

## **BRANCH – VII M Ch SURGICAL ONCOLOGY**

### **SYLLABUS:-**

1. Essentials of Molecular Biology –Basic Principles, Genomics and Cancer transduction, Immunology, Cytogenetics, Cell Cycle, Apoptosis, invasion and metastases, antigenesis , and Carcinogenesis-Genetoics, viral, physical and Chemical.
2. Epidemiology – epidemiologic methods, descriptive and analytical epidemiology.
3. Principles of Cancer management surgical oncology, Medical Oncology, Radiation Oncology and Biologic Therapy.
4. Cancer Chemotherapy.
5. Pharmacology of Cancer Biotherapeutics –Interferne interlukins, hormonal therapy, differentiating agents, monoclonal antibodies, anti-angiogenic factors.
6. Clinical Trials.
7. Cancer Prevention –tobacco related cancers, diet chemoprevention.
8. Cancer Screening.
9. Cancer Diagnosis – Molecular pathology and Cytology, Imaging, Endoscopy, Laparoscopy.
10. Specialised techniques – minimal access surgery, Vascular access, isolated perfusion, intensity modulated radiation therapy.
11. Systemic Oncology ;
  - i. Head and Neck Cancer
  - ii. Lung Cancer
  - iii. Medistinal neoplasma
  - iv. Gastrointestinal tract cancer
  - v. Cancers of Genitourinary system
  - vi. Gynaecologic cancer
  - vii. Breast cancer
  - viii. Endocrine Malignancies
  - ix. Musculoskeletal turnouts
  - x. Mesotheloma
  - xi. Cancer of the skin
  - xii. Malignant Melanoma
  - xiii. Central nervous system malignancies
  - xiv. Paediatric malignancies
  - xv. Lymphomes and leukemials
12. Pareneoplastic syndromes
13. Cancer of the unknown primary life
14. Peritonsal carcinomatosis

15. Cancer in immunosuppressed host
16. Oncologic emergencies –SVC syndrome, spinal cord compression, Metabolic emergencies, urologic emergencies
17. Treatment of metastatic cancer- brain, lung, bone, liver, malignant Effusions and ascites.
18. Haemopoietic therapy –transfusion, growth factors, autologous and Allogenic stem cell transplantation.
19. Infection in the cancer patient.
20. Supportive care and quality of life-pain management, nutritional support, sexual problems, genetic counseling, psychological issues, community resources, care of the terminally ill patient.
21. Adverse effects of treatment – nausea and vomiting. Oral complications, Pulmonary toxicity, cardiac toxicity, hair loss, gonadal dysfunction, second cancers, miscellaneous toxicity.
22. Rehabilitation of the cancer patient.
23. Oncology Nursing including various access.
24. Ethical issues in Oncology.
25. Information systems in Oncology.
26. Alternative methods of cancer treatment.
27. Newer approaches in cancer treatment –Gene therapy, molecular therapy, cancer vaccines, image guided surgery, heavy particles in radiation therapy.
28. Reconstructive Surgery.