

**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 in detail different types of digital radiography.
2. Name the different equipments used in dental radiography. Write in detail about ortho pantomogram.
3. What are the different types of X-ray tubes? Explain stationary anode tube with neat labeled diagram.

**II. Write notes on:**

**(8 x 5 = 40)**

1. CR cassette reader.
2. Image intensifying screen.
3. Describe the properties of tungsten.
4. Beam restrictors.
5. Types of grids and its uses.
6. Exposure control devices.
7. Principle of tomography.
8. Factors determining image quality.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Half value layer.
2. Filament circuit.
3. Air gap technique.
4. Added filtration.
5. What is DSA?
6. Tube rating.
7. Linear attenuation co-efficient.
8. Types of circuits in X-ray tube.
9. Target material in mammogram.
10. Semi-conductor.