

MARCH - 1990

262

M.Ch. DEGREE EXAMINATION, MARCH 1990.

Branch VII — Surgical Oncology

Part I

BASIC SCIENCES

**(Radiation Physics, Tumour Biology, Biochemistry,
Biometry, Immunology and Pharmacology)**

Time : Three hours.

Answer ALL the questions.

- 1. Describe electromagnetic radiation and its therapeutic uses in oncology.**
 - 2. Classify and discuss the mode of action of cytotoxic drugs clinically used in oncology.**
 - 3. Short notes on :**
 - (a) Biological response modifiers-induced emergencies.**
 - (b) Brachytherapy.**
 - (c) Chemical carcinogens.**
 - (d) Immune deficiency syndromes.**
 - (e) Natural killer cells.**
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SEPTEMBER - 1990

262

M. CH. DEGREE EXAMINATION, SEPTEMBER 1990.

Branch VII — Oncology (Surgical)

Part I

BASIC SCIENCES

(Radiation Physics, Tumour Biology, Biochemistry,
Biometry, Immunology and Pharmacology)

Time: Three hours.

Maximum: 100 marks.

Answer ALL the questions.

1. Discuss the management of Septicemia in cancer patients and the special reasons for a cancer patient to succumb to infection.
 2. Discuss the epidemiological profiles of cancers occurring in India and lessons learnt from National Cancer Registry.
 3. Write short notes on :
 - (a) Strategies of cancer prevention
 - (b) Structural Details of Nucleus of Cell
 - (c) Mechanisms of cancer metastasis
 - (d) Surgical Debulking — Concepts and Advantages.
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SEPTEMBER - 1991

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M.Ch. DEGREE EXAMINATION, SEPTEMBER 1991.

Branch VII — Oncology (Surgical)

Part I

BASIC SCIENCES

(Radiation Physics, Tumor Biology, Biochemistry,
Biometry, Immunology and Pharmacology)

Time : Three hours.

Maximum : 100 marks.

Answer ALL questions.

1. What are the Cytokines? Describe their effects and chemical applications. (25 marks)
2. Describe the Clinical Pharmacology and Toxicology of Antimetabolites commonly used in the management of Gastro-intestinal Neoplasms. (25 marks)
3. Write short notes on :
 - (a) Neuron Specific Enolase.
 - (b) Acute and Late effects of Radiation on Normal Tissues.
 - (c) Computer planning of Dosimetry in Radiotherapy.
 - (d) Drug Resistance.
 - (e) Cell Cycle. (5×10=50 marks)

APRIL - 1996

AK 81

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

Branch VII - Oncology (Surgical)

(Revised Regulations)

**Paper I - BASIC SCIENCES AS APPLIED TO
SURGICAL ONCOLOGY**

Time: Three hours

Max. marks: 100

Answer All Questions

- 1. Discuss the Cell Cycle and its relevance in Cancer therapy. (25)**
- 2. Discuss the effects of Radiation at Cellular level and repair of radiation damage. (25)**
- 3. Write short notes on: (5x10=50)**
 - (a) Receptors on malignant cells**
 - (b) Tumour Doubling Time**
 - (c) Drug Resistance**
 - (d) Plasmapheresis in malignancy**
 - (e) Epirubicin.**

APRIL - 1997

MP 54

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

Branch VII-Surgical Oncology

(Revised Regulations)

Paper I - BASIC SCIENCES AS APPLIED TO
SURGICAL ONCOLOGY

Time: Three hours

Max.marks:100

Answer All Questions

1. Discuss the role of growth factors in malignancy. (25)
2. Discuss chemical carcinogenesis. (25)
3. Write briefly on: (5x10=50)
 - (a) Human genetic linkage map
 - (b) Carboplatin
 - (c) Flow cytometry
 - (d) Radiation beam modifying devices
 - (e) Retinoids.

OCTOBER - 1997

MS 33

M.Ch. DEGREE EXAMINATION
(Higher Specialities)

Branch VII - Surgical Oncology
(Revised Regulations)

Paper I - BASIC SCIENCES AS APPLIED TO
SURGICAL ONCOLOGY

Time: Three hours

Max.marks:100

Answer All Questions

1. Discuss viral carcinogenesis. (25)
2. Discuss Intra Operative Radio Therapy.
(ICRT) (25)
3. Write briefly on:
 - Targeted chemotherapy
 - Aminoglutethimide
 - Purged bone marrow
 - Nuclear grading
 - (e) Aneuploidy. (5x10=50)

APRIL - 1998

SV 59

M.Ch. DEGREE EXAMINATION
(Higher Specialities)

Branch VII - SURGICAL ONCOLOGY
(Revised Regulations)

Paper I - BASIC SCIENCES AS APPLIED TO
SURGICAL ONCOLOGY

Time: Three hours

Max. marks:100

Answer All Questions

1. Discuss the molecular approaches to cancer diagnosis. (25)
2. Discuss the contribution of epidemiology to cancer causation and prevention. (25)
3. Write briefly on: (5x10=50)
 - The metastatic cascade
 - c-ERb2
 - Tumour suppression and p53
 - (d) Growth factors and their receptors as targets for anticancer therapy
 - (e) Assessment of cancer risk in humans.

OCTOBER - 1998

[SM 056]

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

Branch VII — Surgical Oncology

(Revised Regulations)

**Paper I — BASIC SCIENCES AS APPLIED TO
SURGICAL ONCOLOGY**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the various types of Radiotherapy and its merits in the management of cancer in general. (25)
2. Metastasis in Cancer; Discuss the why, how and where it occurs in cancer. (25)
3. Write short notes on : (50)
 - (a) Apud cell tumours.
 - (b) Interleukins.
 - (c) Xenotransplantation.
 - (d) Lymphatic drainage of Breast.
 - (e) Photodynamic therapy.

APRIL - 2000

[KB 056]

Sub. Code : 1801

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

Branch VII — Surgical Oncology

(Revised Regulations)

**Paper I — BASIC SCIENCES AS APPLIED TO
SURGICAL ONCOLOGY**

Time : Three hours

Maximum : 100 marks

1. Describe the molecular and homeostatic regulatory mechanism of cancer metastases. (25)
2. Define an ideal Tumor marker. Enlist them and describe their role in management of cancer. (25)
3.
 - (a) Transfection
 - (b) Apoptosis
 - (c) Tumor suppressor gene
 - (d) Cell survival curve
 - (e) Host immunity and cancer. (5 × 10 = 50)

OCTOBER - 2000

[KC 056]

Sub. Code : 1801

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

Branch VII — Surgical Oncology

(Revised Regulations)

**Paper I — BASIC SCIENCES AS APPLIED TO
SURGICAL ONCOLOGY**

Time : Three hours

Maximum : 100 marks

Answer ALL questions

1. Discuss the newer concepts of tumor metastasis and their significance in future developments in cancer control. (25)
2. Discuss the design and conduct of clinical trials. (25)
3. Write briefly on : (5 × 10 = 50)
 - (a) Preventive Surgery
 - (b) Paraneoplastic Syndromes
 - (c) Cancer Screening
 - (d) Diet and Cancer
 - (e) Cancer Registry.