

KHM HIGHER SECONDARY SCHOOL, VALAKKULAM
SECOND TERMINAL EVALUATION - 2021

PHYSICS

Max.Marks:30

STD: X

Time: 01 hrs

Find out the relation

1. Transformer: mutual induction

Inductor :----- . (1)

2. In which voltage, electricity produced in powerstation ? (1)

3. Which device is used to change AC voltage without changing power ?
(1)

4.a) State joule's law ? (1)

b) Calculate the heat developed, when 0.5A current flows for 5 minutes through an electric ironbox design to work under 230V ? (2)

5. 12 ohm, 4 ohm resistors are connected in parallel.

a) Draw the circuit diagram ? (1)

b) Find out the effective resistance ? (1)

6. Name any two parts of moving coil loudspeaker? Write the working principle ? (2)

7. Draw the graphical representation of emf obtained from an AC generator, a battery and a DC generator ? (3)

8. State the laws of reflection ? (2)

9. The input voltage of a transformer is 240V. There are 80 turns in the secondary coil and 800 turns in the primary coil. What is the output voltage of the transformer ? (2)

10. Find out the number of images formed between two plane mirrors placed at an angle of 45° using the equation ? (2)

11. List out the difference between step up transformer and step down transformer ? (2)

12. Write down any two first aid to be given in the case of electric shock ? (2)

13. Write down two main problems during power distribution? how can we solve these problems ? (2)

14. Which law helps to find out the direction of magnetic field in a current carrying conductor? State the law ? (2)

15. The X, Y, Z terminals of the given electric iron box is connected to which of the terminals of the sockets via a three pin plug ? (1)
How can safety be ensured using a three pin plug ? (2)

