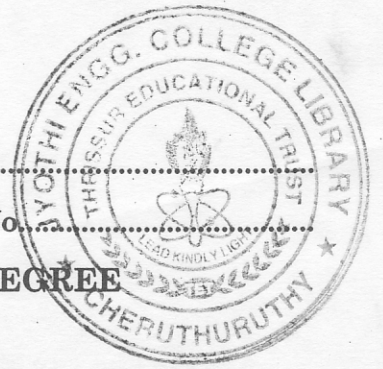


C 6132

Name.....

Reg. No.....



**SIXTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, JUNE 2010**

AI 04 603—BIOMEDICAL INSTRUMENTATION

(2004 admissions)

Time : Three Hours

Maximum : 100 Marks

1. (a) Write a short note on needle Electrodes.
(b) What is skin contact impedance and how it is measured ?
(c) What are the various types of leads used in ECG ?
(d) Write a short note on Plethysmography.
(e) What are the differences between internal and External Pacemakers ?
(f) Write a short note on heart lung machine.
(g) Define diathermy and computed Tomography.
(h) Write a short note on telemedicine.

(8 × 5 = 40 marks)

2. (a) Briefly explain the various types of transducers used for measuring Pressure in Biomedical applications.

Or

- (b) Explain with neat sketches, the various types of micro electrodes.

(15 marks)

3. (a) With a neat sketch explain in detail about Cardiovascular System.

Or

- (b) Briefly explain the various ECG Read out devices.

(15 marks)

4. (a) What is Spirometer ? Explain the various types of Spirometer.

Or

- (b) Explain in detail the operation of Electromyogram with a neat diagram.

(15 marks)

5. (a) With a neat sketch explain the Production of X-rays.

Or

- (b) Explain the various basic Nuclear Magnetic resonance components with neat sketches.

(15 marks)

[4 × 15 = 60 marks]