

NEUROSURGERY  
PAPER-III

NS/J/18/21/III

Time: 3 hours  
Max. Marks:100

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. | CNS tuberculosis:                         | 4+2+2+2 |
|    | a) Various manifestations                 |         |
|    | b) Imaging findings on MRI                |         |
|    | c) Differential diagnosis                 |         |
|    | d) Treatment outline                      |         |
| 2. | Fungal Infections of CNS:                 | 5+3+2   |
|    | a) Various manifestations                 |         |
|    | b) Imaging findings on MRI with MRS       |         |
|    | c) Treatment                              |         |
| 3. | Ventilator associated pneumonia:          | 2+3+5   |
|    | a) Definition                             |         |
|    | b) Common bacteriological agents          |         |
|    | c) Prevention                             |         |
| 4. | Shunt infections:                         | 5+5     |
|    | a) Types & risk factors                   |         |
|    | b) Prevention during surgery              |         |
| 5. | Robotics in Neurosurgery:                 | 4+4+2   |
|    | a) Role in Neurosurgery                   |         |
|    | b) Available options                      |         |
|    | c) Limitations                            |         |
| 6. | Consent taking in Neurosurgery            | 3+5+2   |
|    | a) What is informed consent?              |         |
|    | b) Its ingredients.                       |         |
|    | c) Who can sign it?                       |         |
| 7. | Stereotaxy:                               | 3+2+3+2 |
|    | a) Principles                             |         |
|    | b) Types of frame                         |         |
|    | c) Indications in functional Neurosurgery |         |
|    | d) Limitations                            |         |

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|-----|---|---------|
| 8.  | Deep Brain Stimulations:                    | 3+4+3   |
|     | a) Principles                               |         |
|     | b) Applications                             |         |
|     | c) Results in Parkinsonism                  |         |
| 9.  | Trigeminal neuralgia:                       | 3+3+2+2 |
|     | a) Clinical presentations                   |         |
|     | b) Causes of secondary neuralgia            |         |
|     | c) Imaging modalities                       |         |
|     | d) Role of Gamma knife                      |         |
| 10. | Role of stem cells in neurological surgery: | 4+4+2   |
|     | a) Principles                               |         |
|     | b) Clinical applications                    |         |
|     | c) Ethical considerations                   |         |

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