

QP CODE: 303018

Reg. No.....

**Third Year B.Sc MRT Degree Regular/Supplementary Examinations
March 2022**

Radiation Physics II

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*

Essays:

(3x10=30)

1. Describe the depth dose characteristics of electron beam, factors influencing it, isodose curves for varying beam energies.
2. Beam modifying devices
3. Construction and working of LINAC

Short notes:

(8x5=40)

4. Multileaf collimators
5. PDD
6. Treatment planning with SSD technique.
7. TPS
8. Proton beam treatment
9. Electronic portal imaging
10. DVH
11. Isotopes in brachytherapy.

Answer briefly:

(10x3=30)

12. Bolus
13. Ir 192
14. Wedge angle
15. Tissue compensators.
16. Back pointer
17. Integral dose
18. PTV
19. CT simulator
20. Immobilisation technique for CA vocal cord radiation.
21. TAR
