

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**

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

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

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

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

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

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