

LESSON PLAN	
FUNDAMENTALS OF ELECTRICAL & ELECTRONICS ENGINEERING (TH 6)	
BY: NIHARIKA SETHY	
WEEK: 17.08.26 TO 17.04.27	
Class/Week: 1	Topics to be covered
W1	Passive Active Components: Resistances, Capacitors, Inductors, Diodes, Transistors and their
W2	Applications. (Concept and simple problems of Resistance, Capacitor & Inductor)
W3	Energy bands in solids, Types of materials (insulator, semi-conductor, conductor), intrinsic and extrinsic semiconductors.
W4	Definition, Classification and Working of Diode (PN junction, LED, Zener)
W5	Transistor: BJT
W6	Concept of FET
W7	MOS and CMOS (Definition, Types, Symbol & Terminals)
W8	DC/AC, voltage/current, periodic/non-periodic signals, average, rms, peak values, different types of signal waveforms
W9	Analog & Digital Signals: Definitions & Difference Ideal/non-ideal voltage/current sources, independent/dependent voltage current sources. (Definitions)
W10	Diode as rectifier – half wave rectifier
W11	full wave rectifier (center taped & bridge).
W12	Introduction to Clippers &
W13	Clampers (Definitions only)
W14	Transistor (BJT only)
W15	Transistor as an amplifier
W16	Working of RC Coupled amplifier,
W17	Oscillator (only definition & types)
W18	Introduction to ICs, advantages & uses
W19	741 IC pin configuration, Operational Amplifiers – Characteristics of Ideal Op-Amp
W20	Open loop and closed loop configurations
W21	Application of Op-Amp as amplifier: adder,
W22	differentiator and
W23	integrator
W24	Number Systems: Binary,
W25	Octal Number Systems
W26	Hexadecimal Number Systems ,
W27	Simple problems of Number system
W28	Introduction to Logic Gates (Circuit symbol & Truth table),
W29	Universal Logic gates,
W30	De' Morgans Law
W31	Implementation of Boolean expression using logic gates (simple problem)

Course Outcome-

CO:1	Identify & analyze different types of electronics components & circuits.
CO:2	Analyze basic OPAMP circuits & digital circuits.

Handwritten signature
31.07.26