

**APRIL - 2001**

**[KD 037]**

**Sub. Code : 1582**

**M.Ch. DEGREE EXAMINATION**

**(Higher Specialities)**

**Branch II — Neurosurgery**

**(Revised Regulations)**

**Paper II — CLINICAL NEUROLOGY AND  
NEURORADIOLOGY**

**Time : Three hours**

**Maximum : 100 marks**

**All questions to be answered.**

- 1. Discuss the Etiopathogenesis, clinical features and differential diagnosis of Atlanto-Axial dislocation. (30)**
- 2. Discuss the clinical features, differential diagnosis and management of cavernous sinus thrombosis. (30)**
- 3. Write short notes on : (4 × 10 = 40)**
  - (a) Wallenberg's syndrome.**
  - (b) Hypertensive Encephalopathy**
  - (c) Wernicke's aphasia**
  - (d) Carpal tunnel syndrome.**

**NOVEMBER - 2001**

**[KE 037]**

**Sub Code : 1582**

**M.Ch. DEGREE EXAMINATION**

**(Higher Specialities)**

**(Revised Regulations for 2 Years Course)**

**Branch II — Neurosurgery**

**Paper II — CLINICAL NEUROLOGY AND  
NEURO RADIOLOGY**

**Time : Three hours**

**Maximum: 100 marks**

**All questions to be answered**

1. Briefly discuss the clinical features and medical and surgical management of Parkinson's Disease. (30)
2. Outline the management of recent onset epilepsy. (30)

**Write short notes on : (4 × 10 = 40)**

- (a) Superior orbital fissure syndrome
  - (b) Clinical applications of MR spectroscopy of the brain
  - (c) Treatable dementias
  - (d) Management of Ischaemic stroke
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**MARCH - 2002**

**[KG 037]**

**Sub. Code : 1582**

**M.Ch. DEGREE EXAMINATION.**

**(Higher Specialities)**

**(Revised Regulations for 2 Years Course)**

**Branch II — Neuro Surgery**

**Paper II — CLINICAL NEUROLOGY AND NEURO  
RADIOLOGY**

**Time : Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

1. Discuss the clinical features and investigation of CP angle tumor. (30)
2. Discuss tethered cord syndrome. (30)
3. Write short notes on : (4 × 10 = 40)
  - (a) CCF.
  - (b) Central Cord Syndrome
  - (c) Neuro Cutaneous Markers.
  - (d) False Localising Signs.

SEPTEMBER - 2002

[KH 037]

Sub. Code : 1582

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations for 2 Years Course)

Branch II — Neurosurgery

Paper II — CLINICAL NEUROLOGY AND  
NEURORADIOLOGY

Time : Three hours

Maximum : 100 marks

All questions to be answered

1. Describe the current status and future possibilities in the care of Acute Ischaemic Stroke. (30)
  2. Discuss the current status of endovascular intervention in neurosurgery (30)
  3. Write short notes on : (4 × 10 = 40)
    - (a) Perfusion and Diffusion MRI
    - (b) Diastomatomyelia
    - (c) Spiral CT
    - (d) Optic atrophy.
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APRIL - 2004

[KK 037]

Sub. Code : 1582

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations for 3 years course)

Branch II — Neuro Surgery

Paper II — CLINICAL NEUROLOGY AND NEURO  
RADIOLOGY

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 questions : (2 × 15 = 30)

- (1) Write essay on disorders of bladder function.
- (2) Write essay on functional imaging of the brain.

B. Write Short notes on : (10 × 5 = 50)

- (1) Syndromes caused by lesions of frontal lobe
- (2) Intelligence quotient
- (3) Singultus
- (4) Emotional lability

(5) Trans cortical sensory aphasia

(6) Primary cerebral lymphoma

(7) Recurrent bacterial meningitis

(8) Syndrome of Inappropriate Secretion of ADH  
(SIADH)

(9) Ataxia – Telangiectasia

(10) Congenital ectodermoses.

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FEBRUARY - 2005

[KM 037]

Sub. Code : 1582

M.Ch. DEGREE EXAMINATION,

(Higher Specialities)

(Revised Regulations for 3 Years Course)

Branch II — Neuro surgery

Paper II — CLINICAL NEUROLOGY AND  
NEURORADIOLOGY

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 clinical features and management of tethered cord syndrome.

(2) Write essay on functional imaging of the brain.

II. Short notes : (10 × 5 = 50)

(a) Intracranial pressure monitoring

(b) Internuclear Ophthalmoplegia

(c) Brain protection

- (d) Cold Caloric response
- (e) Management of recurrent cerebral glioma
- (f) Medial temporal sclerosis
- (g) Normal pressure hydrocephalus
- (h) Management of shunt infections
- (i) Post traumatic seizures
- (j) Entrapment Neuropathy.

FEBRUARY - 2006

[KO 037]

Sub. Code : 1582

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations for 3 Years Course)

Branch II — Neuro Surgery

Paper II — CLINICAL NEUROLOGY AND  
NEURORADIOLOGY

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.

Draw suitable diagrams wherever necessary.

I. Essay questions :                      (2 × 15 = 30)

(1) Discuss the pathogenesis, clinical features, investigations and treatment of hyponatremia in neurosurgical practice.

(2) Classification and management of arterio-venous fistulas of cavernous sinus.

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

- (a) Diagnosis of nuclear third nerve palsies.
- (b) Hyperintense lesions in T<sub>1</sub> weighted MR image.
- (c) Sylvian point.
- (d) Klaus index.
- (e) Horner's syndrome.
- (f) The edrophonium test.
- (g) Optokinetic nystagmus.
- (h) Idiopathic intracranial hypertension
- (i) Treatable causes of dementia
- (j) Imaging features of vestibular schwannoma.

**AUGUST - 2006**

**[KP 037]**

**Sub. Code : 1582**

**M.Ch. DEGREE EXAMINATION.**

**(Higher Specialities)**

**(Revised Regulation for 3 years course)**

**Branch II — Neuro Surgery**

**Paper II — CLINICAL NEUROLOGY AND NEURO  
RADIOLOGY**

**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.**

**Draw suitable diagrams wherever necessary.**

**I. Essay questions :**

**(1) Describe the principles of MRI briefly.  
Mention its role in diagnosis of Neurological diseases  
and applications of MR Spectroscopy. (20)**

**(2) Describe craniovertebral anomalies and  
approach for management. (15)**

**(3) Describe your approach to diagnosis and  
treatment of pituitary tumors. (15)**

**II. Write short notes on :**

**(6 × 5 = 30)**

**(a) Radiological features of chiari II  
malformation.**

**(b) PET.**

**(c) Circumscribed gliomas.**

**(d) Spinal arteriovenous malformations.**

**(e) Craniostenosis.**

**(f) Small solitary CT enhancing lesion.**



FEBRUARY - 2007

[KQ 037]

Sub. Code : 1582

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulation for 3 years course)

Branch II — Neuro Surgery

Paper II — CLINICAL NEUROLOGY AND NEURO  
RADIOLOGY

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.

Draw suitable diagrams wherever necessary.

I. Essay questions :

1. Describe the M.R.I. findings in different, cerebellopontine angle lesions. What are the advantages if any in management of an acoustic schwannomas by seeing the M.R.I. Scan. (20)

2. What are the eye signs that help in diagnosis of Neurological disorders? What is inter nuclear ophthalmoplegia? (15)

3. What are the differences in clinical signs in an Intradural and Extradural spinal lesions? How will you diagnose and what are the treatment options for an L4–L5 intervertebral disc prolapse. (15)

II. Write short notes on : (6 × 5 = 30)

1. C.T. Angiography.

2. Empty delta signs.

3. Differential diagnosis of calcification in an X-Ray Skull.

4. Secreting Pitutary adenomas.

5. Fractures around the craniovertebral junction.

6. Entrapment Neuropathy.

August-2007

[KR 037]

Sub. Code : 1582

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulation for 3 years course)

Branch II — Neuro Surgery

Paper II — CLINICAL NEUROLOGY AND NEURO  
RADIOLOGY

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.

Illustrate the answer with diagrams wherever  
indicated.

I. Essay questions :

(1) A 35 year old male patient presenting with sudden onset of severe bursting headache with neck pain-without altered sensorium – Discuss the possible differential diagnosis, appropriate investigations which will be of help in diagnosis. (20)

(2) Enumerate the different surgical conditions which may lead to unilateral small muscle wasting in the hand and outline the investigations that will help in diagnosis. (15)

(3) Briefly discuss the principles of functional MRI and M.R. Spectroscopy and its applications in neuro-surgical conditions. (15)

II. Write short notes on : (6 × 5 = 30)

(a) Spontaneous C.S.F. Rhinorrhoea (including Paradoxical Rhonorrhoea)

(b) Carpal tunnel syndrome

(c) Neurogenic intermittent claudication

(d) 'Thunder-Clap' headache

(e) Optokinetic nystagmus

(f) Raeders paratrigeminal syndrome.

February-2008

**[KS 037]**

**Sub. Code : 1582**

**M.Ch. DEGREE EXAMINATION.**

**(Higher Specialities)**

**(Revised Regulation for 3 years course)**

**Branch II — Neuro Surgery**

**Paper II — CLINICAL NEUROLOGY AND NEURO  
RADIOLOGY**

**Q.P. Code : 171582**

**Time : Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

**Draw suitable diagrams wherever necessary.**

**I. Write essay questions :**

**1. Discuss applied aspect of sphenoid bone. (20)**

**2. Discuss localization and pathology of paraparesis without sensory impairment. (20)**

**II. Write short notes on : (10 × 6 = 60)**

**(1) Fasciculations.**

**(2) Ventricular tapping.**

**(3) Imageological pictures of brain swelling.**

**(4) Grading of SAH.**

**(5) Radioisotopes in neurosurgical practice.**

**(6) Medical ethics.**

**(7) An ideal neurosurgical operation theatre.**

**(8) Raised ICT measurement.**

**(9) Classification of epilepsy.**

**(10) Patellar clonus.**

**FEBRUARY – 2009**

**[KU 037]**

**Sub. Code: 1582**

**M.CH DEGREE EXAMINATIONS**

**(Higher Specialities)**

**(Revised Regulations for 3 years course)**

**Branch II – Neuro Surgery**

**Paper II – CLINICAL NEUROLOGY AND NEURO RADIOLOGY**

***Q.P. Code: 171582***

**Time: Three hours**

**Maximum: 100 Marks**

**ANSWER ALL QUESTIONS**

**Draw suitable diagrams wherever necessary.**

**I. Essays: 2 x 20 = 40 Marks**

1. Describe anatomy of tentorial incisura and clinical features of central and lateral herniation.
2. Trace the optic pathways and different types of visual defect on lesions at various planes.

**II. Write short notes on: 10 X 6 = 60 Marks**

1. Functional MRI.
2. Cauda/conus syndrome.
3. MR Spectroscopy.
4. Cerebellar signs.
5. Type of Diabetes insipidus and management.
6. Radiological difference between Extradural/Intradural/Intramedullary compression.
7. Neuro cutaneous markers and clinical importance.
8. Eye signs in Brain stem and cervicomedullary compression.
9. Clinical sign of hypertonia in upper and lower limbs.
10. Paediatric coma scales.

**August 2009**

**[KV 037]**

**Sub. Code: 1582**

**M.Ch. DEGREE EXAMINATIONS  
(Super Specialities)  
(New and Revised Regulations)  
(Common to both 5 years and 3 years course)**

**Branch II – Neuro Surgery  
Paper II – CLINICAL NEUROLOGY AND NEURO RADIOLOGY  
Q.P. Code: 181582**

**Time: Three hours**

**Maximum: 100 Marks**

**ANSWER ALL QUESTIONS  
Draw suitable diagrams wherever necessary.**

**I. Essays:**

**2 x 20 = 40 Marks**

1. Discuss the anatomy of cerebellum and localization of various clinical syndromes.
2. Imaging of a patient with suspected subarachnoid haemorrhage.

**II. Write short notes on:**

**10 X 6 = 60 Marks**

1. Magnetic resonance spectroscopy.
2. Cerebral salt wasting syndrome.
3. Jugular foramen syndrome.
4. Paraplegia in flexion.
5. Evidence based medicine.
6. Brain monitoring in ICU.
7. Primitive reflexes.
8. Transcranial Doppler in neurosurgical practice.
9. Migraine with aura.
10. Brain death.

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February 2010

[KW 037]

Sub. Code: 1582

**M.Ch. DEGREE EXAMINATIONS**  
**(Super Specialities)**  
**(New and Revised Regulations)**  
**(Common to both 5 years and 3 years course)**

**Branch II – Neuro Surgery**  
**Paper II – CLINICAL NEUROLOGY AND NEURO RADIOLOGY**  
*Q.P. Code: 181582*

**Time: Three hours**

**Maximum: 100 Marks**

**ANSWER ALL QUESTIONS**  
**Draw suitable diagrams wherever necessary.**

**I. Essays:**

**2 x 20 = 40 Marks**

1. Classify epilepsy and describe salient features of each type.
2. Discuss differential diagnosis of recurrent quadriplegia.

**II. Write short notes on:**

**10 X 6 = 60 Marks**

1. MR imaging of intracerebral haematoma.
2. Hounsfield scale.
3. Optic Neuritis.
4. Persistent vegetative state.
5. Treatment of status epilepticus.
6. Carpal tunnel syndrome.
7. Cushing's disease.
8. Functional imaging.
9. Complication of endovascular surgery.
10. Nystagmus.

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August 2011

[KZ 037]

Sub. Code: 1582

MASTER OF CHIRURGIAE (M.Ch.) DEGREE EXAMINATION  
(SUPER SPECIALITIES)

BRANCH II – NEURO SURGERY

CLINICAL NEUROLOGY AND NEURO RADIOLOGY

*Q.P. Code: 181582*

Time : 3 hours

Maximum : 100 marks

(180 Min)

Answer ALL questions in the same order.

**I. Elaborate on :**

**Pages Time Marks  
(Max.) (Max.) (Max.)**

- |   |    |    |    |
|---|----|----|----|
| 1. Discuss the differential diagnosis and management of sudden onset right hemiplegia in 20 year old man. | 11 | 35 | 15 |
| 2. Discuss the recent advances in CT and MRI and their applications in Neurological practice.             | 11 | 35 | 15 |

**II. Write notes on :**

- |  |   |    |   |
|--|---|----|---|
| 1. Internuclear ophthalmoplegia.                           | 4 | 10 | 7 |
| 2. Amaurosis fugax.  | 4 | 10 | 7 |
| 3. Lateral medullary syndrome.                             | 4 | 10 | 7 |
| 4. Medical treatment of migraine.                          | 4 | 10 | 7 |
| 5. Newer anticonvulsants.                                  | 4 | 10 | 7 |
| 6. Radiological diagnosis of brain abscess.                | 4 | 10 | 7 |
| 7. Diagnostic evaluation of Normal pressure hydrocephalus. | 4 | 10 | 7 |
| 8. MRI appearance of intramedullary spinal cord tumours.   | 4 | 10 | 7 |
| 9. Ultrasound in Neurosurgery.                             | 4 | 10 | 7 |
| 10. Diffusion tensor imaging.                              | 4 | 10 | 7 |

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[LB 037]

AUGUST 2012

Sub. Code: 1582

M.Ch – NEURO SURGERY  
FIVE YEAR COURSE-PART II

Paper – II CLINICAL NEUROLOGY AND NEURO RADIOLOGY

Q.P. Code: 181582

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 the anatomical differential diagnosis of a patient presenting with paraparesis. Mention the clinical findings that would help in arriving at a diagnosis with the anatomical basis for the same. 16 35 15
2. Discuss the differential diagnosis in a 45 year old man brought with a diagnosis of sudden onset inability to speak with weakness of the right upper limb for the past one hour. Mention the relevant radiological investigations that would guide in the immediate management of this patient. Briefly outline the management of this patient during the first twenty four hours of his admission. 16 35 15

II. Write notes on:

1. False localizing signs in clinical neurological examination. 4 10 7
2. Petit mal epilepsy. 4 10 7
3. Approach to a patient with bibrachial amyotrophy. 4 10 7
4. Transcranial Doppler. 4 10 7
5. Moyamoya disease. 4 10 7
6. Radiological findings in tuberculous meningitis and their pathological basis. 4 10 7
7. Sodium Valproate. 4 10 7
8. Differential diagnosis of tremor. 4 10 7
9. Papilloedema. 4 10 7
10. Apraxia. 4 10 7

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**M.Ch. – NEURO SURGERY**  
**FIVE YEARS COURSE – PART – II**  
**Paper – II CLINICAL NEUROLOGY AND NEURO RADIOLOGY**  
*Q.P.Code: 181582*

**Time: Three Hours**

**Maximum: 100 marks**

**I. Elaborate on:**

**(2X15=30)**

1. Discuss the differential diagnosis in a patient presenting with decreased hearing in one ear with ipsilateral facial paresis, diminished facial sensations and ataxia. What are the radiological investigations that would aid in arriving at a diagnosis?
2. Discuss the differential diagnosis in a fifty year old man with a ring enhancing lesion in the right frontal lobe, who presented with one episode of generalized seizure. Mention the radiological investigations which would aid in the diagnosis.

**II. Write notes on:**

**(10X7=70)**

1. Sensory ataxia.
2. Tactile agnosia.
3. Fungal meningitis.
4. Spontaneous intracerebral haemorrhage.
5. Supplementary motor area.
6. Nystagmus.
7. Papilloedema.
8. Chorea.
9. Hemianopia.
10. Brain mass in an HIV seropositive individual.

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