

| S. No. | Course Code | Course Name | Course Type | Cd | L | T | P | Marks | | |
|--------|-------------|--|-------------|----|---|---|---|-----------|------------|-------|
| | | | | | | | | Sessional | Final Exam | Total |
| 5 | ECE-211 | Basic Electrical and Electronics Engineering Lab | PCC | 1 | 0 | 0 | 2 | 50 | - | 50 |

Course Outcomes:

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| At the end of the course the student will be able to: - | |
| CO1 | Apply fundamental concepts to solve simple DC and AC electric circuits. |
| CO2 | Verify the basic characteristics of transformers and electrical machines. |
| CO3 | Design diode and rectifier circuits and analyze their characteristics. |
| CO4 | Design and evaluate various transistor biasing configurations and circuits. |
| CO5 | Design different voltage regulators |

List of Experiments of Basic Electrical and Electronics Lab

| S. No. | Experiment |
|--------|---|
| 1 | Verify Characteristics of passive circuit elements (R, L, C). |
| 2 | Examine time and frequency responses of RC, RL and RLC circuits. |
| 3 | Verify and analyze network theorems. |
| 4 | Analyze single-phase transformers. |
| 5 | Perform the polarity test of the single phase transformer. |
| 6 | Perform open and short circuit tests on single phase transformers. |
| 7 | Measure three phase power using two Wattmeter methods. |
| 8 | Verify and plot V-I characteristics of p-n junction and Zener diodes. |
| 9 | Verify and plot Input and Output characteristics of BJT (CE). |
| 10 | Implement half wave and full wave rectifiers. |
| 11 | Design voltage regulator using series pass transistor. |