

963

Register No.:

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 cell.
2. Name the various methods of measuring Blood Pressure.
3. Name any three diagnostic instruments.
4. How many leads are in ECG lead system? What are they?
5. Differentiate between AC Defibrillator and DC Defibrillator.
6. What do you mean by Lithitripsy?
7. Define Micro-shock and Macro-shock.
8. What do you mean by GFI?
9. What are the applications of Laser in medical field?
10. Define Angiography.

[Turn over.....

PART - B

11. (a) State the need for blood flow meter. Also explain the working of Ultrasonic Blood flow meter.  
(Or)  
(b) Explain (i) resting potential (5) (ii) action potential (5) (iii) propagation of action potential (4).
12. (a) What is conduction velocity? Explain how to measure it with the help of EMG machine.  
(Or)  
(b) Explain the working of basic audiometer. Also explain how Air conduction and Bone conduction tests can be performed using Audiometer.
13. (a) Describe the procedure of Hemo dialysis with a suitable block diagram.  
(Or)  
(b) State the role of Ventilators in patient care. Explain the block diagram of Modern ventilator.
14. (a) Explain radio telemetry with Multi channel sub carrier system.  
(Or)  
(b) What are the physiological effects in electro surgical units? Explain the safety aspects in burns and explosion hazards.
15. (a) What do you mean by Tomography? Explain the working of various sub systems of CT scanner.  
(Or)  
(b) Explain the principle of MRI imaging technique.

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