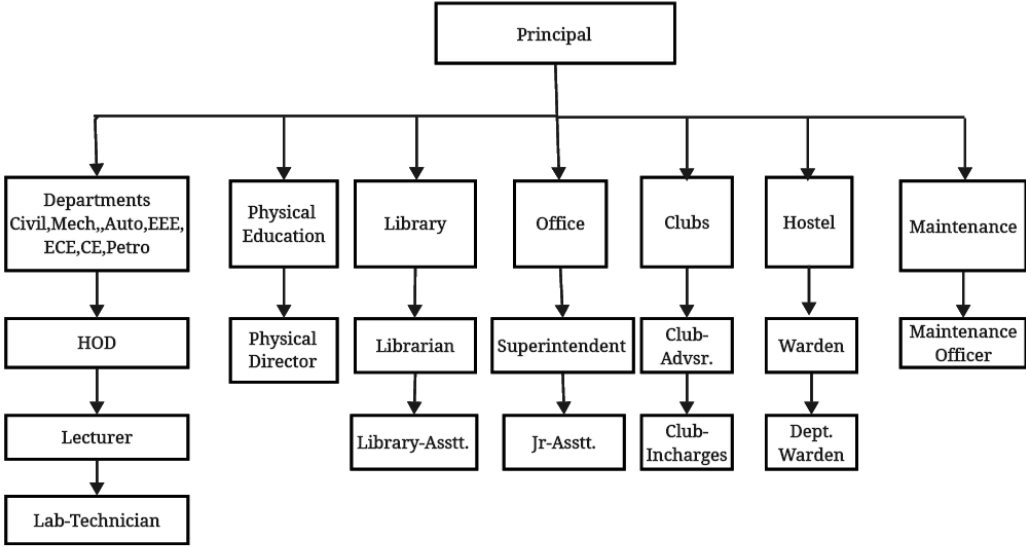


# AICTE MANDATORY DISCLOSURE

## 816-SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE

1. Name of the Institution	
Name	816-SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE
Address	Erode – Gobi Main Road Sri Kalaivani Nagar, OthakuthiraiK.Mettupalayam – Post,Gobichettipalayam-Tk Erode – 638 455, Tamil Nadu.
Mobile Number	97155 45555
Phone No. with STD Code	04285- 265199
Fax No.	04285- 266133
E-Mail	svhpcgobi@gmail.com
Website	www.svhpc.in
Nearest Railway Station(Dist. in km)	Erode(31 KM)
Nearest Airport(Dist. in km)	Coimbatore(89KM)
Approval Year of First Course 2009	2009
Date of the first approval by AICTE letter	12/08/2009
AICTE Permanent Institute Id	1-431725341
Tamil Nadu Government Order No	G.O(Ms) No.180
Type of Institution, Categories	Private Self Finance, Co-Education
2. Name and Address of the Trust	
Name	Shree Venkateshwara Educational & Charitable Trust
Address	Erode – Gobi Main Road, Sri Kalaivani Nagar, Othakuthirai,K.Mettupalayam – Post,Gobichettipalayam-Tk ,Erode – 638 455, Tamil Nadu.
Registered with	Sub Register Office No.2 Gobi
Trust Registration Date	21/10/2007

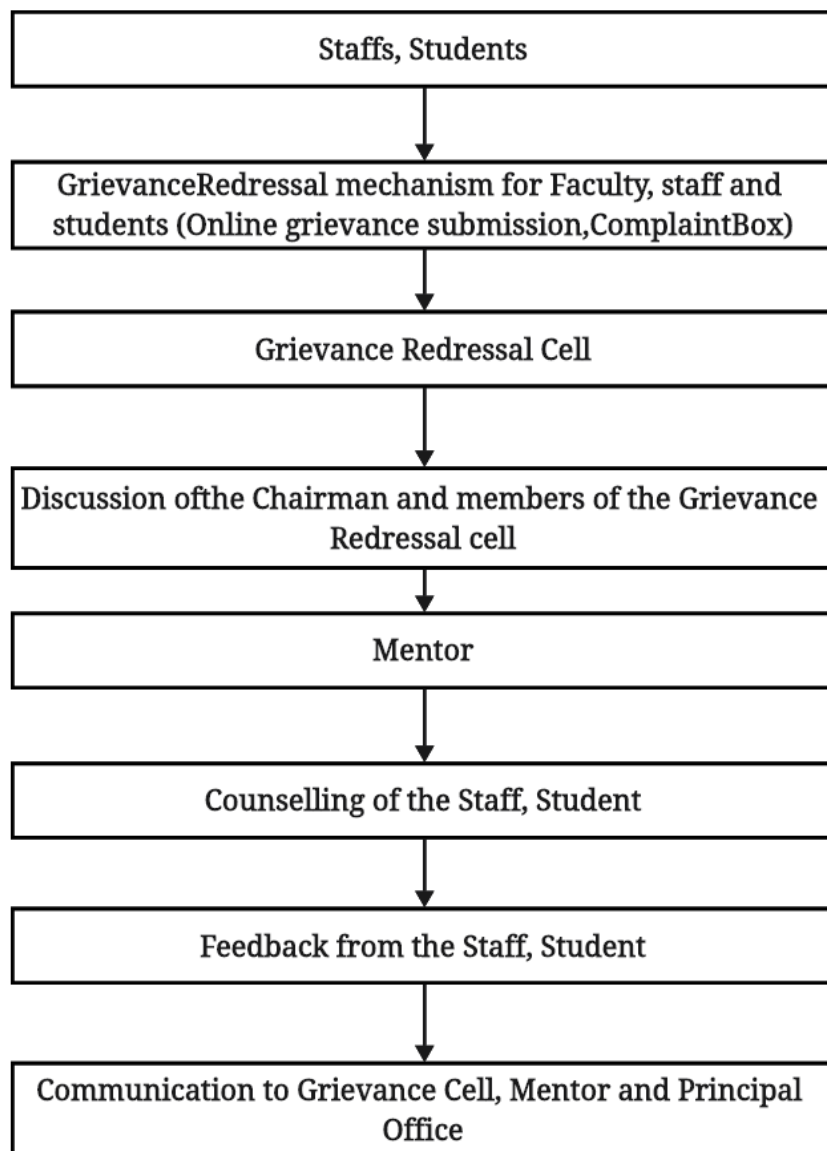
Trust Registration No.	160/BK4		
Telephone No	04285- 266199		
Mobile Number	99761 18611		
Phone No. with STD Code	04285- 266199		
Fax No.	04285- 266133		
E-Mail	svhpcgobi@gmail.com		
<b>i).</b>	<b>Details About The Trustees</b>		
<b>S.No</b>	<b>Name of the Members</b>	<b>Position</b>	<b>Period From</b>
1	Thiru.P.Venkatachalam	Chairman	24-10-2007
2	Thiru.K.C.Karupanan	Secretary	24-10-2007
3	Dr.C.K.Swamy	Treasurer	24-10-2007
4	Thiru.G.P.Kettimuthu	Members	24-10-2007
5	Dr.K.Saravanan	Members	26-06-2020
6	Dr.N.Kuppuswamy	Members	24-10-2007
7	Thiru.K.R.Kaviarasu	Members	24-10-2007
8	K.C.Ganesan	Members	24-10-2007
9	V.Poongodi	Members	24-10-2007
10	V.V.Suganya	Members	24-10-2007
11	K.Devi	Members	24-10-2007
12	S.Jothilingam	Members	24-10-2007
13	Dr.D.Parthiban	Members	24-10-2007
14	Mrs.K.Lakshmipriya	Members	24-10-2007
15	Dr.K.Yuvaraja	Members	26-06-2020
16	Dr.V.Sibiya	Members	26-06-2020
17	G.Gowtham	Members	26-06-2020
18	S.Thamaraikannan	Members	26-06-2020
<b>3.</b>	<b>Name And Address Of The Principal</b>		
Name of the Principal/Director	S.Prakadeswaran		
Exact Designation	Principal		
Phone Number with STD Code	04285- 266199		
FAX Number with STD Code	04285- 266133		
Email	svhpcgobi@gmail.com		
Highest Degree	M.E.,		
Field of Specialization	Computer Science and Engineering		

4	<b>Name of the Affiliating University</b>	Directorate Of Technical Education, Chennai.
5 <b>Governance</b>		
i). <b>Organizational chart</b>		
 <pre> graph TD     Principal[Principal] --&gt; Departments[Departments Civil,Mech.,Auto,EEE, ECE,CE,Petro]     Principal --&gt; Physical[Physical Education]     Principal --&gt; Library[Library]     Principal --&gt; Office[Office]     Principal --&gt; Clubs[Clubs]     Principal --&gt; Hostel[Hostel]     Principal --&gt; Maintenance[Maintenance]          Departments --&gt; HOD[HOD]     HOD --&gt; Lecturer[Lecturer]     Lecturer --&gt; Lab[Lab-Technician]          Physical --&gt; PhysicalDir[Physical Director]          Library --&gt; Librarian[Librarian]     Librarian --&gt; LibAsst[Library-Asstt.]          Office --&gt; Superintendent[Superintendent]     Superintendent --&gt; JrAsstt[Jr-Asstt.]          Clubs --&gt; ClubAdv[Club-Advsr.]     ClubAdv --&gt; ClubInch[Club-Incharges]          Hostel --&gt; Warden[Warden]     Warden --&gt; DeptWarden[Dept. Warden]          Maintenance --&gt; MaintOff[Maintenance Officer] </pre>		
<b>Name of the Committee</b>		<b>Governing Council</b>
a) <b>Objectives and Procedure</b>		
<p>To device, approve and review the progress of function of the HEI in the area viz., Academics, Faculty and Staff Selection, Students, Faculty and Staff Development, Budget and Audited Statement of Accounts, Adherence of the HEI with respect to Norms of statutory bodies (AICT,UGC,DOTE) and other related matters.</p>		
b) <b>Roles and Responsibilities</b>		
<ul style="list-style-type: none"> <li>• To monitor the academic and other related activities of the college.</li> <li>• To consider the recommendations of the Staff Selection Committee.</li> <li>• To review the important communications, policy decisions received from the University, Government, AICTE, etc.</li> <li>• To pass the annual budget of the college.</li> <li>• To review the audited statements of accounts of the institute.</li> <li>• To consider the introduction of new courses and changes in intake for the next academic year.</li> <li>• To review the MOUs signed and industry collaborations.</li> <li>• To review the state-of-the-art equipment procured.</li> </ul>		

	<ul style="list-style-type: none"> <li>• To review the faculty position of the college.</li> <li>• To review the faculty development initiatives and programmes.</li> <li>• To review the admissions of the institute.</li> <li>• To review the academic performance of the students.</li> <li>• To review the students' development activities.</li> <li>• To review the placement activities.</li> </ul>		
<b>c).</b>	<b>Frequency of the Meeting</b>	02 Per Year	
<b>d).</b>	<b>Members of Academic Advisory Body</b>	Not Applicable	
<b>e).</b>	<b>Governing Council- Members of the Board</b>		
<b>S.No</b>	<b>Name</b>	<b>Position</b>	<b>Professional Occupation</b>
1	Mr.P.Venkatachalam	Chairman	Chairman, Shree Venkateshwara Educational and Charitable Trust
2	Yet to be Nominated	DOTE Nominee	-
3	Mr.K.C.Karupanan	Member	Secretary, Shree Venkateshwara Educational and Charitable Trust
4	Mr.G.P.Kettimuthu	Member	Joint Secretary, Shree Venkateshwara Educational and Charitable Trust
5	Dr.C.K.Swamy	Member	Treasurer, Shree Venkateshwara Educational and Charitable Trust
6	Dr.N.Kuppuswamy	Member	Trustee, Shree Venkateshwara Educational and Charitable Trust
7	Dr.A.Bazila Banu	Member	Professor KPR Institute of Engineering and Technology
8	Dr.P.Mani	Member	Vice Principal Shree Venkateshwara Hi Tech Polytechnic College
9	Mr.K.Jayachandran	Member	HOD/Computer Engineering Shree Venkateshwara Hi Tech Polytechnic College
10	MrK.Dhevendhiran	Member	Manager – HR Mobitech Wireless solution Pvt Ltd

11	Ms.S.Sulochana	Member	Administrative Faculty of College
12	Mr.S.Prakadeswaran	Member Secretary	Principal, Shree Venkateshwara Hi Tech Polytechnic College

**ii). Grievance Redressal mechanism for Faculty, staff and students**



**iii). Establishment of Anti Ragging Committee**

S.No	Name	Designation	Position
1	Mr.S.Prakadeswaran	Principal	Chairperson
2	Mrs.M.Reka	Inspector of Police	Member
3	Mr.G.Fredrick	VAO	Member
4	Dr.P.Mani	Vice Principal	Member
5	Mr.K.Jayachandran	HOD	Member
6	Mrs.B.Santhi	Lecturer	Member

7	Mr.K.Balasubramanian	Lecturer	Member
8	Mr.K.Kuppusamy	Lab Technician	Member
9	Mr.M.Arumugam	Parent of I Yr EEE Deepak Sanjay.A	Member
10	Mr.R.Palanisamy	Parent of II Yr CSE P.Dhana	Member
11	Mr.P.N.Mohammed Nabeel	I Mech Student	Member
12	Mr.S.YogaMunish	II AutoStudent	Member
13	Ms.S.Geethanjali	III EEE Student	Member
<b>iv).</b>	<b>Establishment of Online Grievance Redressal Committee</b>		
<b>S.No</b>	<b>Name</b>	<b>Designation</b>	<b>Position</b>
1	Mr.S.Prakadeswaran	Principal	Chairperson
2	Mr.M.Mohan	HOD / Civil	Coordinator
3	Mr.P.Durkaiyan	Lecturer / EEE	Member
4	Mr.K.Arunkumar	Lecturer / Auto	Member
5	Mrs.N.Priyanka	Lecturer / EEE	Member
6	Ms.Thrni	Lecturer / Civil	Member
7	Ms.P.Lavanya	II-ECE Student	Member
8	Ms.C.Subashini	III-EEE Student	Member
9	Mr.L.Rooban	II-Civil Student	Member
10	Mr.S.Elangovan	III-Auto Student	Member
<b>v).</b>	<b>Establishment of Internal Committee (IC)</b>		
<b>S.No</b>	<b>Name</b>	<b>Designation</b>	<b>Position</b>
2	Ms.V.Poongothai	Lecturer / EEE	Chairperson
3	Ms.S.Janaki	NGO representative	Member
4	Ms.S.Ranjitham	Lecturer / Maths	Member
5	Ms.S.Dhivya	Lab Technician / EEE	Member
6	Mrs.S.Premadevi	Junior Assistant	Member
7	Mr.E.Nallasivam	HOD / Mechanical	Member
8	Mr.P.Rajakumar	Sr.Lecturer	Member
9	Ms.K.Santhanalakshmi	Dy.Warden	Member
10	Mr.S.Kannan	Dy.Warden	Member
11	Ms.D.Sastiga	II Civil Student	Member
12	Ms.M.Joshika	III CSE Student	Member
<b>vi).</b>	<b>Establishment of Committee for SC/ST</b>		

S.No	Name	Designation	Position
1	Mr.S.Prakadeswaran	Principal	Chairperson
2	Mr.K.K.Arumugam	HOD	Coordinator
3	Ms.Ruckshana	Lecturer	Member
4	Ms.K.Pavithra	Lecturer	Member
5	S.Maria Evangelina	III Cse Year Student	Member
6	A.Praveen	II EEE Year Student	Member
7	A.Deepaksanjay	I Year Student	Member
8	S.Ramya	I Year Student	Member
<b>vii). Internal Quality Assurance Cell</b>			
S.No	Name	Designation	Position
1.	S.Prakadeswaran	Principal	Chairperson & Head of the Institution
2.	K.C.Karupanan	Secretary	Representing Management
3.	Dr.P.J. Anoop	NGO – Nammagobi Foundation, Gobichettipalayam	Eminent person from local Society
4.	D. Venkateshwaran	Partner/Venbro Polymers, Erode	Nominee from Industries
5.	Ramanujam	Manager HR Metalman Auto Private Ltd. Hosur	Nominee from Employer
6.	I R Gowrishankar	Design Engiineer, Schneider Electric India Pvt Ltd., Coimbatore.	Nominee from Alumni
7.	V.Poongodi	Parent	Nominee from Stakeholders
8.	M.Maheshkumar	AO	Administrative Officer
9.	M.Mohan	Members of Faculty	Hod /Civil
10.	E.Nallasivam		Hod /Mech
11.	K.K Arumugam		Hod /Auto
12.	K.Jayachandran		Hod /Cse
13.	K.Vinothkumar		Hod /Petro
14.	R.Saranya		Lecturer /ECE
15.	P.Durkaiyan		Coordinator of the IQAC
<b>viii). Equal Opportunity facilities Cell.</b>			
The Equal Opportunity Cell has been set up in the institution to address the issues of Gender, Religious and Community equality.			
<b>a). Objective</b>			
To oversee the effective implementation of policies and programmes for disadvantaged groups, to provide guidance and counselling with respect to academic, financial, social and other matters and to enhance the diversity within the campus.			

<b>b).</b>	<b>Functions</b>		
	<ul style="list-style-type: none"> <li>To create a socially congenial atmosphere for academic interaction and for the growth of healthy interpersonal relationships among the students coming from various social backgrounds.</li> <li>To disseminate the information related to schemes and programmes for the welfare of the socially weaker section as well as notifications/memoranda, office orders of the Government, or other related agencies/organizations issued from time to time.</li> <li>To establish coordination with the Government and other agencies/organizations to mobilize academic and financial resources to provide assistance to students of the disadvantaged groups.</li> </ul>		
<b>c).</b>	<b>Members of Equal Opportunity Cell</b>		
<b>S.No</b>	<b>Name</b>	<b>Designation</b>	<b>Position</b>
1	Mr.S.Prakadeswaran	Principal	Chairperson
2	Dr.P.Mani	Vice Principal	Member
4	Mr.K.Jayachandran	HOD	Member
5	Mr.K.K.Arumugam	HOD	Member
6	Mr.M.Mohan	HOD	Member
7	Mr.E.Nallasivam	HOD	Member
8	Ms.V.Poongothai	Lecturer	Member
9	Mr.P.Gokulnath	Lecturer	Member
10	Mr.P.Manickam	Lab Technician	Member
11	Mr.D.Ruthiresh	Lab Technician	Member
<b>6.</b>	<b>Programmes</b>		
<b>i).</b>	<b>Name of Programmes approved by AICTE:</b>	<ol style="list-style-type: none"> <li>1010- Diploma in Civil Engineering.</li> <li>1020- Diploma in Mechanical Engineering.</li> <li>1021- Diploma in Automobile Engineering.</li> <li>1030- Diploma in Electrical &amp; Electronics Engineering.</li> <li>1040- Diploma in Electronics &amp; Communication Engineering.</li> <li>1052- Diploma in Computer Engineering.</li> <li>1075- Diploma in Petrochemical Engineering.</li> </ol>	
<b>ii).</b>	<b>Name of Programmes Accredited by NBA</b>	Nil.	
<b>iii).</b>	<b>Status of Accreditation of the Courses</b>	Nil.	
<b>iv).</b>	<b>Total number of Courses</b>	7	
<b>v).</b>	<b>Programmes Details</b>		



S.No	(a) ProgrammesName	(b) Number of seats	(c) Duration	(d) Cut off marks/rank of admission during the last years
1.	1010- Diploma in Civil Engineering	60 +10% (Lateral Entry)	Full Time (3 years) Full Time Diploma in Engineering shall extend over a period of three academic years, consisting of 6 semesters.	Pass in all subjects
2.	1020- Diploma in Mechanical Engineering	120 +10% (Lateral Entry)		
3.	1021- Diploma in Automobile Engineering	60 +10% (Lateral Entry)		
4.	1030- Diploma in Electrical & Electronics Engineering			
5.	1040- Diploma in Electronics & Communication Engineering			
6.	1052- Diploma in Computer Engineering			
7.	1075- Diploma in Petrochemical Engineering			
<b>vi).</b>	<b>Fee (As Approved By The State Government)</b>			
S.No	Programmes Name	Fee		
1.	1010- Diploma in Civil Engineering	Rs.35,000/-		
2.	1020- Diploma in Mechanical Engineering			
3.	1021- Diploma in Automobile Engineering			
4.	1030- Diploma in Electrical & Electronics Engineering			
5.	1040- Diploma in Electronics & Communication Engineering			
6.	1052- Diploma in Computer Engineering			
7.	1075- Diploma in Petrochemical Engineering			
<b>vii).</b>	<b>Collaboration with Foreign University(s)</b>		Nil	
<b>7.</b>	<b>FACULTY MEMBERS</b>			

S.NO	STAFFS NAME	DESIGNATION	QUALIFICATION	COMMON SUBJECT
<b>FIRST YEAR</b>				
1.	JEEVANANTHAM M	LECTURER	MA, MPHIL	ENGLISH
2.	PAVITHRA K	LECTURER	MA	ENGLISH
3.	KARTHIKADEVI K	LECTURER	MA	ENGLISH
4.	SANTHI B	LECTURER	MSC, MPHIL	MATHS
5.	AROKYARAJ P	LECTURER	MSC, MPHIL	MATHS
6.	RANJITHAM S	LECTURER	MSC, MPHIL	MATHS
7.	RAJAKUMAR P	LECTURER	MSC, MPHIL	PHYSICS
8.	NAVEENKUMAR G	LECTURER	MSC	PHYSICS
9.	PRAVIN R	LECTURER	MSC	PHYSICS
10.	SUGANYA C	LECTURER	MSC	PHYSICS
11.	SADASIVAN B	LECTURER	MSC, MPHIL	CHEMISTRY
12.	AYYAMMAL A	LECTURER	MSC, MPHIL	CHEMISTRY
13.	INDHUMATHI T	LECTURER	MSC	CHEMISTRY
14.	NANDHAKUMAR	LECTURER	MSC	CHEMISTRY
15.	PRABHAKARAN V	LECTURER	MA	TAMIL
16.	GUNASEKARAN N	LECTURER	MA	TAMIL
17.	KARPAKAM PARANJOTHI	LECTURER	MA	TAMIL
18.	PUSHPA R	LECTURER	MA	TAMIL
19.	GANESAN M	LECTURER	BTECH	ENGINEERING GRAPHICS
20.	YUVARAJ R	LECTURER	BE	ENGINEERING GRAPHICS
21.	ARULMURUGAN K	LECTURER	ME	COMPUTER
22.	VIGNESH S	LECTURER	MA	ENGLISH
23.	SRIDHAR L	LECTURER	MSC	MATHS
24.	ANITHA S	LECTURER	MSC	PHYSICS
25.	JOHN DE BRITTO L	LECTURER	MA	ENGLISH
26.	NAGARATHINAM K	LECTURER	MSC	MATHS
27.	MALATHI K S	LECTURER	MSC	CHEMISTRY
<b>CIVIL ENGINEERING</b>				
1.	MOHAN M	HOD		BE
2.	DEVIPRIYA M	LECTURER		BE

3.	PRAVEENA M	LECTURER	BE
4.	THRNI R	LECTURER	BE
5.	RUCKSHANA M	LECTURER	BE
<b>MECHANICAL ENGINEERING</b>			
1.	NALLASIVAM E	HOD	ME
2.	PREMKUMAR C	LECTURER	BE
3.	PRAKASH S	LECTURER	ME
4.	MOHANKUMAR C	LECTURER	ME
5.	RAJKUMAR	LECTURER	BE
6.	GOKULNATH P	LECTURER	BE
7.	BALASUBRAMANIYAM K	LECTURER	BE
8.	KATHIRESAN N	LECTURER	BE
9.	BALAKRISHNAN K	LECTURER	BE
10.	HARIHARAN M	LECTURER	BE
<b>AUTOMOBILE ENGINEERING</b>			
1.	ARUMUGAM K K	HOD	BE
2.	RABERT A	LECTURER	BE
3.	ARUNKUMAR K	LECTURER	ME
4.	RAVINDRAN S	LECTURER	BE
5.	GOWTHAM S	LECTURER	ME
<b>ELECTRICAL AND ELECTRONICS ENGINEERING</b>			
1.	DURKAIYAN P	HOD	BE
2.	PRIYANKA N	LECTURER	BE
3.	VIGNESH M	LECTURER	ME
4.	POONGOTHAI V	LECTURER	BE
5.	UMESH S	LECTURER	ME
<b>ELECTRONICS AND COMMUNICATION ENGINEERING</b>			
1.	SARANYA R	HOD	BE
2.	ABIRAMI C	LECTURER	BE
3.	MURUGAN R	LECTURER	ME
4.	MOORTHY A	LECTURER	ME
5.	SHOBANA S	LECTURER	BE
<b>COMPUTER ENGINEERING</b>			
1.	PRAKADESWARAN S	PRINCIPAL	ME,(PHD)

2.	MANI P	HOD	MSC,PHD
3.	JAYACHANDRAN K	HOD	ME
4.	JANAGARATHINAM A G	LECTURER	ME
5.	MATHIYAZHAGAN M M	LECTURER	BE
6.	KARMUKILAN G R	LECTURER	ME
7.	JANAKI M	LECTURER	BE
<b>PETROCHEMICAL ENGINEERING</b>			
1.	VINOTHKUMAR K	HOD	ME
2.	GOPALAKRISHNAN V	LECTURER	MTECH
3.	SATHISHKUMAR K	LECTURER	BE
4.	AKILANDESWARI S	LECTURER	BTECH
5.	PRABHU K	LECTURER	BE
<b>8.</b>	<b>Profile of Principal</b>		
I.	Name	S.Prakadeswaran	
II.	Date of Birth	24-12-1986	
III.	Unique ID	1-43355922034	
IV.	Education Qualifications	ME,(PHD)	
V.	Work Experience	15 Years	
VI.	Teaching	15 Years	
VII.	Area of Specialization	Machine Learning, Computer Vision and Data Analytics	
VIII.	Courses taught at Diploma	<ol style="list-style-type: none"> <li>1. Computer Networks and Security.</li> <li>2. Computer Architecture.</li> <li>3. C Programming and Data structures.</li> <li>4. Python Programming.</li> <li>5. Data science and Big Data.</li> </ol>	
IX.	Research guidance (Number of Students)	8	
X.	No. of papers published in 1) National 2) International Journals	<ol style="list-style-type: none"> <li>1) 3</li> <li>2) 13</li> </ol>	
XI.	Master	Completed	
XII.	Ph.D.	Ongoing	
<b>9.</b>	<b>Fee</b>		
<b>i.</b>	<b>No. Of Fee Waivers Granted With Amount And Name Of Students</b>		
<b>S.No</b>	<b>Students Name</b>	<b>Programme with Year</b>	<b>Amount Waived</b>

1.	Dhavagurumani V	III –Computer Engineering	Rs. 2,000/-
2.	Menaka A	III – Electronics & Communication Engineering	Rs. 2,000/-
3.	Girija M	II –Civil Engineering	Rs. 2,000/-
4.	Naseera S	II –Computer Engineering	Rs. 2,000/-
5.	Mekala Priya S	II –Computer Engineering	Rs. 2,000/-
6.	Sandhiya M	II – Electronics & Communication Engineering	Rs. 2,000/-
7.	Dhana Sri S	II –Computer Engineering	Rs. 2,000/-
8.	Pavithra S	II –Computer Engineering	Rs. 2,000/-
9.	Maheshwari M	II –Computer Engineering	Rs. 2,000/-
10.	Dhana P	II –Computer Engineering	Rs. 2,000/-
11.	Indhumathi R	I–Computer Engineering	Rs. 2,000/-
12.	Indhu R	I –Computer Engineering	Rs. 2,000/-
<b>ii.</b>	<b>Number Of Scholarship Offered By The Institution, Duration And Amount</b>		
<b>S.No</b>	<b>Students Name</b>	<b>Prssogramme with Year</b>	<b>Amount Waived</b>
1.	Dhavagurumani V	III –Computer Engineering	Rs. 2,000/-
2.	Menaka A	III – Electronics & Communication Engineering	Rs. 2,000/-
3.	Girija M	II –Civil Engineering	Rs. 2,000/-
4.	Naseera S	II –Computer Engineering	Rs. 2,000/-
5.	Mekala Priya S	II –Computer Engineering	Rs. 2,000/-
6.	Sandhiya M	II – Electronics & Communication Engineering	Rs. 2,000/-
7.	Dhana Sri S	II –Computer Engineering	Rs. 2,000/-
8.	Pavithra S	II –Computer Engineering	Rs. 2,000/-
9.	Maheshwari M	II –Computer Engineering	Rs. 2,000/-
10.	Dhana P	II –Computer Engineering	Rs. 2,000/-
11.	Indhumathi R	I–Computer Engineering	Rs. 2,000/-
12.	Indhu R	I –Computer Engineering	Rs. 2,000/-

**10. Admission**

**i. Number Of Seats Sanctioned With The Year Of Approval**

2021-2022 to 2023-2024 DOTE APPROVAL STUDENT STRENGTH DETAILS										
S.NO	DEPARTMENT	2021-2022			2022-2023			2023-2024		
		Sanctioned Strength	I-YR	LE	Sanctioned Strength	I-YR	LE	Sanctioned Strength	I-YR	LE
1	CIVIL ENGINEERING	60	12	5	60	11	8	60	40	11
2	MECHANICAL ENGINEERING	120	38	12	120	43	9	120	120	11
3	AUTOMOBILE ENGINEERING	60	27	2	60	36	12	60	60	19
4	ELECTRICAL AND ELECTRONICS ENGINEERING	60	37	7	60	41	17	60	60	19
5	ELECTRONICS AND COMMUNICATION ENGINEER	60	17	4	60	38	3	60	60	28
6	COMPUTER ENGINEERING	60	40	11	60	52	14	60	60	17
7	PETROCHEMICAL ENGINEERING	60	0	0	60	0	0	60	0	0
	<b>TOTAL</b>	<b>420</b>	<b>171</b>	<b>41</b>	<b>420</b>	<b>221</b>	<b>63</b>	<b>420</b>	<b>400</b>	<b>105</b>

**ii. Number Of Students Admitted Under Various Categories Each Year In The Last Three Years**

**ADMISSION TO FIRST YEAR(REGULAR) DIPLOMA COURSES: 2023 - 2024**

**FORM - C**

**BOYS & GIRLS STATISTICS**

INSTITUTION CODE: 816

INSTITUTION NAME: SHREE VENKATESHWARA HI TECH POLYTECHNIC COLLEGE, ERODE

S.no	Branch Code	Branch Name	Shift	OC		BC		BCM		MBC/DNC		SCA		SC		ST		Total Admitted	
				B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
1	1010	CE	FIRST	3	0	10	1	0	1	7	4	5	2	4	3	0	0	29	11
2	1020	ME	FIRST	6	1	31	0	2	0	29	0	17	0	33	0	1	0	119	1
3	1021	AU	FIRST	0	0	17	0	1	0	19	0	9	0	14	0	0	0	60	0
4	1030	EE	FIRST	0	0	17	0	1	0	10	2	4	2	21	3	0	0	53	7
5	1040	EC	FIRST	0	0	14	6	6	0	6	3	8	6	6	5	0	0	40	20
6	1052	CE	FIRST	0	0	13	6	0	1	8	2	4	9	8	5	1	3	34	26
7	1075	PC	FIRST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total				9	1	102	13	10	2	79	11	47	19	86	16	2	3	335	65

**ADMISSION TO SECOND YEAR(LATERAL ENTRY) DIPLOMA COURSES: 2023 - 2024**

**FORM - C**

**BOYS & GIRLS STATISTICS**

**INSTITUTION CODE: 816**

**INSTITUTION NAME: SHREE VENKATESHWARA HI TECH POLYTECHNIC COLLEGE, ERODE**

S.no	Branch Code	Branch Name	Branch Type	OC		BC		BCM		MBC/DNC		SCA		SC		ST		Total Admitted	
				B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
1	1020	ME	FIRST	0	0	6	0	0	0	1	0	1	0	3	0	0	0	11	0
2	1021	AU	FIRST	0	0	0	0	0	0	1	0	0	0	10	0	0	0	11	0
3	1040	EC	FIRST	1	0	1	0	0	0	3	0	2	1	2	8	1	0	10	9
4	1052	CE	FIRST	0	0	1	2	0	1	0	3	0	0	3	9	0	0	4	15
5	1030	EE	FIRST	9	0	3	2	1	0	6	2	1	0	4	0	0	0	24	4
6	1075	PC	FIRST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	1010	CE	FIRST	12	3	1	0	0	0	0	0	0	0	1	0	0	0	14	3
Total				22	3	12	4	1	1	11	5	4	1	23	17	1	0	74	31

**ADMISSION TO FIRST YEAR(REGULAR) DIPLOMA COURSES: 2022 - 2023**

**FORM - C**

**BOYS & GIRLS STATISTICS**

**INSTITUTION CODE: 816**

**INSTITUTION NAME: SHREE VENKATESHWARA HI TECH POLYTECHNIC COLLEGE, ERODE**

S.no	Branch Code	Branch Name	Shift	OC		BC		BCM		MBC/DNC		SCA		SC		ST		Total Admitted	
				B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
1	1010	CE	FIRST	0	0	2	1	0	0	1	2	2	0	3	2	1	0	9	5
2	1020	ME	FIRST	0	0	11	0	2	0	13	0	7	0	17	0	0	0	50	0
3	1021	AU	FIRST	1	0	9	0	1	0	8	0	8	0	13	0	0	0	40	0
4	1030	EE	FIRST	1	0	11	0	0	0	12	1	6	1	18	3	0	0	48	5
5	1040	EC	FIRST	0	0	4	1	0	0	8	1	7	7	13	8	1	0	33	17
6	1052	CE	FIRST	0	1	12	5	2	1	8	6	5	2	8	8	0	0	35	23
7	1075	PC	FIRST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total				2	1	49	7	5	1	50	10	35	10	72	21	2	0	215	50

**ADMISSION TO SECOND YEAR(LATERAL ENTRY) DIPLOMA COURSES: 2022 - 2023**

**FORM - C**

**BOYS & GIRLS STATISTICS**

**INSTITUTION CODE: 816**

**INSTITUTION NAME: SHREE VENKATESHWARA HI TECH POLYTECHNIC COLLEGE, ERODE**

S.no	Branch Code	Branch Name	Branch Type	OC		BC		BCM		MBC/DNC		SCA		SC		ST		Total Admitted	
				B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
1	1010	CE	FIRST	2	2	2	0	0	0	1	0	0	0	0	0	1	0	6	2
2	1020	ME	FIRST	0	0	1	0	0	0	4	0	0	0	4	0	0	0	9	0
3	1021	AU	FIRST	2	0	3	0	0	0	6	0	0	0	1	0	0	0	12	0
4	1030	EE	FIRST	4	0	5	0	0	0	5	2	0	0	0	1	0	0	14	3
5	1040	EC	FIRST	0	0	0	1	0	0	0	0	0	0	2	0	0	0	2	1
6	1052	CE	FIRST	1	0	5	1	0	0	0	0	0	2	2	3	0	0	8	6
7	1075	PC	FIRST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total				9	2	16	2	0	0	16	2	0	2	9	4	1	0	51	12



**ADMISSION TO FIRST YEAR(REGULAR) DIPLOMA COURSES: 2021 - 2022**

**FORM - C**

**BOYS & GIRLS STATISTICS**

**INSTITUTION CODE: 816**

**INSTITUTION NAME: SHREE VENKATESHWARA HI TECH POLYTECHNIC COLLEGE, ERODE**

S.no	Branch Code	Branch Name	Shift	OC		BC		BCM		MBC/DNC		MBC-V		MBC-O		SCA		SC		ST		Total Admitted	
				B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
1	1010	CE	FIRST	2	0	5	0	0	0	0	0	0	0	3	0	0	0	4	0	0	0	14	0
2	1020	ME	FIRST	2	0	13	0	1	0	0	0	3	0	7	0	2	0	13	0	0	0	41	0
3	1021	AU	FIRST	1	0	7	0	1	0	0	0	3	0	9	0	1	0	8	0	0	0	30	0
4	1030	EE	FIRST	4	0	8	0	0	0	0	0	2	2	2	2	7	0	7	4	1	0	31	8
5	1040	EC	FIRST	0	0	7	0	0	0	0	0	1	0	1	1	0	2	4	2	0	0	13	5
6	1052	CE	FIRST	0	0	3	2	0	1	0	0	1	0	2	0	1	2	6	18	0	6	13	29
7	1075	PC	FIRST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total				9	0	43	2	2	1	0	0	10	2	24	3	11	4	42	24	1	6	142	42

**ADMISSION TO SECOND YEAR(LATERAL ENTRY) DIPLOMA COURSES: 2021 - 2022**

**FORM - C**

**BOYS & GIRLS STATISTICS**

**INSTITUTION CODE: 816**

**INSTITUTION NAME: SHREE VENKATESHWARA HI TECH POLYTECHNIC COLLEGE, ERODE**

S.no	Branch Code	Branch Name	Branch Type	OC		BC		BCM		MBC/DNC		MBC-V		MBC-O		SCA		SC		ST		Total Admitted	
				B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
1	1010	CE	FIRST	2	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	5	0
2	1020	ME	FIRST	0	0	1	0	0	0	0	0	6	0	3	0	1	0	2	0	0	0	13	0
3	1021	AU	FIRST	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0
4	1030	EE	FIRST	1	0	1	1	0	0	0	0	0	0	1	0	0	1	1	2	0	0	4	4
5	1040	EC	FIRST	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
6	1052	CE	FIRST	0	0	0	0	0	1	0	0	0	1	0	1	0	1	3	4	0	0	3	8
7	1075	PC	FIRST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total				3	0	4	1	0	1	1	0	6	1	6	1	1	2	8	8	0	0	29	14

**iii. Number Of Applications Received During Last Year For Admission Under Management Quota And Number Admitted**

Number Of Applications Received

Number Of Students Admitted

190

190

**11. Admission Procedure**

i). Mention The Admission Test Being Followed, Name And Address Of The Test Agency / State Admission

ii). Number Of Seats Allotted To Different Test Qualified Candidate Separately (AIEEE /JEE / CET (State Conducted Test/ University Tests/ CMAT)/ Association Conducted Test Etc.)

iii). Calendar For Admission Against Management Quota Seats:

iv). Last Date Of Request For Applications

v). Last Date Of Submission Of Applications

vi). Dates For Announcing Final Results

vii). Release Of Admission List (Main List And Waiting List Shall Be Announced On The Same Day)

viii). Date For Acceptance By The Candidate (Time Given Shall Innocase Be Less Than 15 Days)

As guided by the Directorate of Technical Education, Chennai

ix).	Last Date For Closing Of Admission & Starting Of The Academic Session	
x).	The Waiting List Shall Be Activated Only On The Expiry Of Date Of Main List	
xi).	The Policy Of Refund Of The Fee, In Case Of Withdrawal, Shall Be Clearly Notified	

<b>12</b>	<b>Information of Infrastructure and Other Resources Available</b>
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<b>1)</b>	<b>Number of Class Rooms and size of each</b>
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S.No	Room Type	Room No	Size in Meter	Room Size in Sq.M
1	Class Room	201	9.68*8.23	79.66
2	Class Room	202	9.68*8.23	79.66
3	Class Room	204	9.68*8.23	79.66
4	Class Room	205	9.68*8.23	79.66
5	Class Room	207	9.68*8.23	79.66
6	Class Room	208	9.68*8.23	79.66
7	Class Room	211	10.06*8.23	82.79
8	Class Room	212	10.06*8.23	82.79
9	Class Room	214	9.94*8.23	81.8
10	Class Room	215	10.06*8.23	82.79
11	Class Room	217	9.82*8.23	80.81
12	Class Room	301	9.68*8.23	79.66
13	Class Room	302	9.68*8.23	79.66
14	Class Room	307	9.68*8.23	79.66
15	Class Room	308	9.68*8.23	79.66
16	Class Room	311	10.06*8.23	82.79
17	Class Room	312	10.06*8.23	82.79
18	Class Room	314	9.94*8.23	81.8
19	Class Room	315	10.06*8.23	82.79
20	Class Room	317	9.82*8.23	80.81
21	Class Room	318	9.94*8.23	81.8

<b>2)</b>	<b>Number of Tutorial rooms and size of each</b>
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S.No	Room Type	Room No	Size in Meter	Room Size in Sq.M
1	Tutorial Room	304	4.30*8.23	35.38
2	Tutorial Room	304 A	4.30*8.23	35.38
3	Tutorial Room	305	4.30*8.23	35.38
4	Tutorial Room	305 A	4.30*8.23	35.38

<b>3) Number of Laboratories and size of each</b>					
	<b>S.No</b>	<b>Room Type</b>	<b>Room No</b>	<b>Size in Meter</b>	<b>Room Size in Sq.M</b>
	1	Eng Comm Lab	105	10.01*8.23	82.38
	2	Physics Lab	107	20.23*8.23	166.49
	3	Chemistry Lab	1	23.5*8.23	193.4
	4	EEE Lab -Machines	2	27.03*8.23	222.45
	5	EEE Lab -Circuits	2A	20*8.23	164.6
	6	Auto Lab	8	33.52*8.23	275.86
	7	Engines Lab	WS-01	9.14*18.28	167.07
	8	Fluid Mechanics Lab	WS-02	9.14*18.28	167.07
	9	Material Testing Lab	WS-03	9.14*18.28	167.07
	10	Lathe Section	WS-04	9.14*18.28	167.07
	11	Measurements and Metrology Lab	WS-04 A	8.53*5.18	44.18
	12	Special Machines - I	WS-05	9.14*18.28	167.07
	13	Additional Workshop	WS-06	9.14*18.28	167.07
	14	CAD Centre	WS-07	9.14*18.28	167.07
	15	E-Vehicle Lab	WS-08	9.14*18.28	167.07
	16	Distillate Testing Lab	WS-11	9.14*15.24	139.29
	17	Unit Operations Lab	WS-12	9.14*15.24	139.29
	18	Civil Engineering Lab	WS-13	9.14*15.24	139.29
	19	Electronics Lab	WS-14	9.14*15.24	139.29
	20	Communication Lab	WS-15	9.14*15.24	139.29
	21	Foundry and Welding	WS-16	9.14*15.24	139.29
	22	Workshop	WS-17,18	18.28*15.24	278.58
	23	Hardware Lab	218	9.94*8.23	81.8
<b>4) Number of Computer Centres with capacity of each</b>					
	<b>S.No</b>	<b>Room Type</b>	<b>Room No</b>	<b>Size in Meter</b>	<b>Capacity</b>
	1	Computer Centre - I	108	20.14*8.23	66
	2	Computer Centre - II	109	20.14*8.23	66
<b>5) Central Examination Facility, Number of rooms and capacity of each</b>					
	<b>S.No</b>	<b>Room Type</b>	<b>Room No</b>	<b>Size in Meter</b>	<b>Room Size in Sq.M</b>
	1	Class Room	201	9.68*8.23	79.66
	2	Class Room	202	9.68*8.23	79.66
	3	Class Room	204	9.68*8.23	79.66

	4	Class Room	205	9.68*8.23	79.66
	5	Class Room	207	9.68*8.23	79.66
	6	Class Room	208	9.68*8.23	79.66
	7	Class Room	211	10.06*8.23	82.79
	8	Class Room	212	10.06*8.23	82.79
	9	Class Room	214	9.94*8.23	81.8
	10	Class Room	215	10.06*8.23	82.79
	11	Class Room	217	9.82*8.23	80.81
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	14	Class Room	307	9.68*8.23	79.66
	15	Class Room	308	9.68*8.23	79.66
	16	Class Room	311	10.06*8.23	82.79
	17	Class Room	312	10.06*8.23	82.79
	18	Class Room	314	9.94*8.23	81.8
	19	Class Room	315	10.06*8.23	82.79
	20	Class Room	317	9.82*8.23	80.81
	21	Class Room	318	9.94*8.23	81.8
	22	Drawing Hall	7	18.4*8.23	151.4
	23	Seminar Hall	310	17.00*8.84	150.28
6)	Online examination facility (Number of Nodes, Internet band width, etc.)			162 Nodes & 300 Mbps	
7)	Barrier Free Built Environment for disabled and elderly persons			Yes	
8)	Fire and Safety Certificate				

**TAMILNADU FIRE - RESCUE SERVICES  
FORM OF FIRE SERVICE LICENSE**

Under Section 13 of the Tamil Nadu Service Act No. 40 of 1985 and with Tamil Nadu  
Fire Service Rules 1990 – Appendix – III

Office of the District Office  
Fire - Rescue Services  
Erode District, Erode

License: 267 / 2024  
K.Dis : 3274/ C1 / 2024  
Your Ref. No : Nil / 2024 Date : 03.04.2024

Date : 08-04-2024

Date of inspection 04.04.2024 inspected by Station Officer (Transport), Gobichettipalayam License is hereby granted under section 13 of the Tamil Nadu Fire Service act, 1985 for running Polytechnic College in the name of M/s.SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE within the jurisdiction of Gobichettipalayam at the premises S.F.No.1218/03, 1223/1-10, 1224/1-18 Sri Kalaivani Nagar, Othakuthirai, K.Mettupalayam (Po) Gobichettipalayam, Gobichettipalayam Taluk, Erode District. subject to the conditions noted there on and such other condition as may be prescribed.

CONDITIONS

1. ( As per Col . 13 to Appendix V to the Rules under Section 13 of the Act )
2. This License is valid for one year from the date of issue.
3. The Applicant will also get permission / No objection Certificate from other Departments, if necessary.
4. If any extension or alteration is made in the existing building and also for changing of present business will also apply & get separate permission.
5. Height of the building **44 Feet (14.33 Mtrs)**
6. Installed the fire fighting Equipment should be maintained properly.
7. Transparent Fire Retardant Coating of 1 meter shall be applied on all electrical Cables at Termination in Electrical Pannels as per Section 3.2 of BIS 12459 : 1988
8. If any deviation for the Above conditions the licence automatically Cancelled

( Official Seal with Date )



*(Signature)*  
**DISTRICT OFFICER  
FIRE AND RESCUE SERVICE  
ERODE DISTRICT,  
ERODE.**

To

M/s.SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE  
S.F.No.1218/03, 1223/1-10, 1224/1-18 Sri Kalaivani Nagar,  
Othakuthirai,  
K.Mettupalayam (Po)  
Gobichettipalayam,  
Gobichettipalayam Taluk,  
ERODE DISTRICT.

9)	Hostel Facilities	Boys Hostel-100 Rooms Girls Hostel-90 Rooms (4 persons per room)
10)	Number of Library books/ E-books/Titles / Journals available ( Programme-wise)	

**Shree Venkateshwara Hi-Tech Polytechnic College Gobi - 638455****Department Of Central Library****Details Of Hard Copy Of National & International Journals - 2024**

<b>S.No</b>	<b>Journals Name</b>	<b>Periodicity</b>	<b>Branch</b>
<b>I.Printed Journals</b>			
1	Current Science	Fortnightly	BS
2	Resonance	Monthly	BS
3	Iete Journal Of Research	Bi-Monthly	ECE
4	Iete Technical Review	Bi-Monthly	ECE
5	Journal Of Scientific & Industrial Research	Monthly	MECH
6	Indian Journal Of Engineering Material Science	Bi-Monthly	MECH
7	Ictact Journal On Image And Video Processing	Quarterly	ECE
8	Ictact Journal On Soft Computing	Quarterly	AIML
9	Ictact Journal On Microelectronics	Quarterly	ECE
10	Ictact Journal On Communication Technology	Quarterly	ECE
11	Indian Journal Of Computer Science	Bi-Monthly	CSE
12	Journal: International Association On Electricity Generation Transmission & Distribution	Half Yearly	EEE
13	Cigr India Journal	Half Yearly	EEE
14	Power Engineer Journal	Half Yearly	EEE
15	Indian Journal Of Geosynthetic And Ground Improvement	Half Yearly	CIVIL
16	Incold Journal - (Technical Journal Of Indian Committee On Large Dams)	Half Yearly	CIVIL
17	Tai Journals (Tunnelling Association Of India)	Half Yearly	CIVIL
18	The Journal Of The English Language Teaching	Bi-Monthly	BS
19	Journal Of Engineering In Industrial Research	Quarterly	MECH

20	Indian Journal Of Biotechnology	Quarterly	MLT
21	Global Journal Of Structural Design And Construction	3 Months	CIVIL
22	Global Journal Of Computer And Internet Security	3 Months	CSE
23	Journal Of Current Development In Artificial Intelligence	3 Months	AIML
24	Global Journal Of Advanced Computer Science And Technology	3 Months	CSE
25	International Journal Of Advance Computational Engineering And Networking	3 Months	CSE
26	Journal Of Biotechnology And Bioengineering Research	3 Months	MLT
27	Journal Of Industrial And Mechanical Engineering	3months	MECH
28	Indian Journal Of Industrial &ProductioEngg. & Technology	Annual	PETRO
29	Indian Journal Of Industrial Engineering And Technology	Annual	PETRO

**Branch wise periodicals subscription details (Printed)**

S.No	BRANCH	JOURNALS	TOTAL
1.	MECH & AUTO	4	4
2.	CIVIL	4	4
3.	EEE	3	3
4.	ECE	5	5
5.	CSE	4	4
6.	BS	3	3
7.	Petro	2	2
8.	MLT	2	2
9.	AIML	2	2
	<b>TOTAL</b>	<b>29</b>	<b>29</b>

11) List of online National/International Journals subscribed

S.No	Journals Name
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1	Current Science
2	Resonance
3	Iete Journal Of Research
4	Iete Technical Review
5	Journal Of Scientific & Industrial Research
6	Indian Journal Of Engineering Material Science
7	Ictact Journal On Image And Video Processing
8	Ictact Journal On Soft Computing
9	Ictact Journal On Microelectronics
10	Ictact Journal On Communication Technology
11	Indian Journal Of Computer Science
12	Journal: International Association On Electricity Generation Transmission & Distribution
13	Cigrg India Journal
14	Power Engineer Journal
15	Indian Journal Of Geosynthetic And Ground Improvement
16	Incold Journal - (Technical Journal Of Indian Committee On Large Dams)
17	Tai Journals (Tunnelling Association Of India)
18	The Journal Of The English Language Teaching
19	Journal Of Engineering In Industrial Research
20	Indian Journal Of Biotechnology
21	Global Journal Of Structural Design And Construction
22	Global Journal Of Computer And Internet Security
23	Journal Of Current Development In Artificial Intelligence
24	Global Journal Of Advanced Computer Science And Technology
25	International Journal Of Advance Computational Engineering And Networking
26	Journal Of Biotechnology And Bioengineering Research

	27	Journal Of Industrial And Mechanical Engineering	
	28	Indian Journal Of Industrial & Productio Engg. & Technology	
	29	Indian Journal Of Industrial Engineering And Technology	
12)	National Digital Library (NDL) subscription details		Subscribed
13)	List of Major Equipment/Facilities in each Laboratory/Workshop		
<b>Department Of Basic Engineering</b>			
<b>Physics Lab</b>			
<b>List Of Equipments</b>			
<b>S.No</b>	<b>Equipments</b>	<b>Specifications</b>	<b>Qty</b>
1	Ammeter	5 amp	25
2	Ammeter (milliamp)	5 amp	5
3	Battery (Eliminator)	12 volt	20
4	Bred board	Bred board	10
5	Bar magnet	Bar magnet	7
6	Boyles law quill tube appts	-	3
7	Burette stand	-	10
8	Compass box	Compass box	5
9	Cutting plier	-	1
10	Compound pendulum steel	-	4
11	Deflection magnetometer	-	7
12	Digital balance	-	1
13	D.P.D.T Switches	-	5
14	Daniel cell	-	4
15	Galvanometer	-	5
16	Glamp	-	5

17	Hammer	-	5
18	Joules Calorimeter	-	9
19	Knife Edge	-	10
20	Lechlance cell	-	4
21	Logic gate kit	-	6
22	Meter scale ss	-	5
23	Meter bridge	-	5
24	Potentiometer	-	4
25	P N junction	-	7
26	Plug key	-	10
27	Surface tension pointer	-	5
28	Resistance box	2D,1	10
29	Rheostate	1.8 amps	5
30	Resistance box	4-D,1k,10k,100k,1000k	7
31	Rheostate	3.3 amps	10
32	Resistance coil	1 ohm	15
33	Simple pendulum bob	-	6
34	Solar cell kit	-	11
35	Sonometer	-	8
36	Standard weights	500g	10
37	Stop watch	-	12
38	Screw gauge	Normal	25
39	Simple pendulum Clamp	-	10
40	Slotted weights	50g	15
41	Stop clock	Digital	5
42	Spectrometer	6-SS scale	8

43	Tuning forks	-	1
44	Travelling microscope	-	8
45	Thermometer	110° c	10
46	Tools box	-	1
47	Torsion pendulum	-	5
48	Voltmeter	10 volt	15
49	Vernier caliper	Normal	20
50	Voltmeter (milliamp)	5 volt	5
51	V – shaped stand	-	8
52	White board and Clamp	-	5
53	Wire cutter	-	1
54	Wooden meter scale	1 metre	10
55	Sodium Vapour lamp	35 watts	8
56	Sodium Vapour lamp Transformer	-	8
57	Sodium Vapour lamp wooden box	-	8
58	Spectrometer Wooden guard	-	4
59	Slotted weight	5x500g	3
60	Spring constant apparatus	-	3

**Department Of Basic Engineering**

**Chemistry Lab**

**List Of Equipments**

S.No	Equipments	Specifications	Qty
1	PH Meter	Elico –Li12o	3
			1
2	Burette stand with clamp	-	50

			5
			15
3	TDS Meter	-	3
4	Copper water bath	-	40
			25
5	Electronic Balance	-	1
6	Gas line LPG	-	1
7	Wooden rack	-	22
8	H <sub>2</sub> S apparatus	-	1
9	Spatula	-	50
			10
			25
10	Test tube Stand	Plastic	35
			20
11	Tripod Stand	-	55
			15
			10
12	Test tube Stand - wood	-	45
			30
13	Test tube Stand - Aluminium	Aluminium (19mm)	15

**Department Of Basic Engineering**

**Communication English Lab**

**List Of Equipments**

S.No	Equipments	Specifications	Qty
1	Sony Bravia 40 Inch Lcd With Wallmount	-	1

			1
2	Sony Dvd With 5.1 Home Theatre	-	1
			5
			15
3	Mike ( Wired & Wireless )	-	1

**Department Of Basic Engineering**

**Workshop Lab**

**List Of Equipments**

S.No	Equipments	Specifications	Qty
1	Hand Shearing Machine	5mm Cap Heavy Duty	1
2	Anvil	50kg C . I	5
3	Caliper	Inside/Outside/Odd Leg	30(Each 30 )
4	Hand Hacksaw Frame	Heavy Fix	31
5	Flat File	10 " Smooth	13
		10 " Rough	13
		12 " Rough	20
		12 " Smooth	20
6	Half Round File	6 "	40
		8 "	20
7	Try Square	100 Mm	41
8	Scriber	150 Mm	40
9	Punch	Pin / Centre / Prick 100 Mm	30 No' S Each
10	Hammer	1 Lbs With Handle	5
11	Tap Wrench&Die Wrench	½ "	5
12	Bench Vice	4 "	20

		6"	4
14	Hand Operated Bending Tool	½ " To 1 "	2
15	Try Square	150 Mm	5
16	Measuring Tape	3 Meters	5
17	Junior Hacksaw Frame	Small	5
18	Pipe/Tupe Cutter	2 " Cap	2
19	Water Meter	½ "	5
20	Grip Plier	-	5
21	Slip Joint Plier	-	5
22	Screw Driver	12 "	5
23	Double End Spanner	6 To 32 Mm	2set
24	Jumber Bit	½ "	5
25	Flat Chisel	6 "	5
26	Sledge Hammer	2 Lbs	5
27	Pipe Vice	2 "	2
28	Pipe Wrench	18 Posh Crv Steel	5
29	Shifting Spanner	12 "	5
30	Wire Brush	-	5
31	Cutting Plier	8 "	20
32	Wire Cutter	-	10
33	Screw Driver	10 "	15
34	Tester	250 V	15
35	Screw Diver Set	-	5
36	Cross Pein Hammer	¼ Lbs	5
37	Poker	-	5
38	Multi Meter	Digital	5

39	Round File	8 "	20
40	Triangular File	8 "	20
41	Square File	8 "	20
42	Round Block	-	16
43	Steel Rule	1'	30
44	Pillar Drilling Machine	25 Mm Cap	1
45	Wood Working Vice	7 "	2
46	Hand Saw	18 "	5
47	Carpentry Chisel	25 Mm	10
48	Carpentry Chisel	12 Mm	10
49	Mortise Chisel	12 Mm	5
50	Wooden Mallet	72 Dia	3
51	Carpentry Plane	7 " Length	3
52	DVR	-	2
53	SMPS	-	2
54	Water Heater	3 Lit	1
55	Self Priming Motor	0.5 Hp	4
56	Camera	2 Mega Pixel	4

**Department Of Civil Engineering**

**Construction Practice Lab**

**List Of Equipments**

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Lechatlter Flask	500ml (Borostlicategla)	2
2	Crucible	25ml	5
3	China Dish	Porcelin	5



4	2180-Cone Imhoff	Blunt Tip (Borosilr)	1
5	Jackson Turbidity Meter	Turbidity Meter	1
6	Weighing Balance 'Wensler' Make	Capacity ; 10 Kg Accuracy ; 0.5 Grm	1
		Capacity ; 3 Kg Accuracy ; 0.1 Grm	2
		Capacity ; 50 Kg Accuracy ; 5 Grm	1
7	Hot Air Oven	Scientek Make Size 455x455x455 Mm	1
8	Muffle Furnance	Scientek Make Size 5"X5"X10"	1
9	Steel Scale	-	3
10	Pycnometer	1kg Capacity Of Glass Jar	7
11	Casagrande Liquid Limit Apparatus	Liquid Limit Device, Supplied Complete With Grooving Tool Type 'Astm' And Gauging Block As Per Is: 9259 Is: 2720 (Part-V).	3
12	Compaction Hammer	Light Mode Of Ms	2
13	Proctor Compaction Mould	Compaction Factor Apparatus Mould 100mm Dia Height 127.3 Mm 1000 Ml Volume	2
14	Direct Shear Test Apparatus With Accessories (Hand Operated)	Direct Shear Apparatus (Motorised) Loading Unit Normal Stress Capacity Is 8 Kg/Cm	1
15	Sand Pouring Cylinder	Cylinder 115 Mm Dia With Container Meter Tray Is 2720 Part (Xxvii)	2
16	Deval's Attrition Testing Machine	Attrition Testing Machine Two Hollow Cast Iron Cylinder Is 2386 (Part Iv)	1
17	Dorry Abrasion Testing Machine	Abrasion Testing Machine Bs 812-1967 A Circular Disc Mounted On A Reduction Gear Drive By Electric Motor	1
18	Aggregate Crushing Apparatus	Aggregate Crushing Value Apparatus @ 152 Mm Dia Cylinder Is 2366-Part Iv	2
19	Aggregate Impact Apparatus	A Heavy Circular Base With Cross Bar At Top & Tamping Rod	1
20	Field Density Kit(Core Cutter Apparatus)	Cylindrical Core Cutter 100mm Dia & Steel Rod	2

21	Plastic Limit Apparatus	Plastic Limit Apparatus Porcelain Evaporating Dish With 150mm Long Glass Plate. Conforming To Is: 2720 (Part V)	2
22	Measuring Jar	Measuring Jar 10 Ml	2
		Measuring Jar 50 Ml	2
		Measuring Jar 100 Ml	2
		Measuring Jar 500 Ml	2
		Measuring Jar 1000 Ml	2
23	Standard Test Sieve - Gi	Gi (300mm) Dia, Size 80, 40, 25, 20, 16, 12.5, 10, 4.75 Mm, Pan & Lid	10
24	Standard Test Sieve -Brass	Size 4.75,2.36,1.18 Mm, 600 $\mu$ , 425 $\mu$ , 300 $\mu$ , 150 $\mu$ & Micro Lid & Pan	8
25	Standard Test Sieve -	90 $\mu$ Sieve Brass	1
		20cm Dia 90 $\mu$ &L/P	2
26	Fine Aggregate Test Sieve	Size 10,4.75,2.36,1.18 Mm, 600 $\mu$ , 300 $\mu$ , 150 $\mu$ & Pan & Lid	1
		20cm Dia 4.75,2.36, 1.18 Mm, 600 $\mu$ , 300 $\mu$ , 150 $\mu$	6
27	Coarse Aggregate Test Sieve	Size 80,40,20,10,4.75 Mm, Lid & Pan	1
		30cm Dia Size 80,40,20,10,4.75 Mm, Lid & Pan	6
28	Cube Mould	150mm X 150mm X 150mm	12
29	Flakiness Apparatus	As Per IS 2386 (Part I). Used To Determine Flakiness Index Of The Aggregate. The Aggregate Particles Are To Be Flaky, If Their Thickness Is Less Than 0.6 Of Their Normal Size. It Consists Of A Frame With Fixed Panel With Accurate Slots Of Standard Width And Length, The Complete Assembly Is Chrome Plated.	1
	Flakiness Gauge	-	2
30	Elongation Apparatus	As Per IS 2386 (Part I). Used To Determine Flakiness Index	1

		Of The Aggregate. Aggregate Particles Are Considered Elongated When Their Length Is More Than 1.8 Of The Normal Size. It Consists Of A Hard Wood Base With Vertically Mounted Metal Studs As Per IS Specifications. The Apparatus Consists Of Standard Length Gauge Of IS Sieve Sizes- 50mm,40mm,25mm,20mm, 16mm,12.5mm,10mm And 6.3 Mm	
	Elongation Gauge	-	2
31	Sieve Shaker	MOTORISED Sieve Shaker	1
32	Slump Cone Apparatus	AS Per IS 1199, IS 7320 Specification: The Slump Cone In These Slump Test Apparatus Is Filled With Freshly Mixed Concrete And Tamped With A Tamping Rod In Three Or Four Layers. The Top Of The Concrete Is Leveled Off With The Top Of The Slump Cone, The Cone Is Lifted Vertically Up And The Slump Of The Sample Is Immediately Measured. The Comprises Of A Steel Octagon Base Plate (8 Faces) With Carrying Handle, Graduated Tamping Rod 16mm Dia X 600 Mm Long With One Bullet End, Slump Cone Having Base 200mm, Height 300mm Fitted With Handle.	5
33	Compaction Factor Apparatus	As Per IS: 5515. Apparatus Is Complete With Hoppers And Receiver Assembly. Built On A Rigid And Stable Frame Consists Of Two Conical Hoppers, Each With A Hinged Trap Door. Trap Door Is Operated By A Quick Release Mechanism To Allow A Free Fall To The Released Concrete Mix Sample. A Cylindrical Mould Is Fitted Beneath The Two Hoppers. Hoppers And Receiver Can Be Easily	1

		Removed For Cleaning.	
34	Vee Bee Consistometer	As Per IS: 1199. The Instrument Comprises Of A Slump Cone With A Hopper, Specimen Container, A Transparent Plastic Plate Attached To A Graduated Rod, Mounted On A Vibrating Table And A Tamping Rod 16mm Dia X 600mm Long. The Vibrating Table Has Fixed Amplitude And Frequency Of Vibration, Imparted By A Motor Drive Mechanism.	1
35	Rebound Hammer	-	1
36	Angularity Number Test	-	1

**Department Of Civil Engineering**

**Materials Testing-II**

**List Of Equipments**

<b>S.No</b>	<b>Description Of The Machinery / Equipment Etc.,</b>	<b>Specification</b>	<b>Qty</b>
1	Tape	30m	1
2	Spade	Spade	2
3	Trowel	Trowel	5
4	Pan	Pan	5
5	Waste Cloth	Waste Cloth	1
6	Lock	Lock	1
7	Cutting Plier	Cutting Plier	
8	Screw Driver	Screw Driver (2x1)(Ta)	1
9	Spanner	12x13 Die	2

**Department Of Civil Engineering**

**Surveying Laboratory**

<b>List Of Equipments</b>			
<b>S.No</b>	<b>Description Of The Machinery / Equipment Etc.,</b>	<b>Specification</b>	<b>Qty</b>
1	GPS	Hand held GPS Garmin E Trex 10 with manual	1

**Department Of Mechanical Engineering**

**Engines Laboratory**

**List Of Equipments**

<b>S.No</b>	<b>Description Of The Machinery / Equipment Etc.,</b>	<b>Specification</b>	<b>Qty</b>
1	Open Cup Apparatus	-	2
2	Closed Cup Apparatus	-	2
3	Redwood Viscometer	-	2
4	Saybolt Viscometer	-	2
5	Two Stroke Petrol Engine Cut Section	-	2
6	"Four Stroke Petrol Engine CutSection"	-	2
7	"Four Stroke Diesel Engine Cut Section"	-	2
8	Two Stroke Petrol Single Cylinder Engine	-	1
9	Four Stroke Petrol Single Cylinder Engine	-	1
10	Four Stroke Diesel Single Cylinder Engine	-	2
11	Four Stroke Petrol Multi Cylinder Engine	Heat Balance Testand Morse Test Arrangement On Four Stroke Petrol Multi Cylinder Engine Hm Make,4 Cylinder,MpfiModel,Rope Brake Dynemometer	1
	Four Stroke Petrol Multi Cylinder Engine	Heat Balance Testand Morse Test Arrangement On Four Stroke Petrol Multi Cylinder Engine Hm Make,4 Cylinder,MpfiModel,Rope Brake Dynamometer	1
12	Air Compressor	Load Test On Air Compressor Elgi 2 Stage	1

13	Stop Watch	Stop Watch Digital	8
14	Thermometer	Thermometer	2
15	Morse Test	Morse Test Arrangement On Four Stroke Diesel Multi Cylinder Cycle HM Make,4cylinder,Rope Brake Dynamometer	1

**Department Of Mechanical Engineering**

**Fluid Mechanics Laboratory**

**List Of Equipments**

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Gunmetal Venturimeter	25mmsize,B Class Gl Pipe With Pressure Distribution Manifold,Fcv,ManometerKrilos ar 1/2hp Pump,SumpTanksize. 2000x500x300mm Collecting Tank Size 500x500x600 Mm	1
2	Gunmetal Orificemeter	25mmsize,B Class Gl Pipe With Pressure Distribution Manifold,Flowcontrolvalve,ManometerKrilosar 1/2hp Pump,SumpTanksize. 2000x500x300mm Collecting Tank Size 500x500x600 Mm	1
3	Eureka Flow Meter Rotometer	2-20,Ms Measuring Tank Size-400x300x600mm Ms Sump Size 1500x300x30mm , 0.5 Hp Taxmo Motor	1
4	Flowthrough Notches Apparatus	Rectangular NotchvNotch,Trapezoidal Notch, Hook Gauge With Vernier Gauge Arrangement,GearOperated,Kil oskar 1/2 Hp Pump,Sump Tank; 2000x500x300mm Collecting Tank;500x500x500mm Notch Tank;200x200x1500mm	1
5	Mouthpiece Apparatus	Sump Tank 2000x500x300mm Collecting Tank 500x500x500mm	1
6	Pipe Friction Apparatus	B Class Gi Pipe Of 15 And 20mm With Pressure Tapping At 2m Distance Pressure	1

			Distribution Manifold 1m Length Manometer, Kirloskar 0.5hp Pump, Sump Tank 2000x500x300mm Collecting Tank 500x500x600mm	
7	Bernoulis Apparatus		0.5 Hp Pump, Sump Tank Size 2000x500x300mm Connecting Tank 500x500x600mm Stabilizing Tank Size 200x200x750mm	1
8	"Reciprocating Pump Testrig"		1x3/4 Double Acting Piston Pump, Kirloskar 1hp Motor, 1440rpm, 3 Phase Sump Tank Size 2000x500x300mm Collecting Tank 500x500x600mm L&T Starter Energy Meter	1
9	"Centrifugal Pump Test Rig"		Kirloskar Pump, 1x1" Single Stage 1hp, B Class Pipes With Fittings Lining Sump Tank Size 2000x500x300mm Collecting Tank Size 500x500x600mm L&T Starter, Energy Meter	1
10	Flowing Through Orifice Meter		Orifice 10mm, 12mm, 15mm, Size Hook Gauge With Gear Arrangement Vernier Scale For X And Y axis Measurement, Sump Tank Size 2000x500x300mm Collecting Tank Size 500x500x500mm Kirloskar 1/2hp Pump	1
11	Kaplan Turbine Test Rig		Turbine Output 1hp Cast Iron Body, Cast Iron Break Drum Of 200mm With Water Cooling, Kirloskar Pump 2000lpm At 6m Head, Tank Size; 1500x500x500mm Main Switch L&T Starter, And Energy Meter	1
12	Francis Turbine Test Rig		Turbine Output 1hp Cast Iron Body, Cast Iron Break Drum Of 200mm With Water Cooling, Kirloskar Pump 5hp 2880 Rpm 3 Phase Size 100x100mm With Discharge 750lpm At 15m Head, Tank Size; 1500x500x500mm, Main Switch L&T Starter And Energy Meter	1
13	Pelton Turbine Test Rig		Turbine Output 1hp, The Cups And Nozzle Made Gunmetal Casting, Cast Iron Break Drum	1

			Of 200mm With Water Cooling,Kirloskar 5hb Pump 2880 Rpm 3 Phase Size 2 1/2x2 With Discharge 300 Lpm At 35m Heat,Tank Size 1500x500x500mm,Main Switch L&T Starter And Energy Meter	
14	Fluidised Bed Apparatus		It Consists Of A Supply Tank Of Mild Steel With Fiber Glass Lining A Small Ss Vessel For The Supply With Glass Bits Heights Of 1200 Rpm And 50mm Dia With Plated Flanged End Suitable Ms Stand To Vertically Mount The Unit,Mano Meter	1
15	Flow Through Packed Bed		It Consists Of Tube Of 65mm, Inner Diameter And 1200mm Height Packed With Glass Ball With Plated Flanged End Suitable Ms Stand Vertically Mount The Unit 1" Water Inlet/Outlet Connection,Connected To Manometer	1
15	Flow Through Helical Coil Apparatus		-	1

**Department Of Mechanical Engineering**

**Foundry And Welding Laboratory**

**List Of Equipments**

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Goggles	Goggle (Welding Safety Equipment)	5
			-
		Suntech Goggles Black	6
			-
2	Filler Rod	Filler Rod (Gas Welding Rod)	20
			-
		Welspring Filler Rod 2.4mm	10



			-
		Filler Rod	25
3	Work Piece (M.S Plate)	50×6 Mm M.S Plate	7
			2
			-
		50×3 Mm M.S Plate	6
			5
			2
		50×3 Mm M.S Plate	12
			6
			8
		50×6 Mm M.S Plate	4
4	Gas Welding Hose	Gas Welding Hose Red & Blue	20meter
		Gas Welding Hose Red & Blue	24meter
		Coolant Tube	5meter
5	Welding Shield	Prenav Welding Helmet	5
			4
6	Gloves	Gold Finger Leather Gloves 18 Inch	10
			10
			8
7	Chipping Hammer	Weld Spring Chipping Hammer	6
		Chipping Hammer-2	8
			7
8	Welding Electrode	Number 1 Welding Electrode 10 - Sws Ms 6013	24
			24

			15
			11
9	Welding Nipple	Nut Nipple Brass 8mm	-
		8mm T Joint Nipple	-
10	Clamping Screw	Clamping Screw	10
11	Welding Base Plate	2×2 Feet Plate	4
12	Wiper Tank Motor	Wiper Tank Motors	1
		Wire Cup	-
13	Flux Powder	Spark Weld Brazing Flux	3
			2
14	Weld Lighter	Craft Weld	2
		Gas Lighter	1
		Gas Lighter	4
15	Battery	Past Mi Leck	2
		Battery Trvel Star	2
		Exide 12v, 7ams (M6g8m995440) Battery	1
16	Work Piece (50×3 Mm)	50×3 Mm M.S Plate	5
17	Work Piece (25×6 Mm)	25×6 Mm M.S Plate	15
			10
18	Sheet Metal (G.C. Sheet)	Sheet Metal (G.C Sheet)	34.1kg
			29.1kg
19	Riddle	Riddle (Moulding Tools)	3
		Riddle (Moulding Tools)	3
			5
		Riddle	1
20	Strike Off Bar	Strike Off Bar (Moulding Tools)	13

		Otc, Strike Off Bar	-
21	Brush	Brush (Moulding Tools)	8
		Paint Brush	12
			12
22	Bucket	Bucket	2
		Bucket (Aluminium)	3
23	Moulding Table	Moulding Table	13
			2
24	Moulding Sand	Moulding Sand	4 Bags
			2 Bags
			4 Bags
25	Slick	Slick 2	10
			10
		Slick	10

### Department Of Mechanical Engineering

#### Lathe Laboratory

#### List Of Equipments

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Spot Welding Machine	6kva	1
2	Arc Welding Inverter	Orbit Welding Inverter 200 Amps	1
3	Arc Welding Inverter	Orbit Welding Inverter 400 Amps	1
4	Gas Welding Torch	"Pilot " Gas Welging Torch	1
5	Gas Regulator	"Asha" Gas Regulator Oxygen, 1 Stage 2 Gauge	1
6	Gas Regulator	"Asha" Gas Regulator Acetylene, 1 Stage 2 Gauge	1
7	Welding Table (Booth)		2

8	Exhaust Fan		2
9	Gas Cutting Torch		1
10	O2 Cylinder	47 Lts Water Capacity Cylinder	2
11	Acetylene Cylinder	41 Lts Water Capacity Cylinder	2
12	Tig Welding Machine		
13	Mig Welding Machine		
14	Arc Welding Machine		
15	Profile Cutting Machine		
16	Pattern	Gear Wheel Pattern (Aluminium) (Solid Pattern)	2
		Step Cone Pulley (Aluminium), Solid Pattern	2
		Yoke Pattern (Aluminium)	1
		Bearing Top (Aluminium)	1
		Tumbles (Aluminium), Split Pattern	2
		Dove Tail (Loose Piece Pattern)	2
17	Pattern Core	`Bend Pipe Pattern (Aluminum) Core Print	1
		T Pipe Pattern (Aluminium) Core Print	1
		`Bend Pipe Pattern (Aluminum) Core Box	2
		T Pipe Pattern (Aluminium) Core Box	2
		Cylindrical Core Print With Core Box	1
18	Moulding Box	Moulding Box (Moulding Tools)	13
		Moulding Box	2
19	Rammer	Rammer (Round)	13
		Rammer (Flat)	13
		Otc Rammer Square	2
		Otc Rammer Round	2

20	Lifter	Lifter Moulding Tools	11
		Otc Lifter	2
21	Trowel	Trowel (Finishing And Square) Moulding Tools	26
		OtcTrowel	1
		Finishing Trowel	3
22	Draw Spike	Draw Spike (Moulding Tools)	13
23	Shovel	Shovel Moulding Tools	3
		Tata Shovel	2
24	Vent Rod	Vent Rod (Moulding Tools)	13
		Otc Vent Rod	2
25	Sprue Pin	Runner (Sprue Pin) Moulding Tools	13
		Riser (Sprue Pin) Moulding Tools	13
		Otc Runner	4
26	Gate	Gate Moulding Tools	13
27	Split Pattern	Split Pattern (Tumbles)	5
28	T Core Pattern	T Pipe With Core Print And Core Box	6
29	L Core Pattern	L Bend With Core Print And Core Box	6
30	Solid Pattern	Solid Pattern (Stepped Pully)	5

**Department Of Mechanical Engineering**

**Lathe Laboratory**

**List Of Equipments**

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Lathe Machine	Lathe Machine Bd 1340.440v/50hz/3ph/1.5kw	1
2	Lathe Machine	Light Duty Lathe Machine Size 6'ft Cone Pulley With Center Height 165mm Distance B/W Center 1160mm .Bed	1

		Widht240mm Spindle Bore 40mm.With Std.Accessories	
3	Lathe Machine	Central Lathe	1

**Department Of Mechanical Engineering**

**Material Testing Laboratory**

**List Of Equipments**

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Mechanical Extensometer	-	1
2	Double Shear Attachment	-	1
	Double Shear	-	1
3	Deflection Test Apparatus	-	2
4	Tersion Testing Machine	-	1
5	Rockwll Hardness Testing Machine	-	1
6	Brineii Hardness Testing Machine	-	1
7	Impact Testing Machine	-	1
8	Spring Testing Machine	-	1
9	Blains Air Permeability	-	2
10	Vicat Needle Apparatus	-	4
11	Metallurgical Microscope	-	5
	Metallurgical Microscope	-	1
12	Magnetic Particle Test	-	2
13	Weighing Balance -30 Kg	-	1
14	Universal Testing Machine	100 T	1
15	Belt Polishing Machine	-	1
16	Lapping Machine	-	1
17	Lpt-Set Die, Penetrant, Developer	-	4

	Lpt-Set Die, Penetrant,Developer	-	3
18	Compression Testing Machine	3000 Kn	1
19	Flexural Testing Machine		1
20	Laser Stainless Steel Ruler	300*25*1.0mm	5
		1000*35*1.5mm	2
21	Racer Stop Watch Digital	1/100 See	5
22	Kency Vernier Caliper	150 Mm 0.05lc	2
23	Screw Drivers		2
24	Electric Hand Cutting Machine	D 28730-In355mm 2300w Chop Saw	1

### Department Of Mechanical Engineering

### Measurements And Metrology laboratory

### List Of Equipments

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Laser Stainless Steei Rule	300*25*1.0mm	11
2	Laser Surface Gauge Adjustable Base 12	Base 12	2
3	Laser Sine Bar 12	Bar 12	2
4	Laser Sine Bar 6	Bar 6	2
5	Laser Straight Edge 18	Edge 18	2
6	Laser Try Square 6	Square 6	5
7	Kency Vernier Calliper	150mm 0.02lc	10
8	Kency Inside Micrometer	5-30mm	1
9	Kency Inside Micrometer	25-50mm	2
10	Kency Inside Micrometer	50-150mm	2
11	Kency Outside Micrometer	0-25mm	5
12	Kency Height Gauge	300mm	1

13	Aerospace /Rsk /China Bevel Protector	-	4
14	Aerospace /Rsk /China Gear Tooth Vernier Caliper	1-26mm	3
15	Kency Slip Gauge Set	112-2pcs	2
16	Kency Screw Thread Micrometer	0.25mm- 0.01lc	2
17	Kency Digital Micrometer	0.25mm- 0.01lc	3
18	Kency Digital Vernier Caliper	0-150mm	3
19	Kency Depth Vernier Caliper	150mm	2
20	Kency Dial Vernier Caliper	150mm-0.02lc	2
21	Allen Screw Set (Metric)	-	2
	Allen Screw Set (Metric)	-	3
	Allen Screw Set (Inch)	-	2
22	Screw Drivers	-	1
	Screw Drivers Set	-	3
23	Mounting Machine	-	2
24	Ayumil Comparator Stand Granit	-	2
25	Kency Dial Gaugemagnetic Stand	-	5
26	Spanner (Double End)	-	1
		-	3
27	Allen Screw Sets (Metric)	-	1
28	Hammer	-	3
29	Laser Surface Gauge Adjectable Base 12	Base 12	5
30	Laser Try Square	-	5
31	Thesmometer	300 C	2
32	Capacitance Transducer Water Level Trainer Kit	-	2
33	Muitimeter	-	2



34	Plain Gauge	5bore Lmm 5 Thread	1
35	Load Cell Instruments And Ment Setup	-	2
36	Test Mandral With Tarer&Shank	12"	2
37	Test Mandral With Tarer&Shank	-	1
38	Test Mandrel Without Taner&Shank	Both End	1
39	Squares	2.4*11cm	5
40	Straight Edge	12"	5
41	Kency Spnit Level	0-150mm	4
42	Digital Inside Mierometer	5-30mm	1

**Department Of Mechanical Engineering**

**PAP & CAD/CAM laboratory**

**List Of Equipments**

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Process Automation PneumaticTraines Kit	1.Double Acting Cylinders = 2nos 2.Single Acting Cylinders =1nos 3.Push Button =1nos 4.Automatic Push Button =1nos 5.Solenoid Value = 2nos 6. 3/2dcv =2nos 7.4/2dcv =2nos 8.4/3dcv =2nos 9.5/2 Pilot Opeleted Valves =2nos 10. Plc Trainer Kit =1nos 11.Stepper Motor With Setup =1 Nos 12. Frl Unit =1nos 13. Plc Software 14. Sliding Value =1 Nos 15.Limit Switch =2nos 16. Connecting Hose And Wires 17. Smcps Controller =1nos	2
2	Cnc Trainer Lathe Machine With P.C With Mach3 Software	1.Swing Over Bed = 120 Mm 2.Distance Between Centers = 160 Mm	1

		3.Hole Through Spindle = 10 Mm 4.Overall (L X B X H) = 700 X 190 X 190	
3	Cnc Trainer Milling Machine With Adtech Controller	1.X - Axis Traverse = 300 Mm 2.Y - Axis Traverse = 150 Mm 3.Z - Axis Traverse = 200 Mm	1

### Department Of Mechanical Engineering

### Special Machines Laboratory

### List Of Equipments

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Vertical Milling Machine	Satluj 'Vertical Milling Machine (1 Hp Motor)	2
2	Universal Milling Machine With Indexing Head	Satluj ' Universal Milling Machine (1 Hp Motor)	2
3	Bench Grinding Machine	02 Nos , Double Ended	2
4	Hydraulic Power Hack Saw	8' Cutting Capacity, Electricals, Motor	1
5	Surface Grinding Machine	Bhurji' Make Bj -914 Ot Model Surface Grinding Machine	1
6	Cylindrical Grinding Machine	Devco8 Model Cylindrical (310) Mm ,Height Center 102 Mm	1
7	Tool And Cutter Grinding Machine	Mitter' Make Mtcg101 Model Tool And Cutter Grinder	1
8	Milling Arbor	18" Long Arbor	1
9	Drilling Machine	25 Mm Cap	1
10	Radial Drilling Machine	40 Mm R40 G	1
11	Pillar Drilling Machine	Heavy Duty With Fine Feed	2
12	Shapping Machine	18" Cap All Geared Feed Shapping	1
		18" Size All All Geared Heavy Duty	1
13	Planer Machine	Fl, Mc Saw 4*2*5*2 1/2 Cap	1
14	Slotting Machine	With Electricals	1
		10"Size With Rotary Table	1

15	Steel Rule	Steel Ruler 300*25*1.0 Mm	4
16	Vernier Caliper	150 Mm 0.02 Lc	4
	Digital Vernier Caliper	151 Mm 0.01 Lc	1
17	Micrometer	0.25 Mm 0.01 Lc	1
18	Digital Micrometer	0.25mm 0.001 Lc	1
19	Universal Vice	Unique/ Blasce Hawk Universal Machine Vice 4	1
20	Box Spanner	10 To 32 Mm	3
21	Hand Drilling Machine	10 Mm Electric	2

**Department Of Automobile Engineering**

**Machines & Equipments Laboratory**

**List of equipments**

<b>S.No</b>	<b>Description Of The Machinery / Equipment Etc.,</b>	<b>Specification</b>	<b>Qty</b>
1	Lead Acid Battery 12V	-	4
2	Battery Load Tester	-	2
3	Buck Converter	-	2
4	Battery Charger Unit	-	2
5	Inverter Trainer Kit Dc To Ac	-	1
6	BLDC Motor Control Trainer Kit	-	1
7	Wiring Harness For Two-Wheeler Accessories Test Kit	-	1
8	E-Bicycle With Wiring Harness Trainer Kit	-	1
9	E-Bike Kit	-	2
10	E- Rickshaw Kit	-	1
11	500 W, 48 V BLDC Motor With Differential Arrangement	-	1
12	Continuity Tester	-	1

13	Line Tester	-	1
14	Multi Tester	-	1
15	Hydrometer	-	1
16	Screw Drive Set	-	1
17	Spanners Set	-	1
18	Work Tables	-	4

### Department Of Automobile Engineering

#### Automobile Laboratory

#### List of equipments

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Front Axle With Steering Mechanism (Different Type)	-	2
2	Streeing Gear Box (Different Model)	-	2
3	Hydrometer Battery Testing	-	1
4	Hydraulic Brake System Layout	-	1
5	Ignition Circuit Layout (Distributor, Contact Breaker ,Spark Plug)	-	1
6	Dynamo	-	3
7	Regulater	-	2
8	Head Lamp Alignment Layout & Horn With Wiring System	-	1
9	Wiper Motor With Wiring System	-	2
10	Synchrnomesh Gear Box Cut Section	-	1
11	Van Chassis	-	1
12	Su Electrical Pump	-	1
13	Su Carboretor	-	2

14	Two Wheeler Wheel Assembly ,Chassis	-	1
15	Cut Section Of MultyCylinder Engine	-	1
16	Single Cylinder Four Stroke Petrol Engine	-	1
17	Single Cylinder Four Stroke Diesel Engine	-	1
18	Four Cylinder Four Stroke Diesel Engine	-	2
19	Two Stroke Petrol Engine	-	1
20	Ac Fuel Pump	-	1
21	SolexCarburator	-	2
22	Maruthi Carburetor	-	2
23	Diesel Tank, Pipe Line, Fuel Injection Pump & Injector Layout	-	1
24	Lift Fuel Pump	-	2
25	Injector (Single Hole, Multi Hole, Pintle &Pintaux Nozzle	-	2
26	Fuel Injection Pump (4 Cylinder )	-	1
27	Distributor Pump	-	2
28	Vacuum Gauge	-	1
29	Starting Motor	-	2
30	Alternator	-	2
31	Clutch Plate, Presure Plate & Clutch Fixer Assembly	-	2
32	Sliding Mesh Gear Box	-	1
33	Constant Mesh Gear Box	-	1
34	Synchnomesh Gear Box	-	1
35	Epicyclic Gear Box	-	1
36	Rzeppa Universal Joint	-	2
37	Pendix Weiss Universal Joints	-	2

38	Real Axle (Different Type)	-	2
39	Power Steering Mechanism	-	1
40	Shock Absorber (Different Type)	-	4
41	Differential Unit	-	1
42	Auto Rick Saw Chassis With Lighting	-	1
43	Battery Charger	-	1
44	Bore Dial Gauge (35mm-50mm) - 3, (50mm-160mm) - 2	-	5
45	Power Steering With Motor	-	1
46	Hydraulic Brake System	-	1
47	Valcanzing Machine (Electrical Type)	-	1
48	Constant Mesh Gear Box	-	1
49	Differential Unit With Axles	-	1
50	Valve Seat Cutting Tool With Handle	-	1
51	Valve Lapping Tool With Lapping Paste	-	1
52	4 Stroke Diesel Engine Cut Model To Do Port Timing	-	1
53	2 Stroke Petrol Engine Cut Model To Do Port Timing Diagram	-	1
54	Two Wheeler Disc Brake Assembly	-	1
55	Magneto Coil Ignition System	-	1
56	General Electrical System In An Automobile	-	1
57	Two Wheeler Chassis (With Running Condition) Rx100	-	1
58	S.U Electrical Pump	-	1
59	Welding Machine	-	1
60	Exhaust Gas Analyser	-	1
61	Diesel Smoke Meter	-	1

62	Digital Bomb Calorimeter	-	1
63	Cylinder Reboring Machine	-	1
64	Cylinder Honing Machine	-	1
65	Line Boring Machine (Hand Operated)	-	1
66	Valve Refacing Machine	-	1
67	Wheel Balancer	-	2
68	Timing Light	-	1
69	Auto Rickshaw (Bajaj)	-	1
70	Crdi Unit With Stand	-	1
71	Common Rail With Pressure Switch	-	2
72	Mpfi Unit With Stand	-	1
73	Wheel Alignment Kit Mechanical Type	-	1
74	Wheel Alignment Kit Computer Type	-	1
75	Maruthi Car 800	-	1
76	Nozzle Tester (Heavy Duty)	-	1
77	Compression Tester Petrol (0.21kg)	-	1
78	Compression Tester Diesel (0.21kg)	-	1
79	Chain Pulley Block	-	1
80	Trolley Jack - Hydraulic (3 Ton)	-	1
81	Pallet - Truck (2 Ton)	-	1
82	Orsat Gas Apparatus With Wood	-	1

**Department Of Electronics And Communication Engineering**

**Electronics Laboratory**

**List Of Equipments**

<b>S.No</b>	<b>Description Of The Machinery / Equipment Etc.,</b>	<b>Specification</b>	<b>Qty</b>
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1	Cro	(0-30mhz)	15
2	Digital Ic Tester	-	2
3	Ammeter	( 0-500 $\mu$ a)	10
4	Signal Generator	( 0-2mhz )	15
5	Dc Power Supply (Single Ended O/P)	(0-30v)	15
6	Dc Power Supply (Double Ended O/P)	(0-30v)	12
7	Digital Electronics Trainer Kit	-	10
8	Decade Inductance Box	-	8
9	Decade Resistance Box	-	8
10	Decade Capacitance Box	-	8
11	Ammeter	( 0-100 $\mu$ a)	10
12	Ammeter	(0-1 Ma)	10
13	Ammeter	(0-10 Ma)	10
14	Ammeter	(0-15 Ma)	10
15	Ammeter	(0-30 Ma)	10
16	Ammeter	(0-50 Ma)	10
17	Ammeter	(0-100 Ma)	10
18	Voltmeter	( 0-1v)	10
19	Voltmeter	( 0-10v)	10
20	Voltmeter	( 0-15v)	10
21	Voltmeter	( 0-30v)	10
22	Voltmeter	( 0-50v)	10
23	Voltmeter	( 0-100v)	10
24	Transformer	230v/ 6v	10
25	Transformer	230v/ 12v	10
26	Single Ended Probe	-	30



27	Double Ended Probe	-	12
28	Patch Chords For Trainer Kit	-	200
29	Amplitude Modulator Trainer Kit	-	1
30	Fm Trainer Kit	-	1
31	Pam Trainer Kit	-	1
32	Solar Cell	12v/5wp	5
33	Analog Ic Tester	Model: Ict20	2
34	Digital Multimeter	Model: M3900	5
35	Power Supply High Voltage(0-300v)Dc	(M-2016-219)	1
36	Digital Voltmeter	(M-2016-220)	1
37	Transformer	230v/6v	10
38	Single Ended Probe	-	10
39	Digital Multimeter	-	2

**Department Of Electronics And Communication Engineering**

**Communication Lab Laboratory**

**List Of Equipments**

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Super Heterodyne Receiver	-	1
2	Fm Transmitter And Receiver Circuit	-	1
3	PPM Generation And Detection	-	1
4	PLL Oscillator	-	1
5	Symmetrical T & Pi Attenuators	-	1
6	Constant K Active And Passive LPF & HPF	-	1
7	PSK Modulation And Demodulation	-	1
8	Fiber Optic Digital Link Voft-01b	-	1

9	Fiber Optic Digital Link Analog Transmitter And Receiver	-	1
10	TDM Of Signals	-	1
11	FSK Transmitter And Receiver	-	1
12	Ask Modulation	-	1
13	PWM Modulation	-	1
14	Tranistor Video Amplifier	-	1
15	Sync Separator Circuit	-	1
16	Sample And Hold Circuit	-	1
17	TV Trainer Kit	-	1
18	Stepper & Dc Motor Interface	-	1
19	Traffic Light Control And Interfacing System	-	1
20	Arm Development Board	-	10
21	Stepper Motor Interface System	-	1
22	Microcontroller Kit	-	15
23	Digital I/O Interface	-	5
24	Key Board Interface	-	5
25	Seven Segment Display Interface	-	5
26	Traffic Light Interface	-	5
27	8 Bit ADC Interface	-	5
28	8 Bit DAC Interface	-	5
29	Stepper Motor Interface	-	5
30	Dc Motor Interface	-	5
31	Rs 232 Serial Interface Cable	-	5
32	Amplitude Modulator Trainer Kit	-	1
33	Frquency Modulator Trainer Kit	-	1

34	Pulse Amplitude Modulation Trainer Kit	-	1
35	Pulse Code Modulation & Demodulation Kit	-	1
36	Led & Photodiode Characteristics	-	1
37	Manchester Encoder & Decoder	-	1
38	DTH System	-	1
39	Three Way Cross Over Network	-	1
40	FPGA Trainer With Parallel Port	-	10
41	Traffic Light Interface	-	1
42	Stepper Motor Interface	-	1
43	Dc Motor Interface	-	1
44	Analog Voice Link With Telephone Head Set	-	1
45	Key Board (Mc Lab)	-	3
46	VLSI Cable (VLSI Lab)	-	5
47	Fiber Optic Digital Link ,Losses, Analog Transmitter And Receiver	-	1
48	Arm Development Board	-	10
49	DTH System	-	1

**Department Of Electrical And Electronics Engineering**

**Electrical Machines Laboratory**

**List Of Equipments**

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Ac Ammeter	( 0-10a),10/20a	22
2	3 Hp Shunt Motor Coupled With 1ph 2 Kva Alternator	<u>Dc Motor:</u> 3 Hp,220v,12a, 1500 Rpm Excitation 220 V,0.6 A <u>Generator:</u> 2 Kva,230v,8.7a,	1

		1500 Rpm Excitation 220 V,0.5 A	
3	Ac Voltmeter	0-600v	14
4	Transformer Oiltest Kit	60 Kw,230v ,50hz,1φ	1
5	Thermal Over Load Kit	-	1
6	Jogging In Squirrel Cage Motor Kit	-	1
7	Rotor Resistance Starter Kit	-	1
8	Speedcontrol Of Dc Motor Kit Using Scr	-	1
9	Rheostat	360Ω / 1.2a	5
10	Bobbin	3ph 6 Step	1
11	Bobbin	5 Step Al	1
12	Coil Winding Machine	-	4
13	Motor Coil Winding Machine	-	2
14	Motor Body	5 Hp	1
15	Motor Body	1/2 Hp	1
16	Ceiling Fan Body	-	1
17	Acidity Test Kit	-	1
18	Semi Automatic Star Delta Starter Kit	-	1
19	Automatic Star Delta Starter Kit	-	1
20	Dynamic Braking Kit	-	1
21	Two Speed Pole Changing Motor With Kit	-	1
22	Single Phase Preventer Kit	-	1
23	Dol Starter Kit Using Plc	-	1
24	Star Delta Starter Kit Using Plc	-	1
25	Forward And Reverse Jogging Kit Using Plc	-	1
26	Single Phase Preventer Kit Using Plc	-	1

27	Plc Trainer Kit	-	4
28	D.C Rectifier	<u>Input</u> Ac ,3 $\phi$ ,440 V <u>Output</u> Dc, 230 V,100a	1
29	Dc Series Motor With Loading Arrangement(Benn)	3hp, 230 V,12 A, 1500 Rpm	1
30	Dc Shunt Motor With Loading Arrangement(Benn)	3hp, 230 V,12 A, 1500 Rpm	2
31	Dc Compound Motor With Loading Arrangement(Benn)	3hp, 230 V,12 A, 1500 Rpm	1
32	Dc Series Generator Coupled With Dc Shunt Motor(Benn)	<u>Dc Motor:</u> 5hp,230v,10a, 1500 Rpm Excitation 120 V,0.7 A <u>Generator:</u> 2.2 Kw,230v,10a, 1500 Rpm Excitation 120 V,0.7 A	1
33	Dc Shunt Generator Coupled With Dc Shunt Motor(Benn)	<u>Dc Motor:</u> 3 Hp,220v,12a, 1500 Rpm Excitation 140 V,0.8 A <u>Generator:</u> 2 Kva,230v,8.7a, 1500 Rpm Excitation 150 V,1.1 A	1
34	Dc Coumpound Generator Coupled With Dc Shunt Motor(Benn)	<u>Dc Motor:</u> 3 Hp,220v,12a, 1500 Rpm Excitation 140 V,0.85 A <u>Generator:</u> 2 Kva,230v,8.7a, 1500 Rpm Excitation 140 V,0.9 A	1
35	3 $\phi$ Alternator Coupled With Dc Shunt Motor(Benn)	<u>Dc Motor:</u> 5 Hp,230v,19a, 1500 Rpm Excitation 135 V,0.8 A <u>Generator:</u> 3 Kva,400v,4.3a, 1500 Rpm	2

		Excitation 130 V,0.9 A	
36	3 $\phi$ Synchronous Motor With Loading Arrangement(Benn)	3 Hp,400 V,4 A, 1500 Rpm Excitation 110 V,0.5 A,Upf	1
37	3 $\phi$ Slipring Induction Motor With Loading Arrangement(Benn)	5 Hp,400v, 7.4a,1440 Rpm	1
38	3 $\phi$ Sq. Cage Induction Motor With Loading Arrangement(Benn)	5 Hp,400v, 7.4a,1440 Rpm	3
39	1 $\phi$ Induction Motor With Loading Arrangement (Capacitor Start)	1.5 Hp,230 V, 1440 Rpm	1
40	1 $\phi$ Induction Motor With Loading Arrangement (Capacitor Start & Run)(Benn)	1.5 Hp,230 V, 1440 Rpm	1
41	1 $\phi$ Transformer	1 Kva,230 V,4.3 A	5
42	3 $\phi$ Transformer	3 Kva,400/230 V, 4.3/7.4 A	3
43	1 $\phi$ Auto-Transformer	300 V,50 Hz	5
44	3 $\phi$ Auto-Transformer	415 V,15 A,50 Hz	5
45	Voltmeter Ac	(0-150,300v) (Meco)	5
46	Voltmeter	Dc (0-1v)	10
47	Voltmeter	Dc (0-15v)	10
48	Voltmeter	Dc (0-30v)	10
49	Voltmeter	Dc (0-50v)	10
50	Voltmeter	Dc (0-300v)	10
51	Ammeter	Ac(0-1a/2a) (Meco)	10
52	Ammeter	Ac (0-5a) (Meco)	5
53	Ammeter	Dc (0-10ma)	10
54	Ammeter	Dc (0-25ma)	10
55	Ammeter	Dc (0-50ma)	5
56	Ammeter	Dc (0-100ma)	10

57	Ammeter	Dc (0-500ma)	5
58	Wattmeter	Lpf (Meco)	10
59	Wattmeter	Upf (Meco)	15
60	Multimeter(1mhz)	Digital	6
61	Tachometer	Analog	5
62	Tachometer	Digital	3
63	Single Phase Energymeter	10a/250v	1
64	Three Phase Energymeter	4w,440v	1
65	Galvanometer	0-30v	2
66	1 $\phi$ Loading Arrangment	Resistive 3 Kw,230 V,13 A	4
67	3 $\phi$ Loading Arrangment	Resistive 3 Kw,440 V, 7 A	4
68	Rheostat	360 Ohms/1.2a	10
69	Rheostat	100 Ohms/2a	5
70	Dol Starter	3 Hp	3
71	Star Delta Starter	Manual	3
72	Star Delta Starter	Semi Auto	2
73	Rotor Resistance Starter	3 Phase ,5 Hp	1
74	2- Point Starter	5 Hp,230 V,19 A	2
75	4- Point Starter	6 Hp,230 V,19 A	2
76	Dpst Switch	32 A	10
77	Spst Switch	32 A	5
78	Tpst Switch	32 A	10
79	Parallel Operation Kit(Dark Lamp, Bright Lamp & Synchroscope)	-	1
80	Ammeter	Dc 0-1/2a (Meco)	4
81	Ammeter	Dc 0-10/20a (Meco)	9

82	Ammeter	Dc 0-15/30a (Meco)	2
83	Capacitive Load	3 Phase ,10a,400v,50hz	1
84	Rotor Resistance Starter	-	1
85	Neon Lamp	-	1
86	Rheostat Wire Wound	2070 Ohm/1a	5
87	Single Element Upf Wattmeter	250v,15a	3
88	Single Element Upf Wattmeter	150v,15a	2
89	Safety Helmet	-	2
90	Air Filter	-	2
91	Heapro Safety Belt	-	1
92	Rubber Gloves	-	2
93	Goggles	-	1
94	Ear Plug	-	1
95	Safety Belt	-	1
96	Mixier Grinder	750 W,230 V,50 Hz	2
97	Wet Grinder	230 V,50 Hz	2
98	Inverter	-	2
99	Solar Panel	-	2
100	Charge Controller	-	2
101	Battery 12v	-	1
102	Induction Stove	-	2
103	Iron Box	-	1
104	Microwave Oven	1350 W,230 V,50 Hz	1
105	Sequential Operation Of Solinoid Valve	-	1
106	Sq. Cage Induction Motor With Out Capacitor Run Type	0.5 Hp,1Ø, 230 V,50 Hz, 1440 Rpm	1



107	Winding Study Motor	2 Hp,1ø, 230 V,50 Hz, 1440 Rpm	1
108	Control Circuit For Forward,Reverse,JoggForward,Jogg Reverse Using Plc	-	1

**Department Of Electrical And Electronics Engineering**

**Wiring And Winding Laboratory**

**List Of Equipments**

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	LCR Meter	-	1
2	Load Cell Trainer Module	-	1
3	Anderson Bridge	-	2
4	Plc Trainerkit	-	3
5	Lift Control	-	1
6	Conveyor Control	-	1
7	Series Inverter	-	1
8	Dc Chopper Trainer	-	1
9	Dc -Dc Buck Converter	-	1
10	SCR Phase Control Circuit	-	1
11	PWM Inverter	-	1
12	SCR Based Dc Chopper Trainer	-	1
13	Earth Tester Kit	-	1
14	UJT Firing Module With SCR	-	1
15	Ac Phase Control Using DIAC& TRIAC	-	1
16	Dc-Dc Push Pull Inverter	-	1
17	Cycloconverter	-	1
18	Dc Motor Speed Control Trainer	-	1

19	Three Phase SCR Half Controlled Converter	-	1
20	Three Phase SCR Fully Controlled Converter	-	1
21	Speed Control Circuit For Universal Motor	-	1
22	Closed Loop Control Of Ac Induction Motor	-	1
23	Dc Motor Speed Control Trainer Closed Loop	-	1
24	Construction And Testing Of Stepper Motor	-	1
25	Construction And Testing Of Servo Motor	-	1
26	Testing Of Relay, Contactor, Push Button And Limitswitch	-	1
27	Testing Of Led, Laser Diode And Seven Segment Display	-	1
28	Dc Power Supply	(0- 30v)/2a	6
29	Decade Resistance Box	-	10
30	Decade Inductance Box	-	10
31	Decade Capacitance Box	-	10
32	Fixed Power Supply	+ -5v	5
33	Wheastone Bridge Trainerkit	-	2
34	Schering Bridge	-	2
35	Thermocouple And Trainer Kit	-	1
36	LVDT Trainer	-	1
37	RLC Series Resonance Trainer	-	1
38	MOSFET Based Step Up And Step Down Chopper	-	1
39	Strain Gauge	-	1
40	Thermistor	-	1
41	Stepper Motor And Servo Motor Drive Kit	-	1
42	Single Phase Parallel Inverter	-	1
43	Single Phase Fully Controlled Converter	-	1

**Department Of Petrochemical Engineering****Heat Transfer Lab****List Of Equipments**

<b>S.No</b>	<b>Description Of The Machinery / Equipment Etc.,</b>	<b>Specification</b>	<b>Qty</b>
1	Thermal Conductivity of Metal Bar	-	1
2	Heat loss in pipes	-	1
3	Double Pipe Heat Exchanger by co-current Flow	-	1
4	Double Pipe Heat Exchanger by counter-current Flow	-	1
5	Emissivity apparatus	-	1
6	Stefan Boltzmann apparatus	-	1
7	Horizontal Condenser	-	1
8	Forced Convection Heat Transfer	-	1
9	Natural convection	-	1
10	Vertical condenser	-	1

**Department Of Petrochemical Engineering****Mass Transfer Lab****List Of Equipments**

<b>S.No</b>	<b>Description Of The Machinery / Equipment Etc.,</b>	<b>Specification</b>	<b>Qty</b>
1	Simple Distillation	-	1
2	Vapour- Liquid Equilibrium	-	1

3	Steam Distillation	-	1
4	Liquid-Liquid Extraction	-	1
5	Soxhlet Extraction	-	1
6	Tray Drier	-	1
7	Crystallization by Cooling	-	1
8	Crystallization by Evaporation	-	1
9	Decolourization by Adsorption	-	1
10	Diffusivity Measurements	-	1

**Department Of Petrochemical Engineering**

**Mechanical Operations Lab**

**List Of Equipments**

<b>S.No</b>	<b>Description Of The Machinery / Equipment Etc.,</b>	<b>Specification</b>	<b>Qty</b>
1	Stoke's Law of Settling	-	1
2	Industrial Mixer	-	1
3	Leaf filter	-	1
4	Sieve Analysis	-	1
5	Jaw Crusher	-	1
6	Roller crusher	-	1
7	Ball mill	-	1
8	Filter press (Plate and Frame)	-	1
9	Cyclone Separator	-	1

**Department Of Petrochemical Engineering**

**Distillate Testing Lab - I**

**List Of Equipments**

<b>S.No</b>	<b>Description Of The Machinery / Equipment Etc.,</b>	<b>Specification</b>	<b>Qty</b>
1	Aniline point apparatus	-	1
2	A.S.T.M Distillation apparatus	-	1
3	Smoke point apparatus	-	1
4	Drop point apparatus	-	1
5	Centrifuge apparatus	-	1
6	Melting point apparatus	-	1
7	Ring & ball apparatus	-	1

**Department Of Petrochemical Engineering**

**Process Instrumentation And Control Lab**

**List Of Equipments**

<b>S.No</b>	<b>Description Of The Machinery / Equipment Etc.,</b>	<b>Specification</b>	<b>Qty</b>
1	Temperature Sensors Like Thermocouple, RTD And Thermocouple	-	1
2	Strain Gauge Type Pressure Transducer	-	1
3	Bourdon Pressure Transducer	-	1

4	P/I And I/P Converter	-	1
5	Differential Pressure Transmitter	-	1
6	Pneumatic Control Valve (Linear, Equal % And Quick Opening) Set Up	-	1
7	Temperature Control Trainer Kit With SCADA Or Analog	-	1
8	Liquid Level Control Trainer Kit With SCADA Or Analog	-	1
9	Pressure Control Trainer Kit With SCADA Or Analog	-	1
10	Thermistor Characteristics Trainer Kit	-	1

**Department Of Petrochemical Engineering**

**Distillate Testing Lab - II**

**List Of Equipments**

<b>S.No</b>	<b>Description Of The Machinery / Equipment Etc.,</b>	<b>Specification</b>	<b>Qty</b>
1	Copper Corrosion test	-	1
2	Say bolt color test	-	1
3	Reid vapor Pressure	-	1
4	Refractive Index	-	1
5	Carbon residue by Conradson method	-	1
6	Carbon residue by Rams bottom method	-	1
7	Sediments by extraction	-	1

8	Kinematic Viscosity	-	1
9	Penetration number	-	1

**Department Of Computer Engineering**

**Computer Laboratory**

**List Of Equipments**

S.No	Description Of The Machinery / Equipment Etc.,	Specification	Qty
1	Zenith Computer System	Intel 945gc Chipset,2gb Ddr2 Ram,16gb Sata Hard Disk,17" Wide Tet Monitor, Keyboard And Ps2 Optical Mouse.	66
2	Acer Power System	Intel Core 2quad 2.33ghz,2gb Ram,320gb Hard Disk,20"tet Monitor.	1
3	Assemble System	Intel 2.6ghz Processor,2gb Ram,160gb Hard Disk,19'Inch Monitor, Keyboard And Mouse.	2
		17 Intel Cpu 3rdgen,8gb Ram,256 Ssd,IntelFan,Bluetooth,H save Cabinet With Smbs,MotherBoard,VgaCable,PowerCable,Keyboard,Mouse,Lenovo Monitor	1
		Desktop PC from Pride systems	8
4	Lenovo Seconds System	Intel P4 .4processor,40gb Hard Disk,1gb Ram,LanCard,ParallelCard,Keyboard,Mouse,15'hp Crt Monitor.	7
5	IBM Seconds System	Ibm Net Vista Branded Pc Intel P4 Processor,Intel 845 Mother Board, 1gbddr Ram,40gb Hard Disk,15'ibm CrtMonitor,Keyboard	13

			And Mouse.	
6	Lenovo System		Lenovo I3 Processor, 2gb Ram, 500gb Hard Disk, 18.5' Inches Lenovo Monitor, Key Board And Mouse.	75
			Lenovo Tower i3 processor,4gb RAM,500gb HDD, Lenovo Keyboard & Mouse	50
7	Hp Laptop		Hp Laptop Corporate Series Core Duo1.8/2.0ghz,320gb Hard Disk, Ram 2gb, Wifi,Webcam,Dvd Writer.	2
8	Server		Ibm X3200 M3 Server Intel Xeon Processor 2.4hz, 2gb Ddr3 1333mhz Ecc Ram, 300gb 15krpm Sas Harddisk, Raid 01 Bultin, 18.5' Tet Monitor, Keyboard And Mouse.	2
9	UPS		20.0kva Online Ups	1
10			Micro Best Power Ctrl System(1.0kva)	1
11			Web 500va Special Ups	1
12			1.0kva Online Ups System 1ph To 1ph 36vdc	1
13			1.0kva Online Ups System 1ph To 1ph 24vdc	1
14			Numeric 5kva Ups System With Dc Power Rack	1
15			10.0kva Ups System	1
16			5.0kva Online Ups System	1
17			5.0kva Online Ups System	1
18		Battery		Bit 40 Base Tubular Battery 12v/40ah
19			Bsttery Exide 6el 75	10



20		Bsttery Exide 6el 75	30
21	Printer	Cannon Lbp2900 Laser Printer	2
22		Wipro Ex330+Dx Dot Matrix Printer	1
23		Cannon Lbp2900 Laser Printer	1
24		Hp Laserjet M1005mfp	1
25		Hp Laserjet 1020 Plus	1
26		Cannon Lbp2900 Laser Printer	3
27		Printer	Wep Ex300+Dx Dot Matrix
28	Hp Laserjet 1020 Plus		2
29	Hp Laserjet 1020 Plus		3
30	Epson L200 Color Printer		1
31	Toner	H12a Toner	1
32	Scanner	Hp Scanjet G3110 Photo Scanner	1
33		Datalogic Magellan M3410-2dscanner	1
34		Epson Dc 870	1
35	Cabinet	Assembled Cabinet	2
36	Graphics Card	Nvidia Geforce 1gb Ddr3 Zotac Graphics Card	75
37	Monitor	Lenova 22	5
38	Modam	Alcatel Usb Modam	1
39	Dlink Switch	Dlink 24port Gigabyte Switch	4
40	Power Manager	Rack Power Manager	1
41	Cable Manager	Rack Cable Manager	2
42	Patch Panel	24 Port Cat6 Patch Panel	4
43	Dlink Switch	Dlink 8port Gigabyte Switch	4
44	Dlink Switch	Dlink 16port Gigabyte Switch	2

45	Outlet Box	Cat6 Information Outlet Box	89
46	Dlink Switch	Dlink 8port 10/100 Normal Switch	2
47	Rack	Rack	1
48	DVD Writer	Lg UsbDvd Writer(External)	1
49		Smart Style Pc Dvd Writer	2
50		Lg Dvd Writer	5
51		Ide Dvd Writer	2
52		Sony Blueray Disk	2
53		Tracend External Dvd Writer	3
54	Head Phone	Zebronics Head Phone With Microphone	10
55		Apnet Headphone	10
56	Web Camera	Web Camera	1
57		Live Tech Webcamera	1
58		FingureWebcamera 1080	9
59	Tools Box	Screw Driver	7
51	Hard Disk Internal & External	500gb Sata Hard Disk	1
52		300gb 15krpm Sas Hard Disk	2
53		Wd 500gb Hard Disk	1
54		500gb Toshiba Hard Disk	1
55	Digital Camera	Sony Digital Camera	1
56		Canon Digital Camera	1
57	Projector	Hansa Cine Equipment Sony	1
58		Image Icon Sony Projector	2
59	Projector	Epson Projector Eb-E01 Projector Wallmount Kit Projector Screen 8*6	2 1 1
60	Scholer White Board	White Board	1

61	Converter	Vpn Converter	1
62		Ac Media Convertor	4
63		Fdms	2
64		Dc Media Convertor	2
65	RAM	8gb Segate	1
66		2gb Ddr3 Umax	1
67		4gb Ddr3 1333mhz	1
68	Wall Mount	Wall Mount Tray	9
69	Hard Disk & Casing	Live Tech Hdd Casing 2.5	2
70		Segate 500gb Sata Harddisk	4
71		Segate 1tb Desktop Harddisk	2
72		Harddisk 256 Gb Nvme,Ssd	3
73	Mother Board	Intel Mother Board	1
74	Mouse	Mouse	40
75	Camera (Examcell)	Ds-7104hqhi-Fi 4ch 1080p Dvr	1
76		Ds2cf56dot-1rp 3.6mm 1080p Dome	2
77		1tb Toshiba Av Harddisk	1
78		8 Port Network Switch	1
79		Rack 2u	1
80		4*4 Sunwood Ip Box	2
81		Smps 2a Cctv	1
82		Bnc Pin Connector	4
83		Dc Connector(Male Type)	2
84		Networking (Cim Lab)	Dlink 24 Port Gigabit Switch
85	Dlink 8port Gigabit Switch		1
86	Legrand Cat 6 Patch Panel		2

87		Dlink Cat6 Cable	700mtrs
88	Networking (Cim Lab)	9u Rack	1
89		Legrand Mylink Cat 6 Io Box	40
90		Legrand Mylink Faceplate 1m	38
91		Legrand Mylink Faceplate 2m	2
92		Legrand Mylink Surface Box	2
93		Dlink Batch Cable 1.5mtr	90
94		Power Manager	1
95		Networking (Library)	Dlink 24port Gigabit Switch
96	Legrand Mylink Cat Io Socket		14
97	Legrand Mylink Faceplate 1m		14
98	4u Rack		1
99	SMBS	Smbs	10
100			1
101		Intel Intel SMBS	1
102			1
103	Network Card	Lan Network Card	3
104		1x Lan Card	1
105		150mbps UsbWifi Adaptor	2
106		Pci Dc Expresscard	1
107		Lan Spliter	1
108	Iot Kit	Iot Kit	10
109	Lan Checker	Lan Checker	1
110		Iball Lan Tester	5
111	Crimping Tool	Crimping Tool	1

## 14) List of Experimental Setup in each Laboratory/Workshop

Institution Code	Institution Name	Course Code	Course Name
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1000	BASIC ENGINEERING (FULL TIME)
Subject Code	Name of the Practical Subject		
WP231360	Basic Workshop Practices		
DS231270	Digital Workplace Skills		
BE231280	Basic English for Employability		
MA232431	Applied Mathematics-I (Non-Circuit Branches)		
MA232432	Applied Mathematics-II (Circuit Branches)		
PH232441	Applied Physics - I (Non-Circuit Branches)		
PH232442	Applied Physics - II (Circuit Branches)		
CH232451	Applied Chemistry - I ( Non - Circuit Branches )		
CH232452	Applied Chemistry - II (Circuit Branches)		
EN232480	Communicative English -II		
DP232360	Drafting Practices		
EP232460	Basic Engineering Practices		

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1000	BASIC ENGINEERING (FULL TIME)		
Subject Code	Name of the Practical Subject				
WP231360	BASIC WORKSHOP PRACTICES				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	Fitting-cutting & Filing of a profile	Bench Vice Drilling Machine Flat File (Rough & Smooth)	30 2 20	30 2 20	
2	Fitting- Drilling, Reaming, Tapping	Vernier Height Gauge Vernier Caliper Try Square Steel Rule Caliper-Inside And Out Side	3 10 20 30 10 10	3 10 20 30 10 10	
3	L-Mating	Hack Saw Frame Scriber File Triangular Half Round File Circular File Square File Triangular File Drill Bit Reaming Tool Tapping Set Tap Wrench	10 6 6 6 6 5	10 6 6 6 6 5	Sufficient qty Sufficient qty Sufficient qty Sufficient qty

4	Wiring-Connection Of Two Lamp, Two Switch With Socket-Parallel& Series	Screw Driver Cutting Plier	20 10	20 10	
5	Wiring- Connection For Fan Switch Regulator	Neon Tester Nose Plier	10 10	10 10	
6	Wiring –Stair Case Wiring	Multi Meter Hammer	5 20	5 20	
7	Installation of a battery, charging & testing battery with hydrometer	Wire Cutter Soldering Iron Center Punch Rubber Gloves	10 5 10 5	10 5 10 5	
8	Plumbing-connect a tap using-pvc pipe, fitting & a tap.	Water Meter Pipe Cutting M/C Pipe Vice Hacwsaw Frame	2 2 2	2 2 2	
9	Plumbing- connect the pipe line for the sink/wash basin	Hand Drilling M/C Spirit Level Water Meter	2 2	2 2	
10	Plumbing – connection for Rain water harvesting.	Spirit Level Adjustable Spanner Hammer Spanner Set Pipe With Suitable Accessories	3 5 5 5	3 5 5 5	Sufficient qty

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1000	BASIC ENGINEERING (FULL TIME)		
Subject Code	Name of the Practical Subject				
DS231270	DIGITAL WORKPLACE SKILLS				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	a) Basic Navigations in Operating Systems - Windows, Ubuntu etc b) Usage of Browsers (Edge, chrome etc) c) Usage of search engines (Google, Bing etc)	Desktop Computers  Laser Printer	30	30	
2	Create a document with basic editing, formatting options, Tables, Equations, Hyperlinks, Pictures				
3	Create a standard covering letter and use mail merge to generate customized letters and generate labels by creating a database				
4	Spreadsheet creation, data handling, formatting, calculations using formulae and functions using Excel / Google Sheets.				
5	Sorting, Filtering, and creation of different charts. Print Preview, Printing-Using Excel / Google Sheets.				
6	Creation of Presentation, editing, saving, Slide creation, Charts, Tables, Pictures, Smart Art, Slide Number, Header, Footer, Date,				

	Shapes, Video and Sound. Slide Animation, Running a slide show, Print Preview. – PowerPoint, Google slides etc				
7	Designing with Canva, Figma.				
8	a. Scheduling–meetings–Google Calendar. b. Mail–Gmail c. Information management- Collection of student Bio data using google forms				
9	Hands-on Video Conferencing Experience with Webex, zoom, Google Meet etc				
10	Password protection for sheets, Google drive sharing–permission.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1000	BASIC ENGINEERING (FULL TIME)		
Subject Code	Name of the Practical Subject				
BE231280	BASIC ENGLISH FOR EMPLOYABILITY				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	Reading (descriptive) - for gist and detail - Grammar - Adjectives - Mind-mapping and writing structure - Listening (descriptive) - for gist & detail.	Hardware Requirement:- 1. Desktop or laptop 2. Compatible speakers or headphones with microphone 3. Projector  Software Requirement:- 1. Chrome version 52+, or Firefox version 50+, or Edge Windows 10 build 15019 2. Operating System – Windows7+, Ubuntu	30	30	
2	Functional Language (writing) - Describe personal experiences - Reading (prospectus) – for locate and isolate - Grammar - Conjunctions - Functional language (speaking) – Making comparisons.		01	01	
3	Listening (prospectus) - for locate and isolate - Functional Language (speaking) – expressing feelings and emotions - Reading (geographical information) - for gist and detail – Punctuations.				

4	Functional Language (speaking) - giving reasons and explanations - Listening (geographical information) - for gist & detail - Functional Language (writing) - Making appointments & reservations - Reading (rules & regulation) - for gist and detail.	3. Access to You Tube 4. Access to <a href="https://english.steptest.in/">https://english.steptest.in/</a> 5. Stable internet connection with 2Mbps speed via Wi-Fi or Ethernet or 4G hotspot			
5	Grammar - Adverbs - Functional Language (Speaking) - Accepting & Rejecting offers and invitations - Listening (rules and regulations) - for gist & detail - Phonics - Commonly Made Speaking Errors.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE	1000	BASIC ENGINEERING (FULL TIME)		
Subject Code	Name of the Practical Subject				
MA232431	APPLIED MATHEMATICS-I (NON-CIRCUIT BRANCHES)				
1	Contact of Circles	<u>Hardware Requirement</u>			
2	Application of External Contact of Circles : Spur Gear	<ul style="list-style-type: none"> <li>Desktop Computers</li> <li>Projector and Screen</li> <li>Printer</li> </ul>		30	-
3	Parabola & Ellipse			1	-
4	Application of Parabola : Parabolic			2	-
5	Limits & Derivatives	<u>Software Requirement</u>			
6	Application of Limits & Derivatives : Reverse Curve	<ul style="list-style-type: none"> <li>Operating System : Windows 7 or later</li> <li>Geogebra Classic 5</li> </ul>		Available	-
7	Integration			Available	-
8	Application of Integration : Area of Irregular Plane Figure				
9	Probability-Normal Distribution				
10	Application of Statistics : Statistical Process control				



Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE	1000	BASIC ENGINEERING (FULL TIME)		
Subject Code	Name of the Practical Subject				
MA232432	APPLIED MATHEMATICS-II (CIRCUIT BRANCHES)				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Parabola & Ellipse	<u>Hardware Requirement</u>			
2	Application of Parabola : Parabolic Shaped Dish Antenna	<ul style="list-style-type: none"> <li>• Desktop Computers</li> <li>• Projector and Screen</li> <li>• Printer</li> </ul> <u>Software Requirement</u> <ul style="list-style-type: none"> <li>• Operating System : Windows 7 or later</li> <li>• Geogebra Classic 5</li> </ul>		30	-
3	Trigonometric & Inverse Trigonometric Functions		1	-	
4	Application of Trigonometric Functions : Sinusoidal Waveform of Complex Numbers		2	-	
5	Application of Complex Numbers : Phasor Diagram & Power Factor		Available	-	
6	Limits & Derivatives		Available	-	
7	Application of Limits & Derivatives : Voltage using Derivative of Current		Available	-	
8	Integration				
9	Application of Integration : Charge Using Integration of Current				
10					

Institution Code	Institution Name	Course Code	Course Name			
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE	1000	BASIC ENGINEERING (FULL TIME)			
Subject Code	Name of the Practical Subject					
PH232441	APPLIED PHYSICS - I (NON-CIRCUIT BRANCHES)					
Experiment No	Name of the Experiment	Equipments / Apparatus / Required	Consumables	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	TORSION PENDULUM	Torsion pendulum, Two equal masses	-		4	
2.	COMPOUND PENDULUM	Compound pendulum, Hanger and graph sheet	-		4	
3.	SURFACE TENSION	Microscope, 500 ml beaker, water, Glass tube, stand	-		4	
4.	STOKE'S METHOD	Tall jar (glass), small and big balls(glass), Castor's oil and stop clock	-		4	
5.	SONOMETER	Wooden box, wire, weight hanger, tuning fork and hammer	-		4	
6.	WHEATSTONE'S BRIDGE	Meter bridge, Galvanometer, Known & Unknown resistances, Jockey, connecting wires	-		4	
7.	LAWS OF RESISTANCE	Resistance boxes, voltmeter, ammeter, Battery, key, Rheostat and connecting wires	-		4	
8	JOULE'S CALORIMETER	Battery, key, rheostat, Voltmeter, Ammeter, Calorimeter, Thermometer, water and wires	-		4	

Institution Code	Institution Name		Course Code	Course Name		
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE		1000	BASIC ENGINEERING (FULL TIME)		
Subject Code	Name of the Practical Subject					
PH232442	APPLIED PHYSICS - II (CIRCUIT BRANCHES)					
Experiment No	Name of the Experiment	Equipments / Apparatus / Required	Consumables	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	REFRACTIVE INDEX OF GLASS	Glass slab, white paper, pin	-		4	
2.	REFLECTION INDEX OF LIQUID	Microscope, 100 ml beaker, water, dust.	-		4	
3.	SOLAR CELL	Solar kit, ammeter, voltmeter, Rheostat & wires	-		4	
4.	DEFLECTION MAGNETOMETER	Wooden rectangular plate, Two bar Magnets and Magnetometer	-		5	
5.	SONOMETER	Wooden box, wire, weight hanger, tuning fork and hammer	-		4	
6.	POTENTIOMETER	Meter bridge, Galvanometer, resistances, Jockey, Battery, key connecting wires	-		5	
7.	LAWS OF RESISTANCE	Resistance boxes, voltmeter, ammeter, Battery, key, Rheostat and connecting wires	-		4	
8	JOULE'S CALORIMETER	Battery, key, rheostat, Voltmeter, Ammeter, Calorimeter, Thermometer, water and wires	-		4	

Institution Code	Institution Name		Course Code	Course Name		
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE		1000	BASIC ENGINEERING		
Subject Code	Name of the Practical Subject					
CH232451	APPLIED CHEMISTRY - I (NON - CIRCUIT BRANCHES)					
1.	Estimation of Total hardness of water by EDTA method	EDTA, Erichrome black - T indicator Ammonia buffer solution, Calcium carbonate	Burette (50ml) Burette stand, Conical flask (250ml) Funnel (250ml) Pipette (20ml) Porcelain tile Wash bottle	Burette (50ml) - 30 Burette stand - 30 Conical flask (250ml) - 30 Funnel - 30 Pipette (20ml) - 30 Porcelain tile - 30 Cleaning brush - 30 Wash bottle - 30	Burette (50ml) - 35 Burette stand - 35 Conical flask (250ml) - 35 Funnel - 35 Pipette (20ml) - 35 Porcelain tile - 35 Cleaning brush - 35 Wash bottle - 35	
2.	Determination of alkalinity of sample of hard water	Hydrochloric acid Phenolphthalein indicator, Methyl orange indicator, Alkaline water	Burette (50ml) Burette stand, Conical flask (250ml), Funnel (250ml), Pipette (20ml) Porcelain tile Wash bottle	Burette (50ml) - 30 Funnel - 30 Pipette (20ml) - 30 Porcelain tile - 30 Cleaning brush - 30 Wash bottle - 30	35 Funnel - 35 Pipette (20ml) - 35 Porcelain tile - 35 Cleaning brush - 35 Wash bottle - 35	
3.	Estimation of Residual chlorine in a given water sample	Sodium thio sulphate, KMNO <sub>4</sub> , starch indicator, KI, Dil.H <sub>2</sub> SO <sub>4</sub> , Acetic acid,	Burette (50ml) Burette stand, Conical flask (250ml) Funnel (250ml) Pipette (20ml) Porcelain tile, Wash bottle	30 pH Meter - 4 TDS Meter - 2	4 4 TDS Meter - 2	

4.	Estimation of oxalic acid by Permanganometry (Non circuit Branch)	Ferrous ammonium sulphate, Oxalic acid Potassium permanganate Dil.H <sub>2</sub> SO <sub>4</sub>	Burette (50ml) Burette stand, Conical flask (250ml) , Funnel Pipette (20ml) Porcelain tile Wash bottle			
5.	Calculation of H <sup>+</sup> ion and TDS of difference samples of acids and bases	Sample acid and base	p <sup>H</sup> meter,TDS meter			
6.	Estimation of copper by complexometry	Zinc sulphate, Copper sulphate, Erichrome black - T indicator, Ammonia buffer solution, Fast Sulphone Black - F EDTA	Burette (50ml) Burette stand, Conical flask (250ml) , Funnel Pipette (20ml) Porcelain tile Wash bottle			
7.	Effluent analysis of Heavy metal ions - Lead, Copper and Zinc	Ammonium chloride, Ammonium Hydroxide H <sub>2</sub> S, Sodium hydroxide, potassium iodide	Test tube, watch glass, spatula, test tube stand			
8.	Analysis of acid radicals such as Carbonate, Nitrate and Sulphate ions.	Dil.HCl, Conc.H <sub>2</sub> SO <sub>4</sub> Copper turnings, Barium chloride, Ferrous sulphate.	Test tube, watch glass, spatula, test tube stand			

Institution Code	Institution Name		Course Code	Course Name		
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE		1000	BASIC ENGINEERING		
Subject Code	Name of the Practical Subject					
CH232452	APPLIED CHEMISTRY - II (CIRCUIT BRANCHES)					
1.	Estimation of Total hardness of water by EDTA method	EDTA, Erichrome black - T indicator Ammonia buffer solution, Calcium carbonate	Burette (50ml) Burette stand, Conical flask (250ml) Funnel Pipette (20ml) Porcelain tile Wash bottle	Burette (50ml) - 30 Burette stand - 30 Conical flask (250ml) - 30 Funnel - 30 Pipette (20ml) - 30 Porcelain tile - 35 Cleaning brush - 35 Wash bottle - 30 p <sup>H</sup> Meter - 4	Burette (50ml) - 35 Burette stand - 35 Conical flask (250ml) - 35 Funnel - 35 Pipette (20ml) - 35 Porcelain tile - 35 Cleaning brush - 35 Wash bottle - 35 p <sup>H</sup> Meter - 4	
2.	Determination of alkalinity of sample of hard water	Hydrochloric acid Phenolphthalein indicator, Methyl orange indicator, Alkaline water	Burette (50ml) Burette stand, Conical flask (250ml) , Funnel Pipette (20ml) Porcelain tile Wash bottle	Porcelain tile - 30 Cleaning brush - 30 Wash bottle - 30 p <sup>H</sup> Meter - 4	Porcelain tile - 35 Cleaning brush - 35 Wash bottle - 35 p <sup>H</sup> Meter - 4	
3.	Estimation of Residual chlorine in a given water sample	Sodium thio sulphate KMNO <sub>4</sub> , Starch indicator, KI, Dil.H <sub>2</sub> SO <sub>4</sub> , Acetic acid,	Burette (50ml) Burette stand, Conical flask (250ml) Funnel Pipette (20ml) Porcelain tile, Wash bottle	TDS Meter - 2 Copper plate - 2 Iron plate - 2 Copper voltameter - 2 Electrolytic cell	TDS Meter - 2 Copper plate - 2 Iron plate - 2	

				- 2	Copper voltameter-2 Electrolytic cell - 2
4.	Estimation of copper by complexometry	Zinc sulphate, Copper sulphate, Erichrome black - T indicator, Ammonia buffer solution, Fast Sulphone Black - F EDTA	Burette (50ml) Burette stand, Conical flask (250ml), Funnel Pipette (20ml) Porcelain tile Wash bottle		
5.	Calculation of H <sup>+</sup> ion and TDS of difference samples of acids and bases	Sample acid and base	pH meter, TDS meter		
6.	Effluent analysis of Heavy metal ions - Lead, Copper and Zinc	Ammonium chloride, Ammonium Hydroxide H <sub>2</sub> S, Sodium hydroxide, potassium iodide	Test tube, watch glass, spatula, test tube stand		
7.	Process of electroplating - Copper plating by copper voltameter	Copper sulphate solution,	Copper plate, Iron plate, Copper Voltameter, Electrolytic cell		
8.	Analysis of acid radicals such as Carbonate, Nitrate and Sulphate ions.	Dil.HCl, Conc.H <sub>2</sub> SO <sub>4</sub> , Copper turnings, Barium chloride, Ferrous sulphate.	Test tube, watch glass, spatula, test tube stand		

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE	1000	BASIC ENGINEERING		
Subject Code	Name of the Practical Subject				
EN232480	COMMUNICATIVE ENGLISH II				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Listening to Scientific and Technological Passages & One Word Substitution	1. An echo free room 2. Desktop or laptop with internet access	1	1	
2	Speaking - Word Cloud & Homophones and their meanings	3. Compatible speakers	1	1	
3	Reading Idiomatic Expressions with their meanings	4. Projector	2	2	
4	Writing- Advertisement Writing	5. Any English Newspaper	1	1	
5	Speaking- Describing Oneself	6. A white board with Markers 7. Comics / Story Books	1	1	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE	1000	BASIC ENGINEERING		
Subject Code	Name of the Practical Subject				
DP232360	DRAFTING PRACTICES				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	a) Rewrite the given statement in a single stroke vertical uppercase letters b) Rewrite the given statement in a single stroke vertical lowercase letters	-	-	-	
2.	Redraw the given drawing and dimension it as per BIS				
3.	a) Divide a straight line and circle into given number of equal divisions b) Construct an arc touching two straight line. c) Construct an arc touching two arcs.				
4.	Construct the polygon of given size (Triangle, Rectangle, Square, Pentagon and Hexagon)				
5.	Draw the given drawing and dimension it as per BIS using CAD.	Personal computer Laser Printer Software : CAD Software	As per Requirement	As per Requirement	
6.	Draw the orthographic views of the given component				

	<p>(for Mechanical and Allied)</p> <p>Draw the given civil engineering drawing using CAD (for Civil Engg.)  (a) Cross sectional view of L -section, T-section, Channel and I - Section  (b) Plan, Elevation and Sectional view of a Single storey, Single room consisting of RCC Flat Roof, Masonry walls, Lintel cum Sunshade, Door and windows of standard size.  (c) Floor plan of a 2BHK residential building.  (d) Plan and Sectional Elevation of a RCC Column with square isolated footings.</p> <p>Draw the given Electrical circuit diagram using CAD (for EEE)  (a) Stair-case wiring electric circuit  (b) Control and main circuit of automatic star delta starter  (c) Control circuit for jogging in cage induction motor  (d) Single phase wiring circuit</p> <p>Draw the given Electronics circuit diagram using CAD (for ECE)  (a) Half Wave Rectifier circuit  (b) Bridge Rectifier circuit  (c) Common Emitter Amplifier circuit  (d) Fire Alarm circuit</p>	Packages				
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Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE	1000	BASIC ENGINEERING		
Subject Code	Name of the Practical Subject				
EP232460	BASIC ENGINEERING PRACTICES				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1.	Install the water supply system as shown in the layout (shower with hot and cold water supply) and prepare the bill of material with specifications.	As per requirement	As per requirement	As per requirement	
2.	Install the drainage system as shown in the layout and prepare the bill of material with specifications.				
3.	Install the given pump for the water supply to storage. Prepare the list of components with specifications.				
4.	Install the Water Purifier and mount the filter. Demonstrate how to replace the damaged components, membrane, filter, valve and watertank.				

5.	Connect the single phase power supply for domestic applications as per the circuit diagram. List the bill of materials with specifications.				
6.	Prepare an earth bit and erect the earth electrode / plate. Mention the importance of Earthing and Lightning arrester.				
7.	Install a CCTV camera and configure. Mention the list of components.				
8.	Install the Smoke Detector Alarm / Fire alarm system as per the circuit. (Electrical / IOT based)				

Institution Code	Institution Name	Course Code	Course Name
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING
Subject Code	Name of the Practical Subject		
4010350	Civil Engineering Drawing and CAD Practical I		
4010360	Material Testing Laboratory I		
4010370	Surveying Practice I		
4010440	Hydraulics Laboratory		
4010450	Material Testing Laboratory- Ii		
4010460	Construction Practice Laboratory		
4010470	Surveying Practice- II		
4010540	Civil Engineering Drawing and CAD Practical II		
4010550	Environmental Engineering Laboratory		
4010562	Concrete Technology Practical		
4010570	Entrepreneurship and startups		
4010640	Computer Applications In Civil Engineering Practice		
4010651	Estimation And Costing Laboratory		
4010660	Project Work And Internship		

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING		
Subject Code	Name of the Practical Subject				
4010350	CIVIL ENGINEERING DRAWING AND CAD PRACTICAL I				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Definition of various commands used in CAD software.	Computers Laser printer CAD software	30 3 30	30 3 30	
2	Simple Exercises for familiarizing the drawing commands in CAD software				
3	Section of semicircular Arch				
4	Elevation of door, partly panelled and partly glazed				
5	Preparation of Plan showing arrangement of furniture / fixtures and other features with standard sizes for the followings ( Each room to be drawn separately - features and furniture may be pasted from the Blocks available in the packages )				

	(i) Living (ii) Bed Room (iii) Kitchen (iv) Toilet				
6	Steel Structures: Cross section of I, Channel, T, Angle and Tubular section, Compound Beams.				
7	Section of Load bearing wall from parapet to foundation showing all the details across the section. (Single storey)				
8	Plan, Section and Elevation of a single bed roomed building (R.C.C. Roof)				
9	Plan, Section and Elevation of a Double bed roomed building (R.C.C. Roof)				
10	Plan, Section and Elevation of a Primary School Building				
11	Plan, Section and Elevation of a Hospital Building				

12	Plan, Section and Elevation of a Workshop with steel columns, Steel roof truss and Metal sheet Roofing of about 300 m2 area.				
13	Preparation of approval drawing to be submitted to Corporation or Municipality showing required details in one sheet such as a) Site Plan (Land boundary, Building boundary, Car Parking, Passage, sanitary layout, septic tank location etc. b) G.F. Plan, F.F. Plan, Section and Elevation (line diagram is enough) c) Key Plan d) Septic tank Plan and section (line diagram) e) Rain water harvesting pit (with all detail) f) Typical foundation details (Column foundation or spread footing) g) Title block showing - joinery details, Specification, Area statement, colour Index, Title of the property, space for owners Signature and Licensed Surveyor's Signature with address.				



Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESWHARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING		
Subject Code	Name of the Practical Subject				
4010360	MATERIAL TESTING LABORATORY I				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	Tension test on mild steel / deformed steel bars.	UTM	1	1	
2	Deflection test on Simply Supported Beams of a. wood and b. steel to find young's modulus	Deflection test verification of Maxwell theorem with magnetic stand, deflection gauge, weights and sets of beam(floor type)	1	1	
3	Torsion test on mild steel bar to determine the Modulus of Rigidity.	Torsion testing machine	1	1	
4	Double shear test on M.S. bar	UTM	1	1	
5	Impact Test on mild steel by performing Izod / Charpy tests	Impact testing machine for Izod and Charpy test	1	1	
6	Find Brinell's hardness numbers of the following materials. a. Mild steel b. Brass c. Aluminum	Rock well-cum-Brinell Hardness testing machine	1	1	

7	Find Rockwell's hardness numbers of the following materials. a. Mild steel b. Brass c. Aluminium.	Rock well-cum-Brinell Hardness testing machine	1	1	
8	Compression Test on Wooden cube.	Compression testing machine 100 tons capacity (electrical operated)	1	1	
9	Compression test on Bricks.	Compression testing machine 100 tons capacity (electrical operated)	1	1	
10	Compression test on Solid Blocks	Compression testing machine 100 tons capacity (electrical operated)	1	1	
11	Water absorption test on Bricks /pressed tiles.	Bucket/ Weighing balance-digital 10 kg capacity	1	1	
12	Flexure test on Tiles.	Flexural Testing Machine for Tiles	1	1	
13	Casting of Cement Mortar cubes after determining the normal consistency of cement.	Vicat needle apparatus (to conduct cement test)	1	1	
14	Determining the compressive strength of Cement Mortar cubes.	Compression testing machine 100 tons capacity (electrical operated)	1	1	

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816	SHREE VENKATESWHARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING		
Subject Code	Name of the Practical Subject				
4010370	SURVEYING PRACTICE I				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	Study of chain, tape and accessories used for chain survey.	Chain with arrows Cross staff	6 6	6 6	
2	Study of Prismatic compass, setting up over a station and observe bearings of lines.	Prismatic compass  Ranging rod	6  2	6  2	
3	Running closed traverse and finding the included angles Use Chain / Tape and Compass. Minimum 5 points.				
4	Determination of distance between two points when their base is accessible. Use Chain / Tape and Compass.				
5	Determination of distance between two points when their base is inaccessible. Use Chain / Tape and Compass.				

6	Reading of various Maps like Taluk map, District Map and Topo sheets.	Study Experiment	-	-	
7	Study of Hand held GPS.	Hand held GPS	6	6	
8	Measurement of Latitude, Longitude and Altitude using hand held GPS.				
9	Selection and marking of routings (Way points) using hand held GPS.				
10	Study of a Level - Temporary adjustment, taking readings and booking in a field book.	Dumpy Level  Levelling staff	10  10	10  10	
11	Fly leveling Reduction by Height of Collimation method - Minimum 6 points with two change points (Minimum Two exercises)				
12	Fly leveling Reduction by Rise and Fall method - Minimum 6 points with two change points (Minimum Two exercises).				
13	Fly levelling covering minimum 6 points with 2 inverted readings (Minimum Two exercises).				
14	Check levelling and reduction of levels (Minimum Two exercises)				

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING		
Subject Code	Name of the Practical Subject				
4010440	HYDRAULICS LABORATORY				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	Verification of Bernoulli's theorem.	Bernoulli's theorem apparatus (closed circuit) with all accessories	01	01	
2	Flow through Venturimeter - Determination of Co-efficient of Discharge	Venturimeter apparatus (closed circuit) with all accessories	01	01	
3	Flow through Orificemeter - Determination of Co-efficient of Discharge	Orificemeter apparatus (closed circuit) with all accessories	01	01	
4	Determination of Co-efficient of Discharge by Time fall - Head method	Orifice apparatus (closed circuit) with all accessories	01	01	
5	Determination of Co-efficient of Discharge by Constant head method	Orifice apparatus (closed circuit) with all accessories	01	01	

6	Determination of Co-efficient of Discharge by Timing fall in head method	Mouthpiece apparatus (closed circuit) with all accessories	01	01	
7	Determination of Co-efficient of Discharge by Constant head method	Mouthpiece apparatus (closed circuit) with all accessories	01	01	
8	Determination of friction factor for the given GI pipe / PVC pipe.	Pipe Friction apparatus (closed circuit) with all accessories	01	01	
9	Determination of Co-efficient of Discharge for Rectangular Notch / V-Notch	Notch apparatus (closed circuit) with accessories	01	01	
10	Reciprocating pump - To draw characteristic curves and determine the efficiency	Reciprocating Pump test rig with accessories	01	01	
11	Centrifugal pump - To draw characteristic curves and determine the efficiency	Centrifugal Pump test rig	01	01	
12	Study of working principle of a pelton wheel.	Pelton wheel	01	01	

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816	SHREE VENKATESWHARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING		
Subject Code	Name of the Practical Subject				
4010450	MATERIAL TESTING LABORATORY- II				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	Determination of Voids ratio and porosity of sand.	Pycnometer	04	04	
2	Determination of liquid limit and plastic limit of the given soil.	Liquid limit device with all accessories	02	02	
3	Determination of bulk density and specific gravity of Fine aggregates.	Pycnometer	04	04	
4	Determination of bulk density and specific gravity of Coarse aggregates.	Pycnometer	04	04	

5	Proctor's compaction test on soil.	Proctor compaction mould with all accessories	02	02	
6	Direct shear test on sand.	Direct shear machine with complete accessories	01	01	
7	Field Density of Soil by core cutter method / sand replacement method.	Field density of soil apparatus (sand pouring cylinder) with complete set	02	02	
8	Attrition test on Aggregate	Devals attrition testing machine with complete accessories	01	01	
9	Abrasion test on Aggregate	Dorry's abrasion testing machine with complete accessories	01	01	
10	Aggregate crushing value test.	Crushing strength apparatus	01	01	
11	Aggregate impact value test.	Aggregate impact testing machine with complete accessories	01	01	

12	Determination of Water absorption of coarse aggregate.	-	-	-	
13	Determination of Total solids present in the given sample of water.	-	-	-	
14	Determination of Turbidity of water by "Jackson candle turbidity meter."	Jackson Candle Turbidity Meter	01	01	
15	Determination of settleable solids present in the given sample of water/ waste water by "Imhoff cone."	Imhoff Cone	01	01	
16	Determination of Organic and inorganic matters present in the given sample of water.	-	-	-	

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816	SHREE VENKATESWHARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING		
Subject Code	Name of the Practical Subject				
4010460	CONSTRUCTION PRACTICE LABORATORY				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	Identify various sizes of available coarse aggregates from sample of 10 kg in laboratory and prepare report (60,40, 20,10 mm)	Aggregate	As required	As required	
2	Identify the available construction materials in the laboratory on the basis of their sources.	Basic materials			
3	Identify the grain distribution pattern in given sample of teak wood in the laboratory and draw the various patterns. (along and perpendicular to the grains)	Wood			

4	Identify various layers and types of soil in foundation pit by visiting at least 3 construction sites in different locations of city and prepare report consisting photographs and samples.	-			
5	Select first class, second class and third class bricks from the stake of bricks and prepare report on the basis of its properties.	Bricks			
6	Measure dimension of 10 bricks and find average dimension and weight. Perform field tests - dropping, striking and scratching by nail and correlate the results obtained.	Bricks			
7	Apply the relevant termite chemical on given damaged sample of timber.	Termite proof			
8	Apply two or more coats of selected paint on the prepared base of a given wall surface for the area of 1m x 1m using suitable brush/ rollers adopting safe practices.	Paint			
9	Prepare mortar using cement and Sand/ Fly ash or Granite/marble polishing waste in the proportion 1:6 or 1:3.	Cement , Sand			

10	Prepare and develop a centre line plan, foundation Plan and set out spread footing in the field for the given line sketch of a building.	Pegs, Thread, Lime powder, Tape			
11	Prepare and develop a centre line plan, foundation Plan and set out the layout of columns and footing in the field for the given line sketch of a building (Framed structure).	Pegs, Thread, Lime powder, Tape			
12	Arrangement of bricks using English bond for one brick thick wall and one and half brick thick wall for right angled corner junction.	Bricks			
13	Arrangement of bricks using English Bond for one brick thick wall, one and half brick thick wall for Tee junction.	Bricks			
14	Arrangement of bricks using English bond for one brick thick, one and half and two brick thick square pillars.	Bricks			
15	Cutting, hooking, cranking and arrangement of reinforcement for: a.Singly reinforced Beam b Lintel and sunshade c Column and footing	Bar bending tools			

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING		
Subject Code	Name of the Practical Subject				
4010470	SURVEYING PRACTICE- II				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	Study of a Theodolite - Temporary adjustments Reading horizontal angles.	Vernier Theodolite	06	06	
2	Measurement of horizontal angle by: i. Reiteration method (not for Exam) ii. Repetition method (not for Exam)				
3	Determination of distance between two points when their bases are accessible, using Theodolite - Measuring Horizontal angles by repetition method and distances from a Theodolite Station.				
4	Determination of distance between two points when their bases are inaccessible, using Theodolite - Measuring Horizontal angles by reiteration method from a baseline.				
5	Measurements of vertical angles to different points.				

6	Determination of Elevation of an object when the base is accessible.				
7	Determination of Elevation of an object when the base is inaccessible by : a) Single plane method b) Double plane method.				
8	Run a closed theodolite traverse for measuring length, included angles and bearing at initial Station and Plot the traverse				
9	Determination of constants of a tacheometer.	Tacheometer	06	06	
10	Determination of distance and elevation of points by Stadia tacheometry.				
11	Determination of gradient between two points (with different elevations) by Stadia tacheometry.				
12	Determination of distance and elevation of points by Tangential tacheometry.				
13	Study of Total Station General commands used - Instrument preparation and setting Reading distances and angles.	Total Station	02	02	
14	Measurement of distances and co-ordinates of given points, using Total station.				

15	Measurement of altitude of given elevated points, using Total Station.				
16	Run closed traverse using Total Station and plotting the traverse .				
17	Determination of area of a field / land / College Campus etc. using Total station.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING		
Subject Code	Name of the Practical Subject				
4010540	CIVIL ENGINEERING DRAWING AND CAD PRACTICAL - II				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	<u>I.PUBLIC HEALTH ENGINEERING</u> Rapid sand filter	Drawing table with board	30	30	
2	Septic tank with dispersion trench / Soak pit.				
3	RCC square overhead tank supported by four columns.				

4	<u>II.BRIDGE DRAWING</u> Steel foot over bridge across a highway				
5	Two span tee beam bridge with square returns.				
6	<u>III.STRUCTURAL ENGINEERING</u> Continuous one-way slab (with three equal spans)	Computers Laser printer CAD Software	30 01 30	30 01 30	
7	Simply supported two-way slab				
8	Restrained two-way slab				
9	Singly reinforced rectangular beam				
10	Doubly reinforced continuous beam (Rectangular beam with two spans)				
11	Tee Beams supporting continuous slab				
12	Lintel and sunshade				
13	Dog legged staircase				
14	R.C.C Column with square isolated footings exercises				



Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESWHARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING		
Subject Code	Name of the Practical Subject				
4010550	ENVIRONMENTAL ENGINEERING LABORATORY				
1	Collection of water samples from sources and Estimation of sulphate content in water sample.	Spectrometer, Nessler tubes	1	1	
2	Determination of PH value by Electrometric method using Ph Meter/ Calorimetric method and comparison by paper method.	PH meter, PH paper, Universal indicator.	2	2	
3	Determine the optimum dose of coagulation in a given raw water sample by jar test.	Jar Test apparatus	1	1	
4	Determine the dissolved oxygen in the given sample of water.	BOD bottle with stopper	1	1	
5	Determination of suspended solids and dissolved solids present in the given sample of water/waste water	Porcelain dish ,oven	1	1	
6	Determination of Temporary and permanent Hardness present in the given sample of water by EDTA titration method.	Burette ,pipette, conical flask, beaker	15	15	
7	Estimation of chlorides in the given sample of water by silver titration method.	Burette ,pipette, conical flask, beaker	15	15	

8	Prepare a report of a field visit to water treatment plant.	Field visit/Report	-	-	
9	Study of pipe fitting used in water supply( with actual models displayed on board)	Pipe fitting	Each	Each	
10	Study of sanitary wares ( with actual models displayed on board)	Sanitary wares fitting	Each	Each	
11	Cutting, threading and joining of G.I pipes/ cutting and pasting of PVC pipes using solvents.	Bench vice, PVC pipe, GI pipes, Hacksaw frame, Die set with die, Solvent	Each	Each	
12	Making a bathroom connection from an existing water supply main(making indents, drawing a neat sketch of the connection with details)	Pipe fittings	Each	Each	
13	Making suction and delivery pipe connection to a centrifugal pump(making indents, drawing a neat sketch of the connection with details)	Foot valve, Pipe Fitting	Each	Each	
14	Study of air pollution control equipments(Gravity settling chamber, cyclone filter with models /devices)	Cyclone filter	1	1	
15	Prepare a report of a field visit to sewage treatment plant	Field visit/Report	-	-	

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816	SHREE VENKATESWHARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING		
Subject Code	Name of the Practical Subject				
4010562	CONCRETE TECHNOLOGY PRACTICAL				
1	Determination of the fineness of cement by blains permeability apparatus or bye sieve analysis	Sieve no 9	2	2	
2	Determination of initial setting time of cement by using vicat's apparatus	Vicat's apparatus with needle for initial setting time	2	2	
3	Determination of final setting time of cement by using vicat's apparatus	Vicat's apparatus with needle for final setting time	2	2	
4	Shape test for coarse aggregate - Flakiness Index test	Standard thickness gauge, IS sieve	1	1	
5	Shape test for coarse aggregate - Elongation Index test	Length gauge, IS sieve	1	1	
6	Shape test for coarse aggregate - Angularity number test	Metal cylinder , tamping rod	1	1	

7	Determine the building characteristics of given sand sample	Measuring jar, mixing pan	1	1	
8	Determination of workability of concrete by slump cone test	Slump cone apparatus	2	2	
9	Determination of workability of concrete by compaction factor test	Compaction factor apparatus	1	1	
10	Casting of concrete cube and compression test on concrete cube	Concrete cube mould (150x150x150)	9	9	
11	Determination of fineness modulus of fine aggregate sample and plot a particle size distribution curve and also find the effective size and uniformity co-efficient	Sieve set for fine aggregate	2	2	
12	Determination of fineness modulus of coarse aggregate sample by conducting sieve analysis	Sieve set for coarse aggregate	2	2	
13	Vee-Bee Consistometer test on concrete test	Vee-Bee Consistometer	1	1	
14	Study of workability of self compacting concrete	Slump cone apparatus	2	2	

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816	SHREE VENKATESWHARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING		
Subject Code	Name of the Practical Subject				
4010640	COMPUTER APPLICATIONS IN CIVIL ENGINEERING PRACTICE				
1	Prepare the Estimate sheet with given data (provide all the measurement details) and calculate the quantity using formula bar.	Computers			
2	Prepare the Abstract sheet for the given data and calculate Amount and Total Amount using Formula bar ( Use separate column for rates and units)	Laser Printer	30	30	
		Auto Cad- Auto	3	3	
3	Design and Analysis problems 1. Calculate Area and Elongation using Formula bar 2. Calculate Effective depth, "d" and Area of Steel „Ast" using Formula Bar for given singly reinforced section.	Rebar			
		Microsoft Office			
		- Project			
4	For given dimension of Masonry/R.C.C Dam ie. top width, bottom width, height of Dam , height of water, Specific weight of masonry/R.C.C. , Sp.wt of Water etc,. Find the base pressure and check the stability of the dam.	Staad Pro V8i			
		Gis Software-			
5	Finding centre of gravity; Ixx and IYY of I, L, T and channel sections	Espatialc			

6	Continuous one way slab (with three equal spans)				
7	Simply supported two-way slab				
8	Restrained two - way slab				
9	Singly reinforced rectangular beam				
10	Doubly reinforced continuous rectangular beam with two equal span				
11	Dog-legged staircase				
12	R.C.C Column with square Isolated footing				
13	Carry out the analysis and design of simple RCC structures using any one of the available packages like STAADPRO, ETAB, CADSD3D or any other suitable packages.				
14	Develop the CPM / PERT Network for the proposed simple building project using any one of the available packages mentioned below or any other suitable packages.				
15	Develop Aerial map of given area using any one of the available packages mentioned below or any other suitable packages.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESWHARA HI-TECH POLYTECHNIC COLLEGE	1010	CIVIL ENGINEERING		
Subject Code	Name of the Practical Subject				
4010651	ESTIMATION AND COSTING LABORATORY				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	Prepare the list of items to be executed with units for detailed estimate of a given structure from the given drawing.	-	-	-	
2	Prepare a report on market rates for given material, labour wages, hire charges of tools & equipments required to construct the given structure as mentioned in at Serial number 1 above	-	-	-	
3	Recording in Measurement Book (MB) for any four items	-	-	-	
4	Prepare bill of quantities of given item from actual measurements. (any four items).	-	-	-	
5	Prepare approximate estimate for the given engineering works	-	-	-	
6	Calculate the quantity of items of work from the given set of drawings using standard measurement sheet for load bearing residential structure using description of item from (1BHK	-	-	-	

	Building with staircase).				
7	Prepare detailed estimate from the given set of drawings using "standard measurement and abstract format" for RCC framed structure using description of item (G+1Building)	-	-	-	
8	Calculate the reinforcement quantities from the given set of drawings for a room size of 3 m x 4m with bar bending schedule.	-	-	-	
9	Prepare detailed estimate of bitumen road of one kilometre length from the given drawing.	-	-	-	
10	Prepare detailed estimate of small Septic tank from the given set of drawings	-	-	-	
11	Prepare bar bending schedule for the given singly reinforced and doubly reinforced beams	-	-	-	
12	Prepare bar bending schedule for the given continuous beam	-	-	-	
13	Prepare bar bending schedule for the given one way slab	-	-	-	
14	Prepare bar bending schedule for the given two way slab	-	-	-	
15	Prepare bar bending schedule for the given square column and square footing	-	-	-	

Institution Code	Institution Name	Course Code	Course Name
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1020	MECHANICAL ENGINEERING
Subject Code	Name of the Practical Subject		
4020350	Machine Drawing And Cad Practical		
4020360	Manufacturing Technology – I Practical		
4020370	Measurements And Metrology Practical		
4020450	Strength Of Materials And Fluid Mechanics Practical		
4020460	Manufacturing Technology-II Practical		
4020470	Electrical Drives And Control Practical		
4020540	Process Automation Practical		
4020550	Thermal Engineering Practical		
4020561	Computer Integrated Manufacturing Practical		
4020570	Entrepreneurship & Startup		
4020640	Solid Modeling Practical		
4020653	Automobile Technology Practical		
4020660	Project Work And Internship		

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1020	MECHANICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4020350	MACHINE DRAWING AND CAD PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
Draw The Front View / Sectional Front View (Full Section / Half Section) And Top View / Left Side View / Right Side View For The Following Given Part Drawing Of The Components After Assemble In The Drawing Sheet And Cad Package.					
1	To create the assemble Front View / Sectional Front View for sleeve and cotter joint	Personal computer  CAD software  Printer	30  sufficient  01	30  sufficient  01	
2	To create the assemble Front View / Sectional Front View for screw jack				
3	To create the assemble Front View / Sectional Front View for Plummer block				
4	To create the assemble Front View / Sectional Front View for simple eccentric				
5	To create the assemble Front View / Sectional Front View for machine vice				
6	To create the assemble Front View / Sectional Front View for flanged coupling				

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1020	MECHANICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4020360	MANUFACTURING TECHNOLOGY-I PRACTICAL				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
01	Prepare the specimen and make the Step turning & Taper turning	Center Lathe Single point cutting tool	10	10	
			10	10	
02	Prepare the specimen and make the Step turning & Knurling		10	10	
			10	10	
03	Prepare the specimen and make the Step turning &BSW Thread cutting		10	10	
			10	10	
04	Prepare the specimen and make the Shaft and Bush		10	10	
			10	10	
05	Prepare the specimen and make the Step turning & BSW and Metric Thread		10	10	
			10	10	
06	Prepare the specimen and make the Eccentric turning		10	10	

			10	10		
07	Prepare the green sand moulding using any one Solid Pattern	Patterns Cope box, Drag box Runner & riser	05	05		
			10	10		
			20	20		
08	Prepare the green sand moulding using any one Split Pattern		05	05		
			10	10		
			20	20		
09	Prepare the green sand moulding using any one Loose Piece pattern		05	05		
			10	10		
			20	20		
10	Prepare the specimen and make the Lab joint by the Arc Welding		Arc welding booth	02	02	
			Safety Glass	10	10	
			Electrode 10 SWG	200	200	
11	Prepare the specimen and make the Corner joint by the Gas Welding	Gas welding unit	01	01		
		Gas welding goggles	02	02		
		Flux chipping hammer	04	04		
12	Prepare the specimen and make the Butt joint by the Spot welding	Spot welding machine	01	01		

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1020	MECHANICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4020370	MEASUREMENTS AND METROLOGY PRACTICAL				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
01	Measure the dimensions of ground MS flat / cylindrical bush using Vernier Caliper compare with Digital / Dial Vernier Caliper.	Vernier Caliper	02	02	
		Digital / Dial Vernier Caliper	02	02	
02	Measure the diameter of a wire using micrometer and compare the result with digital micrometer	Outside micrometer	02	02	
		Digital / Dial micrometer	02	02	
03	Measure the thickness of ground MS plates using slip gauges	Slip gauges	02	02	
04	Measure the inside diameter of the bore of a bush cylindrical component using inside micrometer compare the result with digital micro meter	Inside micrometer	02	02	
		Digital inside micrometer	02	01	
05	Measure the height of gauge blocks or parallel bars using Vernier height gauge	Height gauge	01	01	
06	Detect of cracks of the given two specimens using liquid penetrant test and	Magnetic yoke	01	01	

	magnetic particle test				
07	Measure the angle of a V-block / Taper Shank of Drill / Dovetail using universal bevel protractor	Universal bevel protractor	02	02	
08	Measure the angle of the machined surface using sine bar with slip gauges	Sine bar	02	02	
		Slip gauge	02	02	
09	Measure the geometrical dimensions of V-Thread using thread micrometer	Thread micrometer	01	01	
10	Measure the geometrical dimensions of spur gear	Gear tooth Vernier	02	02	
11	Find out the measurement of given component and compare with a standard component using mechanical comparator and slip gauge	Mechanical comparator	02	02	
12	Prepare a specimen to examine and find the grain structure using the Metallurgical Microscope	Abrasive grinder	01	01	
		Polishing Machine	01	01	
		Mounting machine	01	01	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1020	MECHANICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4020450	STRENGTH OF MATERIALS AND FLUID MECHANICS PRACTICAL				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	Test On Ductile Materials	Utm.	01	01	
2	Hardness Test	Rockwell's Hardness Testing Machine	01	01	
3	Torsion Test	Torsion Testing Machine	01	01	
		Vernier Caliper	02	02	
4	Impact Test	Impact Testing Machine	01	01	
5	Tests On Springs Of Circular Section	Spring Testing Arrangements	01	01	

		Vernier Caliper	02	02	
6	Shear Test	Shear Testing Machine	01	01	
7	Verify The Bernoulli's Theorem	The Bernoulli's Apparatus	01	01	
8	Determination Of Co-Efficient Of Discharge Of A Mouth Piece By Variable Head Method	Mouthpiece Apparatus	01	01	
9	Determination Of Co-Efficient Of Discharge Of A Venturimeter	Venturimeter Apparatus	01	01	
10	Determination Of The Friction Factor In A Pipe	Pipe Friction Apparatus	01	01	
11	Performance Test On Reciprocating Pump And To Draw The Characteristics Curves	Reciprocating Pump Apparatus	01	01	
12	Performance Test On Impulse Turbine And To Find Out The Efficiency	Impluse Turbine Apparatus	01	01	



Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESWHARA HI-TECH POLYTECHNIC COLLEGE	1020	MECHANICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4020460	MANUFACTURING TECHNOLOGY-11 PRACTICAL				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	Make 'V' Block Using Shaping Machine	Shaping Machine	02	02	
		Tools And Measuring Gauge	Sufficient Quantity	Sufficient Quantity	
2	Make Dovetail Using Shaping Machine	Shaping Machine	02	02	
		Tools And Measuring Gauge	Sufficient Quantity	Sufficient Quantity	
3	Make Groove Cut Using Slotting Machine	Slotting Machine	01	01	
		Tools And Measuring Gauge	Sufficient Quantity	Sufficient Quantity	
4	Make Round To Hexagon In Milling Machine.	Universal Milling Machine	02	02	
5	Make Spur Gear Using Milling Machine	Universal Milling Machine	02	02	

6	Make Helical Gear Using Milling Machine	Universal Milling Machine	02	02	
7	Make Slot Cut Using Milling Machine	Vertical Milling Machine	02	02	
		Tools And Measuring Gauge	Sufficient Quantity	Sufficient Quantity	
8	Make Progressive Type Plug Gauge Using Cylindrical Grinding Machine	Cylindrical Grinding	01	01	
		Measuring Gauge	Sufficient Quantity	Sufficient Quantity	
9	Make A Turning Tool Using Tool And Cutter Grinder	Tool And Cutter Grinder	01	01	
10	Make Plain Surfaces (Four Surfaces)Using Surface Grinder	Surface Grinder	01	01	
		Measuring Gauge	Sufficient Quantity	Sufficient Quantity	
11	Make The Component In The Cnc Turing Centre	Cnc Turning Centre	01	01	
12	Make The Component In The Cnc Milling Centre	Cnc Milling Centre	01	01	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESWHARA HI-TECH POLYTECHNIC COLLEGE	1020	MECHANICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4020470	ELECTRICAL DRIVES AND CONTROL PRACTICAL				
Exercise No	Name of the exercise	Equipments / Apparatus / Consumables Required	Number required as per Syllabus	Number available in Working Condition	Remarks
1	Verification Of Ohm's Law	Resistor 1k $\Omega$	1	1	
		DC Ammeter 0-100mA	1	1	
		DC Voltmeter 0-30V	1	1	
2	Load Test On Dc Shunt Motor	DC Voltmeter 0-300V	1	1	
		Rheostat - 300 $\Omega$ /1A	1	1	
		DC Ammeter 0-10A	1	1	
		Three Point Starter 20A, 220V	1	1	
3	Load Test on Single Phase Induction Motor	AC Ammeter 0-10A	2	2	
		AC Voltmeter 0-300V	3	3	
		Wattmeter - various ranges 0-750,0-600V,5/10A	3	3	

		Loading Rheostat 5A,230V	1	1	
4	Load Test On Three Phase Squirrel Cage Motor	AC Ammeter 0-10A	1	1	
		Wattmeter 600V/10A UPF	2	2	
		Tachometer	1	1	
		DOL Starter 16A, 415V	1	1	
5	Testing Of Relays, Contactors, Push Buttons And Limit Switch	Star Delta Starter 20A,600V	1	1	
		Over Load Relay 1 to 2.5A	1	1	
		Air Break Contactors 20A,220V	4	4	
		Push Button 2A,220V	2	2	
6	Connection And Testing Of Mcb, Elcb	Limit Switch 20A, 220V	1	1	
		MCB 20A ,single pole	1	1	
		MCB 20A ,double pole	1	1	
		ELCB 2POLE 20A, 100mA	1	1	
		ELCB 4POLE 20A, 100mA	1	1	

7	Construction And Testing Of Halfwave And Fullwave Rectifier	Transformer 230/9-0-9V,1A	2	2	
		Resistor 1k $\Omega$ /1/2W	3	3	
		Diode 1N4001	2	2	
		Capacitor 1000 $\mu$ F/25V	4	4	
8	Construction And Testing Of Ic Voltage Regulator Using Ic 7805	IC 7805	1	1	
9	Verification Of Truth Tables For Logic Gates	Logic gates IC 7400,7408,7432,7404,7402, 7486	Each 1	Each 1	
10	Verification Of Universal Gates	Logic gates IC 7402, 7400	1	1	
11	Identification And Testing Of Display Devices - Led, 7segment Led, Laser Diode	LED,7 Segment LED, Laser diode	1	1	
12	Testing Of Stepper Motor Drive	Stepper motor Driver kit	1	1	
13	Testing Of Servomotor Drive	Servo motor Driver kit	1	1	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1020	MECHANICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4020540	PROCESS AUTOMATION PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
01	Direct operation of single and double acting cylinder	Pneumatic training kit	03	02	
02	Operation of double acting cylinder with quick exhaust valve		03	02	
03	Speed control of double acting cylinder using metering-in and metering-out Circuits		03	02	
04	Automatic operation of double acting cylinder in single cycle - using limit Switch.		03	02	

05	Direct operation of double acting cylinder	Hydraulics Trainer Kit	02	01	
06	Direct operation of hydraulic motor		02	01	
07	Speed control of double acting cylinder metering-in and metering-out control.		02	01	
08	Direct operation of a motor using latching circuit.	PLC kit Computer with software	03	02	
09	Operation of a motor using 'AND' logic control		10	10	
			03	02	
10	Operation of a motor using 'OR' control.		10	10	
			03	02	
11	On-Delay control of a motor and Off -Delay control of a motor.		10	10	
			03	02	
12	Automatic operation of a Double acting cylinder-single cycle forward, time delay, return		03	02	
			10	10	
13	Automatic operation of Double acting cylinder-Multi cycle		03	02	
		10	10		
14	Sequential operation of double acting cylinder and a motor	03	02		
		10	10		

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1020	MECHANICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4020550	THERMAL ENGINEERING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
01	Flash and fire point of the given oil using open cup and closed cup Apparatus	Open cup apparatus	02	02	
		Close cup apparatus	02	02	
02	The absolute viscosity of the given lubricating oil using Redwood Viscometer	Redwood viscometer	02	02	
03	The absolute viscosity of the given lubricating oil using Say bolt Viscometer	Say bolt viscometer	02	02	
04	Port timing diagram of two stroke petrol Engine	Two stroke petrol engine Model	02	02	

05	Valve time diagram for four stroke petrol Engine	Four stroke petrol engine Model	02	02	
06	Valve time diagram for four stroke diesel engines	Four stroke diesel engine Model	02	02	
07	Load test (Performance test) on Four Stroke Petrol Engine	Four stroke Petrol Engine Test rig	01	01	
08	Load test (Performance test) on Four Stroke diesel Engine	Four stroke Diesel engine Test rig	01	01	
09	Morse test on Multi-cylinder petrol engine	Multi -cylinder petrol engine test rig	01	01	
10	Heat balance test on Four Stroke Diesel / Petrol Engine	Four stroke Diesel engine Test rig	01	01	
11	Volumetric efficiency of Air Compressor.	Air compressor test rig	01	01	
12	Determination of COP of Refrigeration System	Refrigeration Test rig	01	01	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HITEC POLYTECHNIC COLLEGE	1020	MECHANICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4020561	COMPUTER INTEGRATED MANUFACTURING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
01	Geneva Wheel	Personal computer 3D Solid Modeling software Laser / Inkjet Printer	30 sufficient 01	30 sufficient 01	
02	Bearing Block				
03	Bushed bearing				
04	Gib and Cotter joint				
05	Screw Jack				
06	Universal Coupling				

07	Using Linear and Circular interpolation - Create a part program and produce component in the Machine	Personal computer  CNC milling  Consumable  Laser / Inkjet Printer	30  02  Sufficient  01	30  01  Sufficient  01	
08	Using Stock removal cycle - Create a part program for multiple turning operations and produce component in the Machine				
09	Using canned cycle - Create a part program for thread cutting, grooving				
10	Using Linear interpolation and Circular interpolation - Create a part program for grooving and produce component in the Machine				
11	Using canned cycle - Create a part program for drilling, tapping, counter sinking and produce component in the Machine.				
12	Using subprogram - Create a part program and produce component in the Machine				

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1020	MECHANICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4020640	SOLID MODELING PRACTICAL				
1	3D Modeling Of Model 1	CREO  Computer	Sufficient  30	Sufficient  30	
2	3D Modeling Of Model 2				
3	3D Modeling Of Model 3				
4	3D Modeling Of Model 4				
5	3D Modeling Of Model 5				
6	3D Modeling Of Model 6				
7	Draw The Part Models And Assembling Of Revolving Center				
8	Draw The Part Models And Assembling Of Tail Stock				
9	Draw The Part Models And Assembling Of Machine Vice				
10	Draw The Part Models And Assembling Of Crank Hook				
11	Draw The Part Models And Assembling Of Connecting Rod				
12	Draw The Part Model And Assembling Of Pipe Vice				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESWHARA HI-TECH POLYTECHNIC COLLEGE	1020	MECHANICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4020653	AUTOMOBILE TECHNOLOGY PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Dismantling and assembling of four stroke petrol engine and identification of parts	4 Stroke Petrol Engine	01	03	
2	Removing camshaft, replacing timing gears, removing valves, lapping and adjusting valve clearance	4 Stroke Diesel Engine	01	03	
3	Removing, servicing and replacing of fuel pump, oil pump & water pump	Oil pump	01	02	
		Water pump.	01	02	
4	Removing, servicing & replacing MPFI system	MPFI System	01	01	
5	Dismantling and assembling of inline fuel injection pump / CRDI system..	CRDI system	01	01	
6	Test a battery with specific gravity test and charge the battery with constant amperage / voltage method.	Battery and charging set up.	01	01	

Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
7	Removing and replacing of pressure plate and clutch plate, fingers adjustment	Clutch set arrangement with tools	01	02	
8	Dismantling, inspecting and assembling of constant mesh gear box and find Out the gear ratios.	Complete gear box with tools	01	01	
9	Dismantling, assembling and adjusting of steering gear box	Complete steering arrangement	01	03	
10	Dismantling, overhauling and assembling of starter motor / alternator	starter motor	01	02	
		alternator	01	03	
11	Trace the automobile electrical system with respect to battery coil ignition system	battery coil ignition system	01	01	
12	Trace the automobile electrical system with respect to (i) horn relay circuit, (ii) Wiper circuit & explain with neat circuit diagram.	horn relay	01	01	
		Wiper circuit	01	01	

Institution Code	Institution Name	Course Code	Course Name
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1021	AUTOMOBILE ENGINEERING
Subject Code	Name of the Practical Subject		
4021350	Material Testing and Fluids Mechanics & Pneumatics Practical		
4021360	Production Technology Practical		
4020370	Measurements and Metrology Practical		
4020350	Machine Drawing And Cad Practical		
4021460	Automobile Electrical And Electronics Systems Practical		
4021470	Automotive Engines Practical		
4021540	Automobile Servicing Practical		
4021550	Engine Testing and Emission Measurement Practical		
4021561	Two- Wheeler and Three- Wheeler Technology Practical		
4020570	Entrepreneurship and Startup		
4021640	Hybrid Electrical Vehicle Practical		
4020561	Computer Aided Design And Manufacturing Practical		
4020660	Project Work And Internship		

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1021	AUTOMOBILE ENGINEERING		
Subject Code	Name of the Practical Subject				
4021350	MATERIAL TESTING AND FLUIDS MECHANICS & PNEUMATICS PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
PART A					
1	Tension test on Ductile Materials- Finding Young's Modulus of Elasticity, Yield Points, Percentage Elongation and Percentage Reduction in Area, Stress Strain Diagram Plotting test on Mild Steel with the help of a Universal Testing machine.	Universal Testing Machine (UTM)	1	1	
2	Torsion test - Torsion test on mild steel - relation between torque and angle of twist determination of shear modulus and shear stress. Draw a graph between torque and angle of twist in radians.	Torsion testing machine	1	1	
3	Test on spring - Compression Tests on open coil spring - Determination of modulus of rigidity, strain energy, shear stress and stiffness by load deflection method. Draw a graph	Spring testing machine	1	1	



	<b>between load and deflection</b>				
4	Test on orifice - Determination of co-efficient of discharge of a orifice by variable head method and a graph between $\sqrt{H_1}-\sqrt{H_2}$ Vs time taken (t).	Orifice testing kit setup	1	1	
5	Test on venturimeter - Determination of co-efficient of discharge of the venturimeter and draw the following graphs between (i) head Loss (hf) Vs Actual discharge (Qa) and (ii) head loss (hf) Vs co-efficient of discharge (Cd)	Venturimeter Apparatus	1	1	
6	Test on pipe friction apparatus - Determine the friction factor of the given pipe and draw a graph between friction head (hf) and Velocity (v).	Pipe friction Apparatus	1	1	
<b>PART B</b>					
7	Direct operation of pilot control of single acting cylinder and double acting cylinder.	Pneumatic Trainer Kit with all standard accessories	2	2	

8	Speed control of double acting cylinder using metering-in and metering-out circuits.	Pneumatic Trainer Kit with all standard accessories	2	2	
9	Automatic operation of double acting cylinder in single cycle - using limit switch.	Pneumatic Trainer Kit with all standard accessories	2	2	
10	Direct operation of double acting cylinder	Hydraulics Trainer Kit with all standard accessories	2	1	
11	Direct operation of hydraulic motor.	Hydraulics Trainer Kit with all standard accessories	2	1	
12	Speed control of double acting cylinder metering-in and metering-out control.	Hydraulics Trainer Kit with all standard accessories	2	1	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE	1021	AUTOMOBILE ENGINEERING		
Subject Code	Name of the Practical Subject				
4021360	PRODUCTION TECHNOLOGY PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Prepare the green sand moulding using any one Solid Pattern in the foundry	Moulding board Cope box Drag box Core box Shovel Rammer set Slick Strike-off bar Riddle Trowel Lifter Cleaning Brush Vent rod Draw spike Gate cutter Runner & riser each	5 Nos 5 Nos 5 Nos 5 Nos 2 Nos 5 Nos 5 Nos 5 Nos 2 Nos 5 Nos 5 Nos 5 Nos 5 Nos 5 Nos 5 Nos 5 Nos 5 Nos	5 Nos 5 Nos 5 Nos 5 Nos 2 Nos 5 Nos 5 Nos 5 Nos 2 Nos 5 Nos 5 Nos 5 Nos 5 Nos 5 Nos 5 Nos 5 Nos 5 Nos	

2	Prepare the green sand moulding using any one Split Pattern in the foundry				
3	Prepare the specimen and make the T-joint by the Arc Welding (Both sidewelded) (Raw material 25mmX6mm MS flat)	Arcwelding transformer Welding shield Chipping hammer Leather Glows 18"	1 No 5 Nos 10 Nos 10 Set	1 No 5 Nos 10 Nos 10 Set	
4	Prepare the specimen and make the Butt joint by the Gas Welding. (Raw material 25mmX3mm MS sheet)	Gas welding unit Gas welding goggles	1 Set 5 Nos	1 Set 5 Nos	
5	Prepare the specimen and make the drilling and counter boring as shown in figure using the upright drilling machine/ Radial drilling machine.	Upright drilling machine / Radial drilling machine Vernier Height Gauge Surface plate	1 No 1 No 1 No	1 No 1 No 1 No	
6	Prepare the specimen and make the plain surfaces as shown in figure using the surface Grinder.	Surface Grinding Machine	1 No	1 No	

7	Prepare the specimen and make the Step Turning & Taper Turning as shown in figure using the Lathe.	Lathe	2 No	2 No	
8	Prepare the specimen and make the Step Turing & Thread cutting as shown in figure using the Lathe.	Lathe	2 No	2 No	
9	Prepare the specimen and make 'V' Block as shown in figure using Shaping machine	Shaping Machine	1 No	1 No	
10	Prepare the specimen and make round to square as shown in figure using milling machine	Vertical Milling Machine	1 No	1 No	
11	Prepare the specimen and make Spur Gear as shown in figure using milling machine by indexing method.	Universal Milling Machine	1 No	1 No	
12	Prepare the specimen and make the turning tool as shown in figure using the Tool and Cutter Grinder	Tool and Cutter Grinder	1 No	1 No	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE	1021	AUTOMOBILE ENGINEERING		
Subject Code	Name of the Practical Subject				
4020370	MEASUREMENTS AND METROLOGY PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
01	Measure the dimensions of ground MS flat / cylindrical bush using Vernier Caliper compare with Digital / Dial Vernier Caliper.	Vernier Caliper	02	02	
		Digital / Dial Vernier Caliper	02	02	
02	Measure the diameter of a wire using micrometer and compare the result with digital micrometer.	Outside micrometer	02	02	
		Digital / Dial micrometer	02	02	
03	Measure the thickness of ground MS plates using slip gauges.	Slip gauges	02	02	
04	Measure the inside diameter of the bore of a bush cylindrical component using inside micrometer compare the result with digital micro meter.	Inside micrometer	02	02	
		Digital inside micrometer	02	01	

05	Measure the height of gauge blocks or parallel bars using vernier height gauge.	Height gauge	01	01	
06	Detect of cracks of the given two specimens using liquid penetrant test and magnetic particle test.	Magnetic yoke	01	01	
07	Measure the angle of a V-block / Taper Shank of Drill / Dovetail using universal bevelprotractor	Universal bevel protractor	02	02	
08	Measure the angle of the machined surface using sine bar with slip gauges	Side bar	02	02	
		Slip gauge	02	02	
09	Measure the geometrical dimensions of V-Thread using thread micrometer	Thread micrometer	01	01	
10	Measure the geometrical dimensions of spur gear	Gear tooth Vernier	02	02	
11	Find out the measurement of given component and compare with a standard component using mechanical comparator and slip gauge	Mechanical comparator	02	02	
12	Prepare a specimen to examine and find the grain structure using the Metallurgical Microscope	Abrasive grinder	01	01	
		Polishing Machine	01	01	
		Mounting machine	01	01	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1021	AUTOMOBILE ENGINEERING		
Subject Code	Name of the Practical Subject				
4020350	MACHINE DRAWING AND CAD PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
Draw The Front View / Sectional Front View (Full Section / Half Section) And Top View / Left Side View / Right Side View For The Following Given Part Drawing Of The Components After Assemble In The Drawing Sheet And Cad Package.					
1	Sleeve & Cotter Joint	Personal computer CAD software Printer	30 sufficient 01	30 sufficient 01	
2	Screw Jack				
3	Plummer Block				
4	Simple Eccentric				
5	Machine Vice				
6	Protected Type Flanged Coupling				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1021	AUTOMOBILE ENGINEERING		
Subject Code	Name of the Practical Subject				
4021460	AUTOMOTIVE ELECTRICAL AND ELECTRONICS SYSTEMS PRACTICAL				
1	Testing Of Alternator Parts Such As Stator, Rotor And Rectifier For Resistance, Continuity For Insulation Effectiveness Using Multifunction Tester.	Alternator	2	2	
2	Testing Of Starter Motor Parts Such As Test Field Windings, Brush Holders, Armature And Solenoid Switch For Continuity Using Multifunction Tester.	Starter Motor	2	2	
3	Testing Of Electronics Fuel Ignition System	Electronic Fuel Ignition Systems Kit	1	1	
4	Servicing Of The Wiper Motor And Horns - Tuning.	Wiper Motor HORN	2 2	2 2	
5	Identifying And Testing Of The Various Terminals Of 4-Point, 5-Point, 6-Point & 8-Point Relays Through Their Markings Using Multifunction Tester.	Relay ( 4 Point, 5 Point, 6 Point,8 Point)	Each 1 No	Each 1 No	
		Digital Multimeter	1	1	
6	Testing Of Stepper Motor Drive	Stepper Motor Drive Kit	1 No	1 No	
7	Construction And Testing Of Half Wave Rectifier, Full Wave Bridge Rectifier	Transformer (230 V/ 6 V	2	2	

	Without Filters.	Transformer (230 V/ 6 V – 0 V- 6 V	2	2	
		Diode 1n400	10	10	
		Bread Board	2	2	
8	Identification And Testing Of Display Devices- Led, 7 Segment Led	Led	1	1	
		7 Segment Of Led	1	1	
9	Testing Of Various Sensors Using Multifunction Tester	Engine Crankshaft Angular Position Sensor	2	2	
		Speed Sensor	2	2	
		Pressure Sensor	2	2	
		Knock Sensor	1	1	
		Oxygen Sensor	1	1	
		Analog Multimeter	1	1	
10	Construction And Testing Of Fuel And Temperature Gauges Circuit.	Fuel Gauge	1	1	
		Temperature Gauge	1	1	
11	Construction And Testing Of Head Lights, Parking Lights And Direction Indicators Circuit.	Head Light	1	1	
		Parking Light	1	1	
		Direction Indicator	1	1	
12	Connection And Testing Of Mcb, Elcb	Elcb	1	1	
		MCB	1	1	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HITEC POLYTECHNIC COLLEGE	1021	AUTOMOBILE ENGINEERING		
Subject Code	Name of the Practical Subject				
4021470	AUTOMOTIVE ENGINES PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
PART - A					
1	Find Flash And Fire Point Of Fuel Using Open Cup And Closed Cup Apparatus And Compare The Value For The Given Sample.	Open Cup Apparatus Closed Cup Apparatus	1	1	
2	Find Viscosity Of Lubricating Oil Using Saybolt Viscometer.	Saybolt Viscometer	1	1	
3	Find Viscosity Of Lubricating Oil Using Red Wood Viscometer.	Redwood Viscometer	1	1	
4	Draw The Port Timing Diagram Of A Single Cylinder Two Stroke Diesel Engine Or Petrol Engine	Two Stroke Diesel Or Petrol Engine Cut Section	1	1	
5	Draw The Valve Timing Diagram Of A Single Cylinder Four Stroke Diesel Engine Or Petrol Engine.	Four Stroke Diesel Or Petrol Engine Cut Section	1	1	

6	Determine The Cop Of The Vapour Compression Refrigerator System.	Refrigerator Test Rig	1	1	
PART - B					
7	Dismantle And Assemble Camshaft, Timing Gear And Valves. Adjust The Valve Clearance.	Four Stroke Diesel Engine Cut Section Model, Cam Shaft, Timing Gear	1	1	
8	Dismantle And Assemble Oil Pump And Water Pump After Inspection And Service.	Oil & Water Pump	1	1	
9	Dismantle And Assemble The Fuel Pump In A Petrol Engine After Inspection And Service.	Fuel Pump	1	1	
10	Dismantle And Assemble The Distributor Pump And Injector After Inspection And Service.	Distributor Pump	1	1	
11	Identify The Components Of The Mphi System In The Kit.	Mphi Kit	1	1	
12	Identify The Components Of The Crdi System In The Kit.	Crdi Kit	1	1	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE	1021	AUTOMOBILE ENGINEERING		
Subject Code	Name of the Practical Subject				
4021550	Engine Testing and Emission Measurement Practical				
1	Conduct the variable speed performance test of a single cylinder petrol engine	Single cylinder petrol engine	01	01	
2	Conduct the variable speed performance test of a single cylinder diesel engine	Single cylinder diesel engine	01	01	
3	Find the indicated horse power of a multi cylinder engine by morse test	Multi cylinder petrol engine	01	01	
4	Prepare the heat balance sheet on single cylinder diesel engine	Single cylinder diesel engine	01	01	
5	Prepare the heat balance sheet on multi cylinder petrol engine	Multi cylinder petrol engine	01	01	
6	Analysis of exhaust gases from engine by Orsat apparatus	Orsat apparatus	01	01	
7	Find the intensity of smoke from a diesel engine using smoke meter	Smoke meter	01	01	
8	Measure the emissions in exhaust of an engine by exhaust gas analyser	Exhaust gas analyser	01	01	
9	Find the calorific value of diesel using bomb calorimeter	Bomb calorimeter with all accessories	01	01	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HITECH POLYTECHNIC COLLEGE	1021	AUTOMOBILE ENGINEERING		
Subject Code	Name of the Practical Subject				
4021540	AUTOMOBILE SERVICING PRACTICAL				
1	Check and identify the status of the following as per the preventive maintenance procedure under the hood as per the service manual of a car.	LMV	02	02	
2	Check and identify the status of the following as per the maintenance procedure of a vehicle cooling system.	Coolant system	01	01	
3	Check and identify the status of the following as per drive train of a car.	Drive train system	01	01	
4	Check and identify the status of the following as per the manual of a vehicle in the brake system.	Brake system	01	01	
5	Check and identify the status of the following as per the manual of a vehicle in the steering and suspension systems.	Steering system Suspension systems	01 01	01 01	
6	Check and identify the status of the spark plug.	Timing Light Dwell meter Feeler gauge	01 01 01	01 01 01	

7	Check and identify the status of the Fuel system.	Fuel system	01	01	
8	Check and identify the status of the engine oil.	Oil filter Engine oil		01 2L	
9	Check and identify the status of the lubrication oil.	Lubricant		2L	
10	Check and identify the status of the tires.	Tires	01	02	
11	Check and identify for the heart burn issues in car.	Engine with Cooling Systems		01	
12	Check, measure and adjust the caster, chamfer, king pin inclination, toe-in and toe-out of a car using Wheel alignment.	Wheel aligner	01	01	
13	Remove the wheel from the vehicle and balance the wheel using wheel balancing machine.	Wheel balancer	01	01	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1021	AUTOMOBILE ENGINEERING		
Subject Code	Name of the Practical Subject				
4021561	TWO- WHEELER AND THREE- WHEELER TECHNOLOGY PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Dismantle, check and assemble the engine cooling system of Two and Three wheeler	Two Wheeler Three Wheeler	2 Nos	5 Nos	
			1 Nos	2 Nos	
2	Check the engine oil level and replace the oil in Two and Three wheeler		2 Nos	5 Nos	
			1 Nos	2 Nos	
3	Dismantle and assemble the clutch used in Two and Three wheeler		2 Nos	5 Nos	
			1 Nos	2 Nos	



4	Adjust the clutch free play, throttle cable and inspect the common troubles and causes in Two and Three wheeler		2 Nos	5 Nos	
			1 Nos	2 Nos	
5	Overhaul and lubricate the gear box of Two and Three wheeler		2 Nos	5 Nos	
			1 Nos	2 Nos	
6	Dismantle, lubricate and assemble the propeller shaft and differential	Three Wheeler	1 Nos	2 Nos	
7	Dismantle, lubricate and assemble the rear axle of the three wheeler	Three Wheeler	1 Nos	2 Nos	
8	Check frame alignment, dismantle and assemble the leaf spring assembly	Three Wheeler	1 Nos	2 Nos	
9	Dismantle and assemble the front suspension and rear suspension of two wheeler	Two Wheeler	2 Nos	5 Nos	
10	Remove the tire, lubricate bearings, refit and adjust the chain of two wheeler	Two Wheeler	2 Nos	5 Nos	
11	Dismantle, Service and assemble the disc brake system - Master cylinder, Wheel Cylinder, Caliper and brake pad of two wheeler	Two Wheeler	2 Nos	5 Nos	

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1021	AUTOMOBILE ENGINEERING		
Subject Code	Name of the Practical Subject				
4021640	HYBRID ELECTRIC VEHICLE PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
<b>PART- A</b>					
1	Test The Lead Acid Battery On Open Circuit Voltage, Hydrometer And High Discharge Tests	Battery	8	8	
		Battery Load Tester	2	2	
		Hydrometer	1	2	
2	Construct A Battery Pack For An Electric Vehicle. (Test The Battery Pack Supply To Glow Head Lamp)	Battery	8	8	
		Two Wheeler Wiring Harness Kit	1	1	
3	Test On Buck Converter (Dc To Dc Converter)	Battery	8	8	
		Buck Converter (24 V)	2	2	
4	Test The Inverter Circuit (Dc To Ac Converter)	Battery	8	8	
		Inverter Trainer Kit	1	1	
5	Test The Bldc Motor With Triggering Angle Or Throttle Control	Battery	8	8	
		Bldc Motor Control Or Trainer Kit	2	2	

6	Test The Battery Charger Unit And Note The Various Charging Parameters	Battery	8	8	
		Battery Charger Unit	2	2	
<b>PART- B</b>					
1	Assemble And Test The Wiring Harness For Two- Wheeler Accessories	Battery	8	8	
		Two Wheeler Wiring Harness Kit	1	1	
2	Identify And Test Ev Components (Controller, Throttle, Ev Motor, Power On Key & Brake)	Battery	8	8	
		E- Bicycle Kit	2	2	
3	Test The Lead Acid Battery By Using Battery Voltage Or Current Tester And Indicate The Status	Battery	8	8	
		Multi Meter	1	1	
		Voltage Tester	1	1	
4	Assemble And Test E- Bicycle Wiring Harness	Battery	8	8	
		E Bicycle Test	2	2	
		Continuity Tester	1	1	
5	Assemble And Test E- Bike With Central Drive Mechanism (Chain Drive) Wiring Harness	E Bike Kit	2	2	
		Battery	8	8	
6	Assemble And Test E- Auto Rickshaw With Differential Wiring Harness	E Auto Rickshaw	1	1	
		Differential Set Up	1	1	
		Battery	8	8	
		Screw Driver Set	1	1	
		Spanners Set	1	1	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1021	AUTOMOBILE ENGINEERING		
Subject Code	Name of the Practical Subject				
4020561	COMPUTER INTEGRATED MANUFACTURING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
<b>PART- A (SOLID MODELLING)</b>					
1	Geneva Wheel	Personal Computer With 3d Solid Modelling And Simulation Software	30	30	
2	Bearing Block				
3	Bushed Bearing				
4	Gib And Cotter Joint				
5	Screw Jack				
6	Universal Coupling				

PART- B					
1	Using Linear And Circular Interpolation- Create A Part Program And Produce Component In Machine	Cnc Turning Machine	2	1	
2	Using Stock Removal Cycle- Create A Part Program For Multiple Turning Operations And Produce Components In The Machine				
3	Using Canned Cycle- Create A Part Program For Thread Cutting, Grooving And Produce Component In Machine				
4	Using Linear Interpolation And Circular Interpolation- Create A Part Program For Grooving And Produce Component In Machine	Cnc Milling Machine	2	1	
5	Using Canned Cycle- Create A Part Program For Drilling, Tapping, Counter Sinking And Produce Component In Machine				
6	Using Sub Program- Create A Part Program And Produce Component In Machine				
7		Ink Jet Printer	1	1	

Institution Code	Institution Name	Course Code	Course Name
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1030	ELECTRICAL AND ELECTRONICS ENGINEERING
Subject Code	Name of the Practical Subject		
4040340	Electronic Devices and Circuits Practical		
4030350	Electrical Circuits and Machines Practical		
4030360	Electrical Workshop Practical		
4030370	Wiring & Winding Practical		
4030450	Electrical Machines and Instrumentation Practical		
4040460	Analog and Digital Electronics Practical		
4030470	Electrical Circuits and Simulation Practical		
4030514	Control of Electrical Machines Practical		
4030540	Computer Aided Electrical Drawing Practical		
4040550	Micro Controller Practical		
4040570	Entrepreneurship and Startups		
4030640	Electrical Estimation and Costing Practical		
4030651	Power Electronics Practical		
4020660	Project Work & Internship		

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1030	ELECTRICAL AND ELECTRONICS ENGINEERING		
Subject Code	Name of the Practical Subject				
4030350	ELECTRICAL CIRCUITS AND MACHINES PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Verification of Super Position Theorem with two different DC Voltages for a common load.	DC Shunt Motor 3/5 KW	2	2	
		DC Series Motor 3/5 KW	1	1	
2	Verification of Thevenin"s Theorem with DC Supply	DC Compound Motor 3/5 KW	1	1	
		DC Shunt Generator 3/5 KW	1	1	
3	Measurement of Power a. using Ammeter and Voltmeter b. using Wattmeter for Single Phase Resistive Load.	DC Series Generator 3/5 KW	3	3	
		1 Phase Transformer 1KVA	1	1	

4	No load and FULL Load Characteristics of Self Excited DC Shunt Generator.	(or more) 220V/110V	3	3	
		3 Phase Transformer 1KVA (or more) 440V/220V 1 Phase Variac 15 amps	1	1	
5	Load Characteristics of Self Excited DC Series Generator.	3 Phase Variac 15 amps	2	2	
		Dual Regulated Power Supply 0-30V/2A	2	2	
6	Load Test on DC Shunt Motor and Draw the Performance Curve.	Single Regulated Power Supply 0-30V / 2A	2	2	
7	Load Test on DC Series Motor and Draw the Performance Curve.	Single Phase Resistive Load 3/5 KW, 220V	2	2	
		Three Phase Resistive Load 3KW,415V	3	3	
8	Predetermine the Efficiency of DC Machines by Swinburne"s Test.	Tachometer Analog type	4	4	
		Rheostat - various ranges 50Ω/5A,100 Ω/5A, 300 Ω/2A, 600 Ω/2A (or equivalent)	8	8	
9	Speed Control of DC Shunt Motor by a. Armature Control Method b. Field Control Method	AC Ammeter - various ranges 0-500mA,0-1/2A, 0-5/10A,0-10/20A (or	8	8	
			8	8	

10	Load Test on Single Phase Transformer	equivalent) DC Ammeter - various ranges 0-500mA, 0-2A, 0-5A, 0-10A, 0-15/30A (or equivalent)	8 6	8 6	
11	Load Test on Three Phase Transformer	DC Voltmeter - 0-5/10V, 0-30V, 0-300V AC Voltmeter - 0-75V, 0-150V, 0-300V, 0-600V	6 6	6 6	
12	Predetermine the Efficiency and Regulation of Single-Phase Transformer by conducting O.C and S.C Tests	Wattmeter - various ranges LPF 150/300/600V 2.5A/5A, 1/2.5A	EACH 1	EACH 1	
13	Find the Equivalent Circuit Constants of Single-Phase Transformer by conducting O.C and S.C Tests.	Wattmeter - various ranges UPF 150/300/600V 10/20A Transformer oil tester kit, Acidity test kit			
14	Connect two Single Phase Transformers for Parallel Operation.				
15	a) Perform Breakdown Test And determine the Dielectric Strength of Transformer Oil b) Conduct Acidity Test on Transformer Oil.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1030	ELECTRICAL AND ELECTRONICS ENGINEERING		
Subject Code	Name of the Practical Subject				
4030360	ELECTRICAL WORKSHOP PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Familiarization of tools used for Electrical repair works and personal Protection Equipments.	Tools: Screw driver, Cutting pliers, Wire Stripper, Hammer, Spanner set, Line Tester, Nose pliers.	Each 2 set	Each 2 set	
2	Dismantling of Electrical Iron Box, identifying the parts, checking the conditions, assembling, and testing.	Personal Protective Equipments: Safety helmet, Google, Safety gloves, Nose mask, Ear plug, Safety Belt.	Each 2 set	Each 2 set	
3	Dismantling of Mixer Grinder, identifying the parts, checking the conditions, assembling and testing.	Automatic Iron Box	02	02	
			02	02	

4	Dismantling of Wet Grinder, identifying the parts, checking the conditions, assembling, and testing.	Wet Grinder			
5	Assembling the accessories of Ceiling Fan, test the connections of winding & Capacitor and run the Fan with Speed Regulator.	Mixer Grinder Ceiling Fan	02 02	02 02	
6	Connect the Battery and Inverter to supply partial load in a Domestic Wiring during Mains Failure.	LED Light, PCB, Driver Circuit and Outer Cover	10	10	
7	Assembling and testing of 15watts LED Light.	Lead Acid Battery	02 02	02 02	
8	Battery Charging through Solar Panel. Connect Solar Panel to charge Battery through Charge Controller.	Inverter Solar Photo Voltaic Module	02 02	02 02	
9	Dismantling of Induction Heater, identifying the parts, checking the conditions, assembling, and testing	Charge controller Microwave oven	01 08	01 08	
10	Dismantling of Microwave Oven, identifying the parts, checking the conditions, assembling and testing.	Multimeter Induction Heater	01	01	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1030	ELECTRICAL AND ELECTRONICS ENGINEERING		
Subject Code	Name of the Practical Subject				
4030370	WIRING AND WINDING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Emergency alarm wiring with 3 Bells and 3 Pushbuttons.	SPST Flush Type Switch (250V/5A)	10	13	
2	House Wiring for a Service Connection with Single Phase Digital Energy Meter Cutout, Main Switch, 4 Way D.B, Indicator Lamp.	Intermediate Switch (250V/5A) Rotary Switches(500V/32A) Three Phase Control Panel Board	10 6 2	10 6 2	
3	Wiring and Testing of 3 Phase Supply using 3 Rotary Switches, MCB and DB to change the Phases by connecting Single Phase Lamp Load.	Batten Lamp Holder Round Block Switch Board 20cmX15cm 10cmX10cm	10 20 4 15 5	15 20 4 15 8	
4	Wiring of Single-Phase Motor using Single Phase Main Switch, D.O.L Starter and MCB.	Push Button switch (250 V / 5A) 2 Plate Ceiling Rose (250 V / 5A)	10	10	
5	Wiring of Three Phase Induction Motor with Main Switch, Star/Delta Starter and	Electric Bell (250 V / 5A)	3	4	

	ELCB.		3	5	
6	Wiring of Sodium Vapor and Mercury Vapor Lamp.	Single Phase DPIC Main Switch (250 V / 16A)	2	3	
7	Wiring and troubleshooting the Fluorescent Tube light.	Three Phase TPIC Main Switch (500 V / 30A)	1	2	
8	Design and implement a Test Board with Indicator Lamp, Fuse Unit to Test Electrical Appliances.	Single Phase DOL Starter (250 V / 10A) Star Delta Starter (440V /5 HP)	1	2	
9	Go down / Tunnel wiring using 4 Lamps.	ELCB (30mA/1000mA) Cutout (16A)	1	2	
10	Controlling a Lamp by Six Places by using Two, 2-Way Switches & Four Intermediate Switches.	4 Way Distribution Box(250V/15A) Mercury Vapour Lamp with Accessories Sodium Vapour Lamp with Accessories	2	2	
11	Design, construct and test a 230/12-0-12 Volt, 500mA Transformer.	Fluorescent tube light with electronic choke and Holder	1 Set	1 Set	
12	Design No Volt Coil for a 230/440 AC Contactor.	Two Way Flush Type Switch	1 Set	1 Set	
13	Demonstrate the end connection for a 3 Phase Induction Motor Winding for a 2 Poles / 4Pole Operations.	Wooden Box (30 cm X 15 cm)	1 Set	2 Set	
14	Dismantling a faulty Ceiling Fan and identify the fault, run the fan after rectifying the fault.	PVC Pipe 3/4" / 1" Saddle Clips 3/4" / 1" Copper Wire 2.5 Sq mm 1.5Sq mm 1" Junction Box 1 way ,2 way,3way Screws	4	4	
			Required Qty	Required Qty	

		Bare Copper Wire 2.5 Sq mm Lamps (C.F.L. ) EI60 Type Stampings of 0.35 Mm Thickness	55	55	
		Readymade Bobbins (EI60/21) Enameled Copper Wire 26 SWG, 36 SWG, 37 SWG, 38 SWG Varnish Winding Machine Ceiling Fan Single Phase Induction Motor (0.5HP,240V,50Hz) Three Phase Squirrel Cage Induction Motor(3HP,) Gauge Plate for Measurement of SWG Winding Study Motor (3Φ Squirrel Cage Type) Single Phase, Digital Energy Meter (250V,15A,50Hz) M.C.B 250V /10A,2 Pole 440V/32A	Required Qty	Required Qty	
			01	02	
			02	02	
			01	01	
			01	01	
			01	01	
			01	01	
			01	01	
			06	06	
			03	03	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESWARA HI TECH ENGINEERING COLLEGE	1030	DIPLOMA IN ELECTRICAL AND ELECTRONICS ENGINEERING		
Subject Code	Name of the Practical Subject				
4030450	ELECTRICAL MACHINES AND INSTRUMENTATION PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Predetermine the regulation of alternator.	3 phase Alternator with prime mover.	2	2	
2	Load test on 3 phase alternator.	3 phase Alternator with prime mover.	2	2	
3	Synchronization of 3 $\Phi$ alternators.	3 phase Alternator with prime mover.	2	2	
		Synchronizing panel.	1	1	
4	Load test on 1 phase induction motor.	Single phase induction motor with starting and loading arrangement 2HP, 250V, 10A, 1440 rpm.	1	2	
5	Load test on 3 phase induction motor.	Three phase Slip ring Induction motor 5HP, 440V, 940/1450 rpm with starting and loading arrangement.	1	1	
6	Determine the equivalent circuit constants of 3 phase induction motor.	Three Phase Squirrel cage Induction motor 5 HP, 440V,1440 rpm with starting and loading arrangement.	3	3	

7	Predetermine the performance of a 3 phase induction motor.	Three Phase Squirrel cage Induction motor 5 HP, 440V,1440 rpm with starting and loading arrangement.	3	3	
8	Improvement of power factor of an induction motor with load.	Three Phase Squirrel cage Induction motor 5 HP, 440V,1440 rpm with starting and loading arrangement.	3	3	
		3 phase capacitor bank rating of 1KVAR, 400/440 V.	1	1	
9	Calibration of given ammeter and voltmeter.	Single phase autotransformer	1	1	
		Ammeter(0-10A)	2	2	
		Voltmeter(0-300V)	2	2	
10	Calibration of given wattmeter.	Ammeter(0-10A)	1	1	
		Voltmeter(0-300V)	1	1	
		Wattmeter(300V/10A/UPF)	1	1	
11	Calibration of 3 phase energy meter.	3 Phase Energy meter Induction type 440V, 10/20A.	2	2	
		Ammeter(0-10A)	1	1	
		Voltmeter(0-300V)	1	1	
		Wattmeter(300V/10A/UPF)	1	1	
12	Measurement of alternator winding resistance using Wheatstone bridge	Wheatstone bridge.	2	2	
13	Measurement of value of unknown capacitance using Schering Bridge.	Schering Bridge.	2	2	
14	Measurement of value of unknown inductance using Anderson Bridge.	Anderson Bridge.	2	2	
15	Displacement measurement using LVDT.	LVDT trainer.	2	2	
16	Measurement of earth resistance by using megger.	Earth megger with necessary connecting leads and rods.	1	1	



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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1030	DIPLOMA IN ELECTRICAL AND ELECTRONICS ENGINEERING		
Subject Code	Name of the Practical Subject				
4040460	ANALOG AND DIGITAL ELECTRONICS PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Realization of basic gates using NAND & NOR gates.	Bread Board , IC74XX, IC78XX (series ic's), RPS, Connecting wires. LED, Resistor	EACH-1	1/STUDENT	
2	Realization of logic circuit for De-Morgans Theorems	Bread Board ,IC74XX, IC78XX (series ic's), RPS, Connecting wires, LED, Resistor	EACH-1	1/STUDENT	
3	Test the performance of Half Adder and Full Adder.	Bread Board ,IC 74XX, IC 78XX (series ic's), RPS, Connecting wires, LED, Resistor	EACH-1	1/STUDENT	
4	Test the performance of Half Subtractor and Full Subtractor.	IC Trainer Kit, Patch Chords, IC 74XX, IC 78XX (series ic's),Connecting wires.	EACH-1	1/STUDENT	
5	Test the performance of Decoder/ Encoder.	IC Trainer Kit, Patch Chords, IC74XX, IC78XX (series ic's),Connecting wires.	EACH-1	1/STUDENT	
6	Test the performance of RS, D, T & JK flip-flops.	IC Trainer Kit, Patch Chords, IC74XX, IC78XX (series ic's),Connecting wires.	EACH-1	1/STUDENT	

7	Test the performance of Parity generator and checker using parity checker/generator IC's.	IC Trainer Kit, Patch Chords, IC74XX, IC78XX (series ic's),Connecting wires.	EACH-1	1/STUDENT	
8	Test the performance of Multiplexer/ De-multiplexer using IC 4051	IC Trainer Kit, Patch Chords, IC 4051 (series ic's),Connecting wires.	EACH-1	1/STUDENT	
9	Test the performance of Inverting Amplifier and Non inverting amplifier using Op-amp IC 741.	IC741, Resistor, Bread Board ,Connecting wires, Function Generator, RPS,CRO	EACH-1	1/STUDENT	
10	Test the performance of Summing Amplifier, Difference Amplifier.	IC741, Resistor, Bread Board ,Connecting wires, RPS, Voltmeter, Ammeter	EACH-1	1/STUDENT	
11	Test the performance of Zero Crossing Detector and Voltage Comparator using Op amp IC 741.	IC741, Resistor, Bread Board ,Connecting wires, RPS,CRO ,Voltmeter, Ammeter	EACH-1	1/STUDENT	
12	Test the performance of Integrator and Differentiator using Op-amp IC 741.	IC741, Resistor, capacitor, Bread Board ,Connecting wires, Function Generator, RPS,CRO	EACH-1	1/STUDENT	
13	Test the performance of Astable multivibrator using IC 555.	Bread Board, Resistor, Capacitor, RPS, IC555, Connecting wires, CRO.	EACH-1	1/STUDENT	
14	Test the performance of IC Voltage Regulator Power Supplies using IC 7805, IC 7912.	Bread Board, RPS,IC 7805,IC 7912 ,Connecting wires, Capacitor, Voltmeter.	EACH-1	1/STUDENT	
15	Design the PCB of4- bit ripple counter using FF using Software tool Multisim/Or CAD etc	Multisim software, computer, printer	EACH-1	1/STUDENT	

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1030	DIPLOMA IN ELECTRICAL AND ELECTRONICS ENGINEERING		
Subject Code	Name of the Practical Subject				
4030470	ELECTRICAL CIRCUITS AND SIMULATION PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Generation of Following Waveforms i.Sinusoidal Waveform of Fundamental Frequency (50Hz) ii.3rd ,5th,7th Order Harmonics for the Fundamental Frequency	PC with any suitable simulation software	30	30	
2	Simulation of RLC Series and RLC Parallel Response Circuits				
3	Step Response of RL and RC Series Circuit				
4	Simulation of Mesh and Nodal Analysis for Dc Circuits	UPS 5KVA with half an hour battery back up	01	01	
5	Verification of Superposition Theorem	Printer	01	01	

6	Verification of Thevenin's and Norton's theorem				
7	Verification of Maximum Power Transfer Theorem				
8	Simulation of Full wave Rectifier(Center Tapped and Bridge) with RL Load				
9	Simulation of Single Phase Half Wave Converter with RL Load and Free Wheeling Diode				
10	Simulation of Single Phase Full Wave Converter With RL Load and Free Wheeling Diode				
11	Simulation of Three Phase Star Connected Balanced Load and Unbalanced Load				
12	Simulation of Three Phase Delta Connected Balanced Load and Unbalanced Load				
13	Simulation of Three Phase Non Linear Star Connected Load With Three Phase 3 Wire System				
14	Simulation of Three Phase Non Linear Star Connected Load With Three Phase 4 Wire System				
15	Simulation of Basic Logic Gates, Universal Logic Gates and Realization of Logic Gates Using Universal Logic Gates				
16	Simulation of Half Adders and Full Adder				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1030	ELECTRICAL AND ELECTRONICS ENGINEERING		
Subject Code	Name of the Practical Subject				
4030514	CONTROL OF ELECTRICAL MACHINES PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Wire and test the control circuit for jogging in cage induction motor	Transformer oil Tester Kit, Acidity test kit	Each one	Each one	
2	Wire and test the control circuit for semi-automatic star -delta starter.	Thermal Overload Relay	3	3	
3	Wire and test the control circuit for automatic star -delta starter.	AC contactor 230v/440v, 16A	26	26	
4	Wire and test the control circuit for dynamic braking of cage motor.				
5	Wire and test the control circuit for two speed pole changing motor.	Push Button With NO/NC Elements	30	30	
6	Wire and test the control circuit for forward and reverse operation	Induction motor 440 V, 1440 rpm, any HP rating (apart from EM-II lab)	03	03	
		Proximity switch	02	02	

7	Wire and test the control circuit for automatic rotor resistance starter.	PLC (any brand)  Solenoid valve  Three stage lift model, conveyor model  Forward,Reverse and jogging (Forward and Reverse ) Operation Model	05	05			
8	Wire and test the DOL starter with single phase preventer using PLC.						
9	Wire and test the Star -Delta starter using PLC.						
10	Wire and test the control circuit for automatic rotor resistance starter using PLC.				02	02	
11	Develop & execute the ladder logic diagram in PLC for 3 stage lift operation.				Each one	Each one	
12	Wire and test the sequential operation of solenoid valve and a motor for tank filling operation using PLC.				1	1	
13	Develop and execute the ladder logic to interface PLC with conveyor model for counting the object moving in the conveyer.						
14	Wire and test the control circuit for Jog Forward, Jog Reverse, Forward and Reverse Operations using PLC.						

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1030	ELECTRICAL AND ELECTRONICS ENGINEERING		
Subject Code	Name of the Practical Subject				
4030540	COMPUTER AIDED ELECTRICAL DRAWING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Draw the symbols for components: Resistor, Capacitor, Inductor, Diode, Transistor, FET, SCR, UJT, TRIAC, DIAC, and Gates AND, OR, NOT, NAND, NOR, EXOR.	PC – Pentium Dual Core	30	30	
2	Draw the symbols used in electrical wiring: Relays, Contactors, Fuses, Main Switch, Electric Bell, Earth, DPST, DPDT, TPST, Neutral Link.	Electrical CAD Software multi user	01	01	
3	Draw the symbols for instruments: Ammeter, Voltmeter, Wattmeter, Energy meter, Frequency Meter, Power Factor Meter, Timer and Buzzers.	UPS – 5KVA with half an hour battery backup	01	01	
4	Draw the symbols for machines: Armatures, Alternators, Field winding (Shunt, Series and Compound) Transformer and Autotransformer.				

5	Draw the Single Line diagram of Single Phase MCB Distribution Board.				
6	Draw the Single Line diagram of Three Phase MCB Distribution Board.				
7	Draw the Single Line diagram of typical MV Panel.				
8	Draw the Single Line diagram of Motor Control Centre (MCC) Panel.				
9	Draw the Single Line diagram of fire alarm riser arrangement in multi-storey building.				
10	Draw the Single Line diagram of intercom arrangement in multi-storey building.				
11	Draw the Front- End Schematic Diagram of typical Sub Switch Board (SSB).				
12	Draw the winding Diagram of Lap Connected DC Armature with Commutator Connections and Brush Positions.				
13	Draw the Control and Main Circuit of Automatic Star Delta Starter.				
14	Draw the Mush Winding Diagram of a Three Phase Induction Motor.				
15	Draw the Concentric Winding Diagram of a Single Phase Induction Motor.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1030	ELECTRICAL AND ELECTRONICS ENGINEERING		
Subject Code	Name of the Practical Subject				
4040550	MICROCONTROLLER PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	8 / 16 bit addition	1. 8051 Microcontroller Kit	14	14	
2.	8 / 16 bit subtraction	2. Digital I/O Interface Board	02	05	
3.	8 bit multiplication	3. Seven segment LED display Interface Board	02	05	
4.	8 bit division	4. 8 bit DAC Interface Board	02	05	
5.	BCD to Hex code conversion	5. Stepper Motor Control Interface Board	02	05	
6.	Hex to BCD code conversion	6. DC motor control Interface Board	02	05	
7.	Smallest / Biggest number		02	05	

		7. RS232 serial port cable			
		8. LCD interface board			
		9. Laptop / Desktop Computer			
8.	Time delay routine (Demonstrate by Blinking LEDS).				
9.	Using Timer/ counter of 8051				
10.	Interfacing Digital I/O board				
11.	Interfacing DAC				
12.	Interfacing Stepper motor				
13.	Interfacing Seven segment LED display or LCD				
14.	Sending data through the serial port between microcontroller kits				
15.	Interfacing DC motor using PWM.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI TECH POLYTECHNIC COLLEGE,GOBI	1030	DIPLOMA IN ELECTRICAL AND ELECTRONICS ENGINEERING		
Subject Code	Name of the Practical Subject				
4030640	ELECTRICAL ESTIMATION AND COSTING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	To study the various Electrical Symbols, IE Rules 28, IE Rules 30, IE Rules 31, IE Rules 54, IE Rules 56, IE Rules 87.	-	-	-	
2	To study the various types of Earthing.	-	-	-	
3	To study the various types of Electrical Wiring Methods.	-	-	-	
4	Estimate the quantity of material and cost required for Residential Building (1BHK).	-	-	-	
5	Estimate the quantity of material and cost required for Computer Centre having 10 Computers, AC Unit, UPS, Light and Fan.	-	-	-	

6	Estimate the quantity of material and cost required for Industrial Power Wiring having 4 Machines.	-	-	-	
7	Estimate the quantity of material and cost required for street light service having 12 Lamps Light Fitting.	-	-	-	
8	Estimate the quantity of material and cost required for 3 Phase Service connection to a building having 5KW Load.	-	-	-	
9	Estimate the quantity of material and cost required for Irrigation Pump Wiring (5HP).	-	-	-	
10	Estimate the quantity of material and cost required for School Building having 3 Class Rooms.	-	-	-	
11	Estimate the quantity of material and cost required for erection of a 15HP Induction Motor in a Saw Mill/Flour Mill.	-	-	-	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1030	DIPLOMA IN ELECTRICAL AND ELECTRONICS ENGINEERING		
Subject Code	Name of the Practical Subject				
4030651	POWER ELECTRONICS PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	Construct the Line synchronized Ramp trigger circuit using UJT with AC load to measure firing angles.	Line synchronized Ramp trigger circuit using UJT trainer kit	1	1	
2.	Construct Lamp control circuit using DIAC - TRIAC to measure various output voltage for firing angles.	Lamp control circuit using DIAC - TRIAC trainer kit	1	1	
3.	Construct and test the SCR commutation circuits (Class B & Class D)	SCR commutation circuits (Class B & Class D) trainer kit	1	1	
4.	Construct and test the Half Wave controlled Rectifier with R- Load ,RL-Load	Single Half Wave controlled Rectifier with R- Load ,RL- Load trainer kit.	1	1	
5.	Construct and test the Single phase Fully controlled bridge with RL- Load and Free Wheeling diode	Single phase Fully controlled bridge with RL-Load and Free Wheeling diode trainer kit.	1	1	
6.	Construct and test the Single phase semi controlled bridge with R- Load	Single phase semi controlled bridge with R-Load trainer kit.	1	1	

7.	Construct and test the DC Chopper control circuit using Thyristor (Any class)	DC Chopper control circuit using Thyristor (Any class) trainer kit.	1	1	
8.	Construct and test the step up chopper.	Step up chopper trainer kit.	1	1	
9.	Construct the PWM based step down DC chopper using MOSFET/IGBT.	PWM based step down DC chopper using MOSFET/IGBT trainer kit.	1	1	
10.	Construct and test the Single phase Single pulse / Sinusoidal PWM inverter using MOSFET/IGBT.	Single phase Single pulse / Sinusoidal PWM inverter using MOSFET/IGBT trainer kit.	1	1	
11.	Construct and test the SMPS using MOSFET/IGBT.	SMPS using MOSFET/IGBT trainer kit.	1	1	
12.	Construct and test the open loop speed control circuit for DC shunt motor and Single phase AC Motor	Open loop speed control circuit for DC shunt motor and Single phase AC Motor trainer kit	1	1	
13.	Construct and test the control circuit using TRIAC for Universal motor.	Control circuit using TRIAC for Universal motor trainer kit.	1	1	
14.	Construct and test the Closed loop speed control circuit for DC and AC Motor	Closed loop speed control circuit for DC and AC Motor trainer kit	1	1	
15.	Construct and test the Single phase parallel inverter using MOSFET/IGBT	Single phase parallel inverter using MOSFET/IGBT trainer kit	1	1	
16.	Construct and test the Single phase to single phase cyclo converter.	Single phase to single phase cyclo converter trainer kit.	1	1	

Institution Code	Institution Name	Course Code	Course Name
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING
Subject Code	Name of the Practical Subject		
4040340	Electronic Devices and Circuits Practical		
4040350	Electrical Circuits and Instrumentation Practical		
4040360	Programming in 'C' Practical		
4040370	Simulation Practical		
4040440	Industrial Electronics Practical		
4040450	Communication Engineering Practical		
4040460	Analog and Digital Electronics Practical		
4040540	Analog and Digital Communication Practical		
4040550	Microcontroller Practical		
4040561	Very Large Scale Integration Practical		
4020570	Entrepreneurship and Start-Ups		
4040640	Computer Hardware servicing And Networking Practical		
4040653	Embedded Systems Practical		
4040660	Project Work and Internship		

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING		
Subject Code	Name of the Practical Subject				
4040340	ELECTRONIC DEVICES AND CIRCUITS PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	Forward and reverse bias characteristics of a PN Junction Silicon diode	DC Regulated power supply 0-30V,1A	10	12	
2.	Forward and reverse bias characteristics of a Zener diode	High Voltage Power Supply 0-250V,1A	2	2	
3.	Full wave rectifier with and without filter	Signal Generator 1MHz	4	15	
4.	Bridge rectifier with and without filter	Dualtrace CRO 20MHz/30MHz	5	15	
			10	10	
5.	Common Emitter Transistor circuit	Digital Multimeter	15	15	



6.	Common Source Field Effect Transistor circuit	DC Voltmeter (Analog/Digital)  DC Ammeter (Analog/Digital)	15	15	
7.	SCR and find out the forward break over voltage, the value of Latching and Holding currents				
8.	DIAC and plot its switching characteristics				
9.	Bidirectional characteristics of TRIAC				
10.	Common emitter amplifier circuit				
11.	switching characteristics of Astable Multivibrator				
12.	Negative resistance Characteristics of UJT.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING		
Subject Code	Name of the Practical Subject				
4040350	ELECTRICAL CIRCUITS AND INSTRUMENTATION PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	Construct circuit verify Ohm's law.	DC Regulated power supply (0-30V,1A)	8	12	
2.	Construct circuit verify Kirchoff's voltage and current law	Signal Generator (1MHz)	3	15	
			4	15	
3.	Construct a circuit to verify Superposition theorem.	Dualtrace CRO (20/30MHz)	8	Each 10	
4.	Construct a circuit verify Thevenin's Theorem.	DC Voltmeter	8	Each 10	
5.	Construct a circuit verify Maximum power transfer Theorem.	DC Ammeter	1	1	

6.	Construct and test the performance of series resonant circuit.	Galvanometer  Decade Resistance Box	1	1	
7.	Calibrate the given ammeter and voltmeter.				
8.	Construct and test the performance of Wheatstone bridge.				
9.	Measure the amplitude and frequency of signals using CRO.				
10.	Test the performance of LVDT.				
11.	Measure strain using strain gauge.				
12.	Determine the characteristics of a thermistor.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING		
Subject Code	Name of the Practical Subject				
4040360	PROGRAMMING IN C PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	Write C program to calculate simple interest and compound interest.	Hardware Requirement: Desktop / Laptop Computers:	15	45	
2.	Write C program to find the solution of a quadratic equation.	Laserprinter: Software requirement:	01	02	
3.	Write C program to find whether the given number is even or odd.	C-compiler and editor	Sufficient	Sufficient	

4.	Write C program to find the sum of series using 'While' loop.				
5.	Write C program to perform the Arithmetic operation based on the numeric key press using switch case statement. (1-Addition,2-Subtraction,3-multiplication,4-Division).				
6.	Write C program to find the biggest number among three numbers.				
7.	Write C program to print Fibonacci series.				
8.	Write C program to find factorial of given Nnumbers using function.				
9.	Write C program to prepare the to talmarks for N students by reading the Name,Reg.No,Marks1 to Marks 6 using array of structure.				

10.	Write C program to swap the values of two variables.				
11.	Write C program to calculate the sum and average of given three numbers using function.				
12.	Write C program to sort the names in alphabetical order.				
13.	Write C program to count the number of digits in a given integer and print the reverse number.				
14.	Write C program for matrix addition.				
15.	Write C program to print multiplication table.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING		
Subject Code	Name of the Practical Subject				
4040370	SIMULATION PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	Zener diode (Forward and Reverse bias characteristics)	Simulation Tool Multisim/PSpice	Sufficient	Sufficient	
2.	Rectifier circuits (Half wave and Full wave Bridge Rectifiers with Capacitor filter)	Desktop Computers			
3.	Power supply with Zener diode as Regulator	Laser printer	20	25	
4.	Common Base transistor output characteristics		01	02	

5.	Common emitter amplifier (Implementation of Current Series negative feedback)				
6.	Emitter follower (Implementation of Voltage Series negative feedback)				
7.	RC Coupled amplifier (Implementation of the concept of multistage amplifier)				
8.	Clippers and Clampers				
9.	RC Phase shift oscillator (Medium frequency Sine wave generators)				
10.	Hartley oscillator (High frequency Sine wave generator)				
11.	Astable Multivibrator (Square or Rectangular wave generator)				
12.	Gate triggering of SCR with various gate currents.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING		
Subject Code	Name of the Practical Subject				
4040440	INDUSTRIAL ELECTRONICS PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Phase control characteristics of SCR and testing a commutation circuit.	Transformer, Bread Board, SCRs, Resistors, Diode, DRB, CRO, Connecting Wires	EACH-1	1/STUDENT	
2	Construct a Lamp dimmer using TRIAC (in Bread Board Only)	Auto Transformer, Bread Board, VR, Resistor, Capacitor, TRIAC, DIAC, Lamp, Connecting Wires	EACH-1	1/STUDENT	
3	Construct and test a MOSFET based PWM chopper circuit	RPS, Bread Board, Function Generator, MOSFET, CRO, Resistor, Voltmeter, Ammeter, Connecting Wires	EACH-1	1/STUDENT	
4	Construct and test an IC based buck converter using PWM	IC Based Buck Converter Using PWM Kit, CRO, Pulse chords, Connecting Cables	EACH-1	1/STUDENT	
5	Write and implement a simple ladder logic program using digital inputs and outputs for PLC	Computer, PLC Kit, Software(RS Logix & RS Link), Printer	EACH-1	1/STUDENT	

6	Write and implement a simple ladder logic program for interfacing a lift control with PLC.	Computer, PLC Kit, Software(RS Logix & RS Link), Printer, Lift Control Kit	EACH-1	1/STUDENT	
7	Write and implement a simple ladder logic program for interfacing a conveyer control with PLC	Computer, PLC Kit, Software (RS Logix & RS Link), Printer, Conveyer Control Kit	EACH-1	1/STUDENT	
8	Write and implement a simple ladder logic program using timer and counter with branching and subroutines with PLC.	Computer, PLC Kit, Software(RS Logix & RS Link), Printer	EACH-1	1/STUDENT	
9	Construct and draw the VI characteristics of IGBT.	IGBT, Voltmeter, Ammeter, RPS, Resistor, Capacitor	EACH-1	1/STUDENT	
10	Construct and draw the VI characteristics of Power MOSFET.	POWER MOSFET, Voltmeter, Ammeter, RPS, Resistor, Capacitor	EACH-1	1/STUDENT	
11	Construct and draw single phase half controlled bridge converter with resistive load.	Bread Board, Function Generator, CRO, Resistors, Connecting Wires, Transformer, SCR(2), Diode(2)	EACH-1	1/STUDENT	
12	Construct and design a fan regulator using TRIAC and DIAC.	Transformer, Bread Board, VR (Potentio meter), Resistor, Capacitor, TRIAC,	EACH-1	1/STUDENT	

		DIAC, Motor(AC), Connecting Wires			
<b>Institution Code</b>	<b>Institution Name</b>	<b>Course Code</b>	<b>Course Name</b>		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING		
<b>Subject Code</b>	<b>Name of the Practical Subject</b>				
4040450	COMMUNICATION ENGINEERING PRACTICAL				
<b>Experiment No</b>	<b>Name of the Experiment</b>	<b>Equipments / Apparatus / Consumables Required</b>	<b>Number Required as per Syllabus</b>	<b>Number available in Working Condition</b>	<b>Remarks</b>
1	Construct and test the performance of symmetrical T and Pi attenuators	RPS, Bread Board, Resistors, CRO, Connecting Wires, Function Generator	EACH-1	1/STUDENT	
2	Construct and test the performance of passive Low pass and High pass filters. Find out the cut-off frequency from the frequency response characteristics	RPS, Bread Board, Resistors, CRO, Connecting Wires, Function Generator	EACH-1	1/STUDENT	

3	Construct and test the performance of Band pass filter. Find out the cut-off frequencies and find the Bandwidth from the frequency response characteristics	RPS, Bread Board, Function Generator, CRO, Resistor, Connecting Wires, Capacitor	EACH-1	1/STUDENT	
4	Construct and test the performance of series and shunt equalizers.	SERIES & SHUNT Equalizer Kit, Speaker, Function Generator, patch chords	EACH-1	1/STUDENT	
5	Construct and test the performance of Amplitude modulator	RPS, Bread Board, Function Generator, CRO, Resistor, Connecting Wires, Capacitor, Transistor, Inductor.	EACH-1	1/STUDENT	
6	Construct and test the performance of AM linear diode detector..	AM Linear Kit, Function Generator, patch chords, CRO	EACH-1	1/STUDENT	
7	Construct and test the performance of Pulse Width Modulator (PWM)	RPS, Bread Board, Resistors, CRO, Connecting Wires, Function Generator, Diode, IC 555, Capacitor	EACH-1	1/STUDENT	

8	Construct and test the performance of Pulse Position Modulator(PPM).	PPM Kit, Function Generator, patch chords, CRO	EACH-1	1/STUDENT	
9	Determine the directional characteristics of Moving Coil Microphone.	Loud Speaker, Function Generator, Microphone, Multimeter, Connecting wires, Directional chart	EACH-1	1/STUDENT	
10	Determine the directional characteristics of Dynamic cone Loudspeaker	Loud Speaker, Function Generator, Microphone, Multimeter, Connecting wires, Directional chart	EACH-1	1/STUDENT	
11	Determine the frequency response characteristics of Two way cross over network	Cross over network kit, CRO, FG, Patch chord.	EACH-1	1/STUDENT	
12	Design the PCB of AM modulator using simulation tools like Multisim/OrCAD	Multisim software, computer, printer	EACH-1	1/STUDENT	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING		
Subject Code	Name of the Practical Subject				
4040460	ANALOG AND DIGITAL ELECTRONICS PRACTICAL				
1	Realization of basic gates using NAND & NOR gates.	Bread Board , IC74XX, IC78XX (series ic's), RPS, Connecting wires, LED, Resistor	EACH-1	1/STUDENT	
2	Realization of logic circuit for De-Morgans Theorems	Bread Board ,IC74XX, IC78XX (series ic's), RPS, Connecting wires, LED, Resistor	EACH-1	1/STUDENT	
3	Test the performance of Half Adder and Full Adder.	Bread Board ,IC 74XX, IC 78XX (series ic's), RPS, Connecting wires, LED, Resistor	EACH-1	1/STUDENT	
4	Test the performance of Half Subtractor and Full Subtractor.	IC Trainer Kit, Patch Chords, IC 74XX, IC 78XX (series ic's),Connecting wires,	EACH-1	1/STUDENT	
5	Test the performance of Decoder/Encoder.	IC Trainer Kit, Patch Chords, IC74XX, IC78XX (series ic's), Connecting wires.	EACH-1	1/STUDENT	
6	Test the performance of RS, D, T & JK flip-flops.	IC Trainer Kit, Patch Chords, IC74XX, IC78XX (series ic's), Connecting wires.	EACH-1	1/STUDENT	
7	Test the performance of Parity generator and checker using parity checker/generator IC's.	IC Trainer Kit, Patch Chords, IC74XX, IC78XX (series ic's), Connecting wires.	EACH-1	1/STUDENT	
8	Test the performance of Multiplexer/De-	IC Trainer Kit, Patch Chords, IC 4051 (series ic's), Connecting wires.	EACH-1	1/STUDENT	

	multiplexer using IC 4051				
9	Test the performance of Inverting Amplifier and Non inverting amplifier using Op-amp IC 741.	IC741, Bread Board, Connecting wires, RPS, CRO, Signal generator.	EACH-1	1/STUDENT	
10	Test the performance of Summing Amplifier, Difference Amplifier.	IC741, Bread Board ,Connecting wires, RPS, Voltmeter, Ammeter	EACH-1	1/STUDENT	
11	Test the performance of Zero Crossing Detector and Voltage Comparator using Op amp IC 741.	IC741, Bread Board ,Connecting wires, RPS,CRO, Voltmeter, Ammeter	EACH-1	1/STUDENT	
12	Test the performance of Integrator and Differentiator using Op-amp IC 741.	IC741, Bread Board, Connecting wires, RPS, CRO, Signal generator.	EACH-1	1/STUDENT	
13	Test the performance of Astable multivibrator using IC 555.	Bread Board, RPS, IC555, Connecting wires, CRO.	EACH-1	1/STUDENT	
14	Test the performance of IC Voltage Regulator Power Supplies using IC 7805, IC 7912.	Bread Board, RPS, IC 7805, IC 7912, Connecting wires, Capacitor, Voltmeter.	EACH-1	1/STUDENT	
15	Design the PCB of 4-bit ripple counter using FF using Software tool Multisim/Or CAD etc	Multisim software, computer, printer	EACH-1	1/STUDENT	

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING		
Subject Code	Name of the Practical Subject				
4040540	ADVANCED COMMUNICATION SYSTEMS PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	Construct a sample and hold circuit	Dual trace CRO-100MHZ			
2.	Test the performance of ASK modulator and demodulator	PSK Modulator Trainer kit	02	02	
3.	Test the performance of FSK modulator and demodulator	PSK Demodulator Trainer kit	01	01	
4.	Test the performance of PSK modulator and demodulator	Fiber optic Trainer kit	01	01	
		DTH	02	02	
5.	Test the performance of Time Division Multiplexer		01	01	



6.	Test the performance of analog transmitter and receiver				
7.	Test the performance of fiber optic analog link				
8.	Test the performance of a fiber optic digital link				
9.	Find the bending loss and propagation loss in fiber with two different fiber lengths				
10.	Test the performance of Manchester encoder and decoder using optical communication.				
11.	Test the performance of a voice link using optical fiber.				
12.	Test the Horizontal and Vertical deflection sensitivity of CRT.				
13.	Install a DTH system and test its performance.				

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING		
Subject Code	Name of the Practical Subject				
4040550	MICROCONTROLLER PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	8 / 16 bit addition	1. 8051 Microcontroller Kit	14	14	
2.	8 / 16 bit subtraction	2. Digital I/O Interface Board	02	05	
3.	8 bit multiplication	3. Seven segment LED display Interface Board	02	05	
4.	8 bit division	4. 8 bit DAC Interface Board	02	05	
5.	BCD to Hex code conversion	5. Stepper Motor Control Interface Board	02	05	
6.	Hex to BCD code conversion	6. DC motor control Interface Board	02	05	
		7. RS232 serial port cable	02	05	

7.	Smallest / Biggest number	8. LCD interface board 9. Laptop / Desktop Computer			
8.	Time delay routine (Demonstrate by Blinking LEDS).				
9.	Using Timer/ counter of 8051				
10.	Interfacing Digital I/O board				
11.	Interfacing DAC				
12.	Interfacing Stepper motor				
13.	Interfacing Seven segment LED display or LCD				
14.	Sending data through the serial port between microcontroller kits				
15.	Interfacing DC motor using PWM.				

Institution Code	Institution Name	Course Code	Course Name				
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING				
Subject Code	Name of the Practical Subject						
4040561	VERY LARGE SCALE INTEGRATION PRACTICAL						
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks		
1.	Simulation Of VHDL Code For Logic Gates (And Gate,Or Gate)	1. Desktop Computers 2. Laser Printer 3. FPGA KIT 4. Xilinx 14.1V	Sufficient	45			
2.	Simulation Of VHDL Code For Combinational Function				Sufficient	02	
3.	Simulation Of VHDL Code For Half Adder And Full Adder				Sufficient	10	
4.	Simulation Of VHDL Code For Half Subtractor And Full Subtractor						
5.	Simulation Of VHDL Code For Single Bit Digital Comparator						
6.	VHDL Implementation Of 8 To 1 Multiplexer						

7.	VHDL Code For JK Flipflop (Simulation/Implementation)				
8.	VHDL Implementation Of 1 To 8 Demultiplexer				
9.	VHDL Implementation Of 7 Segment Decoder - Boolean Expression				
10.	VHDL Implementation Of 7 Segment Display - With Counter				
11.	VHDL Implementation Of 8 To 3encoder				
12.	VHDL Implementation Of 2 To 4 Decoder				
13.	VHDL Implementation For Blinking A Led				
14.	VHDL Implementation For Blinking An Array Of LEDs				
15.	VHDL Implementation Of A Speller With An Array Of LEDs				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING		
Subject Code	Name of the Practical Subject				
4040640	COMPUTER HARDWARE SERVICING AND NETWORKING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	IDENTIFICATION OF SYSTEM LAYOUT i) Identify front panel indicators & switches and Front side & rear side connectors ii) Familiarize the computer system layout by marking positions of SMPS, Motherboard, FDD, HDD, CD,DVD and add on cards.	1)Computer	30	55	
2.	HARD DISK i) Configure bios setup program and troubleshoot the typical problems using BIOS utility. ii) Install, Configure, Partition and Format Hard disk.	1)Computer	30	55	
3.	DVD/BLU-RAY WRITER i) Install and Configure a DVD Writer and record a blank DVD. ii) Install and Configure a Blu-ray Writer and record a blank Blu-ray	1)Computer 2)CD/ DVD Writer 3)Blu-ray writer 4)Blank Blu-ray disk 5)Blank dvd disk	1)30 2)2 3)- 4)30 5)30	1)55 2)2 3)2 4)30 5)30	

	Disc.	SW: Ashampoo burning s/w			
	<b>PRINTER INSTALLATION</b>				
4.	i) Install and configure Dot matrix printer ii) Install and configure Laser printer	1) Computer 2) Dot matrix Printer 3) Laser Printer	1) 30 2) 2 3) 2	1) 55 2) 2 3) 2	
5.	i) Install and configure Scanner ii) Install and configure Web cam and bio-metric device	1) Computer 2) Scanner 3) Web camera 4) Bio metric device	1) 30 2) 2 3) 2 4) 2	1) 55 2) 2 3) 5 4) 2	
6.	i) Assemble a system with add on cards and check the working condition of the system ii) Install OS in the assembled system.	Computer & SW: Windows 7 Operating System	30	55	
7.	Install Dual OS in a system	Computer & SW: Windows XP,7 Operating System	30	55	
8.	i) Assemble and Disassemble a Laptop to identify the parts. ii) Installation of different device drivers and Installation of different application Software.	Laptop & SW: Windows 7 Operating System	2	2	
9.	Do the following Cabling works for establishing a network i) Crimp the network cable with RJ 45 connector in Standard cabling mode and cross cabling mode. ii) Test the crimped cable using a	1) Crimping Tool 2) RJ45 jack 3) RJ45 Tester and Network Cables	1) 6 2) - 3) 6	1) 7 2) 100 3) 6	

	cable tester.				
10.	Use IPCONFIG, PING, TRACERT and NETSTAT utilities to debug the network issues.	Computer & Internet connection	30	55	
11.	Interface two PCs to form Peer To Peer network using the connectivity devices Switch or Router in a LAN .	1) Computer 2) Hub/Switch & LAN cable	1) 30 2) 2	1) 55 2) 2	
12.	i). Share the files and folders in a LAN, ii). Share a printer in a LAN.	1) Computer 2) Switch & LAN cable	1) 30 2) 2	1) 55 2) 2	
13.	Remote Desktop, Remote Assistance, Telnet, HyperTerminal, Team Viewer.	1) Computer 2) Hub/Switch & LAN cable	1) 30 2) 2	1) 55 2) 2	
14.	Configure DNS to establish interconnection between systems and describe how a name is mapped to IP Address	1) Computer with server 2008 & client windows 7 2) Hub/Switch & LAN cable	1) 30 2) 2	1) 55 2) 2	
15.	i) Install and configure Network Devices: HUB, Switch (4/8/16/24 ports), Routers ii) Install and Configure NIC.	1) Computer 2) Hub/Switch & LAN cable 3) NIC card	1) 30 2) 2 3) -	1) 55 2) 2 3) 2	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1040	ELECTRONICS AND COMMUNICATION ENGINEERING		
Subject Code	Name of the Practical Subject				
4040653	EMBEDDED SYSTEMS PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	STUDY OF ARM PROCESSOR KIT (whatever the ARM processor kit the institution is having) Example: LPC2148 The student should be able to Understand the memory mapping of the IO and peripherals List the peripherals present in the processor Explain that how to use an IO pin, related SFRs and instructions Explain that how to use timer, UART, its related SFR and instructions sets	---	EACH 1	EACH 1	
2	SIMULATION OF ARITHMETIC OPERATION ON ARM IN ASSEMBLY Develop an assembly level code for the single precision (32 bit) arithmetic function. a.Addition b.Subtraction (Note: simulate the program in the software)	SOFTWARE: KEIL VERSION, PC.	EACH 1	EACH 1	
3	SIMULATION OF ARITHMETIC OPERATION ON ARM IN ASSEMBLY Develop an assembly level code for the single precision (32 bit) arithmetic function. a.	SOFTWARE: KEIL VERSION, PC.	EACH 1	EACH 1	

	Multiplication (Note: simulate the program in the software)				
4	SIMULATION OF C PROGRAM FOR SOFT DELAY Develop an C code for the 32 bit or 64 bit delay routine. Calculate the no of clock taken for the routine and adjust the delay value for the desired. (Note: simulate the program in the software)	SOFTWARE: KEIL VERSION, PC.	EACH 1	EACH 1	
5	REALIZING TIMER PERIPHERAL IN ARM BY POLLING METHOD Develop a C program for ARM processor to run a timer peripheral in ARM. The timer flag can be pooled for timer end. As timer ends reset the timer and update new value to the LED display.	ARM7 TDMI Kit : LPC 2148 SOFTWARE: KEIL VERSION, FLASH MAGIC, PC.	EACH 1	EACH 1	
6	REALIZING TIMER PERIPHERAL IN ARM BY INTERRUPT DRIVEN METHOD Develop a C program for ARM processor to run a timer peripheral in ARM. The timer flag can be pooled for timer end. As timer ends reset the timer and update new value to the LED display.		EACH 1	EACH 1	
7	REALIZATION OF INPUT AND OUTPUT PORT IN C Develop an assembly level program of ARM processor to read a port in which switches are connected in the trainer kit. Send back the receive input to output in which LEDs are connected in the trainer kit. Note: Student should study the list of special function registers associated for accessing Port the read and write.	ARM7 TDMI Kit : LPC 2148 SOFTWARE: KEIL VERSION, FLASH MAGIC, PC.	EACH 1	EACH 1	
8	COUNT EXTERNAL INTERRUPT PULSES EINTx (using VIC) AND SHOW BINARY COUNT VALUES IN LED USING EMBEDDED C Develop a C program for ARM processor to count external interrupt pulses (using VIC) and show the		EACH 1	EACH 1	

	output in LED.				
9	SEVEN SEGMENT LED DISPLAY INTERFACE IN C Develop a C program for ARM processor to interface a seven segment LED display. The display should count up for every one second. The delay can be used from experiment.		EACH 1	EACH 1	
10	SERIAL TRANSMISSION AND RECEPTION OF A CHARACTER IN C BY POLLING METHOD Write a C Programs for receiving a character from other device (Computer) and send the next character of the received one to the device back.		EACH 1	EACH 1	
11	SERIAL TRANSMISSION AND RECEPTION OF A CHARACTER IN C BY INTERRUPT METHOD Write a C Programs for receiving a character from other device (Computer) and send the next character of the received one to the device back.	ARM7 TDMI Kit : LPC 2148 SOFTWARE: KEIL VERSION, FLASH MAGIC, TERMINAL SOFTWARE, PC.	EACH 1	EACH 1	
12	ACCESSING INTERNAL ADC OF THE ARM PROCESSOR AND TO DISPLAY IN LED Write a C Program for reading an ADC, convert into decimal and to display it The ADC input is connected to any analog sensor. (Note: Student should study the SFR associated with ADC, Manual containing List of SFR for accessing ADC can be given for the examination.)		EACH 1	EACH 1	

Institution Code	Institution Name	Course Code	Course Name
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING
Subject Code	Name of the Practical Subject		
4052340	Electrical And Electronics Engineering Practical		
4052350	Linux Practical		
4052360	C Programming And Data Structures Practical		
4052370	E Publishing Practical		
4052450	Web Design And Programming Practical		
4052460	Java Programming Practical		
4052470	RDBMS Practical		
4052540	Python Programming Practical		
4052550	Cloud Computing and Internet of Things Practical		
4052561	Component Based Technology Practical		
4052570	Entrepreneurship and Startup		
4052640	Computer Hardware And Networking Practical		
4052652	Multimedia Systems Practical		
4052660	Project Work & Internship		

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING		
Subject Code	Name of the Practical Subject				
4052340	ELECTRICAL AND ELECTRONICS ENGINEERING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	a. Checking of power supply in SMPS.	Ammeter (0-50)ma	6	9	
	b. Construct the circuit and draw the graph for different stages of Bridge rectifier with filter using CRO.	Voltmeter (0-20)V, (0-1)V	6	10	
2.	Construct the circuit and draw the forward characteristics of PN junction Diode and find input resistance.	Power supply 0-30V	6	6	
3.	Construct the circuit and draw the reverse characteristics of Zener Diode and find breakdown voltage.	Digital Trainer Kit	6	10	
4.	Construct the circuit and draw the VI characteristics of LED	Bread Board	2	10	
		Fixed dual power supply (0-15) V	2	10	
5.	Construct the circuit and draw the characteristics of LDR	Signal generator (1MHz)	6	6	

6.	Construct CE configuration circuit and draw the input characteristics and also find input resistance.	CRO Dual Trace (30MHz)			
7.	Construct CE configuration circuit and draw the output characteristics and also find output resistance.				
8.	a. Verify the truth tables of NAND,AND,NOR,OR, NOT,XOR using IC's. b. Realization of basic gates using either NAND or NOR gate.				
9.	Construct and verify Half adder and Half Subtractor	<b>Consumables:-</b> Resistors (1150Ω,1KΩ,2.2KΩ,10KΩ,220Ω) Capacitor (10μF, 4.7μF) PN Diode (IN4007) Zener Diode (Z11.1) Transistor (SL100,CL100) IC7400, IC7402, IC7404, IC7408,IC7432,IC7486 IC74180,IC74153,IC7476, IC7474, IC7490,IC7493, IC7495	Sufficient Quantity	Sufficient	
10.	Construct and verify the truth table of Full adder				
11.	Construct and verify the truth table of Full subtractor				
12.	Verify the truth tables of RS,D,T and JKFF				
13.	Construct and test the parity generator and checker function using IC74180				
14.	Construct and test the 4bit Ripple counter (IC7493)				
15.	Construct and test decade counter(IC7490)				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING		
Subject Code	Name of the Practical Subject				
4052350	LINUX PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	Usage of Directory Management commands: ls, cd, pwd, mkdir, rmdir	1. Desktop Computers  2. Laser Printer  Operating System : Any Linux Based GUI Operating System	30	45	
2.	Usage of File Management commands :cat, chmod, cp, mv, rm, more		01	02	
3.	Use the General Purpose commands: wc, cal, date, who, tty, ln				
4.	Using the Simple filters: pr, head, tail, cut, paste, nl ,sort				
5.	Advanced filters: Search for a pattern using grep, egrep, fgrep, uniq Communication Commands: write, wall				
6.	Check the details of process name, PID, status using ps command. Process Management commands:&nohup, kill, nice				
7.	Device pattern using meta character to match each of the situation				
8.	Write a shell script that accepts a numerical value N. Then display the Decrementing value of N till it reaches 0.				

9.	Write a shell script to search a string and display it.				
10.	Write a shell script that takes three command line arguments. The first argument is the name of the destination file and the other two arguments are Names of files to be placed in the destination file.				
11.	Write a shell script to print contents of file from given line number to next given Number of lines.				
12.	Write a shell script that print out date information in this order: time, day of The week, day number, year- that is like this.21:18:00 IST Mon16 Aug21				
13.	Develop a Basic math Calculator using case statement				
14.	Write a shell script that represents a multiple choice question, gets the user's Answer and report back whether the answer is right, wrong or not one of the choices.				
15.	Write a shell script that takes a command line argument and reports on Whether it is a directory, a file or something else.				



Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING		
Subject Code	Name of the Practical Subject				
4052360	C PROGRAMMING AND DATA STRUCTURES PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	Write a simple C Program a. Print your Name and Address b. Find Simple interest and Compound interest.	1. Desktop Computers	30	45	
2.	Write a C program to swap two variable's using (i) third variable and (ii) without using a third variable.	2. Laser Printer	01	02	
3.	Write a program to find the largest number between given three numbers.	Software Requirement : C - Compiler with Editor.			
4.	Write a program to print all prime numbers from 1 to N.				
5.	Write a program to prepare the total marks for N students by reading the Reg.No, Name, Mark1 to Mark6 by using array of structures.				
6.	Write a program using the function power (a,b) to calculate the value of a				

	raised to b.				
7.	Write a program to find the length of the given string using pointers.				
8.	Write a program to find factorial of a number using recursion.				
9.	Write a program in 'C' to create a singly linked list containing at least five elements. Make necessary assumptions.				
10.	Write a "C" program to perform operations in stack using array.				
11.	Write a "C" program to convert an infix expression into post fix expression.				
12.	Write a "C" program to perform operations in queue using array.				
13.	Write a "C" program to add two 3 x 3 matrices and display the result in Matrix form.				
14.	Write a "C" program to read 10 elements and sort the above numbers using bubble sort.				
15.	Write a "C" Program for binary searching.				

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING		
Subject Code	Name of the Practical Subject				
4052370	E PUBLISHING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	Create a Bit Notice with specified height and width with various text styles.	1. Desktop Computers	30	45	
2.	Create a design using all basic tools and make changes using shape tool.	2. Laser Printer	01	02	
3.	Create a notebook wrapper design using fountain filling and pattern filling tools.	3. Scanner	01	01	
4.	Create an invitation using arrange menu commands like transformations, align and distribute and order.	Software Requirement : <ul style="list-style-type: none"> <li>• Any Open Source Software</li> <li>• GIMP</li> <li>• Scribus</li> <li>• Inkscape</li> <li>• Krita</li> <li>• Pinta</li> </ul>			
5.	Create a calendar with the help of Grid Tool, Power clip and import commands.				
6.	Create a simple logo using text tool, rectangle tool and ellipse tool.				

7.	Transform one object into another object using blend tool.	<ul style="list-style-type: none"> <li>• Shotwell or any equivalent open source software. [or]</li> <li>• Corel draw, Photoshop, Adobe in design.(optional ).</li> </ul>			
8.	Create a design by using the various Selection Tools, cutting and pasting the images.				
9.	Using multiple layers, create a design with the use of masking various images.				
10.	Create a design by the use of text tools and apply text effects.				
11.	Change the color of an image by the use of selective coloring method.				
12.	Create a design by applying the various filtering effects.				
13.	Create a simple layout and master page by using master page palette and Character Styles.				
14.	Create a multipage document by using character, paragraph, auto flow and text commands.				
15.	Create a stylish monthly calendar sheet by using table and its formatting commands.				

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING		
Subject Code	Name of the Practical Subject				
4052450	WEB DESIGN AND PROGRAMMING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Design a HTML page describing your profile in one paragraph. Design in such a way that it has a heading, a horizontal rule, three links and your photo. Also, write three HTML documents for the links. Include facilities for forward, backward and HOME.	Desktop Computers  Laser Printer	30  01	55  04	
2	Design a HTML page about computer languages. List the language. Each Language's name is a link. Prepare separate HTML documents for each language and call them in the appropriate link.				
3	Design a single page website for your polytechnic containing a description of the courses offered. It should also contain some general information about the college such as its history, the campus, and its unique features				

	and so on. The site should be colored and each section should have a different color.				
4	Develop a web page using CSS to create a time table for the class using different border style.				
5	Write a Java script code that converts the entered text to uppercase.				
6	Write a Java script code to validate the username and password. The username and password are stored in variables.				
7	Write a Java Script code using frames and Events (When a cursor moves over an object it should display the specification of the object in another frame).				
8	Create a site containing banner advertisement at the top of the page. The ads are changed every 10 or 15 seconds.				
9	Write jQuery Program for Count the number of milliseconds between the two click events on a paragraph.				

10	Write jQuery Program for Disable/enable the form submit button & Blink the text.				
11	Write a PHP program to implement at least 05 string functions with description				
12	Create a PHP script which display the capital and country name from the given array. Sort the list by the name of the country.				
13	Write a PHP program to implement Date and Time Functions.				
14	Write a PHP script to display table with implementing Form Processing Controls of Insert and Delete data from data base.				
15	Create a simple shopping - cart script using PHP and MySQL.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING		
Subject Code	Name of the Practical Subject				
4052460	JAVA PROGRAMMING PRACTICAL				
1.	Write a program to read the temperature in Celsius and convert into Fahrenheit.	Desktop Computers Printer	30 01	55 04	
2.	Write a program to read 2 integers and find the largest number using conditional operator.				
3.	Write a program to read an integer and find the factorial of a number.				
4.	Write a program to implement Vector class and its methods.				
5.	Write a program to read a string and check whether it is palindrome or not.				
6.	Write a program to create a class with following data members 1. register number 2. Name 3. Marks in 3 subjects and member functions 1. parameterised constructor - to assign values to members 2. method to find total mark 3. method to display register number, name, total mark Create 3 objects from the above class and use the members.				
7.	Write a program that accepts radius of a circle from command line and display its				

	area.				
8.	Write a program to implement multilevel inheritance.				
9.	Write a program to create a own exception subclass that throws exception if the given number is not in a range of numbers.				
10.	Write a program that creates three threads. First thread displays "Good Morning" everyone second, the second thread displays "Hello" every two seconds and the third thread displays "Welcome" every three seconds.				
11.	Write a program to create a file using Byte stream or Character stream class.				
12.	Write a program to demonstrate Mouse events.				
13.	Write a program to display basic shapes using Graphics class and fill them using Color class.				
14.	Write a program to create a simple calculator to perform addition, subtraction, multiplication and division using button, label and text field.				

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING		
Subject Code	Name of the Practical Subject				
4052470	RDBMS PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Install, configure and connect to MySQL server and MySQL workbench in windows. Create a database, backup and restore the database.	Desktop Computers Printer	30 01	55 04	
2	To study Basic MySQL commands (create database, create table, use, drop, insert) and execute the following queries using these commands: Create a database named 'employee'. Use the database 'employee' and create a table 'emp' with attributes 'ename', 'ecity', 'salary', 'enumber', 'eaddress', 'deptname'. Create another table 'Company' with attributes 'cname', 'ccity', 'empnumber' in the database 'employee'.	Desktop Computers Printer	30 01	55 04	
3	To study the viewing commands (select, update) and execute the following queries using these commands: Find the names of all employees who live in	Desktop Computers Printer	30 01	55 04	

	Chennai. Increase the salary of all employees by Rs.5,000. Change the company city to Chennai where the company name is 'TCS'.				
4	study the commands that involve compound conditions (and, or, in, not in, between, not between, like, not like) and execute the following queries using these commands: Find the names of all employees who live in 'Chennai' and whose salary is between Rs.20,000 to Rs.30,000. Find the names of all employees whose names begin with either letter 'A' or 'B'. Find the company names where the company city is 'Chennai' and the number of employees is not between 5000 and 10,000. Find the names of all companies that do not end with letter 'A'	Desktop Computers Printer	30 01	55 04	
5	a) Create a database 'polytechnic_collee'. Create 2 users namely 'staff' and 'student'. Grant all privileges to the user 'staff' and grant only 'create' privilege to 'student' user and verify the same. Revoke all privileges to the 2 users and verify the same. b) Implement the following transactions control statements. i) Commit ii) Rollback iii) Save point	Desktop Computers Printer	30 01	55 04	
6	Create table 'author' with the following structure, author_id, author_name, address, Mobile, book_title, pages published_on i) Insert 4 books published by 3 authors	Desktop Computers Printer	30 01	55 04	

	each. (12 records) ii) Fetch all the rows and observe how the data duplicated. iii) Apply 1st and 2nd normal forms to fix it.				
7	To study the commands for views and execute the following queries using these commands: Create a view having ename and ecity In the above view change the ecity to 'Chennai' where ename is 'John'. Create a view having attributes from both the tables. Update the above view and increase the salary of all employees of IT department by Rs.1000.	Desktop Computers Printer	30 01	55 04	
8	Create a library table with proper fields. Create another table called library1 and insert rows from library table. Hint: CREATE TABLE new_table LIKE original_table; INSERT INTO new_table SELECT * FROM original_table;	Desktop Computers Printer	30 01	55 04	
9	Create a table to store the details of a customer in a Bank. Do some transactions like withdrawal, deposit. Find the Balance amount(Credit Limit). Based on customer's credit limit, write a program using IF or CASE flow control statements to find the customer levels namely SILVER, GOLD or PLATINUM. Curriculum Development Centre Page 84 If the Credit limit is greater than 50K, then the customer level is PLATINUM	Desktop Computers Printer	30 01	55 04	

	less than 50K and greater than 10K, then the customer level is GOLD less than 10K, then the customer level is SILVER				
10	<p>Create two tables with the following structure.</p> <p>a) users - table name  user_id - UNSIGNED, INT, AUTO INCREMENT, PRIMARY KEY  username - VARCHAR (60)  password - VARCHAR (128)  email - VARCHAR (255)</p> <p>b) users_profiles  user_id - FOREIGN KEY refers to user_id field of user table  first_name - VARCHAR(60)  last_name - VARCHAR(60)  mobile - VARCHAR(15)</p> <p>i) SELECT all the users along with their profile details. (Hint: Use INNER JOIN)  ii) SELECT the users who do not have profiles (Hint: USE LEFT JOIN and exclude the rows generated with NULL values from joining table)</p>	Desktop Computers Printer	30 01	55 04	
11	Create an employee database and create a stored procedure that accepts employee_id as input and returns complete details of employee as output.	Desktop Computers Printer	30 01	55 04	
12	<p>Create two tables with the following structure</p> <p>Authors  author_id - INT  name VARCHAR (60)  titles_count INT -- holds the total number</p>	Desktop Computers Printer	30 01	55 04	

	<p>numbers of titles authored.</p> <p>Titles author_id - INT  name VARCHAR (512) -- name of the title</p> <p>a. Create a trigger to update the titles count field of respective row in authors table each time a title gets inserted into titles table.</p> <p>b. Create log table with the following structure author_id - INT  name VARCHAR (512) -- name of the title  status VARCHAR(25) ---  ADDITION,DELETION,UPDATION  and insert an entry in that table each time the title is added, deleted or updated. Use a trigger to accomplish this.</p>				
13	Create a table containing phone number, user name, address of the phone user. Write a function to search the address using phone number.	Desktop Computers Printer	30 01	55 04	
14	Create a table to store the salary details of the employees in a company. Declare the cursor id to contain employee number, employee name and net salary. Use cursor to update the employee.	Desktop Computers Printer	30 01	55 04	
15	Write a program to connect PHP with MySQL and create a database using PHP MySQL.	Desktop Computers Printer	30 01	55 04	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING		
Subject Code	Name of the Practical Subject				
4052540	PYTHON PROGRAMMING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	i) Write a Python program to compute GCD of two numbers. ii) Write a Python Program to print prime numbers in the given range.	Desktop Computers	30	45	
		Laser Printer	01	02	
2.	i) Write a Python Program to check the given year is leap year or not. ii) Write a Python Program to print Armstrong numbers between given range.	Software Requirements :	Sufficient	Python V3.7 available in all computers	
		Windows / Linux Operating System. Python ( to run as interactive mode and IDLE mode).			
3.	i) Write a Python Program to do basic trim and slice operations on String. ii) Write a Python Program to accept line of text and find the number of characters, vowels and blank spaces on it.				

4.	i) Write a Python Program using function to display all such numbers which is divisible by 3 but are not multiple of 5 in a given range. ii) Write a Python Program using recursion to print 'n' terms in Fibonacciseries.				
5.	Write a Python Program to add 'ing' at the end of a given string if the string has 3 or more characters . If the given string is already ends with 'ing' then add 'ly' instead. If the string has less than 3 characters, leave it unchanged.				
6.	Write a Python program to find minimum and maximum of a list of numbers.				
7.	Write a Python program to display a list in reverse order.				
8.	Write a Python Program to print the first half values of tuple in one line and last half values in next line.				
9.	Write a Python Program to take a list of words and return the length of the longest one using string.				



10.	Write a Python Program to find an element in a given set of elements using Linear Search.				
11.	Write a Python Program to sort a set of elements using Selection sort.				
12.	Write a Python Program to multiply two matrices.				
13.	Write a Python program to demonstrate different operations on Tuple.				
14.	Write a Python Program to demonstrate to use Dictionary and related functions.				
15.	Write a Python Program to copy file contents from one file to another and display number of words copied.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING		
Subject Code	Name of the Practical Subject				
4053550	CLOUD COMPUTING AND INTERNET OF THINGS PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	To implement program on SaaS to Create an word document of your class time table and store locally and on cloud with doc and pdf format	Desktop Computers Laser Printer	30 01	45 02	
2.	To implement program on SaaS to Create a spread sheet to generate a marksheet for student progress report.	1. Arduino kit 2. Node MCU / Raspberry Pi	10 10	10 10	
3.	To implement web services by create your BlogSpot and Collaborating via Wikis	3. LED Blub 4. 330K Resistor	10 10	10 10	
4.	To implement on PaaS to Install Google App Engine, create a program to validate user; create a database login(username, password)in mysql and deploy to cloud	5. Push Button 6. Servo Motor 5 V DC 7. 5V DC Relay 8. Mini Bread Board	10 10 10 10	10 10 10 10	

5.	Install Virtual box / VMware Workstation with different flavours of linux or windows OS on top of windows7 or 8.	9. 16x2 LCD Display 10. IR Sensor 11. LM35 Temperature Sensor 12. Connecting Wires	10 10	10 10	
6.	Install OpenStack and use it as Infrastructure as a Service and use technology own Cloud.	Software Requirements : Arduino IDE			
7.	Case Study on any one Open source and commercial Cloud-Microsoft Azure ,Eucalyptus , Amazon EC2				
8.	To implement LED Blink and LED Pattern With Arduino				
9.	To implement LED Pattern with Push Button Control With Arduino				
10.	To display "Hello World " in LCD 16X2 Display With Arduino				
11.	To implement the Servo Motor Control with Arduino				
12.	To implement and monitor the LM35 Temperature Sensor and Ultrasonic Distance Measurement With Arduino				
13.	To implement the IR Sensor Analog Input With Arduino				
14.	Using ThinkSpeak Cloud Reading Temperature Sensor Monitoring with NodeMCU /Raspberry Pi				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING		
Subject Code	Name of the Practical Subject				
4052561	COMPONENT BASED TECHNOLOGY PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	Accept a character from console and check the case of the character.	Desktop Computers	30	45	
2.	Write a program to accept any character from keyboard and display whether it is vowel or not.	Laser Printer Software Requirements :	01	02	
3.	Write a program to implement a calculator with memory and recall operations.	Visual Studio 2008/2012/2013/2015	Sufficient	available in all computers	

4.	Develop a form in to pick a date from Calendar control and display the day, month, and year details in separate text boxes.	Microsoft SQL Server 2005/2008 or above	Sufficient	available in all computers	
5.	Develop a application using the File and directory controls to implement a commondialog box.				
6.	Develop a database application to store the details of students using ADO.NET				
7.	Create a simple ASP.NET page to Output Text with a form, two HTML text boxes, an HTML button, and an HTML <span> element. Create an event procedurefor the button.				
8.	Develop a menu based application to implement a text editor with cut, copy, paste, save and close operations with accessing and shortcut keys.				
9.	Develop an application to perform timer based quiz of 5 questions.				

10.	Develop a database application using ADO.NET to insert, modify, update and deleteoperations.				
11.	Develop a application using Datagrid to add, edit and modify records.				
12.	Develop a web application to input data through a web form to a database andvalidate the data. Use the Required Field Validator and RangeValidator Controls.				
13.	Develop a Window application to read an XML document containing subject, markscored, year of passing into a Dataset.				
14.	Develop a Window application to read students records from Database using ADO.NET and generate XML document containing students records.				

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING		
Subject Code	Name of the Practical Subject				
4052640	COMPUTER HARDWARE AND NETWORKING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	IDENTIFICATION OF SYSTEM LAYOUT (STUDY EXERCISE) a) Front panel indicators & switches and front side & rear side connectors. b) Familiarize the computer system Layout: Marking positions of SMPS, Motherboard, HDD, DVD and add on cards. c) Configure bios setup program and troubleshoot the typical problems using BIOS utility	Computer	30	55	
2	HARD DISK a) Install Hard Disk. b) Configure CMOS-Setup. c) Partition and Format Hard Disk. d) Identify Master /Slave / IDE Devices. e) Practice with scan disk, disk cleanup, disk De-fragmentation, Virus Detecting and Rectifying Software. f) Creating System restore points in windows for system recovery.	Computer Hard disk drive & Antivirus software	30 6	55 6	

3	a) Install and Configure a DVD Writer & Blu-ray Disc Writer. b) Recording a Blank DVD & Blu-ray Disc.	Computer CD/ DVD Writer Blu-ray writer Blank Blu-ray disk Blank dvd disk	30 3 3 20 20	55 3 2 30 30	
5	Install and configure Scanner, Web cam, and bio-metric device with system and troubleshoot the problems	Computer Scanner Web cam Bio -metric device	30 1 1 1	55 1 5 1	
6	Do the following cabling works in a network a) Cable Crimpling b) Standard Cabling c) Cross Cabling d) I/O Connector Crimping e) Testing the Crimped cable using a Cable tester	Crimping Tool RJ45 jack RJ45 Tester and Network Cables	6 - 6	7 100 6	
7	a) Configure Host IP, Subnet Mask and Default Gateway in a system in LAN (TCP/IP Configuration). b) Configure Internet connection and use IPCONFIG, PING / Tracert and Netstat utilities to Debug the Network issues.	Computer	130	55	
8	a) Install and configure Network Devices: HUB, Switch and Routers b) Install and Configure Wired and Wireless NIC and transfer files between systems	Switch Hub Router	1 1 1	3 1 1	
9	Transfer files between systems in LAN using FTP Configuration. Install a printer in LAN and share it in the network.	Computer with server 2003 Computer with windows 7 Switch & LAN cable	1 30 2	2 50 2	

10	Installation of Windows 2008 / 2013 Server.	Computer and windows server 2008 operating system	30	55	
11	Installation and configuration of DHCP Server.	Computer with server 2008 & client windows 7 Hub/Switch & LAN cable	1&30 2	2&30 2	
12	Installation and configuration of Mail Server.	Computer with server 2008 & client windows 7 Hub/Switch & LAN cable	1&30 2	1&30 2	
13	Installation and configuration of Active directory Services. Create a user and permission using logon script and group permissions.	Computer with server 2008 & client windows 7 Hub/Switch & LAN cable	1&30 2	1&30 2	
14	Installation and configuration of DNS Server	Computer with server 2008 & client windows 7 Hub/Switch & LAN cable	1&30 2	1&30 2	
15	a) Installation of Red Hat Linux using Graphical mode. b) Installation of Red Hat Linux using VMWare.	Computer and Red Hat linuxos SW:Vmware software	30	55	
16	Installation of various open source packet sniffing tools and inspect packets in linux.	RedHatlinux installed system	30	55	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1052	COMPUTER ENGINEERING		
Subject Code	Name of the Practical Subject				
4052652	MULTIMEDIA SYSTEMS PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1.	Use a audio processing software and perform the audio editing tasks - Import audio, select and edit the sound, create fade-in and fade-out effects, label audio segments, use noise remove filter, mix multiple sound sources, change stereo to mono tracks, export audio to different format and save.	Desktop PC, Laser printer, Microphone., adobe audition cs6	30	55	
2.	Use a video processing Software to perform - Trim video clips, crop video, rotate video, join video, add subtitles, and edit video dimension, bit rate, frame rate, sample rate, channel, and video/audio quality tasks on a video.	Desktop PC, Laser printer, adobe premiere pro cs3	30	55	

3.	Create a Movie from video clips to demonstrate: - Audio-Video Mixing, Music, Video Effects, Video Transitions, and Titles.	Desktop PC, Laser printer, adobe premiere pro cs3	30	55	
4.	Use suitable software to (a) compress / decompress audio / video files. (b). convert audio / video to different formats. (c). split, join, rip audio / video.	Desktop PC, Laser printer, VLC MediaPlayer, adobe premiere pro cs3	30	55	
5.	Use a scanner to create two or more partial scanned images of large poster/photo. Create a panoramic view of multiple photos by stitching together them using any panorama software.	Desktop PC, Laser printer,PTGui photo stitching software 9.1	30	55	
6.	Develop a web page which shows animation with sound effect using any professional HTML editor.	Desktop PC, Laser printer,notepad,browser	30	55	
7.	Convert the given image into pencil sketch using suitable photo editing software.	Desktop PC, Laser printer, adobe photoshop	30	55	
8.	Design a certificate for sports day with different text effects using suitable software	Desktop PC, Laser printer, adobe photoshop	30	55	

9.	Import any two pictures, Morph, Merge and Overlap those two pictures.	Desktop PC, Laser printer, adobe photoshop	30	55	
10.	Draw the raindrop that falls on the ground. Show the splash effect and sound effect using suitable software.	Desktop PC, Laser printer, autodesk maya	30	55	
11.	Create a moving cloud animation using any animation software.	Desktop PC, Laser printer, adobe photoshop cs3	30	55	
12.	Create a 2D animation using motion guide layer and masking.	Desktop PC, Laser printer, adobe Flash	30	55	
13.	Create a 2D animation of an aeroplane take off using suitable software.	Desktop PC, Laser printer, adobe Flash	30	55	
14.	Design a metallic text using 3D animation tool	Desktop PC, Laser printer,autodesk maya	30	55	
15.	Import an image with green screen background. Change the background of the imported image with required image using chroma key technique.	Desktop PC, Laser printer, Adobe Premiere pro	30	55	

Institution Code	Institution Name	Course Code	Course Name
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1075	PETROCHEMICAL ENGINEERING
Subject Code	Name of the Practical Subject		
4076350	Technical Analysis Practical		
4076360	General Engineering Practical		
4076370	Momentum Transfer Practical		
4076450	Mechanical Operations Practical		
4076460	Heat Transfer Practical		
4075470	Distillate Testing Practical I		
4076550	Chemical Process Simulation Practical		
4076560	Process Instrumentation and Control Practical		
4075570	Distillate Testing Practical II		
4020570	Entrepreneurship and Starts ups		
4076640	Mass Transfer Practical		
4076650	Chemical Cad Practical		
4076660	Project Work & Internship		

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1075	PETRO CHEMICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4076350	TECHNICAL ANALYSIS PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Estimation of Hardness of water by EDTA method.	Burettes 50 ml Pipettes 25 ml, 20 ml, 10 ml Conical flask 500 ml, 250 ml, 100 ml	5 Nos. 5 Nos. 5 Nos. 10	28 Nos 25 Nos 10 Nos 21 Nos	
2	Estimation of Acid value of Oil	Burette stand with clamp - Round bottomed flask 500 ml, 250 ml	Nos. 5 Nos. 2 Nos.	5 Nos 02 Nos 02 Nos 27 Nos	
3	Estimation of Total Fatty Matter content of soap.	Liebig's condenser Distillation set	2 Nos. 5 Nos.	5 Nos.	

4	Estimation of calcium oxide content of cement.	Funnels & Separating funnels	5 Nos.	10 Nos	
		Watch Glass 6",3",3"	5 Nos.	05 Nos	
		Wash bottles plastics	1 No	01 Nos	
5	Determination of available chlorine in Bleaching Powder	Tripod stand & Wire gauge	1 No.	05 Nos	
		Hot plate & Muffle Furnace	2 Nos.	02 Nos	
		Silica Crucible with lid	1 No.	01 No	
6	Estimation of purity of Glycerol by Dichromate method.	Buchner funnel	4 Nos.	04 Nos	
		Suction pump	1 No	1 No	
		Aspirator bottles			
7	Determination of purity of Sucrose	Refractometer			
8	Determination of PH using PH meter				
9	Estimation of Saponification of Oil				
10	Estimation of Mixed Oxide content of cement				

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1075	PETRO CHEMICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4076360	GENERAL ENGINEERING PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Identify the parts of Gate valve, dismantle and assemble the parts of Gate valve.	Gate valve	1	1	
2	Identify the parts of Globe valve, dismantle and assemble the parts of Globe valve.	Globe valve	1	1	
3	Identify the parts of centrifugal pump, dismantle and assemble the parts of Centrifugal pump.	Centrifugal pump.	1	2	



4	Refrigeration Test Rig - COP Determination	Refrigeration Test Rig	1	1	
5	Determine the Hardness Test value of given material (mild steel or plastic material) using hardness testing machine	Hardness Test	1	1	
6	Compressor Test Rig	Compressor Test	1	1	
7	Determination of Unknown Resistance by ohms law	Available	1	1	
8	Energy measurement in a single phase circuit using Lamp load	Available	1	1	
9	Load test on a single phase transformer	single phase transformer	1	1	
10	Verification of Series and parallel circuit	Available	1	1	

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1075	PETRO CHEMICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4076370	MOMENTUM TRANSFER PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Determination of flow rate using Orifice meter	Orifice meter	1	1	
2	Determination of flow rate using Venturi meter	Venturi meter	1	1	
3	Flow through a straight pipe	Flow Through Pipe	1	1	
4	Flow through a helical coil	helical coil	1	1	
5	Rota Meter Calibration	Rota Meter	1	1	
6	Flow through packed column	packed column	1	1	
7	Flow through fluidization column	fluidization column	1	1	
8	Centrifugal pump characteristics	Centrifugal pump	1	1	
9	Flow through a Weir	V Notch	1	1	
10	Reciprocating pump characteristics	Reciprocating pump	1	1	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1075	PETROCHEMICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4076450	MACHNICAL OPERATIONS PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Storkes Law of Settling	Long, Wide glass tube	1	1	
2	Batch Settling	Measuring jar- 1 Litre	1	1	
3	Industrial Mixer	Mixing tank with	1	1	
4	Leaf Filter	Leaf filter with accessories such as Vacuum pump, /	1	1	
5	Sieve Analysis	Set of sieves and sieves shaker machine.	1	1	
6	Jaw Crusher	Jaw Crusher	1	1	
7	Roller Crusher	Double roller crusher	1	1	
8	Ball Mill	Ball mill with different size of balls	1	1	
9	Filter Press	Plate and frame filter press with accessories	1	1	
10	Cyclone Separator	Cyclone Separator	1	1	

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1075	PETROCHEMICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4076460	HEAT TRANSFER PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Thermal Conductivity of Metal Bar	Thermal Conductivity of Metal Bar	1	1	
2	Heat loss in pipe	Heat loss in pipe	1	1	
3	Double Pipe Heat Exchanger by co-current Flow	Double Pipe Heat Exchanger by co-current	1	1	
4	Double Pipe Heat Exchanger by Counter-current flow	Double Pipe Heat Exchanger by Counter-	1	1	
5	Natural Convection Heat Transfer	Natural Convection Heat	1	1	
6	Forced Convection Heat Transfer	Forced Convection Heat	1	1	
7	Determination of Heat Transfer co-efficient in Vertical Condenser	Heat Transfer co-efficient in Vertical Condenser	1	1	
8	Determination of Heat Transfer co-efficient in Horizontal Condenser	Heat Transfer co-efficient in Horizontal Condenser	1	1	
9	Determination of Emissivity of a	Emissivity of a grey Body	1	1	
10	Verification of Stefan Boltzmann constant	Stefan Boltzmann constant	1	1	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1075	PETROCHEMICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4075470	DISTILLATE TESTING PRACTICAL I				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Determination of aromatics using aniline point	Aniline point apparatus	01	01	
2	A.S.T.M Distillation of Petroleum Products	A.S.T.M Distillation apparatus	01	01	
3	Smoke point of Petroleum Products	Smoke point apparatus	01	01	
4	Drop point of grease	Drop point apparatus	01	01	
5	Determinations of specific gravity by using hydrometer	Centrifuge apparatus	01	01	
6	Determination of acidity for Petroleum Products	Acidity determination apparatus	01	01	
7	Melting point	Melting point apparatus	01	01	
8	Softening point	Ring & ball apparatus	01	01	
9	Flash and Fire point of the given sample	Open cup and closed cup	01	01	
10	Viscosity measurement by saybolt viscometer	Saybolt viscometer	01	01	
11	Viscosity measurement by redwood viscometer	ERDWOOD viscometer	01	01	

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1075	PETROCHEMICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4076550	CHEMICAL PROCESS SIMULATION PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Fractionation column for the distillation of binary mixture	Simulation Software			
2	Batch Reactor	Simulation Software			
3	Double pipe Heat exchanger	Simulation Software			
4	Size reduction using Ball mill	Simulation Software			
5	Level and flow control in different sizes of vessel	Simulation Software			
6	CSTR in series	Simulation Software			
7	Centrifugal pump	Simulation Software			
8	Fluidized bed column	Simulation Software			
9	packed bed column	Simulation Software			
10	Flow through pipe	Simulation Software			

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1075	PETROCHEMICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4076560	PROCESS INSTRUMENTATION AND CONTROL PRACTICAL				
1	Study of characteristics of Thermocouple module.	Temperature sensors like Thermocouple, RTD and Thermistor	1	1	
2	Study of characteristics of RTD and Thermistor.	Temperature sensors like Thermocouple, RTD and Thermistor	1	1	
3	Measurement of Pressure using Strain Gauge type Transducer.	Strain Gauge type Pressure Transducer	1	1	
4	Measurement of Pressure using Bourdon Pressure Transducer.	Bourdon Pressure Transducer	1	1	

5	Study the linearity of P/I and I/P converter.	P/I and I/P converter	1	1	
6	Level measurement by using Differential Pressure (DP) Transmitter.	Differential Pressure Transmitter	1	1	
7	Study of valve flow coefficients and inherent characteristics of Linear, Equal% and Quick opening.	Pneumatic control valve (Linear, Equal % and Quick opening) set up	1	1	
8	Study of ON- OFF controller using Temperature controller Trainer kit by monitoring the process in SCADA mode or Analog.	Temperature control Trainer Kit with SCADA or Analog - 1 No.	1	1	
9	Study of P, PI and PID controller using Liquid Level controller Trainer kit.	Liquid Level control Trainer Kit with SCADA or Analog - 1 No.	1	1	
10	Study of P, PI and PID controller using Pressure controller Trainer kit by monitoring the process in SCADA mode or Analog.	Pressure Control Trainer Kit with SCADA or Analog	1	1	

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816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1075	PETROCHEMICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4075570	DISTILLATE TESTING PRACTICAL-II				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Copper Corrosion Test	Copper Corrosion Test	1	1	
2	Say Bolt Color test	Say Bolt Color test	1	1	
3	Reid Vapour Pressure	Reid Vapour Pressure	1	1	
4	Refractive Index	Refractive Index	1	1	
5	Conradson Method	Carbon residue by Conradson Method	1	1	
6	Rams Bottom Method	Carbon residue by Rams Bottom Method	1	1	
7	Bromine Number Apparatus	Bromine Number Apparatus	1	1	
8	Sediments By Extraction	Sediments By Extraction	1	1	
9	Kinematic Viscosity	Kinematic Viscosity	1	1	
10	Penetration Apparatus	Penetration number of Bitumen	1	1	

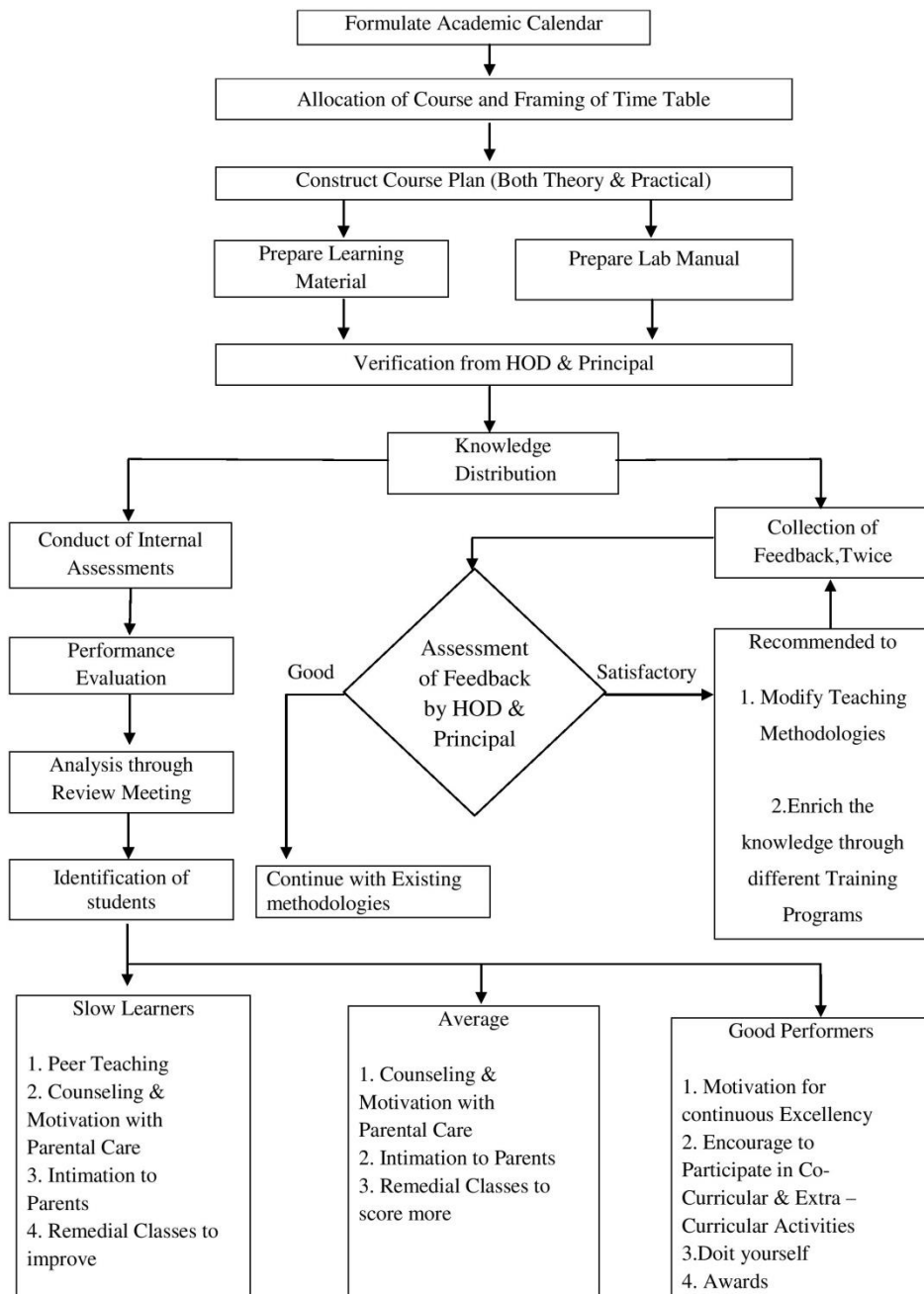
Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1075	PETROCHEMICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4076640	MASS TRANSFER PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Simple Distillation	Simple Distillation Apparatus	1	1	
2	Determination of Vapour- Liquid Equilibrium	Vapour Liquid Equilibrium Apparatus	1	1	
3	Steam Distillation	Steam Distillation Apparatus	1	1	
4	Liquid-Liquid Extraction	Liquid-Liquid Extraction Apparatus	1	1	
5	Soxhlet Extraction	Soxhlet Extractor	1	1	
6	Drying Characteristic solid	Drier	1	1	
7	Crystallization by Cooling	Crystallization by Cooling Apparatus	1	1	
8	Crystallization by Evaporation	Crystallization by Evaporation Apparatus	1	1	
9	Decolourization by Adsorption	Decolourization by Adsorption Equipment	1	1	
10	Diffusivity Measurements	Diffusivity Measurements Apparatus	1	1	

Institution Code	Institution Name	Course Code	Course Name		
816	SHREE VENKATESHWARA HI-TECH POLYTECHNIC COLLEGE	1075	PETROCHEMICAL ENGINEERING		
Subject Code	Name of the Practical Subject				
4076650	CHEMICAL CAD PRACTICAL				
Experiment No	Name of the Experiment	Equipments / Apparatus / Consumables Required	Number Required as per Syllabus	Number available in Working Condition	Remarks
1	Fractionation column	Auto Cad Software 2D		Sufficient Quantity Available	
2	Batch Reactor	Auto Cad Software 2D			
3	Shell and tube Heat exchanger	Auto Cad Software 2D			
4	Long tube Evaporator	Auto Cad Software 2D			

5	Rotary Drum Filter	Auto Cad Software 2D		Sufficient Quantity Available	
6	Simple piping layout with 2D	Auto Cad Software 2D			
7	Spray Drier	Auto Cad Software 3D			
8	Agitated batch crystallizer	Auto Cad Software 3D			
9	Simple piping layout in isometric view.	Auto Cad Software 3D			
10	Set up Process Instrumentation Diagram (P&ID) of Distillation column	Auto Cad Software 3D			

15)	Social Media Cell	Available
16)	Compliance of the Academic Bank of Credit (ABC), applicable to PGCM/ PGDM Institutions and University Departments	Not Applicable
17)	To upload the respective short video (1-2 min) of Infrastructure and facilities available w.r.t the courses	Available

	in the website		
18)	<b>Games and Sports Facilities</b>		
		<b>Outdoor Games</b>	<b>Indoor Games</b>
		<ol style="list-style-type: none"> <li>1. Volleyball Court</li> <li>2. Throw Ball Court</li> <li>3. Koko Court</li> <li>4. Kabaddi Court</li> <li>5. Tennikoit Court</li> <li>6. Handball Court</li> <li>7. Cricket Court</li> </ol>	<ol style="list-style-type: none"> <li>1. Chess</li> <li>2. Carrom</li> </ol>
19)	<b>Teaching Learning Process</b>		



20)	For each Post Graduate Courses give the following	Not applicable
21)	Title of the Course	Not applicable
22)	Laboratory facilities exclusive to the Post Graduate Course	Not applicable
<b>13</b>	<b>Enrolment and placement details of students in the last 3years</b>	



**PLACEMENT DETAILS 2023-24**

Sl. No	Name of the Company	Total No of Offers						Package Details
		CIVIL	MECH	AUTO	EEE	ECE	CSE	
01	NOKIA	-	-	-	10	7	23	1.98 LPA
02	FOXCONN	-	-	-	5	3	21	1.98 LPA
03	PRICOL LIMITED	-	12	17	16	5	0	1.86 LPA
04	ROYAL ENFIELD	-	6	7	14	7	0	2.20 LPA
05	LEDL & LECS	-	22	7	23	13	0	2.02 LPA
06	KYUNGSHIN INDUSTRIAL MOTHERSON PVT.LTD	-	19	16	5	-	-	2.23 LPA
07	TVS TRAINING & SERVICES, CHENNAI	-	10	12	3	2	-	1.98 LPA
08	DESERV INTERNATIONAL, DUBAI	-	4	1	2	-	-	3.54 LPA
09	RAMALINGAM CONSTRUCTION	4	-	-	-	-	-	1.80 LPA
<b>TOTAL NO OF OFFERS</b>		<b>4</b>	<b>73</b>	<b>60</b>	<b>78</b>	<b>37</b>	<b>44</b>	<b>296</b>

**PLACEMENT DETAILS 2022-23**

Sl. No	Name of the Company	Total No of Offers							Package Details
		CIVIL	MECH	AUTO	EEE	ECE	CSE	PCT	
01	Hyundai Motor India Ltd,Chennai		6	10	10				2.11 LPA
02	JBM Auto Ltd,Chennai		5	4	3	4			1.80 LPA
03	AM/NS INDIA		2		1				2.0 LPA
04	LPT, COIMBATORE		17	17					2.02 LPA
05	LECS,COIMBATORE				13	13			2.02 LPA
06	LMW,COIMBATORE		20		10				2.10 LPA
07	NOKIA,CHENNAI					7	21		1.98 LPA
08	ABI SHOWATECH		2						2.11 LPA
09	VERTICAL SOLUTIONS	1			1	6	20		2.22 LPA
10	BRAKES INDIA PVT LTD							6	1.80 LPA
11	RAMALINGAM CONSTRUCTION	7							1.80 LPA
12	VPG SENSORS – CHENNAI				9	4			1.80 LPA
<b>TOTAL NO OF OFFERS</b>		<b>8</b>	<b>52</b>	<b>31</b>	<b>47</b>	<b>34</b>	<b>41</b>	<b>6</b>	<b>219</b>

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List of Research Projects/Consultancy Works

Nil

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MoUs with Industries

**MOU SIGNED COMPANY LIST**

1.	SS TECHNOVATION, COIMBATORE	04.11.2019.
2.	SREE SARAVANA ENGINEERING BHAVANI PRIVATE LIMITED	09.03.2020.

	3.	PUMO TECHNOVATION INDIA PVT LTD, COIMBATORE	03.08.2021.
	4.	CALIBER EMBEDDED TECHNOLOGIES INDIA PVT LTD	03.03.2021.
	5.	SHREE TECHNOLOGIES	18.11.2021.
	6.	NEW TECHNOLOGY, COIMBATORE	17.03.2022.
	7.	LIVEWIRE, ERODE	16.09.2022.
	8.	MOBITECH WIRELESS SOLUTION PRIVATE LIMITED, PERUNDURAI	02.12.2023.