

S.B. Roll No.....

ELECTRICAL MACHINES
3rd Exam/ECE/6189/Jan'2022
(FOR 2018 BATCH ONWARDS)

Duration: 1.15Hrs.

M.Marks:25

SECTION-A

Q1. Attempt any three questions.

3x5=15

- i. Describe advantages of 3 phase system over a single phase system.
- ii. What is the significance of back e.m.f.?
- iii. What is the difference between power transformer and distribution transformer
- iv. Discuss one wattmeter method to measure power in a 3 phase load.
- v. What is the principle of operation of universal motor?
- vi. Name important characteristics of a synchronous motor not found in the induction motor.
- vii. Discuss the advantages of an auto transformer.

SECTION-B

Q2. Attempt any one question.

1x10=10

- a. Explain the principle of working of a 3 phase induction motor with the help of diagram.
- b. Define efficiency of a transformer and derive the condition for obtaining maximum efficiency.
- c. Explain with neat sketch the working of a three point D.C. shunt motor starter.
- d. Draw and explain no-load characteristics of dc generator.