

QUESTION BANK FOR FIRST SEM EXAM 2023-24
ELECTRICAL MAINTENANCE – PAPER 1

- a) Draw symbols.
- b) Draw a neat and labelled diagram of staircase wiring.
- c) Draw a neat and labelled diagram of one-point series parallel testing board.
- a) Draw a neat and labelled circuit diagram of Godown wiring.
- b) Draw a neat and labelled diagram of two lamps controlled by two switches.
- d) Define:
 - i. Resistivity
 - ii. Voltage drop
 - iii. Conductance
 - iv. Power
 - v. Energy
- e) Explain the different types of circuits.
- f) State and explain the laws of resistance.
- g) State the effects of electric current and explain any one in detail.
- h) What are the different types of wires.
- i) Write a note on weatherproof wires with diagram.
- j) What are the different types of switches and give their applications.
- k) Explain plug and socket with diagram.
- l) Two lamps of 100 W each are connected in i) parallel & ii) series to a 220 Volt supply. Calculate the power taken in each case.
- m) The electrical installation in a house is used in the following manner.
 - i) Lamp 100 W each, 12 nos. 6 hrs a day
 - ii) Fan 60 W each, 6 nos. 5 hrs a day
 - iii) Electric cooker 1.5 KW each, 2 nos. 4 hrs a day
 - iv) Electric Geyser 1 KW each, 2nos. 3 hrs a dayCalculate the cost of electric energy for the month of September, @ Rs.3.50 per unit.
- n) Find the equivalent resistance of the circuit below. Also, find the current if the supply voltage is 240V.

