CBSE TEST PAPER-01

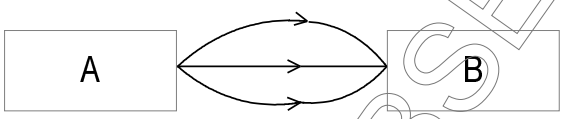
CLASS - X Science (Magnetic effects of electric current)

1. Magnetic field lines determine (1)
   (a) The shape of magnetic field
   (b) Only the direction of magnetic field
   (c) Only the relative strength of the magnetic field
   (d) Both the direction and the relative strength of magnetic field

2. A device for producing electric current is called a (1)
   (a) Galvanometer (b) Motor (c) Generator (d)Ammeter

3. At the time of short circuit, the current in the circuit (1)
   (a) vary continuously (b) reduced considerably
   (c) increases heavily (d) does not change

4. Figure shows the magnetic field lines between the two faces A and B of two magnets. (1)



   (a) Both faces A and B of two bar magnets are North pole.
   (b) Both faces A and B of two bar magnets are South pole.
   (c) Face A is south pole while face B is north pole.
   (d) None of the above.

5. The magnetic field near a long straight wire is described by (1)
   (a) Straight field lines parallel to the wire.
   (b) Straight field lines perpendicular to the wire.
   (c) Connective circle centered on the wire.
   (d) Radial field lines starting from the wire.

6. State two properties of magnetic lines of force? (2)

7. Why does a compass needle deflected when brought near a bar magnet? (2)

8. The magnetic field lines in a given region is uniform. Draw a diagram to represent. (2)

9. Write two ways to induce current in a coil? (2)

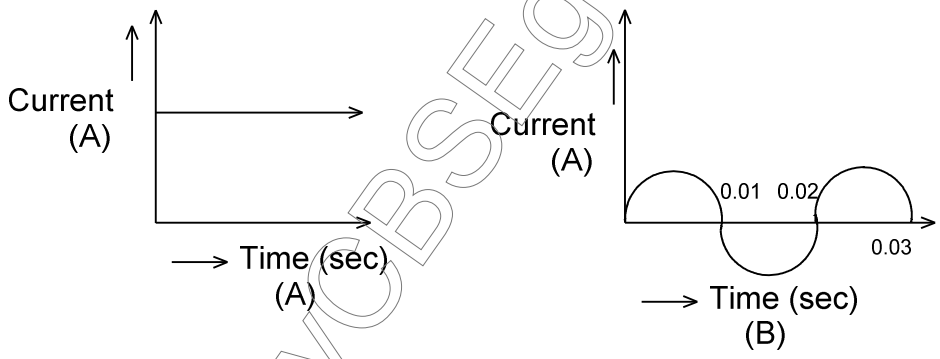
10. What is the function of an earth wire? Why is if necessary to earth metallic casing of electric appliance? (3)

11. We know a current carrying conductor placed in a magnetic field experiences a force due to which the conductor moves. How do we think the rod displaces if- (3)
(a) current in rod is increased (b) a stronger horse shoe is inserted (c) length of the rod is increased.

12. What is the principle of electric motor? State the function of (3)
(a) split ring (b) field magnet used in electric motor.

13. State three factor on which magnetic field produced by a current carrying solenoid depends. (3)

14. Current- time graph from two different sources are shown in the figure. (5)



(i) Name the type of current shown by graph (A) and (B)?
(ii) Name any one source of shown by (A) and (B)?
(iii) What is frequency of current in case (B)?
(iv) Write two difference between current shown by (A) and (B)?