



Reg. No. :

Name :

**Sixth Semester B.Tech. Degree Examination, May 2011
(2008 Scheme)**

08.606 Elective II(B) : BIOMEDICAL INSTRUMENTATION (E)

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions.

1. Explain how action potentials are generated.
2. What is systolic and diastolic pressure ?
3. What are the advantages of MRI ?
4. Write a note on sleep analysis using EEG.
5. What are the electrodes used for recording EMG signals ?
6. Explain the ECG waveform in detail.
7. Describe the principle of AC defibrillator.
8. Describe the working of a bedside monitor.
9. Explain the working of portable artificial kidney.
10. What are the applications of ultra sound in medicine ?



(10×4=40 Marks)

P.T.O.



PART – B

Answer **any one full** question from **each** Module.

Module – 1

11. Explain the working of an Electromagnetic blood flow meter. **20**
12. What are the direct methods commonly used for the measurement of blood pressure ? **20**

Module – 2

13. Describe the working of a bedside monitor. **20**
14. Explain the working of EEG machine. What are the uses of EEG ? **20**

Module – 3

15. Explain the working of a modern X-ray machine. What are the limitations and advantages of using X-rays over other imaging modalities ? **20**
16. Explain the working of a pace maker. What are the different types of pace makers ? **20**
-