

First Year B.Sc Neurotechnology Degree Regular Examinations
November 2024
Paper I – Neuroanatomy I
(2023 Scheme)

Time: 3 Hours**Total 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*

Long Essay **(2x10=20)**

1. Describe anatomy of spinal cord. Draw a cross-section. Mark all ascending and descending tracts and describe their function. (4+6)
2. What are neurons. Describe the structure of a neuron, different types of neurons and their functions. (4+6)

Short Essay **(5x8=40)**

3. Describe the anatomy of cerebellum and its functions.
4. Describe the formation, pathway and drainage of Cerebrospinal Fluid.
5. Enumerate the various foramina of the skull and the structures passing through them.
6. Enumerate the lobes of the brain and show the important sulci and gyri.
7. Describe the atlas vertebra.

Short Notes **(4x6=24)**

8. Describe briefly the anatomy of the peripheral nervous system.
9. Enumerate the blood vessels supplying the brain and the areas supplied by each artery.
10. Briefly describe the anatomy of the meningeal layers. What is meningitis.
11. Briefly describe the language areas of the brain.

Answer Briefly **(2x3=6)**

12. What are the divisions of the autonomic nervous system. Briefly describe their functions.
13. Enumerate the types of glial cells and briefly write their functions.

Fill in the blanks **(10x1=10)**

14. There are _____ cervical vertebra.
15. Memory is mediated by _____ lobe.
16. Caudate nucleus and putamen are parts of _____
17. Brainstem has _____ parts.
18. Sensory relay nucleus is _____.
19. The anterior two-thirds of the spinal cord is supplied by _____
20. Midbrain contains the nuclei of the following cranial nerves _____
21. Vision is mediated by the _____ lobe.
22. The transverse suture connecting the frontal and parietal bones is _____
23. The suture connecting the parietal and occipital bones is _____