

- Q.26 Explain Operating Theatre Table with diagram.
- Q.27 Write a note on Suction apparatus with block diagram
- Q.28 Explain Electro-Surgery with diagram.
- Q.29 Explain single channel telemetry system
- Q.30 What is pacemaker. Explain it.
- Q.31 Explain Tread mill Test.
- Q.32 Explain CPAP.
- Q.33 Write a note on Medical Gas supply system in Hospital.
- Q.34 Write a note on operation theatre instrumentation.
- Q.35 Discuss role of Biomedical Engineers in Healthcare industry.

SECTION-D

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

- Q.36 Explain need of Defibrillator. Explain Defibrillator with circuit diagram.
- Q.37 Explain need of Anaesthesia. Explain Anaesthesia work station in details.
- Q.38 Explain artificial ventilation. Also discuss ventilator with diagram.

No. of Printed Pages : 4
Roll No.

183244/033261

4th Sem / Med. Eltx
Subject:- Biomedical Instrumentation- II / Biomed.
Instrumentation

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 What is the frequency range for electro surgery techniques?
a) 10 - 500 KHz b) 1 - 50 Hz
c) 1 - 3 MHz d) None of the above
- Q.2 What is pressure range for suction pump
a) 0 - 10 mm of Hg b) 15 - 20 mm of Hg
c) 0 - 50 mm of Hg d) None of the above
- Q.3 EMG measurement is done for
a) Heart b) Liver
c) Brain d) Muscles
- Q.4 Which of the following is a radiology instrument?
a) PH Meter b) CT Scan
c) Blood cell counter d) None of the above

- Q.5 What should be the temperature range for operating room
a) 10°F - 20°F b) 25°F - 50°F
c) 72°F - 78°F d) None of above
- Q.6 Normal EEG Frequency range is
a) 50-500 Hz b) 0.5-50 Hz
c) 0.05 - 5 Hz d) 1-200 Hz
- Q.7 Which is called Natural Pacemaker?
a) Aorta b) Bundle of HIS
c) AV Node d) SA Node
- Q.8 Voltage applied during electric shock in fibrillation is
a) 0 - 250 V b) 200 - 500 V
c) 750-800 V d) None of above
- Q.9 How many heart valves does the heart have
a) 4 b) 2
c) 3 d) 6
- Q.10 Which gas out of following is a part Central Medical gas supply in hospital
a) Air b) Oxygen
c) Nitrous Oxide d) All of the above

SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Expand ICU
Q.12 Expand IBP.
Q.13 Prosthetics
Q.14 Expand NCCU
Q.15 Telemedicine
Q.16 Expand IABP
Q.17 Vital Capacity
Q.18 Expand SIMV
Q.19 OT Table
Q.20 Minute Volume

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Explain construction and working of Syringe Pump.
Q.22 Write a note on Prosthetics & Orthotics.
Q.23 Explain Critical care instrumentation.
Q.24 Write a short note on IABP.
Q.25 Explain any two major equipments used in NICU.