

**Third Year B.Sc MRT Degree Supplementary Examinations August 2018**

**Radiotherapy II**

**Time: 3 Hours**

**Max Marks: 100**

- **Answer all questions**
- **Draw diagrams wherever necessary**

**Essays:**

**(3x10=30)**

1. Discuss the classification of testicular tumours. Describe the management of stage 1 seminoma testis.
2. Mention the etiology, pathology and investigations of carcinoma cervix. Describe in details about radiation technique in ca cervix II B
3. What is electron beam therapy. Discuss briefly the physics and clinical application of electron beam treatment.

**Short notes:**

**(8x5=40)**

4. Stochastic and non-stochastic effects
5. ALARA
6. Prophylactic cranial irradiation
7. LET and BED (linear energy transfer and biologic equivalent dose)
8. Immobilization devices
9. HDR brachytherapy
10. Acute radiation mucositis
11. Radiation sensitizers

**Answer briefly:**

**(10x3=30)**

12. Shielding in radiotherapy
13. Spinal cord compression
14. Tolerance doses of critical organs
15. Wedge filters
16. Particle radiation
17. Collimators
18. Iridium 192
19. Simulation in breast radiotherapy
20. TLD
21. SSD

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