

**RADIATION ONCOLOGY**

**PAPER-III**

Time: 3 hours

RTH/D/20/41/III

Max. Marks:100

**Important Instructions:**

- *You are provided with 5 answer sheet booklets. Each individual answer sheet booklet consists of 10 pages excluding the covering jackets.*
- *Answers to all the questions must be attempted within these 5 answer sheet booklets which must be later tagged together at the end of the exam.*
- *No additional supplementary answer sheet booklet will be provided.*
- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

**Write short notes on:**

1. a) Chemotherapy in the management of testicular tumor. 4+6  
b) Describe in detail the management appropriate to a 23-year male with pulmonary metastasis arising from a malignant testicular tumour.
2. Role of intraperitoneal chemotherapy, indications, methods of administration and the drugs used with appropriate relative concentrations when compared to systemic administration. 2+2+3+3
3. a) Radiation reactions in a patient receiving radiotherapy for head and neck cancer. 5+5  
b) Nutritional management in a head and neck cancer patient.
4. Classify targeted drugs. Describe the pharmacology and clinical applications of one such drug. 5+5
5. Name the HPV associated malignancies. Mention the characteristics of HPV positive head and neck cancer. Briefly discuss the implications in management of HPV positive patient of head and neck malignancy. 2+3+5
6. a) Name anti-angiogenic agents, their mechanism of action and toxicity. 5+5  
b) Describe their clinical usefulness in colon cancer.
7. Treatment algorithm of a case of metastatic renal cell carcinoma. 10
8. a) Radiation recall phenomenon. 4+6  
b) Febrile neutropenia.
9. Describe the molecular subtypes of breast cancer. Write a note on the hormone therapy in breast cancer. 5+5
10. Discuss the various diagnostic criteria in multiple myeloma. How do you stage and prognosticate? 5+5

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