

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

[AHS 0122]

**JANUARY 2022  
(OCTOBER 2021 EXAM SESSION)**

**Sub. Code: 4032**

**M.Sc. MEDICAL PHYSICS  
SECOND YEAR (From 2010-2011 onwards)  
PAPER II – CLINICAL RADIATION BIOLOGY  
*Q.P. Code : 284032***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Hyperthermia.
2. Time Dose Fractionation.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. 5 R's of radiotherapy.
2. Chemical radio protectors.
3. Discuss  $\alpha/\beta$  with reference to early and late reaction.
4. Chromosome aberrations.
5. Structure of cell.
6. Proton therapy.
7. LD 50 dose.
8. Benign and Malignant tumours.
9. Target theory.
10. Tissue tolerance dose.

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