

(Please Write your Roll No immediately)

Roll No.....E-015.....

Class Test-2

B. Tech – 1st Semester

Paper Code: ES -107

Time: $1\frac{1}{2}$ hour

February 2023

Subject: Electrical Science

Max. Marks: 30

Note: All Questions are Compulsory.

Q.1. Write short answers.

(5x2 =10 Marks)

- (a) ✓ What do you understand by Generated Voltage in DC Generator.
- (b) ✓ Discuss in brief the principle of operation of Three – Phase Induction Motor?
- (c) ✓ Discuss in brief the armature rheostatic speed control of DC Shunt Motor?
- (d) ✓ Discuss in brief Deflecting Torque in Indicating Instruments?
- (e) ✓ Discuss in brief Ideal Transformer.

Q.2 (a) ✓ Discuss in brief the Construction of DC Machine. (5 Marks)

(b) ✓ Discuss in brief Direct On-Line Starter. (5 Marks)

Q.3 (a) ✓ Discuss in brief Attraction Type Moving Iron Instrument. (5 Marks)

(b) ✓ Discuss in brief Three – Phase Transformer Connections. (5 Marks)

Q.4 Draw the phasor of transformer of parallel load

- (i) for resistance load
- (ii) for resistance inductor load
- (iii)