

QP Code: 104117

Reg. No.:.....

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

Paper IV - Recent Development in Clinical Oncology

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. Discuss in detail about the indication and rationale of neo-adjuvant chemo-radiotherapy in carcinoma of lower 1/3rd esophagus with evidence. Explain in detail about the technique of radiation therapy with respect to the same.

Short essays:

(8x10=80)

2. Radiation therapy: Proton vs Photon.
3. Trastuzumab
4. Difference between cyber knife and conventional linear accelerator based SBRT.
5. Serum Biomarkers.
6. Hypofractionation in carcinoma breast.
7. Role of patient set-up LASERs in radiation therapy. Difference between single moving, 3 moving and 5 moving LASER system.
8. Role of 4DCT scan in radiation therapy.
9. Circulating Tumour Cells.
