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 with a neat diagram rotating anode X-ray tube.
2. What are the different generations of CT scanners? Explain first generation CT in detail?
3. What is PACS? Explain its functioning and advantages.

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

1. Rectifiers.
2. CR cassette.
3. Characteristic radiation.
4. KVP, MAS.
5. What id Bucky? What is its advantage?
6. Types of X-ray generators.
7. Types of digital radiography.
8. Principle of CT.

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

1. What is heel effect?
2. What are the methods of heat dissipation in X-ray machine?
3. What are collimators?
4. Compound filters.
5. Why is compression used in mammography?
6. Air gap technique.
7. Automatic exposure control.
8. What if fluoroscopy?
9. Different methods of filtration in X-ray tube.
10. Semiconductor materials.

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