

Paper II: Technical Subject

1. Pharmacology of Chemotherapeutic Drugs

- 1.1 Classification
- 1.2 Plant alkaloids
- 1.3 Alkylating agents
- 1.4 Antimetabolites
- 1.5 Anthracyclines, Antitumor antibiotics
- 1.6 Topo-isomerase inhibitors, proteasome inhibitors
- 1.7 Corticosteroids

2. Cancer of various Systems : Solid Tumors

- 2.1 Bone and soft tissue sarcomas
- 2.2 Respiratory system
- 2.3 GI Malignancies
- 2.4 Genitourinary Malignancies
- 2.5 CNS Tumors
- 2.6 Hepatobiliary and pancreatic cancers
- 2.7 Cardiovascular malignancies
- 2.8 Cancer of unknown primary
- 2.9 Cancer of breast
- 2.10 Cancer of skin
- 2.11 Cancer of endocrine system
- 2.12 Mesotheliomas
- 2.13 Gynaecologic cancers
- 2.14 Malignant melanomas

3. Haematological malignancies

- 3.1 Myelodysplastic Syndrome
- 3.2 Acute and chronic leukemias
- 3.3 Hodgkin,s and Non-Hodgkins Lymphomas
- 3.4 Plasma cell Dyscrasias
- 3.5 Myeloproliferative disorders

4. Childhood cancers and their management

- 4.1 CNS Tumors
- 4.2 Bone and soft tissue sarcomas
- 4.3 PNET tumors
- 4.4 Lymphoma and leukemias
- 4.5 Nephroblastoma
- 4.6 Hepatoblastoma
- 4.7 Retinoblastomas
- 4.8 Palliative care in children

- 5. Manifestation of complications of cancer and cancer treatment in various systems and their management**
 - 5.1 Haematological complications
 - 5.2 Renal complications
 - 5.3 GI related complications
 - 5.4 Infection and sepsis
 - 5.5 Para- Neoplastic syndrome
 - 5.6 Cardiovascular complications
 - 5.7 Respiratory Complications
 - 5.8 CNS complications
 - 5.9 Metabolic Complications
 - 5.10 Neuromuscular complications
 - 5.11 Bone and joint complications
 - 5.12 Skin and Appendages
 - 5.13 Fertility issues
 - 5.14 Psychosocial issues
- 6. Stem Cell Transplant**
 - 6.1 Indications and principles of stem cell transplant
 - 6.2 Sources of stem cells preparative regimen
 - 6.3 Procedure, complications, prognosis
- 7. Cancer Diagnostics**
 - 7.1 Radiological diagnostics
 - 7.2 Molecular and cytogenetics
 - 7.3 Cytological and Histopathological diagnostics
 - 7.4 Biochemical Diagnostics
 - 7.5 Tumor markers, IHC (Immunohistochemistry), Flowcytometry
 - 7.6 Nuclear and Radionuclear imaging
 - 7.7 Interventional Radiology
 - 7.8 Basics of Radiation Oncology
 - 7.9 Basics of Surgical Oncology
- 8. Recent Advances in cancer management**
 - 8.1 Essentials of Molecular Biology
 - 8.2 Molecular Biology of cancer
 - 8.3 Newer approaches in cancer; Immunotherapy, Biotherapy, Genetherapy
- 9. Palliative Care**
 - 9.1 Introduction and basic concept including definition
 - 9.2 Pain assessment and management, WHO ladder, balanced use of opioids
 - 9.3 Common symptom management
 - 9.4 Communication, Breaking Bad News
 - 9.5 Ethical issues in Palliative care
 - 9.6 Psychosocial issues
 - 9.7 End of life care
 - 9.8 Supportive care and quality of life
 - 9.9 Rehabilitation of cancer patient
