

**B.Sc. RADIOLOGY IMAGING TECHNOLOGY AND  
B.Sc. RADIO DIAGNOSIS 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 the construction and working of a modern rotating X-ray Tube.
2. Explain in Detail about the various Generations of CT Scan.
3. Explain in detail about the various interactions of Ultrasound and different display modes.

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

1. Full wave Rectifier
2. X-ray Generator Circuit
3. mA circuit
4. Flat panel detector
5. Spiral CT
6. Principles of computerized Radiography
7. Super conducting magnets
8. X-ray Beam quality

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

1. Power loss in transformer.
2. Advantage of rotating anode x-ray tube.
3. Focusing cup.
4. CT numbe
5. Contrast medium.
6. Define Tesla.
7. Doppler Effect.
8. Physical properties of Ultrasound.
9. Compare the merits and demerits and CR and DR
10. Focal spot

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