DEPARTMENT OF ELECTRICAL ENGINEERING Govt. Polytechnic Jajpur, Ragadi

LAB LESSON PLAN FOR ACADEMIC SESSION - 2024-25 ANALOG ELECTRONICS LAB

Course Code: PR-2

Semester: 4TH

Examination: 3 Hours

Theory Periods: 3 P/Week

Internal Assessment: 20 Marks

Maximum Marks: 100

End Semester Examination: 80 Marks

Semester From Date: 04/02/2025 To 17/05/2025

Name of Teaching Faculty: SRI. PRASANTA KUMAR MOHAPATRA

| WEEK | GROUP | TOPIC |
|-----------------|-----------------|--|
| 1st | 1 st | Determine the input and output Characteristics of CE & CB transistor configuration |
| | 2 nd | Determine the input and output Characteristics of CE & CB transistor configuration |
| 2 nd | 1 st | Determine Drain & Transfer Characteristics of JFET |
| | 2 nd | Determine Drain & Transfer Characteristics of JFET |
| 3 rd | 1 st | Construct Bridge Rectifier using different filter circuit and to determine Ripple factor & analyze wave form with filter & without filter. |
| | 2 nd | Construct Bridge Rectifier using different filter circuit and to determine Ripple factor & analyze wave form with filter & without filter. |
| 4 th | 1 st | Construct Bridge Rectifier using different filter and to determine Ripple factor |
| | 2 nd | Construct Bridge Rectifier using different filter and to determine Ripple factor |
| 5 th | 1 st | Construct & test the regulator using Zener diode |
| | 2 nd | Construct & test the regulator using Zener diode |
| 6 th | 1 st | Construct different types of biasing circuit and analyze the wave form (i) Fixed bias (ii) Emitter bias (iii) Voltage divider bias |
| | 2 nd | Construct different types of biasing circuit and analyze the wave form (i) Fixed bias (ii) Emitter bias (iii) Voltage divider bias |
| 7 th | 1 st | Study the single stage CE amplifier & find Gain |
| | 2 nd | Study the single stage CE amplifier & find Gain |
| 8 th | 1 st | Study multi stage R-C coupled amplifier & to determine frequencyresponse & gain |
| | 2 nd | Study multi stage R-C coupled amplifier & to determine frequencyresponse & gain |
| 9 th | 1 st | Construct & find the gain (i) Class A. Amplifier (ii) Class B. Amplifier (iii) Class C Tuned Amplifier |

| | 2 nd | Construct & find the gain |
|------------------|-----------------|--|
| | _ | (i) Class A. Amplifier |
| | | (ii) Class B. Amplifier |
| | | (iii) Class C Tuned Amplifier |
| $10^{\rm th}$ | 1 st | Construct & test push pull amplifier & observer the wave form |
| | 2 nd | Construct & test push pull amplifier & observer the wave form |
| 11 th | 1 st | Construct & test push pull amplifier & observer the wave form shift oscillator and |
| | | draw wave form & calculate the frequency |
| | 2 nd | Construct & test push pull amplifier & observer the wave form shift oscillator and |
| | | draw wave form & calculate the frequency |
| 12^{th} | 1 st | Construct & Test Differentiator and Integrator using R-C Circuit |
| | 2 nd | Construct & Test Differentiator and Integrator using R-C Circuit |
| 13 th | 1 st | Study Multivibrator (A stable, Bistable, Monstable) Circuit & Draw its Wave |
| | | forms |
| | 2 nd | Study Multivibrator (A stable, Bistable, Monstable) Circuit & Draw its Wave |
| | | forms |
| 14 th | 1 st | REVISION |
| | 2 nd | REVISION |
| 15 th | 1 st | REVISION |
| | 2 nd | REVISION |

