

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.
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(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.

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(Higher Specialities)

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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.

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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 Theory : 80 marks
forty minutes

MCQ : Twenty minutes MCQ : 20 marks

Answer ALL questions.

I. Essay : (2 × 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 × 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.

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II. Short notes on :

(10 × 5 = 50)

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(Higher Specialities)

(Revised Regulations)

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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.

(a) Apoptosis 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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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 Theory : 80 marks
forty minutes

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 lung 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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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) ¹³¹I 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]

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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.

[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. Attempt a histological classification of germ cell tumours of the testes and discuss the treatment options for a 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 promyelocytic 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 artery embolisation.
4. Total androgen blockade.
5. Neoplastic pemphigus.
6. Mantle zone lymphoma.
7. Pseudomyxoma peritonii.
8. Nilotinib.
9. Carcinoid syndrome.
10. Ritchers syndrome.

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. Differential diagnosis of retroperitoneal lump in a 25 years old male.
9. Molecular biology of breast cancer.
10. Treatment of recurrent head and neck cancer.

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.

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 Nucleotide Polymorphism.	4	10	7
10. Cryptorchidism.	4	10	7

[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
(180 Min)**

Maximum: 100 marks

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 2 nd Trimester of Pregnancy.	4	10	7

(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.

[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

Answer ALL questions in the same order.

I. Elaborate on:

(2 x 15 = 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:

(10 x 7 = 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.
