

- Q.24 Write a note on Operating room instrumentation.
- Q.25 Explain suction apparatus in details.
- Q.26 What is OT Table. Explain it with diagram.
- Q.27 Explain working and general fault finding in syringe pump.
- Q.28 Explain the need and classification of pacemaker.
- Q.29 Explain single channel telemetry system.
- Q.30 Write a note on cardiac catheterization.
- Q.31 Explain telemedicine & its application.
- Q.32 Write a note on artificial heart.
- Q.33 Write a note on surgical OT light.
- Q.34 Explain PEEP.
- Q.35 Write a note on mechanics of breathing.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain IABP in details with diagram.
- Q.37 Explain need of Defibrillator. Explain Defibrillator with circuit diagram.
- Q.38 Explain need of Anesthesia. Explain Anesthesia work station in details.

No. of Printed Pages : 4

183244/033261

Roll No.

4th Sem / Medical Electronics
Subject:- Bio-medical Instrumentations - II /
Biomed. Instrumentation

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- 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
- 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 How many Heart valves we have

- a) 3 b) 4
- c) 2 d) None of the above

Q.7 Which is a part of anesthesia ventilation system

- a) Breathing circuit b) Gas supply system
- c) Scavenging system d) All of the above

Q.8 Needle electrode is used to measure

- a) ECG b) EEG
- c) EMG d) Both B & C

Q.9 Which of the following is a stress testing device?

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

Q.10 Which is called Natural Pacemaker?

- a) Aorta b) SANode
- c) AVNode d) Bundle of HIS

(2) 183244/033261

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Expand NICU

Q.12 Expand CPAP

Q.13 Telelmetry

Q.14 Expand IBP

Q.15 What is Residual volume

Q.16 Humidifier

Q.17 What is the Normal Glucose level in fasting stage of a healthy person?

Q.18 What is total lung capacity?

Q.19 What is normal range of percentage of spo₂?

Q.20 What is minute Volume?

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Write a note on critical care instrumentation.

Q.22 Enlist different equipments used in ICU.

Q.23 Write a short note on Monitoring alarm & electric system in ICU.

(3) 183244/033261