

- Q.24 Explain EEG & its measurements . Also explain ECG machine Working with block diagram.
- Q.25 Explain Principle and working of LVDT with block diagram.

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2nd Year / Medical electronics
Subject : Fundamentals of Medical Electronics

Time : 3 Hrs. M.M. : 60

SECTION-A

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

- Q.1 Which of the following used to measure blood pressure
- a) Sphygmomanometer
 - b) EEG
 - c) EMG
 - d) None of the above
- Q.2 Which is called Natural Pacemaker
- a) Aorta
 - b) AV Node
 - c) SA Node
 - d) All of the above
- Q.3 _____ is used for measurement of electrical activity of brain
- a) ECG
 - b) EEG
 - c) EMG
 - d) None of the above

- Q.4 What is necessary for providing a common reference measurement
 a) Active Electrode b) Ground Electrode
 c) Tape Recorder d) Oscilloscope
- Q.5 The filter used for prevention of Noise Interference
 a) High pass b) Low pass
 c) Notch d) None of the above
- Q.6 How many electrodes placed in 10 / 20 electrode placement system .

SECTION-B

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

- Q.7 Draw normal waveform pattern of ECG
- Q.8 Motion artefact
- Q.9 Expand DSP
- Q.10 Explain EMG
- Q.11 Ultrasound waves
- Q.12 Preventive Maintenance

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SECTION-C

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

- Q.13 Explain various Hospital departments & their functioning.
- Q.14 Explain basic medical instrumentation system.
- Q.15 Write a note on Biomedical organizations.
- Q.16 Explain different signal distortion & their types
- Q.17 Explain classification of Electrodes.
- Q.18 Write a note on Biosensors & smart sensors.
- Q.19 Explain EMG with block diagram.
- Q.20 Explain Piezo - electric Transducer.
- Q.21 Describe optical fibre sensors & their advantages.
- Q.22 Write a note on Pressure Transducers.

SECTION-D

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

- Q.23 Explain ECG & its measurements . Also explain ECG machine Working with block diagram.

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