

- Q.26 Explain Electrical Accidents in hospitals.  
 Q.27 Explain Precaution required for installation of Medical Equipment.  
 Q.28 Write advantages of 3 phase Supply.  
 Q.29 Explain SMPS.  
 Q.30 Explain 3 phase supply.  
 Q.31 Explain Electrical Accident in hospitals.  
 Q.32 Explain Precaution required for installation of Medical Equipment.  
 Q.33 Explain Ultrasound Machine.  
 Q.34 Explain troubleshooting of ECG machine.  
 Q.35 Write short note on Earthing.

#### **Section-D**

**Note: Long answer questions. Attempt any two question out of three Questions.**  $(2 \times 10 = 20)$

- Q.36 Explain AMC and PMS.  
 Q.37 What are the uses of stabilizers and Generators in hospitals?  
 Q.38 What is fuse. Explain its types in details.

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

183254

**5th Sem. / Med. Eltx.**  
**Sub. : Medical Equipment Maintenance System (MEMS)**

Time : 3 Hrs. M.M. : 100

#### **SECTION-A**

**Note: Multiple type Questions. All Questions are compulsory.  $(10 \times 1 = 10)$**

- Q.1 The voltage of each of the circuit in power supply can be measured using a  
 a) Transformer                    b) Rectifier  
 c) Ammeter                      d) Multimeter
- Q.2 What is the signal amplitude of ECG  
 a) 2-5 mv                        b) 0.5-1 mv  
 c) 0-10 mv                      d) 0-20 mv
- Q.3 In ECG measurement, the positive terminal limb in AVR  
 a) Right Arm                    b) Right Leg  
 c) Left Arm                     d) Left Leg
- Q.4 The normal average pulse on an adult male is  
 a) 60-100 bpm                  b) 80-100 bpm  
 c) 100-120 bpm                d) 60-80 bpm

- Q.5 The following is not a classification of maintenance
- Corrective maintenance
  - Timely maintenance
  - Scheduled maintenance
  - Preventive maintenance
- Q.6 Heat rate of a Healthy person should be
- 90 bpm
  - 60 bpm
  - 72 bpm
  - 82 bpm
- Q.7 How many wavelengths are used by pulse oximeter?
- 1
  - 2
  - 3
  - 4
- Q.8 Before placing the electrodes , skin should be
- Wet
  - Oily
  - Hairy
  - Dry
- Q.9 Efficiency of a half wave rectifier is
- 40%
  - 50%
  - 70%
  - 100%
- Q.10 ECG is a graphic record of
- Heart activity
  - Brain Activity
  - Renal function
  - Lung function

### **Section-B**

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

- What is OT?
- What is MCB?
- What is EEG?
- What is CVT?
- What is MCCB?
- What is CVT?
- Define AMC?
- What is ELCB?
- What is Earthing?
- What is SMPS?

### **Section-C**

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

- What is Generator? Explain in detail.
- Write short note on Ultrasound Machine.
- Write short note on Macro shock Hazards.
- What is Ground system Inspection?
- What is anesthesia work station?