

# Chapter:11

(Power measurement in Three-phase circuit)

Lecture-1



## Power measurement in Three-phase:

- In a balanced 3-wire, 3-phase load circuit the power in each phase is equal and, therefore, the total power of the circuit can be determined by multiplying the power measured in any one phase. Hence, the power measurement in three-phase, three-wire circuits can be carried out by using the one wattmeter only.

- In ac circuits, power is measured with the help of wattmeter. A wattmeter is an instrument, which consists of two coils called the potential coil (PC) and the current coil (CC).
- The potential coil having high resistance is connected across the load and carries the current proportional to the potential difference across the load. The current coil having low resistance is connected in series with the load.

The three phase power measurement can be carried out using the following methods:

- One wattmeter method
- Two wattmeter method
- Three wattmeter method.