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: $(3 \times 10 = 30)$

1. Describe in detail, the various types of digital radiography.

- 2. Describe with neat diagram, the construction and working of rotating anode X-ray tube.
- 3. Describe the construction of CT equipment.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Grid Control X-ray tube.
- 2. Direct vision fluoroscopy.
- 3. Portable X-ray unit.
- 4. Why tungsten is used as target material in x-ray tube?
- 5. Image intensifier tube.
- 6. CR reader.
- 7. Scatter radiation.
- 8. Conventional X-ray tomography.

III. Short answers on:

 $(10 \times 3 = 30)$

- 1. Space Charge effect.
- 2. X-ray tube housing.
- 3. Automatic Brightness Control.
- 4. Spot film device.
- 5. Photostimulated luminescence.
- 6. Advantages of compression in mammography.
- 7. PACS.
- 8. OPG.
- 9. Multisection Cassette.
- 10. CT Number.