

## MEDICAL ONCOLOGY

### PAPER – I

Time : 3 hours  
Max. Marks : 100

MED ONCO/D/10/17/I

Attempt all questions in order.  
Each question carries 10 marks.

1. Define evaluation of response to treatment according to "RECIST" Criteria. Outline how they differ from the "WHO" criteria.
2. Outline the relevant investigations for a 32 year old man with a mediastinal mass, along with the relevance of such tests.
3. Interpret the known risk factors for endometrial carcinoma.
4. Outline a strategy for the study of the epidemiology of cancer of the gall bladder for the city of Delhi.
5. What are the essential differences in the mechanism of action and toxicity of conventional chemotherapy and targeted therapy of cancer?
6. Assuming that carcinogenesis is a multi-step process, illustrate your answer with a suitable example.
7. What are the indications for prophylactic cranial radiotherapy? Outline the challenges of cranial irradiation in a 2 years old child with acute lymphoblastic leukemia.
8. What are the sources of clinical hematopoietic stem cells for transplant? Compare and contrast matched versus unmatched donor transplantation.
9. Outline the differences with respect to the mechanism of action, toxicity and indications of the 3 platinum compounds – cisplatin, carboplatin and oxaliplatin.
10. Discuss the relevance of molecular biology in the management of neuroblastoma.

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**PAPER – II**

**Time : 3 hours**  
**Max. Marks : 100**

**MED-ONCO/D/10/17/II**

**Attempt all questions in order.**  
**Each question carries 10 marks.**

1. Discuss the merits and demerits of the WHO classification of Non-Hodgkin's lymphomas.
2. What are the pathological types of Wilm's tumor? Outline the treatment guidelines for bilateral Wilm's tumor.
3. Outline the role of chemotherapy and targeted therapy in the management of neuroendocrine tumors of the gastrointestinal tract.
4. Discuss the differential diagnosis of a retroperitoneal mass in a 25 year old man.
5. A 13 year old girl with a distal femoral osteosarcoma is scheduled for anterior chemotherapy and tentative limb sparing surgery. Discuss the various imaging techniques that will assist in this girl's management.
6. Discuss the indications for radio labeled monoclonal antibodies in Hodgkin's lymphoma.
7. Discuss the role of bevacizumab in the management of brain tumors?
8. The donor for an allotransplant recipient was his sister. Discuss the laboratory techniques to establish chimerism.
9. Discuss the patterns of failure in epithelial ovarian cancer. Outline a treatment schema in each instance.
10. Define familial cancer. Outline the scheme of investigating a healthy woman with a fear of familial breast cancer.

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**PAPER – III**

**Time : 3 hours**

**MED ONCO/D/10/17/III**

**Max. Marks : 100**

**Attempt all questions in order.  
Each question carries 10 marks.**

1. Discuss the management of complete vesicular mole in a 22 years old woman.
2. Outline the treatment options for an 80 years old man with non-small cell lung cancer.
3. Discuss the various targeted therapies available for management of metastatic renal cell carcinoma.
4. Define hormone refractory prostate cancer. Outline its management in a 78 years old man.
5. Compare and contrast endocrine therapy versus chemotherapy in an 80 years old woman with metastatic breast cancer.
6. Discuss the role of neoadjuvant chemo-radio therapy in head and neck cancer.
7. Discuss the changing trends in the epidemiology of breast cancer in India.
8. Discuss fertility conservation in women with pelvic cancers.
9. Discuss the role of neoadjuvant chemotherapy in Pediatric solid tumors with illustrative examples.
10. Discuss the various non-infectious complications following hematopoietic stem cell transplantation and outline steps to prevent the same.