

April-2001

[KD 019]

Sub. Code : 1303

D.M. DEGREE EXAMINATION

(Higher Specialities)

Branch VII — Medical Oncology

(Revised Regulations)

Paper III — MEDICAL ONCOLOGY INCLUDING
THERAPY, EPIDEMIOLOGY AND REHABILITATION

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Enumerate and discuss the preventable factors in etiopathogenesis of cancer. (25)
2. How would you manage a "Febrile Neutropenic" patient? (25)
- 3 Write briefly on : (5 × 10 = 50)
 - (a) Adjuvant chemotherapy of osteo sarcoma.
 - (b) Hospice.
 - (c) Antifungal drugs..
 - (d) Cancer screening.
 - (e) Myelodysplastic syndrome.

[KE 019]

Sub. Code : 1303

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

**Paper III — MEDICAL ONCOLOGY INCLUDING
THERAPY, EPIDEMIOLOGY AND REHABILITATION**

Time : Three hours

Maximum 100 marks

Answer ALL questions

1. Discuss briefly the guidelines for evaluation and treatment of distress in patients with cancer. (25)
 2. Write briefly on second line chemotherapy for epithelial ovarian cancer. (25)
 3. Write short notes on : (5 × 10 = 50)
 - (a) Role of high fibre-low fat diet in prevention of colon cancer
 - (b) Anorexia-cachexia in cancer patients
 - (c) National Cancer Control Programme
 - (d) Differential diagnosis of anterior mediastinal mass in a 14 year old girl
 - (e) Treatment of rhabdomyosarcoma of orbit in a 6 year old child.
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March-2002

[KG 019]

Sub. Code : 1303

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

**Paper III — MEDICAL ONCOLOGY INCLUDING
THERAPY, EPIDEMIOLOGY AND REHABILITATION**

Time : Three hours

-Maximum : 100 marks

Answer ALL questions.

1. Discuss briefly the methodology, guidelines to study the problem of high incidence of stomach cancer in the population of Chennai city. (25)
2. Describe prognostic factors in non Hodgkins lymphomas and role of salvage chemotherapy for high grade lymphomas. (25)
3. Short notes on : (5 × 10 = 50)
 - (a) Mediastinal germ cell tumours
 - (b) EGFR in head and neck cancer
 - (c) The role of Biphosphonates in multiple myeloma
 - (d) Home care for patients with advanced cancer
 - (e) Evaluation of palliative endpoints in oncology clinical trials

[KK 019]

Sub. Code : 1303

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

**Paper III — MEDICAL ONCOLOGY INCLUDING
THERAPY, EPIDEMIOLOGY AND REHABILITATION**

Time : Three hours

Maximum : 100 marks

Sec. A & B : Two hours and
forty minutes

Sec. A & B : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

SECTION A

A. Essay :

(2 × 15 = 30)

(1) Discuss briefly pathology and management
of childhood brain tumours. (15)

(2) Discuss critically the role of Chemotherapy
in the management of advanced non small cell lung
cancer. (15)

SECTION B

B. Short notes :

(10 × 5 = 50)

- (1) Epidemiology of stomach cancer in India.
- (2) Treatment of fatigue in cancer patients.
- (3) Treatment of intermediate risk acute myeloblastic leukemia (AML) in a 25 year old male.
- (4) Neoadjuvant Chemotherapy in Urinary bladder cancer.
- (5) Treatment of metastatic colon cancer in a 45 year old male.
- (6) Differential diagnosis of round cell tumours in children.
- (7) Epidermal Growth Factor.
- (8) Role of Colony stimulating factors in elderly Cancer patients.
- (9) Prevention of Lung cancer
- (10) Stem cell transplantation for patients with auto-immune diseases.

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D.M. DEGREE EXAMINATION.

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Branch VII — Medical Oncology

Paper III — MEDICAL ONCOLOGY INCLUDING
THERAPY, EPIDEMIOLOGY AND REHABILITATION

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay : (2 × 15 = 30)

(1) Discuss briefly management of a case of thirty five year old male, recently diagnosed to have multiple myeloma with renal failure.

(2) Discuss the clinical presentation, pathology staging and treatment option depending on risk stratification of Neuroblastoma.

II. Short notes :

(10 × 5 = 50)

- (a) Prognostic factors for childhood ALL.
- (b) Hypercalcaemia.
- (c) Management of metastatic renal cell cancer.
- (d) Treatment of relapsed/refractory non-seminomatous germ cell tumour in an adult.
- (e) Pulmonary complications in bone marrow transplant recipients.
- (f) Prognostic factors in myelodysplastic syndrome.
- (g) Complications of central venous catheterization.
- (h) Epidemiology of Gall Bladder cancer.
- (i) Management of undifferentiated nasopharyngeal cancer in a 62 year old male with lymph node metastasis (T2N1M0).
- (j) Prostate Specific Antigen (PSA).

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II. Write short notes on :

(10 × 5 = 50)

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Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay :

(2 × 15 = 30)

(1) Discuss the management of a middle aged male presenting with left supraclavicular lymph node enlargement, with a histology of "poorly differentiated malignancy".

(2) Discuss the role of chemotherapy in head and neck cancers.

- (a) Leptomeningeal carcinomatosis.
- (b) Paraneoplastic syndromes.
- (c) Management of hepatocellular carcinoma.
- (d) Treatment of relapsed ovarian cancer.
- (e) End points of cancer treatment.
- (f) Treatment of Wilms' tumour.
- (g) Primary CNS lymphoma.
- (h) Polymorphous leukaemia.
- (i) Staging and treatment of retinoblastoma.
- (j) Acute promyelocytic leukaemia.

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Branch VII — Medical Oncology

Paper III — MEDICAL ONCOLOGY INCLUDING
THERAPY, EPIDEMIOLOGY AND REHABILITATION

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay : (2 × 15 = 30)

(1) Discuss the management of mediastinal lymphoma in a 25 year old male.

(2) Discuss clinical presentations, diagnostic approach, staging and treatment options in the management of Wilm's Tumor.

II. Short notes : (10 × 5 = 50)

(a) Staging systems of chronic myeloid Leukemia.

(b) SIADH.

(c) Treatment of low risk Gestational trophoblastic disease.

(d) Relapsed epithelial cancers of ovary.

(e) GVHD.

(f) WHO classification of Myelodysplastic syndrome.

(g) Complications of Parenteral Nutrition.

(h) Epidemiology of cervical cancer.

(i) β HCG.

(j) Treatment approach to Hormone Refractory Prostate Cancer.

[KP 019]

Sub. Code : 1303

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII – Medical Oncology

**Paper III — MEDICAL ONCOLOGY INCLUDING
THERAPY, EPIDEMIOLOGY AND REHABILITATION**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay :

1. Discuss the therapeutic options in metastases confined to the liver. (20)
2. A young woman is desirous of knowing her risk for familial breast cancer. Suggest an algorithm, based on available evidence, of your approach to the request. Assuming that the result is 'positive', analyse the impact of such knowledge on the woman's. (15)

3. Discuss the staging classification and management of non seminomatous germ cell cancer of the testis. (15)

II. Short notes :

(6 × 5 = 30)

- (a) Management of a malignant thymoma with invasion of great vessels in a 72-year-old man.
- (b) Colposcopy in the evaluation and management of cervical intraepithelial neoplasia.
- (c) Approach to an asymptomatic woman with elevation Ca-125 whose CT Scan is negative, after successful treatment for stage 3 ovarian cancer.
- (d) Place of photodynamic therapy in aerodigestive tract tumours
- (e) Non-steroidal selective oestrogen receptor blockers.
- (f) Post-laryngectomy voice rehabilitation.

[KQ 019]

Sub. Code : 1303

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

**Paper III — MEDICAL ONCOLOGY INCLUDING
THERAPY, EPIDEMIOLOGY AND REHABILITATION**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay ;

1. Discuss therapeutic options in CNS metastatic disease. (20)

2. Discuss staging classification and management of germ cell neoplasms of the ovary. (15)

3. Discuss the major syndromes of genetic cancer predisposition. (15)

II. Short notes : (6 × 5 = 30)

1. Management of pleural mesothelioma in a 40 year old man.

2. Bronchoscopy in the evaluation and management of early bronchogenic carcinoma.

3. Evaluation of metastasis of unknown origin.

4. Radio frequency ablation

5. Bisphosphonates

6. After completion of therapy clinics.

[KR 019]

Sub. Code : 1303

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

**Paper III — MEDICAL ONCOLOGY INCLUDING
THERAPY, EPIDEMIOLOGY AND REHABILITATION**

Time : Three hours

Maximum : 100 marks

Theory : Two hours and forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Illustrate your answers with appropriate diagrams and tables.

I. Essay:

1. Build a decision tree for the evaluation of a pleural effusion in a woman aged 60 years. (20)
2. Discuss the relationship between the various pathological prognostic factors in stage 1 and 2 endometrial carcinoma and their impact on treatment decisions. (15)
3. Discuss the preparatory regimens for a hematopoietic stem cell transplants along with their merits and demerits. (15)

II. Short Notes :

(6 × 5 = 30)

- (a) Onconeural antigens and antibodies.
- (b) Lenalidomide.
- (c) Palonosetron.
- (d) Pegylated G-CSF.
- (e) Nanoparticle Paclitaxel.
- (f) Retroperitoneal lymph node dissection.

[KS 019]

Sub. Code : 1303

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

**Paper III — MEDICAL ONCOLOGY INCLUDING
THERAPY, EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code : 161303

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

I. Essay :

1. Discuss the Therapeutic options for Stage III_B. non small cell lung cancer. (20)

2. Briefly discuss the scheme for the Diagnosis and Management of Poorly differentiated neoplasms of unknown primary site. (20)

II. Short notes : (10 × 6 = 60)

(1) Endometroid borderline tumours of the ovary.

(2) Spinal axis tumours.

(3) Sacro coccyseal teratoma.

(4) Extragonadal germ cell cancer syndrome.

(5) Primary vascular lymphoma.

(6) Gastro intestinal stromal tumour.

(7) Treatment of fatigue in cancer patients.

(8) Chemotherapy for medullo blastoma.

(9) Prognostic factors in chronic lymphocytic leukemia.

(10) Management of metastatic renal cell cancer.

August 2008

[KT 019]

Sub. Code: 1303

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch VII – Medical Oncology

**Paper III– MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code: 161303

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40

1. Discuss the staging of renal cell carcinoma (TNM) and elaborate on the management of metastatic renal cell cancer.
2. Briefly discuss the diagnosis, staging and management of retinoblastoma.

II. Write short notes on:

10 x 6 = 60

1. Prognostic factor in epithelial ovarian cancer.
2. Pinealoblastoma .
3. Esthesioneuroblastoma.
4. TNM stage of RMS.
5. Chordoma.
6. Neoplastic meningitis
7. GIST
8. All trans retinoic acid syndrome.
9. Adaptive immunity
10. Hypercalcemia.

February 2009

[KU 019]

Sub. Code: 1303

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch VII – Medical Oncology

**Paper III– MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code: 161303

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40

1. A 58 year old male presents with fatigue. His blood counts are : HB 11 G/dl, WBC- 39000/cmm differential – neutrophills 10%, lymphocytes – 87%, monocytes 3%, Platelets – 230,000/cmm. How will you investigate further? Briefly discuss management.
2. Discuss treatment of stage IB cervix cancer in a 25 year old, unmarried lady.

II. Write short notes on:

10 x 6 = 60

1. Metaanalysis.
2. Cardiac tumours.
3. Epidemiology of cancer esophagus.
4. WHO Classification for myelodysplatic syndrome.
5. Treatment of AML (acute myeloid leukemia) in a 70 year old man.
6. Chemotherapy treatment for non metastatic osteosarcoma.
7. Treatment of stage I breast cancer in a 37 year old lady.
8. Germ cell tumours of testis : Investigations and their interpretation.
9. NK cell (Natural killer cell).
10. Breast cancer stem cell.

August 2009

[KV 019]

Sub. Code: 1303

D.M. DEGREE EXAMINATION

(Super Specialities)

(Revised Regulations)

Branch VII – Medical Oncology

**Paper III– MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code: 161303

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40

1. Discuss the role of chemo radiation in squamous cell carcinoma of head and neck cancer. Write briefly on functional organ preservation.
2. Write briefly on the staging of breast cancer and role of adjuvant therapy for early breast cancer.

II. Write short notes on:

10 x 6 = 60

1. Current treatment options for refractory low grade NHL.
2. Imatinib resistance in CML.
3. Management of second trimester pregnant ALL patient.
4. Prostate cancer staging and management.
5. Pancreatic cancer – management with special reference to targeted therapies
6. Systemic inflammatory response syndrome (SIRS).
7. Terminally ill geriatric lung cancer patient.
8. Cancer screening - special reference to carcinoma cervix in India.
9. Cancer cachexia.
10. Retinoblastoma.

August 2011

[KZ 019]

Sub. Code: 1303

**DOCTORATE OF MEDICINE (D.M.) DEGREE EXAMINATION
(SUPER SPECIALITIES)**

BRANCH VII – MEDICAL ONCOLOGY

**MEDICAL ONCOLOGY INCLUDING THERAPY, EPIDEMIOLOGY
AND REHABILITATION**

Q.P. Code: 161303

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages (Max.)	Time (Max.)	Marks (Max.)
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1. Describe the side effects of treatment and Rehabilitation after treatment of head and neck cancer.
2. Management of invasive bladder cancer.

11	35	15
11	35	15

II. Write notes on :

- | | | | |
|--|---|----|---|
| 1. Recurrent ovarian cancer. | 4 | 10 | 7 |
| 2. Radioiodine therapy in thyroid carcinoma. | 4 | 10 | 7 |
| 3. Somatostatin and its analogues. | 4 | 10 | 7 |
| 4. Limb sparing surgery. | 4 | 10 | 7 |
| 5. High dose methotrexate. | 4 | 10 | 7 |
| 6. Adjuvant trastuzumab. | 4 | 10 | 7 |
| 7. Management of drug resistant GTD. | 4 | 10 | 7 |
| 8. Prognostic factors in epithelial carcinoma. | 4 | 10 | 7 |
| 9. Xerostomia. | 4 | 10 | 7 |
| 10. Analytical studies. | 4 | 10 | 7 |

[LB 019]

AUGUST 2012

Sub. Code: 1303

D.M – MEDICAL ONCOLOGY

**Paper – III MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code: 161303

**Time: 3 hours
(180 Min)**

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on:

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|--|----|----|----|
| 1. Describe in brief the unique pathophysiology of Acute Promyelocytic Leukemia (APML). Discuss the current standard approach and treatment of APML. | 16 | 35 | 15 |
| 2. A 30 year old Gentleman presents with a bulky anterior Mediastinal mass, biopsy of which is revealed as Poorly Differentiated Malignant Tumour. Discuss in detail your further approach and management of this patient. | 16 | 35 | 15 |

II. Write notes on:

- | | | | |
|--|---|----|---|
| 1. Intraperitoneal chemotherapy in Epithelial Ovarian Cancer . | 4 | 10 | 7 |
| 2. Status of adjuvant chemotherapy in Soft Tissue Sarcomas. | 4 | 10 | 7 |
| 3. Approach to leptomeningeal metastases in Carcinoma Breast. | 4 | 10 | 7 |
| 4. Comprehensive approach to high risk Neuroblastoma. | 4 | 10 | 7 |
| 5. Role and Evidence of Escalated BEACOPP in Hodgkins Lymphoma. | 4 | 10 | 7 |
| 6. Management of Stage I Seminoma Testes. | 4 | 10 | 7 |
| 7. Relevance of molecular monitoring in Chronic Myeloid Leukemia. | 4 | 10 | 7 |
| 8. Clinical Indications and Toxicity of Pegylated G-CSF. | 4 | 10 | 7 |
| 9. Significance of newer Staging in Lung Cancer. | 4 | 10 | 7 |
| 10. Current role of Allogenic Stem Cell Transplant in Adult Acute Leukemias. | 4 | 10 | 7 |

D.M. – MEDICAL ONCOLOGY
Paper – III MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION
Q.P.Code: 161303

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Discuss in detail the Management of Non-seminomatous germ cell tumour of the testis.
2. Describe the side effects of treatment and Rehabilitation after Treatment of muscle invasive bladder cancer.

II. Write notes on:

(10X7=70)

1. Meta-analysis and its uses in oncology.
2. Management of stage IIIB cervix cancer.
3. Incidence rate versus prevalence rate; crude incidence rate versus age adjusted rate versus truncated rate.
4. Indications and contraindications of Neo-adjuvant chemotherapy followed by limb salvage surgery in osteosarcoma.
5. Phase 1 clinical trial requirements.
6. Treatment of nausea and vomiting in a terminally ill patient.
7. Principles in designing cancer prevention clinical trials.
8. Management of anal cancer in a 40 year old female.
9. Indications for bone marrow transplant in oncological practice.
10. Dosage, indications and contraindications of Bendamustine.

D.M. – MEDICAL ONCOLOGY
Paper – III MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION
Q.P.Code: 161303

Time: Three Hours

Maximum: 100 marks

I. Elaborate on: **(2X15=30)**

1. Cardiac toxicity due to chemotherapeutic agents and write the management and monitoring of cardiac toxicity during Trastuzumab treatment.
2. HIV associated lymphomas and management of Primary CNS Lymphoma.

II. Write notes on: **(10X7=70)**

1. Case-Control studies and their benefits.
2. Management of Lymphedema in a Breast cancer patient.
3. Management of Radiation Fibrosis Syndrome.
4. Testicular NHL.
5. Prognostic variables and staging of Multiple Myeloma.
6. Mention different Orthotics and Prosthetics in rehabilitation of cancer patients.
7. Hematopoietic cell transplantation in Chronic Myeloid Leukemia.
8. Elaborate the trials which led to the use of chemoradiation in advanced stage cancer cervix.
9. Role of Hormonal therapy for endometrial cancer.
10. Aromatase inhibitors vs Selective Estrogen Receptor Modulators in the treatment of hormone positive breast cancer.

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P.Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss in detail about management of febrile neutropenia and classify antifungal agents and their use in management of fungal infections in neutropenic patients.
2. Define Gestational Trophoblastic Disease and write about cytogenetics of molar pregnancy, staging and scoring system of GTD and management of High-Risk Disease.

II. Write notes on:

(10 x 7 = 70)

1. Mention Brain dysfunction following cancer treatment and management of cognitive dysfunction.
2. Diagnostic criteria and staging of CLL. Mention prognostic factors associated with poor survival.
3. Paraneoplastic syndromes in Lung cancer.
4. Inflammatory Breast cancer –Pathology and management.
5. Classification and staging of Non-Epithelial Uterine tumours and management of Mixed Mullerian Tumor of the uterus.
6. Options of treating advanced Neuroendocrine tumors.
7. Role of staging Laparoscopy and peritoneal cytology in management of gastric cancer.
8. Management of Osteoporosis caused by chemotherapy and anti-estrogen therapy.
9. Lynch Syndrome.
10. Pertuzumab.

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P.Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the biology, pathology, staging and management of pancreatic neuroendocrine tumors.
2. Discuss the staging, tumor biology, pathology and role of neoadjuvant and adjuvant chemotherapy in gastric cancer.

II. Write notes on: **(10 x 7 = 70)**

1. Management of spinal cord compression.
2. Trastuzumab induced cardiac damage.
3. Mechanism of imatinib resistance.
4. Chemotherapy in osteosarcoma.
5. High dose methotrexate.
6. Immunotherapy in bladder cancer.
7. Genetic testing in breast cancer.
8. Chemotherapy extravasation.
9. Sacrococcygeal teratoma.
10. Immunotherapy in neuroblastoma.

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P.Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the management of Refractory Hodgkins Lymphoma and role of monoclonal antibody conjugate in this setting.
2. WHO Classification of Acute Myeloid Leukemia and management of elderly Acute Myeloid Leukemia?

II. Write notes on: **(10 x 7 = 70)**

1. Pharmacologic treatment of Cachexia.
2. Management of recurrent malignant glioma.
3. Role of chemotherapy in squamous cell carcinoma of Lung cancer in stage II.
4. Rehabilitation of Brain Tumors.
5. Histopathology classification and Risk Stratification Germ cell tumors of testis.
6. Mantle cell non Hodgkin's lymphoma.
7. Bilateral Wilms tumor management.
8. Staging of sarcomas.
9. Primary myelofibrosis.
10. Treatment of Chemotherapy induced Nausea and vomiting.

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P.Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the biology, pathology, staging and management of endometrial cancer.
2. Discuss the evolution of treatment of Wilms tumor and its staging and management.

II. Write notes on: **(10 x 7 = 70)**

1. CONSORT diagram.
2. Management of stage 1 NSGCT.
3. HIPEC.
4. Discuss adjuvant and neoadjuvant therapy in GIST.
5. Adjuvant treatment of pancreatic cancer.
6. Regional cancer centres in India.
7. Surgical interventions for management of pain in advanced cancer.
8. Fertility preservation in cancer.
9. Targeted therapy in soft tissue sarcoma.
10. Performance status.

(LL 019)

AUGUST 2017

Sub. Code:1303

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P.Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Mention different vascular access devices and their use in cancer treatment, also mention about maintenance and complications of these devices.
2. Management of a 20 yr old man presenting with massive anterior mediastinal mass.

II. Write notes on: (10 x 7 = 70)

1. Changing trends in Lung and Breast cancer in the world and in India.
2. Non-Pharmacological Pain management in cancer patients.
3. Complications of Bone metastases and methods of rehabilitation.
4. Plasmablastic Lymphoma.
5. Molecular subtypes of triple negative breast cancer.
6. Management of Peritoneal carcinomatosis in ovarian cancer.
7. Histological subtypes and role of IHC in differential Diagnosis of Carcinoma of Unknown Primary.
8. Monoclonal Gammopathies of Undetermined Significance (MGUS) and Smoldering Myeloma.
9. Alemtuzumab in Chronic Lymphocytic Leukemia.
10. Superior sulcus tumors.

(LM 019)

FEBRUARY 2018

Sub. Code: 1303

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P.Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Pathology, Staging and management of Neuroblastoma.
2. Diagnosis, Staging and management of Ewing sarcoma.

II. Write notes on:

(10 x 7 = 70)

1. Brain dysfunction due to cancer and its treatment.
2. Lymphedema.
3. Epidemiology of Gastric cancer.
4. Stem cell sources.
5. Superior vena caval syndrome.
6. Role of PET-CT scan in treatment of Lymphomas.
7. Breast cancer trend in India.
8. Management of Hairy cell Leukemia.
9. Systemic candidial infection.
10. Non pharmacologic management of pain.

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P.Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. FIGO Staging of Gestational Trophoblastic Tumors and the management of Gestational Trophoblastic Tumors.
2. Pathology, staging and management of Extremity sarcomas.

II. Write notes on: **(10 x 7 = 70)**

1. Psychologist role in management of adolescent cancer patients.
2. Inflammatory breast cancer.
3. Synovial sarcoma genetics and the management.
4. Classification of myelodysplastic syndrome and the molecular significance.
5. The new-targeted therapies in metastatic renal cell carcinoma.
6. Palliative care in improving the quality of life.
7. Diagnostic approach to Deep Vein Thrombosis and its treatment options.
8. The role of adjuvant treatment in squamous cell carcinoma of Head and Neck.
9. International Risk Stratification of Germ Cell Tumors of testis.
10. Evaluation of Carcinoma of Unknown Primary.

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss genetics, staging and treatment of retinoblastoma.
2. Discuss the differential diagnosis of mediastinal mass and pathology, Staging and treatment of thymoma.

II. Write notes on: **(10 x 7 = 70)**

1. Sacrococcygeal teratoma.
2. Grey zone lymphoma.
3. Definitions of invasive fungal disease, EORTC/MSG consensus guidelines.
4. Management of TKI induced skin rash.
5. Management of malignant pleural effusion.
6. Multi-drug resistance bacteria.
7. HLA typing.
8. Response assessment in CML.
9. High dose methotrexate.
10. Diagnosis of acute Promyelocytic leukemia.

(LQ 019)

FEBRUARY 2020

Sub. Code: 1303

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the role of neoadjuvant/induction chemotherapy in squamous cell head and neck cancer.
2. Discuss metronomic chemotherapy.

II. Write notes on:

(10 x 7 = 70)

1. Paraganglioma.
2. Basket and Umbrella clinical trials.
3. Screening for HPV infection.
4. Transplantation in Ewings Sarcoma.
5. Staging and risk stratification of Medulloblastoma.
6. Immunotherapy in neuroblastoma.
7. Cohort study.
8. Assessment of menopausal status.
9. Intravesical drug therapy in bladder cancer.
10. Febrile neutropenia.

(LR 019)

**NOVEMBER 2020
(AUGUST 2020 SESSION)**

Sub. Code: 1303

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Discuss the impact of COVID-19 on cancer management and patient outcome.
2. Discuss the epidemiology, clinical features, genetics, pathology, staging and treatment of cholangiocarcinoma.

II. Write notes on: (10 x 7 = 70)

1. Informed consent.
2. Management of adult Philadelphia chromosome positive Acute Lymphoblastic Leukemia.
3. Chemotherapy in Ewings sarcoma.
4. Medical management of fibromatosis.
5. Define skeletal related adverse events. What is the role of bisphosphonates and denosumab in preventing skeletal related adverse events in patients with metastatic cancer?
6. WHO Global Initiative for Childhood Cancer 2018.
7. Assessment and management of cancer fatigue.
8. Neoadjuvant anti-Her2 treatment in breast cancer.
9. Cancer survivorship and late effects of treatment of pediatric cancer survivor
10. Classification of severity of chemotherapy induced vomiting and guidelines for prophylaxis for prevention of chemotherapy induced nausea and vomiting.

(DM 0821)

AUGUST 2021

Sub. Code: 1303

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Classify histiocytic disorders. Discuss the management of langerhans cell histiocytosis (LCH).
2. What are adolescent and young adult (AYA) Cancers? Discuss the epidemiology, etiology, biology, clinical presentation, screening and general principles of management of AYA cancers.

II. Write notes on:

(10 x 7 = 70)

1. Management of relapsed/refractory hodgkins lymphoma.
2. Management of spinal cord compression.
3. End of life care.
4. Limb salvage surgery.
5. Hand foot syndrome.
6. Communication about sexual problems in cancer patients.
7. Globocan 2018 data with relevance to India.
8. Metastatic adrenocortical carcinoma management.
9. Cyclin dependent kinase 4 (CDK4) inhibitors.
10. Sources of funding for cancer patients in Tamil Nadu.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0222]

FEBRUARY 2022

Sub.Code :1303

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss tumor cell kinetics and its mechanism and discuss the action of chemotherapeutic agents based on it.
2. Discuss briefly flow cytometry and immune phenotype of chronic myeloid leukemia and treatment option.

II. Write notes on: **(10 x 7 = 70)**

1. I^{131} therapy for thyroid cancer.
2. Meta analysis.
3. Information system in oncology.
4. Conformational therapy.
5. Fludarabine.
6. Genetic markers.
7. CNS prophylaxis in small cell lung cancer.
8. Dendritic cell vaccine.
9. Liposomal drug delivery.
10. Hereditary cancer syndrome related to ovary.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0223]

FEBRUARY 2023

Sub. Code :1303

D.M. – MEDICAL ONCOLOGY

**Paper III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe the molecular Subtypes of Triple Negative Breast cancer. Discuss in detail about the chemotherapeutic regimens, targeted therapies and the role of check point inhibitors, hormonal therapy in Hormone positive Breast cancer and Triple Negative Breast Cancer.
2. Describe the molecular classification of colon cancer and discuss the various molecular / genetic testing methods in metastatic colon cancer, various mutations tested and their targets. Discuss the management of various types of metastatic colon cancer.

II. Write notes on:

(10 x 7 = 70)

1. Testicular Cancer Survivorship.
2. NOAC (Novel Oral Anticoagulants) in Deep Venous thrombosis and Pulmonary Embolism (PE).
3. Adjuvant treatment in Head and Neck cancer.
4. Histology directed therapy in metastatic soft tissue sarcomas.
5. Risk reduction surgeries for Breast and Ovarian cancer.
6. Genetic counselling.
7. Multiple Endocrine Neoplasia Syndromes.
8. Olanzapine – its role, mechanism in cancer therapeutics and its cost effectiveness.
9. EORTC QLQ C-30 (Core quality of life) Questionnaire.
10. GLOBOCAN 2020 and top 10 cancers in India in incidence.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0124]

JANUARY 2024

Sub. Code :1303

D.M. – MEDICAL ONCOLOGY

**PAPER III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe the mechanisms of actions of various anti-emetic agents. Discuss the classification of emetogenicity of chemotherapeutics agents and various regimes used for anti-emesis in cancer.
2. Describe and discuss the various molecular testing methods in Non small cell lung cancer, various mutations tested and their targets. Discuss the various targeted therapies for Non small cell lung cancer.

II. Write notes on:

(10 x 7 = 70)

1. Biomarkers for Check point inhibitors.
2. Trastuzumab induced cardiotoxicity and traffic light system to manage trastuzumab cardiotoxicity.
3. Molecular testing and their clinical implications in Astrocytomas.
4. Inflammatory Breast Cancer.
5. High risk Gestational Trophoblastic Neoplasia.
6. AL Amyloidosis.
7. Use of newer agents in the treatment and prevention of cancer associated Thrombosis.
8. Luspatercept.
9. WHO pain ladder.
10. GLOBOCAN 2020 and top 5 cancers in India in incidence and mortality.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0225]

FEBRUARY 2025

Sub. Code :1303

D.M. – MEDICAL ONCOLOGY

**PAPER III – MEDICAL ONCOLOGY INCLUDING THERAPY,
EPIDEMIOLOGY AND REHABILITATION**

Q.P. Code: 161303

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Complications of allogenic stem cell transplantation and their management.
2. Malignant spinal cord compression.

II. Write notes on: **(10 x 7 = 70)**

1. Breaking the bad news.
2. Hospice.
3. Management of Retinoblastoma.
4. Febrile neutropenia.
5. Oncolytic viruses.
6. Prevention and management of high dose methotrexate toxicity.
7. Management of relapsed chronic lymphocytic leukemia.
8. Cancer pain management.
9. Extra gonadal germ cell tumor.
10. Antifungal agents.
