S	R	Roll	No

# POWER ELECTRONICS 4<sup>th</sup> Exam/ECE/6163/Jun'2021 (For 2018 batch onwards)

Duration: 1.15Hrs. M.Marks:25

### **SECTION-A**

### Q1. Attempt any three questions.

3x5=15

- i. Write short note on Programmable uni-junction transistor
- ii. Explain the constructional detail of TRIAC
- iii. Explain the working of UJT as relaxation oscillator.
- iv. With a neat diagram, explain the complementary commutation technique of SCR.
- v. Explain the different control strategies to control duty cycle in a chopper.
- vi. Explain the basic principle of operation of an inverter?
- vii. List all important applications of cycloconverter?

### **SECTION-B**

## Q2. Attempt any one question.

1x10=10

- a. Give the constructional detail and explain the characteristics of SCR.
- b. Explain the working of chopper. Explain Class A and Class B choppers
- c. Explain single phase full wave centre tap rectifier?
- d. Write short notes on dual converter and its applications?