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

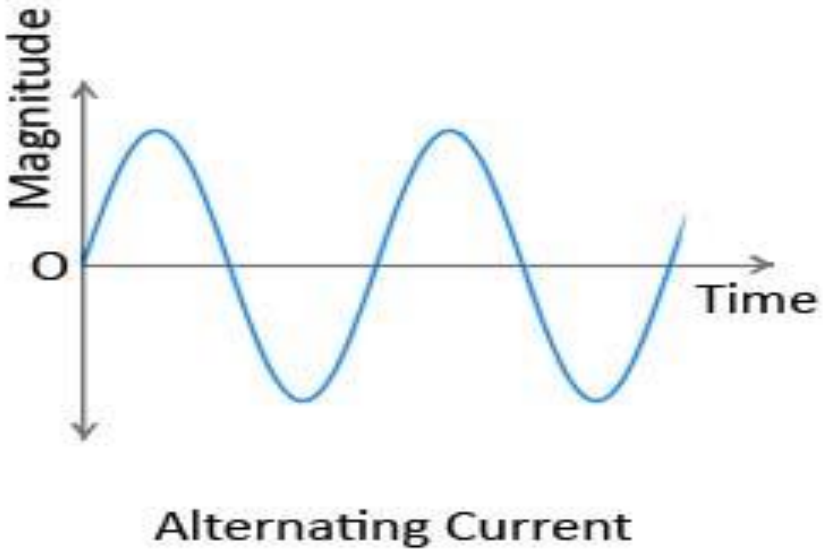
COURSE NAME : 19EE101 BASIC ELECTRICAL AND ELECTRONICS ENGINEERING

I YEAR /I SEMESTER MECHANICAL ENGINEERING

Unit 1 – Electrical Circuits and Measurements

AC & DC Circuits

AC CIRCUITS



AC is a sinusoidal in nature which have frequency in its signal

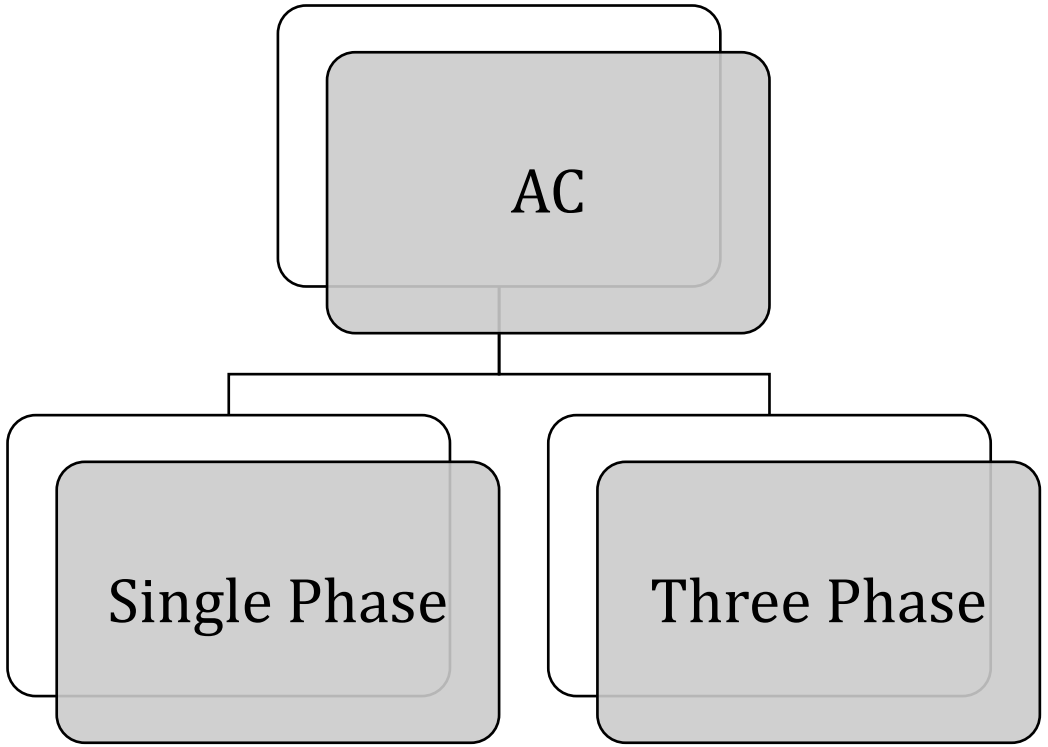
Frequency F= (1/T)

V- Voltage

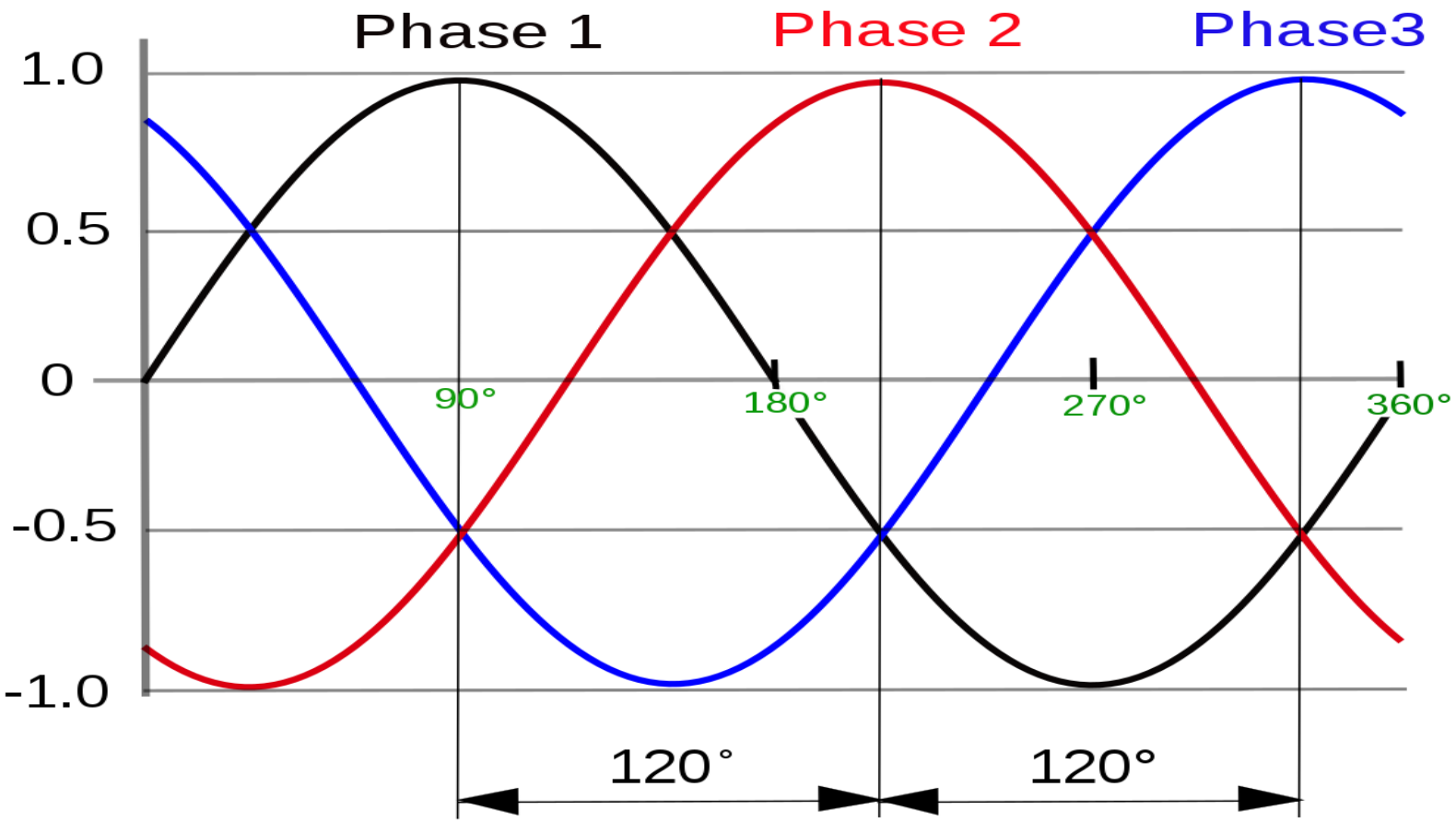
I- Current

Z- Impedence

TYPES OF AC



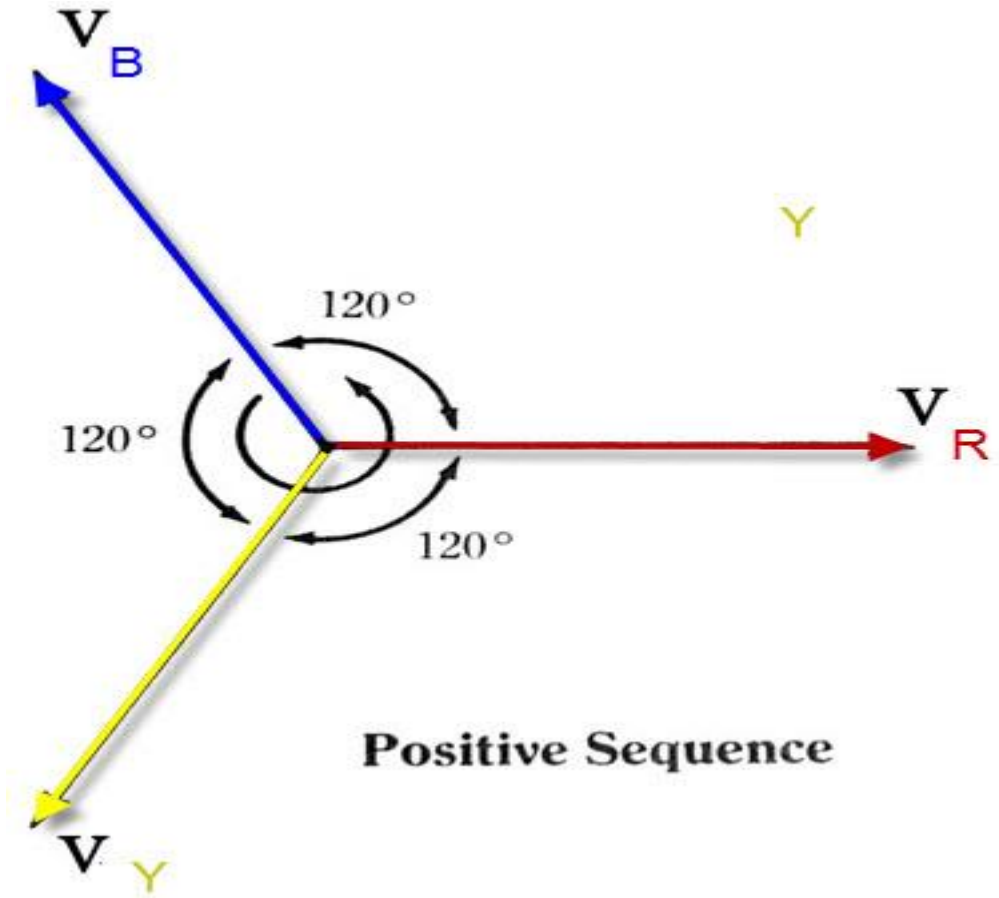
THREE PHASE SUPPLY



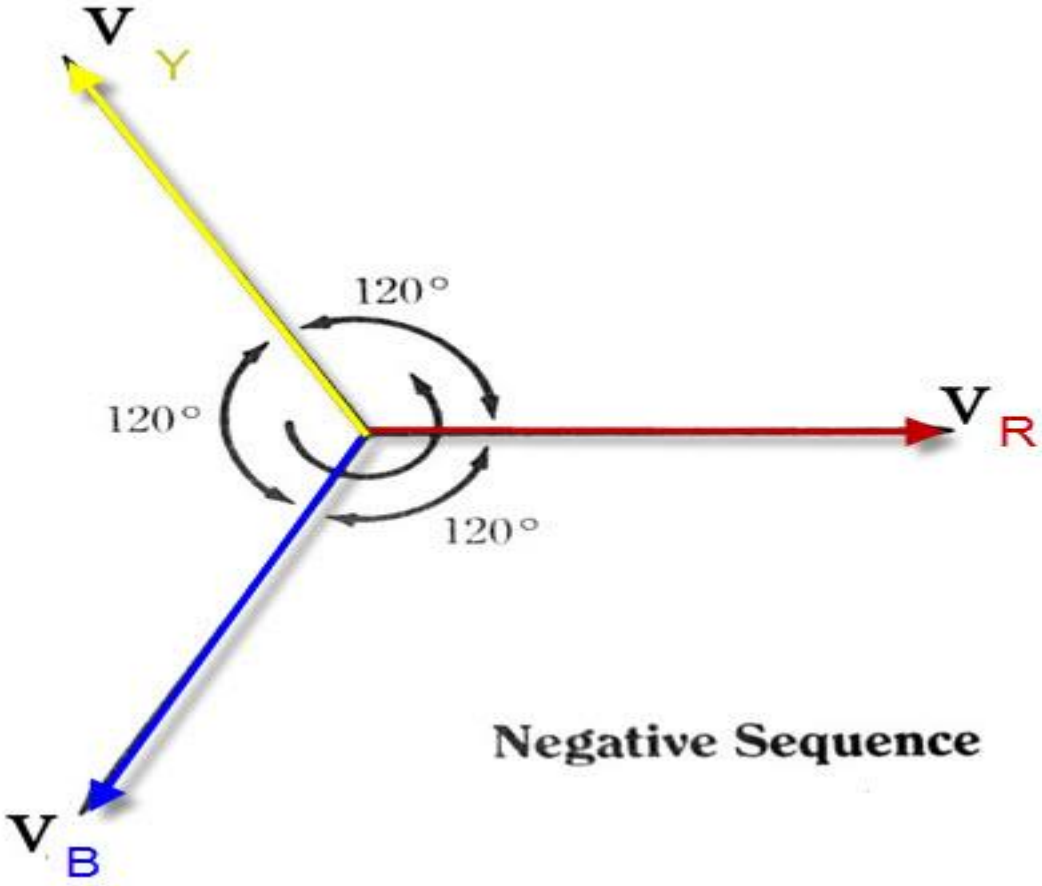
ADVANTAGES OF THREE PHASE SUPPLY

- More power
- Smaller in size with higher capacity
- Self starting
- P.f and efficiency
- More economical

AC & DC

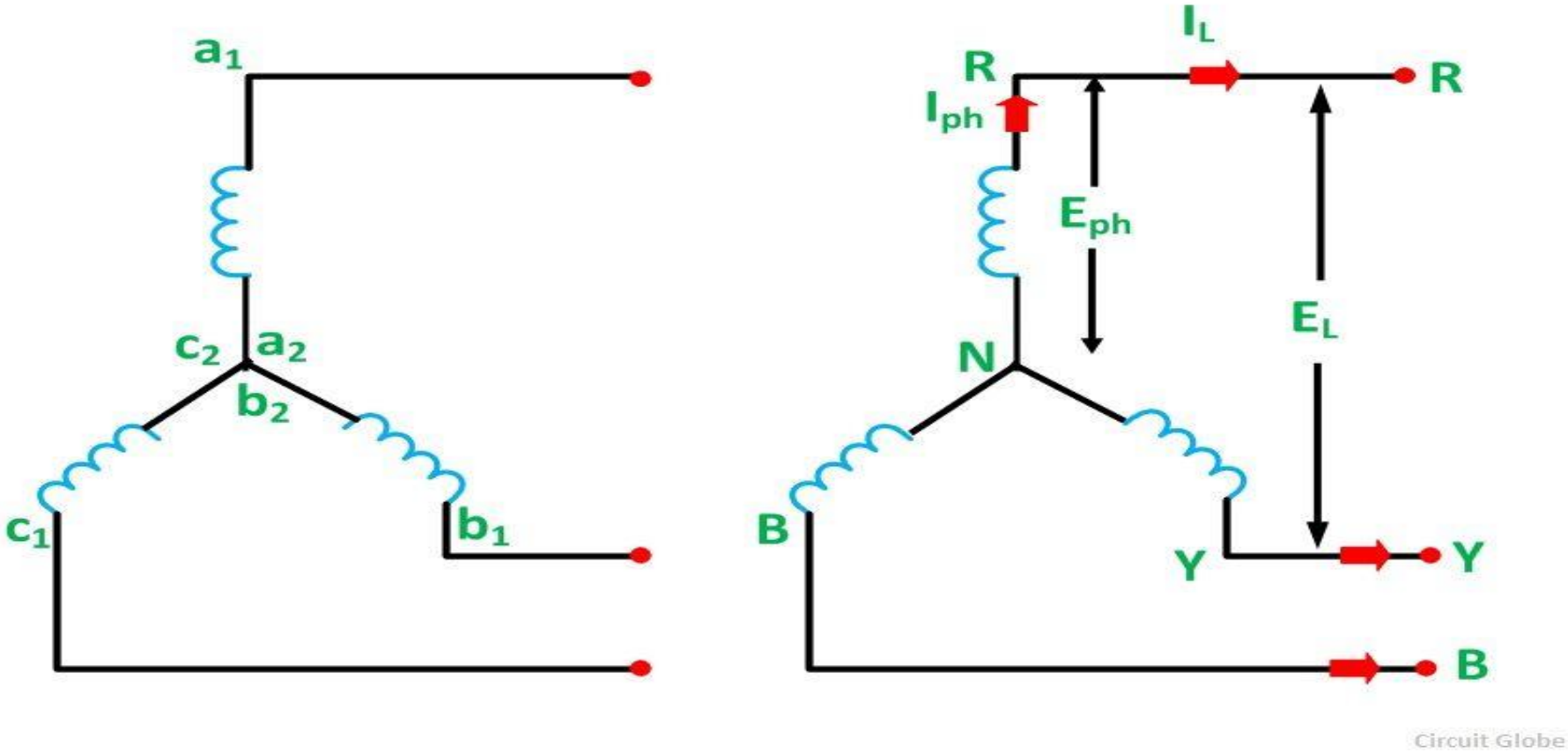


Positive Sequence

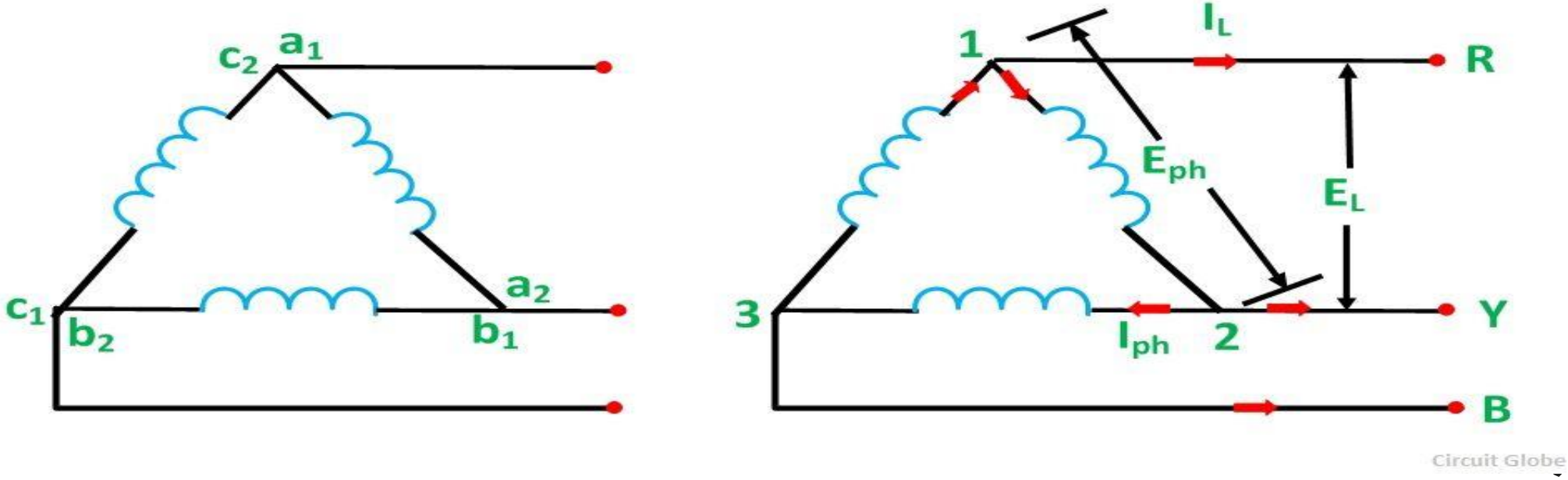


Negative Sequence

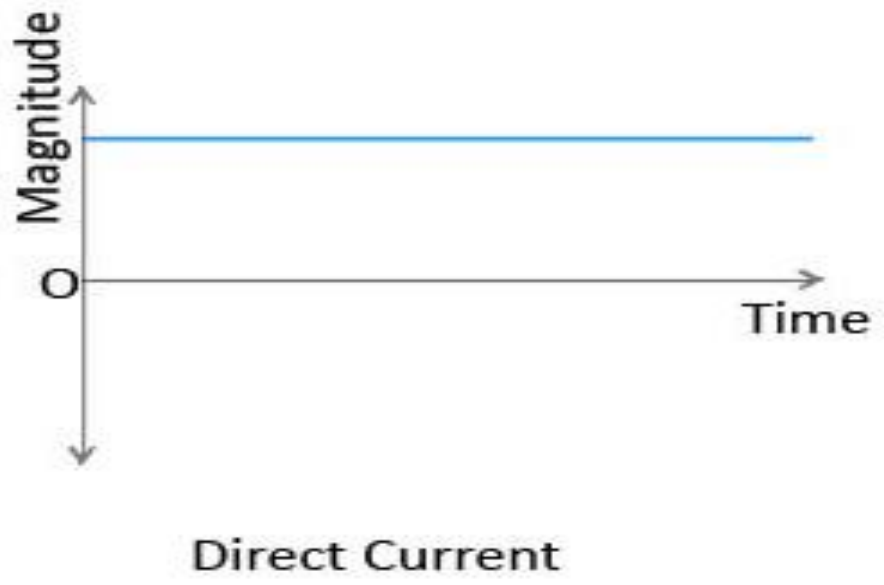
Star connection



Delta connection



DC



DC source is Direct current where the frequency is zero

I-Current
V-Voltage
R-Resistance

REFERENCES

1. Bhattacharya. S.K, “Basic Electrical and Electronics Engineering”, Pearson Education , (2017)
2. Muthu Subramanian R, Salivahanan S,“ Basic Electrical and Electronics Engineering”, Tata McGraw Hill Publishers, (2009)
3. V.Mittle“ Basic Electrical Engineering”, Tata McGraw Hill Publishers, (2017)
4. Nagrath. I.J, “Electronics: Analog and Digital”, Prentice Hall India Pvt. Ltd., (2013)

THANK YOU