

**NEUROSURGERY****PAPER-III**

Time: 3 hours  
Max. Marks:100

NS 2/J/19/21/III

**Important Instructions:**

- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

**Write short notes on:**

1. Refractory epilepsy: 3+3+4
  - a) Definition.
  - b) Pre-surgical evaluation.
  - c) Surgically remediable lesional epilepsy syndromes.
2. Intra-operative imaging: 3+3+4
  - a) Neuro-navigation.
  - b) Intra-operative ultrasound.
  - c) Intra-operative MRI.
3. Lymphocytic hypophysitis: 2+2+3+3
  - a) Diagnosis.
  - b) Differential diagnosis.
  - c) Histopathology.
  - d) Management.
4. Dural arteriovenous malformations: 3+3+4
  - a) Pathophysiology.
  - b) Natural history.
  - c) Management.
5. Regarding stereotaxy: 4+3+3
  - a) Principles and techniques.
  - b) Stereotactic Biopsy.
  - c) Gamma Knife Radiosurgery.
6. Regarding chronic pain: 4+3+3
  - a) Gate control and neuromatrix theories of pain.
  - b) Diagnostic criteria.
  - c) Grading of pain.

**P.T.O.**

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7. Recent advances in:  
a) Mapping of eloquent cortex. 4+3+3  
b) Fluorescence guided resection.  
c) Awake craniotomy.
8. In the diagnosis of intracranial aneurysms, discuss the role of: 3+3+4  
a) Computed Tomography angiography (CTA).  
b) Magnetic resonance angiography (MRA).  
c) Intra-arterial digital subtraction angiography (IADSA).
9. a) Management of fungal infections of the brain. 3+3+4  
b) Sources of brain abscess.  
c) Pathology of TBM.
10. Osteoporotic wedge compression fractures: 3+3+4  
a) Differential diagnosis.  
b) Radiological diagnosis.  
c) Recent advances in medical management.

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