Date :- 29/11/2012
Sem :- VII th (Rev)
Branch :- Bio-Med
Sub :- Bio-Medical Instrumentation - II

Biomed. =10

2nd Half-12 mina-(c)-49 YTIET/LIB/BM/SEM-VI/BI-II/29-11-2012

Con. 8278-12. KR-8828

(3 Hours) [Total Marks : 100

N. B. : (1) Question No. **1** is **compulsory**.
(2) Attempt any **four** questions from remaining **six** questions.
(3) **Figures** to the **right** indicate **full** marks.

1. (a) Explain the generation of EMG signal. 5
   (b) Applications of Telemedicine. 5
   (c) What are the sources of noise in low level measurement ? 5
   (d) What is a microshock ? 5

2. (a) Explain 12 lead electrode system for recording of ECG. 10
   (b) Explain block diagram of cardiace moniter. 10

3. (a) Explain how Instrumentation Amplifier for amplification of ECG Signal. 10
   (b) Explain how Fetal heart rate is measured. 10

4. (a) Explain the procedure for monitoring of labour activity. 10
   (b) Explain 10/20 electrode system for recording of EEG. 10

5. (a) Explain any one method of temperature monitoring. 10
   (b) Explain generation of action potential using suitable waveform. 10

6. (a) Explain the technique of phonocardiography. 10
   (b) Explain using suitable diagram Biotelemetry transmitter. 10

7. Write short notes on (any **four**) :— 20
   (a) Baby incubator
   (b) Biofeedback
   (c) EMG electrodes
   (d) EEG signal frequencies
   (e) Ambulatory monitoring.
