

QP Code: 101505

Reg. No.:.....

**M.Ch. (Neuro Surgery) Degree Regular/Supplementary Examinations  
November 2023**

**Paper I – Basic Sciences**

Time: 3 hrs

Max marks: 100

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay:**

**(20)**

1. Describe blood brain barrier, loss of autoregulation and classification, pathophysiology, diagnosis and treatment of cerebral edema.

**Short essays:**

**(8x10=80)**

2. Describe surgical anatomy of cerebello pontine angle and seventh cranial nerve.
3. Express your views on neurophysiologic basis of: diffuse axonal injury, cerebral edema in brain tumors.
4. Neural basis of posterior rhizotomies for spasticity.
5. Short notes on: pituitary hormones, ultrasonic surgical aspirator: principles and applications.
6. Pathophysiology of tethered cord syndrome.
7. Intracranial pressure regulation.
8. Discuss the biomechanics and kinetics of adult cervical spine.
9. Immunotherapy of human gliomas, biological glue in neurosurgery.

\*\*\*\*\*