

[LG 0215]

FEBRUARY 2015

Sub Code: 1803

B.Sc. RADIOLOGY IMAGING TECHNOLOGY

FIRST YEAR

**PAPER III – RADIO DIAGNOSIS EQUIPMENTS, MAINTENANCE AND
QUALITY CONTROL**

Q.P. Code: 801803

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on:

(3 x 10 = 30)

1. Explain the principle and function of a transformer.
2. Explain the principle of ultrasound scanner.
3. Discuss the computed Radiography system.

II. Write notes on:

(8 x 5 = 40)

1. Diode.
2. Transformer losses.
3. MRI signal.
4. X-ray Generator circuit.
5. CT Image Quality.
6. Half Valve layer.
7. MRI magnet.
8. Interaction of ultra sound.

III. Short answers on:

(10 x 3 = 30)

1. What is thermionic emission?
2. What is Heel effect?
3. Define nippie factor.
4. What is piezo electric effect?
5. List the advantages of 3-phase generator.
6. Why Hydrogen is used for MR Imaging?
7. Write the Larmor equation.
8. What is CT number?
9. Name the target materials used in Mammography.
10. List the advantages of digital radiography.
