

# LESSON PLAN

DEPARTMENT OF ELECTRICAL ENGINEERING, ITT, CHOUDWAR

SUBJECT: AE LAB

Periods: 3 per week

SEMESTER: 4<sup>TH</sup>

NAME OF FACULTY: Mr.T R Sahoo & S. PATTNAIK

No. of weeks: 15

Week	Class	Theory Topics
1st	1st	Determine the input and output Characteristics of CE & CB transistor configuration
2 <sup>nd</sup>	2 <sup>nd</sup>	Determine Drain & Transfer Characteristics of JFET
3 <sup>rd</sup>	3 <sup>rd</sup>	Construct Bridge Rectifier using different filter circuit and to determine Ripple factor & analyze wave form with filter & without filter.
4 <sup>th</sup>	4 <sup>th</sup>	Construct Bridge Rectifier using different filter and to determine Ripple factor.
5 <sup>th</sup>	5 <sup>th</sup>	Construct & test the regulator using Zener diode
6 <sup>th</sup>	6 <sup>th</sup>	Construct different types of biasing circuit and analyze the wave form (i) Fixed bias (ii) Emitter bias (iii) Voltage divider bias
7 <sup>th</sup>	7 <sup>th</sup>	Study the single stage CE amplifier & find Gain
8 <sup>th</sup>	8 <sup>th</sup>	Study multi stage R-C coupled amplifier & to determine frequency-response & gain.
9 <sup>th</sup>	9 <sup>th</sup>	Construct & Find the gain (I) Class A. Amplifier (ii) Class B. Amplifier (iii) Class C Tuned Amplifier
10 <sup>th</sup>	10 <sup>th</sup>	Construct & test push pull amplifier & observe the wave form
11 <sup>th</sup>	11 <sup>th</sup>	Construct & calculate the frequency of (i) Hartly Oscillator (ii) Collpit's Oscillator and draw wave form & calculate the frequency
12 <sup>th</sup>	12 <sup>th</sup>	Construct & calculate the frequency of (iii) Wein Bridge Oscillator (iv) R-C phase shift oscillator and draw wave form & calculate the frequency
13 <sup>th</sup>	13 <sup>th</sup>	Construct & Test Differentiator and Integrator using R-C Circuit
14 <sup>th</sup>	14 <sup>th</sup>	Study of Multivibrator ( Astable, Monstable) Circuit & Draw its Wave forms
15 <sup>th</sup>	15 <sup>th</sup>	Study of Bistable Multivibrator Circuit & Draw its Wave forms

Teaching Faculty