B. Sc. DEGREE END SEMESTER EXAMINATION - OCT. / NOV. 2021 SEMESTER 3 : COMPLEMENTARY COURSE FOR B Sc PSYCHOLOGY COURSE : 19U3CPBHS3 : NEUROPHYSIOLOGY OF BEHAVIOUR I PAPER 3

(For Regular - 2020 Admission)

Time : Three Hours

Max. Marks: 75

PART A Answer all (1 mark each)

- 1. Name the white fatty substance covering the axon.
- 2. Name the type of neurons found in the retina of the eye, inner ear, and the olfactory area of the brain.
- 3. Name the Neuropeptide that has a role in regulating blood pressure in the brain.
- 4. Name the most superficial meninges layer.
- 5. What is a tumour that develops within the spinal cord called?
- 6. Name the condition which involves the narrowing of the space inside the spine which can put pressure on the spinal cord and the nerves within the spine.
- 7. How many pairs of Sacral Nerves are there in the human Nervous System?
- 8. The parasympathetic nervous system is most active during times of high emotion. True or False?
- 9. _____ area is the center for language comprehension.
- 10. Name the innermost layer of the neocortex that directly overlies the subcortical white matter.

(1 x 10 = 10)

PART B Answer any 8 (2 marks each)

- 11. How does the resting membrane potential change to action potential?
- 12. Write a short note on 5-hydroxytryptamine.
- 13. What is decremental conduction?
- 14. Write a short note on the Vestibulocochlear Nerve.
- 15. Why is Ptosis or drooping of the upper eyelid a possible effect of Midbrain impairment?
- 16. How does Agraphia differ from Alexia? Explain.
- 17. What are mixed cranial nerves?
- 18. What are Chemoreceptors? Give examples.
- 19. Write a note on the Molecular layer of the neocortex.
- 20. Differentiate between sensory aprosodia and motor aprosodia.

(2 x 8 = 16)

PART C Answer any 5 (5 marks each)

- 21. Write a brief note on the structural and functional classification of neurons.
- 22. Write a short essay on Acetylcholine and its functions.
- 23. Write a short note on the disorders caused by Parietal Lobe lesions.
- 24. Differentiate between Cerebrum and Cerebellum.

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- 25. Briefly explain the Somatic Nervous System.
- 26. Write a note on the Linguistic Capabilities of the Right Hemisphere.
- 27. Is there any linkage to hemispheric assymetry in certain types of stuttering? Give reasons for your answer.

(5 x 5 = 25)

PART D Answer any 2 (12 marks each)

- 28. Write an essay on the neurotransmission of impulses.
- 29. Write an essay on the major divisions of the adult human brain.
- 30. Differentiate between the Sympathetic and Parasympathetic Nervous System.
- 31. Write an essay on the Surgical studies and Human studies of hemispherical assymetry and isolation.

(12 x 2 = 24)