

[LH 0815]

AUGUST 2015

Sub Code: 1821

**B.Sc. RADIOLOGY IMAGING TECHNOLOGY /
RADIO DIAGNOSIS TECHNOLOGY**

THIRD YEAR

PAPER I – EQUIPMENTS OF MODERN IMAGING MODALITIES

Q.P. Code: 801821

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on :

(3 x 10 = 30)

1. Explain in detail the Signal encoding steps in MR imaging.
2. Describe about the various flat panel detectors in x-ray imaging
3. Discuss the basic principle and reconstruction algorithms in CT imaging.

II. Write Notes on:

(8 x 5 = 40)

1. Spin echo sequence.
2. CR artefacts.
3. Superconductive magnet.
4. Multi detector CT.
5. Basic principle of Doppler imaging.
6. Discuss about 3 artefacts in MRI.
7. Contrast agents used in CT.
8. Factors affecting image quality in computed radiography.

III. Short Answers on:

(10 x 3 = 30)

1. Piezo electric effect.
2. TR and TE.
3. T2w imaging.
4. Tomography.
5. Scintillation detector.
6. B mode in ultrasound.
7. AEC.
8. CTDI.
9. MIP and MPR.
10. Larmour frequency.
