NILASAILA INSTITUTE OF SCIENCE & TECHNOLOGY
SERGARH-756060, BALASORE (ODISHA)
(Approved by AICTE& affiliated to SCTE&VT, Odisha)

LESSON PLAN

SUBJECT : TH-4(a)

Name Of The Faculty :- Er. NIRANJAN SAHU
Session :- 2024-25
Branch :-EE/EEE
Semester :- 2ND
Examination :- 2025 (S)

CHAPTER WISE DISTRIBUTION OF PERIODS

Sl.No.	Name of the chapter as per the Syllabus	No. of periods actually needed
1	Overview of Electronic Components and Signals	10
2	Overview of Analog Circuits	6
3	Overview of Digital Electronics	13
4	Electric and Magnetic Circuits	8
5	AC Circuits	13
6	Transformer and Machines	10
Total		60

Niranjan Sahu
Sign of Faculty 31/1/25

Sign of H.O.D. 31/01/25

Discipline: EE/EEE	Semester: 2ND	Name of the Teaching Faculty: Er.NIRANJAN SAHU
		SESSION : 2024-25 EXAMINATION : 2025 (S)
Week	**Class Day**	**Topics to be Covered**
1st	1st	**Introduction of Electronics components,passive components like**
	2nd	Sereis And Parallel ckt of Resistors.
	3rd	Passive components like Inductor,Capacitors
	4th	Active components like PN juction Diode
2nd	1st	Zener Diode ,Light Emitting Diode
	2nd	Transister
	3rd	FET
	4th	Mos Devices
3rd	1st	**Signal And Active Devices**
	2nd	frequency,Waveform
	3rd	**Introduction of Analog Circuit**
	4th	Basic of Opamp
4th	1st	Opamp Parameter
	2nd	Opamp Configuration
	3rd	Opamp Operating mode as addder ,substarction
	4th	Opamp Operating mode as differentiator,integrator
5th	1st	**Introduction of Digital Electonics**
	2nd	Decimal Number system,Binary Number system
	3rd	Octal and Hexadecimal Number System
	4th	Number Conversion like Binary to Decimal,Decimal to Binary
6th	1st	Boolean Laws and Theorems
	2nd	LOGIC GATES,Types of Logic Gates
	3rd	FLIP FLOPS AND COUNTERS,Types of Flip Flop
	4th	S R flip flop,Clocked S R flip flop
7th	1st	D flip flop ,J K flip flop
	2nd	T flip-flop
	3rd	Counters,Asynchronous Counter
	4th	Introduction to Integrated Circuits
8th	1st	Transistor Transistor Logic (TTL)
	2nd	**Introduction of Electric and Magnetic Circuit**
	3rd	Current /Voltage and Power/Energy
	4th	Electric Circuit Terminology
9th	1st	Kirchoff's Current Law (KCL),Kirchoff's Voltage Law (KVL)
	2nd	Parameters of magenetic Circuit like Magnetizing force,Flux density
	3rd	Magnetomotive Force,Magnetic Circuits
	4th	Faraday's law,Self-inductance,Mutual Inductance

Week	Class Day	Topics to be Covered
10th	1st	ANALOGY BETWEEN ELECTRICAL AND MAGNETIC CIRCUITS
	2nd	**Introduction of AC Circuits**
	3rd	Important terms related with an alternating quantity
	4th	Important terms related with an alternating quantity
11th	1st	Phase, Phase Difference and Power Factor
	2nd	A.C in Pure Resistors
	3rd	A.C in Pure Inductors
	4th	A.C in Pure Capacitors
12th	1st	Resistance - Inductance (R-L) circuit
	2nd	Resistance - Capacitance (R-C) circuit
	3rd	Resistance, Inductance and Capacitance Circuit (R.L.C. Circuit)
	4th	AC POWER AND THREE PHASE CIRCUIT
13th	1st	Star and Delta Connection
	2nd	Power Triangle
	3rd	**Introduction of Transformer and Machines**
	4th	Parts of a Transformer
14th	1st	Types of Transformers
	2nd	EMF Equation of Transformer,Voltage Transformation ratio
	3rd	ELECTRIC MOTORS
	4th	Construction of DC Motor,Working Principle of DC Motor
15th	1st	Types of DC Motors
	2nd	3ph AC Motors like Squirrel Cage,Wound Rotor
	3rd	Single phase AC Motors
	4th	Capacitor Split Phase AC Motors

Niranjan Sahu

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