

### SECTION-D

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

Q.23 Explain Heart lung Machine With Diagram.

Q.24 Explain IABP in details with diagram.

Q.25 Explain need of Defibrillator. Explain Defibrillator with circuit diagram.

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 is called Natural Pacemaker ?

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

Q.2 Which of the following is not an ICU equipment

- a) Pulse oximeter                                      b) Patient Monitor
- c) Themometer                                      d) X-ray machine

Q.3 Minute volume is concerns for

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

Q.4 Defibrillator is used for

- a) Bone density measurement
- b) HB measurement
- c) Electric shock delivery
- d) None of above

Q.5 Which is not a blood component ?

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

Q.6 Respiration rate of a healthy person in resting state should be :-

- a) 50-100 breaths/minute
- b) 12-20 breaths/minute
- c) 0-60 breaths/minute
- d) None of the above

#### SECTION-B

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

Q.7 What is normal range of percentage of  $\text{SPO}_2$  ?

Q.8 What is Tidal Volume ?

Q.9 What is Respiration Rate

Q.10 Nebulizer

Q.11 What is the Normal Glucose level in fasting stage of a healthy person ?

Q.12 Expand ICCU

#### SECTION-C

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

Q.13 Write a note on Prosthetics & Orthotics.

Q.14 Explain the working of Syringe Pump.

Q.15 Write a short note on Critical care instrumentation.

Q.16 Explain IABP in details.

Q.17 Write a brief description on NICU Equipments.

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

Q.19 Explain Tread mill Test.

Q.20 Explain BiPAP.

Q.21 Write a note on surgical OT Light.

Q.22 Explain different modes of artificial ventilation.