April-2001

[KD 018] **Sub. Code : 1302**

D.M. DEGREE EXAMINATION.

(Higher Specialities)

Branch VII — Medical Oncology

(Revised Regulations)

Paper II — GENERAL ONCOLOGY, TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Time : Three hours Maximum : 100 marks

Answer ALL questions

1. Discuss the pathology, clinical features, staging and management of Wilms' tumor. (25)

2. Describe the use of monoclonal antibodies in diagnosis of small round cell tumors. (25)

3 Write briefly on : (5 × 10 = 50)

(a) MRI.

(b) Bone scan.

(c) Pain control in cancer

(d) Tamoxifen.

(e) Lasers in oncology.

November-2001

[KE 018] **Sub. Code : 1302**

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper II — GENERAL ONCOLOGY, TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Discuss critically role of chemotherapy in early stage breast cancer. (25)

2. Discuss role of concurrent chemo–radiotherapy in locally advanced squamous cell cancer of cervix. (25)

3. Write short notes on : (5 × 10 = 50)

(a) Differential diagnosis of a painful, neoplastic retroperitoneal mass in a 27 year old man

(b) Complete versus partial hydatiform mole

(c) WHO grading for oral mucositis

(d) Radiographic skeltal abnormalities in children with acute leukemia

(e) Mammography versus self examination in screening of breast cancer.

[KG 018] **Sub. Code : 1302**

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper II — GENERAL ONCOLOGY, TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Discuss briefly classification, pathology and treatment of germ cell tumours of ovary. (25)

2. Describe role of chemotherapy in muscle invasive urinary bladder cancer. (25)

3 Short notes on (5 × 10 = 50)

(a) Choice of Radiologic investigations in the diagnosis and follow up of a patient with multiple myeloma

(b) Chemotherapy for high grade NHL of gut in a 6 year old child

(c) Clear cell carcinoma of ovary

(d) Immunohistochemistry in the differential diagnosis of small round cell tumours

(e) Radionuclide treatment of painful bony metastases.

[KK 018] **Sub. Code : 1302**

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper II — GENERAL ONCOLOGY, TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

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.

A. Essay : (2 × 15 = 30)

(1) Discuss briefly pathology of childhood soft tissue sarcomas. How will you treat a 4 years old child with Orbital Rhabdomyosarcoma. (15)

(2) A 57 year old man has been diagnosed to have moderate splenomegaly with pancytopenia. Discuss critically the management plan. (15)

B. Short notes. (10 × 5 = 50)

(1) Gastrointestinal stromal Tumours (GIST)

(2) Radiology in the diagnosis of Brain Tumours

(3) Malignant tumours of Heart

(4) Catheter associated infections.

(5) Placental Site Trophoblastic Tumour (PSTT).

(6) Differential diagnosis of malignant ascites in a 25 year old male.

(7) Radioisotopes in the therapy of bone metastases.

(8) Molecular biology of Head and Neck cancer.

(9) WHO classification of myelodysplastic syndrome.

(10) Growing Teratoma Syndrome.

[KL 018] **Sub. Code : 1302**

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper II — GENERAL ONCOLOGY, TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Time : Three hours — Maximum : 100 marks

Theory : Two hours and forty minutes — Theory : 80 marks

MCQ : Twenty minutes — MCQ : 20 marks

Answer ALL questions.

I. Essay : $(2 \times 15 = 30)$

(1) Discuss critically role of concurrent chemoradiotherapy for organ preservation in advanced laryngeal cancer.

(2) Discuss briefly merits and demerits of various methods for screening of cancer cervix in the community.

II. Short notes : $(10 \times 5 = 50)$

(a) Role of PET Scan staging of Lung Cancer.

(b) Differential diagnosis of ovarian mass in a 15 year old girl.

(c) POEMS syndrome.

(d) Large cell anaplastic lymphoma.

(e) Complete mole Vs. partial mole.

(f) Pathology of uterine sarcomas.

(g) Role of Radiology in Childhood Bone Tumours.

(h) Immunotherapy for metastatic renal cell cancer.

(i) Venous thromboembolic complications of cancer.

(j) Importance of Long term Follow up in cancer survivors.

[KM 018] **Sub. Code : 1302**

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper II — GENERAL ONCOLOGY, TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

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 various oncological emergencies that are encountered in practice in brief and genesis and management of tumour lysis syndrome in details.

(2) Discuss the various strategies for prevention of cancer.

II. Short notes on : (10 × 5 = 50)

(a) Apophasis in cancer.

(b) PET scan in solid tumours.

(c) Role of immuno histo chemistry in diagnosis.

(d) Oncogenes.

(e) Aietary carcinogens and anticarcinogens.

(f) Chromosomal abnormalities in cancer.

(g) Phase III clinical trials.

(h) Hormonal therapy of prostate cancer.

(i) Anthracycline induced cardiotoxicity.

(j) Cytokines.

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[KO 018] **Sub. Code : 1302**

D.M. DEGREE EXAMINATION.

(Higher specialties)

(Revised Regulations)

Branch VII — Medical Oncology

Paper II — GENERAL ONCOLOGY, TUMOR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

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 questions : (2 × 15 = 30)

(1) Discuss the combined modality approach in the treatment of Non-small cell long cancer.

(2) Discuss briefly methods of diagnosis of early cancer. Suggest screening programme applicable to cancer in women.

II. Short notes : (10 × 5 = 50)

(a) Immuno scintigraphy.

(b) Differential diagnosis of massive splenomegaly.

(c) Extra pulmonary small cell carcinomas.

(d) Carcinoid syndrome.

(e) Lymphocyte predominant Hodgkin's-disease.

(f) Non–germ cell neoplasms of testis.

(g) Polyposis syndromes.

(h) Cardiac complications of treatment of cancer

(i) Role of radiology in gastro intestinal cancers.

(j) Genetic counselling in Breast Cancer.

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[KP 018] **Sub. Code : 1302**

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper II — GENERAL ONCOLOGY, TUMOR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

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 histomorphogenetic basis for the recent changes in the classification of Hodgkin's lymphoma and its bearing on treatment. (20)

(2) Discuss the mammographic appearances of neoplasms of the breast and suggest an evaluation algorithm for non–palpable breast lesions. (15)

(3) Discuss the pathogenesis, diagnosis and management principles of skeletal metastases. (15)

II. Short notes : (6 × 5 = 30)

(a) Histology of Gastro Intestinal Stromal Tumours (GIST).

(b) Myeloma associated amyloidosis.

(c) ^{131}I therapy for thyroid cancer.

(d) Methodology of meta–analysis.

(e) 'Generic' and 'Specific' pathologic grading systems for malignancies.

(f) Lambert–Eaton myaesthenic syndrome.

[KQ 018] **Sub. Code : 1302**

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper II – GENERAL ONCOLOGY, TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

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 WHO classification of Non-Hodgkin's lymphoma. (20)

2. Discuss the PET-FDG Imaging. How is it useful in evaluation of Lung cancer? (15)

3. Discuss the pathogenesis, diagnosis, prevention and management of Anthracycline cardiotoxicity. (15)

II. Short notes : (6 × 5 = 30)

1. Histology of NeuroEndocrine Tumors of the Gut.

2. Richter's syndrome.

3. Radio immuno conjugates in cancer therapy.

4. Bias in clinical trials.

5. Rapid-Tumor - clearance syndrome.

6. Opsoclonus – myoclonus.

[KR 018] **Sub. Code : 1302**

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper II — GENERAL ONCOLOGY, TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

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) What is primary and secondary prophylaxis? Illustrate your answer with a suitable example. (20)

(2) Enumerate the causes and discuss the management of a patient with malignant obstructive jaundice. (15)

(3) Attempt a histological classification of primary exocrine pancreatic tumors. (15)

II. Short notes : (6 × 5 = 30)

(a) Primary effusion lymphoma.

(b) Fulvestrant.

(c) Endoscopic sonography.

(d) *Helicobacter pylori*.

(e) Human papilloma virus.

(f) Atypical glandular hyperplasia.

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[KS 018] **Sub. Code : 1302**

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper II — GENERAL ONCOLOGY, TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code : 161302

Time : Three hours Maximum : 100 marks

Answer ALL questions.

I. Essay :

1. Discuss the pathology, staging and treatment options for cutaneous T. Cell Lymphoma. (20)

2. Attempt a histological classification of epithelial ovarian tumours and Discuss the treatment options for primary and locally recurrent tumors. (20)

II. Short notes : (10 × 6 = 60)

1. Chordoma.

2. Radiofrequency Ablation.

3. Hairy Cell Leukemia.

4. Epstein – Barr Virus.

5. Medullary Carcinoma Thyroid.

6. Clear Cell Sarcoma.

7. POEM'S syndrome.

8. Ethical Committee in Clinical Research.

9. Paraneoplastic Syndrome.

10. Gompertzian Curve.

August 2008

[KT 018] **Sub. Code: 1302**

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

(Common to All Regulations)

Branch VII – Medical Oncology

Paper II– GENERAL ONCOLOGY, TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time: Three hours **Maximum: 100 Marks**

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays: **2 x 20 = 40**

1. Attenpt a histological classification of germ cell tumours of the testes and discuss the treatment options for an young unmarried adult with a testicular tumour and secondary metastasis in the lung.
2. Discuss the diagnosis, management and follow up of patients with acute promyclocytic leukemia and comment on the salvage options of relapsed disease.

II. Write short notes on: **10 x 6 = 60**

1. Merkel cell tumour.
2. Pontine glioma.
3. Selective Hepatic arfery embolisation.
4. Total androgen blockade.
5. Neoplastic pemphigus.
6. Mantle zone lymphoma.
7. Psendomyxoma peritonii.
8. Nilotinib.
9. Carcinoid syndrome.
10. Ritchers syndrome.

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February 2009

[KU 018] **Sub. Code: 1302**

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch VII – Medical Oncology

Paper II– GENERAL ONCOLOGY, TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time: Three hours **Maximum: 100 Marks**

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays: **2 x 20 = 40**

1. A 9 year old child has been diagnosed to have bilateral proptosis. Fine needle aspiration biopsy is suggestive of round cell tumour. How will you approach to diagnosis. Give rationale for each investigation.
2. Discuss briefly tumour heterogeneity.

II. Write short notes on: **10 x 6 = 60**

1. Pathology of endometrial cancer.
2. Stomach Cancer: Investigations and their interpretation.
3. Multiple Myeloma: Response Criteria.
4. Beta 2 microglobulin.
5. Opioid for advanced cancer.
6. Radiolabelled antibodies in the diagnosis of cancer.
7. CT Scan versus PET scan for Lung cancer.
8. Differenital diagnosis of retroperitoneal lump in a 25 years old male.
9. Molecular biology of breast cancer.
10. Treatment of recurrent head and neck cancer.

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August 2009

[KV 018] **Sub. Code: 1302**

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch VII – Medical Oncology

Paper II– GENERAL ONCOLOGY, TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time: Three hours **Maximum: 100 Marks**

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays: **2 x 20 = 40**

1. WHO classification of ovarian tumors and role of neoadjuvant and adjuvant chemo therapy in epithelial tumors of ovary.
2. Diagnosis, staging and non surgical management of carcinoma of oesophagus.

II. Write short notes on: **10 x 6 = 60**

1. Neuroblastoma.
2. Prostate cancer - staging and management.
3. Telemarase therapies.
4. Sorfenib.
5. Clinical utility of genetic testing.
6. Adjuvant therapy for early breast cancer.
7. Anaemia in multiple myeloma
8. Quality of life in breast cancer
9. Ewings sarcoma molecular biology.
10. Cancer vaccines.

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August 2011

[KZ 018] **Sub. Code: 1302**

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

BRANCH VII – MEDICAL ONCOLOGY

GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time : 3 hours (180 Min) **Maximum : 100 marks**

Answer ALL questions in the same order.

I. Elaborate on :	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. Discuss the mechanism of action and the clinical indications for Photodynamic therapy in detail.	11	35	15
2. Discuss the histological classification of epithelial tumors of Lung.	11	35	15
II. Write notes on :			
1. Dietary carcinogens.	4	10	7
2. Molecular Imaging in Medical Oncology.	4	10	7
3. Inferior vena cava filters.	4	10	7
4. Endobronchial ultrasound.	4	10	7
5. Raloxifene.	4	10	7
6. Port site metastasis.	4	10	7
7. Lung cancer screening.	4	10	7
8. Biliary Drainage.	4	10	7
9. Single Nucleiotide Polymorphism.	4	10	7
10. Cryptorchidism.	4	10	7

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[LB 018] **AUGUST 2012** **Sub. Code: 1302**

D.M – MEDICAL ONCOLOGY

Paper – II GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time: 3 hours **Maximum: 100 marks**
(180 Min)

Answer ALL questions in the same order.

I. Elaborate on:	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. Discuss in detail Fertility Preservation Strategies in current Oncology Practice.	16	35	15
2. Discuss in detail the current role of a pathologist in the diagnosis and prognostication of Lung Carcinoma.	16	35	15

II. Write notes on:

1. Role of Nuclear Medicine Physician in Cancer Pain Management.	4	10	7
2. Transfusion Associated GVHD.	4	10	7
3. Epigenetics and Clinical Relevance in Oncology.	4	10	7
4. Indications of PET CT imaging in Gastro Intestinal Tumours.	4	10	7
5. Radio immune conjugates in Management of Lymphomas.	4	10	7
6. Indications and relevance of Magnetic Resonance Imaging of the Breast.	4	10	7
7. Indian scenario in screening of Carcinoma Cervix.	4	10	7
8. Tamoxifen in Chemoprevention.	4	10	7
9. Paraneoplastic Manifestations in Lung Carcinoma.	4	10	7
10. Approach to Stage II Breast Carcinoma diagnosed in 2nd Trimester of Pregnancy.	4	10	7

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(LD 018) **AUGUST 2013** **Sub. Code:1302**

D.M. – MEDICAL ONCOLOGY
Paper – II GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE
Q.P.Code: 161302

Time: Three Hours **Maximum: 100 marks**

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

1. Discuss the histo-pathological classification of ovarian cancers.

2. Discuss in detail Hereditary cancers, including the management of unaffected carriers of BRCA1 deleterious mutations.

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

1. Differential diagnosis of small blue round cell tumours.
2. Grading of epithelial breast tumours.
3. Molecular basis, clinical features and management of Gastrointestinal stromal tumours.
4. Indications, contraindications and basic principles of Radio-labelled monoclonal antibodies.
5. Management of the Retroperitoneal tumours.
6. Diagnostic workup of Acute lymphoblastic leukaemia.
7. Radio-isotopes useful in PET-CT and oncological applications of PET-CT.
8. Zero order versus first order kinetics in cancer therapy.
9. Parasites causing cancers.
10. Magnetic resonance imaging of the breast.

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(LF 018) **AUGUST 2014** **Sub. Code:1302**

D.M. – MEDICAL ONCOLOGY

Paper – II GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P.Code: 161302

Time: Three Hours **Maximum: 100 marks**

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

1. Role of PET-CT scan in diagnosis, assessing response and treatment of Lymphomas
2. Discuss the differential diagnosis and management of a 30 yr old male with Superior Vena caval Syndrome.

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

1. Management of liver metastases by interventional radiology.
2. Use of photodynamic therapy in treatment of cancer.
3. Epidermal Growth Factor Receptor Inhibitors in Non-Small cell Lung cancer
4. Risk Stratification and treatment recommendations of GIST.
5. Chemo radiation in locally advanced cancer Esophagus.
6. Enumerate the different staging system in Gastric cancer and their clinical implications.
7. Poor prognosis Estrogen Receptor-positive breast cancer.
8. Circulating tumor cells and their utility in management and outcomes.
9. Denosumab – mechanism of action, dose, advantages in management of bone metastases.
10. Thyroid cancer-Emerging role for targeted therapies.

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(LH 018) **AUGUST 2015** **Sub. Code:1302**

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P.Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. Describe in detail about morphology, immunophenotype, clinical features, diagnosis and therapy of Follicular lymphoma.

2. Metastatic colon cancer-chemotherapy, targeted therapy and surgery for primary and metastatic sites.

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

1. Radio embolization and its uses in management of cancer.
2. Adjuvant chemotherapy in Non-Small cell Lung cancer.
3. Palliative procedures in unresectable Esophageal cancer.
4. Risk factors, pathology and tumor biology of gastric cancer.
5. Histological features, immunophenotype of Nodular Lymphocyte predominant Hodgkin lymphoma.
6. Enumerate mediastinal Neoplasms and elaborate on management of Thymoma.
7. Novel targeted approach to chemo radiation of locally advanced pancreatic cancer.
8. Immunotherapy and chemotherapy for metastatic melanoma.
9. Metronomic chemotherapy.
10. Gastric Maltoma – diagnosis and management.

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(LI 018) FEBRUARY 2016 **Sub. Code:1302**

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P.Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. Discuss the management of metastatic prostate cancer.
2. Discuss the role of neoadjuvant chemotherapy in head and neck squamous cell carcinoma.

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

1. Bone scan.
2. Hepatoblastoma.
3. HIV related lymphoma.
4. Management of relapsed refractory hodgkins lymphoma.
5. Maintenance therapy in multiple myeloma.
6. Granulosa cell tumor.
7. Risk reduction surgery.
8. Escalation and de-escalation approach in febrile neutropenia.
9. Management of acute GVHD.
10. Cancer associated thrombosis.

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(LJ 018) AUGUST 2016 **Sub. Code:1302**

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P.Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. Write the Histopathogical classification of Thyroid cancer and the role of Medical Oncologist in the management of Thyroid cancer.

2. Write about the genetics, molecular profile of Colon cancer and role of targeted therapy.

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

1. GIST management.
2. Management of superficial Bladder cancer.
3. Classification of pediatric brain tumors and describe the management of medulloblastoma.
4. Castrate Resistant Prostatic Cancer – role of chemotherapy.
5. Hormone manipulation in postmenopausal breast cancer woman.
6. Staging and management of pancreatic neuro endocrine cancer.
7. Describe the management of Adreno cortical tumor.
8. Management of recurrent / metastatic carcinoma cervix.
9. Ewing's sarcoma evolution of chemotherapy.
10. Breast cancer screening.

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(LK 018) FEBRUARY 2017 **Sub. Code:1302**

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P.Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. What are the methods available for assessment of response to treatment, discuss in detail?

2. Discuss the molecular pathology of lung cancer and its clinical application.

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

1. Management of metastatic pancreatic cancer.
2. Chemoradiotherapy in esophageal cancer.
3. Risk stratification in multiple myeloma.
4. Use of anti-emetics.
5. DOTATOC scan.
6. Pathology of neuroblastoma.
7. Molecular biology of renal cell carcinoma.
8. Treatment of bone metastasis.
9. Sinusoidal obstruction syndrome.
10. Indication for transplantation in pediatric acute lymphoblastic leukemia.

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(LL 018) AUGUST 2017 **Sub. Code:1302**

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P.Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. Role of Interventional Radiology in the Management of cancer-Explain with examples.

2. Discuss the management of Small Cell Lung cancer-Extensive disease.

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

1. Management of IVC occlusion in cancer patients.
2. Vertebroplasty and Kyphoplasty in the management of bone lesions.
3. How is PET-CT Scan useful in assessing residual disease in Hodgkin Lymphoma?
4. Bio markers used in Breast and Colorectal cancers and their clinical implications.
5. Human Papilloma Virus as etiological agent in Head and Neck cancer.
6. Role of Chemo radiation in Non-Small Cell Lung Cancer.
7. Tyrosine kinase inhibitors.
8. Etiological factors and predisposing conditions for cancer Esophagus.
9. Ibrutinib in CLL.
10. Staging of Hodgkin Lymphoma and prognostic factors in Early and advanced stage disease.

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(LM 018) FEBRUARY 2018 **Sub. Code: 1302**

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P.Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. Histological classification of Lung cancers and role of Adjuvant chemotherapy in resected Non Small cell lung cancer.

2. Management of advanced Epithelial ovarian cancer.

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

1. Mediastinal Germ Cell tumours.
2. Management of advanced Pancreatic cancer.
3. Liver Transplantation for Hepatocellular carcinoma.
4. Adjuvant chemotherapy in Rectal cancer.
5. Principles of HER 2 testing in Breast cancer.
6. Magnetic Resonance Spectroscopy.
7. Role of Radioactive Iodine therapy in thyroid cancer.
8. Pathology of Breast cancer and its importance in treatment.
9. Retinoblastoma - staging and management.
10. Tobacco cessation therapy.

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(LN 018) AUGUST 2018 **Sub. Code: 1302**

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P.Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. Bio markers in epithelial ovarian cancers and the Role of anti angiogenic agent in the management of Epithelial ovarian cancers.

2. Wilm's tumor staging and the evaluation of therapy.

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

1. Systemic therapy in Metastatic pancreatic cancer.
2. HER-2 Testing in Breast cancer.
3. Fatigue in Cancer.
4. Management of Superficial Urinary Bladder Cancer.
5. Sentinel node biopsy.
6. Role of PET-CT in lymphomas.
7. Breast cancer Screening.
8. MIBG.
9. Risk stratification acute myeloid leukemia.
10. Triple Negative breast cancer subtypes and the molecular biology.

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(LP 018) AUGUST 2019 **Sub. Code: 1302**

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. What are the regulatory requirements for conducting clinical trials in India?

2. Discuss bone directed therapy in solid tumors.

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

1. DA-REPOCH.
2. WHO classification of NHL.
3. COTPA.
4. Role of nephrectomy in renal cell carcinoma.
5. Liquid biopsy.
6. Chemotherapy in hormone sensitive metastatic prostate cancer.
7. Role of chemotherapy in low grade glioma.
8. Solitary pulmonary nodule.
9. Recommendations for screening for colon cancer.
10. Staging of pediatric germ cell tumor.

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(LQ 018) FEBRUARY 2020 **Sub. Code: 1302**

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. Role of interventional radiology in management of cancer – explain with example.
2. Discuss targeted therapy in breast cancer.

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

1. Dietary carcinogens.
2. Biosimilars.
3. Histology guided treatment in soft tissue sarcoma.
4. MIBG.
5. Pathogenesis of myeloma bone disease.
6. Uses of HDAC inhibitor in oncology.
7. Management of CMV in allogenic bone marrow transplantation.
8. Response adapted therapy in Hodgkins lymphoma.
9. Minimal Residual Disease in Acute Lymphoblastic Leukemia.
10. Viruses and cancer.

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(LR 018) NOVEMBER 2020 **Sub. Code: 1302**

(AUGUST 2020 SESSION)

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. What are the indications for genetic testing in patients with suspected hereditary breast cancer? What are the methods by which BRCA testing is performed? Discuss the reporting and clinical implication of BRCA report.

2. Discuss the etiopathogenesis of Human Papilloma Virus (HPV) associated cancers. What are the therapeutic implications for HPV associated cancers? Discuss the pros and cons for universal HPV vaccination in India?

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

1. IMDC (International Metastatic RCC Database Consortium) Risk Score.
2. Pathological risk-stratification in Wilms tumor.
3. ^{77}Lu-Dotatate. Lutetium therapy for neuroendocrine tumors
4. BI-RADS (Breast Imaging-Reporting and Data System) score.
5. Fibroblast Growth Factor Receptor (FGFR) inhibitors
6. Tumor Proportion Score (TPS) and Combined Positive Score (CPS)
7. Genetic, pathological and clinical differences between right sided and left sided colon cancer.
8. Discuss the molecular classification of brain tumors and role of targeted therapy in management of brain tumors.
9. International Myeloma Working Group (IMWG) criteria for diagnosis and response assessment in multiple myeloma?
10. Carcinoma of unknown primary (CUPS).

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(DM 0821) AUGUST 2021 **Sub. Code: 1302**

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. Discuss the role of microbiome in cancer and its clinical application.
2. Discuss the risk factors, pathology, staging and management of malignant mesothelioma.

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

1. Microsatellite instability.
2. Central nervous system prophylaxis in acute lymphoblastic leukemia.
3. The cancer genome atlas (TCGA).
4. Mechanism of action of taxanes, vinca alkaloids and epothilones.
5. Smoking cessation guidelines.
6. Hereditary gastric cancer.
7. Bayesian methods in statistics.
8. Pragmatic clinical trials.
9. Chemotherapy in operable pancreatic cancer.
10. European American osteosarcoma (EURAMOS) trial.

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

[DM 0222] FEBRUARY 2022 **Sub.Code :1302**

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. Discuss the types of ionizing radiation and their application in oncology and their side effects.
2. Discuss the etiopathogenesis of malignant bone tumors. Discuss the management of osteogenic sarcoma.

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

1. Thalium 201 imaging.
2. Fast neutron therapy.
3. Hydatiform mole.
4. K RAS mutation.
5. Spectral karyotype.
6. Proteomics in cancer detection.
7. Organ selective growth of metastasis.
8. Suicide gene therapy.
9. Immuno scintigraphy.
10. Cetuximab.

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

[DM 0822] AUGUST 2022 Sub. Code :1302

D.M. – MEDICAL ONCOLOGY

Paper II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. Describe in detail about Pathology of Hodgkins Lymphoma, Diagnosic Evaluation, Risk factors and Management of early stage Hodgkins Lymphoma.

2. Describe the various vascular access devices used in Oncology and elaborate about each device and its merits and demerits.

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

1. Use of Lu177 based cancer therapeutics.
2. Prognostic scores for Follicular lymphoma.
3. Lugano Response Evaluation Criteria for Lymphomas.
4. Checkpoint inhibitors in Urothelial cancers.
5. LI-RADS (Liver imaging reporting and data system).
6. Risk reduction surgeries for thyroid cancer.
7. Diagnostic Immunohistochemistry (IHC) for Carcinoma of Unknown Primary.
8. CML and Pregnancy.
9. Advantages and disadvantages of NWTS and SIOP protocols in Wilms tumor.
10. Risk stratification of germ cell tumors of testis.

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

[DM 0223] FEBRUARY 2023 Sub. Code :1302

D.M. – MEDICAL ONCOLOGY

PAPER II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. Smoking Cessation Guidelines and Smoking Cessation into Oncology practice and discuss the treatment for Nicotine Dependence.

2. Discuss Tumor Cell Kinetics, its mechanism and action of Chemotherapeutic agents based on it.

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

1. Screening recommendation for Colon Cancer.
2. Describe Kaplan-Meier and Water fall plot.
3. Molecular imaging in Medical Oncology.
4. Anorexia - Cachexia in Oncology practice.
5. Standard deviation.
6. Precancerous lesions in oral cavity.
7. Chemo Radiotherapy in Solid tumors.
8. Radio sensitizing nucleosides.
9. Relative Biological efficiency.
10. Bone scan.

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

[DM 0124] **JANUARY 2024** **Sub. Code :1302**

D.M. – MEDICAL ONCOLOGY

PAPER II – GENERAL ONCOLOGY INCLUDING TUMOUR PATHOLOGY, RADIOLOGY AND NUCLEAR MEDICINE

Q.P. Code: 161302

Time: Three Hours **Maximum: 100 Marks**

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

1. Prognostic system in metastatic RCC and management of metastatic renal cell carcinoma.

2. Castration resistant prostate cancer-metastatic and non metastatic.

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

1. HPV in oropharyngeal cancer.
2. Paragangliomas.
3. Smoking cessation.
4. Management of solitary pulmonary nodule.
5. TP53 tumor suppressor gene.
6. Treatment for stage I gastric cancer.
7. Pancreatoblastoma.
8. Hamartomatous polyposis syndrome.
9. Bethesda criteria.
10. Active surveillance in prostate cancer.

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