**BEME5-1**

**Seventh Semester B. Tech Mechanical Engineering**

**Examination Aug/Sep-2015**

**Elective- Mechatronics**

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

**SECTION-A**

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

1. Define the term Resistance.
2. Write a short note on Zener Diode.
3. What is Electroplating?
4. Briefly write about the Transformers.
5. Clarify the term Insulated Gate FET (MOSFET).
6. Briefly write about Chromium Plating.
7. What is Potential?

**SECTION-B**

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

1. Give a detail account of Inductors.
2. Explain the following :
3. Uni-junction Transistor (UJT)
4. Field Effect Transistor (FET)
5. Elaborate the various Measuring Systems used on CNC Machines.

**SECTION-C**

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

1. Evaluate the various aspects of CNC machines to be considered in their designing.
2. Describe CNC Systems. Explain the Configuration of a CNC System.
3. Discuss the Concept of Product Design. What are the elements of the Product Design?