

S.B. Roll No.....

**MEDICAL ELECTRONICS**  
**6<sup>th</sup>/ECE/EMP/ECE(II)/6180/Nov'15**

**Duration 3 Hrs**

**M.Marks=75**

**Note: Attempt all questions:**

**SECTION A**

**Q1 Answer the following:**

**15**

- (i) Pressure
- (ii) E.M.G.
- (iii) ECG
- (iv) MRI
- (v) Bioelectrode
- (vi) Anatomy
- (vii) Gross shock
- (viii) Types of heart rate meters
- (ix) Incubator
- (x) Muscle action

**SECTION B**

**Q2: Attempt any FIVE questions:**

**5x6=30**

- i. Explain method to measure heart rate of body.
- ii. Explain pressure transducer with the help of classification.
- iii. Explain and classify the micro electrode.
- iv. Write precaution to minimize electric shock hazards.
- v. What is central nervous system? Explain.
- vi. Describe few therapeutic equipments.

**SECTION C**

**Q3: Attempt any THREE questions:**

**3x10=30**

- i Draw block diagram of ECG machines. Explain its working.
- ii Explain the anatomy with the help of various parts of the body.
- iii What is MRI? Explain it with help of block diagram.
- iv Write short note on any **TWO**:
  - (a) Micro current shock
  - (b) Blood pressure measurement
  - (c) Electrode tissue interface