

DIPLOMA IN RADIOLOGY IMAGING TECHNOLOGY

SECOND YEAR

**PAPER II – EQUIPMENTS, BASIC TECHNIQUES OF MODERN
IMAGING MODALITIES**

Q.P. Code: 841412

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on:

(3 x 10 = 30)

1. Explain the First generation of CT scan & list the advantages and disadvantages of CT scan and MRI scan.
2. Explain the DR system.
3. Basic Principle of Ultrasonogram and discuss about interaction of ultrasound with matter.

II. Write Notes on:

(10 x 5 = 50)

1. Dual source CT Scan.
2. Advantages and disadvantages of digital radiography over conventional radiography.
3. Safety aspects in CT Study.
4. HRCT of temporal bone.
5. Type of coils used in MRI.
6. Computer radiography.
7. Contrast medias used in MRI Scan.
8. Advantages of CR and DR.
9. CT Detector.
10. Different types of transducer.

III. Short Answers on:

(10 x 2 = 20)

1. Mammography grid.
2. Name the crystal used in US.
3. PET CT.
4. Anomaly scan.
5. Define Pitch.
6. Spiral CT.
7. Scintillation detector.
8. Uses of high frequency probes in ultrasound scan.
9. Advantages of Digital Image Storage.
10. Why hydrogen is widely used in MR imaging?
