

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

[AHS 0921]

**SEPTEMBER 2021  
(MAY 2021 EXAM SESSION)**

**Sub. Code: 2305**

**M.Sc. NUCLEAR MEDICINE TECHNOLOGY  
FIRST YEAR (From 2019-2020 onwards)  
PAPER V – RADIATION BIOLOGY  
*Q.P. Code : 282305***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Explain in detail about Linear Quadratic Theory.
2. What are the effects of radiation effects. Explain in detail each effect with example.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Law of Bergonie & Tribondeau.
2. Radiation Effects on DNA.
3. Relationship between LET and RBE.
4. Annual Dose Equivalent Limits.
5. Molecular Composition of Human body.
6. Radiation Induced Radicals in water.
7. Radiation Effects on Embryo.
8. Cell Survival Curve.
9. Human Cell Cycle.
10. Chromosomal Aberration.

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