

# Physics Class Notes

## 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.

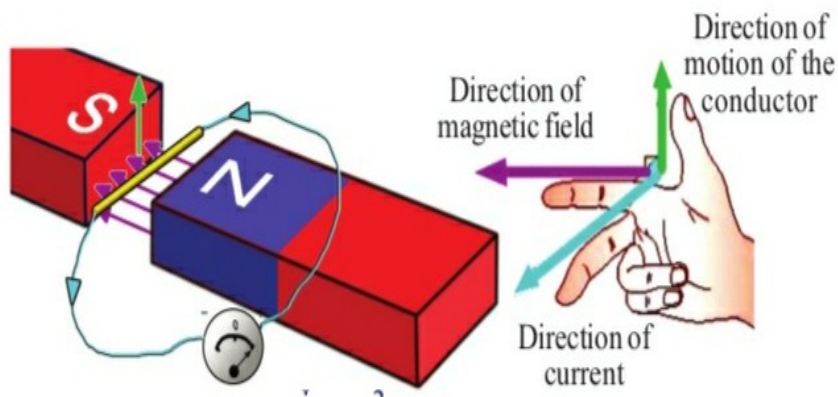
1. Which are the factors on which the direction of induced current in electromagnetic induction depend?

- Direction of the magnetic field.
- Direction of motion of the conductor or the coil.

The British Scientist John Ambrose Fleming discovered that the induced emf would be maximum if the conductor is moved perpendicular to the magnetic field lines. The direction of induced emf can be obtained from Fleming's Right Hand rule.

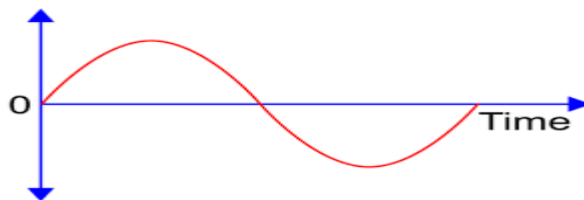
## Fleming's Right Hand Rule

Imagine a conductor moving perpendicular to a magnetic field. Stretch the forefinger, middle finger and thumb of the right hand in mutually perpendicular directions. If the forefinger represents the direction of magnetic field, and the thumb represents the direction of motion of the conductor, then, the middle finger represents the direction of the induced current.



## 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.

