

Answer all Questions

Q1 (a) Identify five different electrical devices from the point of generation to the point of utilization and briefly explain their work. (5x2=10)

(b) Briefly explain the working of an electrical device (other than what you include in part 'a' above) used in Construction/Railway system. (5)

Q2 (a) Explain the name plate details of a transformer. (5)

(b) Discuss the role of Interpoles and Compensating winding in dc machines. (5)

(c) Why 3-Phase power system is used so widely? (5)

Q3 (a) Why 3-Phase squirrel cage Induction motor is called the Work Horse of Industry? (5)

(b) Why the name synchronous machine? Give applications of syn. Machine as motor as well as generator mode. (2+3=5) (2)

(c) Why 1-Phase induction motors are not self starting? Give 2- application of this motor. (4)

(d) Bring out the difference between feeder and distributor design. (2+3)

Q4 (a) Highlight the significance of any two of the following:
(i) Electrical Safety (ii) Energy Conservation (iii) Energy Audit (4x2)

(b) Why Circuit Breakers are needed? Name two types of Circuit Breakers being used in practice. (2+1)(3+1)

Q5 (a) Give a brief summary of your own seminar presentation. (5)

(b) Critically examine ~~an~~^a seminar presentation, other than your own. What made you select this topic? (5)

(c) Briefly describe a Construction/Railway system and identify the role of electrical device in it. (5)