

No. of Printed Pages : 4
Roll No.

223245

4th Sem./ Medical Electronics
Subject : Biomedical Instrumentation - II

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory
(6x1=6)

Q.1 Which of the following is not an Radiology equipment

- a) Pulse oximeter
- b) X-ray machine
- c) MRI
- d) None of the above

Q.2 Montage is concerns for

- a) ECG
- b) Ventilator
- c) Ultrasound
- d) None of the above

Q.3 Vital capacity is concerns for

- a) ECG
- b) Ventilator
- c) Ultrasound
- d) None of the above

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Q.4 Which is not a blood component?

- a) RBC
- b) Platelets
- c) Neuron
- d) Plasma

Q.5 Blood pressure of a healthy person in resting state should be :-

- a) 200/110 mm of Hg
- b) 50/20 mm of Hg
- c) 120/80 mm of Hg
- d) None of the above

Q.6 Which of the following is a stress testing device?

- a) Sphygmomanometer
- b) Endoscope
- c) Tread Mill
- d) None of the above

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 What is total lung capacity?

Q.8 What is normal range of percentage of sPo₂?

Q.9 What is Minute Volume?

Q.10 Expand NICU

Q.11 Expand CPAP

Q.12 Telemetry

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Write a note on critical care instrumentation.

Q.14 Enlist different equipments used in ICU.

Q.15 Write a short note on Monitoring alarm & electric system in ICU.

Q.16 Write a note on Operating room instrumentation

Q.17 Explain suction apparatus in details.

Q.18 What is OT Table. Explain it with diagram.

Q.19 Explain working and general fault finding in syringe pump

Q.20 Explain the need and classification of pacemaker.

Q.21 Explain single channel telemetry system

Q.22 Write a note on cardiac catheterization.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain need of Defibrillator. Explain Defibrillator with circuit diagram.

Q.24 Explain artificial ventilation. Also discuss ventilator with diagram.

Q.25 Explain need of Anesthesia. Explain Anesthesia work station in details.