

Magnetic Effects of Electric Current

ONE MARKS QUESTION

1. What is a solenoid?
2. What is the direction of the magnetic field lines inside a bar magnet?
3. What is the direction of the magnetic field lines outside a bar magnet?
4. State two uses of electromagnet.
5. An electron moving along X – axis in a magnetic field along Y – axis. In which direction will the electron deflected.
6. State Fleming's left hand rule.
7. Name the sources of direct current.
8. What is the role of split ring in an electric motor?
9. What is an earth wire?
10. What is the surer test of magnetism?
11. What happens if we break a magnet into two pieces?
12. What is the effect of placing an iron core in a solenoid?

TWO MARKS QUESTION

13. What is an electromagnet?
14. What is the difference between a direct current and an alternating current? What is the frequency of AC in India?
15. State the rule to find the direction of magnetic field produced around a current-carrying conductor.
16. Give two points of difference between and electromagnet and permanent magnet.
17. Draw the lines of force indicating field direction of the magnetic field through and around
Single loop of wire carrying electric current.
18. A solenoid carrying electric current. What is magnetic field? How is the direction of magnetic field at a point determined ?
19. How do the field lines of the regions of strong field different from those of weak field?
20. Give two advantages of electromagnets.
21. Give four features of domestic electric wiring.
22. Should a copper wire be used as a fuse wire? If not, why?
23. What is the importance of earth wire?
24. Explain the magnetic effects of current with the help of an activity along with labeled diagram.

THREE MARKS QUESTION

25. What is the role of fuse, used in series with any electrical appliance? Why should a fuse with defined rating not be replaced by one with a larger rating?
26. Why does a magnetic compass needle deflect when a bar magnet or a current-carrying loop is brought near it.

Draw a schematic diagram of domestic wiring system and write its main features.

. Match the following:

A

B

- | | |
|-----------------------------|---|
| . Right hand thumb rule | . Force on a conductor in a magnetic field |
| . Fleming's left hand rule | . Direction of magnetic field of straight conductor |
| . Fleming's right hand rule | . Direction of induced current in conductor |
| | . Polarity of any end of a solenoid. |

38. Draw a labelled diagram to show how electro – magnet is made.
39. What is the purpose of soft iron core in making electromagnet?
40. Write two differences between AC and DC current and draw diagram also.
41. What is solenoid ? Draw the field lines of the magnetic field produced on passing current through and around a current carrying solenoid.

FIVE MARKS QUESTION

42. Write principle of electric generator. Explain construction and working of generator.
Draw labeled diagram of electric generator.
43. Describe any five safety measure that should be taken while dealing with electric appliance connected in domestic electric circuit.