ELECTRONICS
SEMESTER: I

COURSE: CIRCUIT THEORY AND ELECTRONIC DEVICES

CO	COURSE OUTCOMES	LEVEL
CO1	To Identify the different electronic components used in electronic circuits .	L2
CO2	To Apply network theorems to different circuits.	L3
CO3	To learn how to analyze the frequency response of RC and RL circuits.	L4
CO4	To describe the construction, working and VI characteristics of electronic devices.	L2
CO5	To demonstrate proficiency in the operation and utilization of voltage regulators.	L3

COURSE: DIGITAL ELECTRONICS

CO	COURSE OUTCOMES	LEVEL
CO1	To understand the number systems, Binary codes and Complements.	L2
CO2	To analyze and evaluate Boolean expressions and logic - circuits.	L4
CO3	To understand the combinational logic circuits.	L2
CO4	To discuss the concepts of sequential circuits and to analyze sequential systems in terms of state machines.	L4
CO5	To differentiate between various memory devices.	L2

COURSE: ANALOG CIRCUITS AND COMMUNICATION ELECTRONICS

CO	COURSE OUTCOMES	LEVEL
CO1	To analyze and design operational amplifier circuits.	L4
CO2	To construct circuits based on linear integrated circuits.	L3
CO3	To analyze and explain the principles of amplitude modulation.	L4
CO4	To discuss various modulation and demodulation techniques of analog communication.	L2
CO5	To explain the principles of radio broadcasting and reception.	L2

COURSE: MICROPROCESSOR SYSTEMS

CO	COURSE OUTCOMES	LEVEL
CO1	To understanding of CPU architecture, including the operation of the Intel 8085and 8086.	L2
CO2	To describe a comprehensive understanding of the 8085 instruction set.	L4
CO3	To design, implement, and analyze assembly language programs efficiently.	L3
CO4	To understanding of both minimum mode and maximum mode configurations of the 8086.	L2
CO5	To describe of ARM processor technology.	L4

COURSE: MICROCONTROLLER AND INTERFACING

CO	COURSE OUTCOMES	LEVEL
CO1	To understanding of the fundamental concepts related to microprocessors and microcontrollers.	L2
CO2	To analyzing, designing, and implementing systems based on the 8051 microcontroller.	L4
CO3	To Understand different instruction and addressing modes of microcontroller.	L2
CO4	To design, implement, and analyze assembly language programs efficiently.	L3
CO5	To describe interfacing of different I/O devices	L4

COURSE: INDUSTRIAL ELECTRONICS

CO	COURSE OUTCOMES	LEVEL
CO1	To understanding of rectifiers, filters, and voltage regulators .	L2
CO2	To analyzing, designing, and implementing power supply circuits.	L3
CO3	To describe the concepts of voltage doublers, and Tripler.	L4
CO4	To understanding of controlled rectifiers, particularly SCR-based rectifier circuits.	L2
CO5	To explain the Principle and operation of different Electronic Heating devices.	L4

COURSE: ELECTRONIC INSTRUMENTATION

CO	COURSE OUTCOMES	LEVEL
CO1	To Identify various equipments required to set up a basic Instrumentation.	L2
CO2	To explore different types of oscilloscopes and their respective uses in different applications.	L3
CO3	To analyzing, selecting, and utilizing transducers for various measurement and sensing applications.	L4
CO4	To Understand the Principle and operation of different display devices	L2
CO5	To understanding of biomedical instruments commonly used in healthcare settings.	L4