

- 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.

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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) SA Node
c) AV Node d) Bundle of HIS

SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Expand NICU
Q.12 Expand CPAP
Q.13 Telelemetry
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.