

- Q.26 Explain SMPS in details?
- Q.27 Discuss Physiological effects due to 50hz current passage?
- Q.28 Explain Micro-current & Macro-current Hazards?
- Q.29 What is UPS Classify it?
- Q.30 Explain various types of electrical hazards in hospitals?
- Q.31 Differentiate between Preventive & Corrective Maintenance?
- Q.32 Explain Emergency power system in hospitals?
- Q.33 Write a note on Medical Gas supply system in Hospital
- Q.34 Write a note on operation theatre instrumentation.
- Q.35 Discuss various classification of UPS as per their application.

Section-D

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

- Q.36 Explain X-Ray machine in details.
- Q.37 Explain ECG and its Measurements. Explain ECG machine with Block Diagram?
- Q.38 Explain EEG Machine with Diagram?

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6th Sem, Branch : Medical Electronics
Subject : Installation, Maintenance & Servicing of Medical Equipments (IMME)

Time : 3 Hrs.

M.M. : 100

SECTION-A

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

- Q.1 CT stands for
- Controlled Tomography
 - Computerized Tomography
 - Converted Tomography
 - Conversion Tomography
- Q.2 Thermocouple refers to measurement of
- Temperature
 - Current
 - Capacitance
 - None of the above
- Q.3 The most commonly used semiconductor material is
- Silicon
 - Germanium
 - Mixture of Silicon & Germanium
 - None of above
- 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 Efficiency of half wave rectifier is
a) 100% b) 75%
c) 50% `d) 25%
- Q.6 LED converts electric energy into _____ energy
a) Heat b) Chemical
c) Sound d) Light
- Q.7 Which is called Natural Pacemaker?
a) Aorta b) Bundle of HIS
c) AV Node d) SANode
- Q.8 How many wavelength is used by pulse oximetry techniques
a) 2 b) 3
c) 4 d) None of above
- Q.9 Any unwanted signal present in circuit other than required called
a) Noise b) Interference
c) Distortion d) All of above
- Q.10 What is the frequency range for electro surgery techniques?
a) 10-500 Khz b) 1-50Hz
c) 1-3 Hz d) None of the above

Section B

Note: Objective types Questions. All Questions are compulsory. (10x1=10)

- Q.11 Notch Filter.
Q.12 Troubleshooting.
Q.13 Radiology.
Q.14 Fibrillation.
Q.15 Expand ECG.
Q.16 Colorimeter.
Q.17 Draw normal waveform pattern of ECG.
Q.18 Expand MRI.
Q.19 What is Spo2.
Q.20 Expand NIBP.

Section-C

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

- Q.21 Explain construction and working of Defibrillator.
Q.22 Write a note on bed side monitoring system.
Q.23 Explain the role of Biomedical Engineer in servicing & maintenance of hospital equipments.
Q.24 Explain Auto-Analyzer with diagram?
Q.25 What is ESU. Explain it?