

G)	Draw the Electrical symbol of 1) Fuse 2) Transformer 3) Earthing 4)Two way switch four correct symbols – 0.5 Mark each	K2 / CO4	2
Q.2	Solve Any Two of the following.		10
A)	What is electrical shock? Explain the causes of electrical shock and its effects on the human body ? Definition of electrical shock – 1 Mark Causes (any two) – 2 Marks Effects on human body (any two) – 2 Marks	K3 / CO5	5
B)	Find current flowing through branch BD using Loop Analysis. Correct identification of loops – 1 Mark Writing correct KVL equations – 2 Marks Solving equations – 1 Mark	K3/CO 2	5
C)	Explain the power triangle and show the relationship between active power, reactive power, and apparent power. Definition of power triangle – 1 Mark Neat labeled diagram – 2 Marks Relationship- 2 Marks	K4 /CO3	5
Q. 3	Solve Any Two of the following.		10
A)	A series RLC circuit has resistance 10 Ω, inductance 0.1 H and capacitance 100 μF supplied by 120 V (RMS), 50 Hz. Find reactances , impedance , Current and power factor in the circuit. Calculation- reactances - X_L and X_C - 2 marks impedance , Current and power factor in the circuit– 1 mark each	K4 /CO3	5
B)	State and Explain KCL & KVL with suitable examples. Statement – 2 Marks Explanation – 2 Marks Example – 1 Mark	K3/CO 2	5
C)	What is a wiring system? Explain any two wiring systems commonly used in buildings with neat sketches and advantages. Definition-1 Marks Explanation – 2 Marks Advantages-2 Marks	K2 / CO4	5
*** End ***			