

**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. Discuss in detail about the physical principle of computed radiography.
2. Describe in detail, the construction of mammographic x-ray equipment.
3. Describe in detail, the physical properties behind image formation in CT.

**II. Write notes on:** **(8 x 5 = 40)**

1. Filtration in radiography.
2. Anode heel effect.
3. Heat dissipation in rotating anode x-ray tube.
4. Mobile x-ray unit.
5. Direct vision fluoroscopy.
6. Direct digital radiography.
7. Spinning top test.
8. Generation of CT.

**III. Short answers on:** **(10 x 3 = 30)**

1. Anode angle.
2. Space charge effect.
3. Why tungsten is used as target material in x-ray tube?
4. CT number.
5. Fluorescence.
6. Automatic brightness control.
7. Advantages of digital radiography.
8. Charge coupled device.
9. Beam hardening artifact.
10. Basic principle of DSA.

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