

Q.21 Explain Multi parameter monitor with diagram .

Q.22 Explain biological effect due to UV Radiation?

### SECTION-D

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

Q.23 Explain Anesthesia work station & its maintenance with block diagram.

Q.24 Explain Principle, working & maintenance of ECG Machine with diagram.

Q.25 Explain Principle, working & maintenance of Pulse oximeter with diagram.

(40)

(4)

223251

No. of Printed Pages : 4  
Roll No. ....

223251

### 5th Sem. / Medical Electronics

#### Subject : Troubleshooting & Maintenance of Biomedical equipment

Time : 3 Hrs.

M.M. : 60

### SECTION-A

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

Q.1 The downstairs chambers of heart called

- a) Atria                                      b) Ventricles
- c) Heart Valve                            d) None of the above

Q.2 What does a capacitor store

- a) Voltage                                      b) Charge
- c) Current                                      d) Power

Q.3 Which limb used as ground electrode in ECG measurement

- a) Right arm                                      b) Left arm
- c) Right leg                                      d) Left leg

(1)

223251

- Q.4 Zener diode are generally made up of
- a) Germanium                      b) Silicon
  - c) Carbon                          d) None
- Q.5 LED converts electrical energy into
- a) Heat                              b) Light
  - c) Chemical                      d) Sound
- Q.6 CT Stands for
- a) Controlled tomography
  - b) Comparison tomography
  - c) Converted tomography
  - d) Computerized tomography

### SECTION-B

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

- Q.7 Comprehensive maintenance
- Q.8 Anesthesia
- Q.9 Expand UPS

(2)

223251

- Q.10 Earthing
- Q.11 Radiation safety
- Q.12 Expand MCB

### SECTION-C

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

- Q.13 List various electronic connectors & their classification .
- Q.14 Explain Grounding system inspection .
- Q.15 Discuss precautionary measurement while installing any medical equipment.
- Q.16 Explain SMPS with diagram
- Q.17 Write a note on construction & application of coaxial cables
- Q.18 Explain Medical gas cylinders & their classifications.
- Q.19 Explain construction & working of Suction Pump.
- Q.20 Write a note on Radiation safety instrumentation.

(3)

223251