

April-2001

[KD 020]

Sub. Code : 1304

D.M. DEGREE EXAMINATION

(Higher Specialities)

Branch VII — Medical Oncology

(Revised Regulations)

Paper IV — RECENT ADVANCES IN MEDICAL
ONCOLOGY

Time : Three hours (Maximum : 100 marks)

Answer ALL questions

1. Discuss the role of biological response modifiers in management of cancer. (25)
2. Discuss the various aspects of high dose chemotherapy in cancer. (25)
- 3 Write briefly on : (5 × 10 = 50)
 - (a) Topoisomerase inhibitors.
 - (b) Hyperthermia.
 - (c) Late effects of Cancer chemotherapy
 - (d) All transretinoic acid (ATRA).
 - (e) Gene therapy.

November-2001

[KE 020]

Sub. Code : 1304

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper IV — RECENT ADVANCES IN MEDICAL
ONCOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss critically role of chemotherapy in the treatment of anal canal cancer. (25)
 2. Discuss management of standard prognosis AML. (25)
 3. Short notes on : (5 × 10 = 50)
 - (a) STI-571 (Tyrosine Kinase Inhibitor)
 - (b) Gene therapy in gliomas
 - (c) Thalidomide
 - (d) Hormone replacement therapy
 - (e) Antibody targeted therapy in nonHodgkins Lymphoma.
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March-2002

[KG 020]

Sub. Code : 1304

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper IV — RECENT ADVANCES IN MEDICAL
ONCOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss outpatients management of febrile neutropenia following cancer chemotherapy. (25)
2. Discuss critically role of concurrent chemoradiotherapy in head and neck Cancer. (25)
3. Write short notes on : (5 × 10 = 50)
 - (a) Arsenic trioxide
 - (b) Mycophenolate Mofetil (MMF)
 - (c) Advances in the chemotherapy of pancreatic cancer
 - (d) Mixed chimerism in marrow transplants
 - (e) Multiagent antifolate in non small cell lung cancer.

[KK 020]

Sub. Code : 1304

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper IV — RECENT ADVANCES IN MEDICAL
ONCOLOGY

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

A. Essay : (2 × 15 = 30)

(1) Describe briefly hierarchy of haemopoiesis.
How stem cells play a part in tissue repair?

(2) Discuss critically the role of concurrent
chemoradiotherapy in the management of anal canal
cancer.

B. Short notes. (10 × 5 = 50)

(1) Target based therapy for head and neck
cancer.

(2) Immunotherapy for the treatment of
malignant gliomas.

- (3) Role of monoclonal antibodies in lymphomas.
- (4) Bortezomib.
- (5) Treatment of stem cell transplantation in the
childhood ALL (acute lymphoblastic leukemia).
- (6) Flow Cytometry.
- (7) Treatment of Secondary leukemia.
- (8) Chemotherapy for Medulloblastoma.
- (9) Hormone therapy for metastatic breast
cancer
- (10) Gene therapy for malignant melanoma.

February-2005

[KM 020]

Sub. Code : 1304

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper IV — RECENT ADVANCES IN MEDICAL
ONCOLOGY

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 : (2 × 15 = 30)

(1) Discuss the role of autologous stem cell transplantation in present practice of oncology.

(2) Discuss the role and recent trends of targeted therapy.

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

(a) Cancer vaccines

(b) Chemoprevention

(c) Role of laparoscopy in diagnosis and treatment

(d) Chemotherapy of prostate cancer

(e) Biphosphonates

(f) Meta-analysis

(g) Aromatase inhibitors

(h) Epidemiology of cancer in India

(i) Role of erythropoietin in cancer anaemia

(j) Cancer in Immuno-suppressed.

[KO 020]

Sub. Code : 1304

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper IV — RECENT ADVANCES IN MEDICAL
ONCOLOGY

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) Describe critically the management of Hodgkins disease which relapsed after standard ABVD.

(2) Discuss the Neoadjuvant treatment of cancer of rectum.

II. Short Notes: (10 × 5 = 50)

(a) Hormonal treatment of breast cancer in premenopausal female.

(b) Angiogenesis inhibitors.

(c) Cyto protection during chemotherapy

(d) Chemo prevention of cancer

(e) Chemotherapy for mesothelioma

(f) Imatinib mesylate

(g) Treatment of gastric lymphoma

(h) Immuno histo chemistry for small round cell tumors.

(i) Radio immuno pharmaceuticals in hematologic malignancies.

(j) Somatostatin.

[KP 020]

Sub. Code : 1304

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper IV — RECENT ADVANCES IN MEDICAL
ONCOLOGY

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 :

(1) Critically evaluate the role of sentinel lymph node biopsy, along with the various techniques used, in the management of tumours at different sites. (20)

(2) Discuss the etiopathogenesis of deep vein thrombosis in cancer. Suggest an investigative work up for such patients. Outline a management approach. (15)

(3) Discuss Neoplastic angiogenesis and antiangiogenesis therapy. (15)

II. Short notes : (6 × 5 = 30)

(a) Chemoradiotherapy in the management of carcinoma of the anal canal

(b) Management of metastatic endometrial stromal sarcoma.

(c) Cyclo-oxygenase-2 (COX2) inhibitors in prevention of cancer.

(d) Temozolomide for metastatic brain tumours.

(e) Magnetic resonance spectroscopy.

(f) Suicide gene therapy.

[KQ 020]

Sub. Code : 1304

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper IV — RECENT ADVANCES IN MEDICAL
ONCOLOGY

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. Critically evaluate Breast conservative surgery vis-a-vis radical surgery in the management of Breast cancer. (20)

2. Discuss immuno surveillance mechanisms and the different immunotherapeutic strategies. (15)

3. Discuss the plasma - cell - stromal interactions in multiple myeloma. Discuss various therapeutic strategies in the treatment of myeloma. (15)

II. Short notes : (6 × 5 = 30)

1. Chemoradiotherapy in the management of carcinoma of cervix.

2. Metastatic renal cell carcinoma

3. Prevention of oral cancer.

4. Dendritic cell vaccines

5. Carcinomatous meningitis.

6. LASER in the management of cancer of the upper aerodigestive tract.

[KS 020]

Sub. Code : 1304

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

**Paper IV — RECENT ADVANCES IN MEDICAL
ONCOLOGY**

Q.P. Code : 161304

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

I. Essay :

1. Discuss the pathophysiology of pain and the advances in the management of acute pain in subjects with cancer. (20)

2. Discuss the status of geriatric assessment in the elderly and briefly elaborate on the treatment of older subjects with colorectal cancer. (20)

II. Short notes : (10 × 6 = 60)

(1) Extreme drug resistance assay

(2) Vulnerable population in clinical research

(3) Bexarotene

(4) Transfusion related acute lung injury

(5) Molecular imaging

(6) Prognostic factors in myelodysplastic syndrome

(7) Differentiating agents

(8) Bortezomib

(9) Preventable cancer

(10) Neuroendocrine tumours.

August 2008

[KT 020]

Sub. Code: 1304

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch VII – Medical Oncology

Paper IV– RECENT ADVANCES IN MEDICAL ONCOLOGY

Q.P. Code: 161304

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40

1. Discuss the pathophysiology of hemopoiesis and the current status of colony stimulating factor in the management of infectious complications in subjects with febrile neutropenia following myelosuppressive chemotherapy.
2. Elaborate the role of molecular targetted therapy in the treatment of squamous cell cancer of the head and neck.

II. Write short notes on:

10 x 6 = 60

1. Directed donation.
2. Ostroarticular allograft.
3. Thrombopoietin.
4. Mammalian target of rapamycin inhibitors (MTOR).
5. Graft versus myeloma effect.
6. Proteasome Inhibitor.
7. Thallium – 201 (Imaging).
8. Terminally ill Children – issue of support.
9. Neurocognitive sequelae of children treated with radiation.
10. Central venous catheter infection.

February 2009

[KU 020]

Sub. Code: 1304

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch VII – Medical Oncology

Paper IV– RECENT ADVANCES IN MEDICAL ONCOLOGY

Q.P. Code: 161304

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40

1. Write short essay on Epigenetics.
2. 'Cancer is a multistep process' Explain this with example of colon cancer. What could be possible interventions at each step?

II. Write short notes on:

10 x 6 = 60

1. Bortezomib.
2. Treatment of CNS leukemia.
3. T cell non Hodgkin's Lymphoma.
4. Allogeneic stem cell transplantation for immunodeficiency diseases.
5. Role of immunohistochemistry in the diagnosis of unknown primary.
6. Management of Invasive aspergillosis.
7. Treatment of superior venal cava obstruction.
8. Differential diagnosis of ovarian mass in a 15 year old girl.
9. Communication skills in oncology care.
10. Merits and demerits of treatment in asymptomatic early stage prostate cancer.

August 2009

[KV 020]

Sub. Code: 1304

D.M. DEGREE EXAMINATION

(Super Specialities)

(Revised Regulations)

Branch VII – Medical Oncology

Paper IV– RECENT ADVANCES IN MEDICAL ONCOLOGY

Q.P. Code: 161304

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40

1. Discuss briefly on the recent development in pathology, molecular biology and management of glioblastoma multiforme.
2. Management of imitanib resistant chronic myeloid leukemia.

II. Write short notes on:

10 x 6 = 60

1. K RAS.
2. RECIST PD – 20.
3. Lepatib.
4. IGRT (image guided Radiotherapy).
5. Multikinase inhibitors.
6. Chemoport.
7. GVHD.
8. Molecular targeted therapy in renal cell carcinoma.
9. Chemoprevention.
10. Management of mesothelioma.

August 2011

[KZ 020]

Sub. Code: 1304

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

**BRANCH VII – MEDICAL ONCOLOGY
RECENT ADVANCES IN MEDICAL ONCOLOGY
Q.P. Code: 161304**

**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 Adoptive cell therapy in treatment of Cancer.	11	35	15
2. Discuss the current status of individualized treatment for Cancer (Tailored Therapy) in Medical Oncology.	11	35	15

II. Write notes on :

1. Electronic Medical Records.	4	10	7
2. Robotic Surgery in Oncology.	4	10	7
3. Bendamustine.	4	10	7
4. Radiation induced Cardiotoxicity.	4	10	7
5. Olaparib.	4	10	7
6. Image Guided Radiotherapy (IGRT).	4	10	7
7. Genitourinary Rhabdomyosarcoma.	4	10	7
8. Carcinosarcoma of uterus.	4	10	7
9. Thaliomide.	4	10	7
10. Myelofibrosis.	4	10	7

[LB 020]

AUGUST 2012

Sub. Code: 1304

D.M – MEDICAL ONCOLOGY

Paper – IV RECENT ADVANCES IN MEDICAL ONCOLOGY

Q.P. Code: 161304

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. Discuss in detail the role Targeted therapy and recent advances in the Systemic Management of Colorectal Cancers. | 16 | 35 | 15 |
| 2. Critically analyse the role and issues regarding Intraperitoneal Chemotherapy in Epithelial Ovarian Cancer. | 16 | 35 | 15 |

II. Write notes on:

- | | | | |
|--|---|----|---|
| 1. Indications and contraindications of Total Parenteral Nutrition in Cancer Patients. | 4 | 10 | 7 |
| 2. Algorithm for Cancer Pain Management. | 4 | 10 | 7 |
| 3. Utility of Erlotinib in Solid Tumour Oncology. | 4 | 10 | 7 |
| 4. Definition and Indications of Haploidentical Stem cell Transplantation. | 4 | 10 | 7 |
| 5. Recent advances in Systemic therapy in Non Small Cell Lung Cancer. | 4 | 10 | 7 |
| 6. Accelerated Approval of Cancer Drugs. | 4 | 10 | 7 |
| 7. Definition and issues involved in Euthanasia and Physician Assisted Suicide. | 4 | 10 | 7 |
| 8. Clinical Indications and Toxicity of Trastuzumab. | 4 | 10 | 7 |
| 9. Recent Advances in the management of Hormone Refractory Prostate Cancer. | 4 | 10 | 7 |
| 10. Current role of PET Scan in patients with Lymphomas. | 4 | 10 | 7 |

(LD 020)

AUGUST 2013

Sub. Code:1304

D.M. – MEDICAL ONCOLOGY
Paper – IV RECENT ADVANCES IN MEDICAL ONCOLOGY
Q.P.Code: 161304

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Discuss in detail the role of Targeted therapy in Oncology.
2. Indications, contraindications, methodology and side effects of Allogenic bone marrow transplant.

II. Write notes on:

(10X7=70)

1. Nanotechnology in oncology.
2. Active specific immunotherapy for cancer.
3. 3rd generation Pgp (P-glycoprotein) inhibitors.
4. Differentiating agents in the treatment of cancer.
5. HNPCC prevention.
6. Sorafenib.
7. Radiofrequency ablation.
8. Vandetanib.
9. Metronomic chemotherapy.
10. Predictive molecular tests in cancer management.

[LF 020]

AUGUST 2014

Sub. Code: 1304

D.M. – MEDICAL ONCOLOGY

Paper IV – RECENT ADVANCES IN MEDICAL ONCOLOGY

Q. P. Code: 161304

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions in the same order.

I. Elaborate on:

(2 x 15 = 30)

1. Recent advances in treatment of HER 2 Positive Breast cancer.
2. Discuss in detail about cytogenetics, molecular abnormalities, prognostic factors and newer therapies in Acute Myeloid Leukemia.

II. Write notes on:

(10 x 7 = 70)

1. Eribulin.
2. Targeted therapy in Hodgkin's Lymphoma.
3. Ramucirumab in colorectal cancer.
4. Nutritional assessment and intervention in cancer patients.
5. Role of Androgen receptor in breast cancer management.
6. Immunotherapy in malignant melanoma.
7. Comment on Surgery vs Observation following Neo adjuvant chemo radiation in locally advanced rectal cancer.
8. Describe charged particle beams in radiation and mention the advantages and disadvantages of Proton and Carbon beam therapy.
9. Granulosa cell tumours of the ovary.
10. How do you assess cost-effectiveness and use it in decision making?
