

[LN 0818]

AUGUST 2018

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. Describe in detail the various parts of mammography equipment.
2. Explain the structure and functioning of image intensifier tube.
3. Explain the properties of X-rays. Explain construction of X-ray tube.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Beam restrictors.
2. Three phase generator.
3. Scatter radiation.
4. Step up and step down transformers.
5. Automatic exposure control.
6. CR cassette reader.
7. Intensifying screens.
8. Fluoroscopy.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Semi-conductor materials.
2. Anode angle.
3. Air gap technique.
4. Focal spot.
5. Principle of tomography.
6. Types of DR.
7. Thermionic emission.
8. Properties of tungsten.
9. Linear attenuation co-efficient.
10. Anode heel effect.

\*\*\*\*\*