

Register No.:

334

April 2024

*Time - Three hours
(Maximum Marks: 100)*

- [N.B.]**
1. Answer all questions under Part-A. Each question carries 3 marks.
 2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART - A

1. Draw the structure of a cell. Label its parts.
2. Define action potential.
3. Draw the basic wave form of normal ECG.
4. What is an audiometer?
5. What is endoscopy?
6. Sketch the block diagram of modern ventilator.
7. State the applications of telemedicine.
8. What is ground fault circuit interrupter?
9. What is tomogram?
10. What is angiography?

[Turn over.....

PART - B

11. (a) Explain about microelectrode, skin surface electrode and needle electrode.
(Or)
(b) Explain the operation of electromagnetic blood flow meter with neat diagram.
12. (a) Explain 10-20 lead system used in EEG and EEG recorder with a neat diagram.
(Or)
(b) Explain EMG recording techniques with neat sketch.
13. (a) Discuss about the shortwave and microwave diathermy techniques.
(Or)
(b) Explain the working of Heart-Lung Machine with a neat sketch.
14. (a) What are the elements of bio-telemetry system? Explain its working with block diagram.
(Or)
(b) (i) Explain about Microshock and Macroshock. (7)
(ii) Discuss about leakage currents. (7)
15. (a) Explain CO₂ LASER with a neat diagram.
(Or)
(b) Explain the block diagram of MRI system with a neat sketch.
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