

**MEDICAL ONCOLOGY**

**PAPER- I**

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

**MED. ONCO/D/11/17/I**

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

1. Discuss briefly the molecular biology of non small cell lung cancer. How does the knowledge of various histological subtypes assists in management? 5+5
2. Discuss role of monoclonal antibodies in the treatment of Hodgkin's and non-Hodgkin's lymphoma. 5+5
3. Describe briefly the pharmacology of immuno-suppressive drugs as applied to allogenic bone marrow / stem cell transplantation. 10
4. Discuss briefly the principles of newer techniques for radiation with reference to IMRT and Cyber knife. 5+5
5. How does 'PET Scan' compare with 'CT Scan' in the evaluation of a new case of Hodgkin's lymphoma? Briefly describe its impact on the outcome. 5+5
6. What are 'T-Regulatory cells'? Describe briefly the role of 'T-Regulatory cells' in the pathophysiology of cancer. 5+5
7. Define bone marrow micro-environment. Briefly discuss role of newer molecules in the treatment of 'Mantle cell' lymphoma. 3+7
8. Discuss briefly the molecular biology of head and neck cancer. How this information is being used in the management at present? 5+5
9. Discuss impact of various prognostic factors on outcome of chronic lymphocytic leukemia. 10
10. Discuss briefly the mechanism of late effects of anticancer treatment (with special reference to radiation). 10

\*\*\*\*\*

**MEDICAL ONCOLOGY**

**PAPER- II**

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

**MED. ONCO /D/11/17/II**

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

1. Give plan of management for a newly diagnosed case of multiple myeloma in a 43 years old lady. How will you prognosticate her? 5+5
2. A 50 years old lady has been diagnosed to have metastatic adenocarcinoma. Discuss plan of investigations with rationale to determine the primary site. 10
3. Discuss the role of 'Life style' as a contributing factor for cancer. Illustrate this with example of colon cancer. 6+4
4. Discuss staging of 'Prostate cancer' and its implications on the management. 5+5
5. Outline investigations with rationale for a 10 years old child with acute lymphoblastic leukemia who has relapsed after 1 year. 10
6. Discuss pathology of breast cancer in young age. How this information helps in planning treatment. 6+4
7. What are common childhood tumours? How do they differ from those in adults? What are the adverse prognostic factors for treatment failure in neuroblastoma? 4+4+2
8. Discuss approach to diagnosis and management of a 67 year old lady with history of weight loss of 10 kg in past 3 months; CT scan shows 4X3 cm mass in tail of pancreas and a single hypodense lesion in left lobe of liver. 10
9. Define various scales used to assess 'Performance status'. How will you apply this knowledge in planning treatment of a 70 years old person with lung cancer? 6+4
10. What are the differences between a 'Hospital based' versus 'Population based' cancer Registry? How will you plan to study incidence of 'Stomach cancer' in Chennai city? 4+6

\*\*\*\*\*

**MEDICAL ONCOLOGY**

**PAPER- III**

**Time : 3 hours**

**MED. ONCO /D/11/17/III**

**Max. Marks : 100**

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

1. Discuss epidemiology and trends of five common cancers in India. 10
2. Discuss impact of age on cancer chemotherapy planning. 10
3. Discuss management of muscle invasive urinary bladder cancer in a 60 years old male. 10
4. Discuss briefly various steps involved in planning a clinical trial. Illustrate this with an example of recurrent ovarian cancer or cervix cancer. 6+4
5. How does pathology of endometrial cancer differ in young and old age? How will you treat high risk stage I endometrial cancer? 5+5
6. Discuss management of recurrent testicular germ cell tumours. 10
7. Briefly discuss issues involved in the palliative management of advanced gall bladder cancer with liver metastasis. 10
8. A three years child has been diagnosed to have left orbital mass. Discuss the differential diagnosis and outline the management. 5+5
9. Describe role of chemotherapy and newer agents in the treatment of malignant brain tumours. 10
10. Discuss briefly role of 'Epigenetics' in cancer. Illustrate this with example of myelodysplastic syndrome'. 6+4

\*\*\*\*\*