

**MEDICAL ONCOLOGY****PAPER – I**

MED.ONCO/D/14/17/I

Time : 3 hours

Max. Marks : 100

**Important instructions:**

- 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.

1. Enumerate immunosuppressive agents used for prophylaxis of acute graft versus host disease. Compare pharmacology, mechanism of action and toxicity of cyclosporine, tacrolimus and mycophenolate. 2+8
2. Name various techniques used for assessment of minimal residual disease (MRD) in leukemia. How this information can be used in the treatment of children with acute lymphoblastic leukemia? 3+7
3. A 65 year old male has been diagnosed to have metastatic liver cancer with unknown primary. Discuss the various immuno-histochemistry stains (IHC) with rationale that can be used to find out possible primary. 3+7
4. Name HPV (Human Papilloma Virus) associated malignancies. Mention characteristics of HPV positive head and neck cancer. Briefly discuss role of HPV vaccine in prevention of cervical cancer. 2+3+5
5. Name anti-angiogenic agents and describe mechanism of their action, toxicity and clinical usefulness in colon cancer. 2+2+3+3
6. List various biochemical markers for testicular germ cell tumors. Briefly discuss their interpretation and value in treatment. 3+7
7. List various biosensitizers and bioprotectors used in radiotherapy. Discuss critically their impact on treatment outcome. 5+5
8. What is 'Land mark Analysis'? How will you calculate 'sample size' to study impact of a new drug in advanced Lung cancer? 4+6
9. Discuss CARs (Chimeric Antigenic Receptors) and their value in treatment of acute lymphoblastic (ALL) and Chronic Lymphocytic Leukemias (CLL). 3+3+4
10. Discuss the principles of PET scan. Discuss its impact in the management of aggressive non Hodgkin's Lymphoma (NHL). 4+6

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