

SECTION - 5

Q1

Faraday's law's of electromagnetic.
In 1831, Micheal Faraday formulated two laws on the basis of experiments. These laws are called Faraday's laws of electromagnetic induction.

FIRST LAW:- First law of Faraday's electromagnetic induction state that whenever a conductor are placed in a called induced emf. If the conductor circuit are closed current are also induced which is called induction current.

SECOND LAW:- Second law of Faraday's electromagnetic induction state that the induction emf is equal to the rate of change of Flux linkage.

[Faraday's law :- $-N d\phi / dt$ volt]

Lenz's law:- Lenz's law stated that the direction of the current induced in a conductor by a changing magnetic field is such that the magnetic field created by the induction current

[$\mathcal{E} = -N \frac{\partial \phi_B}{\partial t}$]