

SECTION-D

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

- Q.23 Write the classification of bio-transducers. Explain the operation of pulse sensor. (4+4)
- Q.24 Explain the working of ECG machine with the help of its block diagram.
- Q.25 Write a short note on :
- a) Cardiac pacemaker
 - b) Leakage current

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221064B

6th Sem / ECE, ECE (For Speech and Hearing Impaired)

Subject : Medical Electronics

Time : 3 Hrs.

M.M. : 60

SECTION-A

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

- Q.1 Spirometer is used for _____ measurement.
- a) Respiration
 - b) Heart rate
 - c) Pulse rate
 - d) None of above
- Q.2 _____ converts biochemical events into measurable signals.
- a) Amplifier
 - b) OP-amp
 - c) Rectifier
 - d) Transducer
- Q.3 Which of the following is not an example of body surface electrodes?
- a) Needle electrode
 - b) Suction electrode
 - c) Metal plate electrode
 - d) Floating electrode

- Q.4 LVDT stands for
- a) Linear variable differential transformer
 - b) Linear Varying differential transformer
 - c) Linear Variable differential transform
 - d) Linear variable differential transducer
- Q.5 BIS stands for _____
- a) Board of Indian standards
 - b) Bureau of Indian standards
 - c) Bureau of International Specifications
 - d) Board of International standards
- Q.6 Which instrument is used for clinical detection of heart sounds?
- a) Stethoscope b) Endoscope
 - c) Anoscope d) Proctoscope

SECTION-B

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

- Q.7 What is the full form of ECG?
- Q.8 Name any two therapeutic equipment.

- Q.9 Define the term pressure transducers?
- Q.10 What is the full form of MRI?
- Q.11 What is defibrillation?
- Q.12 What is gross shock?

SECTION-C

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

- Q.13 Describe photoelectric transducer?
- Q.14 What will happen when a current pass through a human body?
- Q.15 Write short note on Blood pressure measurement.
- Q.16 Explain briefly the Ultrasonic Imaging system.
- Q.17 What is the use of nebulizer?
- Q.18 Which types of electrodes are used for EEG measurement?
- Q.19 Explain briefly the various types of temperature transducer.
- Q.20 Write a short note on micro current shock.
- Q.21 Draw and explain the working of PCG.
- Q.22 Write a short note on safety standards of medical instruments.