer Integrated Manufacturing	M. P. Groover	PHI Learning Pvt. Ltd., New Delhi	3	2012

Course Details: Strength of Materials

Class	B. Tech, Sem.-IV
Course Code and Course Title	0AUPC209,Strength of Materials
Prerequisite/s	0BSES110
Teaching Scheme: Lecture/Tutorial	03/00
Credits:	03
Evaluation Scheme: ISE I / MSE / ISE II /	10/30/10/50

ESE	
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Course Objectives: The course enables students to :	
01	Gain knowledge of the stresses and strains in axially-loaded members, factor of safety, complementary shear stress and different elastic constants.
02	Understand principal stresses, maximum shearing stress, as well as principal stresses.
03	Understand procedure to draw Shear Force Diagram and Bending Moment Diagram for beams.
04	Acquire knowledge of stresses in beams for various sections and the deflections produced in beams, columns.
05	Understand effect of torsion on circular shafts

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:	
0AUPC209.1	Compute the stresses and strains in axially-loaded members, factor of safety, complementary shear stress and different elastic constants. (K³)
0AUPC209.2	Determine principal stresses, maximum shearing stress by analytical as well as graphical method. (K³)
0AUPC209.3	Draw shear force and bending moment diagram for different loading conditions. (K³)
0AUPC209.4	Calculate stresses in beams for various sections and the deflections produced in beams, columns. (K³)
0AUPC209.5	Solve problems of hollow and solid circular shafts subjected to torsion. (K³)

Course Contents:		
Sr.No.	Contents	Contact Hrs.
Unit 1	Simple Stresses and Strains: Concept of stress and strain, stress-strain diagram, Hooke's Law, working stress, factor of safety, complementary shear stress, elastic constants and significance, Deformation of simple and compound bars under axial loading, Stresses in the components subjected to multi- axial forces, thermal stresses, strain energy	08
Unit 2	Principal Stresses and Strains: Stresses on inclined plane, Principal stresses, maximum shear stress, Positions of principal planes and planes of maximum shear, Mohr's circle for stresses, principal strain, maximum shear strain, strain gauges and rosettes.	07
Unit 3	Shear Force and Bending Moment Diagram: SF and BM diagram definitions, SFD and BMD for cantilever, Simply Supported and overhanging beams, under different loading conditions such as point load, UDL over full span or part of span, UVL over full span or part of span and couple, point of contra flexure, Relation between shear force, bending moment and intensity of loading	07

Unit 4	Stresses in Beams: Bending Stresses: Symmetric pure bending of beams, flexure formula, moment of resistance of cross-sections, simple built-up section, design of various sections such as rectangular and circular sections; L, I and T sections Shear stresses: Distribution of shear stresses in beams of various sections, combined effect of bending and shear.	07
Unit 5	Deflection of Beams and Columnn: Deflection of beams: Strain curvature and moment curvature relation, Deflection of Cantilever and simply supported beam by Double integration method, Macaulay's method, Area moment method. Columns: Euler's formula for different end connections, concept of equivalent length, eccentric loading, Rankine's formula	07
Unit 6	Torsion: Basic assumptions in torsion, analysis of torsion for circular shaft, power transmitted, Angular deflection, combined effect of bending and Torsion	06

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Mechanics of Materials	Ferdinand P. Beer, E. Russell Johnston Jr., John T. Dewolf, David F. Mazurek	Tata McGraw Hill Education Private Ltd. New Delhi	5	2011
02	Strength of Materials	S. Ramamurthum, R. Narayanan	DhanpatRai Publishing Company, New Delhi	17	2011
03	Strength of Materials	W. A. Nash	McGraw Hill Education India Pvt. Ltd., New Delhi	4	2014
04	Strength of Materials	S. S. Rattan	McGraw Hill Education India Pvt. Ltd., New Delhi	2	2014
05	Strength of materials	B. K. Sarkar	Tata McGraw Hill Publishing Company ltd., New Delhi	1	2003

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Elements of Strength of Materials	S.P. Timoshenko, Donovan H. Young.	Affiliated East West Press Pvt. Ltd., New Delhi	5	2012
02	Mechanics of Materials	James M. Gere	Nelson Thornes Ltd, Cheltenham (U. K.)	5	2002
03	Strength of Materials	Debabrata Nag, Abhijit Chanda	Wiley India Pvt. Ltd New Delhi	2	2012
04	Mechanics of Materials	A. Pytel, J. Kiusalaas	Cengage Learning India Pvt. Ltd., Delhi	2	2012

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Elements of Strength of Materials	S.P. Timoshenko, Donovan H. Young.	Affiliated East West Press Pvt. Ltd., New Delhi	5	2012
05	Fundamentals of Strength of Materials	P. N. Chandramouli	PHI Learning Pvt. Ltd., New Delhi	1	2013

Course Details:Transport Management

Class	S. Y. Tech, Sem-IV
Course Code and Course Title	0AUPC210, Transport Management
Prerequisite/s	--
Teaching Scheme: Lecture/Tutorial	03/00
Credits	03
Evaluation Scheme: ISE I / MSE / ISE II / ESE	10/30/10/50

Course Objectives:

The course enables the student;

01	To understand motor vehicle act & central motor vehicle rules.
02	To attain the knowledge of insurance & taxation.
03	To understand various transport operations.
04	To broaden the knowledge about traffic management.

Course Outcomes (COs):

Upon successful completion of this course, the students will be able to:

0AUPC210.1	Make use of the motor vehicle act & central motor vehicle rules. (K³)
0AUPC210.2	Apply motor vehicle insurance & taxation basics. (K³)
0AUPC210.3	Analyze the passenger & goods transport operations and characterize fare structure. (K⁴)
0AUPC210.4	Make use of advanced techniques in traffic management. (K³)
0AUPC210.5	Carry out Survey of accidental claims, vehicle volume count, pedestrian density, vehicle speed, axle load. (K⁴)

Course Contents:

Sr.No.	Contents	Contact Hrs.
Unit 1	Motor Vehicle Act: Short titles & definitions, Laws governing to use of motor vehicle & vehicle transport, Licensing of drivers & conductors, Registration of vehicle, State & interstate permits, Traffic rules, Signals & controls, Accidents, Causes & analysis, Responsibility of driver, Offences and penalties, Different types of RTO forms, Government administration structure- Motor vehicle department of Maharashtra, Rules regarding construction of motor vehicles.	10

Unit 2	Taxation : Objectives, Structure & methods of laying taxation, Onetime tax, Tax exemption & tax renewal, Tax calculations.	04
Unit 3	Insurance : Insurance principles, Types & significance, Comprehensive insurance, Third party insurance, Exemption from insurance, Insurance calculations, Furnishing of particulars of vehicles involved in accident, IDV, Subrogation, Future package policies, MACT (Motor Accident Claims Tribunal), Hit & Run case, Solatium Fund, Duty of driver in case of accident, Surveyor & Loss Assessor, Surveyors report.	07
Unit 4	Passenger Transport Operation: Structure of passenger transport organizations, Typical depot layouts, Requirements and Problems on fleet management, Significance of Motor Transport Workers Act, Fleet maintenance, Bus & Crew Scheduling, MIS In Passenger Transport, operation & control, Training in Passenger Transport Operation, Passenger amenities, Advertisement, Theory of fares-Basic principles of fare charging, Differential rates for different types of services, Depreciation & debt charges, Operation cost and Revenues, Economics & records.	10
Unit 5	Goods Transport Operation: Structure of goods transport organizations, Scheduling of goods transport, Market players and Interrelationships, Freight calculations Management Information System (MIS) in goods transport operation, Intelligent Transport System, Hazards goods and class labels, Storage & transportation of petroleum products.	07
Unit 6	Advance Techniques in Traffic Management: Traffic detectors, Roadway sensors, Surface street control, bridge and tunnel management, Traffic navigation, Global positioning system, Parking Survey, Field Work.	04

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Road Passenger Transport in India	P. G. Patankar	CIRT, Pune	1	1986
02	Advanced Traffic Control on Highways	B. De Schutter, T. Bellemans	Delft University of Technology, Netherland	1	1999
03	Ontario Traffic Manual	Ataur Bacchus	Ministry of Ontario traffic police, Ontario	1	2007

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Motor Vehicle Laws in	A K Gupte,	Hind Law House,	7	2002

	Maharashtra	S D Dighe	Pune		
02	Economics of Transport	S.K. Shrivastava	S Chand & Co. (Pvt) Ltd., New Dehli	5	1971
03	Transport Development in India	S.K. Shrivastava	S. Chand & Co. Pvt. Ltd., New Delhi	8	1981
04	Bus operation, principles and practice for the transport student	L. Kitchen	Pub. for Bus & Coach, by Iliffe, England	1	1947

Course Details: Environmental Studies

Class	B. Tech, Sem.-IV
Course Code and Course Title	0AUMC211, Environmental Studies
Prerequisite/s	--
Teaching Scheme: Lecture	02
Credits	--
Evaluation Scheme: ISE/ESE	50/00

Course Objectives:

The course enables students to,

01	Gain knowledge of nature and the facts about environment.
02	Create awareness about scientific, technological, economic and political solutions to environmental problems.
03	Understand interrelationship between living organism and environment.
04	Acquire knowledge of the importance of environment by assessing its impact on the human world; envision the surrounding environment, its functions and its value.
05	Create awareness about integrated themes and biodiversity, natural resources, pollution control and waste management.

Course Outcomes (COs):

Upon successful completion of this course, the student will be able to,

0AUMC211.1	Explain importance of environmental studies with necessary of acts.(K ²)
0AUMC211.2	Explain importance of public awareness on environmental problems (K ²)
0AUMC211.3	Write a technical report in team regarding course and impacts of environment related issues.(S ²)
0AUMC211.4	Discuss current concern of environment issues.(A ²)
0AUMC211.5	Describe the need of environment protection and ethics. (A ²)

Course Contents:

Sr.No.	Contents	Contact Hrs.
Unit 1	Nature of Environmental Studies. Definition, scope and importance. Multidisciplinary nature of environmental	02

	studies Need for public awareness.	
Unit 2	Natural Resources. a) Forest resources: Use and over-exploitation, deforestation, dams and their effects on forests and tribal people; b) Water resources: Use and over-utilization of surface and groundwater, floods, drought, conflicts over water, dams-benefits and problems. c) Mineral resources: Usage and exploitation. Environmental effects of extracting and using mineral resources. d) Food resources: World food problem, changes caused by agriculture effect of modern agriculture, fertilizer-pesticide problems. e) Energy resources: Growing energy needs, renewable and non-renewable energy resources, use of alternate energy sources. Solar energy, Biomass energy, Nuclear energy, f) Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. Role of an individual in conservation of natural resources.	04
Unit 3	Ecosystems Concept of an ecosystem. Structure and function of an ecosystem. Producers, consumers and decomposers. Energy flow in the ecosystem. Ecological succession. Food chains, food webs and ecological pyramids. Introduction, types, characteristics features, structure and function of the following ecosystem :- a) Forest ecosystem, b) Grassland ecosystem, c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)	04
Unit 4	Biodiversity and its conservation Introduction- Definition: genetic, species and ecosystem diversity. Bio-geographical classification of India. Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values. India as a mega-diversity nation. Western Ghat as a biodiversity region. Hot-spots of biodiversity. Threats to biodiversity habitat loss, poaching of wildlife, man-wild life conflicts. Endangered and endemic species of India. Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.	05
Unit 5	Environmental Pollution Definition: Causes, effects and control measures of: Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, Nuclear hazards. Solid waste Management: Causes, effects and control measures of urban and industrial wastes. Role of an individual in prevention of pollution.	04
Unit 6	Social Issues And The Environment Disaster management: floods, earthquake, cyclone, tsunami and landslides Urban problems related to energy. Water conservation, rain water harvesting, watershed management. Resettlement and rehabilitation of people; its problems and concerns. Environmental ethics: Issue and possible solutions. Global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Wasteland reclamation. Consumerism and waste products.	03
Unit 7	Environmental Protection From Unsustainable to Sustainable development Environmental Protection Act. Air (Prevention and Control of Pollution) Act. Water (Prevention and	03

	control of Pollution) Act. Wildlife Protection Act. Forest Conservation Act. Population Growth and Human Health, Human Rights	
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Mini Project	<u>Mini project based on :</u> Environmental assets River/Forest/Grassland/Hill/Mountain. OR A local polluted site Urban/Rural/Industrial/Agricultural. OR Study of common plants, insects, and birds. OR Study of simple ecosystems - ponds, river, hill slopes, etc. (Mini Project report is Mandatory.)
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<u>Assessment Method:</u>		
1. Mini Project report – 10 marks 2. ISE question paper format will be Multiple Choice Questions- 40 Marks		
Unit No.	Topic Name	Weightage
1	Nature of Environmental Studies.	4 Marks
2	Natural Resources.	7 Marks
3	Ecosystems	7 Marks
4	Biodiversity and its conservation	7 Marks
5	Environmental Pollution	7 Marks
6	Social Issues and the Environment	8 Marks

<u>IMPORTANT NOTES:</u>	
1. ISE will be conducted in 14 th week of semester. 2. Mini Project report will be submitted to course coordinator in 10 th week of semester. 3. Students should get minimum 40% marks to get PP (PASS) grade. 4. Students getting less than 40% marks will be offered NP (NOT PASS) grade. 5. To get B. Tech. Degree PP grade in Environmental Studies is mandatory.	

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Environmental Studies	Dr. B. S. Chauhan	University Science Press, New Delhi	1	2008
02	Environmental Studies	Dr. P. D. Raut	S. U. Kolhapur	3	2011

Reference Books:

Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Principals of Environmental Science and Engineering	Raman Sivakumar	Cengage learning, Singapore	2	2005
02	Elements of Environmental Science and Engineering	P. Meenakshi	Prentice Hall of India Private Limited, New Delhi	-	2006
03	Environmental Science – working with the Earth	G.Tyler Miller Jr	Thomson Brooks /Cole	11	2006

Course Details: Automotive Engineering Laboratory

Class	B. Tech, Sem.-IV
Course Code and Course Title	0AUPC258, Automotive Engineering Laboratory
Prerequisite/s	0AUPC205, 0AUPC210
Teaching Scheme: Practical	02
Credits	01
Evaluation Scheme: ISE/ESE	25/25

Course Objectives: The course enables students to,

01	Build the fundamental knowledge in the field of automotive chassis and transmission systems.
02	Familiar with the engineering practices in chassis and transmission system.
03	Develop a logical ability to justify the recommendation of automotive chassis/transmission system for particular application.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to:

0AUPC258.1	Identify and locate basic components that make up automotive chassis/transmission systems. (K²)
0AUPC258.2	Draw labeled sketches/schematics of automotive transmission/chassis systems. (K³)
0AUPC258.3	Demonstrate the functioning of various automotive chassis and transmission systems. (K³)
0AUPC258.4	Exhibit professional and ethical attitude through behavior in lab sessions and co-operate with members of batch during lab work (A²)
0AUPC258.5	Communicate effectively about laboratory work and Exhibit Technical Curiosity in the lab work (S²)

List of Experiments:

Exp. No.	Title	Contact Hrs.
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01	Trial on front wheel steering geometries.	02
02	Trial on hydraulic, electric and electronic power steering.	02
03	Perform computerized wheel balancing.	02
04	Perform computerized wheel alignment.	02
05	Trial on hydraulic, air, vacuum servo and parking brake.	02
06	Demonstration of conventional and independent suspensions.	02
07	Demonstration of conventional and electronic shock absorber.	02
08	Demonstration of clutches like single and multi-plate, centrifugal, diaphragm clutch.	02
09	Demonstration of conventional constant mesh and synchromesh type of gear boxes.	02
10	Demonstration of continuous variable transmission unit (CVT).	02
11	Demonstration of final drive and differential assembly.	02
12	Industrial visit to tyre retreading unit.	02

Text Books:

Sr. No.	Title	Author	Publisher	Edition	Year
01	Automobile Mechanics	Dr. N. K. Giri	Khanna publishers, Dehli	8	2013
02	Automobile Engineering	G. B. Narang	Khanna publishers, Dehli	5	2007
03	Automobile Engineering	R. B. Gupta	SatyaPrakashan, New Delhi	9	2014
04	Automotive Mechanics	William Crouse	McGraw Hill Publishers, New Delhi	10	2013

Reference Books:

Sr. No	Title	Author	Publisher	Edition	Year
01	The Motor Vehicle	Newton, Garrett, Steeds	Butterworth-Heinemann, London	13	2001
02	Automotive technology - A system approach	Jack Erjavac	SAE publication, USA	5	2009
03	Automotive Chassis and Body	Crouse W. H.	McGraw-Hill, New York	1	1971
04	Chassis design	William, Douglas, Olley	SAE, USA	1	2012

Course Details: Theory of Machines Laboratory

Class	B. Tech, Sem.-IV
Course Code and Course Title	0AUPC259, Theory of Machines Laboratory
Prerequisite/s	0BSES111,0BSES105
Teaching Scheme: Practical	02*
Credits	01
Evaluation Scheme: ISE / ESE	25/00

Course Objectives: The course enables students to,	
01	Develop competency in drawing velocity and acceleration diagram for simple and complex mechanism.
02	Develop competency in graphical and analytical method for solving problems in static and dynamic force analysis.
03	Demonstrate different types of gear
04	Explain with working principles and applications of governors.

Course Outcomes (COs): Upon successful completion of this course, the students will be able to:	
0AUPC259.1	Explain working of different four bar chain, single slider crank mechanism, and double slider crank mechanism (K²)
0AUPC259.2	Develop velocity and acceleration diagrams for various mechanisms. (K³)
0AUPE259.3	Develop profile of cam to obtain specified follower motion for an application. (K³)
0AUPE259.4	Analyze the governor to determine its height for corresponding change in speed and sleeve displacement. (K⁴)
0AUPE259.5	Communicate effectively in laboratory work and show technical curiosity in the lab work. (S²)
0AUPE259.6	Exhibit professional and ethical attitude through behavior in lab sessions and co-operate with members of batch during lab work. (A²)

List of Experiments:		
Exp. No.	Title	Contact Hrs.
01	Study of basic mechanisms and its inversions of mechanism.	02
02	Kinematic Analysis of mechanisms using relative velocity and acceleration method.	02
03	Kinematic Analysis of mechanisms using instantaneous centre method.	02
04	Kinematic Analysis of mechanisms using Klein's construction method.	02
05	Experiment on generation of involute gear tooth profile and verification of law of gearing.	02
06	Develop displacement, velocity and acceleration curves of cam follower.	02
07	Governor characteristics for Porter governor and Hartnell governor	02
08	Computer programming for velocity and acceleration analysis of slider cranks mechanism.	02
Note: Perform any 5 Experiments among the experiments list.		

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Theory of Machines.	S.S. Ratan	McGraw Hill	4	2014

			Education, New Delhi.		
02	Theory of Machines.	V.P. Singh	Dhanpat Rai and Sons, New Delhi	5	2017
03	Theory of machines.	Dr. R. K. Bansal Dr. J. S. Brar	Laxmi Publication, New Delhi	5	2016
04	Theory of Machines.	P. L. Ballany	Khanna Publication, Delhi.	25	2003

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	The Theory of Machines.	Thomas Bevan	CBS Publishers, New Delhi.	3 rd	reprint 2005
02	Theory of Machines and Mechanism.	J. E. Shigley	Oxford University press, Oxford, UK	3 rd	2014
03	Theory of machines: Kinematics and Dynamics	Sadhu Singh	Pearson Education, Noida, Delhi	3 rd	2011
04	Theory of machines and Mechanism.	Dr. Jagdish Lal	Metropolitan Book Company, New Delhi	2 nd	1998

Course Details: Strength of Materials Tutorial

Class	B. Tech, Sem.-IV
Course Code and Course Title	0AUPC260, Strength of Materials Tutorial
Prerequisite/s	0BSES110
Teaching Scheme: Lecture/Tutorial	00/01
Credits:	01
Evaluation Scheme: ISE/ ESE	25/00

Course Objectives:

The course enables students to :

01	Gain knowledge of the stresses and strains in axially-loaded members, factor of safety, complementary shear stress and different elastic constants.
02	Understand principal stresses, maximum shearing stress, as well as principal stresses.
03	Understand procedure to draw Shear Force Diagram and Bending Moment Diagram for beams.
04	Acquire knowledge of stresses in beams for various sections and the deflections produced in beams, columns.
05	Understand effect of torsion on circular shafts

Course Outcomes (COs):

Upon successful completion of this course, the student will be able to:

0AUPC260.1	Compute the stresses and strains in axially-loaded members, factor of safety,
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	complementary shear stress and different elastic constants. (K^3)
0AUPC260.2	Determine principal stresses, maximum shearing stress by analytical as well as graphical method. (K^3)
0AUPC260.3	Draw shear force and bending moment diagram for different loading conditions. (K^3)
0AUPC260.4	Calculate stresses in beams for various sections and the deflections produced in beams, columns. (K^3)
0AUPC260.5	Solve problems of hollow and solid circular shafts subjected to torsion. (K^3)

List of Tutorials:		
Tutorial No.	Title	Contact Hrs.
01	Determine stresses and strain in axially loaded components.	01
02	Compute volumetric strain, elastic constants and thermal stress induced in given components.	01
03	Compute principal stress, principal strain and location of these planes, along with stresses induced on inclined plane.	01
04	Verify stresses induced due to biaxial stresses with the help of graphical and analytical method.	01
05	Draw shear force and bending moment diagram for given loading condition.	01
06	Find out stresses induced in a beam due to bending.	01
07	Find out stresses induced in a beam due to shear.	01
08	Determine deflection and slope of beam due to various loading condition.	01
09	Determine buckling load and safe load for columns with different end conditions.	01
10	Determine angular deflection, size of circular shaft subjected to torsion.	01

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Mechanics of Materials	Ferdinand P. Beer, E. Russell Johnston Jr., John T. Dewolf, David F. Mazurek	Tata McGraw Hill Education Private Ltd. New Delhi	5	2011
02	Strength of Materials	S. Ramamurthum, R. Narayanan	Dhanpat Rai Publishing Company, New Delhi	17	2011
03	Strength of Materials	W. A. Nash	McGraw Hill Education India Pvt. Ltd., New Delhi	4	2014
04	Strength of Materials	S. S. Rattan	McGraw Hill Education India Pvt. Ltd., New Delhi	2	2014
05	Strength of	C. K. Sarkar	Tata McGraw Hill	1	2003

	materials		Publishing Company Ltd., New Delhi		
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Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Elements of Strength of Materials	S.P. Timoshenko, Donovan H. Young.	Affiliated East West Press Pvt. Ltd., New Delhi	5	2012
02	Mechanics of Materials	James M. Gere	Nelson Thornes Ltd, Cheltenham (U. K.)	5	2002
03	Strength of Materials	Debabrata Nag, Abhijit Chanda	Wiley India Pvt. Ltd New Delhi	2	2012
04	Mechanics of Materials	B. Pytel, J. Kiusalaas	Cengage Learning India Pvt. Ltd., Delhi	2	2012
05	Fundamentals of Strength of Materials	P. N. Chandramouli	PHI Learning Pvt. Ltd. ,New Delhi	1	2013

Course Details: Instrumentation & Measurement Laboratory

Class	B. Tech, Sem.-III
Course Code and Course Title	0AUPC261, Instrumentation & Measurement Laboratory
Prerequisite/s	0AUPC205
Teaching Scheme: Practical	02
Credits	01
Evaluation Scheme: ISE / ESE	25/25

Course Objectives: Course enables to,	
01	Develop an ability to use different measuring instruments and comparators.
02	Acquire formal procedures and technical aspects of measurement and comparison.
03	Attain technical practices to calibrate different measuring instruments.

Course Outcomes (COs):	
Upon successful completion of this course, the student will be able to:	
0AUPC261.1	Determination of angle, flatness, gear thickness and thread terms using instruments. (S³)
0AUPC261.2	Demonstrate the use of different types of comparators. (S³)
0AUPC261.3	Determination of temperature, pressure, flow and force using instruments. (K³)
0AUPC261.4	Compare different instruments on the basis of accuracy and requirement. (S²)
0AUPC261.5	Calibrate different instruments by using formal standards. (K³)

List of Experiments:

Expt. No.	Title	Contact Hrs.
01	Measurement of different automobile components.	02
02	Angle measurement using sine bar.	02
03	Demonstration and use of different comparators.	02
04	Gear measurement using gear tooth caliper	02
05	Measurement of template and thread using tool makers microscope	02
06	Thread measurement using floating carriage diameter measuring machine.	02
07	Calibration of pressure gauge using dead weight pressure gauge	02
08	Measurement of flow using rotameter.	02
09	Temperature measurement using thermocouple, RTD and thermister	02
10	Measurement of force/load using strain gauges and calibration of load cell.	02

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Metrology & Quality Control	Dr. M.M. Bhoomkar	Nirali Publications	4	2008
02	Mechanical Measurements and Control,	D. S. Kumar	Metropolian, Delhi.	3	2001
03	Engineering metrology & measurements	Dr.N.V. Raghavendra	OUP India	1	2013
04	Mechanical Measurements,	Sirohi& Dr. Radhakrishnan	New Age International (P) Ltd	1	2014

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Engineering metrology	I.C. Gupta	DhanpatRai publications	22	2010
02	Engineering metrology	R. K. Jain	Khanna Publications	20	2012
03	Statistical Quality Control	R.C. Gupta	DhanpatRai publications	15	2009
04	Engineering metrology and instrumentation	R. K. Rajput	S. K. Kataria and sons	7	2013

Course Details: Hydraulics and Pneumatics Laboratory

Class	B. Tech, Sem.-IV
Course Code and Course Title	0AUPC262,Hydraulics and Pneumatics Laboratory
Prerequisites	0AUPC203, 0AUPC208
Teaching Scheme: Practical	02
Credits	01

Evaluation Scheme: ISE / ESE	50/00
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Course Objectives: The course enables students to	
01	Sketch ISO symbols used in hydraulic and pneumatic systems.
02	Enhance knowledge of construction and working of hydraulic and pneumatic system elements.
03	Prepare hydraulic and pneumatic circuit for different applications.
04	Integrate ability to develop hydraulic and pneumatic systems for certain industrial applications
05	Acquire knowledge of fluid power maintenance and troubleshooting.

Course Outcomes (COs): Upon successful completion of this course, the student will be able to	
0AUPC262.1	Use the ISO symbols for various components used in hydraulics and pneumatics. (K²)
0AUPC262.2	Explain construction and working of hydraulic and pneumatic system elements. (K²)
0AUPC262.3	Prepare hydraulic and pneumatic circuit for different applications. (S³)
0AUPC262.4	Evaluate discharge of fluid by using centrifugal and reciprocating pumps. (K⁵)
0AUPC262.5	Apply safety regulations and troubleshooting of hydraulic and pneumatic systems. (S³)

List of Experiments:		
Exp. No.	Title	Contact Hrs.
01	Draw ISO symbols for hydraulic and pneumatic systems.	02
02	Prepare the hydraulic and pneumatic circuits using various components like accumulators, actuators, intensifiers etc.	02
03	Prepare circuits using direction control valves and flow control valve.	02
04	Construct To and Fro motion circuit using pressure control valves.	02
05	Building of sequence circuits on trainer kit.	02
06	Prepare meter-in & meter-out control circuit for hydraulic system.	02
07	Prepare meter-in & meter-out control circuit for pneumatic system.	02
08	Performance test on centrifugal pump	02
09	Performance test on reciprocating pump	02
10	Apply safety regulations and troubleshooting of hydraulic and pneumatic systems.	02

Text books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Pneumatics and Hydraulics	H.L.Stewart	Tarapoevaia, Bombay	7	2002
02	Introduction to Hydraulics and	Ilango S.	PHI Learning Private Ltd.	2	2011

	Pneumatics		Delhi		
03	Introduction to Fluid Power	Johnson James L.	Thomason Delmer-Learning, New Delhi	1	2003
04	Hydraulics and Pneumatics	S.V.Shaikh&Iliyas Khan	R.K. Publications, Kolhapur	1	2002

Reference Books:

Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Pneumatic Systems- Principles and Maintenance.	S. R. Majumdar	Tata McGraw Hill, New Delhi	26	2012
02	Oil Hydraulic systems- Principles and Maintenance.	S. R. Majumdar	Tata McGraw Hill, New Delhi	25	2012
03	Pneumatic Controls	Joji P.	Wiley India Pvt. Ltd, New Delhi	1	2011
04	Fluid Power with Applications	Anthony Esposito	Pearson, Noida U.P.	7	2008

Course Details: Programming In C++

Class	B. Tech, Sem.-III
Course Code and Course Title	0AUBS263, Programming In C++
Prerequisite/s	0BSES161
Teaching Scheme: Practical	2*
Credits	01
Evaluation Scheme: ISE / ESE	25/00

Course Objectives: Course enable to,

01	Gain basic knowledge of programming in C++.
02	Familiar with different techniques pertaining problem solving skills.
03	Acquire knowledge of programming background to proceed with C++ object-oriented Programming.

Course Outcomes (COs):

Upon successful completion of this course, the student will be able to:

0AUES263.1	Explain basic Programming in C++ Language and understand concept of Function, Array and Pointer.(S ²)
0AUES263.2	Prepare program in pointer, array and Structure. (S ³)

0AUES263.3	Prepare program in class and object. (S^3)
0AUES263.4	Explain Array of Class, Inheritance and Overloading. (S^2)
0AUES263.5	Exhibit professional and ethical attitude through behavior in lab sessions and co-operate with members of batch during lab work. (A^2)

List of Experiments:		
Expt. No.	Title	Contact Hrs.
01	programs on Input/ Output & arithmetic expressions, branching and loop control statements	02
02	programs on Function and pointer	02
03	programs on Array and structures	02
04	programs on Class & Objects and Array of class & objects	02
05	programs on Inheritance	02
06	programs on Overloading	02
07	programs on any Computational Methods	02
Note: Any five experiments from the list.		

Text Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Numerical Methods	Dr. B.S. Grewal	Khanna Publications, Delhi.	9	2013
02	Introduction to Numerical methods	Devi Prasad	Narosa Publications, New Delhi.	3	2010
03	Numerical Methods	E. Balguruswami	Tata McGraw hill, New Delhi.	32	2012
04	Introductory methods of Numerical Analysis	S.S. Shastri	PHI learning, New Delhi.	4	2010

Reference Books:					
Sr. No.	Title	Author	Publisher	Edition	Year of Edition
01	Programming with C++	Ravichandran	Tata McGraw Hill, New Delhi.	3	2011
02	Object Oriented Programming in C++	Robert Lafore	Pearson, New Delhi.	4	2009
03	Object Oriented Programming in C++	Rohit Khanna	Vikas publications, Chennai.	2	2014
04	An Introduction to Numerical Methods in C++	Brian H. Flowers	Oxford University Press.	1	2009

Course Details: Professional Skills Development-I

Class	B. Tech, Sem.-IV
Course Code and Course Title	0AUHS264, Professional Skills Development-I
Prerequisite/s	0AUHS213
Teaching Scheme: Practical	02
Credits	01
Evaluation Scheme: ISE / ESE	25/00

Course Objectives:

The course enables students to:

01	Create awareness about professional skills.
02	Acquire essential skills of oral and written communication.
03	Aware about skills required in different departments of company.
04	Identify skills for automobile engineer in service sector of automobile.
05	Prepare technical proposal for company.

Course Outcomes (COs):

Upon successful completion of this course, the student will be able to:

0AUHS264.1	Describe significance of professional skills. (K¹)
0AUHS264.2	Summarize the functions of automobile engineer in different departments of company. (K²)
0AUHS264.3	Explain role of automobile engineer in service sector of automobile. (K²)
0AUHS264.4	Conduct mock meeting in organization. (S³)
0AUHS264.5	Use prerequisite skills in oral and written communication. (S³)

List of Assignments:

Assign. No.	Title	Contact Hrs.
01	Professional skills development for automobile engineer in design department	02
02	Professional skills development for automobile engineer in maintenance department	02
03	Professional skills development for automobile engineer in production department	02
04	Professional skills development for automobile engineer in quality department	02
05	Professional skills development for automobile engineer in marketing department	02
06	Professional skills development for automobile engineer in service sector of automobile	02
07	Conduct Meeting and Prepare its Documentation (Notice, Agenda, Minutes of Mock Meetings)	02
08	Preparation of Technical Proposal for supply of automobile components (Group activity, document of the proposal)	02

09	Reading and understanding of scientific journal paper (structure of a journal paper, process of publishing a journal paper)	02
10	Prepare seminar or conference presentation (Structuring talk)	02

Text Books:

Sr. No.	Title	Author	Publisher	Edition	Year of Edition
1	Interpersonal Skills at Work	John Hayes	Routledge, New York	2	2002
2	Plan and Conduct Effective Meetings	Barbara J. Streibel	McGraw-Hill, New York	1	2007
3	Scientific and Technical Communication Writing for Engineers and Professionals	S.D. Sharma	Sarup and Sons, New Delhi	3	2007
4	Writing for Science and Engineering: Papers, Presentations and Reports	Heather Silyn-Roberts	Butterworth-Heinemann, Woburn, US	1	2000

Reference Books:

Sr. No.	Title	Author	Publisher	Edition	Year of Edition
1	Make and Test Projects in Engineering Design	Andrew Emery Samuel	Springer-Verlag, London	1	2006
2	Sustainability in Engineering Design	Anthony Johnson, Gibson	Elsevier, London	1	2014
3	Engineering Maintenance Management (Industrial Engineering)	Ricky Smith, Bruce Hawkins	Elsevier Butterworth-Heinemann, Oxford, UK	2	2004
4	Production and Operations Management	N. Suresh, S. Anil Kumar	New Age International, New Delhi	2	2008

10.15 Academic Calendar



Annasaheb Dange College of Engineering and Technology, Ashta
(An Autonomous Institute)
Tal.: Walwa, Dist.: Sangli, Maharashtra, India 416 301

Academic Calendar: 2018-19 - F. Y. , S.Y. B. Tech. & F. Y. M. Tech. Even Semester

Week	Month	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Working Days(96)	Remarks
1	January		1	2	3	4	5	6	5	24 th to 29 th Dec. 2018: Sports
2	January	7	8	9	10	11	12	13	6	1 st Jan: Commencement of even semester
3	January	14	15	16	17	18	19	20	6	19 th Jan: Sanstha Sneha
4	January	21	22	23	24	25	26	27	5	Melava
5	Jan/Feb	28	29	30	31	1	2	3	6	23 th Jan: Mentors / Counseling meet 24 th to 25 th Jan : Annual Social Gathering-Sneha 26 th Jan: Republic Day 3 rd Feb: Parents Meet
6	February	4	5	6	7	8	9	10	6	4 th Feb: Attendance Review
7	February	11	12	13	14	15	16	17	6	4 th to 9 th Feb: Faculty Feedback-I
8	February	18	19	20	21	22	23	24	5	4 th to 9 th Feb: ISE-I Week 6 th to 8 th Feb: Attendance Review With Parents
9	Feb/Mar	25	26	27	28	1	2	3	6	10 th Feb: Alumni Meet 16 th Feb: Review of Faculty Feedback-I 19 th Feb: Chatrapati Shivaji Maharaj Jayant 22 nd Feb: Review of ISE-I & Result declaration 25 th March: Mentors / Counseling meet 26 th Feb to 3 rd March: MSE
10	March	4	5	6	7	8	9	10	6	4 th March: Attendance Review
11	March	11	12	13	14	15	16	17	6	6 th to 8 th March: Attendance Review With Parents
12	March	18	19	20	21	22	23	24	6	7 rd March: MSE Result Declaration
13	March	25	26	27	28	29	30	31	5	16 th March: Innovation 25 th March: Rangpanchami
14	April	1	2	3	4	5	6	7	5	1 st to 5 th April: Faculty Feedback-II
15	April	8	9	10	11	12	13	14	6	1 st to 5 th April: ISE-II
16	April	15	16	17	18	19	20	21	6	2 nd April: Attendance Review
17	April	22	23	24	25	26	27	28	6	4 th to 5 th April: Attendance Review With Parents
18	April/May	29	30	1	2	3	4	5		6 th April: Gudi Padwa 12 th April: Review of ISE-I

									&Result declaration 14 th April: Ambedkar Jayanti, Ram Navami 15 th to 20 April: ESE of Laboratory courses-FY. 20 th April: Display of XX grade students list 20 th April: Conclusion of Teaching 29 th April to 10 th May: ESE of Theory courses
19	May	6	7	8	9	10	11	12	1 st May: Maharashtra Day
20	May	13	14	15	16	17	18	19	1 st May: Dnyanada Publication
21	May	20	21	22	23	24	25	26	13 th to 22 nd May: ESE of Laboratory courses-SY
22	May/June	27	28	29	30	31	1	2	25 th May: Result Declaration
23	June	3	4	5	6	7	8	9	10 th to 15 th June: Re-Exam-ESE of Theory courses
24	June	10	11	12	13	14	15	16	20 th June: Re-Exam Result Declaration
25	June	17	18	19	20	21	22	23	
26	June	24	25	26	27	28	29	30	

Holiday List

Sr. No	Event	Date	Remark
1.	Ramzan Eid	June 16 th , 2018	Yes
2.	Independence Day	August 15 th , 2018	Yes
3.	Parashi New Year	August 17 th , 2018	No
4.	Bakri Eid	August 22 nd , 2018	Yes
5.	Ganesh Chaturthi	September 13 th , 2018	Yes
6.	Moharam	September 20 th , 2018	No
7.	Gandhi Jayanti	October 2 nd , 2018	Yes
8.	Dasara	October 18 th , 2018	Yes
9.	Diwali Laxmi Pujan	November 7 th , 2018	Yes
10.	Diwali Balipratipada	November 8 th , 2018	Yes
11.	Bhaubij	November 9 th , 2018	Yes
12.	Eid-E-Milad	November 21 st , 2018	Yes
13.	Christmas	December 25 th , 2018	Yes
14.	Republic Day	January 26 th , 2019	Yes
15.	Chatrapati Shivaji Maharaj Jayant	February 19 th , 2019	Yes

16.	Rangpanchami	March 25 th , 2019	Yes
17.	Gudi Padwa	April 6 th , 2019	Yes
18.	Ambedkar Jayanti	April 14 th , 2019	Yes
19.	Ram Navami	April 13 th , 2019	Yes
20.	Maharashtra Day	May 1 st 2019	Yes



Sant Dnyaneshwar Shikshan Sanstha's
Annasaheb Dange College of Engineering and Technology, Ashta
 (An Autonomous Institute affiliated to Shivaji University, Kolhapur)

Compensation Classes Schedule

Sr. No.	Holiday: Event and Date	Compensation Classes: Date
1.	Republic Day January 26 th , 2019	---
2.	Chatrapati Shivaji Maharaj Jayant February 19 th , 2019	February 23 th , 2019
3.	Rangpanchami March 25 th , 2019	March 23 th , 2019
4.	Gudi Padwa April 6 th , 2019	March 30 th , 2019



Sant Dnyaneshwar Shikshan Sanstha's
 Annasaheb Dange College of Engineering and Technology, Ashta
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PG Dissertation

Phase I - Synopsis Submission Seminar: August 20th to 31st, 2018

Phase II -Term Work (ISE): October 22nd to November 3rd, 2018

Phase II - Progress Seminar Presentation (ESE): November 26th to December 8th, 2018

Meetings

1. Institute level

- Core committee meeting: Every Tuesday, Time : 4.15 pm
- Departmental Meeting: Every Wednesday, Time : 4.15 pm
- Class/Batch wise counseling cell meeting for students: Last Week of every month
- Departmental Activities: Every Saturday

2. BoS, Academic Council and other meetings

- Board of studies meeting: 3rd & 4th (Saturday) week of October 2018
- Academic Council Meeting : 2nd Week of November 2018
- Academic Audit: 3rd Week of November 2018
- Examination cell/Question papers audit : 2nd & 3rd week of August, 2018
- Library Committee meeting : 3rd Week of November 2018
- IQAC meeting: 3rd week of July 2018
- Examination Committee : 2nd Week of December 2018
- ISO meeting : 4th week of July 2018

Important Instructions:

- All departments are requested to strictly adhere to the academic calendar
- Prepare departmental academic calendar and include following activities
 - ✓ Plan all activities as per Institute academic calendar
 - ✓ Expert lecture/sessions,
 - ✓ Industry institute interaction
 - ✓ T&P activities
 - ✓ Remedial/Slow learner classes
 - ✓ Bright and weak students lectures
 - ✓ Faculty/Students chapters activities
 - ✓ Add on courses / Bridge courses/ Audit courses
 - ✓ Industry visits
 - ✓ Faculty industrial visit
 - ✓ Students internship
 - ✓ Students training programmes
 - ✓ Co- curricular and Extra Curricular activities etc.

- For departmental activities, industrial visit, expert lecture, extra lecture, shall be scheduled incorporating Saturday/Sunday/Holidays as far as possible with intimation to students, faculty members and higher authority.
- Display Academic calendar, Holiday and compensation classes schedule on notice board for student's information. Also circulate to all other stockholders.



Annasaheb Dange College of Engineering and Technology, Ashta
(An Autonomous Institute)
Tal.: Walwa, Dist.: Sangli, Maharashtra, India 416 301

Academic Calendar : 2018-19 - Odd Semester (S. Y. B. Tech & S. Y. M. Tech)										
Week	Month	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Working Days(90)	Remarks
	July							1		9 th to 14 th July: Admission and Registration 16 th July: Induction Program, Commencement of Teaching 16 th July: Reporting to department 16 th July: Commencement of Teaching 17 th to 21 st July: Library Registration Week 24 th July: Institute Foundation Day 26 th July: Dept. Review of Mentoring
	July	2	3	4	5	6	7	8		
	July	9	10	11	12	13	14	15		
1	July	16	17	18	19	20	21	22	6	
2	July	23	24	25	26	27	28	29	6	
3	July/August	30	31	1	2	3	4	5	6	4 th Aug: Attendance Review
4	August	6	7	8	9	10	11	12	6	6 th to 8 th Aug: Attendance Review With Parents
5	August	13	14	15	16	17	18	19	5	15 th Aug: Independence Day
6	August	20	21	22	23	24	25	26	5	20 th to 25 th Aug: ISE-I Week
7	Aug/Sept	27	28	29	30	31	1	2	6	22 nd Aug: Bakri Eid 27 th to 31 st Aug: Faculty Feedback-I 30 th Aug: Dept. Review

										of Mentoring 31 st Aug: Review of ISE-I & Result declaration 1 st Sep: Discovery 2K18
8	September	3	4	5	6	7	8	9	6	3 rd Sep: Submission of ISE-I Marks to CoE
9	September	10	11	12	13	14	15	16	5	3 rd Sep: Attendance Review
10	September	17	18	19	20	21	22	23	5	5 th Sep: Teachers Day 6 th to 8 th Sep: Attendance Review With Parents
11	September	24	25	26	27	28	29	30	6	8 th Sep: Review of Faculty Feedback-I 10 th to 18 th Sep: MSE 13 th Sep: Ganesh Chaturthi 15 th Sep: Engineers Day 21 st Sep: MSE Result Declaration 28 th Sep: Dept. Review of Mentoring
12	October	1	2	3	4	5	6	7	5	2 nd Oct: Gandhi Jayanti
13	October	8	9	10	11	12	13	14	6	3 rd Oct: Attendance Review
14	October	15	16	17	18	19	20	21	5	6 th to 9 th Oct: Attendance Review With Parents
15	October	22	23	24	25	26	27	28	6	15 th to 20 th Oct: ISE-II Week 18 th Oct: Dasara 22 nd to 27 th Oct: Faculty Feedback-II 25 th Oct: Dept. Review of Mentoring 26 th Oct: Review of ISEII & Result declaration
16	Oct/Nov	29	30	31	1	2	3	4	6	3 rd Nov: Sem. Academic last working day
17	November	5	6	7	8	9	10	11		5 th Nov: Display of XX grade students list
18	November	12	13	14	15	16	17	18		7 th Nov: Diwali Laxmi Pujan
19	November	19	20	21	22	23	24	25		8 th Nov: Diwali Balipratipada
20	Nov/Dec	26	27	28	29	30	1	2		9 th Nov: Bhaubij 19 th to 30 th Nov: ESE of Theory courses

									21 st Nov: Eid-E-Milad
21	December	3	4	5	6	7	8	9	1 st Nov to 8 th Dec: ESE of Laboratory courses 13 th Dec: Result Declaration 24 th to 31 st Dec: Re-Exam for ESE of Theory courses 1 st to 5 th Jan: Re-Exam for ESE of Laboratory courses 10 th Jan: Re-Exam Result Declaration 1 st Jan: Commencement of Academic Activities for Even Semester
22	December	10	11	12	13	14	15	16	
23	December	17	18	19	20	21	22	23	
24	December	24	25	26	27	28	29	30	
25	Dec/Jan	31	1	2	3	4	5	6	
26	January	7	8	9	10	11	12	13	



Annasaheb Dange College of Engineering and Technology, Ashta
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Tal.: Walwa, Dist.: Sangli, Maharashtra, India 416 301

Academic Calendar : 2018-19 - F. Y. B. Tech. Odd Semester

Week	Month	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Working Days(91)	Remarks
1	August			1	2	3	4	5	4	1 st August: Commencement of odd semester 1 st to 18 th August : Induction program 15 th August: Independence Day 22 nd August: Bakri Eid 30 th August: Dept. Review of Mentoring 1 st Sep: Discovery 2K18
2	August	6	7	8	9	10	11	12	6	
3	August	13	14	15	16	17	18	19	5	
4	August	20	21	22	23	24	25	26	5	
5	Aug/Sep	27	28	29	30	31	1	2	6	4 th Sep: Attendance Review 5 th Sep: Teachers Day 6 th to 8 th Sep: Attendance Review With Parents 10 th to 15 th Sep: ISE-I Week 13 th Sep: Ganesh Chaturthi 15 th Sep: Engineers Day 17 th to 22 nd Sep: Faculty Feedback-I 22 nd Sep: Result declaration
6	September	3	4	5	6	7	8	9	6	
7	September	10	11	12	13	14	15	16	5	
8	September	17	18	19	20	21	22	23	6	
9	September	24	25	26	27	28	29	30	6	

										of ISE-I 28 th Sep: Dept. Review of Mentoring 29 th Sep: Review of Faculty Feedback-I
10	October	1	2	3	4	5	6	7	5	1 st to 8 th Oct: -MSE 2 nd Oct: Gandhi Jayanti
11	October	8	9	10	11	12	13	14	6	4 th Oct: Attendance Review 6 th to 8 th Oct: Attendance
12	October	15	16	17	18	19	20	21	5	Review With Parents
13	October	22	23	24	25	26	27	28	6	13 th Oct: Result declaration of MSE
14	Oct/Nov	29	30	31	1	2	3	4	6	18 th Oct: Dasara 22 nd to 27 th Oct: Faculty Feedback-II 26 th Oct: Dept. Review of Mentoring 29 th Oct to 3 rd Nov: ISE-II Week 30 th Oct : Review of Faculty Feedback-II
15	November	5	6	7	8	9	10	11	3	5 th Nov: Attendance Review 7 th Nov: Diwali Laxmi
16	November	12	13	14	15	16	17	18	6	Pujan 8 th Nov: Diwali Balipratipada
17	November	19	20	21	22	23	24	25	5	9 th Nov: Bhaubij 12 th Nov: Result declaration of ISE-II
18	Nov/Dec	26	27	28	29	30	1	2		13 th to 14 th Nov: Attendance Review With Parents 17 th Nov: Sem. Academic last working day 19 th to 24 th Nov: ISE for Laboratory Courses 20 th Nov: Display of XX grade students list 21 st Nov: Eid-E-Milad 30 th Nov: Dept. Review of Mentoring
19	December	3	4	5	6	7	8	9		3 rd to 15 th ESE for Theory
20	December	10	11	12	13	14	15	16		Courses
21	December	17	18	19	20	21	22	23		22 nd Dec: Declaration of

22	December	24	25	26	27	28	29	30		Result for odd sem. 31 st Dec to 5 th Jan: Re-Exam 11 th Jan : Result declaration of Re-Exam 1 st Jan: Commencement of Academic Activities for Even Semester
23	December	31	1	2	3	4	5	6		



Annasaheb Dange College of Engineering and Technology, Ashta
(An Autonomous Institute)

Tal.: Walwa, Dist.: Sangli, Maharashtra, India 416 301

Academic Calendar : 2018-19 - F. Y. & S.Y. B. Tech. Even Semester

Week	Month	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Working Days(97)	Remarks
1	January		1	2	3	4	5	6	5	1 st Jan: Commencement of even semester 19 th Jan: Sanstha Sneha Melava 26 th Jan: Republic Day 24 th Jan: Mentors / Counseling meet 25 th to 31 st Jan: Sports 1 st to 2 nd Feb: Annual Gathering-Sneha 2018 3 rd Feb: Parents Meet
2	January	7	8	9	10	11	12	13	6	
3	January	14	15	16	17	18	19	20	6	
4	January	21	22	23	24	25	26	27	5	
5	Jan/Feb	28	29	30	31	1	2	3	6	
6	February	4	5	6	7	8	9	10	6	4 th Feb: Attendance Review 4 th to 9 th Feb: Faculty Feedback-I 6 th to 8 th Feb: Attendance Review With Parents 10 th Feb: Alumni Meet 11 th to 16 th Feb: ISE-I Week 16 th Feb: Review of Faculty Feedback-I 19 th Feb: Chatrapati Shivaji Maharaj Jayant 22 nd Feb: Review of ISE-I & Result declaration 28 th Feb: Innovation 1 st March: Mentors / Counseling meet
7	February	11	12	13	14	15	16	17	6	
8	February	18	19	20	21	22	23	24	5	
9	Feb/Mar	25	26	27	28	1	2	3	6	
10	March	4	5	6	7	8	9	10	6	4 th March: Attendance Review 6 th to 8 th March: Attendance Review With Parents
11	March	11	12	13	14	15	16	17	6	
12	March	18	19	20	21	22	23	24	6	

13	March	25	26	27	28	29	30	31	5	11 th to 16 th March: MSE 22 nd March: MSE Result Declaration 25 th March: Rangpanchami
14	April	1	2	3	4	5	6	7	5	1 st to 5 th April: Faculty Feedback-II
15	April	8	9	10	11	12	13	14	6	2 nd April: Attendance Review
16	April	15	16	17	18	19	20	21	6	4 th to 5 th April: Attendance Review With Parents
17	April	22	23	24	25	26	27	28	6	6 th April: Gudi Padwa 8 th to 13 th April: ISE-II 14 th April: Ambedkar Jayanti, Ram Navami 19 th April: Review of ISE-I & Result declaration 27 th April: Conclusion of Teaching
18	April/May	29	30	1	2	3	4	5		29 th Apr to 4 th May: ESE of Laboratory courses-FY. 30 th April: Display of XX grade students list
19	May	6	7	8	9	10	11	12		1 st May: Maharashtra Day
20	May	13	14	15	16	17	18	19		1 st May: Dnyanada Publication
21	May	20	21	22	23	24	25	26		13 th to 25 th May: ESE of Theory courses
22	May/June	27	28	29	30	31	1	2		27 th May to 1 st Jun: ESE of Laboratory courses-SY
23	June	3	4	5	6	7	8	9		6 th June: Result Declaration
24	June	10	11	12	13	14	15	16		4 th July: Re-Exam Result Declaration
25	June	17	18	19	20	21	22	23		17 th to 22 nd June: Re-Exam-ESE of Theory courses
26	June	24	25	26	27	28	29	30		24 th to 29 th June: Re-Exam-ESE of Lab. courses 1 st June to 30 th June: Summer Term

Holiday List

Sr. No	Event	Date	Remark
21.	Ramzan Eid	June 16 th , 2018	Yes
22.	Independence Day	August 15 th , 2018	Yes

23.	Parashi New Year	August 17 th , 2018	No
24.	Bakri Eid	August 22 nd , 2018	Yes
25.	Ganesh Chaturthi	September 13 th , 2018	Yes
26.	Moharam	September 20 th , 2018	No
27.	Gandhi Jayanti	October 2 nd , 2018	Yes
28.	Dasara	October 18 th , 2018	Yes
29.	Diwali Laxmi Pujan	November 7 th , 2018	Yes
30.	Diwali Balipratipada	November 8 th , 2018	Yes
31.	Bhaubij	November 9 th , 2018	Yes
32.	Eid-E-Milad	November 21 st , 2018	Yes
33.	Christmas	December 25 th , 2018	Yes
34.	Republic Day	January 26 th , 2019	Yes
35.	Chatrapati Shivaji Maharaj Jayant	February 19 th , 2019	Yes
36.	Rangpanchami	March 25 th , 2019	Yes
37.	Gudi Padwa	April 6 th , 2019	Yes
38.	Ambedkar Jayanti	April 14 th , 2019	Yes
39.	Ram Navami	April 14 th , 2019	Yes
40.	Maharashtra Day	May 1 st 2019	Yes

Compensation Classes Schedule

Sr. No.	Holiday: Event and Date	Compensation Classes: Date
5.	Independence Day August 15 th , 2018	---
6.	Bakri Eid August 22 nd , 2018	August 25 th , 2018
7.	Ganesh Chaturthi September 13 th , 2018	September 8 th , 2018
8.	Gandhi Jayanti October 2 nd , 2018	October 6 th , 2018
9.	Dasara October 18 th , 2018	October 13 th , 2018
10.	Republic Day January 26 th , 2019	---
11.	Chatrapati Shivaji Maharaj Jayant February 19 th , 2019	February 23 th , 2019
12.	Rangpanchami March 25 th , 2019	March 23 th , 2019
13.	Gudi Padwa April 6 th , 2019	March 30 th , 2019

PG Dissertation

Phase I - Synopsis Submission Seminar: August 20th to 31st, 2018

Phase II -Term Work (ISE): October 22nd to November 3rd, 2018

Phase II - Progress Seminar Presentation (ESE): November 26th to December 8th, 2018

Meetings

3. Institute level

- Core committee meeting: Every Tuesday, Time : 4.15 pm
- Departmental Meeting: Every Wednesday, Time : 4.15 pm
- Class/Batch wise counseling cell meeting for students: Last Week of every month
- Departmental Activities: Every Saturday

4. BoS, Academic Council and other meetings

- Board of studies meeting: 3rd & 4th (Saturday) week of October 2018
- Academic Council Meeting : 2nd Week of November 2018
- Academic Audit: 3rd Week of November 2018
- Examination cell/Question papers audit : 2nd & 3rd week of August, 2018
- Library Committee meeting : 3rd Week of November 2018
- IQAC meeting: 3rd week of July 2018
- Examination Committee : 2nd Week of December 2018
- ISO meeting : 4th week of July 2018

Important Instructions:

- All departments are requested to strictly adhere to the academic calendar
- Prepare departmental academic calendar and include following activities
 - ✓ Plan all activities as per Institute academic calendar
 - ✓ Expert lecture/sessions,
 - ✓ Industry institute interaction
 - ✓ T&P activities
 - ✓ Remedial/Slow learner classes
 - ✓ Bright and weak students lectures
 - ✓ Faculty/Students chapters activities
 - ✓ Add on courses / Bridge courses/ Audit courses

- ✓ Industry visits
- ✓ Faculty industrial visit
- ✓ Students internship
- ✓ Students training programmes
- ✓ Co- curricular and Extra Curricular activities etc.
- For departmental activities, industrial visit, expert lecture, extra lecture, shall be scheduled incorporating Saturday/Sunday/Holidays as far as possible with intimation to students, faculty members and higher authority.
- Display Academic calendar, Holiday and compensation classes schedule on notice board for student's information. Also circulate to all other stockholders.

Academic Time Table

TIME	CLASS	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9.15 AM - 11.15AM	SY BTECH	CT-/ASS-CR3	PL-I-/RRJ-CR3	SM-KL-CR3	AM-III-SMP-CR3	S1-MIII/CT-SMP/ASS-T1/L10 S2-CT/MII-ASS/SMP-L10/T1 S3-PL-I-/RRJ-L7 S4-EMI-/MMR-L9	
		AE-I -/VAP -CR3	CT-/ASS-CR3	DE-/SSB-CR3	AE-I-/VAP-CR3		
	TE	T1-SL-/SSS-L8 T2-C/C++-SSP-L11 T3-PE-KNP-L9 T4-DCOM-/ALL-L6	T1- CS/SS(T)-VAP /SST -T1/L10 T2--SL-/SSS-L8 T3-C/C++ -SSP -L11 T4-PE-KNP -L9	T1-DCOM-/ALL-L6 T2- CS/SS(T)-VAP/ SST -T1/L10 T3-AWP-/ASS-L5 T4- SL-KNP-L8	T1-PE-KNP-L9 T2- AWP-/ASS-L5 T3- CS / SS(T)-/SST-T1 T4- C/C++ -SSP L11	DCOM-/ALL -CR2	T1- C/C++ -SSP -L11 T2- PE-KNP-L9 T3- DCOM-/ALL-L6 T4- AWP-/ASS-L5
		BE-I	CCN-KMD - CR1	SC-/SSB - CR1	ES-VAM- CR1	SC-/SSB-CR1	ELE-KNP,MMK- CR1
	HPV-/MMR - CR1		RFMW-JA - CR1	RFMW-JA CR1	HPV-/MMR- CR1	SC-/SSB- CR1	ES-VAM- CR1
	BE-II	B1-CCN-MMK-L7 B2-HPV-/RRJ-	SC-KMD-CR4	CCN-MMK –CR4	ES-ALL -CR4	ELE-I-KNP,MMK- CR4	HPV-/RRJ-CR4
		ES-/ALL -CR4	RFMW-SSP-CR4	GA-PPM-CR4	SC-KMD-CR4	CCN-MMK –CR4	
11.15 - 11.30AM	SHORT RECESS						
11.30 AM- 1.30PM	SY BTECH	AM-III-SMP-CR3	AE-I -/VAP-CR3	AE-I -/VAP-CR3	DE-/SSB -CR3	SM-KL-CR3	
		EMI-/MMR -CR3	EMI-/MMR -CR3	EMI-/MMR-CR3	CT -/ASS-CR3	AM-III-SMP-CR3	
	TE	SL-/SSS -CCF	PE-KNP- CR2	SS-/SST -CR2	PE-KNP - CR2	CS-/VAP -CR2	CS-/VAP -CR2
		SL-/SSS-CCF	AWP-/ASS-CR2	C/C++ - SSP-CR2	CS-/VAP -CR2	C/C++-SSP-CR2	DCOM-/ALL-CR2
	BE-I	B1-HPV-/PPM- B2- CCN-KMD-L7 B3-ES-VAM-L4 B4-RFMW-SSB-L5	B1-SC, ELE-I (T)-/SSB/MMK-T1/L10 B2- PROJECT B3-CCN-KMD-L7 B4-ELE-I,SC(T)-MMK/SSB-L10/T1	B1- CCN-KMD-L7 B2- HPV-/PPM- B3- RFMW-JA-L5 B4- ES-VAM-L4	B1- RFMW-JA-L5 B2- ES-VAM-L4 B3- PROJECT B4- HPV-/PPM-	B1- PROJECT B2- RFMW-JA-L5 B3- HPV-/MMR- B4- CCN-KMD-L7	B1- ES-KMD-L4 B2- SC/ ELE-I (T)-/SSB/MMK-T1/L10 B3-ELE-I/SC(T)-MMK/SSB-L10/T1 B4- PROJECT
		BE-II	CCN-MMK-CR4	B1-RFMW-SSP-L5	HPV-/RRJ-CR4	CCN-MMK-CR4	ES-ALL -CR4
HPV-/RRJ-CR4	B2- ES-/ALL-L4		ES-ALL-CR4	RFMW-SSP-CR4	GA-PPM-CR4		
1.30 PM- 2.15PM	LONG RECESS						
2.15 PM - 4.15 PM	SY BTECH	S1- AE-I -/VAP -L1 S2- DE-/SSB -L3 S3- MIII/CT-SMP/ASS-T1/L10 S4- CT/MII-ASS/SMP-L10/T1	S1- DE-/SSB -L3 S2- AE-I -/VAP -L1 S3-EMI-/MMR-L9 S4-PL-1-/RRJ-L7	S1- PL-1-/RRJ-L7 S2- EMI-/MMR-L9 S3- AE-I -/VAP -L1 S4- DE-/SSB -L3	S1- EMI-/MMR-L9 S2- PL-1-/RRJ-L7 S3- DE-/SSB -L3 S4- AE-I -/VAP -L1	PL-/RRJ-CR3	
					DE-/SSB -CR3		
4.15PM- 5.15PM			Extra-curricular activities	Extra-curricular activities			
2.15 PM - 4.15 PM	TE	DCOM-/ALL -CR2	GA-/PPM-CR2	AWP-/ASS-CR2	SS-/SST-CR2	T1- AWP-/ASS-L5 T2- DCOM-/ALL-L6 T3- SL-KNP-L8 T4- SS/CS(T)-/SST-L11	PE-KNP - CR2
		SS-/SST-CR2	DCOM-/ALL -CR2	PE-KNP - CR2	AWP-/ASS-CR2		AWP-/ASS-CR2
	BE-I	GA-/PPM-CR1	ELE-I-KNP,MMK- CR1	GA-PPM-CR1	ES-VAM- CR1	ES-VAM- CR1	RFMW-JA - CR1
		ELE-I-KNP,MMK- CR1	CCN-KMD - CR1	CCN-KMD - CR1	RFMW-JA - CR1	HPV-/MMR-CR1	
2.15 PM - 4.15 PM	BE-II	SC-KMD-CR4	ELE-I-KNP,MMK- CR4	B1-ES-/ALL-L4 B2-RFMW-SSP-L5	B1-HPV-/PPM- B2-ELE-I/SC(T)-KNP/KMD-L10/T1	B1- ELE-I/SC(T)-/VAP/KMD-L10/T1 B2-CCN-MMK-L7	
		ELE-I-KNP,MMK- CR4	RFMW-SSP-CR4				
w.e.f:- 18/06/2018							
		Prepared by:	Verified by:		Approved by:		

TIME	CLASS	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9.15 AM - 11.15AM	SY BTECH	EMFT-/ASS-CR3	POEC-/SSS-CR3	AIC-/VAP-CR3	S1-AE II-KNP-L1 S2-SS/EMFT(T)-/ASS,SSP-T1 S3- CL I- SSS-L6 S4-MP-I-MMK-L8	ES-RRC –CR3	NSS/ SPORTS/ YOGA/ MUSIC/ DRAMA
		AE II-KNP-CR3	AIC-/VAP-CR3	SS-SSP-CR3		AE II- KNP-CR3	
	TE	DSP-/SST-CR2	MPMC-VAM-CR2	JP-KNP-CR2	DSP-/SST-CR2	VLSI-/SSB-CR2	T3-PC-AGS-CR2
		MPMC-VAM-CR2	OCN-MMR-CR2	VLSI-/SSB-CR2	OCN-MMR-CR2	DSP-SST-CR2	T4-PC-AGS-CR2
	BE-I	B1-VE-KMD-L10 B2-WMC-RRJ-L5 B3-DIP-MMK-L11 B4-ELE II-JA-L9	B1-WMC-SSB-L5 B2-DIP-MMK-L11 B3-ELE II(T)-JA-L9 B4-PROJECT	B1-DIP-MMK-L11 B2-ELE II(T)-JA-L9 B3-PROJECT B4-VE-KMD-L10	B1-ELE II(T)-JA-L9 B2-PROJECT B3-VE-KMD-L10 B4-WMC-RRJ-L5	B1-PROJECT B2-VE-KMD-L10 B3-WMC-SSB-L5 B4-DIP-MMK-L11	
		BE-II	VE-SSP-CR4	DIP-/ASS-CR4	WMC-SSB-CR4	WMC-SSB-CR4	VE-SSP-CR4
	WMC-SSB-CR4		VE-SSP-CR4	DIP-/ASS-CR4	WMC-SSB-CR4	DIP-/ASS-CR4	
11.15 - 11.30AM	SHORT RECESS						
11.30 AM- 1.30PM	SY BTECH	AIC-/VAP-CR3	AE II-KNP-CR3	PL-II/RRJ- CR3	POEC-/SSS-CR3	POEC-/SSS-CR3	CO-CURRICULAR ACTIVITIES
		SS-SSP-CR3	SS-SSP-CR3	PL-II/RRJ- CR3	EMFT-/ASS-CR3	EMFT-/ASS-CR3	
	TE	T1-DSP-SST-L2 T2-VLSI-/SSB-L3 T3-MPMC-VAM-L4 T4-OCN-MMR-L6	T1-VLSI-/SSB-L3 T2-MPMC-VAM-L4 T3-OCN-MMR-L6 T4-ESD-/VAP-L8	T1-MPMC-VAM-L4 T2-OCN-MMR-L6 T3-ESD-/VAP-L8 T4-JP-KNP-L7	T1-OCN-MMR-L6 T2-ESD-/VAP-L8 T3-JP-KNP-L7 T4-DSP-SST-L2	T1-ESD-/VAP-L8 T2-JP-KNP-L7 T3-DSP-SST-L2 T4-VLSI-/SSB-L3	T1-JP-SSP-L7 T2-DSP-SST-L2 T3-VLSI-/SSB-L3 T4-MPMC-VAM-L4
	BE-I	DIP-/MMK-CR1	VE-KMD-CR1	VE-KMD-CR1	WMC-/SSB-CR1	PROJECT	
		ELE II-JA-CR1	DIP-/MMK-CR1	WMC-/SSB-CR1	ELE II-JA-CR1		
	BE-II	DIP-/ASS-CR4	B1-WMC-SSB-L5 B2-DIP-/ASS-L11	B1-DIP-/ASS-L11 B2-ELE II(T)-ALL- L9	VE-SSP-CR4	B1- PROJECT B2- VE- SSP-L10	
		ELE II-ALL-CR4			ELE II-ALL-CR4		
1.30 PM- 2.15PM	LONG RECESS						
2.15 PM - 4.15 PM	SY BTECH	S1-CL- I-/SSS-L6 S2-MP -I-ASS- L8 S3- PL-II-/RRJ- L2 S4-AE II- KNP-L1	S1-MP -I-JA- L8 S2-PL II-/RRJ- L2 S3-AE II- KNP-L1 S4-SS/EMFT(T)-/ASS,SSP-T1	S1-PL II-/RRJ- L2 S2-AE II- KNP-L1 S3-SS/EMFT(T)-SSP/ASS-T1 S4-CL-I-/VAP-L6	ES-RRC –CR3	S1- SS/EMFT (T) SSP/ASS-T1 S2-CL- I-/VAP-L6 S3-MP -I-JA- L8 S4- PL-II-/RRJ- L2	EXTRA- CURRICULAR ACTIVITIES
					AE II-KNP-CR3		
	TE	ESD-VAP-CR2	DSP-/SST-CR2	OCN-MMR-CR2	VLSI-/SSB-CR2	MPMC-VAM-CR2	IM-KMD-CR2
		OCN-MMR-CR2	IM-KMD-CR2	IM-KMD-CR2	ESD-VAP-CR2	JP- KNP-CR2	MPMC-VAM-CR2
	BE-I	VE-KMD-CR1	WMC-/SSB-CR1	ELE II-JA-CR1	VE-KMD-CR1		
		WMC-/SSB-CR1	DIP-/MMK-CR1	DIP-/MMK-CR1	PROJECT		
	BE-II	B1- VE- SSP-L10 B2-WMC-SSB-L5	PROJECT	ELE II-ALL-CR4	B1-ELE II(T)-ALL- L9 B2- PROJECT		
		PROJECT					
4.15 PM- 5.15PM		Counseling and General Aptitude	TE-T1-PC-AGS-CR2	TE-T2-PC-AGS-CR2		Counseling and General Aptitude	

w.e.f:- 17/12/2018

Prepared by:	Verified by:	Approved by:
TIME TABLE I/C.	HOD	VICE-PRINCIPAL(ACADEMICS)

Faculty Feedback Summary

Academic Year: 2018-19

Sem: Odd

Sr.No.	Branch	Theory												Practical											
		Total Sub/Faculty				Above 9 feedback				Less than 7 feedback				Total Batch/Faculty				Above 9 feedback				Less than 7 feedback			
1.	Mechanical Engineering	A 18	B 18	C 18	T 54	A 2	B 8	C 8	T 18	A 1	B 0	C 2	T 3	A 70	B 70	C 68	T 208	A 32	B 42	C 36	T 100	A 3	B 0	C 6	T 9
2.	E & Tc	R 21	S 7	T 28		R 6	S 4	T 10		R 2	S 0	T 2		R 76	S 12	T 88		R 15	S 6	T 21		R 8	S 0	T 8	
3.	Information Technology	06				06				00				05				05				00			
4.	Computer Sciences and Engineering	18				04				01				58				12				01			
5.	Electrical Engineering	29				03				03				84				10				04			
6.	Automobile Engineering	15				07				01				58				29				01			
7.	Civil Engineering	17				06				03				50				16				05			
Sr.No	Branch	Theory												Practical											
		Total Sub/Faculty				Above 9 feedback				Less than 7 feedback				Total Batch/Faculty				Above 9 feedback				Less than 7 feedback			
														258											

8.	Aeronautical Engineering	16	03	03	58	14	06
9.	Basic Science	A B C D E 6 6 6 6 6 F G H I J 6 6 6 6 6 60	A B C D E 1 5 2 1 1 F G H I J 3 2 2 1 2 20	A B C D E 0 0 0 0 0 F G H I J 0 0 1 0 1 02	A B C D E 21 Bach Each F G H I J 18 Batch Each 234	A B C D E 6 13 5 6 13 F G H I J 12 8 8 4 9 74	A B C D E 3 0 0 0 0 F G H I J 0 0 2 1 1 7
Total		243	77 (31.68 %)	18 (7.40%)	843	281 (33.33%)	40(4.74%)

Sr. No	Branch	Theory			Practical		
		Total Sub/Faculty	Above 9 feedback	Less than 7 feedback	Total Batch/Faculty	Above 9 feedback	Less than 7 feedback
1.	Mechanical Engineering	A B C D T 1 1 1 6 5 6 6 6 6 4	A B C D T 3 4 8 0 1 3 4 8 0 5	A B C D T 0 0 1 0 1	A B C D T 7 7 7 2 2 0 0 0 4 3 0 0 0 4 4	A B C D T 3 3 3 1 1 2 3 7 1 0 2 3 7 1 3	A B C D T 0 2 3 5 1 0 2 3 5 0
2.	E & Tc	R S T 17 4 21	R S T 0 2 2	R S T 3 1 4	R S T 68 8 76	R S T 8 4 12	R S T 13 1 14
3.	Computer Sciences and Engineering	24	2	1	64	8	1
4.	Electrical Engineering	A B T 16 11 27	A B T 6 2 8	A B T 1 2 3	A B T 42 36 78	A B T 17 11 28	A B T 3 259 9 6

5.	Automobile Engineering	16	02	04	69	20	09
	Civil Engineering	17	1	3	48	13	4
6.	Aeronautical Engineering	16	6	2	53	19	3
7.	Basic Science	A B C D E 6 6 6 6 6 F G H I J 6 6 6 6 6 60	A B C D E 0 5 1 1 4 F G H I J 2 2 2 2 2 21	A B C D E 1 1 0 1 1 F G H I J 0 0 0 0 0 04	A B C D E 18 Bach Each F G H I J 21 Batch Each 195	A B C D 1 13 6 3 F G H I 9 6 7 6 70	E A B C D E 111 2 0 2 0 J F G H I J 80 0 0 0 0 5
Total		235	57 (24.25 %)	22 (9.36%)	817	273 (33.41%)	55(6.73%)

Faculty Feedback Summary

Academic Year: 2018-19

Sem: Even

Theory	Total subject: 243	Feedback above 9: 77 (31.68%)	Feedback between 7 to 9: 148 (60.90%)	Feedback less than 7: 18(7.40%)
Practical	Total subject: 843	Feedback above 9: 281(33.33%)	Feedback between 7 to 9: 522 (61.92%)	Feedback less than 7: 40(4.74%)

Theory	Total subject: 235	Feedback above 9: 57 (24.25%)	Feedback between 7 to 9: 156 (66.38%)	Feedback less than 7: 22(9.36%)
Practical	Total subject: 817	Feedback above 9: 273(33.41%)	Feedback between 7 to 9: 489 (59.85%)	Feedback less than 7: 55(6.73%)

10.15.1 Student Activities

- Culture Activities : Annual Gathering - SNHA, Traditional Days etc
- Games Sports Activities : We conduct the Indoor and Outdoor Games for the students

List of outdoor games

1. Cricket Foot ball Volley ball Kabaddi kho kho Athletics Malkham

List of indoor games in Sports Hall

Table Tennis , Carrom, Chess, badminton, singing, yoga, dance, music learning

- Magazine / News Papers : We provide the facility of Magazine / News Papers to the students

Magazine : India Today, CSR, University News, Electronics For You, Digit etc

New Papers : Times of India, Indian Express, Pudhari, Sakal, Lomat, Lokastta, Tarun Bharat etc.

- Technical Activities / Tech Fest :
 1. Inviting experts, consultants for special training programs like advanced developments, Research work as a part of technical knowledge.
 2. Conducting semester wise training programs towards Aptitude Test, Group Discussion, Mock Interviews & J.A.M. (just a minute test) sessions.
 3. Conducting GATE offline Test for final & pre-final Students.
 4. Use of GATE Solution software for different branches.
- Industrial Visits / Tours : 1.We are arranging branch wise 4 industrial visits per year of every class.
 2. In Plant Training: We are arranging vocational in plant industrial training to every student within 4 years curriculum. The duration of the training is 2 weeks to 4 weeks.
- Alumni activities : We conduct the alumni meet
- Medical Facility : We provide the medical facility and counseling to the students through 'Dhanvantri Rugnalaya'. The facility provided include,
 1. A physician and counseling room

2. First Aid facility
3. Medical Check-up
4. Ambulance Service
5. Emergency hospitalization service

10.15.2 Student Extra Curricular Activities

- 1) Teachers day programme
- 2) Freshers welcome programme
- 3) Engineers day programme
- 4) Yoga center Activity
- 5) Annual Gathering – SNEHA
- 6) Best outgoing student activity
- 7) Alumni meet activity
- 8) Students associations of each department
- 9) Student council activity

National day celebration

- 1) Independence day programme – 15th August
- 2) Republic day - 26th January

10.15.3 Soft Skill Development Facilities

2. In Plant Training: We are arranging vocational in plant industrial training to every student within 4 years curriculum. The duration of the training is 2 weeks to 4 weeks.
3. Industrial Visits: We are arranging branch wise 4 industrial visits per year of every class.
4. Different Training programs for students in college campus:
5. We are conducting semester wise training program towards Personality Development of the students.
6. Inviting experts, consultants for special training programs like advanced developments, Research work as a part of technical knowledge.
7. Conducting semester wise training programs towards Aptitude Test, Group Discussion, Mock Interviews & J.A.M. (just a minute test) sessions.
8. Conducting GATE offline Test for final & pre-final Students.
9. Use of GATE Solution software for different branches.

17. List of Research Projects/ Consultancy Works**Number of Projects carried out, funding Agency, Grant received****Mechanical Engineering Department****List of Funded Projects**

Sr. No.	Academic Year	Name of the Project	Name of Funding Agency	Grant Received (Rs.)	Name of Faculty Member/s
1	2018-19	Online Health Monitoring System for Impact Induced Filament Wound Glass Fiber/Epoxy Composite Tubes	Research Initiation Scheme, SU, Kolhapur	1,05,000	K. J. Burle and K. I. Nargatti
2	2018-19	Heat Transfer Enhancement for Surfaces with Different Dimple Shapes	ISHRAE	47,000	Mr. V. S. Gondkar
3	2018-19	Numerical and Experimental Investigation of Centrifugal Pump Performance under Gas-Liquid Two Phase Flow Condition	Shivaji University, Kolhapur	1,05,000	Mr. R. R. Gaji
4	2017-18	Performance Improvement of Domestic Refrigerator by Using Phase Change Material (PCM) As Thermal Storage	Indian Society for Heating, Refrigeration and Air Conditioning Engineers (ISHRAE)	50,000	Mr. P. M. Wadekar

Consultancy Record**(From 1st April 2018 to 31st March 2019)**

Sr. No.	Name of the agency to whom consultancy given	Amount of Consultancy Rs.	Amount received Rs.
01	Shri. Raut A. S.	45,000/-	45,000/-
02	Omega Consultant Pvt. Ltd., Kolhapur	4,60,000/-	2,10,500/-
03	Kirloskar Ebara Ltd.	66000/-	66,000/-
04	Sonhira Sahkari Sakhar Karkhana Ltd.	1,34,800/- (1,26,000/- + 8,800)	29,800/-
05	Harsha Sugar, Soundatti	30,000/-	30,000/-
06	Sovereign Industrial Ltd., Terdal	36,975/-	---
07	Rajarambapu Sahakari Sakhar Karkhana, Sakharale	19,705/-	19,705/-
08	D.Y.Patil College of Engineering, Kolhapur	5,000/-	5,000/-

09	Rajendra Mane College of Engineering, Dewrukha	10,000/-	10,000/-
10	MDJIT Polytechnic Metallurgy Experiments	10,000/-	10,000/-
11	Dazzle DynacoatesMadhavnagar Sangli	3,000/-	3,000/-
12	Shreyas Enterprises Uplawi Sangli	5,000/-	5,000/-
13	Zanwar Group. Ashta Liners Ashta	15,000/-	---
14	Govt. College of Engineering, Jalgaon	8,000/-	8,000/-
14	IBCL Baramati	14,000/-	14,000/-
15	Arrow Wheels Industries, Shirol	10,000/-	---
Total		8,72,480/-	4,56,005/-

Consultancy Record
(From 1st April 2017 To 31st March 2018)

Sr. No.	Name of the agency to whom consultancy given	Amount of the consultancy Rs.
01	Omega Consultant Pvt. Ltd., Kolhapur	1,95,000/-
02	Shri. Mahesh B. Joshi	25,000/-
03	Shivam Indian Cuisine Pvt. Ltd. Pune	10,000/-
Total		2,30,000/-

Computer Science & Engineering

Noble Achievements of Department in Academic Year 2018-19:-
Under Research Initiation Scheme of Shivaji University Kolhapur following faculty has been selected.

Sr. No	Name of Faculty	Title of the Project	Grant
1	Mr. S. S. Sayyad	Performance analysis of GPU optimized server in accelerating Deep Learning	85,000/-
2	Mr. A. R. Pradnyavant	Diverse Query in Uncertain and Probabilistic Database	65,000/-

Electrical Engineering

List of Research Project / Consultancy Work

Sr. No	Title of Project	Funding Agency	Faculty Name	Amount
1	AN INNOVATIVE TBSC-TBSR COMPENSATOR FOR DYNAMIC LOAD	Shivaji University, Kolhapur	Mr. Swapnil Dadaso Patil Mr Rajendra B Madake	1,05,000/-
2	Motor Over Heating & Jerk During operation	Akshay Offset MIDC Islampur Provide Solution	Ms. J. M. Kharade	2000/-

Civil Engineering

Fund Collection 2018-19

Sr No.	Funding Agency	Name of Faculty	Fund Recieved
1	SUK – Research Initiation Scheme	Prof. S. B. Hivarekar	112500/-
2	SUK – Research Proposal	Dr. A. P. Patil	20000/-

Automobile Engineering

List of Research Project

Sr. No	Name of Project	Responsible Faculty	Fund Received	Funding Agency
1	A New Approach for Detection of the Shaft Unbalance in Rotor for Minimization of the Premature Bearing and machinery Failures	Dr. I. M. Jamadar	1,10,000/-	Shivaji University

Publications

Mechanical Engineering Department

2018-19

Journal:-

International-

1. R.B.Patil,B.S.Kothavale,L.Y.Waghmode,”Selection of time-to-failure model for computerized numerical control turning centre based on assessment of trends in maintenance data”, Journal of Risk and Reliability, July-2018.
2. R.B.Patil,” Integrated Reliability and Maintainability analysis of computerized numerical control turning center considering the effects of human and organizing factors”, Journal of Quality Maintenance Engineering, Aug-2018.

Conference –

International-

1. V.S.Ganachari, Dr. U.N.Chate, Dr.L.Y.Waghmode, S.A.Mullya, S.S.Shirguppikar, V.T.Kumbhar, “A comparative study of Performance of the Dry and Near Dry EDM Processes in Machining of Spring Steel Material”, 9th International Conference of Materials Processing and Characterization -2019
2. K.J.Burle, K.I.Nargatti, Dr.S.S.Ahankari, “A Novel and Simplified Approach of Assessment of Outcomes in Cognitive, Psychomotor and Affective Domains”, NBA India, Fourth World Summit on Accreditation, New Delhi, Sept. 2018.
3. P. V. Jadhav, R. A. Barawade, S. V. Patil, Y. B. Mohite,V. R. Patil, “An Experimental and Numerical Investigation on StaticVibration Response of Multi-Cracked Rotor Shaft”,International Conference on Mechanical, Materials and Renewable Energy, 2018.
4. S. A. Mullya, G. Karthikeyan, “Comparative study of Dielectric and Debris flow in Micro Electrical Discharge Milling process using Cylindrical and Slotted tools”, 7th International And 28th All India Manufacturing Technology, Design And Research Conference Dec 2018 (AIMTDR 2018), Anna University Chennai. Dec-2018.
5. R.B.Patil, D.A.Mhamane, “Fault Tree Analysis: A case study from Machine Tool Industry”, Troboindia, Dec-2018.
6. Sumit Desai et al, “Design and prototype development of a reconfigurablewheelchair with stand-sit-sleep configurations”, International Mechanical Engineering Congress and Exposition, November 9-15, 2018.
7. Sumit Desai et al, “Remaining useful life (rul) prediction of rolling element bearingusing random forest and gradient boosting technique”,International Mechanical Engineering Congress and Exposition, November 9-15, 2018.

Journal:-**International-**

3. R.B.Patil,B.S.Kothavale,L.Y.Waghmode,”Selection of time-to-failure model for computerized numerical control turning centre based on assessment of trends in maintenance data”, Journal of Risk and Reliability, July-2018.
4. R.B.Patil,” Integrated Reliability and Maintainability analysis of computerized numerical control turning center considering the effects of human and organizing factors”, Journal of Quality Maintenance Engineering, Aug-2018.

Conference –**International-**

8. V.S.Ganachari, Dr. U.N.Chate, Dr.L.Y.Waghmode, S.A.Mullya, S.S.Shirguppikar, V.T.Kumbhar, “A comparative study of Performance of the Dry and Near Dry EDM Processes in Machining of Spring Steel Material”, 9th International Conference of Materials Processing and Characterization -2019
9. K.J.Burle, K.I.Nargatti, Dr.S.S.Ahankari, “A Novel and Simplified Approach of Assessment of Outcomes in Cognitive, Psychomotor and Affective Domains”, NBA India, Fourth World Summit on Accreditation, New Delhi, Sept. 2018.
10. P. V. Jadhav, R. A. Barawade, S. V. Patil, Y. B. Mohite,V. R. Patil, “An Experimental and Numerical Investigation on StaticVibration Response of Multi-Cracked Rotor Shaft”,International Conference on Mechanical, Materials and Renewable Energy, 2018.
11. S. A. Mullya, G. Karthikeyan, “Comparative study of Dielectric and Debris flow in Micro Electrical Discharge Milling process using Cylindrical and Slotted tools”, 7th International And 28th All India Manufacturing Technology, Design And Research Conference Dec 2018 (AIMTDR 2018), Anna University Chennai. Dec-2018.
12. R.B.Patil, D.A.Mhamane, “Fault Tree Analysis: A case study from Machine Tool Industry”, Troboindia, Dec-2018.
13. Sumit Desai et al, “Design and prototype development of a reconfigurablewheelchair with stand-sit-sleep configurations”, International Mechanical Engineering Congress and Exposition, November 9-15, 2018.
14. Sumit Desai et al, “Remaining useful life (rul) prediction of rolling element bearingusing random forest and gradient boosting technique”,International Mechanical Engineering Congress and Exposition, November 9-15, 2018.

Journal:-

1. International:-

1. Raghunandan Sharma, **Ahankari Sandeep S**, Kamal K Kar, Animech Biswas, K V Sirvastava, "Functionally Graded Elastomeric Composites as Microwave Shielding Media", Journal of Elastomers and Plastics, Vol. 49(I), 37-46, 2017.
2. Bellary S. A. I. , A. Samad, (2016), " Centrifugal Impeller Blade Shape Optimization Through Numerical Modeling", International journal of Fluid Machinery and System, Vol. 9, No. 4, Oct-Dec 2016.
3. R. B. Patil, B. S. Kothavale, L. Y. Waghmode, S. G. Joshi, " Reliability Analysis Of CNC Turning Centre Based on Assessment of Trends In Maintenance Data – A Case Study" , International journal of quality and reliability management, accepted on 10 Feb 2017.
4. S. S. Patil, S. V. Dhanal, R. B. Patil, "Reliability Analysis of CNC Machine Tools - A Review", Inventi Rapid: Quality, Statistics & Reliability, Vol. 2016, Issue 4, pp. 1-4, Aug 2016.
5. RajendraPethkar, AdmuthUjwal, KabureSiddhesh, KadamAvadhoot, KadamShrikant, " Study of Design and Development of Turmeric Processing Unit : A Review" , International Journal of Innovations in Engineering Research and Technology [IJIERT], Vol. 4, Issue 3, Mar. 2017, pp. 128-134, ISSN 2394-3696
6. Patil P. B., Shirsat S. R., Patil S. S., Patil R. S., " Theoretical Stress Analysis of Helical Gear (HG13)" , International Journal of Engineering Research, Vol. 5, Issue 2, April 2017.
7. A. S. Dabhole, S. M. Pise, P. B. Mutalik, " Investigation of Heat Transfer Enhancement in Air Cooled Computer Processor Heat Sink", Journal of Advances In Science and Technology, Vol. 13, Issue 1, March 2017, ISSN 2230-9659
8. V. T. Kumbhar, V. S. Ganachari, " Study and Development of Waterlifting Mechanism by Using Simple Pendulum", International Journal of Research and Science Development (IJSRD), Vol – 3, Issue – 4, April-June 2017
9. P. M. Wadekar, A. M. Patil, A. R. Patil, " A Review of Heat Transfer Enhancement Using Twisted Tape With and Without Perforation", International Journal of Innovations In Engineering Research and Technology (IJIERT), Vol – 4, Issue – 3, March 2017, ISSN 2394-3696.
10. T.B.Patil,"Comparative Study if Shell and Tube Heat Exchanger with Stright and Inclinde Baffles",International Journal of Engineering ,Technicalogy, Science and Research,(IJETSR),ISSN 2394-3386 Vol.4-6,June-2017
11. A.S.Dabhole, T.B.Patil,P.R.Bhokare,"Desing and Simulation of Low Cost anti-Water Ovreflow system for Domestic Tanks",International Journal of



Annasaheb Dange College of Engineering and Technology, Ashta

**Department of Electronics and Telecommunication
Engineering**

Faculty Paper Publications/ Presentations

Engineering ,Technology, Science and Research,(IJETSR),ISSN 2349-4476
Vol.5-6,June-2017

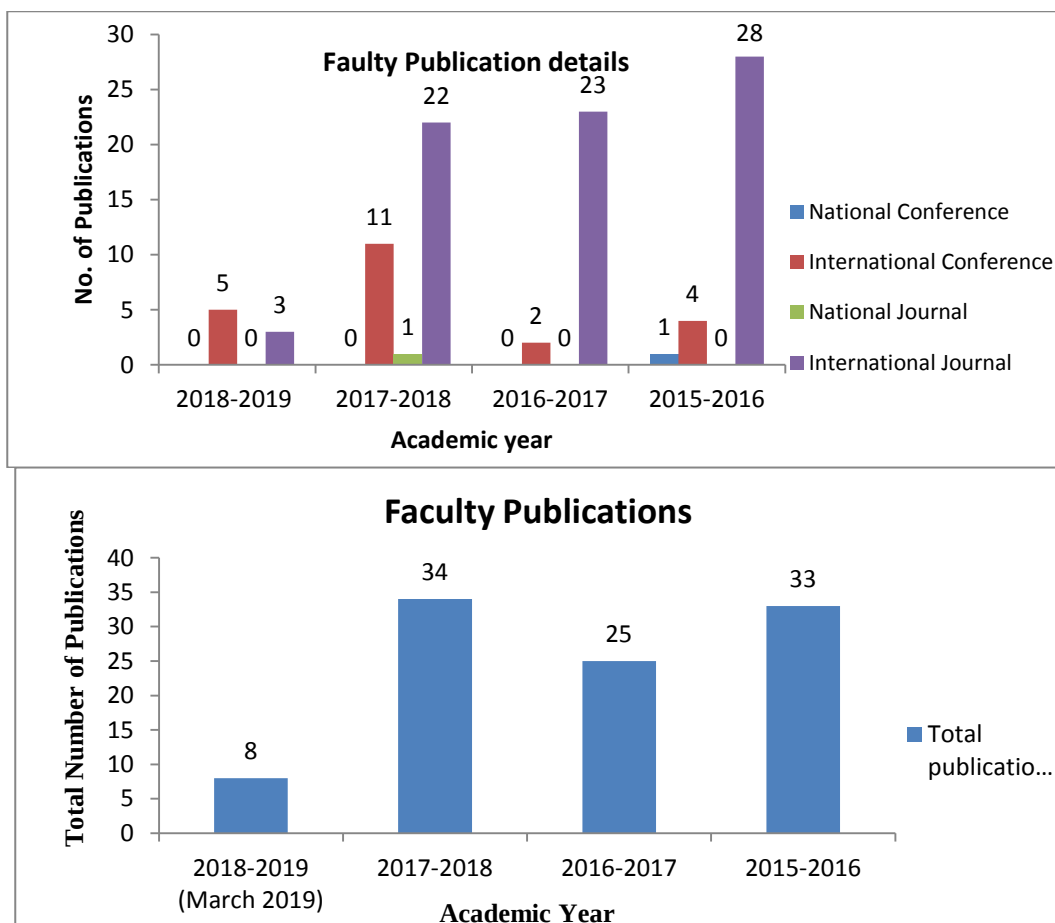
12. H.H.Patil,"An Overview of Hopper and Design Procedure of Pyramid Shaped Hopper",Internatitonal journal for Scientific Research and Development(IJSCRD), ISSN 2321-0613,Vol-5, Issue-1,Jan-2017.
13. Y.B.Ballal,"Design of Short Incline Belt Conveyor System used for Rice Sack Handling", International journal for Scientific Research and Development (IJSCRD), ISSN 2321-0613,Vol-5, Issue-2,Jan-2017.
14. M.M.Jadhav, A.M.Pirajade,"Design Analysis and Optimization of Robotic Parts: A Review",International Journal of Engineering and Technical Research(IJETR).
15. M.M.Jadhav,"Design and Analysis of Reactor Dish Vessel",International Journal Innovative Research in Science and Technology(IJIRST), ISSN 2349-6010, Vol-3,Issue-11,April-2017
16. M.M.Jadhav,"Vibration Analysis of Composite Beam with Crack",International Journal of Trend in Research Development(IJRTD), ISSN 2394-9333,Vol-4(2), April-2017.
17. R.B.Patil, L.Y. Waghmode,"Failure Mode and Effect Analysis (FMEA) of Manually and Electrically Operated Butterfly Valve",Pumps Valves and Systems, p8-p18,Mar-17.
18. M.M.Jadhav,"Analysis of Pressure Vessel : A Review",International Journal Innovative Research in Science and Technology(IJIRST), ISSN 2349-6010, Vol-3(11), April-2017.

Electronics & Telecommunication

Details of Faculty Paper Publications/ Presentations

Academic Year	National Conference	International Conference	National Journal	International Journal	Total
2018-2019 (March 2019)	--	05	--	03	08
2017-2018	--	11	01	22	34
2016-2017	--	02	--	23	25

2015-2016	01	04	--	28	33
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Electrical Engineering

Academic Year: 2018-2019

1. Manoj D Patil "ALO Optimized Neural Network Controlled Three Phase Five Level Cascaded H-Bridge Inverter for Integrating PV Panel with Smart Grid" Institute of Advanced Scientific Research Publications; Journal of Advanced Research in Dynamical & Control System. Vol:10 Special issue-09 pp 2127-2139
2. Gopinath S "Insulation Condition Assessment of High Voltage Rotating Machines Using Hybrid Techniques" IET Generation Transmission & Distribution Vol. 13 Issue 2 2019. Pp- 180
3. Bhupali P. Kumbhar and V. V. Khatavkar "A Hybrid DSTATCOM Topology for Load Compensation with Reduced DC- Link Voltage Rating" Asian Journal of Convergence in Technology Volume IV, Issue I ISSN No.: 2350-1146, I.F -5.11

4. D. B. Kanase “An Energy Audit of an Industry: A Case Study” International Journal of Electrical and Electronics Engineering Research Vol 9 Jan 2019 pp 23-28 ISSN(P) 2250-155X
5. Vidya S. Patil and Manoj D. Patil “Performance Analysis of Single Phase Cascade H- Bridge Multilevel Inverter Using Level Shift PWM Technique” Proceeding of the International Conference on Inventive Research in Computing Application(ICIRCA 2018) IEEE Xplore ISBN :978:-1-5386-2456-2
6. Madhuri p. Jadhav and Vaiju N. Kalkhambkar “A review on Plug –in Electric vehicles: Services, Limitations and Impacts”, majlesi Journal of Mechatronic System, Vol. 7, No. 2, June 2018.
7. Madhuri p. Jadhav and Vaiju N. Kalkhambkar “ Frequency Regulation by electric vehicle” Proceeding of 2018 IEEE International Conference on Current Trends Converging technologies, Coimbatore, India 978-1-5386-3702-9
8. Madhuri p. Jadhav and Vaiju N. Kalkhambkar “ Electric Vehicle for frequency Regulation of Micro grid” RITPgcon-18, ISSN No: 2581-4230, April 13 2018
9. Abhijitkumar A. Jadhav, Sandeep S. Ahankari, Deepali. A. Suryawanshi, “A Continuous Sustainable Progress for Realistic Attainment of Program Outcomes (POs): A Case Study”, 4th World Summit on accreditation organized by National Board of Accreditation.
10. V. B. Patil “An Energy Audit of an Industry: A Case Study” International Journal of Electrical and Electronics Engineering Research Vol 9 Jan 2019 pp 23-28 ISSN(P) 2250-155X
11. Manoj D Patil “Performance Improvement of Renewable Energy Sources Inverter for Interface with Smart Grid”2018 IJRAR January 2019, Volume 6, Issue 1 www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

Book Publication

1. Basic Electrical Engineering By J. M. Kharade, M. D. Patil, D. B. Kanase
Publisher: Wiely India Pvt. Ltd, ISBN:978-81-265-7620-3

Academic Year: 2017-2018

1. Snehal Sunil Bulle ; S. D. Patil ; V. V. Kheradkar “Implementation of incremental conductance method for MPPT using SEPIC converter” International Conference on Circuit ,Power and Computing Technologies (ICCPCT), 2017, IEEE Conference Publications, ISBN: 978-1-5090-4967-7 , DOI: 10.1109/ICCPCT.2017.8074234, pp.
2. Smita P. Patil ; Rajkumari R. Patil ; Anwar M. Mulla ; Swapnil D. Patil, “Performance analysis of interleaved flyback inverter topology for single phase high power application using MATLAB Simulink ” International Conference on

- Circuit ,Power and Computing Technologies (ICCPCT), 2017, IEEE Conference Publications, ISBN: 978-1-5090-4967-7, DOI: 10.1109/ICCPCT.2017.8074192, pp.
3. Rajkumari R. Patil ; Smita P. Patil ; Swapnil D. Patil ; Anwar M. Mulla, “Designing Of Z-source inverter for photovoltaic system using MATLAB/SIMULINK” International Conference on Circuit ,Power and Computing Technologies (ICCPCT), 2017, IEEE Conference Publications, ISBN: 978-1-5090-4967-7, DOI: 10.1109/ICCPCT.2017.8074331, pp.
 4. Rupali M. Shivpuje; Swapnil D. Patil, “Microcontroller based fault detection and protection system for induction motor” 2017 International Conference on Intelligent Computing and Control Systems(ICICCS) IEEE Conferences Year: 2017 DOI: 10.1109/ICCONS.2017.8250655 Pages: 1187 - 1191
 5. Mr.RanjitP.Patil, Miss.J.M.Kharade, Dr.AnwarM.Mulla, Miss. J. M. Kharade , “A GSM Based And Speech Enabled Wireless Annunciator Window Facia For Substation Automation”, 2017 2nd International Conference for Convergence in Technology (I2CT), 978-1-5090-4307-1/17/\$31.00. DOI: 10.1109/I2CT.2017.8226256
 6. Miss.J.M.Kharade, Dr. N. G. Savagave, “Alternate Arm Modular Multilevel Converter for HVDC Systems”, 2017 2nd International Conference for Convergence in Technology (I2CT), 978-1-5090-4307-1/17/\$31.00. DOI: 10.1109/I2CT.2017.8226196
 7. Suraj D. Pawar,”Speed Control of Buck Converter fed DC motor using Digital Fractional order PID controller” 2nd International Conference on Inventive Computation Technologies (ICICT-2017)
 8. Deepali Suryawanshi et.al, “Dynamic Response Analysis of Electro-Rheological Fluid (ERF) Machine Tool Mount” ICOVP, 13th International Conference on Vibration Problems 29th Nov- 2nd Dec 2017, Indian Institute of Guwahati India
 9. Santosh V. Patil, Manoj D. Patil “Performance Analysis of Shunt Active Filter under different loading and distorted voltage conditions” in IEEE Xplore Digital Library & International Conference On Electrical, Electronics, Computers, Communication, Mechanical And Computing (EECCMC2018) at Priyadarshini Engineering College, Chettiyappanur, Vaniyambadi, Vellore District, Tamil Nadu, India., during 28th & 29th January 2018.
 10. Swapna S. Pujari, Soujanya A. Sukanawar, Manoj D. Patil, Swapnil. N. Sawant “PWM scheme for AC/DC Bidirectional Converter Feed-forward Control for Grid-connected Microgrid” in IEEE Xplore Digital Library & IEEE International Conference on Current Trends towards Converging Technologies (ICCTCT2018) at SVS College of Engineering, Coimbatore, Tamil Nadu, during 1st to 3rd March 2018
 11. N. M. Jamadar, et.al., “Agricultural Electrostatic Pesticide Spray Pump” International Journal of Modern Trends in Engineering and Science
 12. N. M. Jamadar, et.al., “Design of Bidirectional Power Converter for electric vehicle application” International Journal of Modern Trends in Engineering and Science

1. SumantLokhande, Swapnil Patil, KushalShende, Dadaso Patil, Anwar Mulla, "Introduction to FC-TBSR based SVC for Voltage Regulation and Reactive Power Compensation", IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES)IEEE Conference Publications978-1-4673-8888-7/16/\$31.00 ©2016 IEEE, DOI: 10.1109/PEDES.2016.7914416 Year 2016 Pages 1 – 5.
2. Swapnil D. Patil, Khushal V. Shende, Anwar M. Mulla, Dadaso R. Patil, "Microcontroller Based TBSC Compensator with Transient Free Switching for Reactive Power Compensation", International conference on Signal Processing, Communication, Power and Embedded System (SCOPEs)-2016, 978-1-5090-4620-1/16/\$31.00 ©2016 IEEE, pp.216-220.
3. ShirsikarPrachiGopal, D. R. Patil, "Hysteresis Band Current Controller for voltage regulation and harmonic mitigation using DSTATCOM ", 2016 International Conference on Computation of Power, Energy Information and Commuincation (ICCPEIC), IEEE Chennai, India, 01 September 2016, DOI: 10.1109/ICCPEIC.2016.7557313.
4. PriyankaShintre, Dr. D.R.Patil, "A Series Active Filter for Power Quality Compensation", International Research Journal of Engineering and Technology (IRJET), Volume: 04, Issue: 05, May -2017, e-ISSN: 2395 -0056, pp. 2973-2976.
5. Mr.RanjitP.Patil, Miss.J.M.Kharade, Dr.AnwarM.Mulla, Miss. J. M. Kharade , "A GSM Based And Speech Enabled Wireless Annunciator Window Facia For Substation Automation", 2017 2nd International Conference for Convergence in Technology (I2CT), 978-1-5090-4307-1/17/\$31.00 ©2017 IEEE.
6. Miss.J.M.Kharade, Dr. N. G. Savagave, "Alternate Arm Modular Multilevel Converter for HVDC Systems", 2017 2nd International Conference for Convergence in Technology (I2CT), 978-1-5090-4307-1/17/\$31.00 ©2017 IEEE.
7. Miss. J. M. Kharade, Dr. N. G. Savagave, "A Review of HVDC Converter Topology", IJRSET, Vol.6, Issue 2, Feb. 2017, ISSN: 2319-8753, pp.1822-1830.
8. Manoj D. Patil, "Recent Developments and Problems Associated with Smart Grid Technology- A Review" in International Journal of Research Publications in Engineering and Technology, ISSN: 2454-7875, Volume-2, Issue-8, August-2016, pp.5-7.
9. Manoj D. Patil, AnandBhupal Kumbhar "Operational Planning and Energy Management of a Microgrid with a PV-based Active Generator for Smart Grid Applications" in International Journal of Research Publications in Engineering and Technology, ISSN: 2454-7875, Volume-2, Issue-8, August-2016, pp.21-24.
10. Manoj D. Patil, AnandBhupal Kumbhar "Heuristic Optimization for Demand Side Management in Smart Grid" in International Journal of Research Publications in Engineering and Technology, ISSN: 2454-7875, Volume-2, Issue-7, July-2016, pp.47-51.

11. DilipSutraway, Pavan Kumar Reddy, SantoshBagewadi, A M Mulla, "Investigation of the Performance and Emission Characteristics of CI Engine Using Simarouba Biodiesel as Fuel", International Research Journal of Engineering and Technology (IRJET), Volume: 03 Issue:06, June-2016 e-ISSN: 2395 -0056, pp.1942-1946.
12. M. Charan Sekhar, JagnathDaingade, Sheetal Shinde, Amit More, ShwetaKulkarni,Ranjit Patil, "Wireless Annunciator window for substation application with GSM facility", Journal of power electronics & power system, ISSN: 2249-863X,STM Journals 2017,pp.1-6.
13. Ms. Jadhav Tejas S., Ms. Kamble Namita Y., Ms. Shinde Sneha N., Ms. Jathar Amuruta A., Mr. Kanase Digvijay B., "Power Factor Improvement of Single Phase Induction Motor", IJARIE, Volume- 3, Issue- 2, 2017, ISSN(O): 2395-4396. pp.1-6.
14. R. V. Patil, DhirajKalantre, Niranjana Hirugade, Arun More, AshwineeKakade, "Transformer Health Monitoring and Control Through Arduino ", International Journal of Electrical, Electronics and Data Communication, Volume-5, Issue-1, Jan-2017, ISSN: 2320-2084, pp.59-62.
15. Kiran K. Desai, Rohan V. Gavali, Shubham D. Kanase, Sumit S. Karande, N. M. Jamadar, "Application of Buck Boost Converter for Wind Energy Control", IJRST, Volume-3, Issue-10, March 2017, ISSN(online): 2349-6010, pp. 156-160.
16. RenukaKachre, GitanjaliAtugade, Shreyada Jadhav, ShwetaMahajan, Dhanyakumar Patil, "Digital Testing Kit for Three Phase Distribution Transformer ", IRJET, Volume 4, Issue 3, march 2017, e-ISSN: 2395-0056, p-ISSN: 2395-0072, pp.1843.
17. A. C. Joshi, A. C. Bansode, S. S. Mane, A. S. Mane, "Solar Air Conditioner", IJARIE, Volume-3, Issue-2, 2017, ISSN(O): 2395-4396, pp. 1-5.
18. Jyoti M. Kharade, Vidya M. Patil, Onkar A. Bhadule, Shubhangi S. Patil, Sujit S. Patil, "Comparison of Cascaded H-Bridge Multilevel Inverter Topologies with THD Analysis", IJRSET, Volume-6, Issue-3, March 2017, ISSN(Online): 2319-8753, pp.3324-3330.
19. Vishal B. Patil, Indrajeet R. Dhokate, Prasad S. Ghadge, Aniket S. Shirke, Sameer B. Tembare, "Solar Operated Grass Cutter", IJARIE, Volume-3, Issue-2, 2017, ISSN(O): 2395-4396, pp. 2463-2469.
20. AashitoshTodkar, Shubham Dange, AswiniPalkhe, ReshmaSargar, RajendraMadke, "Simulation Based V/F Speed Control of Three Phase Induction Motor", IJSDR, Volume-2, Issue-1, Jan. 2017, ISSN: 2455-2631, pp. 80-87.
21. KomalKadam, Hrutuja Chougule, ShrutiPujari, Sayli Mali, Swapnil Patil, "Energy Meter for Net Metering", IJARIE, Volume-3, Issue-2, 2017, ISSN(O): 2395-4396, pp. 2689-2693.
22. P. S. Mali, A. B. Patil, P. P. Patil, A. A. Patil, P. S. Patil, "Single Phase Inverter Using PIC Controller", IJARIE, Volume-1, Issue-1, 2017, ISSN(O): 2395-4396.

23. D. A. Patil, S. N. Pirjade, J. S. Bhandare, T. K. Shikalgar, A. M. Sutar, "Automated Water Distribution System Using PLC and SCADA", IJARIE, Volume-3, Issue-2, 2017, ISSN(O): 2395-4396, pp. 2570-2574.
24. S. K. Shaikh, P. B. Bhagawati, R. S. Mali, S. C. Gaikwad, P. B. Jadhav, S. J. Bongarde, "Mobile Solar Water Purifier", IRJET, Volume-4, Issue-3, March 2017, e-ISSN: 2395-0056, pp. 839-841. .
25. DhawadeRohanDilip, GaikwadPrafullaSambhaji, PaktiAdityaAtul, TaralkarShubhamPradip, Manoj D Patil, "A Sensor-less Hybrid MPPT by Two Step Using FSCC and P&O Technique", National Level Paper Presentation Contest on Make in India, November 2016.
26. Kamble Arati M, Kamble Supriya P, Shejal Amruta C, Kamble Madhuri D, N G Savagave, " Solar Wind Hybrid Power Generation with Switching Control", International Journal of Advance Research and Innovative Ideas in Education, ISSN: 2395-4396, volume 3, issue 2 2017, pp 1-8.
27. Bagane R. S., Khandekar M.V., Misal T. A., Sayyad M.S., Swapnil D Patil, "Rescue and Protection System for Coal Mine Workers by using WSN", International Journal of Advance Research and Innovative Ideas in Education, ISSN: 2395-4396, volume-3, issue-2, 2017, pp 2942-2950.
28. Jadhav Vivek A, Jadhav Rishikesh S, MagarPramod R, KharatSandip T, S. U. Bagwan, " Energy Conservation through Lighting Audit", National Level Paper Presentation Contest on Make in India, November 2016.
29. Shaikh Tanjum M, SayyadHarun S, Patil Pratik B, Patil Dhananjay J, Y. A. Makandar, "High Altitude Wind Power Generation Using Aerostat", National Level Paper Presentation Contest on Make in India, November 2016.
30. RupnurVitthal S, Patil Avadhut N, Waghmode Rahul S, Bate Atul J, Y. R. Atre, "Simulation based Power Conditioning Unit for Off-Grid Solar PV System, IJSEDR, volume-2, Issue 4, pp 8-14, March 2017.

Chapter Publication:

1. Swapnil Patil, KhushalShende, Anwar Mulla, Dadgonda Patil "***TBSC Compensator***"Chapter No. 22, Book Title **Transactions on Engineering Technologies, Springer Singapore**, DOI 10.1007/978-981-10-2717-8_22, Print ISBN 978-981-10-2716-1, Online ISBN 978-981-10-2717-8, Date: 07 February, 2017 pp 305-318.
http://link.springer.com/chapter/10.1007/978-981-10-2717-8_22

Civil Engineering

Faculty Paper Publications (2018-19)

Sr. No.	Name of Faculty	Title of Paper	Details of Publications
1	Mr. P. A. Pisal, Mr. S. B. Hivarekar, Mr. S. S. Mohite, Mr. R. A. Patil	“Groundwater quality assessment for drinking & irrigation purpose in Minche - Savarde basin, Kolhapur district”	Indian Journal of Environment protection, vol. 38, Issue -8, 2018 (Scopus Indexed)
2	Mr. M. M. Bhanuse, Mr. R. V. Jadhav Mr. S. S. Patil	To study the strength of concrete due to partial replacement of river sand by waste foundary sand.”	International Journal of Environment protection, vol. 38, Issue – 12, 2018. (Scopus Indexed)
4	Mr. P. G. Chandak	“Review and assessment of flexible pavement”	“Review and assessment of flexible pavement”
5	Mr. G. S. Kate	“Case study of risk factors involved in public-private, partnership power transmission projects in India”	International Journal for research in Engineering Applications of management, vol. 4, Issue – 3, June 2018

Automobile Engineering

Faculty Publications – Year 2018-2019

1. Prasad V Kengar, Dr. S. V. Karmare, 2019, “**Development and Investigation of performance of multistage with multielevator refrigeration system**” International Congress on Engineering and Technology 2019(ICET2019), Pune.

Faculty Publications – Year 2017-2018

1. Imran Moulaalli Jamadar, Dipakkumar Vakharia, (2018) "**Correlation of base oil viscosity in grease with vibration severity of damaged rolling bearings**", Industrial Lubrication and Tribology, Vol. 70 Issue: 2, pp.264-272, <https://doi.org/10.1108/ILT-04-2016-0078>.
2. I. M. Jamadar, D. P. Vakharia, (2018) "**A New Damage Diagnostic Approach for Deep Groove Ball Bearings Having Localized Surface Defects in the Raceways**", ASME Journal of Tribology, Volume 139, Issue 6, 061103, doi: 10.1115/1.4036630.
3. Vijay R. Patil, Dr. P. V. Jadhav, 2018 “**Development of Prototype of Light**

- Passenger Quarter Car For Improved Vehicle Ride Characteristics”** Springer International Publishing AG 2018, ICATSA 2016. Springer, Cham, doi.org/10.1007/978-3-319-53556-2_87.
4. V. R. Patil , P. V. Jadhav, R. A. Barawade, S. V. Patil, Y. B. Mohite , 2018 “**An Experimental and Numerical Investigation on Static Vibration Response of Multi-Cracked Rotor Shaft**” , Materials Science and Engineering, IOP Journals, Volume 377, PP. 012041, doi:10.1088/1757-899X/377/1/012041.
 5. Vijay R. Patil, Dr. P. V. Jadhav, 2017 “**An Experimental Investigation on Dynamic Vibration Response of Multi-Cracked Rotor Shaft**” ICOVP, 13th International Conference on Vibration Problems 29th November – 2nd December, 2017, Indian Institute of Technology Guwahati, INDIA.
 6. P. V. Jadhav, R. A. Barawade, S. V. Patil, Y. B. Mohite, V. R. Patil , 2017 “**An Experimental and Numerical Investigation on Static Vibration Response of Multi-Cracked Rotor Shaft**” , 1st International Conference on Materials, Manufacturing and Renewable energy (ICMMRE - 2017) , 2017, Sikkim Manipal University, Sikkim, INDIA.
 7. P. V. Shinde, P. M. Gavali 2017 “**Numerical Analysis of Acoustic Attenuation and Performance characteristics of Diesel Engine Muffler**” ICOVP, 13th International Conference on Vibration Problems 29th November – 2nd December, 2017, Indian Institute of Technology Guwahati, INDIA.
 8. P. V. Shinde, P. M. Gavali, R. A. Barawade, Y. B. Mohite, P. B. Shinde, “**A Review on Muffler Design for Exhaust Noise Attenuation**” International Journal of Engineering and Technology (IJET), Vol. 9, pp. 428-430.
 9. A. R. Mali, R. G. Desavale 2017 “**Influence of Instantaneous Defective Frequency on Speed and Life of Ball Bearing** ” ICOVP, 13th International Conference on Vibration Problems 29th November – 2nd December, 2017, Indian Institute of Technology Guwahati, INDIA.

Faculty Publications – Year 2016-2017

1. Dr. S.A. Patil, Mrs. S.S. Patil, “**Active Learning: Creating Excitement in Teaching Learning Process**”, Fourth International Conference on Transformations in Engineering Education, Vardhman College of Engineering, Hyderabad on 6-8 January, 2017.
2. Dr. S.A. Patil, Mr. A.B. Gavali, “**Technology-Based Learning system in Programmable Logic Controller Education**”, IEEE 8th International Conference on Technology for Education, IIT Bombay, Mumbai on 2-4 December, 2016.

3. Dr. S.A. Patil, Bhushan Walunj, Amol Ingle, **“Solar Powered Android Controlled Inspection Car By Using IP Camera”**, International Conference on Modern Era Research in Mechanical Engineering-2016 (MERME-16), RIT, Rajaramnagar, Sangli, on 29-30 September, 2016.
4. Dr. S.A. Patil, S.P. Karhatliar, **“Experimental investigation of Wear and Friction Characteristics of Aluminum Metal Matrix Composite with Addition Silicon Carbide under Dry and Wet Condition: A Review”**, International Conference on Modern Era Research in Mechanical Engineering-2016 (MERME-16), RIT, Rajaramnagar, Sangli, on 29-30 September, 2016.
5. Jamadar I. M., Vakharia D. P., **“A novel approach integrating dimensional analysis and neural networks for the detection of localized faults in roller bearings”**, Journal of measurement, Elsevier, July 2016, 94 (2016) 177–185. ISSN No: 0263-2241
6. Gawade S.S., Jagtap S.P., Chavan D.S., **“Performance Analysis of Different Metallic Diaphragms by Using Theoretical & Finite Element Method”**, International Conference on Modern Era Research in Mechanical Engineering-2016 (MERME-16), RIT, Rajaramnagar, Sangli, on 29-30 September, 2016.
7. Dr. P. V. Jadhav, Vijay R. Patil, S. G. Kumbhar., **“Vibration Response of Double Row Ball Bearing on Local Defects using Multivariable Regression Analysis”**, Proceedings of 1st the International Conference on Materials, Manufacturing and Design Engineering, (iCMMD 2016), December 20-21, 2016. Organized by Department of Mechanical Engineering Dr. Babasaheb Ambedkar Technological University ‘Vidyavihar’, Lonere, M.S. India.
8. Sandip S. Chavan, Vijay R. Patil, Ganesh N. Rakate., **“Analysis of pressure Vessel for Structural Stability with Inclined Leg Position by Using FEA”**, Proceedings of 1st the International Conference on Materials, Manufacturing and Design Engineering, (iCMMD 2016) December 20-21, 2016. Organized by Department of Mechanical Engineering Dr. Babasaheb Ambedkar Technological University ‘Vidyavihar’, Lonere, M.S. India.
9. P.V. Kengar, P.M. Wadekar, **“Pool Boiling Heat Transfer in Aqueous Solutions of Triton X-100 Surfactant”**, International Conference on Recent Trends in

Mechanical Engineering for Sustainable Growth at MET's Institute of Engineering, Nashik on 29-30 December, 2016.

10. Jamadar I. M., Vakharia D. P., **“Correlation of Base oil Viscosity in the Grease with Vibration Severity of Damaged Rolling Bearings”**, Industrial Lubrication and Tribology, manuscript accepted, Feb. 2017.
11. Vijay R. Patil, Dr. P. V. Jadhav, **“Development of Prototype of Light Passenger Quarter Car For Improved Vehicle Ride Characteristics”**^{1st} the International Conference on “Advanced technologies for Societal Applications Techno-societal 2016” December 20-21, 2016., Organized by SVERI's College of Engineering, Pandharpur, India.
12. Vijay R. Patil, S.G. Kumbhar et al., **“Cost and Energy Effective Automatic Material Handling System for Small Scale Industry”**, Proceedings of the 1st International and 18th ISME Conference, 23rd to 25th February, 2017, NIT Warangal, Warangal.
13. Miss. A.R. Mali, V.G. Salunkhe et al., **“Experimental Mathematical Model for Diagnosis of Vibrations Generated in Defective Rolling Element Bearings”**, Proceedings of the 1st International and 18th ISME Conference, 23rd to 25th February, 2017, NIT Warangal, Warangal.
14. Miss. A.R. Mali, S.V. Paymal et al., **“Development of Multipurpose Agro-Cycle for Ploughing and Sowing Process”**, Proceedings of the 1st International and 18th ISME Conference, 23rd to 25th February, 2017, NIT Warangal, Warangal.

Aeronautical Engineering Department

Academic Year: 2017 – 2018

Consolidated List of Publications

Sr. No.	Name of the faculty	Journals		Conference		Total
		International	National	International	National	
1	Dr. I M Jamadar	2				2
2	Mr. K M Kiran Babu	2		2	1	5
3	Mr. K Balaji	1				1
4	Ms. PoojaPatil			2		1
Total Publications 2017-18						10

Journal Publications

- **K. M. Kiran Babu** and S. Sendhil Kumar, “*Expert system for combustion monitoring in gas turbine engines*”, Journal of Mines, Metals & Fuels, ICAET 2017 Special Volume 65 pp. 60 – 64, December 2017.
- **I.M.Jamadar**, and D.P.Vakharia, 2018, “A New Damage Diagnostic Approach for Deep Groove Ball Bearings having Localized Surface Defects in the Raceways”, ASME Journal of Tribology, NOVEMBER 2017, Vol. 139 / 061103-1-10.
- **I.M.Jamadar**, and D.P.Vakharia, 2018, “Correlation of base oil viscosity in the grease with vibration severity of damaged roller bearings”, Emerald, Journal of Industrial Lubrication and Tribology, Vol. 70 Issue: 2, pp.264-272.
- Vijayan. S. N, Duraimurugan G. K, Sendhilkumar. S, **Kiran Babu. K. M** and Deepak. P, “*CFD Analysis of Frictional Drag Reduction on the Underneath of Ship’s Hull using Air Lubrication System*”, International Journal of Mechanical Engineering and Technology (IJMET), Volume 9, Issue 4, April 2018.
- **Balaji K &Prashant S. Patil**, “*An Aviation Industry Overview: Maintenance, Repair & Overhaul (MRO) Strategies and Fundamentals in India*”, International Journal for Research & Development in Technology, Volume 08, Issue 04, October 2017.
- **Santanu S Gulawani, Deepika R Chimote, K M Kiran Babu**, “Flutter velocity prediction of Cantilever Plate by Similitude Method”, Faculty of Mechanical Engineer, 2018 (Submitted Manuscript).

Conference Publications

- **Ashish Magar, K. M. Kiran Babu** and Rajkumar S Pant, “*Establishing the efficacy of Open-FOAM for carrying out CFD analysis of aerostat envelopes*”, National Conference on Aerial Delivery & Airborne Surveillance Systems (ADASS) 2017 ADRDE, Agra on 10th October, 2017 Organized by the Aerial Delivery Research and Development Establishment, Agra.
- **Santanu S Gulawani, Deepika R Chimote, K M Kiran Babu & S. Sendhil Kumar**, “*Design & Development of Expert System for Temperature Monitoring using Artificial Neural Networks*”, 4th International Conference on Computational Methods in Engineering and Health Sciences (ICCMEH – 2017), December 19-20, 2017.
- **Ashish Magar, DeepeshBhosale, JayeshWarke, & K M Kiran Babu**, “*Numerical Investigation of Vortex Lift over Double Delta Wing using OpenFOAM*”, 3rd International Conference on Innovative Design & Development Practices in Aerospace & Automotive Engineering (IDAD 2018), 22nd – 24th February 2018.
- **P. B. Patil**, Vishal Salunkhe, **PrashantPatil** “*Experimental Investigation of Static & Dynamic loading conditions for Glare Material*”, International conference on Advances in Thermal Systems, Materials & Design Engineering at VJTI, Mumbai, December 2017.
- Prashant S. Patil, **P B Patil**, MurliGurav, Ramesh Sankpal, “*Experimental Investigation of Static & Dynamic loading conditions for Glare Composite Material*”, ICMPC_2018, Proceedings 5 (2018) 18342–18353, Hyderabad, March 2018.

Academic Year: 2016 – 2017

Consolidated List of Publications

Sr. No.	Name of the faculty	Journals		Conference		Total
		International	National	International	National	
1	Dr. I M Jamadar	2		1		3
2	Dr. L Y Waghmode	1				1
3	Mr. K M Kiran Babu	1		1	1	3
Total Publications 2016-17						7

Journal Publications

- R. B. Patil, B S Kothavale, **Dr. L. Y. Waghmode**, and S G Joshi, “Reliability analysis of CNC turning center based on the assessment of trends in maintenance data” International Journal of Quality and Reliability Management Vol. 34 No. 9 , 2017

- **I.M.Jamadar**, and D.P.Vakharia, 2016, “A Novel Approach Integrating Dimensional Analysis and Neural Networks for the Detection of Localized Faults in Roller Bearings”, Elsevier Journal of Measurement, Vol.94, pp.77–185.
- **I.M.Jamadar**, and D.P.Vakharia, 2016, “An in-situ synthesized model for detection of defective roller in rolling bearings”, Elsevier Journal of Engineering Science and Technology, Vol.19, pp.1488-1496.
- **K M Kiran Babu** and S Sendhil Kumar, “*Fatigue Life Extension of Riveted Joints using Fiber Metal Laminate Reinforcement*”, Polymers & Polymer Composites, Volume 24, Issue 7, pp. 517 – 521, 2016.
<https://doi.org/10.1177%2F096739111602400710>.

Conference Publications

- **K. M. Kiran Babu** and S. Sendhil Kumar, “*Expert System for Combustion Monitoring in Gas Turbine Engines*”, 30th National Convection of Aerospace Engineers & National Seminar on Aerospace Technology: Future Trends & Developments, held at Adhiyamaan College of Engineering, Hosur on 25th & 26th November, 2016.
- **K. M. Kiran Babu, N. L. Narasimha Reddy & P. Manivannan**, “*Computational Study of SCRAM Jet Combustor with a Co-Axial Strut Fuel Injector*”, 2nd International Conference for Convergence in Technology (I2CT 2017), IEEE. Sponsored, 07th to 09th April 2017.
- **I.M.Jamadar**, S.R.Khade, A.A.Dhanawade, S.C.Tapase, N.L.Devane, M.B.Sutar, 2017 “Design Optimization of Disc Brake Using Thermo-Structural Coupled Finite Element Analysis”, International Conference on Frontiers in Engineering, Applied Sciences and Technology (FEAST), March 31- April 1, 2017, National Institute of Technology, Trichy, India.

Industry Linkages

Mechanical Engineering Department

No. of linkages created during 2018-19: **92**

Sr. No	Name Of Company
1	Ichalkaranji Association, Ichalkaranji
2	Applied Research Engineering Sangli
3	Rashtriya Chemicals Fertilizers Ltd. Alibag
4	Ashta Liners Pvt Ltd Ashta
5	Ceraflux India Pvt Ltd Kolhapur
6	Kalapi Engineering Associates Pvt Ltd Sangli
7	Kasturi Foundry Pvt Ltd Ashta
8	Koshal Engineering Works Sangli
9	Magnewin Energy Pvt Ltd Kupwad
10	Dynostar New Industrial Estate, Ichalkaranji
11	Omega Consultants Kolhapur
12	Pasaydan Electricals Dattanagr Shirol
13	Pentamech Parvati Co-Op Ind Estate Yadrav
14	PNP Techno Products Ichalkaranji
15	Preci Fab Engineers Pvt Ltd
16	Skylark Precitech Pvt Ltd Sangli
17	Sujata Engineering Associates Palus
18	Sun Beam Appliances Yelur
19	Swastik Engineers Parvati CO-po Ind Estate Yadrav
20	Technico-Engineers Ichalkaranji
21	Techprarth Solutions Pvt Ltd Shirol
22	Vijay Techno Industries Miraj
23	Spaco Corporation, Sangli
24	Zanwar group of industries
25	JSW Energy ltd
26	Ghatge Patil Industries
27	Manugraph industries

28	JANGS Technologies
29	General Machine Tools
30	Fuel Instruments & Engg. Pvt. Ltd
31	Kirloskar Oil Engines
32	RCF, Ltd Alibag
33	Kirloskar Brothers Ltd
34	Forbes marshall
35	Max Torque Drives Pvt. Ltd
36	Kadam Pattern
37	SunBeam Appliances, Yelur
38	Vijay Techno Industries
39	V R Precision Industries
40	K. U . B. Quliaty Service pvt ltd
41	Emprirical Technology Pune
42	Technica Engineers
43	Bhabha Engg. Pvt Ltd
44	Menon Automobiles
45	Menon Piston Ltd
46	Rocket Engg.
47	ED Steel Pvt. Ltd.
48	Digvijay Industries
49	Karad Projects & Motors
50	Shahu Shugar Factory
51	Hutatma Shugar Factory
52	Arya Technologies
53	Cooper corporation
54	Joshi Jampala Engg. Pvt. Ltd
55	Bhide & Sons Pvt Ltd
56	Dazzle Dynacoats
57	Kalapi Engineering
58	Kiwi Metals
59	Hydro Power plant
60	K. S. B. Pumps
61	Koshal engineering
62	Sagar Cold Storage

63	Maharashtra Machine Pvt. Ltd
64	Fag Controls
65	Alpha Foundry
66	Kirloskar Ebara Pumps Limited
67	Advik HI-Tech Pvt. Ltd.
68	Unique Metals, Tasgaon
69	NETMECH Engineering, Pvt. Ltd
70	FIE Group
71	Swastik Engineers
72	Pentamech
73	Techno-Engineering
74	Srujan Automation
75	Dynostar
76	Suparcraft Foundry
77	Flame Industry
78	Pasaydan
79	J.K. Electricals
80	Rubby Concrete
81	Manufacturer's Association Kagal
82	Ajanta Universal Fabrics Ltd.
83	Kalburgi Udyog
84	Kalburgi Stamping
85	Uthopia Automation & Control Pvt. Ltd
86	Gharda Chemicals Limited
87	Precision Automation & Robotics India (PARI)
88	Vinati Organics Ltd
89	Excel India
90	Ronch Polymer, Pune
91	Bharat Forge
92	Sunanda Engineering Works

No. of linkages created during 2018-19: 14

Sr. No.	Name of the Industry
1.	Winner Software
2.	Le'otile Pune
3.	ExtremityIndia
4.	Tech Hub
5.	BuziBrains
6.	ObstiniNFRATECH
7.	Cloudxchange.io
8.	Creazione softwares
9.	MindIT
10.	Rackson IT
11.	Stormsoft
12.	Struosoft
13.	Technosolutions
14.	TotalAgro Solutions Pvt ltd

Electrical Engineering

Industry Linkage

Sr. No.	Details of Industry Interaction
1	Name of Faculty: Mr. Patil ManojDhondiram Date of Industry Visit & Interaction: 19/11/2018, Monday Name & Address of Industry: M/s. GHODAWAT ENTERPRISES PVT.LTD. STAR HOUSE, PLOT NO. 438 JAYSINGPUR, DIST-KOLHAPUR. MAHARASHTRA. PIN NO -416101. Company Contact Person Name: Mr. Mukund Patil (Accountable Manager), aviation@ghodawat.com, mukund@ghodawat.com, 9921280555. &OnkarLambe (Sr. Technical Officer), 8623872577. Outcome: Industrial Training, Industrial Visit

	 
2	• Name of Faculty: Mr. Patil ManojDhondiram • Date of Industry Visit & Interaction: 19/11/2018, Monday • Name & Address of Industry: HEM ELECTRONIQUES, C-46,M.I.D.C. MIRAJ -416410 MAHARASHTRA (INDIA), PH:- + 91-233-2644324 ,+91-233-2645201(TELEFAX), Email:-san_hem@bsnl.in , hem_contact@yahoo.co.in. • Company Contact Person Name:Mr.AshwinGadgil (Manager), hem_contact@yahoo.co.in, 9673146882. • Outcome: Industrial Training, Industrial Visit 
3	• Name of Faculty: Mr. MakandarYakub Anwar, Mr. Shaikh SuhelKaisar and Mr. ManojDhondiram Patil. • Date of Industry Visit & Interaction: 23/11/2018, Friday • Name & Address of Industry: PCE Systems, Plot No.:- E - 32, M.I.D.C, Kupwad. Dist:- Sangli,Tal.:- Miraj, Maharashtra (INDIA), Pin - 416 436. • Company Contact Person Name: Mr. KhotSwapnil, (Head of Maintenance Department) • Outcome: Internship, industrial training for students and faculties, and Industrial Visit. Placement 
4	• Name of Faculty: Mr. MakandarYakub Anwar, Mr. Shaikh SuhelKaisar and Mr.

	ManojDhondiram Patil ● Date of Industry Visit & Interaction: 23/11/2018, Friday ● Name & Address of Industry: M/S. Siddheshwar Electricals, J-49, MIDC Kupwad, Sangli. Pin - 416 436. ● Company Contact Person Name: Mr. M. S. Patil (Owner) ● Outcome: Industrial training for students and faculties, and Industrial Visit. 
5	● Name of Faculty:Mr. MakandarYakub Anwar and Mr. Shaikh SuhelKaisar ● Date of Industry Visit & Interaction:: 22/11/2018, Thursday ● Name & Address of Industry: Kulkarni Power Tools Ltd., Shirol - 416 103, Dist : Kolhapur, Maharashtra, INDIA. ● Company Contact Person Name:Mr. SnehkantThanekar (Assistant Human Resource Manager),+91 9225838986. snehkant.thanekar@kpt.co.in ● Outcome: Paid and unpaid internship, curriculum design, industrial training for students and faculties, expert lecture, research project with prior permission in meeting of higher authority and Industrial Visit, Placement (if any)  

6	• Name of Faculty:Mr. MakandarYakub Anwar and Mr. Shaikh SuhelKaisar • Date of Industry Visit & Interaction: 22/11/2018, Thursday • Name & Address of Industry: J K Electricals., 315/2, Plot no. 8, Chattrapatishahu corporation industrial estate, Dattanagar, Shirol-416120 Dist. Kolhapur • Company Contact Person Name:Mr. YuvrajJagdale (Owner) +91 9422417611, Email ID electricalsjk@ymail.com. • Outcome:Internship, industrial training for students and faculties, and Industrial Visit  
7	• Name of Faculty:Mr. N. M. Jamadar and Mr. A. B. Jadhav • Date of Industry Visit & Interaction:: 17/11/2018, Saturday • Name & Address of Industry:Deepak Industries, Shirol MIDC Dist. Kolhapur Company Contact Person Name: Mr. V. S. Ayarekar Contact- 9422049051 Email: powerdeepvsa@yahoo.com • Outcome:Industrial training for students and faculties, and Industrial Visit 
8	• Name of Faculty:Mr. N. M. Jamadar and Mr. A. B. Jadhav • Date of Industry Visit & Interaction: 17/11/2018, Saturday • Name & Address of Industry: RYB Power Systems, Shirol MIDC Dist. Kolhapur • Company Contact Person Name:Mr. Balasaheb Patil Contact- 7709511999 Email: rybpower2003@gmail.com • Outcome:Placements, Industrial training for students and faculties, and Industrial Visit

	
9	• Name of Faculty:Mr. N. M. Jamadar and Mr. A. B. Jadhav • Date of Industry Visit & Interaction: 17/11/2018, Saturday • Name & Address of Industry: FAG Controls, Y. P. Powar Nagar, Kolhapur • Company Contact Person Name:Mr. SagarJadhav • Contact- 9850339900 Email: Sagar.jadhav@fagcontrols.com • Outcome:Apprenticeship, curriculum design & Industrial Visit 
10	• Name of Faculty:Mr. N. M. Jamadar and Mr. A. B. Jadhav • Date of Industry Visit & Interaction: 17/11/2018, Saturday • Name & Address of Industry: Pro Automater,, Rajarampuri, Kolhapur • Company Contact Person NameMr. OnkarTodkar Contact- 7774971079 Email: contact@proautomater.com • Outcome:Training based placement & Industrial Visit 
11	• Name of Faculty: Mr. N. M. Jamadar and Mr. A. B. Jadhav • Date of Industry Visit & Interaction: 23/11/2018, Saturday • Name & Address of Industry: Yash Energy Capacitors Pvt.Ltd, Islampur • Company Contact Person :Mr. ArunBilaskar • Contact- 9404020766, 8275755766 Email: capacitor.yashenergy@gmail.com • Outcome:Industrial Training, curriculum design & Industrial Visit

		
12	• Name of Faculty: Mr. N. M. Jamadar and Mr. A. B. Jadhav • Date of Industry Visit & Interaction: 23/11/2018, Saturday • Name & Address of Industry: Bombay Rayon, Islampur Integrated textile park, Peth Naka • Company Contact Person : Mr. Atul Lahigade Contact- 9527272001 Email: atul.l@bombayrayon.com • Outcome: Placements as per vacancy available, Project, Industrial Visit	
13	• Name of Faculty: Miss. Kharade Jyoti Mohan • Date of Industry Visit & Interaction: 21/11/2018, Wednesday • Name & Address of Industry: AJANTA UNIVERSAL FABRICS LTD. Plot. B-60 to B-63, B-71 & B-177, Opp. Water Treatment Plant, Tasawade MIDC, Post - Umbraj - 415 109, Tal-Karad, DIST - Satara, Maharashtra, India TEL - +91-2164-258205 FAX - +91-2164-258505 WEB - www.aufl.in ,E-MAIL - contact@aufl.in Sagar Joshi, Executive Director Mobile : +91-9822394806, Email: sagar@aufl.in Mr. Amit Jadhav (HR), Mobile: 9763491564 • Outcome: Campus Placement as per vacancy, Vocational/ Internship/ In-plant training for students, Sponsored projects for students and faculty, Industrial Visits for students and faculty. 	
14	• Name of Faculty: Miss. Kharade Jyoti Mohan • Date of Industry Visit & Interaction: 21/11/2018, Wednesday • Name & Address of Industry: Nikson Agrotech India Pvt. Ltd. B-66, Tasawade MIDC, KARAD- 415 109. Dist. Satara, Maharashtra, India. Tel : +91 2164 258080 Fax : +91 2164 258382, Email : contact@niksanagrotech.com,	

	www.niksanagrotech.com • Company Contact Person :Name:Mr. SandipGune (MD), Mobile: 9822599417 • Outcome:: Vocational/ Internship/ In-plant training for students, Sponsored projects for students and faculty, Industrial Visits for students and faculty. 
15	• Name of Faculty:Miss. KharadeJyoti Mohan • Date of Industry Visit & Interaction30/11/2018, Friday • Name & Address of Industry::KalburgiUdyog / DYTECH (Sheet Metal Component Manufacturer) KalburgiTechnoforming35A/ B, Industrial Estate, Ogalewadi Tal- Karad-415 105 Dist.Satara, Maharashtra, India. Company • Company Contact Person Name: Mr. Chandrashekharkalburgi (HR) Mobile: 9326766555, Email: shekharkalburgi@yahoo.com , dytechpune@gmail.com • Outcomes:Campus placement as per vacancy (EE &Mech), Vocational/ Internship/ In-plant training for students, Sponsored projects for students and faculty, Industrial Visits for students and faculty.  
16	• Name of Faculty: Miss. KharadeJyoti Mohan • Date of Industry Visit & Interaction: 30/11/2018, Friday • Name & Address of Industry:Kalburgi Stamping (Manufacturers of Electrical stamping)Gat No.-95, Delstar Road, Hajarmachi,Tal- Karad- 415 105Dist. Satara, Maharashtra, India. Email: kalburgistamping@gmail.com , www.kalburgistamping.com • Company Contact Person Name:Mr. ShridharKalburgi (HR), Mobile: 9326710032, 8668713040 • Outcomes: Vocational/ Internship/ In-plant training for students, Sponsored projects for students and faculty, Sponsored industrial research and joint research publications, Industrial Visits for students and faculty.

	 
17	• Name of Faculty: Miss. KharadeJyoti Mohan • Date of Industry Visit & Interaction: 30/11/2018, Friday • Name & Address of Industry: Delstar Pvt. Ltd., Hajarmachi, Tal- Karad- 415 105, Dist. Satara, Maharashtra, India. • Company Contact Person Name: Mr. Joshi Sir, Mobile: 9028668080, Web: www.delstarindia.com • Outcomes: Vocational/ Internship/ In-plant training for students, Sponsored projects for students and faculty, Industrial Visits for students and faculty.
18	• Name of Faculty: Miss. KharadeJyoti Mohan • Date of Industry Visit & Interaction: 30/11/2018, Friday • Name & Address of Industry: Essel Enterprise 23, Industrial Estate, Ogalewadi, Tal- Karad- 415 105, Dist. Satara, Maharashtra, India. • Company Contact Person Name: Mr. Ganesh Kalburgi (Owner) • Outcomes: Sponsored projects for students and faculty, Campus Placement of the student. 
19	• Name of the Faculty: Mr. MakulaCharanSekhar, P. S. Mali, • Name of the Industry: Galaxy Transmission • Date: 16/11/2018 • Address: N-3, MIDC Kupwad Block, Sangli, Maharashtra 416436 • Contact Person: Rajendra More (AGM) Mobile: 9096599620 • Outcomes: Placements, Training, Industry Visit
20	• Name of the Faculty: Mr. MakulaCharanSekhar, P. S. Mali • Name of the Company: Quality Power • Date: 16/11/2018 • Address: L-61, Kupwad MIDC, Sangli, Maharashtra, INDIA • Contact Person: Sachin Sudhakar Kulkarni Mobile: 9011271300 • Outcomes: Industrial Training, Industrial Visit

21	• Name of the Faculty: Mr. MakulaCharanSekhar, P. S. Mali • Name of the Company:D. N. Wind • Date of Industry visit:24/11/2018 • Address: Survey No.248/3, Peth - wadgoan,Tal - Hatkanangale, dist - Kolhapur, 416112 • Contact Person:Mr. N. M. Wadikar (Plant Head)Mobile: 9823058305 • Outcomes:Help in Curriculum development, Training
22	• Name: Mr. KanaseDigvijayBhimrao&Mr. Vishal B. Patil • Name of Industry: B K Engineers Karad • Date: 21/11/2018 • Contact Person: Mr. Rajendra Kachare, HR • Mob: 8378975983 • Address: Plot No B-109 Tasawade MIDC Karad • Email:mkt@bkengineers.co.in • Outcomes: (1) Internship for 3 and 6 months (2) Expert Talk on Industrial Management
23	• Name:Mr. KanaseDigvijayBhimrao& Mr. Vishal B. Patil • Name of Industry: Cogeneration Plant. Krishna Sugar Factory Karad • Date: 21/11/2018 • Contact Person: Mr. UditMohite • Mob:8806923443 • Add: Krishna Sugar factory Rethare Bk. Karad • Outcome: Internship for Three Weeks
24	• Name:Mr. KanaseDigvijayBhimrao& Mr. Vishal B. Patil • Name of Industry: AG Electric Motors Karad • Date: 22/11/2018 • Contact Person: Mr. ShridharRamdurgkar (Managing Partner) • Mob:9890248201 • Email: shridhar@agelectricmotors.com • Add: Plot No. 6/2 Koyana Industrial Estate Pune-Banglore Highway Karad 415110 • Outcome: (1) Internship for 3 and 6 months
25	• Name:Mr. KanaseDigvijayBhimrao& Mr. Vishal B. Patil • Name of Industry: AR Engineering Satara • Date: 22/11/2018 • Contact Person: Mr. AdityaMutalik • Mob: 9422605890 • Email:info@arengg.net • Add: L-77, Addl MIDC Satara 415004 • Outcome: (1) Internship (2) Sponsored project for PG students of Electrical, Mechanical and Electronics Engineering. (3) Expert Talk
26	• Name:Mr. KanaseDigvijayBhimrao& Mr. Vishal B. Patil • Name of Industry:Ajinkya Electro System Satara • Date: 22/11/2018 • Contact Person: Mr. Anil Jadhav , Mr. Sunil Shinde • Mob: 9423260373, 942300688

	• Add: SLU-W-7ADDL. MIDC Satara 415004 • Outcome: (1) Internship
27	• Name of Faculty:-Ms. Gurav Puja Deelip • Date of Industry visit & interaction: 16/11/18 to 19/11/18 • Name & Address of Industry: Karad Projects and Motors Limited (Wholly owned subsidiary of Kirloskar Brothers Ltd.), Plot B67 & B68, MIDC Karad Industrial Area,, A/P-Taswade, Taluka-Karad-415109, Dist-Satara, Maharashtra, Tel no: (02164) 258424, Fax:+91 2164 258425, Web: www.kpml.co.in, Email: sunil.kanchan@kpml.co.in • Company Contact Person Name: Mr. AjitkumarDonvade (HR), Email: ajitkumar.donavade@kpml.co.in Contact No: 9850886893 • Outcomes: Placement as per company vacancy requirements, In plant/Vocational training for students, Industrial Visit, Assistance in Curriculum Designing, Expert lecture from Industry 
28	• Name of Faculty:-Ms. Gurav Puja Deelip • Date of Industry visit & interaction:19/11/18 • Name & Address of Industry: AG Electro-services, Plot no.6,Koyana audyogik vasahat,P.B.Road,Karad-415110.India, Karad, Maharashtra 415110, Phone: 98220 08646, Web: www.agelectricmotors.com, • Company Contact Person Name: Mr. Ram Durgkar (Managing Director), Contact No: 88888 38542 • Outcomes: In plant/Vocational training for students, Industrial Visit for students & faculty 
29	• Name of Faculty:-Ms. Gurav Puja Deelip • Date of Industry Interaction:19/11/18 • Name & Address of Industry: Utopia Automation & Control Pvt. Ltd.P-4/5 information technology park, Maharashtra, Old MIDC, Manik Nagar, Satara, Maharashtra 415004Tel: 02162 246 821Email: support@utopiacontrol.com • Company Contact Person Name: Mr. VinayDeshpande, Contact No: 9423014027,

	• Outcomes: Requirement of Graduate Pass out candidates for the post of Site Engineer
30	• Name of Faculty:Ms. Gurav Puja Deelip& Ms. KumbharBhupali P • Date of Industry visit & interaction:24/11/18 • Name & Address of Industry: Universal Controls, 165, Vasantdada Industrial Estate, Sangli, 416416, Tel: 0233 231 4440 • Company Contact Person Name • Mr. GurudasBhanushe • Contact: +91 9420104440 • Email: vijaybhagatuc@gmail.com (Managing Director) • Outcomes: Placement requirement in month of August, In plant/Vocational training for students, Industrial Visit 
31	• Name of Faculty:Ms. B. P. Kumbhar • Date of Industry Visit & Interaction: 21/11/2018, Wednesday • Name & Address of Industry: Sycon Systems & Controls: • Address: C-24, M I D C Miraj, M I D C Miraj, Sangli, Maharashtra 416410 • Company Contact Person Name:Management Representative: Mr. SujitNandarge, Contact: +91 9604639899,E-mail: quality@sycon.co.in • Outcome: Placements as per requirement, Sponsored Projects, Industrial training, Curriculum Design and Industrial Visit.
32	• Name of Faculty:Ms. B. P. Kumbhar • Date of Industry Visit & Interaction:24/11/2018, Saturday • Name & Address of Industry: Shreenath Electricals Pvt. Ltd.Plot No. K-17, MIDC Kupwad Block, Sangli • Company Contact Person Name:: Mr. SuyashShrikhande,91 8600913598 E-mail:san_shreenath@yahoo.com • Outcome: Industrial Training and Industrial Visit 
33	• Name of Faculty Mr. S.S.Kashid, S.D. Pawar

	• Date of Industry Visit & Interaction17/11/2018, Saturday • Name & Address of Industry: Fie Research Institute, Ganganagar, Ichalkaranji, 230-2441475 • Company Contact Person Name:Mr. R. V. Tambad (Sr. engineer)Contact- 9850065882 Email: fri@dataone.in • Outcome: Industrial training for students, and Industrial Visit
34	• Name of Faculty:Mr. S.S.Kashid, S.D. Pawar • Date of Industry Visit & Interaction: 17/11/2018, Saturday • Name & Address of Industry: Ganesh Quality Machines Pvt. LtdYadrav-sugar factory Road,Tardal, Ichalkaranji,0230 2430228/2425271 • Company Contact Person Name:Mr. Milind D. Biradar (MD) • Contact- 9527688282 Email: milind@ganeshfoundryequipment.com • Outcome: Industrial training for students, and Industrial Visit
35	• Name of Faculty:Mr. S.S.Kashid, S.D. Pawar, • Date of Industry Visit & Interaction:17/11/2018, Saturday • Name & Address of Industry: Fie Instruments & Engineers Pvt. Ltd.Parvati Co-op Industrial Estate, Yadrav,0230-252133/6517232 • Company Contact Person Name:Mr. A. D. Tare (Manager)Contact- 9850065877 Email: bsllspare@fietest.com • Outcome:Industrial training for students, and Industrial Visit
36	• Name of Faculty:Mr. S.S.Kashid, S.D. Pawar, • Date of Industry Visit & Interaction17/11/2018, Saturday • Name & Address of Industry: Power EngineersW - 24 / 25, MIDC, GokulShirgaon, Maharashtra • Company Contact Person Name:Kane (MD)Contact- 9822393139 • Outcome: Vocational/ Internship/ In-plant training for students, Industrial Visit, Guest Lecture.
37	• Name of Faculty:Mr. S. D.Patil& Mr. R. B. Madake • Date of Industry Visit & Interaction: 24/11/2018 • Name & Address of Industry: Laxmi Pumps Pvt. Ltd. A - 10, MIDC, GOKUL Shirgaon, Kolhapur, 416234 • Company Contact Person Name:Rajendra V Vibhute (Production Engineer) Mobile: 9623458144 • Outcome:Training, Industrial Visit
38	• Name of Faculty:Mr. S. D.Patil& Mr. R. B. Madake • Date of Industry Visit & Interaction: 24/11/2018 • Name & Address of Industry: Sree Samarth Automation
39	• Name of Faculty:Mr. S. D.Patil& Mr. R. B. Madake • Date of Industry Visit & Interaction: 24/11/2018 • Name & Address of Industry: Mentor Automation
40	• Name of Faculty:Mr. S. D.Patil& Mr. R. B. Madake • Date of Industry Visit & Interaction: 24/11/2018 • Name & Address of Industry: Ashok Electricals
41	• Name of Faculty:Mr. S. S. Patil, Ms. V. S. Patil, Ms. D. A. Suryawanshi, Ms. M. P. Jadhav

	• Date of Industry Visit & Interaction: 21/11/2018, Wednesday • Name & Address of Industry: Rajarambapu Milk Industry A/116 TO 119, MIDC Islampur. • Company Contact Person Name: Mr. P. D. Salunkhe (Accounts Manager) • Email: bakore@krushnadudh.com, 02342220136. • Outcome: Industrial Training, Industrial Visit.  
42	• Name of Faculty: Mr. S. S. Patil, Ms. V. S. Patil, Ms. D. A. Suryawanshi, Ms. M. P. Jadhav • Date of Industry Visit & Interaction: 21/11/2018, Wednesday • Name & Address of Industry: Sudhir Industries Plot No. C-5 MIDC Urun Islampur. • Company Contact Person Name: Mr. AbhijeetPise (Manager), Email: abhijeetspise@gmail.com, 9823523030. • Outcome: Industrial Training, Industrial Visit, Internship. 
43	• Name of Faculty: Mr. S. S. Patil, Ms. V. S. Patil, Ms. D. A. Suryawanshi, Ms. M. P. Jadhav • Date of Industry Visit & Interaction: 21/11/2018, Wednesday. • Name & Address of Industry: Mauli Industries Plot No. B23 Shirala MIDC. • Company Contact Person Name: Mr. Shailesh Patil, (Manager), (9823829595) Email:maulindustries11@gmail.com • Outcome: Internship, industrial training and Industrial Visit, Apprenticeship (Paid), Placement.

		
44	• Name of Faculty:Mr. S. S. Patil, Ms. V. S. Patil, Ms. D. A. Suryawanshi, Ms. M. P. Jadhav • Date of Industry Visit & Interaction:23/11/2018, Friday • Name & Address of Industry: Hydro Modeling & Solutions J 17/1, Near MIDC Police Station, Kupwad. • Company Contact Person Name:Mr. Vishwajit Chauhan, (Manager) (9604363138). • Outcome:Industrial Visit, Sponsored Projects. 	
45	• Name of Faculty:Mr. S. S. Patil, Ms. V. S. Patil, Ms. D. A. Suryawanshi, Ms. M. P. Jadhav • Date of Industry Visit & Interaction:23/11/2018, Friday • Name & Address of Industry:Sharda Electronics & Co.G-9 MIDC, Kupwad, Sangli. • Company Contact Person Name:Mr. Abhijeet Shete (Manager), 9503435575 • Email: ars.204199@gmail.com • Outcome:Paid and unpaid internship, curriculum design, industrial training for students, expert lecture, Sponsored Project and Industrial Visit, Placement. 	
46	• Name of Faculty:Mr. S. S. Patil, Ms. V. S. Patil, Ms. D. A. Suryawanshi, Ms. M. P. Jadhav • Date of Industry Visit & Interaction: 23/11/2018, Friday • Name & Address of Industry: Deepak Industries :Plot no. E 73, Sound Casting Shree Ram Foundry road, Shirol MIDC, Kolhapur- 416122. • Company Contact Person Name: Mr. Yuvraj Jagdale (Owner), 9152419385.	

	- Email: electricalsjk@ymail.com Outcome:Industrial training and Industrial visit.
47	Name of Faculty:Mr. S. S. Patil, Ms. V. S. Patil, Ms. D. A. Suryawanshi, Ms. M. P. Jadhav Date of Industry Visit & Interaction: 23/11/2018, Friday. Name & Address of Industry: AVP Electrical and automation.Plot no. 8 behindmantrimetallics MIDC Shioli. Company Contact Person Name:Mr. Ananda V Patil (Owner), 9823249393. apanandapatil9393@gmail.com Outcome: Industrial training for students and faculties and Industrial Visit, Paid internship.
48	Name of Faculty:Mr. Patil Sagar Sanjay, Ms. Patil VidyaSampatrao, Ms. SuryawanshiDeepaliAnanadrao, Ms. JadhavMadhuriPandurang Date of Industry Visit & Interaction: 24/11/2018, Saturday Name & Address of Industry:Rajarambapu Sugar Industry Takari road Islampur. Company Contact Person Name: Mr. Thorat (Asst. Engineer) 9970900252, Mr. More (Asst. Engineer), 9970900 725 Outcome:Industrial training for students and Industrial Visit 
49	Name of Faculty:Mr. Patil Sagar Sanjay, Ms. Patil VidyaSampatrao, Ms. SuryawanshiDeepaliAnanadrao, Ms. JadhavMadhuriPandurang Date of Industry Visit & Interaction: 24/11/2018, Saturday Name & Address of Industry: Reliance Corporate JagtapChaukVanavadi, Pune. Company Contact Person Name:Mr. ArvindJagdale (Maintenance Head), 9970061887 Outcome:Placement of atleast 5 students with 6 month paid training.
50	Name of Faculty:Mr. Patil Sagar Sanjay, Ms. Patil VidyaSampatrao, Ms. SuryawanshiDeepaliAnanadrao, Ms. JadhavMadhuriPandurang Date of Industry Visit & Interaction:21/11/2018, Wednesday Name & Address of Industry: Kamal IndustriesShirala MIDC Company Contact Person Name:Mr. Ganesh Patil (Owner), 9665645691 Outcome:Industrial Visit, Guidance for entrepreneurship.

Automobile Engineering

Industry Linkage III 2018-19

Sr. No	Date of Visit	Name of Company	Address
1	18/08/2018	Mahabal Metals , Pvt. Ltd.	Kupwad MIDC, Miraj
2	29-10-2018	ACE Micromatics Group	Kolhapur
3	27-10-2018	Ident	Pimpary Vallabhnagar
4	27-10-2018	Injo Technical Services	Pune
5	27-10-2018	Automotive Manufacturers Pvt. Ltd, Pune	Katraj
6	16-11-2018	Top Gear Transmission Pvt. Ltd.	Satara
7	16-11-2018	Cooper Corporation	Satara
8	16-11-2018	Joshi Jampala Engineering Pvt. Ltd.	Satara
9	16-11-2018	Kay Bouvet Engineering Ltd.	Satara
10	16-11-2018	Spark Autometal Component	Satara
11	30-11-2018	ACE Miromatics machine tools pvt. Ltd., Shirol MIDC	Kolhapur
12	30-11-2018	Perfect Pins, Shirol MIDC	Kolhapur
13	30-11-2018	Deshpande AutoMech Pvt. Ltd., Shirol MIDC	Kolhapur
14	25-10-2018	Pentamech,	Ichchcalkaranji
15	29-09-2018	Chougule Industries Pvt. Ltd.	Sangli
16	29-09-2018	Sahyadri Motors (Mahindra)	Sangli
17	29-09-2018	My Hundai	Sangli
18	18-08-2018	Mahabal Metals Pvt. Ltd.	Miraj
19	27-10-2018	ELENO	Shaniwarwada, Pune
20	27-10-2018	HONDA Two Wheelers	Pune

MOU's with Industries

Mechanical Engineering Department

Year: 2016-17 to 2018-19		
Sr. No	Name Of MOUs	Date of MoU
	Year 2018-19	
1	Ichalkaranji Association, Ichalkaranji	05/01/2019
2	Applied Research Engineering Sangli	02/02/2019
3	Rashtriya Chemicals Fertilizers Ltd. Alibag	05/01/2019
4	Ashta Liners Pvt Ltd Ashta	01/02/2019
5	Ceraflux India Pvt Ltd Kolhapur	02/02/2019
6	Kalapi Engineering Associates Pvt Ltd Sangli	02/01/2019
7	Kasturi Foundry Pvt Ltd Ashta	01/02/2019
8	Koshal Engineering Works Sangli	01/02/2019
9	Magnewin Energy Pvt Ltd Kupwad	01/02/2019
10	Dynostar New Industrial Estate, Ichalkaranji	01/02/2019
11	Omega Consultants Kolhapur	01/02/2019
12	Pasaydan Electricals Dattanagr Shirol	01/02/2019
13	Pentamech Parvti Co-Op Ind Estate Yadrav	01/02/2019
14	PNP Techno Products Ichalkaranji	02/02/2019
15	Preci Fab Engineers Pvt Ltd	02/01/2019
16	Skylark Precitech Pvt Ltd Sangli	02/01/2019
17	Sujata Engineering Associates Palus	04/02/2019
18	Sun Beam Appliances Yelur	01/01/2019
19	Swastik Engineers Parvati CO-po Ind Estate Yadrav	01/02/2019
20	Technico-Engineers Ichalkaranji	01/02/2019
21	Techprarth Solutions Pvt Ltd Shirol	01/02/2019
22	Vijay Techno Industries Miraj	01/02/2019
23	Spaco Corporation, Sangli	02/02/2019
	Year 2017-18	
1	Omega Consultant , Kolhapur	29/08/2017
2	ARE test equipments, MIDC Kupwad	30/08/2017
3	Gloinnt Solutions Private Limited, Bengaluru	16/02/2018
4	Design Tech and Analysis, Satara	04/06/2017

	Year 2016-17	
1	Global Talent Track Private Limited, Pune	19/01/2017
2	3 Idea Technology LLP, Mumbai	16/01/2017
3	Bharat Wire Ropes Limited, Mumbai	12/12/2016
4	Vinijya E-Solutions LLP, Mumbai	19/10/2016
5	M/s Treeze E-Solutions Private Limited, Mumbai	15/09/2016
6	Reliance Infrastructure Limited, Dahanu	03/01/2017
7	P3 Group Academy, Bengaluru	06/12/2016
8	Maharashtra State Electricity Transmission Co. Limited	06/10/2016

Electronics & Telecommunication

Memorandum of Understanding (MOUs)

Sr. No	Name of MOU	Date of MOU
1.	Teksun Lab Pvt. Lab., Ahmadabad	02 February 2019
2.	Prasaditi Medical Equipments, Miraj	02 February 2019
3.	I-Smart Technosolutions, Sangli	02 February 2019
4.	PRECISION TECH Automation & Controls, Pune	20 January 2019
5.	SNR, Electronics, Kupwad MIDC, Bamnoli	30 th December 2018
6.	Blazing Arrows, Ahmedabad	23 rd May 2017
7.	Sharda Electronics & Co., Kupwad MIDC, Sangli	19 th April 2017
8.	Savya iTech Global Pvt Ltd. Mumbai	5 th October 2016
9.	National Association of Software and Service Companies(NASSCOM)	16 th September 2015
10.	eİTRA-e-Infochips Institute of Training Research and Academy Ltd, Ahmadabad	19 th June 2015
11.	Blazing Arrows, Ahmedabad	23 rd May 2017
12.	Sharda Electronics & Co., Kupwad MIDC, Sangli	19 th April 2017
13.	Savya iTech Global Pvt Ltd. Mumbai	5 th October 2016
14.	SNR, Electronics, Kupwad MIDC, Bamnoli	15 th December 2016
15.	National Association of Software and Service Companies(NASSCOM)	16 th September 2015

16.	eiTRA-e-Infochips Institute of Training Research and Academy Ltd, Ahmadabad	19 th June 2015
17.	EdGate Technologies Pvt. Ltd., Bangalore (Texas Instruments India)	31 st Dec. 2013

Computer Science & Engineering

MOU 2018-19 Summary

Sr.No	Company Name	Date
1	Tech Hub Pune	08/02/2019
2	Creazione Software Pune	08/02/2019
3	Obstin Infratech Kolhapur	01/02/2019
4	TechnoSolution Miraj	02/02/2019
5	Mind IT Services Miraj	02/02/2019
6	RacksonsIT Developers Jaysingpur	02/02/2019
7	Stormsoft Software Development Ichalkaranji	02/02/2019
8	STRUOSOFT PRIVATE LTD	02/01/2019

Electrical Engineering

MoU with Industry

Sr.No	Name Of Organization	Date of MOU	Type of MOU	Activities Planned
1	AG Motors, Karad	01-02-19	Private	1) Training for faculties, 2)Training for students, 3)Industrial visit 4) Placement 5) Interenship
2	DIGI Tech, Karad	01-02-19	Private	Training for Students
3	HEM Electronics,Miraj	01-02-19	Private	1) Training for faculties, 2)Training for students, 3)Industrial visit 4) Interenship
4	MouliIndustries,Shirala	01-02-19	Private	1) Training for faculties, 2)Training

				for students, 3)Industrial visit
5	MSEDCL,Sangli	01-02-19	GOVT	1) Training for faculties, 2)Training for students, 3)Industrial visit 4) Interenship
6	SidheshwarElectrical,Kupwad	01-02-19	Private	1) Training for faculties, 2)Training for students, 3)Industrial visit 4) Interenship
7	SIGMA automation,Sangli	01-02-19	Private	1) Training for faculties, 2)Training for students, 3)Industrial visit 4) Placement 5) Interenship

Civil Engineering

MoU with Industry

Academic Year 2018-19	
Name of Company	Date
Sanmati Consultants, Ashta	20/10/2018
Wallnett Bricks Pvt. Ltd.	01/12/2018
Nandkumar Bane Structural and Consulting Engineer	01/01/2019
Credai, Islampur	23/01/2019
A. P. Shah Institute of Technology, Thane	12/02/2019
Academic Year 2017-18	
Nil	NA
Academic Year 2016-17	
Prakash Jadhav and Associates	20/01/2017
WalwaTaluka Engineers Association	20/01/2017

Automobile Engineering

MoU with Industry

Sr. No.	Name of the Company /Organization	Date/Year of Signing	Expected Work
1	New Bharat Deisel, Sangli	23/07/2015	Industrial Visit
2	ACE Micromatics Machine tool Private LTD, Shirol MIDC, Kolhapur	1/2/2019	Placement, Internship
3	Perfect Pins, Shirol MIDC, Kolhapur	1/2/2019	Placement, Internship, Syllabus
4	Siddhivinayak Auto(Hero), Sangli	1/2/2019	Placement, Internship
5	Pant Industries, MIDC Islampur	1/2/2019	Industrial Visit, Syllabus

6	Pentamech, Ichalkaranji	1/2/2019	Placement, Internship
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Aeronautical Engineering

List of MoU's signed with Industries

Sl.No	Name of the Industry
1	P3 Consulting Engineer's Pvt. Ltd. , Bengaluru
2	Gloinnt Solutions Pvt. Ltd., Bengaluru
3	Paru Engineers, Hyderabad
4	TAACMA, Hyderabad
5	Pratt & Whitney India Training Center, Bengaluru
6	Mennen Aviation, Palakkad
7	Vipula Creative Technologies Pvt. Ltd., Bengaluru
8	Milenium Advanced Materials Pvt. Ltd., Hyderabad
9	Chem-plas India, Hyderabad

10.18 LOA and Subsequent EOA till date Academic Year



APPROVAL PROCESS 2019-20

Extension of Approval (EoA)

F.No. Western/1-4267422476/2019/EOA

Date: 30-Apr-2019

To,

The Secretary,
Tech. & Higher Education Deptt.
Govt. of Maharashtra, Mantralaya,
Annexe Building, Mumbai-400032

Sub: Extension of Approval for the Academic Year 2019-20

Ref: Application of the Institution for Extension of approval for the Academic Year 2019-20

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2018 notified by the Council vide notification number F.No AB/AICTE/REG/2018 dated 31/12/2018 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Permanent Id	1-4318091	Application Id	1-4267422476
Name of the Institute	ANNASAHEB DANGE COLLEGE OF ENGINEERING AND TECHNOLOGY, ASHTA	Name of the Society/Trust	SANT DNYANESHWAR SHIKSHAN SANSTHA
Institute Address	NEAR OLD AIRPORT, A/P - ASHTA, TAL - WALWA, DIST - SANGLI, ASHTA, SANGLI, Maharashtra, 416301	Society/Trust Address	KACHARE GALLI, ISLAMPUR TAL - WALWA, DIST - SANGLI, ISLAMPUR, SANGLI, Maharashtra, 416301
Institute Type	Unaided - Private	Region	Western

Opted for Change from Women to Co-Ed and vice versa	No	Change from Women to Co-Ed and vice versa Approved or Not	NA
Opted for Change of Name	No	Change of Name Approved or Not	NA
Opted for Change of Site/Location	No	Change of Site/Location Approved or Not	NA
Opted for Conversion from Degree to Diploma or vice versa	No	Conversion for Degree to Diploma or vice versa Approved or Not	NA
Opted for Organization Name Change	No	Change of Organization Name Approved or Not	NA
Opted for Merger of Institution	No	Merger of Institution Approved or Not	NA
Opted for Introduction of New Program/Level	No	Introduction of Program/Level Approved or Not	NA

To conduct following Courses with the Intake indicated below for the Academic Year 2019-20

Program	Shift	Level	Course	FT/PT+	Affiliating Body (Univ/Body)	Intake Approved for 2019-20	NRI Approval Status	P10 / FN / Gulf quota/ OCI Approval Status
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	MECHANICAL ENGINEERING	FT	Shivaji University, Kolhapur	120	NA	NA
ENGINEERING	1st	POST		FT	Shivaji University, Kolhapur	18	NA	NA

Application No:1-4267422476
Note: This is a Computer generated Report. No signature is required.
Printed By : ae027021

Page 1 of 3

Letter Printed On: 4 May 2019

AND TECHNOLOGY		GRADUATE	ELECTRICAL POWER SYSTEM					
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	MECHANICAL ENGINEERING	FT	Shivaji University, Kolhapur	60	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FT	Shivaji University, Kolhapur	120	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	ELECTRICAL ENGINEERING	FT	Shivaji University, Kolhapur	120	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	AUTOMOBILE ENGINEERING	FT	Shivaji University, Kolhapur	60	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	CIVIL ENGINEERING	FT	Shivaji University, Kolhapur	60	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	AERONAUTICAL ENGINEERING	FT	Shivaji University, Kolhapur	60	NA	NA
ENGINEERING AND TECHNOLOGY	2nd	POST GRADUATE	STRUCTURAL ENGINEERING	FT	Shivaji University, Kolhapur	18	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	FOOD TECHNOLOGY##	FT	Shivaji University, Kolhapur	60	NA	NA

+FT –Full Time,PT-Part Time

Approved New Courses

Punitive Action against the Institute

Course(s) Applied for Closure by the Institute for the Academic Year 2019-20

Program	Shift	Level	Course	FT/PT+	Affiliating Body (Univ/Body)	Course Closure Status
ENGINEERING AND TECHNOLOGY	2nd	UNDER GRADUATE	MECHANICAL ENGINEERING	FT	Shivaji University, Kolhapur	Pending [§]
ENGINEERING AND TECHNOLOGY	1st	POST GRADUATE	ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING	FT	Shivaji University, Kolhapur	Pending [§]
ENGINEERING AND TECHNOLOGY	2nd	POST GRADUATE	DESIGN ENGINEERING	FT	Shivaji University, Kolhapur	Pending [§]
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	ELECTRONICS & TELECOMMUNICATION ENGINEERING	FT	Shivaji University, Kolhapur	Pending [§]
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	INFORMATION TECHNOLOGY	FT	Shivaji University, Kolhapur	Pending [§]
ENGINEERING AND TECHNOLOGY	1st	POST GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FT	Shivaji University, Kolhapur	Pending [§]
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	MECHANICAL AND AUTOMATION ENGINEERING	FT	Shivaji University, Kolhapur	Pending [§]

+FT-Full Time ,PT-Part Time

§ Due to non-submission of NOC's from University / Board and / or State Government

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation: - Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

It is mandatory to comply all the essential requirements as given in APH 2019-20(appendix 6)

NOTE: If the State Government / UT / DTE / DME has a reservation policy for admission in Technical Education Institutes and the same is applicable to Private & Self-financing Technical Institutions, then the State Government / UT/ DTE / DME shall ensure that 10 % of Reservation for EWS would be operational from the Academic year 2019-20 without affecting the percentage reservations of SC/ST/OBC/General. However, this would not be applicable in the case of Minority Institutions referred to the clause (1) of Article 30 of Constitution of India.

Prof. A.P Mittal
Member Secretary, AICTE

Copy to:

1. **The Director Of Technical Education****, Maharashtra
2. **The Registrar****,
Shivaji University, Kolhapur
3. **The Principal / Director**,
Annasaheb Dange College Of Engineering And Technology, Ashta
Near Old Airport, A/P - Ashta, Tal - Walwa, Dist - Sangli,
Ashta, Sangli,
Maharashtra, 416301
4. **The Secretary / Chairman**,
Sant Dnyaneshwar Shikshan Sanstha
Kachare Galli, Islampur
Tal - Walwa, Dist - Sangli.
Islampur, Sangli,
Maharashtra, 416301
5. **The Regional Officer**,
All India Council for Technical Education
Industrial Assurance Building
2nd Floor, Nariman Road
Mumbai - 400 020, Maharashtra
6. **Guard File(AICTE)**

Note: Validity of the Course details may be verified at <http://www.aicte-india.org/>

** Individual Approval letter copy will not be communicated through Post/E mail. However, consolidated list of Approved Institutions(bulk) will be shared through official E mail Address to the concerned Authorities mentioned above.

All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela Marg, Vasant Kunj, New Delhi-110070 Website: www.aicte-india.org



APPROVAL PROCESS 2018-19

Extension of Approval (EoA)

F.No. Western/1-3516300037/2018/EoA

Date: 10-Apr-2018

To,

The Secretary,
Tech. & Higher Education Deptt.
Govt. of Maharashtra, Mantralaya,
Annexe Building, Mumbai-400032

Sub: Extension of Approval for the Academic Year 2018-19

Ref: Application of the Institution for Extension of approval for the Academic Year 2018-19

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2016 notified by the Council vide notification number F.No.AB/AICTE/REG/2016 dated 30/11/2016 and amended on December 5, 2017 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Permanent Id	1-4318091	Application Id	1-3516300037
Name of the Institute	ANNASHEB DANGE COLLEGE OF ENGINEERING AND TECHNOLOGY, ASHTA	Name of the Society/Trust	SANT DNYANESHWAR SHIKSHAN SANSTHA
Institute Address	NEAR OLD AIRPORT, A/P - ASHTA, TAL - WALWA, DIST - SANGLI, ASHTA, SANGLI, Maharashtra, 416301	Society/Trust Address	KACHARE GALLI, ISLAMPUR TAL - WALWA, DIST - SANGLI, ISLAMPUR, SANGLI, Maharashtra, 416301
Institute Type	Unaided - Private	Region	Western

Opted for Change from Women to Co-Ed and vice versa	No	Change from Women to Co-Ed and vice versa Approved or Not	NA
Opted for Change of Name	No	Change of Name Approved or Not	NA
Opted for Change of Site	No	Change of Site Approved or Not	NA
Opted for Conversion from Degree to Diploma or vice versa	No	Conversion for Degree to Diploma or vice versa Approved or Not	NA
Opted for Organization Name Change	No	Change of Organization Name Approved or Not	NA

To conduct following Courses with the Intake indicated below for the Academic Year 2018-19

Program	Shift	Level	Course	FT/PT*	Affiliating Body (Univ/Body)	Intake Approved for 2018-19	NRI Approval Status	PIO / FN / Gulf quota/ OCI/ Approval Status	Foreign Collaboration /Twining Program Approval Status*
ENGINEERING AND TECHNOLOGY	2nd	UNDER GRADUATE	MECHANICAL ENGINEERING	FT	Shivaji University, Kolhapur	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	MECHANICAL ENGINEERING	FT	Shivaji University, Kolhapur	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st	POST GRADUATE	ELECTRONICS AND TELECOMMUNICATIONS	FT	Shivaji University, Kolhapur	18	NA	NA	NA

Application No:1-3516300037

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			ATIONS ENGINEERING						
ENGINEERING AND TECHNOLOGY	1st	POST GRADUATE	ELECTRICAL POWER SYSTEM	FT	Shivaji University, Kolhapur	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd	POST GRADUATE	DESIGN ENGINEERING	FT	Shivaji University, Kolhapur	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	MECHANICAL ENGINEERING	FT	Shivaji University, Kolhapur	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	ELECTRONICS & TELE- COMMUNICATION ENGINEERING	FT	Shivaji University, Kolhapur	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FT	Shivaji University, Kolhapur	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	ELECTRICAL ENGINEERING	FT	Shivaji University, Kolhapur	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	AUTOMOBILE ENGINEERING	FT	Shivaji University, Kolhapur	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	CIVIL ENGINEERING	FT	Shivaji University, Kolhapur	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st	POST GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FT	Shivaji University, Kolhapur	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	AERONAUTICAL ENGINEERING	FT	Shivaji University, Kolhapur	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd	POST GRADUATE	STRUCTURAL ENGINEERING	FT	Shivaji University, Kolhapur	18	NA	NA	NA

+FT –Full Time,PT-Part Time

Punitive Action against the Institute

Course(s) Applied for Closure by the Institute for the Academic Year 2018-19

Program	Shift	Level	Course	FT/PT+	Affiliating Body (Univ/Body)	Course Closure Status
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	INFORMATION TECHNOLOGY	FT	Shivaji University, Kolhapur	Pending [§]
ENGINEERING AND TECHNOLOGY	1st	POST GRADUATE	CAD/CAM	FT	Shivaji University, Kolhapur	Pending [§]
ENGINEERING AND TECHNOLOGY	1st	UNDER GRADUATE	MECHANICAL AND AUTOMATION ENGINEERING	FT	Shivaji University, Kolhapur	Pending [§]

+FT-Full Time,PT-Part Time

§ Due to non-submission of NOC's from University / Board and / or State Government

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation: - Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

Prof. A.P. Mittal

Application No:1-3516300037

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Member Secretary, AICTE

Copy to:

1. The Regional Officer,
All India Council for Technical Education
Industrial Assurance Building
2nd Floor, Nariman Road
Mumbai - 400 020, Maharashtra
2. The Director Of Technical Education**,
Maharashtra
3. The Registrar**,
Shivaji University, Kolhapur
4. The Principal / Director,
ANNASAHEB DANGE COLLEGE OF ENGINEERING AND TECHNOLOGY, ASHTA
NEAR OLD AIRPORT, A/P - ASHTA, TAL - WALWA, DIST - SANGLI,
ASHTA, SANGLI,
Maharashtra, 416301
5. The Secretary / Chairman,
SANT DNYANESHWAR SHIKSHAN SANSTHA
KACHARE GALLI, ISLAMPUR
TAL - WALWA, DIST - SANGLI,
ISLAMPUR, SANGLI,
Maharashtra, 416301
6. Guard File(AICTE)

Note: Validity of the Course details may be verified at <http://www.aicte-india.org/>

** Individual Approval letter copy will not be communicated through Post/Email. However, consolidated list of Approved Institutions(bulk) will be shared through official Email Address to the concerned Authorities mentioned above.



All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela Marg Vasant Kunj, New Delhi-110067
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

F.No. Western/1-3327968950/2017/EOA

Date: 10-Apr-2017

To,

The Secretary,
Tech. & Higher Education Deptt.
Govt. of Maharashtra, Mantralaya,
Annexe Building, Mumbai-400032

Sub: Extension of approval for the academic year 2017-18

Ref: Application of the Institution for Extension of approval for the academic year 2017-18

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2016 notified by the Council vide notification number F.No.AB/AICTE/REG/2016 dated 30/11/2016 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Permanent Id	1-4318091	Application Id	1-3327968950
Name of the Institute	ANNASHEB DANGE COLLEGE OF ENGINEERING AND TECHNOLOGY, ASHTA	Institute Address	NEAR OLD AIRPORT, A/P - ASHTA, TAL - WALWA, DIST - SANGLI, ASHTA, SANGLI, Maharashtra, 416301
Name of the Society/Trust	SANT DNYANESHWAR SHIKSHAN SANSTHA	Society/Trust Address	KACHARE GALLI, ISLAMPUR TAL - WALWA, DIST - SANGLI/ISLAMPUR, SANGLI, Maharashtra, 416301
Institute Type	Unaided - Private	Region	Western

Opted for change from Women to Co-ed and Vice versa	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable
Opted for Conversion from degree to diploma	No	Opted for Conversion from diploma to degree	No	Conversion (degree to diploma or vice-a- versa) Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2017-18

Application Id: 1-3327968950			Course	Full/Part Time	Affiliating Body	Intake Approved for 2016-17	Intake Approved for 2017-18	NRI Approval status	PIO / FN / Gulf quota/ OCI / Approval status	Foreign Collaboration/Twinning Program Approval status
Program	Shift	Level								
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Shivaji University, Kolhapur	18	18	NA	NA	NA

Application Number: 1-3327968950

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Letter Printed On:15 April 2017

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ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	ELECTRICAL POWER SYSTEM	FULL TIME	Shivaji University, Kolhapur	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING	FULL TIME	Shivaji University, Kolhapur	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	AERONAUTICAL ENGINEERING	FULL TIME	Shivaji University, Kolhapur	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	AUTOMOBILE ENGINEERING	FULL TIME	Shivaji University, Kolhapur	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	CIVIL ENGINEERING	FULL TIME	Shivaji University, Kolhapur	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Shivaji University, Kolhapur	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRICAL ENGINEERING	FULL TIME	Shivaji University, Kolhapur	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRONICS & TELE-COMMUNICATION ENGINEERING	FULL TIME	Shivaji University, Kolhapur	60	60	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	Shivaji University, Kolhapur	120	120	NA	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	Shivaji University, Kolhapur	60	60	NA	NA	NA

Application Number: 1-3327968950

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ENGINEERING AND TECHNOLOGY	2nd Shift	POST GRADUATE	DESIGN ENGINEERING	FULL TIME	Shivaji University, Kolhapur	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	POST GRADUATE	STRUCTURAL ENGINEERING	FULL TIME	Shivaji University, Kolhapur	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	Shivaji University, Kolhapur	60	60	NA	NA	NA

The above mentioned approval is subject to the condition that

ANNASAHEDDANGE COLLEGE OF ENGINEERING AND TECHNOLOGY, ASHTA

shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

Course(s) Applied for Closure by the Institute for the AY 2017-18:

Application Id: 1-3327968950			Name of the Course	Full/Part Time	Affiliating Body	Course Closure Status
Program	Shift	Level				
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	CAD/CAM : (Last Approved intake 18)	FULL TIME	Shivaji University, Kolhapur	Pending ⁵
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	INFORMATION TECHNOLOGY (Last Approved intake 0)	FULL TIME	Shivaji University, Kolhapur	Pending ⁵
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	MECHANICAL AND AUTOMATION ENGINEERING (Last Approved intake 0)	FULL TIME	Shivaji University, Kolhapur	Pending ⁵
ENGINEERING AND TECHNOLOGY	2nd Shift	POST GRADUATE	COMPUTER SCIENCE AND ENGINEERING (Last Approved intake 18)	FULL TIME	Shivaji University, Kolhapur	Approved
ENGINEERING	2nd Shift	POST GRADUATE	VLSI AND EMBEDDED	FULL TIME	Shivaji University,	Approved

Application Number: 1-3327968950

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ENGINEERING AND TECHNOLOGY	2nd Shift	POST GRADUATE	DESIGN ENGINEERING	FULL TIME	Shivaji University, Kolhapur	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	POST GRADUATE	STRUCTURAL ENGINEERING	FULL TIME	Shivaji University, Kolhapur	18	18	NA	NA	NA
ENGINEERING AND TECHNOLOGY	2nd Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	Shivaji University, Kolhapur	60	60	NA	NA	NA

The above mentioned approval is subject to the condition that

ANNASAHEBDANGE COLLEGE OF ENGINEERING AND TECHNOLOGY, ASHTA

shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

Course(s) Applied for Closure by the Institute for the AY 2017-18:

Application Id: 1-3327968950			Name of the Course	Full/Part Time	Affiliating Body	Course Closure Status
Program	Shift	Level				
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	CAD/CAM : (Last Approved intake 18)	FULL TIME	Shivaji University, Kolhapur	Pending ⁵
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	INFORMATION TECHNOLOGY (Last Approved intake 0)	FULL TIME	Shivaji University, Kolhapur	Pending ⁵
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	MECHANICAL AND AUTOMATION ENGINEERING (Last Approved intake 0)	FULL TIME	Shivaji University, Kolhapur	Pending ⁵
ENGINEERING AND TECHNOLOGY	2nd Shift	POST GRADUATE	COMPUTER SCIENCE AND ENGINEERING (Last Approved intake 18)	FULL TIME	Shivaji University, Kolhapur	Approved
ENGINEERING	2nd Shift	POST GRADUATE	VLSI AND EMBEDDED	FULL TIME	Shivaji University,	Approved

Application Number: 1-3327968950

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Letter Printed On:15 April 2017



All India Council for Technical Education

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Nelson Mandela Marg Vasant Kunj, New Delhi-110067
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

RING AND TECHNOL OGY		E	SYSTEMS : (Last Approved ntake 18)		Kolhapur	
----------------------------	--	---	--	--	----------	--

\$ due to non submission of NOC's from University / Board and / or State Government

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

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Note: Validity of the course details may be verified at www.aicte-india.org.

Prof. A.P Mittal
Member Secretary, AICTE

Copy to:

- The Regional Officer,**
All India Council for Technical Education
Industrial Assurance Building
2nd Floor, Nariman Road
Mumbai - 400 020, Maharashtra
- The Director Of Technical Education**,**
Maharashtra
- The Registrar**,**
Shivaji University, Kolhapur
- The Principal / Director,**
ANNASAHEB DANGE COLLEGE OF ENGINEERING AND TECHNOLOGY, ASHTA
NEAR OLD AIRPORT, A/P - ASHTA, TAL - WALWA, DIST - SANGLI,
ASHTA, SANGLI,
Maharashtra, 416301
- The Secretary / Chairman,**
SANT DNYANESHWAR SHIKSHAN SANSTHA
KACHARE GALLI, ISLAMPUR
TAL - WALWA, DIST - SANGLI,
ISLAMPUR, SANGLI,
Maharashtra, 416301
- Guard File(AICTE)**

Note: ** - Approval letter copy will not be communicated through post/email. However, provision is made in the portal for downloading Approval letter through Authorized login credentials allotted to concerned DTE/Registrar.

Application Number: 1-3327968950
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Letter Printed On: 15 April 2017



All India Council for Technical Education

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PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

Application Number: 1-3327968950
Note: This is a Computer generated Report.No signature is required.

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Letter Printed On:15 April 2017

10.19 Accounted Audited Statement for the last Three years

Accounted Audited Statement 2017-2018

BHASKAR B. PATIL & Co.
Chartered Accountants

Office : Flat No. 101 & 102, Ground Floor,
'C' Wing, Shamrao Mandlik Park,
13th Lane, Rajarampuri (East),
Kolhapur- 416 008
Phone : 0231-2525985, 0231-2532530

Date :

Audit Report

We have audited the accounts of "Annasaheb Dange College of Engineering & Technology Ashta", Taluka - Walwa, District - Sangli - 416301 which is a unit/branch of parent body - Sant Dnyaneshwar Shikshan Sanstha Islampur, Taluka - Walwa, District - Sangli, Registered Trust No. F - 1546 for the period **01-04-2017 to 31-03-2018** and annexed herewith the audited Receipt & Payment A/c, Income & Expenditure A/c for the year ended on **31-03-2018** and Balance Sheet of the said unit/branch as on **31-03-2018**.

We have conducted our audit in accordance with the auditing standards generally accepted in India. Those standards required that we plan & perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. An audit includes examining on a test check basis, evidence supporting the amount and disclosures in the financial statements. And audit also includes assessing the accounting principles used and significant estimates made by the management as well as evaluating the overall financial statements presented. We believe that our audit provides a reasonable basis for our opinion.

Auditor's responsibility -

Our responsibility is to express an opinion on these financial statements based on our audit. An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the institution's preparation and presentation of the financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on whether the institution has in place an adequate internal financial controls system over financial reporting and the operating effectiveness of such controls. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the management as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.



Date :

Report on required matters as per Fee Regulation Authority –

1. Reporting of Method of Accounting -

During the year 01-04-2017 to 31-03-2018 the educational institute has followed mercantile system of accounting as recommended by the FRA

2. Reporting of Segment Accounting -

a) About Geographical Segmentation -

The area of operation of the educational institute is restricted to only one place situated at "Ashta", Taluka Walwa, District Sangli, Maharashtra State and hence there is no requirement of geographical segmentation for the courses conducted by the institute.

b) About Business Segmentation -

The educational institute runs UG and PG departments of engineering course at same place and hence fee is only for engineering course as a whole and accounting records and financial statements relates only to such educational activity i.e. engineering course only.

However; separate Receipt and Payment Account of UG department and PG department along with Consolidated Receipt and Payment Account of both the departments are prepared for presentation purpose. Further; Consolidated Income and Expenditure Account and Consolidated Balance Sheet of both UG and PG departments as on 31-03-2018 along with necessary schedules are prepared.

3. The educational institute has kept proper books of accounts required for the purpose of conducting audit.
4. While conducting the audit, we have observed that the internal control system is deficient in respect of expenses incurred and considering the size & volume of the transactions of the institute it is necessary to improve it adequately to safeguard the interest of the educational institute.



Date :

5. Subject to above; in our opinion and according to the information and explanation given to us the accounts give true and fair view –

- i) In the case of the Balance Sheet the state of affairs of the educational institute as at 31st March, 2018.
- ii) In the case of Income and Expenditure of the **Surplus** of the educational institute for the year ended on that date.

Place – Kolhapur
Date – 27-09-2018

For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN – 101275W




CA. Bhaskar B. Patil
Proprietor
M. No. 036961

BHASKAR B. PATIL & Co.

Chartered Accountants

Office : Flat No. 101 & 102, Ground Floor,
'C' Wing, Shamrao Mandlik Park,
13th Lane, Rajarampuri (East),
Kolhapur- 416 008

Phone : 0231-2525985, 0231-2532530

Date :

Sant Dnyaneshwar Shikashan Sanstha's

Annasaheb Dange College of Engineering & Technology, Ashta

Taluka - Walwa, District - Sangli - 416 301

Consolidated Receipts & Payments A/c

(Form 01/04/2017 to 31/03/2018)

Receipts	Rs.	Rs.	Payment	Rs.	Rs.
<u>To Opening Balance</u>		6428570	<u>By Salary</u>		150666349
Cash in hand	1000336		Teaching Staff Salary	119137107	
<u>Bank Balances -</u>			Non-Teaching Staff Salary	25286833	
I D B I A/c No. 2060	1013605		Guest Staff Salary (Visiting)	2033970	
I D B I A/c No. 2226	1000		P. F. Mgt. Contribution	4208439	
I D B I A/c No. 2397	20592				
I D B I A/c No. 22561	1269638				
I D B I A/c No. -2219	1000		<u>By Staff Expenditure</u>		538964
S B I A/c No. 8671	2277203		ISTE Membership Fee		
Bank of Maharashtra	58927		Staff Training	226409	
Federal Bank A/c No. 3194	13929		STTP - Aero	4904	
Nutan Sah. Bank A/c No. 5530	164643		STTP - LIB	80519	
Fixed Bank Deposits	607697		STTP - CSE	15593	
			STTP - ETC	2000	
<u>To Fees</u>		197956906	STTP - EE	62100	
Tuition Fee	176304420		STTP - CIVIL	17000	
Development Fee	21652486		STTP - BS	5133	
			STTP - Mech	42726	
			Uniform	82580	
<u>To Other Revenue Receipts</u>		8142395	<u>By Student Expenditure</u>		6398353
Notice Pay	315750		Dnyanda (College Mag)	303542	
Bank Interest	388086		File & workshop Stationery	2625029	
Library Late Fee	210607		Gymkhana	178778	
Mis Fee	300500		Industrial Visit	23952	
Exam Fee (Autonomous)	1577341		Innovation 2018	323535	
Revaluation Fee (Autonomous)	7750		Discovery	433015	
Tc & Lc Fee	44820		Student Project	47150	



Date :

Absent Fine	42000	Sneha	458580	
Duplicate I Card Fee	800	Student Activity	426610	
Runanubandh fee a/c	73500	Students Training	1065469	
Admission Form Fee	12590	Training & Placement	512693	
Discovery	488350			
Rent	34000			
Scrap	72750	By Audit Fee		80000
Internal Revenue Generation	136033	Audit Fee	80000	
Gymkhana	833680	By Other Revenue Exp.		23345394
Uniform	13700	Office Stationery & Printing	681749	
Sneha	4980	Travelling & Conveyance	534353	
Student Activity	28000	Postage & Telegram	27066	
Innovation	117750	Hospitality	596984	
Sttaf - Training	55000	Advertisement	4872951	
Sstp - Mech	1845	R/C Laboratory	581194	
Sstp - EE	62100	M & R General	592054	
Sstp - Civil	12000	Building M & R	382456	
Library Workshop	61000	M & R & Diesel Generator	212995	
Prize Distribution	15000	M & R Equipment	696106	
Misc	20021	Vehicle Insurance	304829	
Lib Memb. Card Fee	8980	Vehicle Tax	350620	
Other Service Charges	3203462	Vehicle Diesel	2174017	
		M & R Garden	167365	
		Lift M & R	9000	
		Library Other Exps.	4059	
		Meeting Exps	101355	
		Legal Charges	50000	
		ISO 9001:2008	170325	
		Telephone Bill	94994	
		Electrical Bill	2639698	
		Water Conn. Charges	28550	
		Magazines & Journals	43396	
		News Paper	25571	



Date :

		Bank Commission	18308	
		Function	265480	
		Transport & Octroi	83105	
		Light & Elet. Expenses	366718	
		Admission Expenses	52530	
		Xerox Bill (Charges)	43931	
		Medical Aid	9017	
		Revenue Stamp	14000	
		Internet Expenses	1396500	
		Affiliation & Registration	794618	
		Honorarium	458455	
		Security Charges	2028271	
		Alumni Meet	30296	
		Autonomus exps	418534	
		Int. on Bank Loan	1147082	
		Processing Fee	175400	
		Parent Meeting Exps	48560	
		House Rent for Staff	84700	
		SU Exam Exps.	184464	
		NBA Exps.	360938	
		Consultancy /Service charges	15150	
		Cost of Forms	7650	
		<u>By Rent & Taxes</u>		37085
		Municipal Tax	37085	
		<u>By Capital Expenditure</u>		11484919
		<u>Equipment & Tools</u>		
		Mechanical	1001669	
		Electronics & Tele.	107091	
		Civil	100130	
		Aeronautical	4500000	
		Gen Set Equipment	660000	
		Office Deadstock	37000	



Date :

			Dead Stock (Material)	1709796	
			Total	8115686	
			Library Books	2983956	
			Computers & Centre	385277	
<u>To Scholarship</u>		65420712	<u>By Scholarship</u>		64206472
All Category - Other	18903287		All Category - Other	21096897	
Freeship	11983596		Freeship	9814372	
EBC	34533829		EBC	33295203	
<u>To Salary Deduction</u>		25389787	<u>By Salary Deduction</u>		25389787
Income Tax	6169200		Income Tax	6169200	
LIC premium	630017		LIC premium	630017	
Profession Tax	817400		Profession Tax	817400	
Providend Fund	7670706		Providend Fund	7670706	
Staff other recovery payable	10102464		Staff other recovery payable	10102464	
<u>To Advances/other source</u>		106976370	<u>By Advances/other source</u>		89196606
Advance	92741534		Advance	84584427	
Admission Deposit	2830778		Admission Deposit	2334938	
Provisional Admission Fee	1805000		Lib Deposit	500	
Blind Asso. Fund	7500		Provisional Admission Fee	1229000	
TDS	1040241		TDS	1040241	
Staff SD	5404235		Blind Asso. Fund	7500	
Build. Aero. Bill Payable	2000000		Repayment of Loan		6500000
Bank Loan	1147082				
<u>To Amt. recd. from Society</u>		24910310	<u>By Amount Paid to Society</u>		98181801
SDSS	24611408		SDSS	18267206	
Kala Academy	149700		Capital Exp. Building	79706298	
Gurukul Academy	128200		Kala Academy	12986	
Motor Driving School	21002		Gurukul Academy	180091	
			Motor Driving School	15220	



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Date :

<u>To Amt Recd For Remittance</u>		81100886	<u>By Amount Remitted</u>	33451432
S. U. Exam fee	7301431		S. U. Exam fee	7302043
S. U. Remuneration	876212		S. U. Remuneration	586969
Photocopy Fee	405200		Photocopy Fee	404950
Verification Fee	50		Verification Fee	50
S. U. Fees (YF, AM, PRO)	1034574		S. U. Fees (YF, AM, PRO)	911696
Pro-Rata	23090		NSS Fee	17890
STAFF INSURANCE	30050		Pro-Rata	23090
Environmental Fee	138400		Environmental Fee	88575
Lead college Fee	381950		SU CAP Centre	692076
SU CAP Centre	683431		TCS - Exam Fee	220603
TCS - Exam Fee	756295		IIT EXAM	3920
Re-Verification (Photocopy)	740100		Re-Verification (Photocopy)	767100
Unpaid Salary	31525305		Unpaid Salary	15130596
Unpaid Sanstha	105800		Unpaid Sanstha	52900
Unpaid Sant D S Pat Sanstha	10396366		Unpaid Sant D S Pat Sanstha	5198183
Unpaid Staff Loan Installment	3769220		Unpaid Staff Loan Installment	1884610
CAP Round Fee	2975000		TCS Exam Fee Receivable	92546
Deposit	19950000		Interest Receivable	73235
Bank Int. Receivable	4812		Registration Fee	400
Registration Fee	3600			
			<u>By Closing Balance</u>	6848774
			Cash in Hand	3105287
			<u>Cash at Bank -</u>	
			I D B I A/c No. 2060	1383177
			I D B I A/c No. 2226	28272
			I D B I A/c No. 2397	67744
			I D B I A/c No. 148733	247821
			I D B I A/c No. 22561	591253
			I D B I A/c No. -2219	1000
			S B I A/c No. 8671	574066
			Bank of Maharashtra-7471	11968
			Federal Bank A/c No. 3194	13929

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Date :

			Nutan Sah. Bank A/c No. 5530	216560	
			Fixed Bank Deposits	607697	
Total		516325936	Total		516325936

Director



Place - Kolhapur
Date - 27/09/2018

As per our report of even date
For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN - 101275W

CA. Bhaskar B. Patil
Proprietor
M. No. 036961

BHASKAR B. PATIL & Co.

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Date :

Sant Dnyaneshwar Shikashan Sanstha's
Annasaheb Dange College of Engineering & Technology, Ashta

Taluka -Walwa, District - Sangli - 416 301

Income & Expenditure A/c

(From 01-04-2017 to 31-03-2018)

Expenditure	Rs.	Rs.	Income	Rs.	Rs.
<u>To Expenses of Properties</u>		37085	<u>By Income</u>		211772567
Rent & Taxes	37085		a) Allotted Student Fee for the Year -		
<u>To Establishment Exps.</u>		14424914	- Tution Fee	189820466	
Audit Fee	80000		- Development Fee	21952101	
Depreciation for the year	14344914				
<u>To Expenditure on Object of Educational Trust</u>		180949060	b) Other Revenue Income		9208173
Salary Teaching Staff	119137107				
Salary Non-Teaching Staff	25286833				
Guest Staff Salary (Visiting)	2033970				
Provident Fund (Mgt. Cont)	4208439				
Staff Expenditure	538964				
Student Expenditure	6398353				
Other Revenue Exp.	23345394				
<u>To Surplus</u>		25569681			
Total		220980740	Total		220980740

Director



As per our report of even date
For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN - 101275W



CA. Bhaskar B. Patil
Proprietor
M. No. 036961

Place - Kolhapur

Date - 27/09/2018

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Date :

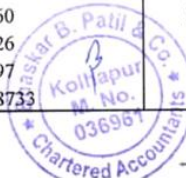
Sant Dnyaneshwar Shikashan Sanstha'sAnnasaheb Dange College of Engineering & Technology, Ashta

Taluka - Walwa, District - Sangli - 416 301

Balance sheet

As on 31st March, 2018

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Funds		160050326	Assets		170382794
AICTE - Grant	2725500		Fixed Assets (As per schedule)	170382794	
SU Grant	9325				
Corpus Fund	3000000		Deposits		1117697
Depreciation Fund	108215827		Electricity Deposit (MSEB)	1107197	
Development Fee fund	44099674		Telephone Deposit	6000	
Maintenance Fund	1000000		Internet Deposit	4500	
Staff welfare Fund	1000000				
Liabilities		117085064	Advances		50218197
Admission Deposit Payable	1060471		Interest Receivable	73235	
Library & Lab. Deposit Payable	712998		Security Deposit Receivable	62200	
Other Payables	6262740		TCS Exam Fee Receivable	92546	
Staff SD	20765705		Staff & Other	49990216	
Bank Loan	6330328				
Provisional Admission Fee	3288500		Fees Receivable		112527165
S. U. Remunration Payable	1501790		Opening Balance	104595630	
Scholarship Payable	28011525		Less - Fees received in advance	5884126	
Security Deposit	237083		Net Op. Dues	98711504	
Unpaid Salary Payable	16853231		Add - Current year Dues	211772567	
Unpaid Sanstha	52900		Total Dues	310484071	
Unpaid Sant D S Pat Sanstha	5198183		Less - Fees received Current Year	197956906	
Unpaid Staff Loan Installment	1884610				
Deposit	19950000				
Build. Aero. Bill Payable	2000000				
CAP Round Fee	2975000				
Sant Dnyaneshwar Shikashan Sanstha (Including I & E A/c)		63959237	By Closing Balance		6848774
Opening Balance	111661047		Cash in Hand	3105287	
Add - Received during the year	24910310		Cash at Bank -		
- Current Years surplus	25569681		I D B I A/c No. 2060	1383177	
	162141038		I D B I A/c No. 2226	28272	
			I D B I A/c No. 2397	67744	
Less - Amount Paid	18267206		I D B I A/c No. 148733	247821	



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Date :

Less - Capital Expenditure	79706298		I D B I A/c No. 22561	591253	
Less - Other Expenditure	208297		I D B I A/c No. -2219	1000	
			S B I A/c No. 8671	574066	
			Bank of Maharashtra-7471	11968	
			Federal Bank A/c No. 3194	13929	
			Nutan Sah. Bank A/c No. 5530	216560	
			Fixed Bank Deposits	607697	
Total		341094627	Total		341094627


Director



As per our report of even date
For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN - 101275W

CA. Bhaskar B. Patil
Proprietor
M. No. 036961

Place - Kolhapur
Date - 27/09/2018

Date :

Sant Dnyaneshwar Shikashan Sanstha's
Annasaheb Dange College of Engineering & Technology Ashta,
Taluka - Walwa, Dist. - Sangli - 416 301

Schedule of Fixed Assets
As on 31-03-2018

Sr. No.	Particulars	Op. Bal. as on 01-04-2017	Additions During Year 2017-2018	Cl. Bal. as on 31-03-2018
A)	Equipment & Tools			
1)	Mechanical	14464919	1001669	15466588
2)	Electronics & Telecommunication	10867288	107091	10974379
3)	Electrical	8028849		8028849
4)	Physics	1138103		1138103
5)	Chemistry	259526		259526
6)	Workshop	556855		556855
7)	Civil	6184163	100130	6284293
8)	Project	156083		156083
9)	Office	799587	37000	836587
10)	Deadstock	10656955	1709796	12366751
11)	General	319475		319475
12)	Information Technology	321651		321651
13)	Electric Installation - Water Conn.etc	2163419		2163419
14)	Genertor Set	844275	660000	1504275
15)	Automobile	7160259		7160259
16)	Mech. & Automation	2368806		2368806
17)	Aeronautical	1712612	4500000	6212612
18)	Sports	37995		37995
19)	Library Equipment	64228		64228
	Total (A)	68105048	8115686	76220734
B)	Library			
1)	Library Books	14310925	2983956	17294881
C)	Furniture & Fixture			
1)	Furniture	19883845	0	19883845
D)	Computer (Centre)			
1)	Computer & Accessories	46631916	385277	47017193
E)	Vehicle			
1)	Buses	9966141	0	9966141
	Total	158897875	11484919	170382794

Director



Place - Kolhapur
Date - 27/09/2018



As per our report of even date
For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN - 101275W

CA. Bhaskar B. Patil
Proprietor
M. No. 036961

BHASKAR B. PATIL & Co.
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Date :

Sant Dnyaneshwar Shikshan Sanstha's
Annasaheb Dange College of Engineering & Technology, Ashta
Taluka - Walwa, Dist - Sangli - 416 301

Depreciation Fund As On 31/03/2018
(Schedule No. 2)

Sr. No.	Particulars / Groups	Dep. Rate	Opening Balance of Dep. Fund	Dep. On W. D. V.	Dep. On Additions In 2017-18	Total Dep. For Year 2017-18	Total Dep. Fund As on 31-03-2018
1)	Library	40%	12486982	729577	1790282	2519859	15006841
2)	Equipment	15%	34568417	6525416	793373	7318789	41887206
3)	Furniture & Fixtures	10%	7898184	1198566	0	1198566	9096750
4)	Computer	40%	38917330	3085834	221866	3307700	42225031
	Total		93870913	11539393	2805521	14344914	108215827

Director



Place - Kolhapur
Date - 27/09/2018



As per our report of even date
For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN - 101275W

CA. Bhaskar B. Patil
Proprietor
M. No. 036961

Accounted Audited Statement 2016-2017

BHASKAR B. PATIL & Co.
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Date :

Audit Report

We have audited the accounts of "Hon. Annasaheb Dange College of Engineering & Technology Ashta", Taluka - Walwa, District - Sangli - 416301 which is a unit/branch of parent body - Sant Dnyaneshwar Shikshan Sanstha Islampur, Taluka - Walwa, District - Sangli, Registered Trust No. F - 1546 for the period **01-04-2016 to 31-03-2017** and annexed herewith the audited Receipt & Payment A/c, Income & Expenditure A/c for the year ended on **31-03-2017** and Balance Sheet of the said unit/branch as on **31-03-2017**.

We have conducted our audit in accordance with the auditing standards generally accepted in India. Those standards required that we plan & perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. An audit includes examining on a test check basis, evidence supporting the amount and disclosures in the financial statements. And audit also includes assessing the accounting principles used and significant estimates made by the management as well as evaluating the overall financial statements presented. We believe that our audit provides a reasonable basis for our opinion.

Auditor's responsibility -

Our responsibility is to express an opinion on these financial statements based on our audit. An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the institution's preparation and presentation of the financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on whether the institution has in place an adequate internal financial controls system over financial reporting and the operating effectiveness of such controls. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the management as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.



Date :

Report on required matters as per Fee Regulation Authority –

1. Reporting of Method of Accounting -

During the year 01-04-2016 to 31-03-2017 the educational institute has followed mercantile system of accounting as recommended by the FRA for the first time and as such the fees receivable (net) up to 31-03-2016 of Rs. 8,05,16,027/- have been directly credited to the Sanstha Account (i.e. Income and Expenditure A/c Balance) in Balance Sheet for the purpose of reflecting correct surplus of the current year in Income and Expenditure A/c.

2. Reporting of Segment Accounting -

a) About Geographical Segmentation -

The area of operation of the educational institute is restricted to only one place situated at "Ashta", Taluka Walwa, District Sangli, Maharashtra State and hence there is no requirement of geographical segmentation for the courses conducted by the institute.

b) About Business Segmentation -

The educational institute runs UG and PG departments of engineering course at same place and hence fee is only for engineering course as a whole and accounting records and financial statements relates only to such educational activity i.e. engineering course only.

However, separate Receipt and Payment Account of UG department and PG department along with Consolidated Receipt and Payment Account of both the departments are prepared for presentation purpose. Further, Consolidated Income and Expenditure Account and Consolidated Balance Sheet of both UG and PG departments as on 31-03-2017 along with necessary schedules are prepared.

3. The educational institute has kept proper books of accounts required for the purpose of conducting audit.



BHASKAR B. PATIL & Co.
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Date :

4. While conducting the audit, we have observed that the internal control system is deficient in respect of expenses incurred and considering the size & volume of the transactions of the institute it is necessary to improve it adequately to safeguard the interest of the educational institute.
5. Subject to above; in our opinion and according to the information and explanation given to us the accounts give true and fair view –
- i) In the case of the Balance Sheet the state of affairs of the educational institute as at 31st March, 2017.
- ii) In the case of Income and Expenditure of the **Surplus** of the educational institute for the year ended on that date.

Place – Kolhapur
Date – 27-09-2017



For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN – 101275W


CA. Bhaskar B. Patil
Proprietor
M. No. 036961

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Date :

Sant Dnyaneshwar Shikshan Sanstha's
Annasaheb Dange College of Engineering & Technology, Ashta
Taluka -Walwa, District - Sangli - 416 301
Consolidated Receipts & Payments A/c
(Form 01/04/2016 to 31/03/2017)

Receipts	Rs.	Rs.	Payment	Rs.	Rs.
To Opening Balance		11900232	By Salary		140768746
Cash in hand	1904148		Teaching Staff Salary	109756122	
<u>Bank Balances -</u>			Non-Teaching Staff Salary	24022822	
I D B I A/c No. 2060	1243400		Guest Staff Salary (Visiting)	2728850	
I D B I A/c No. 2397	18027		P. F. Mgt. Contribution	4260952	
I D B I A/c No. 22561	1549381				
S B I A/c No. 8671	5016628		By Staff Expenditure		962168
Bank of Maharashtra	553020		ISTE Membership Fee	2000	
Federal Bank A/c No. 3194	13929		Staff Training	175679	
Nutan Sah. Bank A/c No. 5530	6720		Staff Twelfare	250000	
Fixed Bank Deposits	1594979		STTP - Aero	4680	
			STTP - Civil	115580	
To Fees		204330383	STTP - CSE	284806	
Tuition Fee	184257450		STTP - ETC	93273	
Development Fee	20072933		STTP - Mech	36150	
			By Student Expenditure		12414900
			Dnyanda (College Mag)	393165	
			File & workshop Stationery	2933337	
			Gymkhana	1092959	
			Industrial Visit	2006296	
			Innovation 2016	44180	
			Prize Distribution	771000	
			Student Project	1053580	
			Sneha	368747	
			Student Activity	33068	
			Students Training	510069	
			Training & Placement	768564	
			Uniform	2439935	



BHASKAR B. PATIL & Co.
Chartered Accountants

Office : Flat No. 101 & 102, Ground Floor,
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Phone : 0231-2525985, 0231-2532530

Date :

			By Audit Fee		71500
			Audit Fee	71500	
To Other Revenue Receipts		10525496	By Other Revenue Exp.		31138665
Absent & Other Fine	143450		Office Stationery & Printing	978377	
Bank Interest	569059		Travelling & Conveyance	637020	
Duplicate I Card Fee	500		Postage & Telegram	7291	
Library Fine	130137		Hospitality	483788	
Runanubandh Fee	73844		Advertisement	1075469	
Sale of Scrap	81160		R/C Laboratory	3360467	
TC & LC Fee	54520		M & R General	220077	
Admission Form Fee	48534		Building M & R	2131645	
Sstp-CSE	62250		M & R & Diesel Generator	99565	
Notice Pay	19286		M & R Equipment	115869	
Misc. Fee	965592		Vehicle Insurance	242506	
Students Traing	293200		Vehicle Tax	337700	
Sstp-Civil	106000		Vehicle Diesel	2329110	
Sstp-ET (Vibration)	78700		M & R Garden	1001500	
Sstp- M	73100		Lift M & R	25000	
Sstp- Auto	800		Library Other Exps.	18620	
Sstp- Aero	14300		Meeting Exps	258783	
bus charges	1684900		Misc. Exps	125	
Discovery	267900		Legal Charges	30000	
Other Charges	1441723		IPR Cell	1086287	
Environmental Fee	142200		ISO 9001:2008	80285	
Photocopy Fee	443300		Telephone Bill	109973	
Re-Verification (Photocopy)	677750		Electrical Bill	2136680	
S. U. Fees (YF, AM, PRO)	984990		Water Charges	82081	
Staff Insurance	29750		Magazines & Journals	1356874	
TCS - Exam Fee	1046322		News Paper	24888	
Verification Fee	200		Bank Commission	39554	
Gymkhana	768500		Function	127152	
Lead college Fee	88039		Transport & Octroi	52968	
Convocation Fee	100		Light & Elet. Expenses	52090	
NSS Fee	20		Admission Expenses	89225	
Pro-Rata	14315		Website Exps.	10764	



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Date :

Lib Membership Card Fee	10550	Xerox Bill (Charges)	41585	
NBA Fee	206100	Teaching Aid	1012370	
Registration Fee	4400	Medical Aid	487630	
Student Relief Fund	5	NBA Fee	206100	
		Revenue Stamp	15500	
		Internet Expenses	1225917	
		Affiliation & Registration	537800	
		Honorarium	229066	
		Security Charges	1862259	
		Alumni Meet	55953	
		Autonomous R/C	1026529	
		FRA Fee	561410	
		Int. on Bank Loan	183246	
		Processing Fee	661500	
		Rent -House	76300	
		MSCIT Exam	14000	
		SU Exam Exps.	79613	
		NBA Fee	1911750	
		Cost of Forms	1000	
		Environmental Fee	53975	
		Youth Festival	100000	
		NSS Fee	10	
		Photocopy Fee	442950	
		Pro-Rata	14315	
		Re-Verification (Photocopy)	650000	
		S. U. Fees (YF, AM, PRO)	881244	
		TCS - Exam Fee	204210	
		Verification Fee	200	
		SU CAP Centre	500	
		By Rent & Taxes		136347
		Municipal Tax	136347	
		By Capital Expenditure		14009141
		Equipment & Tools		
		Mechanical	610712	
		Electronics & Tele.	331953	



Date :

			Chemistry Lab-Basic Science	54675	
			Civil	829419	
			Aeronautical	1712612	
			M & A	458758	
			Electric Installation- Water Cont	242732	
			Dead Stock (Material)	1587502	
			Total	5828363	
			Library Books	885735	
			Furniture & Fixtures	201767	
			Computers & Centre	7093276	
To Scholarship		118514755	By Scholarship		107551628
All Category - Other	51763887		All Category - Other	41029501	
Freeship	9069558		Freeship	8513579	
EBC	57681310		EBC	58008548	
To Salary Deduction		22102682	By Salary Deduction		22102682
Income Tax	6019400		Income Tax	6019400	
LIC premium	627977		LIC premium	627977	
Profession Tax	788500		Profession Tax	788500	
Providend Fund	9095232		Providend Fund	9095232	
Staff other recovery payable	5571573		Staff other recovery payable	5571573	
To Amt Recd For Remittance		9118299	By Amount Remitted		9346978
S. U. Exam fee	8558059		S. U. Exam fee	8742595	
S. U. Remuneration	415193		S. U. Remuneration	493373	
Unpaid Salary	106198		Unpaid Salary	106198	
Bank Int. Receivable	38849		Interest Receivable	4812	
To Advances/other source		58696056	By Advances/other source		59022349
Advance	29157923		Advance	56674932	
Provisional Admission Fee	1860000		Provisional Admission Fee	1714000	
TDS	633417		TDS	633417	
Staff SD	15361470				
Bank Loan	11683246				

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Date :

To Amt. recd. from Society		26023377	By Amount Paid to Society		57178106
SDSS	25793127		SDSS	44406242	
Motor Driving School	230250		Capital Exp. Building	12225199	
			Motor Driving School	181865	
			Building-Guest House	364800	
			By Deposit Payment		79500
			Admission - Deposit	78000	
			Library Deposit	1500	
			By Closing Balance		6428570
			Cash in Hand	1000336	
			Cash at Bank -		
			I D B I A/c No. 2060	1013605	
			I D B I A/c No. 2226	1000	
			I D B I A/c No. 2397	20592	
			I D B I A/c No. -22561	1269638	
			I D B I A/c No. -2219	1000	
			S B I A/c No. 8671	2277203	
			Bank of Maharashtra	58927	
			Federal Bank A/c No. 3194	13929	
			Nutan Sah. Bank A/c No. 5530	164643	
			Fixed Bank Deposits	607697	
Total		461211280	Total		461211280

Principal



Place - Kolhapur
Date - 27/09/2017



As per our report of even date
For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN - 101275W

CA. Bhaskar B. Patil
Proprietor
M. No. 036961

BHASKAR B. PATIL & Co.
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Date :

Sant Dnyaneshwar Shikshan Sanstha's
Annasaheb Dange College of Engineering & Technology, Ashfa
Taluka -Walwa, District - Sangli - 416 301

Income & Expenditure A/c
(From 01-04-2016 to 31-03-2017)

Expenditure	Rs.	Rs.	Income	Rs.	Rs.
To Expenses of Properties		136,347	By Income		233051356
Rent & Taxes	136,347		a) Allotted Student Fee for the Year -		
To Establishment Exps.		17675412	- Tuition Fee	202760184	
Audit Fee	71500		- Development Fee	19851719	
Depreciation for the year	17603912		- Other Fee	1781532	224393435
To Expenditure on Object of Educational Trust		185289064	b) Other Revenue Income	8657921	
Salary Teaching Staff	109756122				
Salary Non-Teaching Staff	24022822				
Guest Staff Salary (Visiting)	2728850				
Provident Fund (Mgt. Cont)	4260952				
Staff Expenditure	962168				
Student Expenditure	12414900				
SU Exam Exps.	4585				
Other Revenue Exp.	31138665				
To Surplus		29950533			
Total		233051356	Total		233051356

Accounting Notes -

- 1) The mercantile system of accounting is followed for the first time during the year 2016-2017 and as such earlier year fees receivable up to 31-03-2016 due to Cash System of Accounting were Rs. 8,05,16,027/- which are directly credited to Sanstha A/c (i.e. in I & E A/c Balance) and in Balance Sheet as these fees are not relevant for the current year income.
- 2) Since the educational institute has followed the mercantile system of accounting during the year 2016-17, the unrealized prortion of current year income including earlier year income up to 31-03-2017 is Rs. 9,87,11,504/- which is net of fees receivable of Rs. 10,45,95,630/- and fees received in advance of Rs. 58,84,126/- as reflected in Balance Sheet.

Principal



Place - Kolhapur
Date - 27/09/2017



As per our report of even date
For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN - 101275W

C.A. Bhaskar B. Patil
Proprietor
M. No. 036961

BHASKAR B. PATIL & Co.
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Date :

Sant Dnyaneshwar Shikshan Sanstha's
Annasaheb Dange College of Engineering & Technology, Ashta
Taluka -Walwa, District - Sangli - 416 301

Balance sheet
As on 31st March, 2017

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Funds		145705412	Assets		158897875
AICTE - Grant	2725500		Fixed Assets (As per schedule)	158897875	
SU Grant	9325				
Corpus Fund	3000000		Deposits		1117697
Depreciation Fund	93870913		Electricity Deposit (MSEB)	1107197	
Development Fee fund	44099674		Telephone Deposit	6000	
Maintenance Fund	1000000		Internet Deposit	4500	
Staff welfare Fund	1000000				
			Advances		58214335
Liabilities		66003522	Interest Receivable	4812	
Admission Deposit Payable	564631		Security Deposit Receivable	62200	
Library & Lab. Deposit Payable	713498		Staff & Other	58147323	
Other Payables	6262740				
Staff SD	15361470		Fees Receivable		104595630
Bank Loan	11683246		Student Fees Receivable	104595630	
Provisional Admission Fee	2712500				
S. U. Remuneration Payable	1212547		By Closing Balance		6428570
Scholarship Payable	26797285		Cash in Hand	1000336	
Security Deposit	237083		Cash at Bank -		
Unpaid Salary Payable	458522		1 D B I A/c No. 2060	1013605	
			1 D B I A/c No. 2226	1000	
Fees Received in Advance		5884126	1 D B I A/c No. 2397	20592	
Student Fees Recd. in Advance	5884126		1 D B I A/c No. -22561	1269638	
			1 D B I A/c No. -2219	1000	
Sant Dnyaneshwar Shikshan Sanstha (Including I & E A/c)		111661047	S B I A/c No. 8671	2277203	
Opening Balance	32349216		Bank of Maharashtra	58927	
Add - Fees receivable at the end adjusted due to change in the method of accounting	80516027		Federal Bank A/c No. 3194	13929	
Add - Received during the year	26023377		Nutan Sahi Bank A/c No. 5530	164643	
- Current Years surplus	29950533		Fixed Bank Deposits	607697	
	168839153				
Less - Amount Paid	44406242				
Less - Capital Expenditure	12225199				
Less - MDS	181865				
Less - Other Expenditure	364800				
Total		329254107	Total		329254107

Note -

For accounting notes please refer notes to the Income and Expenditure Account of the year.



Place - Kolhapur
Date - 27/09/2017



As per our report of even date
For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN - 101275W

CA. Bhaskar B. Patil
Proprietor
M. No. 036961

BHASKAR B. PATIL & Co.
Chartered Accountants

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Kolhapur- 416 008
Phone : 0231-2525985, 0231-2532530

Date :

Sant Dnyaneshwar Shikshan Sanstha's
Annasaheb Dange College of Engineering & Technology Ashta,
Taluka - Walwa, Dist. - Sangli - 416 301

Schedule of Fixed Assets
As on 31-03-2017

Sr. No.	Particulars	Op. Bal. as on 01-04-2016	Additions During Year 2016-2017	Cl. Bal. as on 31-03-2017
A)	Equipment & Tools			
1)	Mechanical	13854207	610712	14464919
2)	Electronics & Telecommunication	10535335	331953	10867288
3)	Electrical	8028849	0	8028849
4)	Physics	1138103	0	1138103
5)	Chemistry	259526	0	259526
6)	Workshop	556855	0	556855
7)	Civil	5354744	829419	6184163
8)	Project	156083	0	156083
9)	Office	799587	0	799587
10)	Deadstock	9069453	1587502	10656955
11)	General	264800	54675	319475
12)	Information Technology	321651	0	321651
13)	Electric Installation -Water Conn.etc	1920687	242732	2163419
14)	Genertor Set	844275	0	844275
15)	Automobile	7160259	0	7160259
16)	Mech. & Automation	1910048	458758	2368806
17)	Aeronautical	0	1712612	1712612
18)	Sports	37995	0	37995
19)	Library Equipment	64228	0	64228
	Total (A)	62276685	5828363	68105048
B)	Library			
1)	Library Books	13425190	885735	14310925
C)	Furniture & Fixture			
1)	Furniture	19682078	201767	19883845
D)	Computer (Centre)			
1)	Computer & Accessories	39538640	7093276	46631916
E)	Vehicle			
1)	Buses	9966141	0	9966141
	Total	144888734	14009141	158897875

Principal



Place - Kolhapur
Date - 27/09/2017



As per our report of even date
For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN - 101275W

CA. Bhaskar B. Patil
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M. No. 036961

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Date :

Sant Dnyaneshwar Shikshan Sanstha's
Annasaheb Dange College of Engineering & Technology, Ashta
Taluka - Walwa, Dist - Sangli - 416 301

Depreciation Fund As On 31/03/2017
(Schedule No. 2)

Sr. No.	Particulars / Groups	Dep. Rate	Opening Balance of Dep. Fund	Dep. On W. D. V.	Dep. On Additions In 2016-17	Total Dep. For Year 2016-17	Total Dep. Fund As on 31-03-2017
1)	Library	60%	9767059	2194879	525044	2719923	12486982
2)	Equipment	15%	27274958	6745180	548279	7293459	34568417
3)	Furniture & Fixtures	10%	6575877	1310620	11687	1322307	7898184
4)	Computer	60%	32649107	4133720	2134503	6268223	38917330
	Total		76267001	14384399	3219513	17603912	93870913

Principal



Place - Kolhapur
Date - 27/09/2017



As per our report of even date
For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN - 101275W

CA. Bhaskar B. Patil
Proprietor
M. No. 036961

Date :

2. Calculation of depreciation on other assets for AY 2017-18

A) For Regular Shift

Sr. No.	Particulars	Rate of Dep.	Op. W. D. V. as on 01-04-2016	Addition during the year	Deduction During the year	Total Value for Depreciation	Depreciation for the year	Cl. W. D. V. as on 31-03-2017
				Before 01-10-2016	After 30-09-2016			
A)	Library	60%	3658131	864410	21325	4543866	2719922	1823944
B)	Equipment	15%	44967868	1482023	4346340	50796231	7293459	43502772
C)	Furniture & Fixture	10%	13106201	31969	169798	13307968	1322307	11985661
D)	Computer	60%	6889533	21735	7071541	13982809	6268223	7714586
E)	Grand Total (A+B+C)		68621733	2400137	11609004	82630874	17603911	65026963

Explanation:-

- a) Basis of computation of depreciation should be written down value (WDV) method.
b) Calculation of depreciation shall be as per applicable income tax rules.

Place - Kolhapur
Date - 27/09/2017

Signature and Seal of the certifying
Chartered Accountant and Auditors

Signature and Seal
of Person duly authorized in terms of
section 2(1) of the Act with Code No.



Accounted Audited Statement 2015-2016

BHASKAR B. PATIL & Co.
Chartered Accountants

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Phone : 0231-2525985, 0231-2532530

Date :

Audit Report

We have audited the accounts of "**Hon. Annasaheb Dange Colloège of Engineering & Technology Ashta**", Taluka - Walwa, District - Sangli - 416301 which is a unit/branch of parent body - **Sant Dnyaneshwar Shikshan Sanstha Islampur**, Taluka - Walwa, District - Sangli, Registered Trust No. F - 1546 for the period **01-04-2015 to 31-03-2016** and annexed herewith the audited Receipt & Payment A/c, Income & Expenditure A/c for the year ended on **31-03-2016** and Balance Sheet of the said unit/branch as on **31-03-2016**.

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

Auditor's responsibility -

Our responsibility is to express an opinion on these financial statements based on our audit. An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the institution's preparation and presentation of the financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on whether the institution has in place an adequate internal financial controls system over financial reporting and the operating effectiveness of such controls. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the management as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.



Date :

Report on other required matters -

1. The institution has kept proper books of accounts required for the purpose of conducting audit.
2. The institute is following cash method of accounting and there is no change during the year 01-04-2015 to 31-03-2016.
3. We have obtained all the information and explanation which were necessary for the purpose of audit and for determination of fees by the Authority.
4. The Accounting Standard 17 (AS-17) is not applicable to this institution as fee segment is only for one Engineering Course and accounting record and financial statements relates only to such activity – Engineering Course only.
5. While conducting the audit, we have observed that the internal control system is deficient in respect of expenses incurred; considering the size & volume of the transactions of the institute and as such it is necessary to strengthen it adequately.
6. Subject to above; in our opinion and according to the information and explanation given to us the accounts give true and fair view –
 - i) In the case of the Balance Sheet the state of affairs of the Company as at 31st March, 2016.
 - ii) In the case of Income and Expenditure of the Surplus of the institution for the year ended on that date.

Place – Kolhapur
Date – 15-10-2016



For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN – 101275W

CA. Bhaskar B. Patil
Proprietor
M. No. 036961

BHASKAR B. PATIL & Co.

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Date :

Sant Dnyaneshwar Shikashan Sanstha'sAnnasaheb Dange College of Engineering & Technology, Ashta

Taluka -Walwa, District - Sangli - 416 301

Consolidated Receipts & Payments A/c

(Form 01/04/2015 to 31/03/2016)

Receipts	Rs.	Rs.	Payment	Rs.	Rs.
To Opening Balance		18087362	By Salary		125265168
Cash in hand	881281		Teaching Staff Salary	97473037	
Bank Balances -			Non-Teaching Staff Salary	22466998	
I D B I A/c No. 2060	2412506		Guest Staff Salary (Visiting)	1592496	
I D B I A/c No. 2397	17326		P. F. Mgt. Contribution	3500452	
I D B I A/c No. 22561	943124		LIC Group Gratuity	50000	
S B I A/c No. 8671	1620187		Honorarium	182185	
Bank of Maharashtra	519305				
Federal Bank A/c No. 3194	13929		By Staff Expenditure		4395548
Nutan Sah. Bank A/c No. 553	35214		ISTE Membership Fee	500	
Fixed Bank Deposits	11644490		Staff Training	931439	
			STTP - Auto	513260	
To Fees		195646723	STTP - BS	471066	
Tuition Fee	180707754		STTP - Civil	612803	
Development Fee	14938969		STTP - CSE	484023	
			STTP - EE	462730	
To Grants		9325	STTP - ETC	433784	
SU Grants	9325		STTP - Mech	485943	
			By Student Expenditure		11631769
			Discovery	523749	
			Dnyanda (College Mag)	358345	
			File & workshop Stationery	3478085	
			Gymkhana	1486454	
			Industrial Visit	446166	
			ASR Olympaid	297988	
			Prize Distribution	332000	
			Profest	254380	
			Student Project	810000	
			Sneha	399217	
			Student Activity	528946	
			Students Training	1042347	
			Training & Placement	631082	

BHASKAR B. PATIL & Co.

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13th Lane, Rajarampuri (East),
Kolhapur- 416 008

Phone : 0231-2525985, 0231-2532530

Date :

		Uniform	1043010	
		By Audit Fee		61000
		Audit Fee	61000	
To Other Revenue Receipts	13822918	By Other Revenue Exp.		25099326
Absent Fine	167600	Office Stationery & Printing	670910	
Bank Interest	1639978	Travelling & Conveyance	332242	
Duplicate I Card Fee	600	Postage & Telegram	16325	
Library Fine	124495	Hospitality	528379	
Runanubandh Fee	75500	Advertisement	1538855	
Sale of Scrap	54000	R/C Laboratory	2882849	
TC & LC Fee	46675	M & R General	964395	
Consultancy Fee	16250	Building M & R	1349605	
Cost of Forms	15130	M & R & Diesel Generator	93065	
Admission Form Fee	200	M & R Equipment	132263	
Bus Charges	1967725	Vehicle Insurance	229623	
Other Service Charges	1842451	Vehicle Tax	333700	
STTP - All	400100	Vehicle Diesel	1457665	
Research & Develop.	119600	M & R Garden	1014490	
Naassomnac Tech. Test	10800	Legal Charges	8735	
Olympaid	89560	Library Other Exps.	49850	
Student Chapter in Prof.	199040	Water Connection Exps.	39300	
Students Traing	143000	NAAC Expenditure	22925	
Profest	37000	Teaching Aid Exps.	480606	
Loan Charges	619922	Misc. Exps	24604	
Processing Fee	11000	Staff Selection Exps	125630	
Discovery	491725	Studnt Relief Fund	15	
Environmental Fee	150400	Research & Develop.	702759	
SUCTA (SU Collg. Teacher A	26400	Inspection & Services Charges	218100	
Photocopy Fee	461150	ISO 9001:2008	41799	
Re-Verification (Photocopy)	817150	Telephone Bill	135456	
S. U. Fees (YF, AM, PRO)	957685	Electrical Bill	2270069	
Staff Insurance	25950	Water Charges	4350	
TCS - Exam Fee	741397	Magazines & Journals	106169	
Verification Fee	1800	News Paper	22867	
SU CAP Centre	2113757	Bank Commission	28916	
Lead college Fee	454878	Function	294473	
		Transport & Octroi	72560	



BHASKAR B. PATIL & Co.
Chartered Accountants

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'C' Wing, Shamrao Mandlik Park,
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Phone : 0231-2525985, 0231-2532530

Date :

		Light & Elet. Expenses	1565529	
		Admission Expenses	315759	
		Website Exps.	117092	
		Xerox Bill (Charges)	36918	
		Revenue Stamp	16000	
		Internet Expenses	1194007	
		Affiliation & Registration	980700	
		House Rent	53590	
		Membership Fee	43703	
		SU Exam Exps.	15054	
		Medical Aid	25598	
		NBA Fee	28272	
		Email Facility Fee	150	
		Environmental Fee	60175	
		SUCTA (SU Collg. Teacher Asso	27150	
		NSS Fee	30	
		Photocopy Fee	457700	
		Pro-Rata	2500	
		Re-Verification (Photocopy)	822000	
		S. U. Fees (YF, AM, PRO)	870093	
		TCS - Exam Fee	151000	
		S. U. Eligibility Fee	7200	
		Verification Fee	1800	
		SU CAP Centre	2113757	
		<u>By Rent & Taxes</u>		86952
		Municipal Tax	86952	
		<u>By Capital Expenditure</u>		14145802
		<u>Equipment & Tools</u>		
		Mechanical	204120	
		Electronics & Tele.	113850	
		Electrical	590625	
		Automobile	1436558	
		Civil	59788	
		M & A	1508010	
		Dead Stock (Material)	1262231	
		Total	5175182	
		Library Books	2357512	
		Furniture	93508	



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Date :

			Computers & Centre	4659600	
			Vehicle	1860000	
<u>To Scholarship</u>		71509331	<u>By Scholarship</u>		63439490
All Category - Other	33376811		All Category - Other	26879109	
Freeship	14423763		Freeship	13331624	
EBC	23708757		EBC	23228757	
<u>To Salary Deduction</u>		16488212	<u>By Salary Deduction</u>		16488212
Income Tax	4284700		Income Tax	4284700	
LIC premium	726584		LIC premium	726584	
Profession Tax	746700		Profession Tax	746700	
Providend Fund	6287626		Providend Fund	6287626	
Staff other recovery payable	4442602		Staff other recovery payable	4442602	
<u>To Amt Recd For Remittance</u>		10958558	<u>By Amount Remitted</u>		9589057
S. U. Exam fee	8532647		S. U. Exam fee	8532668	
S. U. Remuneration	1311706		S. U. Remuneration	613130	
Unpaid Salary	705121		Unpaid Salary	443259	
Bank Interest Receivable	409084				
<u>To Advances/other source</u>		60379475	<u>By Advances/other source</u>		64959701
Advance	57694583		Advance	62948309	
Provisional Admission Fee	2214500		Provisional Admission Fee	1541000	
TDS	470392		TDS	470392	
<u>To Amt. recd. from Society</u>		21429730	<u>By Amount Paid to Society</u>		61490009
			SDSS	16190579	
			Capital Exp. Building	44921785	
			Motor Driving School	377645	
<u>To Deposit</u>		1721386	<u>By Deposit</u>		1455905
Admission - Deposit	1721386		Admission - Deposit	1449405	
Security Deposit	0		Library Deposit	5500	
			Telephone Deposit	1000	
			<u>By Fee</u>		6000
			Other	6000	
			<u>By Intrest Receivable</u>		38849
			<u>By Closing Balance</u>		11900232
			Cash in hand	1904148	
			Cash at Bank -		
			ID B I A/c No. 2060	1243400	



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Date :

			I D B I A/c No. 2397	18027	
			I D B I A/c No. 22561	1549381	
			S B I A/c No. 8671	5016628	
			Bank of Maharashtra	553020	
			Federal Bank A/c No. 3194	13929	
			Nutan Sah. Bank A/c No. 5530	6720	
			Fixed Bank Deposits	1594979	
Total		410053020	Total		410053020

Principal



Place - Kolhapur
Date - 15/10/2016

As per our report of even date
For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN - 101275W

CA. Bhaskar B. Patil
Proprietor
M. No. 036961

BHASKAR B. PATIL & Co.
Chartered Accountants

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Date :

Sant Dnyaneshwar Shikshan Sanstha's
Annasaheb Dange College of Engineering & Technology, Ashta
Taluka - Walwa, District - Sangli - 416 301

Income & Expenditure A/c
(From 01-04-2015 to 31-03-2016)

Expenditure	Rs.	Rs.	Income	Rs.	Rs.
<u>To Expenses of Properties</u>		86952	<u>By Income</u>		209463641
Rent & Taxes	86952		Fees	195640723	
			Other Revenue Receipts	13822918	
<u>To Establishment Exps.</u>		23108135			
Audit Fee	61000				
Depreciation	23047135				
<u>To Expenditure on Object of Educational Trust</u>		166391811			
Salary Teaching Staff	97473037				
Salary Non-Teaching Staff	22466998				
Guest Staff Salary (Visiting)	1592496				
Provident Fund (Mgt. Cont)	3500452				
LIC Group Gratuity	50000				
Honorarium	182185				
Staff Expenditure	4395548				
Student Expenditure	11631769				
Other Revenue Exp.	25099326				
To Surplus		19876743			
Total		209463641	Total		209463641

Principal



Place - Kolhapur
Date - 15/10/2016

As per our report of even date
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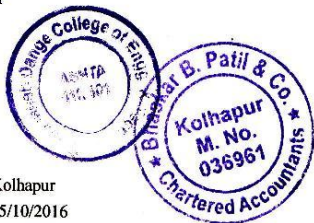
Date :

Sant Dnyaneshwar Shikashan Sanstha's
Annasaheb Dange College of Engineering & Technology, Ashta
Taluka - Walwa, District - Sangli - 416 301

Balance sheet
As on 31st March, 2016

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
<u>Funds</u>		128101500	<u>Assets</u>		144888734
AICTE - Grant	2725500		Fixed Assets (As per schedule)	144888734	
SU Grant	9325				
Corpus Fund	3000000				
Depreciation Fund	76267001		<u>Deposits</u>		1117697
Development Fee fund	44099674		Electricity Deposit (MSEB)	1107197	
Maintenance Fund	1000000		Telephone Deposit	6000	
Staff welfare Fund	1000000		Internet Deposit	4500	
<u>Liabilities</u>		28187310	<u>Advances</u>		30731363
Admission Deposit Payable	642631		Interest Receivable	38849	
Library & Lab. Deposit Payable	714998		Security Deposit Receivable	62200	
Other Payables	6262740		Staff & Other	30630314	
Provisional Admission Fee	2566500				
S. U. Remunration Payable	1290727		<u>By Closing Balances</u>		11900232
Scholarship Payable	15834158		Cash in Hand	1904148	
Security Deposit	237083		<u>Cash at Bank -</u>		
S. U. Exam Fee Payable	179951		ID B I A/c No. 2060	1243400	
Unpaid Salary Payable	458522		ID B I A/c No. 2397	18027	
			ID B I A/c No. 2561	1549381	
<u>Sant Dnyaneshwar Shikashan Sanstha</u>		32349216	S B I A/c No. 8671	5016628	
Opening Balance	52532752		Bank of Maharashtra	553020	
Add - Received during the year	21429730		Federal Bank A/c No. 3194	13929	
- Current Years surplus	19876743		Nutan Nagari Sah. Bank	6720	
Total	93839225		Fixed Bank Deposits	1594979	
Less - Amount Paid	16190579				
Less - Capital Expenditure	44921785				
Less - Other Expenditure	377645				
Total		188638026	Total		188638026

Principal



Place - Kolhapur
Date - 15/10/2016

As per our report of even date
For M/s. Bhaskar B. Patil & Co.
Chartered Accountants
FRN - 101275W

CA. Bhaskar B. Patil
Proprietor
M. No. 036961

BHASKAR B. PATIL & CO.

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Date :

Sant Dnyaneshwar Shikashan Sanstha's

Annasaheb Dange College of Engineering & Technology Ashta,

Taluka - Walwa, Dist. - Sangli - 416 301

Schedule of Fixed Assets

As on 31-03-2016

Sr. No.	Particulars	Op. Bal. as on	Additions	Cl. Bal. as on
A)	<u>Equipment & Tools</u>			
1)	Mechanical	13650087	204120	13854207
2)	Electronics & Telecommunication	10421485	113850	10535335
3)	Electrical	7438224	590625	8028849
4)	Physics	1138103	0	1138103
5)	Chemistry	259526	0	259526
6)	Workshop	556855	0	556855
7)	Civil	5294956	59788	5354744
8)	Project	156083	0	156083
9)	Office	799587	0	799587
10)	Deadstock	7807222	1262231	9069453
11)	General	264800	0	264800
12)	Information Technology	321651	0	321651
13)	Electric Installation	1920687	0	1920687
14)	Generator Set	844275	0	844275
15)	Automobile	5723701	1436558	7160259
16)	Mech. & Automation	402038	1508010	1910048
17)	Sports	37995	0	37995
18)	Library Equipment	64228	0	64228
	Total (A)	57101503	5175182	62276685
B)	<u>Library</u>			
1)	Library Books	11067678	2357512	13425190
C)	<u>Furniture & Fixture</u>			
1)	Furniture	19588570	93508	19682078
D)	<u>Computer (Centre)</u>			
1)	Computer & Accessories	34879040	4659600	39538640
E)	<u>Vehicle</u>			
1)	Buses	8106141	1860000	9966141
	Total	130742932	14145802	144888734

Principal



Place - Kolhapur
Date - 15/10/2016



As per our report of even date
For M/s. Bhaskar B. Patil & Co.
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Sant Dnyaneshwar Shikshan Sanstha's Date :
Annasaheb Dange College Of Engineering & Technology, Ashta
 Taluka - Walwa, Dist - Sangli - 416 301

Depreciation Fund As On 31/03/2016
(Schedule No. 2)

Sr. No.	Particulars / Groups	Dep. Rate	Opening Balance of Dep. Fund	Dep. On W. D. V.	Dep. On Additions In 2015-16	Total Dep. For Year 2015-16	Total Dep. Fund As on 31-03-2016
1)	Library	60%	6042003	3015405	709651	3725056	9767059
2)	Equipment	15%	19558706	6847341	868911	7716252	27274958
3)	Furniture & Fixtures	10%	5120641	1446793	8443	1455236	6575877
4)	Computer	60%	22498516	7428314	2722277	10150591	32649107
	Total		53219866	18737853	4309282	23047135	76267001

Principal



Place - Kolhapur
 Date - 15/10/2016

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 For M/s. Bhaskar B. Patil & Co.
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 FRN - 101275W

CA. Bhaskar B. Patil
 Proprietor
 M. No. 036961