

QP Code: 101117

Reg. No.:.....

**PG Degree Regular/Supplementary Examinations in Radiotherapy
(MD) May 2021**

Paper I – Radiation Physics, Radiobiology & Other Basic Sciences

Time: 3 hrs

Max marks:100

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essay:

(20)

1. Write in detail about Irradiation induced damage and DNA damage repair.

Short essays:

(8x10=80)

2. Hypoxic cell radiosensitizers
3. Reactivation of immune response by radiotherapy
4. ICRU 62 and 83
5. Effective Dose Equivalent - Limits for occupational and public exposures
6. Thermo-Luminescent Dosimeter
7. Quality Assurance for IMRT
8. Interactions of ionization radiation with matters
9. Second cancers after Radiotherapy
