

Set - A

KHM HIGHER SECONDARY SCHOOL, VALAKKULAM

FIRST TERMINAL EVALUATION - 2021

PHYSICS

Time: 40 Minutes

STD: X

Max.Marks: 20

1. Find the link and fill it out.

a) Bulb: lighting effect

b) Safety fuse: ----- (1)

2. Find out the odd one.

a) $H=I^2Rt$, $H=VIt$, $H=(V^2/R)t$, $H=P/t$. (1)

b) Electric iron box, heater, mixie, induction cooker (1)

3. Nichrome is not used as filament in filament lamps. Why ? (1)

4. 'LED bulbs are common today'

a) Write down any two advantages of LED bulbs ? (1)

b) Write down any two parts of LED bulb ? (1)

5. 5ohm, 8ohm resistors are connected in series combination.

a) Draw the circuit diagram ? (1)

b) Find out the effective resistance ? (1)

c) When this circuit is connected with 10V, what will be the ammeter reading (current) ? (1)

6. What will be the polarity of the solenoid, when current flows in clockwise direction ? (1)

7. Name any two devices that work on the basis of motor principle ? (1)

8. Name any two factors that affect the strength of the magnetic field of a solenoid carrying current ? (1)

9. a) Which is the rule used to arrive at the direction of current and magnetic field in a current carrying conductor ? (1/2)

b) State the rule ? (1 1/2)

10. Describe the working of a moving coil loudspeaker ? (3)

11. In the split ring commutator of an electric motor, semicircular rings are used. What is the need for this ? (1)

12. State the 'Fleming's left hand rule' ? (2)