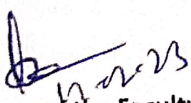
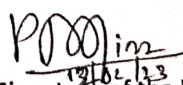


DISCIPLINE ELECTRICAL	SEMESTER 4 TH	NAME OF THE TEACHING FACULTY Niranjan Nayak (Lect. in I & C)
SUBJECT Analog Electronics & op - Amp	NO. OF DAYS/WEEK CLASS ALLOTTED - 60	SEMESTER FROM DATE 13.02.2023 to 22.05.2023 No. of week excluding holiday - 15
Class No.	Dates	THEORY TOPICS
1	13.02.2023	Define diode and working principle of P-N Junction Diode.
2	15.02.2023	V-I characteristic of PN junction Diode.
3	16.02.2023	DC load line and important terms such as Ideal Diode, Knee voltage
4	20.02.2023	Junctions break down. 1. Zener breakdown
5	22.02.2023	2. Avalanche breakdown
6	23.02.2023	P-N Diode clipping Circuit.
7	23.02.2023	P-N Diode clamping Circuit.
8	25.02.2023	Thermistors
9	27.02.2023	Sensors & barretters.
10	01.03.2023	Zener Diode, Tunnel Diode, PIN Diode
11	02.03.2023	Revision class of P-N Diode, Zener Diode, clipping Circuit clamping Circuit.
12	04.03.2023	Classification of rectifiers. Analysis of half wave full wave Centre tapped
13	04.03.2023	Bridge rectifiers and calculate DC output current and voltage
14	09.03.2023	RMS output current and voltage
15	11.03.2023	Rectifier efficiency, Ripple factor
16	13.03.2023	Regulation, Transformer utilization factor
17	15.03.2023	Peak inverse voltage
18	16.03.2023	Filters: Shunt capacitor filter, Choke input filter, π filter
19	16.03.2023	Revision class of Shunt capacitor filter, Choke input filter and RMS output current and voltage of rectifier.
20	18.03.2023	Current components in a transistor Principle of Bipolar junction transistor
21	20.03.2023	Different modes of operation of transistor and transistor as an amplifier.
22	22.03.2023	Transistor circuit configuration & its characteristics. CB Configuration
23	23.03.2023	CE Configuration
24	27.03.2023	CC Configuration
25	29.03.2023	Transistor biasing. Stabilization, Stability factor.
26	29.03.2023	Different method of Transistors Biasing. Base resistor method.
27	29.03.2023	Collector to base bias.
28	29.03.2023	Self bias or voltage divider method.
29	29.03.2023	Revision class of biasing and Configuration of transistor.
30	29.03.2023	Practical circuit of transistor amplifier DC load line and DC equivalent circuit
31	29.03.2023	AC load line and AC equivalent circuit
32	03.04.2023	Calculation of gain, Phase reversal
33	05.04.2023	H-parameters of transistors Simplified H-parameters of transistors
34	06.04.2023	Analysis of CB, CE, CC amplifier using generalized approximate model.
35	08.04.2023	Multi stage transistor amplifier
36	10.04.2023	R.C. coupled amplifier Transformer coupled amplifier

37	12.04.2023	Feed back in amplifier
38	15.04.2023	Negative feedback circuit
39	17.04.2023	Advantage of negative feed back
40	19.04.2023	Power amplifier and its classification
41	22.04.2023	Difference between voltage amplifier and power amplifier
42	24.04.2023	Transformer coupled class A power amplifier
43	27.04.2023	Class A push pull amplifier and Class B push pull amplifier
44	29.04.2023	Revision class of Feed back in amplifier and push pull amplifier
45	01.05.2023	Oscillators
46	03.05.2023 (3:00pm-3:45pm)	Types of oscillators, Essentials of transistor oscillator.
47	04.05.2023 (3:00pm-3:45pm)	Principle of operation of tuned collector, Hartley oscillator .
48	06.05.2023	Colpitt and phase shift oscillator.
49	08.05.2023	Wein bridge oscillator.
50	10.05.2023 (3:00pm-3:45pm)	Classification of FET and advantages of FET over BJT
51	12.05.2023	Principle of operation of BJT and FET parameter.
52	14.05.2023	DC drain resistance, AC drain resistance
53	16.05.2023	Trans-conductance and biasing of FET
54	18.05.2023	Revision class of DC drain resistance, AC drain resistance
55	20.05.2023	Trans-conductance and biasing of FET
56	22.05.2023	General circuit simple of OP-AMP and IC – CA – 741 OP AMP
57	24.05.2023	Operational amplifier stages and equivalent circuit of operational amplifier
58	26.05.2023	Open loop OP-AMP configuration
59	28.05.2023	OPAMP with fed back
60	30.05.2023	Inverting OP-AMP, Non inverting OP-AMP, Voltage follower & buffer
		Differential amplifier and Adder or summing amplifier
		Sub tractor Integrator
		Differentiator, Comparator
		Revision class of integrator ,differentiator and comparator
		Previous year questions and answers discussion.


Signature of the Faculty


Signature of the HOD