R09

Code No: C8807

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech I - Semester Examinations, March/April-2011
BIOMEDICAL INSTRUMENTATION
(ELECTRONICS AND INSTRUMENTATION)

Time: 3hours **Max. Marks: 60**

Answer any five questions
All questions carry equal marks

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1. a) Explain the electrodes used for ECG measurement.
   b) Briefly explain resting action potentials with necessary diagrams. [12]

2. a) Explain phonocardiography with necessary sketches.
   b) Write short notes on:
   i) Vector cordiography
   ii) Echocardiography. [12]

3. With neat sketches explain any two methods of measurements of blood flow. [12]

4. a) Explain the functioning of defibrillators.
   b) Write a note on ultrasonography. [12]

5. a) Describe with a neat block diagram computer tomography (CT).
   b) Explain any one application of lasers in medicine. [12]

6. Explain the method of continuous monitoring of feotal scalp pH. [12]

7. a) Describe the functioning of speech audiometer system.
   b) Explain the applications of audiometer. [12]

8. a) Explain in detail the measurement of pH in blood.
   b) Describe with a neat diagram the coulter counter. [12]

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