Q.27 Write a short note on Micro-Curent shock.
Q.28 Explain the block diagram of ECG machine.
Q.29 What is bio-electric signals?
Q.30 Describe the anatomy of heart and circulatory systems.
Q.31 Discuss briefly the reproduction system.
Q.32 Explain the structure of cell.
Q.33 How does an implanted defibrillator work?
Q.34 Explain briefly the various types of temperature transducers.
Q.35 Write a short note on micro-current shock.

SECTION-D

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

Q.36 Explain in detail, how electrodes are classified on the basis of application and place where they are placed?
Q.37 What is respiratory system? Draw the explain respiratory system of a human body. Also explain the breathing mechanism.
Q.38 What is transducer? Explain in detail ay transducer for measurement of temperature.

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6th Sem / Branch : Eltx.
Sub.: Medical Electronics

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 Electrodes to measure EEG are placed on which part of body?
a) Forehead b) Scalp
c) Cheeks d) Ears

Q.2 Which of the following in an example of internal electrodes?
a) Needle electrode b) Suction electrode
c) Metal plate electrode d) Floating electrode

Q.3 EEG electrodes are _____ in size than ECG electrodes.
a) Larger b) Smaller
c) Equal d) None of the above

Q.4 Which of the following is not an example of therapeutic equipment?
a) Nebuliser b) Pacemaker
c) Ventilator d) ECG machine

Q.5 LVDT works on the principle of _____

a) Variable resistor b) Variable inductance
c) Variable capacitance d) Variable pressure

Q.6 Which instrument is used for clinical detection of heart sounds?

a) Stethoscope b) Endoscope
c) Anoscope d) Proctoscope

Q.7 MRI stands for _____

a) Magnetic radio imaging
b) Moving radio imaging
c) Magnetic resonance imaging
d) None of the above

Q.8 EMG instrument is useful for making study of _____

a) Cardiovascular function
b) Neuromuscular function
c) Nervous function
d) Immune function

Q.9 ECG stands for _____

a) Electro-cardio gram
b) Electro cardio graph
c) Electrical cardio graph
d) None of the above

Q.10 CT stands for _____ in CT scan

a) Cardiac tomography
b) Computed tomography
c) Computed transducer
d) None of the above

SECTION-B

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

Q.11 What is a tissue?

Q.12 How you define heart rate?

Q.13 What is contact impedance?

Q.14 Name any two diagnostic equipment.

Q.15 Define cardiac cycle.

Q.16 What is a cell membrane?

Q.17 What is the frequency range of ECG machine?

Q.18 What is Systolic pressure?

Q.19 What is the full form of EEG?

Q.20 What is a gross shock?

SECTION-C

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

Q.21 What is the function of cardiac pacemaker?

Q.22 Write a short note on heart rate measurement.

Q.23 Distinguish between ECG and EMG.

Q.24 What is EEG machine? Draw and explain block diagram of EEG machine.

Q.25 Explain any two diagnostic and therapeutic equipment?

Q.26 What are the various safety aspects of medical instruments?