SCHEME OF INSTRUCTION & EXAMINATION
B.E. (Electronics and Instrumentation Engineering) III – SEMESTER

S. No	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration In Hrs	
Theory Courses										
1	ES302CE	Engineering Mechanics	3	1	-	3	30	70	3	4
2	BS205MT	Mathematics – III	3	1	-	3	30	70	3	4
3	PC436EE	Network Analysis	3	-	-	3	30	70	3	3
4	PC402EE	Electromagnetic Fields	3	-	-	3	30	70	3	3
5	PC437EE	Transducers Engineering	3	-	-	3	30	70	3	3
6	PC403EC	Analog Electronic Circuits	3	-	-	3	30	70	3	3
Practical / Laboratory Courses										
7	PC453EE	Networks Analysis Lab	-	-	2	2	25	50	3	1
8	PC454EE	Computer Aided Instrumentation Drawing Lab	-	-	2	2	25	50	3	1
9	PC453EC	Analog Electronic Circuits Lab	-	-	2	2	25	50	3	1
Total			**18**	**2**	**6**	**24**	**255**	**570**	-	**23**

HS: Humanities and Social Sciences BS: Basic Science ES: Engineering Science
MC: Mandatory Course PC: Professional Core PE: Professional Elective
L: Lecture T: Tutorial P: Practical D: Drawing
CIE: Continuous Internal Evaluation SEE: Semester End Evaluation (Univ. Exam) EE: Electrical Engg.

Note:

1. Each contact hour is a clock hour.
2. The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

Professor & Head
Electrical Engineering Department,
M.J. College of Engg. & Tech.,
Rd. No. 3, Banjara Hills, Hyd.-155.

23/03/2022
PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

SCHEME OF INSTRUCTION & EXAMINATION
B.E. (Electronics and Instrumentation Engineering) IV – SEMESTER

S. No	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk.	CIE	SEE	Duration In Hrs	
Theory Courses										
1	HS102EG	Effective Technical Communication in English	2	-	-	2	30	70	3	2
2	PC438EE	Instrumentation Systems	3	-	-	3	30	70	3	3
3	ES305ME	Energy Sciences and Engineering	2	-	-	2	30	70	3	2
4	PC439EE	Power Plant Instrumentation	3	-	-	3	30	70	3	3
5	PC410EE	Digital Electronics and Logic Design	3	-	-	3	30	70	3	3
6	PC411EE	Power Electronics	3	-	-	3	30	70	3	3
Practical / Laboratory Courses										
7	PC458EE	Transducers Engineering Lab	-	-	2	2	25	50	3	1
8	PC456EE	Power Electronics Lab	-	-	2	2	25	50	3	1
9	PC457EE	Digital Electronics and Logic Design Lab	-	-	2	2	25	50	3	1
Total			**16**	**00**	**06**	**22**	**255**	**570**	-	**19**

HS: Humanities and Social Sciences BS: Basic Science ES: Engineering Science
MC: Mandatory Course PC: Professional Core PE: Professional Elective
L: Lecture T: Tutorial P: Practical D: Drawing
CIE: Continuous Internal Evaluation SEE: Semester End Evaluation (Univ. Exam) EE: Electrical Engg.

Note:

1. Each contact hour is a clock hour.
2. The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

Professor & Head
Electrical Engineering Department,
M.J. College of Engg. & Tech.,
Rd. No. 3, Banjara Hills, Hyd.-155.

20/03/2021
PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P.

FACULTY OF ENGINEERING

Scheme of Instructions and Examination

(AICTE Model Curriculum for the Academic Year 2020-21)

and

Syllabi

B.E. V and VI Semester

of

Four Year Degree Programme

in

Electronics and Instrumentation Engineering

(With effect from the academic year 2020 - 21)

(As approved in the faculty meeting held on XX-XX-2020)

Issued by

Dean, Faculty of Engineering

Osmania University, Hyderabad – 500 007

2020

SCHEME OF INSTRUCTION AND EXAMINATION
B.E. (ELECTRONICS AND INSTRUMENTATION ENGINEERING)
V – SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1	PC501EE	Instrumentation Systems	3	-	-	3	30	70	3	3
2	PC502EE	Power Plant Instrumentation	3	-	-	3	30	70	3	3
3	PC237EE	Linear Control Systems	3	-	-	3	30	70	3	3
4	PC238EE	Microprocessors and Microcontrollers	3	-	-	3	30	70	3	3
5	PC239EE	Signals and Systems	3	1	-	4	30	70	3	4
6	PE5 _ EE	Professional Elective - I	3	-	-	3	30	70	3	3
Practical/ Laboratory Courses										
7	PC263EE	Electrical Circuits Lab	-	-	2	2	25	50	3	1
8	PC264EE	Control Systems Lab	-	-	2	2	25	50	3	1
9	PC265EE	Power Electronics Lab	-	-	2	2	25	50	3	1
			18	**01**	**06**	**25**	**255**	**570**	-	**22**

Professional Elective – I		
1	PE551EE	Building Management Systems
2	PE552EE	Principles of Communication Engineering
3	PE553EE	Advanced Sensors

HS: Humanities and Social Sciences BS: Basic Science ES: Engineering Science MC: Mandatory Course PC: Professional Core PE: Professional Elective
L: Lecture T: Tutorial P: Practical D: Drawing
CIE: Continuous Internal Evaluation SEE: Semester End Evaluation (Univ. Exam) ,

Note:

1. Each contact hour is a clock hour
2. The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

Professor & Head
Electrical Engineering Department,
M.J. College of Engg. & Tech.,
Plot. No. 3, Banjara Hills, Hyd.-155.

PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034, A.P

SCHEME OF INSTRUCTION AND EXAMINATION
B.E. (ELECTRONICS AND INSTRUMENTATION ENGINEERING)
VI–SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1	PC241EE	Electrical Measurements and Instrumentation	3	1	-	4	30	70	3	4
2	PC242EE	Digital Signal Processing and Applications	3	1	-	4	30	70	3	4
3	PC504EE	Biomedical Instrumentation	3	1	-	4	30	70	3	4
4	PC505EE	Process Control	3	-	-	3	30	70	3	3
5	OE2_EE	Open Elective - I	3		-	3	30	70	3	3
6	OE2_EE	Open Elective – II	3		-	3	30	70	3	3
Practical/ Laboratory Courses										
7	PC507EE	Digital Signal Processing Lab	-	-	2	2	25	50	3	1
8	PC267EE	Electrical Measurements and Instrumentation Lab	-	-	2	2	25	50	3	1
9	PC268EE	Microprocessors and Microcontrollers Lab	-	-	2	2	25	50	3	1
10	PC801EE	Summer Internship*	Six Weeks during Summer Vacation							
			18	**3**	**06**	**27**	**255**	**570**	--	**24**

Open Elective – I & II		
1.	OE201EE	Electrical Energy Conservation and Auditing
2.	OE202EE	Reliability Engineering
3.	OE203EE	Non-Conventional Energy Sources
4.	OE204EE	Illumination and Electric Traction Systems

HS: Humanities and Social Sciences BS: Basic Science ES: Engineering Science MC: Mandatory Course PC: Professional Core OE: Open Elective
L: Lecture T: Tutorial P: Practical D: Drawing
CIE: Continuous Internal Evaluation SEE: Semester End Evaluation (Univ.Exam)
EE: Electrical Engineering

Note:

1. Each contact hour is a clock hour
2. The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.
3. The students have to undergo a Summer Internship of six-week duration after VI–Semester and credits will be awarded in VII–Semester after evaluation.

Professor & Head
Electrical Engineering Department,
M.J. College of Engg. & Tech.,
Rd. No. 3, Banjara Hills, Hyd.-165.

PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034. A.P

FACULTY OF ENGINEERING

Scheme of Instruction & Examination

(CBCS Curriculum for the Academic Year 2019-2020)

and

Syllabi

B.E. VII and VIII Semester

of

Four Year Degree Programme

In

Electronics and Instrumentation Engineering

(With effect from the academic year 2019– 2020)

(As approved in the faculty meeting held on 25-06-2019)

Issued by

Dean, Faculty of Engineering

Osmania University, Hyderabad – 500 007

2019

SCHEME OF INSTRUCTION & EXAMINATION
B.E. VII - Semester
(ELECTRONICS AND INSTRUMENTATION ENGINEERING)

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1	PC 711 EE	Opto-Electronic Instrumentation	3	-	-	3	30	70	3	3
2	PC 712 EE	Virtual Instrumentation	3	-	-	3	30	70	3	3
3	PC 713 EE	Analytical Instrumentation	3	-	-	3	30	70	3	3
4		Open Elective – II	3	-	-	3	30	70	3	3
5		Open Elective – III	3	-	-	3	30	70	3	3
Practical/ Laboratory Courses										
6	PC 752 EE	Microprocessor and Microcontrollers Lab	-	-	2	2	25	50	3	1
7	PC 753 EE	Instrumentation Simulation Lab	-	-	2	2	25	50	3	1
8	PW 761 EE	Summer Internship	-	-	4	4	50	-	-	2
9	SI 762 EE	Project Work – I	-	-	-	-	50	-	-	2
			15	-	08	23	300	450		21

Open Elective – II			Open Elective – III		
S. No.	Course Code	Course Title	S. No.	Course Code	Course Title
1	OE 771 CE	Green Building Technologies	1	OE 781 CE	Road Safety Engineering
2	OE 772 CS	Data Science Using R Programming	2	OE 782 IT	Software Engineering
3	OE 773 EC	Fundamentals of IoT	3	OE 783 EC	Principles of Electronic Communications
4	OE 774 EE**	Non-Conventional Energy Sources	4	OE 784 EE**	Illumination and Electric Traction systems
5	OE 775 ME	Entrepreneurship	5	OE 785 ME	Mechatronics

PC: Professional Course PE: Professional Elective
L: Lectures T: Tutorials P: Practical D: Drawing
CIE: Continuous Internal Evaluation **SEE:** Semester End Examination (Univ. Exam)

Note: 1) Each contact hour is a Clock Hour
2) The practical class can be of two and half hour (clock hours) duration as per the requirement of a particular laboratory.

Note-2: * The students have to undergo a Summer Internship of four weeks' duration after VI semester and credits will be awarded in VII semester after evaluation.
** Subject is not offered to the students of EEE and EIE Department.

Professor & Head
Electronics & Instrumentation Engineering Department,
M.J. College of Engg. & Tech.,
Rd No. 3, Banjara Hills, Hyd.-34.

23/03/2022
PRINCIPAL
Muffakham Jah College Of Engineering & Technology
Banjara Hills, Road No.3,
HYDERABAD - 500 034, A.P.

SCHEME OF INSTRUCTION& EXAMINATION
B.E. VIII - SEMESTER
(ELECTRONICS AND INSTRUMENTATION ENGINEERING)

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1	**PC 802 EE**	Advance Programmable Logic Controller	3	-	-	3	30	70	3	3
2		Professional Elective – III	3	-	-	3	30	70	3	3
3		Professional Elective – IV	3	-	-	3	30	70	3	3
4		Professional Elective – V	3	-	-	3	30	70	3	3
Practical/ Laboratory Courses										
5	**PC 852 EE**	Process Instrumentation Lab	-	-	2	2	25	50	3	1
6	**PW 961 EE**	Project Work – II	-	-	16	16	50	100	-	8
			12	**-**	**18**	**30**	**195**	**430**		**21**

Professional Elective – III		
S. No.	Course Code	Course Title
1	**PE 825 EE**	Digital Control Systems
2	**PE 826 EE**	Automation in Process Control
3	**PE 827 EE**	Hydraulic & Pneumatics
4	**PE 828 EE**	Software Design tools for Sensing & Control

Professional Elective – IV		
S. No.	Course Code	Course Title
1	**PE 834 EE**	Power Quality
2	**PE 835 EE**	Advance Digital Signal Processing
3	**PE 836 EE**	Biomedical Signal Processing
4	**PE 837 EE**	Power plant design and safety management

Professional Elective – V		
1	**PE 842 EE**	Energy Management Systems and SCADA
2	**PE 846 EE**	Neural Networks and Fuzzy Logic
3	**PE 847 EE**	Instrumentation for Agricultural and Food Processing Industries
4	**PE 848 EE**	Digital Image Processing

PC: Professional Course PE: Professional Elective
L: Lectures T: Tutorials P: Practical D: Drawing
CIE: Continuous Internal Evaluation **SEE:** Semester End Examination (Univ. Exam)

Note: 1) Each contact hour is a Clock Hour
2) The duration of the practical class is two clock hours, however it can be extended wherever necessary, to enable the student to complete the experiment

Professor & Head
Electrical Engineering Department,
... College of Engg. & Tech.,
Rd. No. 3, Banjara Hills, Hyd...

PRINCIPAL
Muffakham Jah College Of
Engineering & Technology,
Banjara Hills, Road No.3,
HYDERABAD - 500 034 A.P