**BTE10**

**Sixth Semester B. Tech Electrical Engineering**

**Examination Aug/Sep-2015**

**Industrial Electronics and Devices**

**Time:-3Hours Max. Marks: - 75**

**SECTION-A**

**Answer any five questions. (5\*5)**

1. Briefly write about driving transistors & thyristors.
2. What are Counters? What are its different forms?
3. Give a short note on Machine Control Unit (MCU).
4. What is ‘Post processing’? Mention its different types.
5. Define ‘DC choppers’.
6. What do you mean by drum sequencer?
7. Clarify the following principles of CNC:
	1. Point-to-Point systems b. Continues Path systems

**SECTION-B**

**Answer any two questions. (10\*2)**

1. Explain MOSFET trans-conductance.
2. Diagrammatically explain the symmetrical silicon-controlled rectifier.
3. Explain with diagram, the single-phase UPS.

**SECTION-C**

**Answer any two questions. (15\*2)**

1. Explain the following:
	1. IGBT at turn-on
	2. IGBT in the on-state
	3. IGBT at turn-off
2. Elaborate half-wave circuit with an R-L load.
3. Write a detail note on resonant inverters.