

MARCH - 1990

245

M.Ch. DEGREE EXAMINATION, MARCH 1990.

(Higher Specialities)

Branch II — Neurosurgery

Part II

NEUROCHEMISTRY AND NEUROPATHOLOGY

Time : Three hours.

Answer ALL the questions.

1. Describe in detail the biochemical changes in the brain following acute cerebral ischaemia, and their significance.
 2. Describe the life cycle of *Taenia solium* and discuss the pathogenesis of the pathological manifestations of neurocysticercosis.
 3. Write short notes on :
 - (a) Tumour markers.
 - (b) Lysozomal enzymes in C.S.F.
 - (c) Endorphins.
 - (d) Pathological features of herpes simplex encephalitis.
 - (e) Pathogenesis of acute central cervical cord syndrome.
 - (f) Methods for rapid histological diagnosis of brain tumours.
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MARCH - 1990

(Five Years Course for M.B.,B.S. candidates)

6163

M.Ch. DEGREE EXAMINATION, MARCH 1990

(Higher Specialities)

Branch II - Neurosurgery

Part II

Paper II - NEUROCHEMISTRY AND
NEUROPATHOLOGY

Time : Three hours.

SECTION

1. Describe the classification of gliomas.
2. What are biochemical markers of intracranial tumours. Discuss their presence in C.S.F. for prognostications.

SECTION II

3. Write short notes on:
 - (a) Pathology of cerebral concussion.
 - (b) Primary lymphoma of brain.
 - (c) plexus papilloma.
 - (d) Biochemistry of neural transmission.
 - (e) Pyridoxine deficiency.
 - (f) Cutaneous neuromarkers.
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SEPTEMBER - 1990

M.Ch. DEGREE EXAMINATION, SEPTEMBER 1990.

(Higher Specialities)

Branch II — Neurosurgery

Part II

Paper II — NEUROCHEMISTRY AND NEUROPATHOLOGY

Time : Three hours.

1. What are free radicals? Describe their importance in neurological surgery.
 2. Describe the pathogenesis of post-traumatic craniocerebral erosion.
 3. Write short notes on :
 - (a) Role of calcium channel blockers in cerebral vasospasm.
 - (b) Synaptic transmission.
 - (c) Neuropeptides.
 - (d) Primitive neuroectodermal tumours.
 - (e) Pathogenesis of post-traumatic internal carotid artery thrombosis.
 - (f) Brain biopsy.
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MARCH - 1991

19

M.CH. DEGREE EXAMINATION, MARCH 1991

(Higher Specialities)

Branch II — Neurosurgery

Part II

Topic II — NEUROCHEMISTRY AND NEUROPATHOLOGY

Time Three hours

Answer ALL the questions.

Discuss the neurochemical basis of seizure disorders and the pathological changes involved in producing seizures.

Describe the pathological changes in hydrocephalus.

Write short notes on :

- (a) Serotonin.**
- (b) Haemangioblastoma.**
- (c) Vasospasm.**
- (d) Maintaining astrocytoma cell lines**
- (e) G.F.A.P.**

MARCH - 1991

M.Ch. DEGREE EXAMINATION, MARCH 1991.

(Higher Specialities)

(New Regulations)

Branch II — Neurosurgery

Part II

NEUROCHEMISTRY AND NEUROPATHOLOGY

Three hours Maximum 100 marks.

Answer ALL the questions.

Discuss the pathological classification of meningiomas and co-related bone changes. (25 marks)

Describe the neurochemical factors responsible for cerebral oedema. (25 marks)

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

- (a) Role of magnesium ion vis-a-vis sodium, potassium and calcium.**
- (b) Aesthesio neuroblastoma.**
- (c) Neuro modulators.**
- (d) GABA.**
- (e) Froin's syndrome.**

SEPTEMBER - 1991

349

M.Ch. DEGREE EXAMINATION, SEPTEMBER 1991

Part II — Neurosurgery

Paper II — NEUROCHEMISTRY AND NEUROPATHOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Describe the biochemical aspects of Parkinson's disease. (25 marks)
 2. Describe the pathogenesis of acute post-traumatic brain oedema. (25 marks)
 3. Write short notes on: (5 × 10 = 50 marks)
 - (a) Desmoplastic medulloblastoma
 - (b) Carbamazepine
 - (c) Neuro-transmitters
 - (d) Nissl bodies.
 - (e) Monoclonal antibodies.
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MARCH - 1992

349

M.Ch. DEGREE EXAMINATION, MARCH 1992

(Old/New Regulation)

Part II Neurosurgery

Paper II — NEUROCHEMISTRY AND NEUROPATHOLOGY

Time Three hours

Maximum 100 marks.

Answer ALL the questions

- 1. Describe the electron microscopic and immunocytochemical classification of pituitary tumours. (25 marks)**
- 2. Describe the biochemical changes in the brain during seizures. (25 marks)**
- 3. Write short notes on: (5 × 10 = 50 marks)**
 - (a) Sodium Nitroprusside.**
 - (b) Nerve growth factor.**
 - (c) Negri bodies.**
 - (d) Pathological changes in tuberculous meningitis.**
 - (e) Acute central cervical cord syndrome.**

SEPTEMBER - 1992

[349]

M.Ch. DEGREE EXAMINATION, SEPTEMBER 1992.

Neurosurgery — Branch II — Part II

Paper II — NEUROPATHOLOGY AND NEUROCHEMISTRY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the pathology of various supratentorial tumours in childhood. (25 marks)
 2. Discuss the hormonal basis of neural inhibitory mechanisms. (25 marks)
 3. Write short notes on : (10×5=50 marks)
 - (a) Medulloblastoma.
 - (b) Tuberculous encephalopathy.
 - (c) Cerebral oedema.
 - (d) Acetyl choline.
 - (e) Neurochemical evaluation in muscle disease.
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MARCH - 1993

1125

M.CH. DEGREE EXAMINATION MARCH, 1993

Branch II - NEURO SURGERY

OLD/NEW REGULATIONS

PART II

NEUROCHEMISTRY AND NEUROPATHOLOGY

Time: Three hours

Maximum: 100 Marks

- Discuss the classification and grading of gliomas of brain. (25)
2. Discuss the role of neurotransmitters in motor movements and diseases involving motor systems. (25)
3. Write short notes on (5 x 10=50)
1. Haemangioblastoma.
 2. Malignant Meningioma.
 3. Reticulin stains
 4. Tumour enzymes in CNS.
 5. Radioimmune assay.

NOVEMBER - 1993

[PR 325]

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

Branch II — Neurosurgery

(Old/New Regulations)

Part II

Paper II — NEUROCHEMISTRY AND NEUROPATHOLOGY

Time : Three hours.

Maximum : 100 marks.

Answer ALL questions.

1. Discuss in detail "Neural transplantation" and its clinical applications. (25)
 2. Describe the role of various neurotransmitters and their current clinical significance. (25)
 3. Write short notes on : (5×10=50)
 - (a) Paragangliomas.
 - (b) Pathogenesis of brain abscess in cyanotic heart disease.
 - (c) Dopamine and the C.N.S.
 - (d) Neurochemistry of cerebral vasospasm.
 - (e) Tumor markers.
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APRIL - 1994

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

Branch II - Neurosurgery

(Old/New Regulations)

Part II

Paper II - NEUROCHEMISTRY AND NEUROPATHOLOGY

Time: Three hours

Max.marks:100

Answer ALL questions.

discuss in detail the various metabolic changes following head trauma. Discuss the role of "Oxygen free radicals" in head trauma. (25)

discuss the pathogenesis and pathology in tuberculous involvement of the central nervous system. (25)

Write short notes on: (5 x 10 = 50

a. Pathology of pituitary adenomas

Dissecting intracranial aneurysms

Lipid storage diseases of the

erebral concussion

Alzheimer's disease.

NOVEMBER - 1994

[ND 125]

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

Branch II — Neurosurgery

(Old/New Regulations)

Part II

Paper II — NEUROCHEMISTRY AND NEUROPATHOLOGY

Time : Three hours.

Maximum : 100 marks.

Answer ALL questions.

1. Discuss "AIDS and the Central Nervous system involvements". (25)

Discuss the neurochemistry of lipidoses. (25)

Write short notes on : (5 × 10 = 50)

(a) Recurrent Meningiomas.

(b) Sub-ependymomas.

(c) Serotonin and the CNS.

(d) Diffuse axonal Injury-pathology.

(e) Herpes-Simplex Encephalitis

APRIL - 1995

125]

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

Branch II – Neurosurgery

(Old/New Regulations)

Part II

II – NEUROCHEMISTRY AND NEUROPATHOLOGY

Three hours

Maximum : 100 marks

Answer ALL questions.

Discuss the pathology of Tuberculosis of the Central Nervous System.
(25)

Discuss in detail current status of Neuro-transmitters of the Central Nervous System.
(25)

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

- (a) Arachnoid cyst – pathology /pathogenesis.**
- (b) Pathology of colloid cysts.**
- (c) Vasospasm-mechanism and pathology.**
- (d) Gangliogliomas.**
- (e) Pathogenesis of Brain Abscess associated with cyanotic heart disease.**

APRIL - 1996

AT 46

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

Branch II - Neuro Surgery

(Old/New Regulations)

Part II

Paper II - NEUROCHEMISTRY AND NEUROPATHOLOGY

Time: Three hours

Max. marks: 100

Answer All Questions

1. Discuss the etiology and patho-physiology of Brain abscess. (25)
2. Discuss in detail the production, circulation of C.S.F., and pathogenesis of congenital and acquired hydrocephalus in infants. (25)
3. Write short notes on: (5x10=50)
 - (a) B.I.H.
 - (b) Chiari Malformation
 - (c) Disc herniation
 - (d) Pathology of Pineal tumours
 - (e) Endorphins.

APRIL - 1997

MP 65

M.Ch. DEGREE EXAMINATION
(Higher Specialities)
Branch II - Neuro Surgery
(Revised Regulations)

Part II

Paper II - NEUROCHEMISTRY AND NEUROPATHOLOGY

Time: Three hours

Max.marks:100

Answer All Questions

1. Discuss the pathogenesis of Syringomyelia and discuss the management. (25)
2. Discuss the pathophysiology of hydrocephalus in Tuberculous meningitis and outline the management. (25)
3. Write briefly on: (5x10=50)
 - (a) Brain death
 - (b) Neuroenteric cyst

Pathology of colloid cyst

Post-operative inter-space infection

Pathophysiology of Brain oedema.

APRIL - 1998

SV 35

M.Ch. DEGREE EXAMINATION
(Higher Specialities)
Branch II - Neuro Surgery
(Revised Regulations)

Part II

Paper II - NEUROCHEMISTRY AND NEUROPATHOLOGY

Time: Three hours

Max.marks:100

Answer All Questions

1. Discuss the recent concepts regarding pathophysiological and biochemical aspects of Parkinsonism with relevance to various methods of treatment. (25)
2. Discuss the metabolic disorders following acute head injury. (25)
3. Write briefly on: (5x10=50)
 - (a) Carbamazepine
 - (b) Pinealoma
 - (c) Mycotic Aneurysms
 - (d) Intracranial calcification
 - (e) Epidural abscess.

APRIL - 2000

[KB 032]

Sub. Code : 1562

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

Branch II — Neurosurgery

Part II

**Paper II — NEUROCHEMISTRY AND
NEUROPATHOLOGY**

Time : Three hours

Maximum : 100 marks

1. Discuss the pathology of Cysticercosis of Central Nervous System. (25)
2. Discuss the Neurochemical Basis of Extrapyrarnidal Syndromes. (25)
3. Write short notes on : (5 × 10 = 50)
 - (a) Oligodendroglioma
 - (b) Prolactinoma.
 - (c) Diphenyl Hydantoin
 - (d) Arnold Chiari Malformation.
 - (e) Pathology of Ruptured Intracranial Aneurysm.

OCTOBER - 2000

[KC 032]

Sub. Code : 1562

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

Branch II — Neurosurgery

(New and Revised Regulations for 5 years course)

Part II

Paper II — NEURO CHEMISTRY AND
NEUROPATHOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the role of tumour markers in neurosurgery (25)
2. Discuss the role of genetics in brain tumour pathogenesis. (25)
3. Write short notes on : (5 × 10 = 50)
 - (a) Diabetes Insipidus
 - (b) Arachnoid cysts
 - (c) Aesthesio neuroblastoma
 - (d) Eosinophilic granuloma
 - (e) Carbamazepine