# POWER ELECTRONICS 4<sup>th</sup> Exam/ECE/6163/Jan'2022 (FOR 2018 BATCH ONWARDS)

## Duration: 1.15Hrs.

#### SECTION-A

Q1. Attempt any three questions.

- i. What is a DC Chopper? Explain Step-down DC Chopper?
- ii. Name the various SCR Triggering methods. Explain any one of them.
- iii. Write a short note on UPS.
- iv. Explain the working principle of dual converter?
- v. How thyristor can be used for illumination control?
- vi. Draw the V-I characteristics of TRIAC and Explain its working?
- vii. Explain Class A commutation technique of SCR?

#### **SECTION-B**

## Q2. Attempt any one question.

### 1x10=10

- a. Explain with the help of a circuit diagram, the working principle of a parallel inverter?
- b. Explain the construction detail and working principle of UJT. How it act as relaxation oscillator
- c. Describe the working of single-phase half wave controlled rectifier with R-L load?
- d. Draw the V-I characteristics of a SCR and explain its working?

3x5=15

M.Marks:25