

**DIPLOMA IN MEDICAL RADIOTHERAPY (DMRT) EXAMINATION**

**GENERAL PRINCIPLES OF RADIOTHERAPY INCLUDING  
RADIO-BIOLOGY AND ONCOLOGY**

*Q.P. Code: 343026*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 15 = 30)**

1. Discuss various fractionation schedules and their clinical significance.
2. Discuss in detail Relative Biological Effectiveness and factors modifying the same.

**II. Write notes on:**

**(10 x 7 = 70)**

1. Oxygen Enhancement Ratio.
2. Dose volume histogram.
3. Treatment planning algorithms.
4. Hazard Ratio.
5. Meta analysis.
6. p 53 mutation.
7. Recist criteria.
8. Radio-iodine therapy.
9. Norton – Simon Hypothesis.
10. Molecular targets in cancer treatment.

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