

ANALOG ELECTRONICS-I LAB
PCC-ECE205-P

Course Credits: 2 Contact Hours: 4/week (L-T-P: 0-0-4) Mode : Lab Work	Course Assessment Method : (Internal: 30; External: 70)
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Sr. No.	Course Outcomes At the end of the semester, students will be able:	RBT Level
CO 1	To trace the characteristics of semiconductor devices.	L1
CO 2	To identify the various electronic components and differentiate them based upon their characteristics.	L2
CO 3	To demonstrate simple applications of semiconductor devices.	L3
CO 4	To test the electronic component and circuits, and to carry experimentation with them.	H1

List of Experiments

1. To study V-I characteristics of diode.
2. To design and study the characteristics of half wave rectifier with filter circuit.
3. To design and study the characteristics of full wave rectifiers with filter circuit.
4. To study of Zener diode as a voltage regulator.
5. To design clipper circuits and observe their output waveforms.
6. To design the clamper circuits and observe their output waveforms.
7. To design the dc voltage doubler.
8. To study the characteristics of CB configurations of a transistor.
9. To study the characteristics of CE configurations of a transistor.
10. Study of CC amplifier as a buffer.
11. Study of transistor as a constant current source in CE configuration.
12. To study the V-I characteristics of FET in CS configuration.
13. To study the V-I characteristics of FET in CD configuration.
14. To study the frequency response of RC coupled amplifier.
15. To study the 3-terminal IC voltage regulators.
16. Study of IR diode (IR-emitter) and photodiode (IR receiver).
17. Study of opto-coupler (opto-isolator).
18. Simple project (Any topic related to the scope of the course).

Note: Atleast 12 experiments are to be performed in the semester, out of which minimum 8 experiments should be performed from above list. Remaining experiments may either be performed from the above list or designed and set by concerned institution as per the scope of the syllabus.