

Discipline	Electrical	Semesters	1 st	Name of the teaching faculty	
Subject	Basic electrical & electronic engg.	No. of days class per week allotted	4	Semester from date to date	No of week 16

1st

- 1st Define current, source & load, Resistance & ohm's law.
- 2nd Relation of V, I, R in series & parallel ckt.
- 3rd electron emission & its type.

2nd

- 4th Explain conductor, semiconductor & Insulator.
- 1st Division of current in parallel ckt.
- 2nd kirchhoff's law & its problem.
- 3rd Different betⁿ Intrinsic & Extrinsic semiconductor
Different betⁿ vacuum tube & semiconductor
- 4th Working of PN junction diode, Zener diode.

3rd

- 1st Different betⁿ DC & AC. Define Amplitude, instantaneous value, cycle, Time period.
- 2nd Frequency, Phase angle, phase difference. Explain light emitting diode.
- 3rd Integrated ckt & its advantage.
- 4th Rms value, Average value, Amplitude & form factor.

1st Explain AC value in phasor diagram, AC through resistance, inductance, capacitance.

4th 2nd Describe AC through RL, RC, RLC series ckt.

3rd Simple problem on, RL, RC, RLC series ckt.

1st Define Rectifier. Types of Rectifier.

5th 2nd Merits & Demerits of Rectifier. Define filter.

3rd Types of filter (Capacitor & choke π & T)

4th Working of DC power with block diagram.

1st Define power & power factor, Impedance triangle & power triangle.

2nd Thermal power plant & hydro power plant.

3rd Nuclear power plant.

4th Explain DC machines & main parts of DC machines.

1st Explain transistor. Types of transistor configuration.

7th 2nd o/p & i/p current gain relationship in CE, CB, & CC configuration.

3rd Define biasing & Need of biasing.

4th Types of biasing with ckt diagram.

1st Types of DC generator & DC motor.

2nd Use of DC generator & DC motors. Types of single phase induction motors.

8th

3rd Define lumen. Types of lamps.

4th Construction of filament fluorescent, LED bulb.

1st Define amplifier, working of single phase CE amplifier.

2nd Explain Oscillators & its types.

9th

3rd Oscillators with different elements through block diagram.

4th Explain communication system with block diagram.

1st Types of wiring for domestic installation.

2nd Protective device used in house hold wiring.

10th

3rd Calculated energy consumed in a small electric installation.

1st Explain modulation

2nd Explain demodulation.

11th

3rd Types of modulation (AM, FM & PM)

1st different betⁿ modulation & demodulation.

12th

2nd Explain measuring instruments.

3rd Different uses of PMMC type of instruments.

1st Torques in instruments.

2nd Define transducer & types of transducer.

13th

2nd Define sensor & type of sensor.

4th Active transducer & passive transducer.

1st Working of photo emission.

2nd Application of photo emission.

Pranav
14th

3rd Connection diagram of AC ammeter.

4th Connection diagram of DC ammeter.

1st Connection diagram of AC & DC voltmeter.

15th

2nd Connection diagram of AC & DC energy meter & wattmeter.

3rd Explain photoconductive & its application.

4th Working of photoelectric transducer & its application.

16th

1 st	Define multimeter & its application.
2 nd	Working of multimeter with block diagram.
3 rd	Working of CRO with block diagram.
4 th	Revision.