

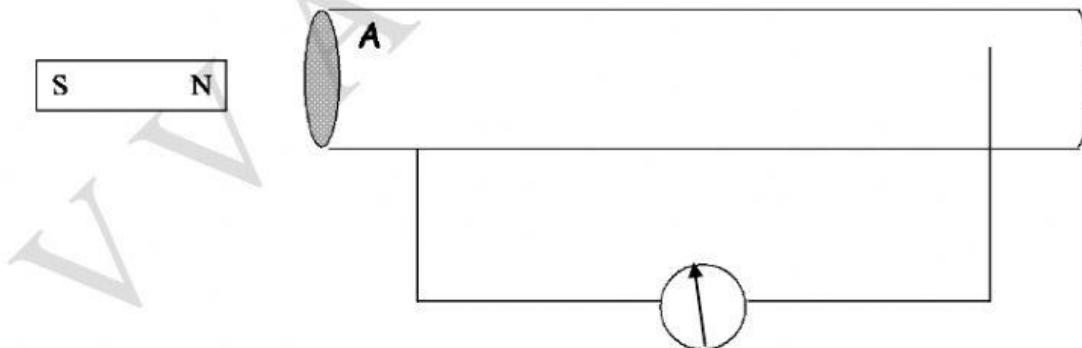
## Worksheet on - Electromagnetic Induction.

**I**) Fill in the blanks with the words shown underneath by drag and drop in appropriate place:

- 1) When there is relative movement between a wire and a magnetic \_\_\_\_\_, then a \_\_\_\_\_ is \_\_\_\_\_ in the wire.
- 2) This is the principle used in a \_\_\_\_\_ and a dynamo.
- 3) Faraday found that the strength of the induced current \_\_\_\_\_ on:
  - i) the \_\_\_\_\_ of the movement
  - ii) the \_\_\_\_\_ of the magnet
  - iii) the \_\_\_\_\_ of turns on the coil.
- 4) Lenz's Law states that the \_\_\_\_\_ of the induced current is such that it always \_\_\_\_\_ the change producing it.

[ depends, current, opposes, number, turbine, direction, strength, induced, field, speed ]

**II**): Consider the diagram shown below.



Use Lenz's Law to explain what happens to the polarity of end A when the magnet is moved towards and the magnet move back to face A of the coil.

**NORTH, NORTH**

**NORTH, SOUTH**

**SOUTH, SOUTH**