



होमी भाभा राष्ट्रीय संस्थान  
Homi Bhabha National Institute

(Tata Memorial Centre)  
Dr. Ernest Borges Marg, Parel Mumbai – 400 012

**Theory Examination DM MEDICAL ONCOLOGY**

**NOVEMBER – DECEMBER 2013**

**Paper I**

- I **BASIC SCIENCES: CANCER BIOLOGY, TUMOUR IMMUNOLOGY, CANCER AETIOLOGY, PHARMACOLOGY, RADIATION BIOLOGY, TUMOUR PATHOLOGY**

Answer any 10 short notes

1. Next Generation Sequencing (NGS)
2. Gene expression profiling assays in breast cancer
3. Small molecule multi-targeted tyrosine kinase inhibitors in RCC: Adverse effects and special precautions
4. Newer techniques in Radiotherapy
5. Human papilloma virus and cancer
6. Predictive biomarkers in Colorectal cancer
7. Tumour vaccines: Present status
8. Field cancerization
9. Mechanisms of imatinib resistance
10. Circulating tumour cells
11. Antibody drug conjugates
12. Managing L-asparaginase toxicities



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Paper II

II SOLID TUMOURS: PRINCIPLES OF MEDICAL ONCOLOGY,  
MANAGEMENT

Answer any 10 Short Notes

1. Extended adjuvant endocrine therapy of breast cancer
2. Desmoplastic small round cell tumour (DSRCT): Current management
3. Adjuvant therapy of Non-Small Cell Lung Cancer
4. Liver metastasis in colorectal cancer: Therapeutic strategies
5. Tyrosine kinase resistance in Non-Small Cell Lung cancer
6. Neuroblastoma: Risk adapted therapy management of platinum sensitive disease
7. Neo-adjuvant chemotherapy: Benefits beyond down staging
8. FDG-PET and impact on therapeutic decisions in solid tumours
9. Her2+ metastatic breast cancer: Treatment
10. Stage IIIB Non-Small Cell Lung cancer
11. Breast conservation surgery for cancer of breast
12. Pancreatic neuroendocrine tumours: Therapeutic options



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Paper III

III HAEMATOLOGIC MALIGNANCIES

Answer any 10 Short Notes

1. 2<sup>nd</sup> Generation Tyrosine Kinase Inhibitors as 1<sup>st</sup> line therapy in chronic myeloid leukaemia (CML)
2. Initial therapy and supportive measures in acute promyelocytic leukaemia (APL)
3. Role of transplantation in follicular lymphomas
4. IMiDs in management of multiple myeloma
5. WHO Classification of myeloproliferative neoplasms (MPNs)
6. Role of maintenance rituximab in low grade lymphomas
7. Prognostic factors in chronic lymphocytic leukaemia (CLL)
8. Role of transplantation in Acute Myeloid Leukaemia (AML)
9. Treatment of Hairy Cell Leukaemia (HCL)
10. MRD in Acute Lymphoblastic Leukaemia (ALL): Detection and implications
11. Pathophysiology of post-transplantation lymphoproliferative disorders ((PTLD)
12. Pathogenesis of gastric MALT lymphoma



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Paper IV

IV **CANCER EPIDEMIOLOGY, PREVENTION, PSYCHO-ONCOLOGY,  
REHABILITATION, SOCIETAL ONCOLOGY**

Answer any 10 Short Notes

1. Chemoprevention in breast cancer: Current status
2. Lung cancer screening
3. Tumour lysis syndrome
4. Endpoint in randomized trials: Disease Free Survival vs. Overall Survival
5. Benefits and risks of use of erythropoietin in cancer
6. Tobacco control strategies
7. Speech and swallowing rehabilitation in Head & Neck cancer
8. Deep vein thrombosis in cancer: management
9. Osteonecrosis of the jaw
10. Hypercalcaemia in cancer and its management
11. Psychosocial issues at the end of life
12. Forrest plots