

**GOVERNMENT POLYTECHNIC ,BARGARH**  
**Department Of Electrical and ELECTRONICS Engineering**

Semester: 4<sup>th</sup>. DIPLOMA

Subject: AE LAB

Branch: EEE

Session: SUMMER

No of Period :45(3p/week)

Name of Faculty: Niranjan Nayak

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