

Q.No.	Question
1	Explain ohm's law with limitations.
2	Define temp. co-efficient of resistance & explain about it.
3	Explain the effect of temperature rise on resistance of different materials.
4	Explain Joule's law & derive relations of energy and power.
5	Explain lead acid battery.
6	Compare primary cell with secondary cell.
7	Explain Coulomb's
8	Explain potential and potential difference.
9	Explain Faraday's laws of electromagnetic induction.
10	Explain capacitor and capacitance.
11	Explain series and parallel connection of capacitors.
12	Explain charging of capacitor.
13	Discuss discharging of capacitor.
14	Compare electric circuit with magnetic circuit.
15	Explain emf generation in 1-phase a.c. generation.
16	Explain RMS value of a.c. current.
17	Explain Average value of a.c. current.
18	Explain phase and phase difference.
19	Explain pure resistive circuit analysis, when a.c. supply applied.
20	Explain pure inductive circuit analysis, when a.c. supply applied.
21	Explain pure capacitive circuit analysis, when a.c. supply applied.
22	Explain series R-L series circuit.
23	Explain series R-C series circuit.
24	Explain series R-L-C series circuit.
25	Explain resonance in series a.c. circuit.
26	Explain resonance in a.c. parallel circuit.
27	Explain methods for parallel a.c. circuit solution.
28	Explain three phase a.c. power generation.
29	Explain star connection with its applications.
30	Explain delta connection with its applications.
31	Derive relation between line voltage & phase voltage, line current & phase current in star connection.
32	Derive relation between line voltage & phase voltage, line current & phase current in delta connection.
33	Explain two wattmeter method for 3-phase power measurement.
34	Compare 1-phase a.c. system with 3-phase a.c. system.
35	Explain rise and decay of current in inductive circuit.
36	Explain statically induced emf.
37	Explain energy store in capacitor.
38	Explain dynamically induced emf.
39	Explain types of capacitors.
40	Define-Cycle, frequency, peak factor, form-factor, amplitude.

