Physics Class Notes

Use of Magnetic Effect of Electricity

In Electric fan, motor, etc... we make use of magnetic effect of electricity.

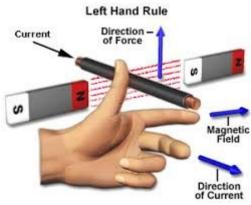
Motor Principle

A current carrying conductor which can move freely which is kept in a magnetic field experiences a force and it moves. This is called motor principle.

The direction of the force is obtained from Fleming's Left Hand Rule.

Fleming's Left Hand Rule

Hold the forefinger, middle finger and thumb of the left hand in mutually perpendicular direction such that the forefinger indicates the direction of magnetic field and the middle finger; the direction of current through the conductor, then the thumb will indicate the direction of force.

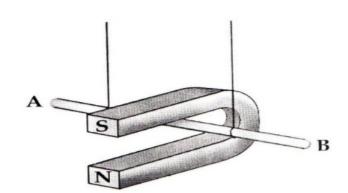


1. What are the factors affecting the force experienced in a current carrying conductor placed in a magnetic field?

- i. Direction of current
- ii. Direction of magnetic field.

Home Work

1.



If the current passes from A to B, then in which direction the conductor will move?