

**Second Year B.Sc Radio Therapy Technology Degree Regular
Examinations November 2025**

Radiological, Nuclear Medicine and Other Imaging Techniques

(2023 Scheme)

Time: 3 Hours**Total Marks: 100**

- *Answer all questions to the point neatly and legibly* • *Do not leave any blank pages between answers* • *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together* • *Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essays:**(2x15=30)**

1. What are the components and imaging principles of Digital Radiography. What are its advantages and disadvantages
2. Discuss in detail the principle, techniques and equipment of Computed Tomography (CT)

Short notes:**(8x5=40)**

3. PACS
4. Ultrasound probe
5. Mammography
6. Gamma camera
7. Various stages of conventional radiographic film processing
8. MRI – clinical applications
9. Surface anatomy in radiotherapy planning
10. Classification of contrast agents

Answer briefly:**(10x3=30)**

11. Grid ratio
12. Name the positive and negative contrast agents in CT
13. Intensifying screen
14. MR artefacts
15. FDG - 18
16. Collimators
17. Expand AERB and eLORA
18. Precautions to be followed when a woman comes for radiography
19. Draw a labelled diagram of axial CT section of abdomen at the level of kidneys
20. MRI contraindications