



Physics

Worksheet 1 : 09/08/2020

Class - X

**CHAPTER 12 : MAGNETIC EFFECTS OF CURRENT****Instructions:**

- ✓ Read the chapter in your book - quickly and thoroughly, preferably more than once.
- ✓ Watch the uploaded video classes from school's website. For becoming more clear about the basics, watch more than once, if needed.

(Questions given in this worksheet are important questions for all exams)

- ✓ Learn the answers given in this worksheet.
- ✓ Contact me in case of any difficulties in understanding.

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**Cognitive Questions (Mark 1)****1. What is electromagnetic induction?**

Ans.: During the time of changing the magnetic field in a coil of wire, the generation of voltage and current in the coil is called electromagnetic induction.

**2. What is solenoid?**

Ans.: Solenoid is a cylindrical coil of wire which creates magnetic field like a bar magnet when electricity flows in it.

**3. What is the magnetic effect of current?**

Ans.: When current flows through a conductor, a magnetic field is produced around it which is called the magnetic effect of current.

**4. Who invented the magnetic effect of current?**

Ans.: Oersted invented the magnetic effect of current.

### Analytical Question (Mark-2)

#### **1. How can you increase the strength of an electromagnet?**

Ans.: The strength of an electromagnet can be increased in following ways -

- i. By using soft iron core.
- ii. By increasing flow of current.
- iii. By increasing number of coil of solenoid.
- iv. By bending the iron rod in the form of alphabet 'U' and keeping two ends of 'U' as close as possible.

#### **2. What do you mean by induce current and induce voltage?**

Ans.: The process of creating electric current by changing the distance of the circuit which can create voltage temporarily to another closed circuit is called electromagnetic induction.

This voltage is known as an induced voltage and the current is known as an induced current.