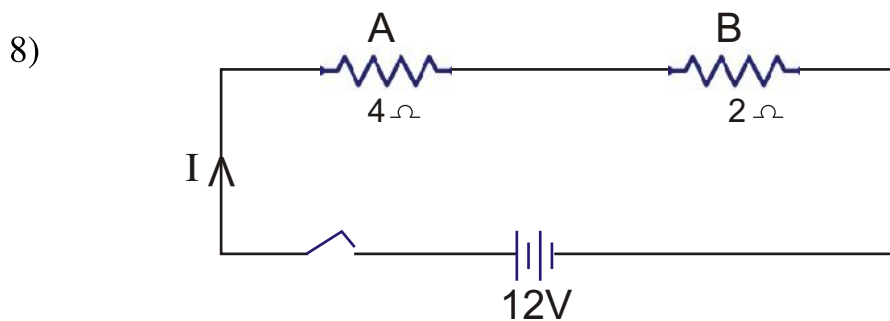


<b>UNIT TEST - 1</b>	<b>EFFECTS OF ELECTRIC CURRENT</b>	<b>MAX MARK: 20</b> <b>TIME : 45 Min</b>
----------------------	------------------------------------	---

- 1) Find the relation in the first then complete the second pair (1)
  - a) Bulb : Light effect
  - b) Safety Fuse : .....
- 2) Find Odd one and give the reason (1)
 

( $P = I^2R$ ,  $P = V^2 / R$ ,  $P = V I$ ,  $P = I R$ )
- 3) Nichrome is not used as filament in filament lamps. Why ? (2)
- 4) The cautionary measures are given while the fuse wire is included in the circuit.
  - Fuse wire should be connected in parallel to the circuit.
  - Fuse wire should not extend out of the carrier base..
  - (a) Which statement among the above is correct ? (1)
  - (b) Rewrite the wrong statement after necessary corrections. (1)
- 5) Explain how the fuse wire works in the circuit (3)
- 6) Nowadays LED Lamps are widely used .
  - a) Write down any two advantages of LED lamp (1)
  - b) Name any two parts of this lamp & write the working of it. (2)
- 7) A filament Lamp designed to work at a potential difference 250V has power 100W. What will be the power of this lamp when connected to a 100V supply? (4)



- a) Calculate the effective resistance in the above circuit. (1)
- b) If the electric current is flowing for 10 minutes , calculate the amount of heat energy produced. (1)
- c) Calculate the heat energy produced in 10 minutes if these resistors are connected in parallel (2)