

QP Code: 107391

Reg. No.....

**Post M.Sc Diploma in Radiological Physics Regular/Supplementary
Examinations October 2025**

Radiation Therapy

Time: 3 hours

Max. 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*
- *Simple calculator shall only be permitted*

Essay: (2x14=28)

1. Write in detail acceptance, commissioning and quality assurance of Linear accelerator.
2. Describe (a) High dose brachy unit (b) Immobilizations (c) TPS

Short Essays (4x8=32)

3. Algorithms.
4. Describe CT-SIM and its function.
5. SBRT.
6. Define PDD, TMR, TPR, SSD.

Short Notes (10x4=40)

7. What is IGRT, give its advantages.
8. What is the difference between Photon therapy and electron therapy.
9. What is EPID, explain its working.
10. Explain Wedges and their advantages.
11. Explain PACS, DICOM.
12. Electron Brachy Therapy.
13. Adaptive planning.
14. Tomotherapy.
15. Explain two phantoms.
16. 4DCT.

CORRECTION / NO-CORRECTION FILE
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QPCODE: 107391

Dated: 13-10-2025

Question No.12

Modified as "Electronic Brachytherapy."

Corrections/Modifications/Replacement of Questions if any shall be made available to all students. Take the print out of the Correction File in such cases and distribute to all students.

(Sd/-)

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