

# Chapter:6

## (Moving Iron Instruments)

Lecture:1

# Description of Moving Iron Instruments:

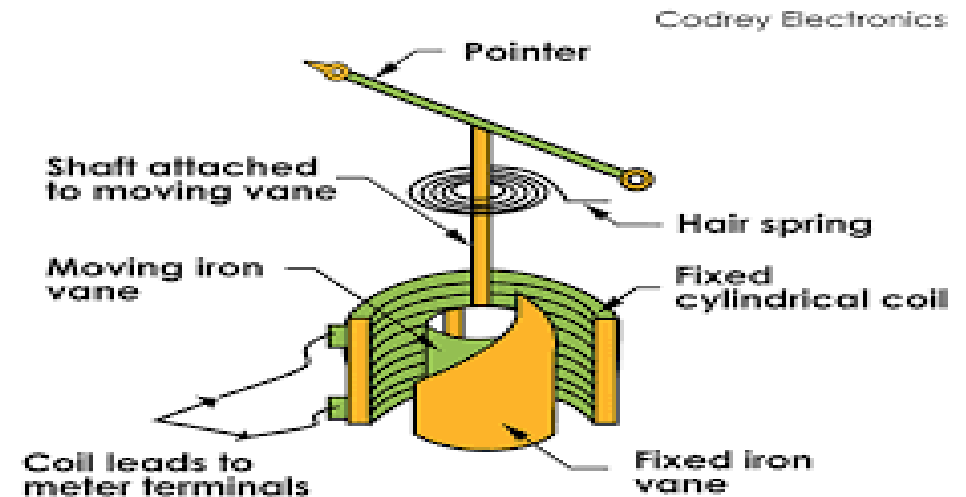
- Moving-iron instruments are generally used to measure alternating voltages and currents. In moving-iron instruments the movable system consists of one or more pieces of specially-shaped soft iron, which are so pivoted as to be acted upon by the magnetic field produced by the current in coil.

# Types of Moving Iron Instruments:

- **There are two general types of moving-iron instruments namely:**
- Repulsion (or double iron) type (figure 1)
- Attraction (or single-iron) type (figure 2)

# Repulsion (or double iron) type:

- Repulsion Type (double Iron)
- **A shaft is attached to the moving iron.** A cylindrical stationary coil is used to produce the magnetic field when there is a flow of current through it. A pointer is fixed on the shaft which gets deflected shows the reading on a non-uniform scale.



# Attraction (or single-iron) type:

- What is Attraction type moving iron instrument?
- Definition: The instrument in which the moving iron is used for measuring the flow of current or voltage is known as the moving iron instrument. It works on the principle that the iron placed near the magnet attracts towards it. The force of attraction depends on the strength of the magnet field.

## What is Moving Iron Instrument?

