

Physics Class Notes

Chapter 3- Electromagnetic Induction

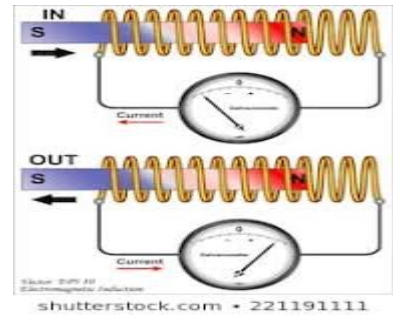
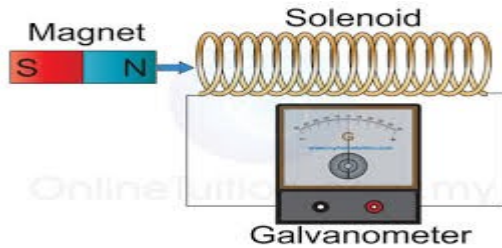
Galvanometer

Galvanometer is device used to detect the presence and direction of electric current

Symbol-



Electromagnetic Induction-Experiment



1. Why did the galvanometer needle deflect in the experiment?

Ans: Whenever there is a change in the magnetic flux linked with a coil, an emf is induced in the coil.

2. Which are the instances in which there was a flow of current through the solenoid?

Ans: Whenever there is a relative motion between the magnet and the solenoid, there is a flow of electricity.

Electromagnetic Induction

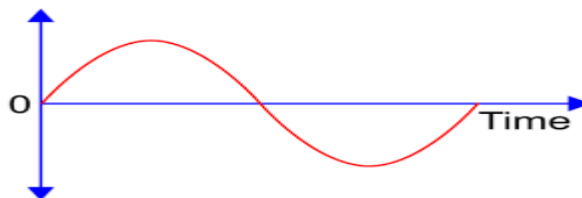
Whenever there is a change in the magnetic flux linked with a coil, an emf is induced in the coil. This phenomenon is electromagnetic induction. The emf thus developed is called **Induced emf** and the current is called **Induced current**.

Factors Affecting Induced emf

- Number of turns of the coiled conductor.
- Strength of the magnet.
- Speed of motion of either the magnet or the coil.

Alternating Current (AC)

Current that changes at regular intervals of time, is an alternating current.



Direct Current (DC)

A current that flows only in one direction continuously is a direct current.

