

PG Degree Supplementary Examinations in Radiation Oncology
(MD) July 2025
Paper III - Clinical Oncology & Cancer Chemotherapy

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. Describe the relevance of molecular markers in endometrial cancer. How will it affect your risk stratification and management. Discuss the impact of chemotherapy for each molecular subgroup based on the PORTEC3 trial

(5+10+5)

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

2. Discuss the ILROG guidelines in the treatment of solitary plasmacytoma. What are the investigations to confirm that it is not multiple myeloma (7+3)
3. Discuss the indications for prophylactic cranial irradiation in acute lymphoblastic leukaemia in children. Discuss the dose and fractionation, volume, fields and constraints. Justify the dose fractionation schedule with evidence (2+5+3)
4. Describe the relevance of immunohistochemical markers in a 68-year-old male presenting with a 2 x 2 cm hard mobile left level 5b cervical lymph node. What are the investigations you will do to arrive at a possible site of primary malignancy. What will be the treatment option if all investigations fail to reveal a primary (5+2+3)
5. What are the malignancies associated with AIDS. Describe the challenges you will face in the treatment of carcinoma cervix in an HIV-infected woman (2+8)
6. Describe a suitable treatment plan for a patient with carcinoma cervix 3C2. She has a tumour involving the posterior lip of the cervix which extends to the medial third of bilateral parametria, vagina free. CECT abdomen and pelvis revealed a 1x1 cm paraaortic node below the left renal hilum with multiple significant external iliac nodes. Describe the target volume, fields, the dose and the normal tissue constraints (2+4+2+2)
7. What are the acute and late toxicities of pelvic and para-aortic radiation. How will you minimise the toxicities (3+3+4)
8. Describe the principles of chemotherapy in non-metastatic osteosarcoma
9. Describe the management of non-palpable and palpable nodes in a patient with carcinoma of the penis (5+5)
