

B.E - VII | 1151

Biomedical Instrumentation

QP Code : 5907

Total marks: 80

Duration: 03 Hours.

Instructions to the candidates if any:-

30.11.15

N.B. (1) Question No. 1 is compulsory.

(2) Answer any Three out of remaining questions.

(3) Assumptions made should be clearly stated

Q. 1 Solve any Four

- a) Explain Nervous system
- b) Explain propagation of Action Potential
- c) Explain origin of ECG, EMG, EEG and ERG.
- d) What is Hounsfield Number in CT?
- e) Compare direct and indirect blood pressure measurement

Q. 2) a) Explain types of bio potential electrode 10
 b) Explain measurement of respiratory parameters 10

Q. 3) a) Explain EMG measurement with block diagram 10
 b) Explain direct blood pressure measurement 10

Q. 4) a) Explain origin of Heart sound? How it can be measured 10
 b) What is pacemaker? Explain rate responsive pacemaker 10

Q. 5) a) Explain working heart lung machine 10
 b) Explain working of CT machine with block diagram 10

Q. 6) a) Explain modes of ultrasound imaging 10
 b) Explain physiological effects of electric current? 10

MD-Con. 8765 -15.