

B.E (Instru) Sem - VII
CBGs

Duration: 03 Hours.

Total marks: 80

Instructions to the candidates:-

- N. B. (1) Question No. 1 is compulsory.
(2) Answer any **Three** out of remaining questions.
(3) Assumptions made should be clearly stated.

27/11/18
(1/1)

Q. 1 Solve any **Four**

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- a) Explain refractory periods of cell
- b) What is blood circulation? Explain its types
- c) What are CNS and PNS of human body?
- d) What is Hounsfield Number in CT?
- e) Compare direct and indirect blood pressure measurement

Q. 2) a) Explain generation of Action potential and its propagation 10

b) Explain respiratory track and measurement of respiratory parameters 10

Q. 3) a) Explain EEG measurement with 10-20 Electrode system 10

b) What is Cardiac Output? Explain its measurement with suitable diagram 10

Q.4) a) Compare X ray, CT and Ultrasound imaging 10

b) What is fibrillation? Explain working of DC defibrillator machine 10

Q. 5) a) Explain working of heart lung machine 10

b) Explain earthing and ground schemes for medical equipment's 10

Q.6) a) What is NMR? Explain MRI principle 10

b) Explain working of X ray machine with block diagram 10

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