QUIZEN – 10P01 – Electricity

Learning Level 1	*Learning Level 2*	*Learning Level 3*
Q - Remembering (knowledge-based questions)	I - Applying (application-based questions)	*E - Evaluating (evaluation-based questions)*
U - Understanding (comprehension-based questions)	Z - Analyzing (analysis-based questions)	*N - Creating (creation-based questions)*

Learning Level 1

Q1: Define resistance and give its unit.

Q2: State Ohm's law and explain its significance.

Q3: What is the potential difference across a resistance of 10 Ω if a current of 2 A flows through it?

Q4: What is the resistance of a wire if a current of 2 A flows through it when a potential difference of 4 V is applied across it?

Q5: What is the current through a 5 Ω resistor if a potential difference of 20 V is applied across it?

Learning Level 2

Q1: Two resistors of resistance 4 Ω and 6 Ω are connected in series. Calculate the equivalent resistance of the combination.

Q2: Two resistors of resistance 3 Ω and 9 Ω are connected in parallel. Calculate the equivalent resistance of the combination.

Q3: State Kirchhoff's first law and second law. Explain how they are used in solving problems related to electrical circuits.

Q4: What is the power dissipated in a resistor of 5 Ω when a current of 2 A flows through it?

Q5: Two resistors of resistance 10 Ω and 20 Ω are connected in series. Calculate the voltage drop across the 20 Ω resistor when a potential difference of 120 V is applied across the combination.

Learning Level 3

Q1: Explain why the resistance of a conductor increases with its temperature.

Q2: A bulb rated at 100 W, 220 V is connected across a 110 V supply. What will be the power consumed by the bulb? Explain.

Q3: A current of 2 A flows through a 10 Ω resistor for 5 minutes. Calculate the amount of electrical energy consumed by the resistor.

Q4: What is an electric fuse? How does it work?

Q5: Design a circuit using a 12 V battery and three resistors such that the current passing through the resistors is 0.5 A