

**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 basic principle of Computed Tomography.
2. Explain the different types of Digital Radiography.
3. Explain the interaction of ultrasound with matter.

**II. Write Notes on:**

**(10 x 5 = 50)**

1. Principle of Computed Radiography.
2. Compression in mammography.
3. Various modes of ultrasound imaging.
4. CT x-ray tube.
5. Pulse sequences used in MRI.
6. Magnets used in MRI.
7. MRI Artifacts.
8. T2 weighted imaging.
9. Target and filter used in mammography.
10. Mammographic cassette.

**III. Short Answers on:**

**(10 x 2 = 20)**

1. Phosphor used in computed radiography.
2. Hounsfield unit.
3. Different types of probes used in ultrasonogram.
4. Beam Hardening artifact.
5. Tesla.
6. Contraindications of MRI.
7. Name contrast agent used in MRI.
8. Tomography.
9. Uses of RF coils in MRI.
10. Multislice CT.

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