

**CLASS TEST -PHYSICS**

LESSON 1&2

*GTHS ADIMALY*

SCORE :20  
TIME:1 HOUR

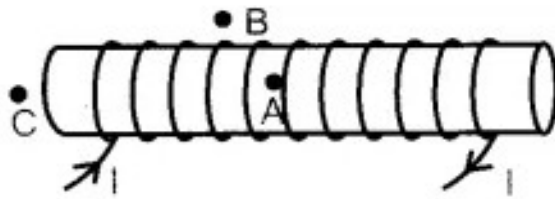
1. Identify the picture 1/2



- 2.LED : Lighting effect, safety fuse:----- 1/2
- 3.Explain the working of discharge lamps 2
- 4.Three devices are connected to a circuit having voltage 240 V. An electric iron having power 750 W , Mixie having power 1000 W, and a bulb having power 20 W.
- a. Find the total wattage in the circuit 1
- b. Find the amperage of the fuse wire to be connected 1
5. State the Joule's Law 1/2
6. A circuit has 240 voltage. A bulb having power 100 W is connected to this circuit. If the voltage is reduced to half ,find the amperage of the bulb. 2
- 7.Write the reason for filling bulb with an inert gas 1/2
- 8.Which is the rule related to direction of magnetic field around the current carrying conductor 1/2

9. Draw the magnetic field around the following solenoid

1/2



a. In the picture there are three points marked as A, B, C. In these points, which are the points the maximum and minimum field strength is felt

1

Justify your answer.

1

10. Write an experiment report to explain the magnetic field is produced while passing current through a circular coil, with help of picture.

2

11. By drawing picture, explain a current carrying conductor that is placed in a magnetic field experiences a force.

2

a. Which are the factors that affect the force on the conductor?

b. What are the change in the movement of the conductor if the direction of current changes?

1

12. Which are the situations that lead to short circuit?

2

13. A positively charged particle is moving towards east and it is deflected towards south due to magnetic field. Find the direction of magnetic field

1