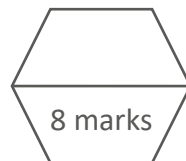


Name: \_\_\_\_\_  
Grade: \_\_\_\_\_

Date: 01/02/2024



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8

- 
1. What is the direction of conventional current flow in a circuit?
- A. From positive to negative
  - B. From negative to positive
  - C. It depends on the type of conductor
  - D. Random direction
- 
2. To which of the following is the potential energy of charges while flowing in a circuit is related?
- A. Potential difference
  - B. Current
  - C. Resistance
  - D. Power
- 
3. What is the purpose of a variable resistor in a circuit?
- A. To control the voltage
  - B. To control the current
  - C. To vary the resistance
  - D. To increase the power
- 
4. Which of the following is most effective at minimizing energy losses during transmission over long distances?
- A. Increase the voltage
  - B. Increase the current
  - C. Use thinner wires
  - D. Use silver wires
- 
5. What power is consumed by a device with a voltage of 120 V and a current of 5 A?
- A. 24 W
  - B. 125 W
  - C. 600 W
  - D. 2880 W
- 
6. A current of 0.2 A passes through a 10.5 kΩ resistor, what is the voltage across the resistor?
- A. 52500 V
  - B. 2100 V
  - C. 420 V
  - D. 46 V

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$$P = I^2 R$$

$$P = \frac{\Delta V^2}{R}$$

7. A household appliance consumes 2 kWh of energy in 1 h. How much power in watts does it consume?
- A.  $5.6 \times 10^{-4} \text{ W}$
  - B. 0.56 W
  - C. 2 W
  - D. 2000 W
- 

8. A 9 V battery is connected to a 10 W lightbulb. What is the bulb's resistance?



- A.  $0.9 \, \Omega$
  - B.  $1.1 \, \Omega$
  - C.  $8.1 \, \Omega$
  - D.  $90 \, \Omega$
- 

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$$P = I^2 R$$

$$P = \frac{\Delta V^2}{R}$$