$[KD\ 017]$ 

Sub. Code: 1301

D.M. DEGREE EXAMINATION.

(Higher Specialities)

Branch VII --- Medical Oncology

(Revised Regulations)

Paper I - BASIC SCIENCES

(RADIATION PHYSICS, TUMOUR BIOLOGY, BIOCHEMISTRY, BIOMETRY, IMMUNOLOGY AND PHARMACOLOGY)

Time: Three hours

Maximum: 100 marks

# Answer ALL questions

- Discuss the relationship between viruses and cancer. (25)
- Write in detail immunophenotyping of acute leukemias. (25)
- Write briefly on :

 $(5 \times 10 = 50)$ 

- (a) Apoptosis.
- (b) Cell cycle.
- (c) Cellular Immunodeficiency
- (d) Radiosensitiser.
- (e) Intravesical chemotherapy.

[KE 017]

Sub. Code: 1301

#### D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch VII — Medical Oncology

Paper I — BASIC SCIENCES, (RADIATION PHYSICS, TUMOUR BIOLOGY, BIOCHEMISTRY, BIOMETRY, IMMUNOLOGY AND PHARMACOLOGY)

Time: Three hours Maximum 100 marks

## Answer ALL questions.

- 1. Discuss role of dendritic cell based immunotherapy in the treatment of cancer. (25)
- 2. Write briefly on molecular biology of epithelial ovarian cancer. How this knowledge can be utilized to overcome the drug resistance? (25)
- 3. Write short notes on :  $(5 \times 10 = 50)$ 
  - (a) Paraneoplastic cerebellar ataxia
  - (b) Multidrug resistance modulation
- -(c) Positron Emission Tomography in non Hodgkins lymphoma
- (d) Indications for radiation therapy in Wilms
  Tumour
  - (e) CNS Prophylaxis in small cell lung cancer.

# [KG 017]

Sub. Code: 1301

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(Higher Specialities)

(Revised Regulations)

Branch VII - Medical Oncology

Paper I — BASIC SCIENCES

(RADIATION PHYSICS, TUMOUR BIOLOGY, BIOCHEMISTRY, BIOMETRY, IMMUNOLOGY AND PHARMACOLOGY)

Time: Three hours -Maximum: 100 marks

Answer ALL questions.

- Discuss role of genetic prognostic markers in the management of breast cancer. (25)
- Describe briefly molecular biology of colon cancer and role of adjuvant chemotherapy in treatment of colorectal cancer. (25)
- Short notes on :

 $(5 \times 10 = 50)$ 

- (a) Antifungal prophylaxis in patients on cancer chemotherapy
  - (b) Oxaloplatin
- (c) Radiofrequency ablation of malignant liver tumours
  - (d) Molecular methods for HLA matching
  - (e) Skeletal targeted radiotherapy.

[KK 017]

Sub. Code: 1301

#### D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch VII - Medical Oncology

Paper I - BASIC SCIENCES

# (RADIATION PHYSICS, TUMOUR BIOLOGY, BIOCHEMISTRY, BIOMETRY, IMMUNOLOGY AND PHARMACOLOGY)

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.

## Essay:

 $(2 \times 15 = 30)$ 

- (1) Describe briefly the mechanism of osteolytic bone lesions in multiple myeloma.
- (2) Discuss briefly the pathology and role of tumour markers in the management of Germ cell tumours of ovary. (15)

Short notes:

 $(10 \times 5 = 50)$ 

- Conformal Radiation Therapy
- Hepatotoxic chemotherapy drugs
- Hereditary cancer syndromes with reference to ovary
  - Biphenotypic leukemia
  - Liposomal Drug delivery
  - Telomerase
- Radiofrequency ablation of malignant liver tumours
- Cyclosporin : Mechanism interactions
- (9) Infections as etiological factor for childhood acute lymphoblastic leukemia
- (10) Paraneoplastic syndromes involving nervous system.

[KL 017]

Sub. Code: 1301

D.M. DEGREE EXAMINATION.

(Higher Specialities)

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Branch VII - Medical Oncology

Paper I - BASIC SCIENCES

(RADIATION PHYSICS, TUMOUR BIOLOGY, BIOCHEMISTRY, BIOMETRY, IMMUNOLOGY AND PHARMACOLOGY)

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 :

 $(2 \times 15 = 30)$ 

- Discuss the role of cytogenetics in the management of acute leukemias.
- (2) Discuss role of monoclonal antibodies in the treatment of solid tumours.

II. Short notes on :

 $(10 \times 5 = 50)$ 

- (a) Stereotactic Radiosurgery.
- (b) ATRA syndrome.
- (c) Molecular biology of colon cancer.
- (d) Immunohistochemistry in the diagnosis of unknown primary.
- (e) Role of radiation in the treatment of Hodgkin's disease.
  - (f) Diagnosis of fungal infections.
  - (g) Letrozole.
- (h) Etiology of impaired renal functions in bone marrow transplant recipients.
  - (i) Virus in the etiology of cancer.
- (j) Response criteria for evaluation of Chemotherapy Treatment.