## UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA Academic Lesson Plan for summer semester- 2023

Name of the teaching faculty : Sarita Bauri Semester: 4th No. of periods per week: 4 End semester exam: 80 Total Marks: 100 Department: Electrical Engineering Subject: AE &OP-AMP Total Periods: 60 Class test: 20

SI.	Week	Period	Unit/Chapter	Topic to be Covered
No.				
1.	1 <sup>st</sup>	1 <sup>st</sup>	P-N JUNCTION DIODE	P-N Junction Diode and its working
2.	-	2 <sup>nd</sup>		
				V-I characteristic of PN junction Diode
3. 4.		3 <sup>rd</sup>		Important terms such as Ideal Diode,
		-		Knee voltage
		4 <sup>th</sup>		Zener breakdown and Avalanche
				breakdown
5	2 <sup>nd</sup>	<b>1</b> <sup>st</sup>		P-N Diode clipping Circuit.
6		2 <sup>nd</sup>		P-N Diode clamping Circuit
7		3 <sup>rd</sup>	TUTORIAL CUM DOUBT CLEAR CLASS	Objective question related to P-N
				junction diode
8		4 <sup>th</sup>	SPECIAL SEMICONDUCTOR DEVICES	Thermistors
9	3 <sup>rd</sup>	<b>1</b> <sup>st</sup>		Zener Diode
10		2 <sup>nd</sup>		Tunnel Diode
11.		3 <sup>rd</sup>		PIN Diode
12.		4 <sup>th</sup>	TUTORIAL CUM DOUBT CLEAR CLASS	Objective question related to special
				semiconductor devices
13	4 <sup>th</sup>	1 <sup>st</sup>	RECTIFIER CIRCUITS & FILTERS	Classification of rectifiers
14.		2 <sup>nd</sup>		Analysis of half wave rectifiers
15.		3 <sup>rd</sup>		Analysis of full center tapped rectifiers
16.		4 <sup>™</sup>		Analysis of Bridge rectifiers
17.	5 <sup>th</sup>	<b>1</b> <sup>st</sup>		Calculation of DC output current and
	_	nd		voltage
18.		2 <sup>nd</sup>		RMS value, Rectifier efficiency, Ripple
	_	ord		factor
19.	+	3 <sup>rd</sup> 4 <sup>th</sup>		Filter
20.		4"	TUTORIAL CUM DOUBT CLEAR CLASS	Objective question related to rectifier
24	6 <sup>th</sup>	1 <sup>st</sup>		circuit and filter
21. 22.	0	1 <sup>nd</sup>	TRANSISTORS	Principle of Bipolar junction transistor
۲۲.		2		Different modes of operation of transistor
23.	-	3 <sup>rd</sup>		Current components in a transistor
23.		3 4 <sup>th</sup>		Transistor as an amplifier
25.	7 <sup>th</sup>	- 1 <sup>st</sup>		Transistor circuit configuration & its
23.	-	1		characteristics
26.		2 <sup>nd</sup>	TUTORIAL CUM DOUBT CLEAR CLASS	Objective question related to Transistor
27.		3 <sup>rd</sup>	TRANSISTOR CIRCUITS	Transistor biasing
28.		4 <sup>th</sup>		Stabilization and Stability factor
29.	8 <sup>th</sup>	1 <sup>st</sup>		Different method of Transistors Biasing
30.		2 <sup>nd</sup>		Do
31.	1	3 <sup>rd</sup>	TUTORIAL CUM DOUBT CLEAR CLASS	Objective question related to Transistor
		-		circuit