PRACTICE ASSIGNMENT
MAGNETIC EFFECTS OF CURRENT

1. What is magnetic field?

2. What will be the frequency of an alternating current, if its direction changes after every 0.05 s?

3. What is the principle on which working of electric generator is based? What are its important parts?

4. Why two magnetic lines of force don't intersect each other?

5. Give two methods by which we can increase the strength of magnetic field produced by a circular coil carrying current?

6. What are the patterns of magnetic field lines inside and outside of a solenoid? What do they indicate?

7. What are the factors which govern the force experienced by a current carrying conductor placed in a uniform magnetic field depends?

8. Distinguish between an electric motor and generator?

9. Why mostly all electrical home appliances like refrigerator, toaster etc. are provided with a wire having green insulation?

10. Describe about short circuiting and overloading in detail.

11. What is an electromagnet? On what factors its magnetic field depends?

12. Mention the differences between an electromagnet and a permanent magnet.

13. What do you understand by magnetic effect of electric current?

14. Explain Maxwell's right hand thumb rule?

15. What are the properties of magnetic field due to a current through a straight wire?

16. Which rule is used find the direction of the force on a conductor in a magnetic field. Explain?

17. Give characteristics of magnetic field lines.

18. What do you mean by electromagnetic induction?

19. A current through a horizontal power line flows in north to south direction. What is the direction of magnetic field (i) at a point directly below it and (ii)at a point directly above it?

20. A straight wire carrying electric current is moving out of plane of paper and is perpendicular to it. What is the direction and type of induced magnetic field?

21. How can it be shown that magnetic field exist around a wire carrying current?

22. Give the factors that affect strength of magnetic field at a point due to a straight conductor carrying current.

23. Where do we connect a fuse: with live wire or with neutral wire?

24. Give two uses of electromagnets.

25. Name any two devices which use permanent magnets.