

- Q.25 Explain image intensifier in a short note.
- Q.26 Explain the coherent scattering in short note.
- Q.27 Write a short note on the permanent magnets used in the MRI.
- Q.28 Write a short note on the transducer used in the USG.
- Q.29 Draw a neat and clean block diagram of CT.
- Q.30 Explain the biological effects of ionizing radiation.
- Q.31 Write a short note on the generation of X rays.
- Q.32 Draw a well labelled block diagram of stationary X ray Tube.
- Q.33 Write five safety requirements in MRI.
- Q.34 Write a short note on the pulse echo technique.
- Q.35 Describe angiography in a short note.

SECTION-D

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

- Q.36 Give brief introduction of Computed Tomography and explain its System Components.
- Q.37 Draw the block diagram of MRI and explain its parts.
- Q.38 Explain conventional X ray radiography with its basic components.

No. of Printed Pages : 4

183253

Roll No.

5th Sem / Med. Eltx Subject:- Medical Imaging Techniques (MIT)

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 _____ is the frequency of sound waves used for diagnostic use
- a) 10MHz b) 10 Hz
- c) 10 kHz d) 100 kHz
- Q.2 The full form of CT is _____
- a) Magnetic Resonance Imaging
- b) Computed Sonography
- c) Ultra Sonography
- d) None
- Q.3 Radiation which is harmful for humans
- a) Sound waves b) Magnetic Waves
- c) Infrared Rays d) X rays
- Q.4 X ray tube is a part of
- a) CT b) MRI
- c) Ventilator d) USG

(40)

(4)

183253

(1)

183253

- Q.5 X ray is an example of _____ equipment.
- a) Surgical b) Diagnostic
c) Therapeutic d) None of the above
- Q.6 _____ is a magnetic material.
- a) Plastic b) Wood
c) Stone d) Iron
- Q.7 The effect which is used in USG
- a) Photo Effect b) Doppler Effect
c) Magnetic Effect d) All of the above
- Q.8 NMR coil is a system component of
- a) MRI b) Ventilator
c) Monitor d) Blood Cell Counter
- Q.9 Tube rating are used for _____
- a) USG b) MRI
c) ECG d) X ray
- Q.10 _____ is a part of MRI
- a) RF coil b) X ray tube
c) Objective Lens d) None of the above

SECTION-B

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

- Q.11 Write one use of collimator.
- Q.12 Expand NMR.
- Q.13 Write the full form of MIT
- Q.14 Write the definition of frequency.
- Q.15 Write one advantage of rotating X ray Tube.
- Q.16 Write name of one part of USG.
- Q.17 Name one system component of Gamma Camera.
- Q.18 Write one use of mammography.
- Q.19 Write one advantage of mobile X ray machine.
- Q.20 Write one example of electromagnetic radiation.

SECTION-C

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

- Q.21 Define electromagnetic radiation and give three examples.
- Q.22 Draw the block diagram of X ray Machine.
- Q.23 Explain the principle of MRI machine in a short note.
- Q.24 Explain the principle of color doppler.