

**PG Degree Regular/Supplementary Examinations in Radiation
Oncology (MD) January 2025**
Paper II - General Principles and Clinical Practice of Radiotherapy

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. Outline the investigations and treatment plan for a 5 x 2 x 1 cm (CC x AP x ML) squamous cell carcinoma of the upper oesophagus cT3N2M0 extending 2cm below the suprasternal notch. Give suitable reasons. Describe the volumes, the dose and the constraints (4+6+4+3+3)

Short essays:**(8x10=80)**

2. Describe the organ preservation strategies in carcinoma rectum with evidence
3. Describe a suitable dose, fields and energy for T1aN0M0 carcinoma glottis Justify your answer. Describe the various steps in a 2d plan for a T1N0 glottis involving the anterior commissure. (2+2+2+4)
4. Discuss the treatment of cT2N1M0 carcinoma stomach involving the pylorus. Discuss the various types of lymphadenectomy (4+6)
5. Describe the contouring limits of the supraclavicular nodes and internal mammary nodes according to the ESTRO and RTOG contouring guidelines (5+5)
6. Discuss the pathophysiology, of radiation-induced kidney injury. How will you mitigate it (6+4)
7. Superior vena caval obstruction
8. Role of chemo radiation in carcinoma cervix, discuss with evidence
9. Brachytherapy for soft tissue sarcoma
