

MANIPAL ACADEMY OF HIGHER EDUCATION
M.Ch. (NEURO SURGERY) DEGREE EXAMINATION – JULY 2018
SUBJECT: PAPER I: BASIC SCIENCES

Monday, July 09, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **All questions are compulsory.**

✍ **Long essay:**

1. Anatomy of cavernous sinus.

(20 marks)

2. Surgical anatomy of foramen magnum.

(20 marks)

3. **Short notes:**

3A. Taylor Haughton lines

3B. Venous anatomy of brain

3C. Third ventricle and its boundaries

3D. Anatomy of internal capsule

3E. Internuclear ophthalmoplegia

3F. Labelled diagram of spinal cord with various tracts and blood supply

(10 marks × 6 = 60 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION**M.Ch. (NEURO SURGERY) DEGREE EXAMINATION – JULY 2018****SUBJECT: PAPER II: CLINICAL NEUROLOGY AND NEUROSURGERY**

Tuesday, July 10, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **All questions are compulsory.**

✍ **Long Essay:**

1. Discuss the management controversies in a patient with hypertensive intracerebral hematoma. (20 marks)
2. Trigeminal neuralgia – selection of management options. (20 marks)

3. **Short Notes:**

- 3A. Split cord malformations
- 3B. Pyogenic Brain abscess
- 3C. Unruptured Incidental intracranial aneurysms- management controversies
- 3D. Endoscopic third ventriculostomy – principles, indications and complications
- 3E. Low grade gliomas – management controversies
- 3F. Decompressive craniectomy for stroke

(10 marks × 6 = 60 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION
M.Ch. (NEURO SURGERY) DEGREE EXAMINATION – JULY 2018
SUBJECT: PAPER III: CLINICAL NEUROSURGERY

Wednesday, July 11, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ All questions are compulsory.

✍ Essay:

1. Pathophysiology, classification and management of hydrocephalus with special mention on the various newer shunt systems.

(20 marks)

2. Motion preserving spinal stabilization surgeries.

(20 marks)

3. **Short Notes:**

3A. Discuss the preop evaluation for epilepsy surgery, and various types of epilepsy surgery.

3B. Basilar invagination.

3C. Foramen magnum meningioma – clinical features and Surgical approaches.

3D. Hemangioblastoma – pathogenesis, genetics and radiology.

3E. Lumbar canal stenosis – clinical features, radiology and management.

3F. Hypothalamic hamartoma.

(6 marks × 10 = 60 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION**M.Ch. (NEURO SURGERY) DEGREE EXAMINATION – JULY 2018****SUBJECT: PAPER IV: RECENT ADVANCES, NEURORADIOLOGY**

Thursday, July 12, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Draw diagrams wherever necessary.**

✍ **Essay:**

1. Clipping vs coiling for intracranial aneurysms – discuss the controversy.

(20 marks)

2. Deep brain stimulation for Parkinsons disease.

(20 marks)

3. **Short Essays:**

3A. Stem cells in neurosurgery

3B. Vagal nerve stimulation for refractory epilepsy

3C. Progamable shunts

3D. Surgery for intracerebral metastasis

3E. Intervention neuroradiology in the management of acute ischemic stroke

3F. Endoscopic surgery for lumbar intervertebral disc prolapse

(10 marks × 6 = 60 marks)

