

## Appendix 8

### Format for Mandatory Disclosure

Mandatory Disclosure	: 04-04-2010
1. AICTE File No.	: AE4354851
Date & Period of last approval	: 29-9-2009
2. Name of the Institution	: Mona College of Engg & Technology
Address of the Institution	: Gollguda Village, Nalgonda
City & Pin Code	: Nalgonda. 508001
State/ UT	: Andhra Pradesh
Longitude & Latitude	:
Phone number with STD Code	: 234586, 08682
Fax number with STD Code	: 233918, 08682:
Office hours at he Institution	: 9.00 am 4 pm
Academic hours at the Institution	: 9.30 to 4 pm
Email	: mcet_nlg@yahoo.com
Website	: www.monacollege.com
Nearest Railway Station (dist in Km)	: Nalgonda, 5 Km
Nearest Airport (dist in Km)	: Hyderabad, 110 Km
3. Type of Institution	: Private- Self Financed
Category (1)	: Muslim Minority
Category (2)	: Co-Education
4. Name of the Organization running the Institution	: Mona Educational Society
Type of the Organization	: Society
Address of the Organization	: H.No 263/3RT, Vijayanagar Colony, Hyderabad.
Registered with	:
Registration date	:
Website of the Organization	: www.pcmboard.org

5. Name of the affiliating University : Jawaharlal Nehru Technology University  
Address : Kukatpally,  
Website : [www.jntu.ac.in](http://www.jntu.ac.in)  
Latest affiliation period : 2 years

6. Name of Principal/ Director : M.A Nazeer  
Exact Designation : Principal  
Phone No with STD Code : 230960. 08682  
Fax No with STD Code : 233918, 08682  
Email : [nazeer\\_1945@rediffmail.com](mailto:nazeer_1945@rediffmail.com)  
Highest Degree : M.E.,  
Field of Specialization : Mechanical

### 7. Governing Board Members

1. Mr. MK. AZAD : CHAIRMAN  
Retd. Chief Engineer, P.R. Dept. Govt. of A.P.  
Vice Chairman ( Retd. Director Town & Country  
planning, Govt of A.P Hyderabad )
2. Mr. Md. Moizuddin :  
SECRETARY M.B.A., (Ph.D).,
3. Mr. Saquib Rasool Khan :  
Member
4. Mrs. Maliha Fatima :  
Member
5. Mr. S.H.A.SHAKIR :  
Member

### 8. Academic Advisory Body

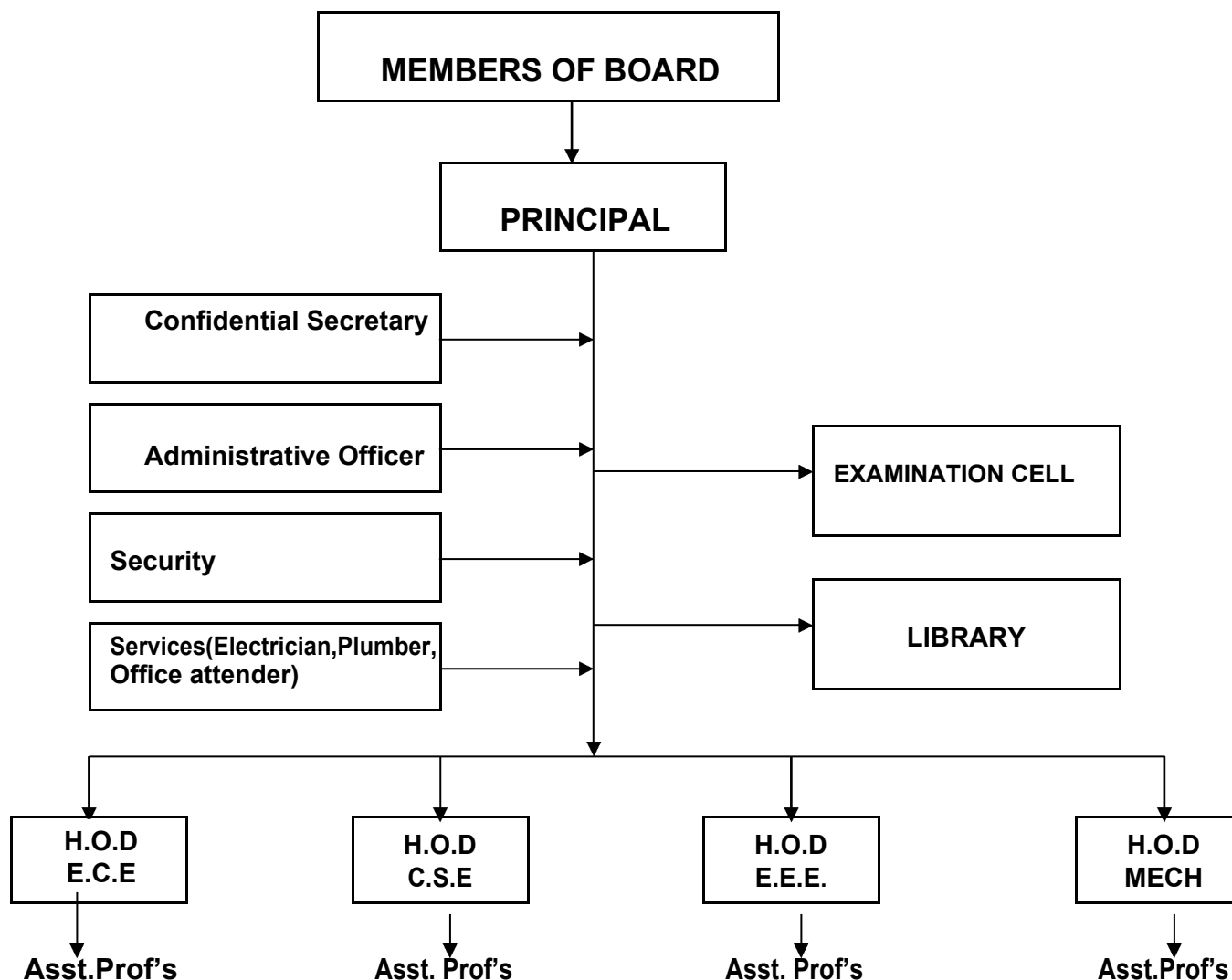
- 1) Mr. Azaz-ur-Rahman : M.Tech (BITS) Pilani,  
He has over 15 years experience in the field of education.
- 2) Mohd. Nisar Ahmed : Chief Engineer(Irrigation) (Retd.)
- 3) Mr Md..Fayazuddin : Principal Shadan College Hyderabad,  
He has more than 15 years experience  
in setting up Laboratories in engineering colleges.
- 4) Mr.M.A.Nazeer : Principal
- 5) Md. Mohammed Ali : Retd Chief Engineer (Irrigation ) Govt of A.P, Hyd.

Frequency of meetings

The Board meets once a semester while the Academic Advisory Body

Meetings are held twice a semester

## 9. Organizational Chart



## 10. Student Feedback Mechanism on Institutional Governance / Faculty performance.

Principal, HODs and Class Advisors are in regular touch with students in respect of issues such as:

- Syllabus coverage.
- Proficiency of lecturers
- Availability of books
- Facilities for sports and games
- Facilities for transport.

The feedback is reviewed and necessary steps taken to improve matters. For example: if unsatisfactory feedback is received about any faculty member, the HOD attends his lecture and if the grievance is found to be genuine, counseling is done to faculty member to improve his performance. If in spite of this there is no improvement, the faculty member will be replaced.

Similarly students' feedback in respect of extracurricular activities or availability of books,

transport facilities etc are taken note of and deficiencies if any are removed

### **11. Grievance redressal mechanism for faculty, staff and students:**

College maintains an open door policy towards all grievances emanating from faculty or students. Students are free to contact HODs / Principal at any time not only during college hours but if necessary after office hours either on phone or through personal visits to residence of faculty members/Principal.

Similarly, regular faculty meetings are held in Principal's office once a week where all important issues relating to college matters are addressed.

### **12. PROGRAMMES APPROVED BY AICTE:**

**Name** : **Electrical & Electronics Engineering**

**Number of seats** : 60

**Duration** : 4 years (B.Tech., degree)

**Cut off Marks/Convenor** : This varies according to rules of admission and demand for each branch.

(i) 2009-10 - ----

(ii) 2008-09 - ----

(iii) 2007-08 - ----

**Fee** : Rs. 30,200/- (for 2009-2010 the fee is Rs30,200/- as fixed by the Govt.)

### **FACULTY:**

The list of Faculty members is given below.

<b>ELECTRICAL &amp; ELECTRONICS ENGINEERING (E.E.E)</b>			
<b>S.NO</b>	<b>NAME OF THE STAFF MEMBER</b>	<b>DESIGNATION</b>	<b>QUALIFICATION</b>
1	Mr.M.Mattaiah	Assoc Prof. & H.O.D	M..Tech.
2	Mr..P.Vinay Kumar	Assoc. Prof.	M.Tech.
3	Ms. Ayesha Zehra	Asst. Prof.	B.Tech
4	Mr. A.Nagendra Prasad	Asst. Prof.	B.Tech
5	Mr.Md.Raziuddin	Asst. Prof.	B.Tech
6	Mr Mir Iqbal Ali	Asst. Prof	B.Tech.
7	Asif Ahmed Mohammed	Asst. Prof	B.Tech

Intake of last 3 years 30+30+45 = 105( Intake 30 in 2008-09, 30 in 2007-08 & 45 in 2006-07)

- Student Staff ratio i.e. 15:1 is maintained as we have 7 Faculty Members.

### Electronics & Communications Engineering

Number of seats : 60

Duration : 4 years (B.Tech., degree)

Cut off Marks/convenor : This varies according to rules of admission and demand for each branch.

(i) 2009-10 - -----

(ii) 2008-09 - -----

(iii) 2007-08 - -----

Fee : Rs. 30,200/-- (for 2009-2010 the fee is Rs.30,200/-as fixed by the Govt.)

Faculty:

#### The List of Faculty Members is given below

#### **ELECTRONICS & COMMUNICATION ENGINEERING (E.C.E)**

S.NO	NAME OF THE STAFF MEMBER	DESIGNATION	QUALIFICATION
1	Mr. N.Srinivas	Assoc.Prof. & H.O.D	M.Tech
2	Mr.V.Venkanna	Assoc. Prof.	M.Tech.
3	Mr.N.Uma Devi	Assoc. Prof.	M.Tech
4	Mr. S.M.Mustafa Hussain	Assoc. Prof.	M.Tech.
5	Mr.Abid Ali	Asst. Prof	B.Tech.
6	Mr.K.Imran Khan	Asst. Prof	B.Tech.
7	Mr.Rafi Mohammed	Asst. Prof	B.Tech.

Intake last 3 years 30+30+45 = 105 ( intake 30 in 2008-09, 30 in 2007-08 & 45 in 2006-07)

Student Staff ratio i.e. 15:1 is maintained as we have 7 Faculty Members.

## Computer Science & Engineering

Number of seats : 60

Duration : 4 years (B.Tech., degree)

Cut off Marks/convenor : This varies according to rules of admission and demand for each branch.

(i) 2008-09 - -----

(ii) 2007-08 - -----

(iii) 2006-07 - -----

Fee : Rs. 30,200/- (for 2009-2010 the fee is Rs.30,200 as fixed by the Govt.)

### Faculty:

The list of Faculty members is given below.

COMPUTER SCIENCE ENGINEERING (CSE)			
S.NO	NAME OF THE STAFF MEMBER	DESIGNATION	QUALIFICATION
1	Mr.Syed Salaman Ali	Assoc Prof H.O.D	M.Tech
2	Mr. SK.Rahmath	Assoc Prof.	M.Tech.
3	Mr.Aleemuddin Ilyas	Assoc. Prof	B.Tech., M.B.A
4	Miss.V.Sandhya	Asst. Prof	B.Tech.
5	Mr. Md Ishaq Ahmed Khan	Asst. Prof	B.Tech.
6	Mr.Afroze Mohammed	Asst. Prof	B.Tech.
7	Mr.Imran Raheem	Asst. Prof	B.Tech

- Intake of last 3 years 30+30+45 = 105 ( Intake 30 in 2008-09, 30 in 2007-08 & 45 in 2006-07)

Student Staff ratio i.e. 15:1 is maintained as we have 7 Faculty Members.

## Humanities & Science

Faculty Members in Humanities & Science Dept.			
S.NO	NAME OF THE STAFF MEMBER	DESIGNATION	QUALIFICATION
1	Mr. G.Sai Kumar	Assoc Prof	M.Sc.
2	Mr. T.Nicholas Prasad	Asst Prof	M.A.
3	Mr. A.Bhanu Prasad	Assoc Prof	M.Com
4	Mr. A.Ravi Kumar	Asst Prof	M.Sc.
5	Mr. Md.Moiz *	Asst Prof	M.Sc..
6	Mr.Md.Rahmat Ullah *	Asst Prof	M.Sc.
7	Mr.N.Bikshamaih	Asst Prof	M.Sc.
8	Mr.V.Venkat Reddy	Asst Prof	M.Sc.
9	Mr.A.V laxman Rao	Asst Prof	M.Sc.
10	Mr. Narsimha Reddy	Asst Prof	M.Sc.
11	Suvarna	Asst Prof	M.Sc.
12	J.Ravi Kumar	Asst Prof	M.Sc.
13	Sudhakar Reddy	Asst Prof	M.Sc.
14	R. Srinivasulu	Librarian	M.Li.Sc,M.Phil

### 13.DETAILS OF TEACHING FACULTY: [FULL TIME]

#### Details of Full Time Teaching Faculty (Program Wise)

The College has got approval for four courses with total intake of 210 students per year which comes to 525 students for four years. A per AICTE norms the ratio of 1:15 has to be maintained between the staff and the students. This is being maintained with the below staff members.

Name of the Course	SI NO	Names of The Faculty	Designation	Qualification with field of specialization			Date of Birth	Experience a) Teaching b) Industry c) Research			Date of Joining	Gross Salary as on Date with scale & Basic Pay
				U G	P G	DO CT		a	b	c		
CSE	1	Mr.Syed Salman Ali	Assoc.Prof		√		30-05-1984	√			17-11-2007	Rs.20,640
	2	Mr. Sk. Rahmath	Assoc.Prof	√	√		15-04-1982	√			24-09-2009	Rs.20,640
	3	Mr.Aleemuddin Ilyas	Assoc.Prof	√			23/7/83	√			26/1/2005	Rs.20,640
	4	Mr.Imraan Raheem	Asst prof	√			26-08-1988	√			10/02/2010	Rs.13,500
	5	Mrs.V.Sandhya	Asst prof	√			20-07-1985	√			01/07/2008	Rs.13,500
	6	Mr.Afroz	Asst prof	√			08-06-1987	√			29/07/2009	Rs.13,500
	7	Mr. Md Ishaq Ahmed Khan	Asst prof	√			04-01-1987	√			29-07-2009	Rs.13,500

ECE	1	<b>Mr. N.Srinivas</b>	Assoc.Prof	√		22-12-1980	√		22-07-2004	Rs.20,640
	2	<b>Mr.V.Venkanna</b>	Assoc.Prof	√		30-04-1984	√		01-07-2006	Rs.20,640
	3	<b>Mr.N.Uma Devi</b>	Assoc.Prof	√		10-08-1981	√		13-07-2006	Rs.20,640
	4	<b>Mr. S.M.Mustafa Hussain</b>	Assoc.Prof	√		21/8/83	√		11/8/2005	Rs.20,640
	5	<b>Mr.Abid Ali</b>	Asst.Prof	√		25-01-1983	√		01-07-2008	Rs.13,760
	6	<b>Mr.K.Imran Khan</b>	Asst.Prof	√		25-05-1983	√		29-07-2009	Rs.13,760
	7	<b>Mr.Rafi Mohammed</b>	Asst.Prof	√		20-08-1984	√		29-07-2009	Rs.13,760
EEE	1	<b>Mr.k.Mattaiah</b>	Assoc.Prof	√		10-05-1975	√		04-09-2006	Rs.13,760
	2	<b>Mr..P.Vinay Kumar</b>	Assoc.Prof	√		15-06-1984	√		29-07-2009	Rs.20,640
	3	<b>Mr.Ayesha Zehra</b>	Asst.Prof.	√		06-01-1981	√		17-01-2005	Rs.13,760
	4	<b>Mr. A.Nagendra Prasad</b>	Asst.Prof.	√		02-08-1985	√		04-09-2006	Rs.13,760
	5	<b>Mr.Md.Raziuddin</b>	Asst.Prof.	√		27-07-1981	√		19-12-2007	Rs.13,760
	6	<b>Mr Mir Iqbal Ali</b>	Asst.Prof.	√		05-03-1985	√		13-12-2007	Rs.13,760
	7	<b>Asif Ahmed Mohammed</b>	Asst.Prof.	√		18-01-1987	√		29-07-2009	Rs.13,760

<b>H &amp; S</b>	1	<b>Mr. G.Sai Kumar</b>	Assoc.Prof	√	√		23/07/1975	√			02/09/2002	Rs.20,640
	2	<b>Mr. T.Nicholas Prasad</b>	Asst.Prof.	√	√		15/04/1956	√			02-12-2005	Rs.13,760
	3	<b>Mr. A.Bhanu Prasad</b>	Assoc.Prof	√	√		29-08-1974	√			01-07-2003	Rs.20,640
	4	<b>Mr. A.Ravi Kumar</b>	Asst.Prof.	√	√		03-06-1982	√			20-07-2006	Rs.13,760
	5	<b>Mr. Md.Moiz</b>	Asst.Prof.	√	√		11-01-1977	√			27/5/2005	Rs.13,760
	6	<b>Mr.Md.Rahmat Ullah</b>	Asst.Prof.	√	√		11-10-1974	√			10-10-2008	Rs.13,760
	7	<b>Mr.N.Bikshamaih</b>	Asst.Prof.	√	√		13-10-1977	√			06-07-2009	Rs.13,760
	8	<b>Mr.V.Venkat Reddy</b>	Asst.Prof.	√	√		12-05-1980	√			06-07-2009	Rs.13,760
	9	<b>Mr.Sudhakar Reddy</b>	Asst.Prof.	√	√		10-09-1973	√			06-07-2009	Rs.13,760
	10	<b>Mr. Narsimha Reddy</b>	Asst.Prof.	√	√		12-12-1980	√			06-07-2009	Rs.13,760
	11	<b>Mr. J.Ravi Kumar</b>	Asst.Prof.	√	√		10-12-1972	√			06-07-2009	Rs.13,760
	12	<b>Mr. A V Laxman Rao</b>	Asst.Prof.	√	√		22-04-1982	√			29-07-2009	Rs.13,760
	13	<b>Mrs K.Suvarna</b>	Asst.Prof.	√	√		20-09-1984	√			01-08-2009	Rs.13,760
	14	<b>Mr. R. Srinivasulu</b>	Librarian	√	√		24-04-1961	√			06-09-2002	Rs.13,760

		10	<b>Mrs. K. Suvarna</b>
		11	<b>Mr. Sudhakar Reddy</b>
		12	<b>Mr. Narsimha Reddy</b>
		13	<b>Mr . A.V Laxman Rao</b>
		14	<b>Mr. Srinivasulu R .</b>

#### 14. Fee Structure of the institution

S.No	Fee Category of Charged	CET Quota		Management Quota	
		Fixed by the state Fee Committee	Being Charged by the Institution	Fixed by the State Fee Committee	Being Charged by the Institution
1	Admission Fee	Rs. 37,200/-	Rs. 37,200/-	Rs. 98,700/-	Rs. 50,000
2	Tuition Fee				
3	University Fee(Examination fee, Registration fee etc)				
4	Hostel fee				
5	Laboratory fee				
6	Library fee				
7	Any other				
	<b>Total fee</b>	<b>Rs. 37,200/-</b>	<b>Rs. 37,200/-</b>	<b>Rs. 98,700/-</b>	<b>Rs. 50,000</b>

Full fees should be paid before the commencement of class works.

Admission: Sanctioned intake

Course(s)	Intake & Year of Approval
Computer Sc. Engg.	60 (2009-2010)
Electrical & Electronics Engg	60 (2009-2010)
Electronics & Comm. Engg.	60 (2009-2010)
Mechanical	30 (2009-2010)

#### Number of Students admitted in the last three years

Course	2008-2009		2007-2008		2006-2007	
	Sanctioned Intake	Actual Admissions	Sanctioned Intake	Actual Admissions	Sanctioned Intake	Actual Admissions
	B.Tech.,	90	82	90	82	135

## 15. Infrastructural Information

### INSTRUCTIONAL AREA:

S.No	Particulars	No	Available Area of each (in Sq m)
1	Class Rooms	13	87
2.	Tutorial Hall	06	44
3.	Drawing Hall	1	220
4.	Computer Centre	2	220
5.	Library	1	400
6.	Laboratories	13	212
7.	Examination Cell	1	180
8.	Staff Room	2	150

### Details of Accommodation available

Existing Pucca Building Area = 8374 Sq.mts.

Existing Sheds Area = 1500 Sq. mts.

Total Area Available – 9874 Sq.mts

### Information on infrastructure and other resources available

#### LIBRARY

S.No	Course	Number of titles Of the books	Number of volumes	Journals	
				Natio nal	International
	B.Tech			3	
1.	E.C.E	252	1581	5	4
2.	C.S.E.	251	1735	...	-
3.	E.E.E	255	1285	...	-
4	M.E	250	689		
5.	Humanities.	260	1516	...	-
	<b>Total</b>	<b>1268</b>	<b>6806</b>		-

### e-Library Facility :

SONET is providing online international journals

As per AICTE norms the total books required are only 5000 volumes where as we have 6806.

# LABORATORIES

## LIST OF EQUIPMENT IN E.D.C.& E.C.A. E.E. LABS.

Sl.No	Name of the Equipment	EDC LAB	ECA LAB
1	20MHZ Dual Trace Oscilloscope		12
2	Function Generator with Frequency Counter		12
3	0-30V DC Regulated Power Supply		15
4	5KVA Servo Stabilizer		1
5	Decade Resistance Box		6
6	Decade Capacitance Box		3
7	Decade Inductance Box		3
8	Digital Millimeter		19
9	Voltmeters (Analog Panel)		
	D.C.(0-30V)		15
	D.C.(0-3V)		15
10	Ammeters (Analog panel)		
	D.C.(0-50mA)		15
	D.C.(0-100mA)		5
	D.C.(0-20mA)		15
	D.C.(0-500CA)		30
11	Educational Trainer Kits		
	Rectifiers & Filters	2	
	CE Amplifier	2	
	Hartley Oscillator	1	
	Colpitts Oscillator	1	
	UJT Characteristics	1	
	FET Characteristics	1	
	CC Amplifier	1	
	Feed Back Amplifier( Voltage Shunt)	1	
	Feed Back Amplifier( Current Series)	1	
	FET Amplifier (C.S)	1	
	FET Amplifier (C.D)	1	

	Weinbridge Oscillator	1	
	RC Phase Shift Oscillator	1	
	Measurement of H.Parameters	1	
	S.C.R. Characteristics	1	
12	SPIICE software orcade Capture		1
13	D.S.P. Lab kits	5	
14	Trainers Kits		
	Two stage RC Coupled Amplifier (Transistor CE)		1
	Class A,B,C, & AB Amplifier		1
	Class B Pushpull Power Amplifier		1
	Complementary symmetry Amplifier		1
	AF tuned Collector Amplifier		1
	Class C Amplifier		1
	Regulated Power Supply using Transister		1
	1). Series type		1
	2). Shunt type		1

#### LIST OF EQUIPMENTS IN N.T. & E.E. LABS.

Sl.No	Name of the Equipment	Qty.
1	20MHZ Dual Trace Oscilloscope	10
2	Function Generator with Frequency Counter	10
3	0-30V DC Regulated Power Supply	10
4	5KVA Servo Stabilizer	1
5	Digital L.C.R.Meter	2
6	Decade Resistance Box	10
7	Decade Capacitance Box	10
8	Decade Inductance Box	10
9	Digital Multimeter	10
10	series & parallel resonance	3
11	Time Response of RC/RL	3
12	Two Port network parameters	3
13	Super position & Reciprocity Theorems	3
14	Thevenins & Nortons Theorems	3
15	Max Power Transfer Theorem	3

16	Current locus Diagram with RL & RC with R&C Varying in both cases	3
17	Frequency Response of LP & HP Filters	3
18	Determination of Form factor for non-Sinusoidal waveform	3
19	Generation of non-linear periodic waveform using clipping & clamping	3
20	Verification of Compensation & milliman Theorem	3
21	Voltmeters (Digital) [D.C.]	
	(0-25mV)	10
	(0-2V)	10
	(0-10V)	10
	(0-30V)	10

	(0-30mV)	10
	(0-200mV)	10
22	Ammeters[Digital] (D.C)	
	(0-50mA)	10
	(0-200mA)	10
	(0-1A)	10
	(0-10CA)	10
	(0-100CA)	10
	(0-200CA)	10

### **RECORD ON COMPUTER SCIENCE LAB**

Sl.No	Name of the Equipment	Quantity
1	Intel Celeron Processors 20, 40 GB HDD, 64,128MB RAM, 1.44 FDD 15"Samtron Color Monitors, Mouse, Keyboard	75
2	Intel P-IV, 40 GB HDD, 128 RAM, 1.44 FDD, 15" Color Monitors, Mouse, Keyboard	75
3	HP Proliant Middle end Server	1
3	HP Laser Jet 1200 Printer	3 No
4	TVSE Dot Matrix Printers	1 No

5	HP ScanJet 2300c Scanner	1 No
6	"Dax" External Modem	1 No

**LIST OF EQUIPMENT IN I.C. AND P.D.C LABS.**

SI.No	Name of the Equipment	IC	PDC
1	20MHZ Dual Trace Oscilloscope	10	
2	Function Generator with Frequency Counter	10	
3	0-30V DC Regulated Power Supply	10	
4	5KVA Servo Stabilizer	1	
5	Digital Multimeter	10	
6	Educational Trainer Kits		
	RC & RL Differentiator and Integrator Circuits		3
	Clippers and Clampers		3
	Transistor as a Switch		3
	Study of logic gates		3
	Study of Flip-flops		3
	Sampling gates		3
	Astable multivibrator		3
	Monostable multivibrator		3
	Bistable multivibrator		3
	Schmitt Trigger		3
	UJT Relaxation Oscillator		3
	Bootstrap Sweep Circuits		3
	Integrator & differentiator using 741 IC	3	
	Astable using 555 IC	3	
	Monostable using 555IC	3	
	Function Generator 741	3	
	Voltage Regulator 723	3	
	Inverter Transfer Characteristics	3	
	Study of logic Gates	3	
	Study of Flip-flops	3	
	7490 Counter	3	
	7447 BCD 7 Segment Decoder	3	

	Half & Full Adder & Subtractor	3
	Voltage Regulator 723	3
	Voltage Controlled Oscillator	3
	D/A Converter	3
	A/D Converter	3

### **RECORD ON HYDRAULIC MACHINERIES LAB**

Sl.No	Name of the Equipment	Quantity
1	Centrifugal pump test rig with all accessories	1
2	Multistage Centrifugal pump test rig with all accessories	1
3	Reciprocating pump test rig with all accessories.	1
4	Pipe friction apparatus with all accessories.	1
5	Calibration test rig for Venturimeter 25mm & 40 mm with all accessories	1
6	Calibration test rig for Orificemeter 25mm & 40 mm with all accessories	1
7	Impact of jet on vanes apparatus with all accessories	1
8	Pelton Wheel and performance curve	1
9	Francis turbine and performance curve	1

### **LIST OF EQUIPMENT IN INSTRUMENTATION LABS.**

Sl.No	Name of the Equipment	INSTRUMENTATION
1	DC meters using D'Arsonval Galvanometer parmanenet magnet moving Coil type	2
2	AC meters using D'Arsonval Galvanometer parmanenet magnet moving Coil type	2
3	Digital L.C.R. meter	2
4	Strain Guage module	2
5	Resistance Thermometer Device; Resistance temperature detector(R.T.D)	2
6	i).Range +15mm withi/p Scale	1
7	ii).Range +-10mm i/p with micrometer	2

8	Capacitive transducers	2
9	PIEZO electri transducer	2

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#### MICROPROCESSORS LAB

1	8086 Microprocessor's trainer kit	10
2	8051 Microcontroller trainer kit	5
3	8059 Interrupt controller	3
4	8255 P.P.T	3
5	8279 Keyboard display	3
6	Traffic light control	1
7	Stepper motor control interface	1
8	8255 interface board	1
9	ADC\DAC card mosert	1
10	Traffic light control	1
11	Real time clock\calendar	1
12	RS-232 cable	3
13	AD-590 transformer	1

#### ANALOG COMMUNICATION

1	AM(Modulation & Demod)	3
2	Frequency mod & demod	3
3	Balanced modulation	3
4	Plased lock loop	3
5	Miner charecteristics	3
6	Pre-emphasis & duemphasis	3
7	SSB system	3
8	Fiber optic analog Ter & Res	3
9	Synchronous detector	3
10	Reciever measurement	3

#### P.D.C.LAB

1	Function generator	5
2	Digital multimeters	4
3	Ossilloscopes	5
4	Bread board	5
5	Trainer kits	

6	(RC&RL) Linear wave shaping kits	3
7	Non linear wave shaping kits	3
8	transistor as a switch	3
9	Study of logic gates	3
10	Study of flip flops	3
11	Sampling gates	3
12	Astable multi transistor	3
13	Monostable multi using transistor	3
14	Bistable multi using transistor	3
15	Schmitt trigger	3
16	UJT relaxation oscillator	3
17	Boot strap sweep circuits	3
18	Soldering iron	1

**L.I.C.A , P.D.C& I.C. ,L.D.I.C.**

1	Function Generator	5
2	stabilizer	1
3	Regulated power supply	10
4	Oscilloscope	5
5	Decade Resistance Boxes	2
6	Multimeter	4
7	Bread boards	5
8	Soldering iron	1
9	Trainer Kits	
10	Integrator differentiator	3
11	Astable multi using 555	3
12	Mono stable multi using 555	3
13	Function Generator using 555	3
14	Voltage regulator trainer	6
15	Inverter transfer characteristics	3
16	Study of logic gates	3
17	Study of flip flops	3
18	7490 counter	3
19	BCD-7-segment decoder	3
20	Voltage controlled oscillators	3
21	D-A convertor	3

22	A-D convertor	3
23	PLL using 565 IC	3
24	Balanced modulator	2
25	RC phase shift oscillator	2
26	Active filters	2
27	Schmitt trigger	2
28	Wienbridge oscillator	2
29	Op-amp trainer	1
30	IC-testers	2

## MICRO WAVE OPTICAL COMMUNICATION LAB

1	Solid state Klystron P.W.	2
2	Klystron tube Klystron Mount	2
3	Isolator	2
4	Frequency meter(Micro type)]	4
5	Frequency meter(Direct type	2
6	Variable attenuator	2
7	wave guide stand	4
8	Three port circulator	10
9	wave guide detector mount	2
10	Solid state VSWR meter	4
11	Gunn power supply	4
12	mutihole directional coupler	2
13	Gunnoscillator	2
14	Pin Modulator	2
15	Matched termination	5
16	Tunable probe	4
17	Slotted line	4
18	Cross directional Coupler	1
19	Movable short	3
20	Slide screw Tuner	2
21	Smith chart	1
22	EHTEE(magic TEE)	1
23	E-Plane TEE(wave guide)	1
24	H-plane TEE	1
25	coding fan for Klystron	3

26	Reflector	2
27	Fiber Optic transmission kit	2
28	LED Characteristics	1
29	Laser Trainer kit	1

## MECHANICAL LAB

S.NO.	NAME OF THE TOOL	SPECIFICATIONS	QUANTITY
1	Ball peen hammer	1lb	8
2	Cross peen hammer		8
3	Scribers 6"	6"	8
4	Dividers (spring leaf)		8
5	Try Square	6"	8
6	Chisel (Cold Chisel)	4"	8
7	Dot punch	4"	8
8	Pliers	8"	8
9	Straight snips		8
10	Files (all types)		8
11	Bend Snip		8
12	Mallet		8
13	Standard & Thickness guage		8
14	Soldering Iron		8
15	Wing Corepass		8
16	Hand drilling Machine		8
17	Hand Blower		8
18	Copper Soldering Bits		8
19	Spring Core pass		8
20	Blow lamps		8
21	Welding House pipe		meter
22	Screw	10"	1
23	Nozzel tip cleaner		1
24	Cylinder key		1
25	Spark light		1
26	Snips		1

## List of Experimental Setups

Name of the Laboratory: Hydraulics & Hydraulic Machinery Lab

2<sup>nd</sup> yr. 1<sup>st</sup> Sem

- 1) Impact of jets on vanes
- 2) Performance test on pelton wheel
- 3) Performance test on single stage centrifugal pump
- 4) Performance test on multistage centrifugal pump
- 5) Performance test on reciprocating pump
- 6) Calibration of venturimeter
- 7) Calibration of orifice meter
- 8) Determination of friction factor for a given pipe line

Name of the Laboratory: Networks Lab

2<sup>nd</sup> yr. 1<sup>st</sup> sem

- 1) Verification of maximum power transfer theorem
- 2) Verification of superposition and reciprocity theorem.
- 3) Verification of nortons & thevenins theorem.
- 4) Evaluation of two port Network parameters (Z&Y).
- 5) Frequency response of high pass & low pass RC filters.
- 6) Time response of high pass & low pass RC filters.

Name of the Laboratory : Electromechanics Lab-II

3<sup>rd</sup> yr. 1<sup>st</sup> sem

- 1) O.C & S.C. tests on single phase transformer
- 2) Sumpners test on a pair of single phase transformer
- 3) Scott connection of transformers
- 4) No load & blocked rotor tests on three phase induction motor
- 5) Regulation of a three-phase alternator by synchronous impedance.
- 6) V & inverted V curves of a three-phase synchronous motor
- 7) Equivalent circuit of a single phase induction motor
- 8) Speed control of 3-phase slipping induction motor.
- 9) Brake test o three phase induction motor
- 10) Determination of  $x_d$  and  $x_q$  of a salient pole synchronous machine.

Name of the Laboratory : Control Systems Lab

3<sup>rd</sup> yr. 1<sup>st</sup> sem

- 1) characteristics of synchronous
- 2) effect of feed back on DC servo motor
- 3) Time response of second order system
- 4) effect of P,PD, PI, PID controller on a second order systems
- 5) lag & lead compensation – magnitude & phase plot
- 6) characteristics of AC servo motor
- 7) temperature controller using PID

Name of the Laboratory: Simulation of electrical Systems Lab

4<sup>th</sup> yr. 1<sup>st</sup> sem

- 1) Pspice simulation of transient response of RLC circuits
  - A) response to pulse input
  - B) response to step input
  - C) response to sinusoidal input

- 2) Pspice simulation of single phase full converter using RL & E loads & single phase AC voltage controller using RL & E loads
- 3) Pspice simulation of resonant pulse commutation circuit and buck chopper
- 4) Pspice simulation single phase inverter with PWM control
- 5) Pspice simulation of D.C. circuit using Pspice.
- 6) Transfer function analysis of D.C. circuit using Pspice
- 7) Plotting of bode plots, root locus and Nyquist plot for the transfer function of system upto 5<sup>th</sup> order using MATLAB.
- 8) Power flow solution and transient stability evaluation of power system.
- 9) Transfer function analysis of a given circuit using MATLAB
- 10) Analysis of three phase circuit representing the generator transmission line & load. Plot three phase currents & neutral current using PSPICE.

#### **LIST OF EXPERIMENTS OF ELECTROMACHANICS – I LAB**

2yr-II sem

1. Magnetization characteristics of DC shunt generator . Determination of critical field resistance and critical speed.
2. Load test on DC shunt generator . Determination of characteristics.
3. Load test on DC series generator . Determination of characteristics.
4. Load test on DC compound generator. Determination of characteristics.
5. Hopkinson's test on DC shunt machines. Predetermination of efficiency.
6. Field's test on DC series machines . Determination of efficiency.
7. Brake test on DC shunt motor . Determination of performance curves.
8. Brake test on DC compound motor. Determination of performance curves.
9. Swinburne's test on DC shunt machine . Predetermination of efficiencies.
10. Speed control of DC shunt motor.

#### **LIST OF EXPERIMENTS OF ELECTRICAL MEASUREMENTS (EM) - LAB**

3rd yr-II sem

1. Callibration and testing of 1 phase energy meter.
2. Kelvin Double Bridge.
3. LVDT and capacitive pick-up.
4. Callibration of Dynamometer type power factor meter.
5. Schering Bridge and Anderson Bridge.
6. Measurement of 3phase reactive power factor with 1phase watt meter.
7. Resistance strain wage.
8. Measurement of parameters of a choke coil using 3- Voltmeter and 3- Ammeter method.
9. Crompton DC potentiometers.

#### **LIST OF EXPERIMENTS OF POWER ELECTRONICS - LAB**

3rd yr-II sem

1. Study of Characteristics of SCR, MOSFET & IGBT
2. Gate firing circuits for SCR's.
3. Single phase AC Voltage Controller with R and RL Loads
4. Single Phase fully controlled bridge with R and RL Loads
5. Forced Commutation circuits {Class A, B, C, D, E, & F}
6. DC Jones chopper with R and RL Loads
7. Single Phase parallel inverter with R and RL Loads

- 8. Single Phase Cycloconverter with R and RL Loads**
- 9. Single Phase Half controlled Converter with R load**
- 10. Single Phase series inverter with R and RL loads.**
- 11. Three Phase half controlled bridge converter with R-Load**

## **INSTRUMENTATION LAB - I**

II yr-Ist sem

1. DC meters using D' Arsonval Galvanometers.
2. AC meters using D' Arsonval Galvanometers.
3. Ohm meter.
4. RLC and Q measurement using Q- meter.
5. Study of CRO-Voltage, frequency and phase measurement.
6. Strain gauges.
7. Resistance Thermometer Devices.
8. LVDT.
9. Capacitive Transducers.
10. Piezo-Electric Transducers.
11. Bordon tube.
12. Acceleration transducer.

## **CONTROL SYSTEMS LAB-1**

II yr-II Sem

1. Characteristics of synchro transducer, synchro receiver and control transformers.
2. Gain control of the O/P of D.C. Amplifier with & without Chopper stabilization.
3. Programming a PLC.
4. Torque-Displacement Characteristics of stepper motor using A/D converters.
5. Open loop control of a relay servomechanism.
6. Advantages of feedback on the performance of an open loop speed control system (D.C motor Speed control System).
7. Response of first order system with RC components.
8. Operation of pneumatically operated pressure control system using pressure sensitive bellows & LVDT and Sensors.
9. Error comparators-gauged potentiometer & system using a flapper nozzle in the pressure sensing circuit.

## **Instrumentation Lab-II**

III yr- Ist Sem

1. Displacement measurement using LVDT
2. Calibration of P to I and I to P Converters
3. Displacement measurement using Inductive Pick up & capacitive pickup
4. Measurement of humidity
5. PH measurements
6. Measurement of Blood pressure.
7. Measurement of level using capacitance method/Transducer
8. Temperature measurement using Thermistor interface
9. Study of Level monitoring instruments using PLC
10. RPM Indicator using Stroboscope.

## **PROCESS CONTROL LAB**

III yr / Ist sem

1. Flow level control unit.
2. Temperature level control unit.
3. Servo and regulator operation.
4. Realization of control actions: Pneumatic controllers, Hydraulic controllers, and Electronic controllers.

5. Process tuning- Process reaction curve method.
6. Process tuning- continuous and damped oscillation method.
7. Operation of flow loop in plant.
8. Input convertor- Pneumatic actuator.
9. Input convertor- Hydraulic actuator.
10. Control valve characteristics (Different types).
11. Multi loop control systems- Ratio Control.
12. Multi loop control systems- Cascade Control.

### **CONTROL SYSTEM LAB-II**

IIIyr-IIInd sem

1. Determination of control characteristics of A.C servomotor.
2. T/F of Armature controlled D.C servomotor with inertia & viscous friction load.
3. Control characteristics of a magnetic amplifier with & without feedback.
4. D.C motor speed control with regenerative & degenerative feedback.
5. D.C position control system- O/P control with variation of control loop gain.
6. System identification for the frequency response of a filter.
7. Shaft angle encoder , decoder, O/P characteristics.
8. Amplitude modulation low frequency signal and recovery after demodulation.
9. 4-1 line multiplexer with digital logic gates.

### **INSTRUMENTATION LAB-III**

IVyr-Ist sem

1. Spectrophotometer: UV & VIS Spectrophotometer.
2. Flame Photometer.
3. Measurement of calorific value.
4. Interfacing of analog signal to microcomputer through ADC.
5. Interfacing of digital signal to microcomputer through DAC.

### **CONTROL SYSTEM LAB – III**

IV yr-Ist sem

1. To obtain the Bode plot of a given transfer function and to measure the gain and phase margins using MATLAB.
2. To obtain the Nyquist plot of a given transfer function and to measure the gain and phase margins using MATLAB.
3. To obtain the Root Locus plot of a given transfer function and measure the performance specifications using MATLAB.
4. To obtain the Step Response of a second order system and measure the performance specifications using MATLAB.
5. To obtain the transfer function of a given state model and test for its controllability and observability using MATLAB.

## ELECTRONICS & COMMUNICATION LAB

### List of Major Equipment/Facilities:

<b>EDC LAB</b>		
<b>S.NO</b>	<b>NAME OF THE EQUIPMENT</b>	<b>QUANTITY</b>
1	OSCILLOSCOPE	12
2	POWER SUPPLIES	15
3	FUNCTION GENERATORS	12
4	MULTI METERS	15
5	STABILIZERS	1
6	DECADE R,L,C BOX	12
7	BREAD BOARDS	20

<b>IC APPLICATIONS LAB</b>		
<b>S.NO</b>	<b>NAME OF THE EQUIPMENT</b>	<b>QUANTITY</b>
1	CATHODE RAY OSCILLOSCOPE	10
2	POWER SUPPLIES	10
3	FUNCTION GENERATORS	10
4	MULTI METERS	10
5	STABILIZER	1
6	I.C.TESTER	2

<b>DIGITAL COMMUNICATIONS LAB</b>		
<b>S.NO</b>	<b>NAME OF THE EQUIPMENT</b>	<b>QUANTITY</b>
1	PAM KITS	2
2	PWM	2
3	PPM	2
4	PCM	2
5	TDM	2
6	DELTA MODULATION & DEMODULATION	2
7	FSK	2
8	DIFFERENTIAL PSK	2
9	PSK	2

<b>ANALOG COMMUNICATIONS LAB</b>		
<b>S.NO</b>	<b>NAME OF THE EQUIPMENT</b>	<b>QUANTITY</b>
1	A.M	3
2	F.M	3
3	PAM	3
4	PLL	3
5	POWER SUPPLY	5
6	OSCILLOSCOPE	10
7	DIGITAL MULTI METER	5
8	FREQUENCY COUNTER	2
9	FUNCTION GENERATORS	5
10	MIXER CHARACTERISTICS	3
11	RECEIVER MEASUREMENTS	3
12	FIBER OPTICS ANALOG	3

<b>E-CAD LAB</b>		
<b>S.NO</b>	<b>NAME OF THE EQUIPMENT</b>	<b>QUANTITY</b>
1	D.C. Regulated power supplies	4
2	Digital I.C. Trainers	4
<b>DIGITAL SIGNAL PROCESSORS &amp; MICROPROCESSOR LAB</b>		
<b>S.NO</b>	<b>NAME OF THE EQUIPMENT</b>	<b>QUANTITY</b>
1	DSP Kits ( TMS 320C 6711) With parallel peripheral interfaces, Power supplies 5V, I/P, O/P, Connectors.	5
2	Personal Computers	20
3	Stabilizer ( 5KVA )	1
4	Softwares (i) Code composer studio C6711 simulation (ii) DSK software C6711 for real time applications (iii) Mat Lab. 6.5	2
5	1 8086 MICRO P KITS	10
	2. INTER FACING STUDY CARDS	3
6	1. 8279 [KCD]	3 NOS
	2. 8251 [ USART]	5 NOS
	3. 8255 [PPI]	4 NOS
	4. A TO D & D TO A CONVERTERS	1 NOS
	5. STEPPER MOTOR INTER FACING	1 NOS
	6. 8031/8051 MICRO CONTROLLER	5 NOS

<b>MICROWAVE &amp; OPTICAL COMMUNICATION LAB</b>		
<b>S.NO</b>	<b>NAME OF THE EQUIPMENT</b>	<b>QUANTITY</b>
1	5 KVA SERVO STABLIZER	1
2	MICRO WAVE BENCHES	4
3	OPTICAL FIBER KITS	2
4	TABLE FANS	3
5	LED KITS	2

# List of Experimental Setups

Name of the Laboratory: Electronics Devices & Circuits Lab

1<sup>st</sup> year

Common for ECE, EEE, CSE, ICE.

1. PN junction diode characteristics.
  - a. Forward bias
  - b. Reverse bias
2. Zener diode characteristics
3. Transistor CB characteristics (input & output)
4. Transistor CE characteristics (input & output)
5. Transistor CC characteristics (input & output)
6. Rectifier with filter (full wave & half wave)
7. Rectifier without filter (full wave & half wave)
8. FET characteristics
9. UJT characteristics
10. Study of CRO
11. Measurement of h-parameters of transistor in CB, CE, CC configurations
12. CE amplifier
13. CC amplifier (emitter follower)
14. Single stage R-C- coupled amplifier
15. FET amplifier (common source)
16. FET amplifier (common drain)
17. Wein bridge oscillator
18. RC phase shift oscillator
19. Colpitts oscillator
20. Hartley oscillator
21. SCR characteristics

Name of the Laboratory: Pulse & Digital Circuits Lab

2<sup>nd</sup> year 1<sup>st</sup> Sem

1. Non linear wave shaping -Clippers
2. Non linear wave shaping- Clampers
3. Linear wave shaping.
4. Study of flipflops.
5. Logic gates using discrete components and ICS
6. Transistor as a switch
7. Sampling gates
8. Monostable Multivibrator
9. Astable Multivibrator
10. Schmitt Trigger Circuit
11. Bi-stable Multivibrator

Name of the Laboratory: Electronic Circuit Analysis Lab

2<sup>nd</sup> year 1<sup>st</sup> Sem

Hardware

1. Two stage RC coupled amplifier
2. Class A. power amplifier
3. Class B push pull amplifiers
4. Class B complementary symmetry configuration
5. Class C power amplifier
6. Class C tuned voltage amplifier.
7. Series Regulated power supply
8. Shunt Regulated power supply.

**Name of the Laboratory: IC Applications Lab(CSE )**

**2<sup>nd</sup> year 1<sup>st</sup> Sem**

1. Integrator using 741 Op-amp
2. Differentiator using 741 Op-amp
3. Study of logic gates and flip –flops
4. 7490 decade counter
5. BCD to seven segment decoder driver
6. Astable multi vibrator using 555 timer
7. Digital to analog converter using binary weight resistor
8. Digital to analog converter using R-2R ladder network
9. Monostable multi vibrator using IC 555 timer
10. Voltage regulator using IC 723

**Name of the Laboratory: Digital Communications Lab**

**3<sup>rd</sup> year 1<sup>st</sup> Sem**

1. Pulse amplitude modulation (PAM)
2. Pulse width modulation (PWM)
3. Pulse position modulation (PPM)
4. Time division multiplexing (TDM)
5. Pulse code modulation (PCM)
6. Differential pulse code modulation
7. Delta modulation (DM)
8. Frequency shift keying (FSK)
9. Phase shift keying (PSK)
10. Differential phase shift keying (DPSK)

**Name of the Laboratory: Linear IC Applications Lab**

**3<sup>rd</sup> year 1<sup>st</sup> Sem**

1. Study of Op-Amp
2. Op-Amp applications.
3. Integrator and Differentiator circuits using Op-Amp IC 741
4. Function generator
5. Monostable multivibrator
6. Astable multivibrator
7. PLL applications
8. VCO applications
9. Active Filter applications (First Order)
10. Active filter applications (high pass filter)
11. Schmitt Trigger circuit
12. Voltage Regulator using IC 723

**Name of the Laboratory: Interfacing through Microprocessors Lab(CSE )**

**3<sup>rd</sup> year 1<sup>st</sup> Sem**

**8086 Assembly languages programming exercise**

1. Arithmetic operations.
2. Logical operations.
3. String operations.
4. Modular programs.
5. 8259 interrupt controller.
6. 8279 key board display.
7. 8255 PPI.
8. 8051 Micro controller.

Name of the Laboratory: Digital Signal Processing Lab

4<sup>th</sup> year 1<sup>st</sup> Sem

1. Introduction to DSK.
2. To generate sine wave using C6711 device simulator
3. To generate cosine wave using C6711 device simulator
4. To verify linear convolution
5. To verify circular convolution
6. Fast Fourier Transform
7. Power density spectrum
8. Finite impulse resonance filter.
9. infinite resonance filter.

Name of the Laboratory: Microwave & Optical communication Lab

4<sup>th</sup> year 1<sup>st</sup> Sem

1. Reflex klystron characteristics.
2. Gunn diode characteristics
3. Attenuation measurement
4. Directional coupler characteristics
5. VSWR measurements
6. Impedance & frequency measurement
7. Scattering parameters of magic tee
8. Characteristics of LED
9. Communication through optical fiber.

Name of the Laboratory: Microprocessors Lab (EEE)

4<sup>th</sup> year 1<sup>st</sup> Sem

1. Micro processor 8086:
  - a. Introduction to MASM/TASM.
  - b. Arithmetic operation –multi byte addition and subtraction, multiplication and division-signed and unsigned arithmetic operation, ASCII arithmetic
  - c. Logic operation-shift and rotate-converting packed BCD to unpacked BCD,BCD to ASCII conversion.
  - d. By using the string operation and instruction prefix: move block, reverse string, sorting, inserting, deleting, length of the string, string comparison.
  - e. Modular program,/procedure, near and far implementation, recursion.
  - f. DOS/BIOS programming: reading key-board (buffered with and without echo) –display characters strings.
2. Interfacing:
  - a. 8259-interrupt controllers.
  - b. 8279 -key board displays
  - c. 8255- PPI
  - d. 8251-USART

### 3. Micro controller 8051

- a. Reading and writing on a parallel port.
- b. Timer in different modes
- c. Serial communicating implementation
- d. Understanding three memory areas of 00-FF (program using above areas.)
- e. Using external interrupts.
- f. Programs using special instructions like swap, bit/byte, set/reset etc.,
- g. Program based on short page absolute addressing.

Name of the Laboratory: E -Cad LAB (ECE 3<sup>rd</sup> year 2<sup>st</sup> Sem)

1. Logic gates
2. D- flip-flop
3. Decade counter.
4. 4-bit counter
5. Shift register.
6. Universal shift register.
7. 3-to-8 decoder.
8. 4- bit comparator.
9. 8\*1 multiplexer.
- 10.16\*1 multiplexer.
- 11.Stack and queue implementation using RAM.

## COMPUTER SCIENCE ENGINEERING LAB

### List of Major Equipment/facilities:

Number of computers Available : 150 ( 75- ( P-III) 75- (P-IV) )

( For a total intake of 525 students for four years 150 computers are provided to maintain a student computer ratio of 1:4 as per AICTE norms)

Number of Terminals on LAN = 100

### Software:

WINDOWS 98/2000, XP, JAVA 1.4/1.5, TURBO C, TURBOC++,  
MULTISIM, BSD , LINUX Fedora

## Peripherals

**PRINTER** : 4 (3 LASERJET, 1 DOT MATRIX)

**UPS** : UPS Provided.

**16. Boys Hostel** : Minority Students Hostel Provided

Girls Hostel : No

### 17. Academic Sessions:

Examination System : Semester wise for II, III, IV year and Yearly Examination for I year

Period of Declaration of Results: as per university norms

**18. Counseling / Mentoring** : Training and placement officer has provided

### 19. Students Activity Body

**Cultural Activities** : available

**Sports Activities** : available

**Literary Activities** : available

**Magazine / New letters** : available

**Technical Activates** : available

**Industrial Visits/ Tours** : available

**Alumni activities** : available

### 20. Name of the Information Officer

for RTI : Mohammed Younus Sahreef

**Designation** : Administrative Officer

**Phone No with STD Code** : 233952, 08682

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