# LAB REPORT-05

## Experiment No : 5
## Experiment Name: Three Phase Sequence test using Bulb.

## Objectives:
(i)To observe the three phase sequence by observing light intensity of bulb.

## Theory:
Phase sequence in a three-phase system refers to the order in which the voltages reach their greatest positive value. In a three-phase system, the frequency is electrically displaced by a 120° angle, but there are three voltages or EMFs of the same magnitude.

The order in which the three phases of a three-phase system attain their maximum values is known as the phase sequence. Phase sequence ABC, for instance, would occur if phase A peaks before phase B and phase B peaks before phase C. The phase sequence is CBA if phase C reaches its peak before phase B and phase B reaches its peak before phase A. Depending on the orientation, the phase sequence might be either.

## Diagram:

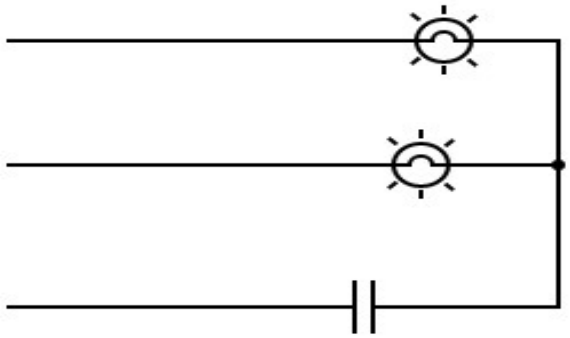
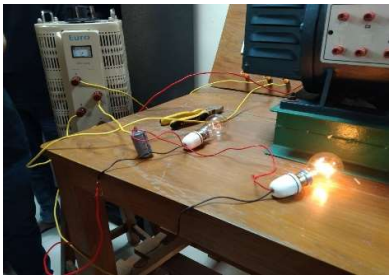


**Fig-1: Sequence test of bulbs**

## Required Apparatus:
1. Two Bulb
2. Connecting Wires
3. VARIAC
4.Capacitor / Inductor

**Results:**

When the capacitor is used the less bright bulb is considerd as B. So the middle bulb was less bright there for the sequence was ABC as shown in the picture below.



When the source sequence was changed the terminal light was less bright. Therefore it was considered as B. So the phase sequence was observed as ACB as given in the picture below