

## **SNS COLLEGE OF ENGINEERING**

Kurumbapalayam (Po), Coimbatore – 641 107

#### An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A' Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

### **DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

### **COURSE NAME : 19EE101-BASIC ELECTRICAL & ELECTRONICS ENGINEERING**

I YEAR /I SEMESTER CSE & CST



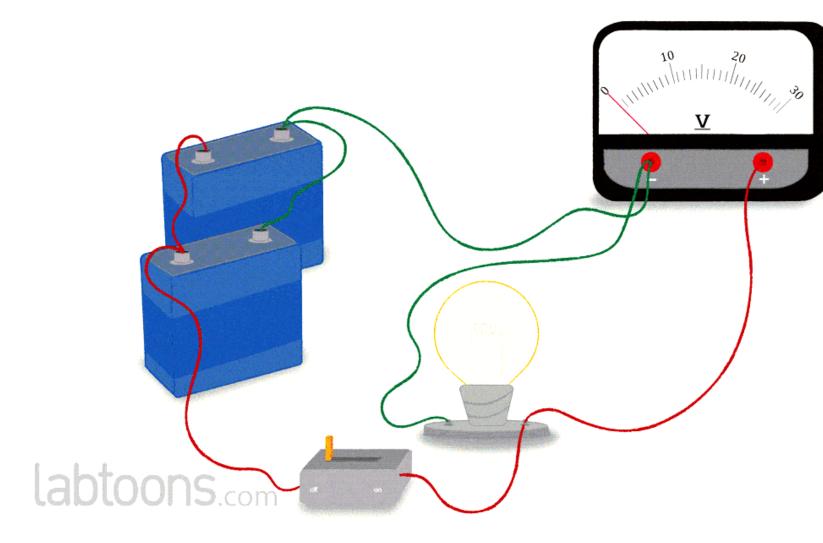
Unit 1: Electrical Circuits & Measurements

**Topic : Measuring Instruments** 





## **HOW IT IS WORKING? ANY GUESS?**





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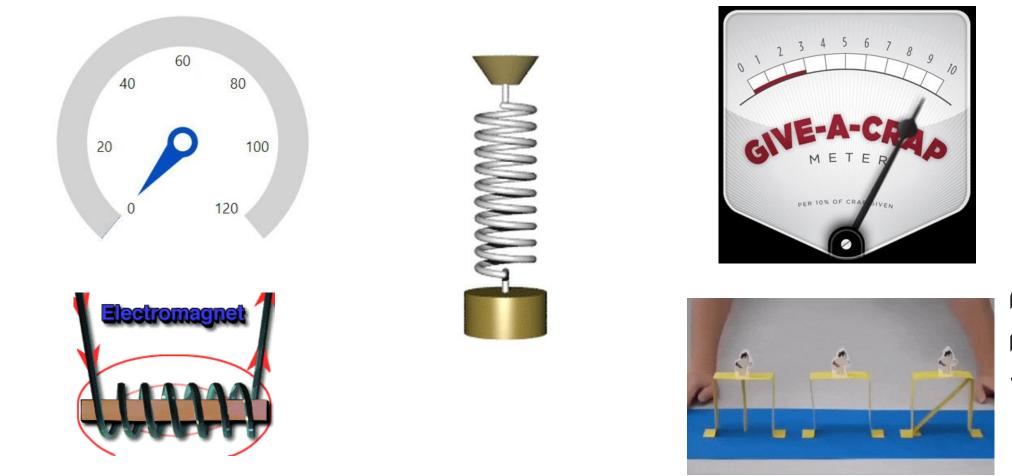


## **TORQUE IN MEASURING INSTRUMENTS**

### DEFLECTING TORQUE

CONTROLLING TORQUE

DAMPING TORQUE







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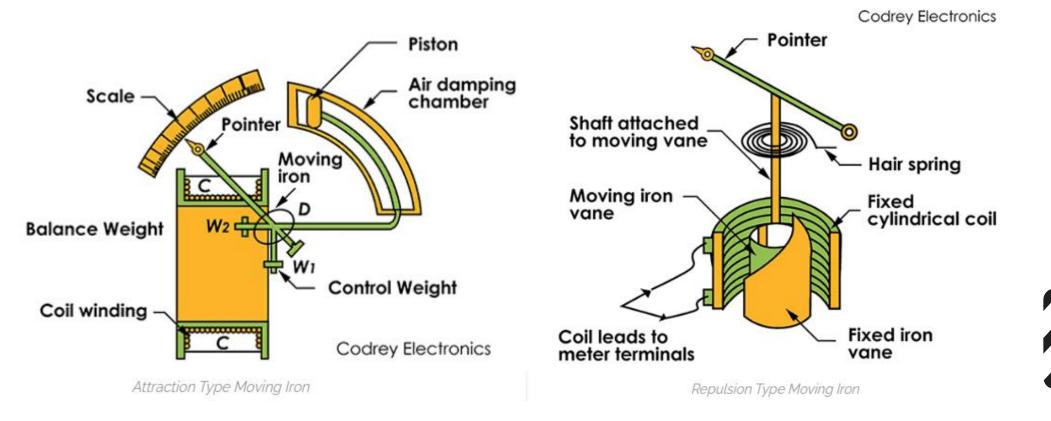
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## **MOVING IRON INSTRUMENT (MI)**

Attraction Type Moving Iron Instrument

**Repulsion Type Moving Iron Instrument** 



#### AC MEASUREMENT



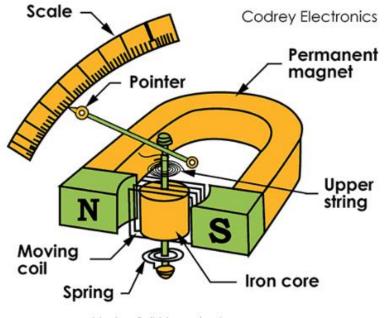
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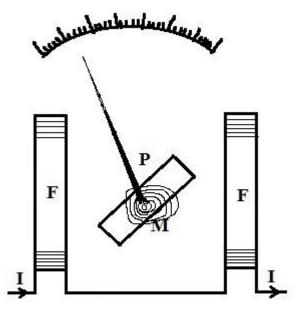


# **MOVING COIL INSTRUMENT (MC)**

#### PERMENANT MAGNET MOVING COIL INSTRUMENT



Moving Coil Measuring Instrument



Dynamometer type instrument

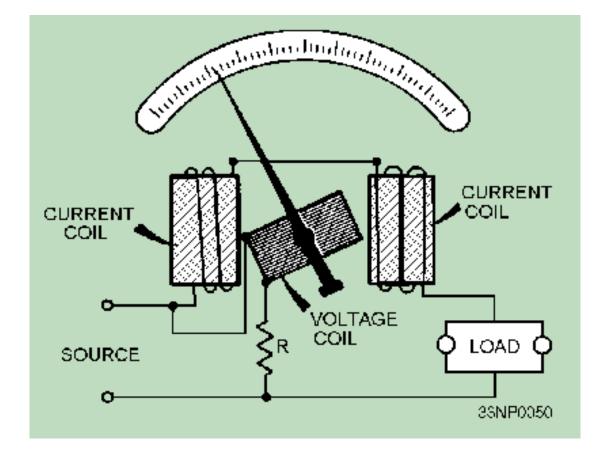


#### DYNAMOMETER TYPE MOVING COIL INSTRUMENT





### **DYNAMOMETER TYPE WATTMETER**



### To measure AC Power

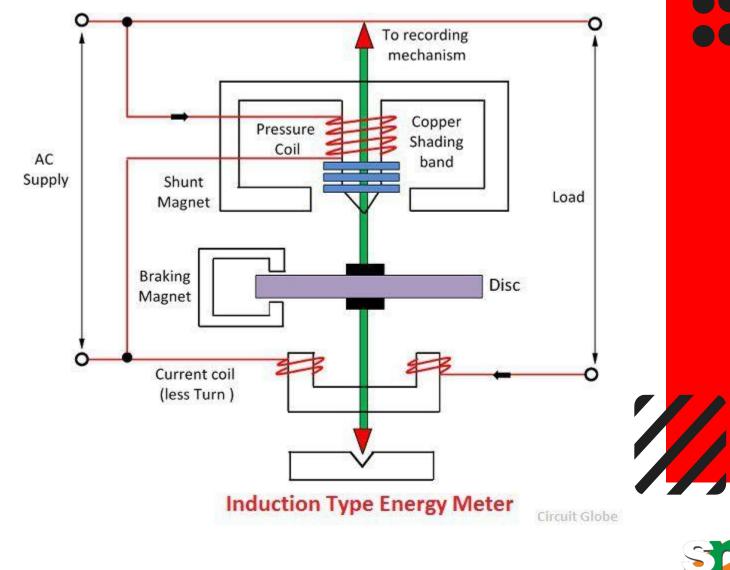






# **ENERGY METER**







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## REFERENCES

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- Bhattacharya. S.K, "Basic Electrical and Electronics Engineering", Pearson Education, (2017) – UNIT I – IV
- Mehta V K, Mehta Rohit, "Principles of Electrical Engineering and Electronics",
  S.Chand & Company Ltd, (2010)- UNIT I and II
- Mehta V K, Mehta Rohit, "Principles of Electronics", S.Chand & Company Ltd, (2005)- UNIT IV and V

## **THANK YOU**

