

**THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY**

**[MD 0723]**

**JULY 2023  
(MAY 2023 EXAM SESSION)**

**Sub. Code: 2036**

**M.D. DEGREE EXAMINATION  
BRANCH IX – RADIO THERAPY  
BRANCH XXVI - RADIATION ONCOLOGY**

**PAPER II – GENERAL PRINCIPLES OF RADIOTHERAPY  
INCLUDING RADIOBIOLOGY AND ONCOLOGY**

*Q.P. Code: 202036*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 15 = 30)**

1. Dosimetry system in Cancer Cervix Brachytherapy.
2. Radiobiological basis for Chemotherapy and Radiotherapy Interactions.

**II. Write notes on:**

**(10 x 7 = 70)**

1. Risk factors for Breast Cancer and methods for Risk Reduction.
2. Bone Scan.
3. Dose response curves in Radiotherapy.
4. Proton therapy – Merits and Demerits.
5. Hereditary Cancers.
6. Prostate Cancer Risk Stratification.
7. HPV Positive Oropharyngeal Cancer Treatment.
8. Land Mark Trials in Head and Neck Cancer irradiation.
9. Cyber knife.
10. Dysphagia aspiration related structure dose limits.

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