B. Sc. DEGREE END SEMESTER EXAMINATION : NOVEMBER 2023 SEMESTER 3 : COMPLEMENTARY COURSE FOR PSYCHOLOGY

COURSE : 19U3CPBHS03 : NEUROPHYSIOLOGY OF BEHAVIOUR I PAPER - III

(For Regular 2022 Admission and Improvement / Supplementary 2021/2020 Admissions)

Time : Three Hours

Max. Marks: 75

PART A Answer All (1 mark each)

- 1. Primary auditory area is located in which lobe of the Cerebrum?
- 2. Name the neuropeptide that enhances the perception of pain.
- 3. The cerebral ventricles, central canal and subarachnoid space are filled with
- 4. How many pairs of Lumbar Nerves are there in the human Nervous System?
- 5. Name the scanning technique that involves use of strong magnetic fields and radio waves to produce detailed images of the inside of the body.
- 6. Name the extensive network of neurons confined to the wall of the GastroIntestinal Tract.
- 7. Name the category of neuropeptides that were first discovered in the gut.
- 8. Name the basic strucural and functional unit of the nervous system
- 9. What is the existence of an inherited bias toward right-handedness called?
- 10. Which brain structure is most responsible for our balance, posture and muscle tone?

 $(1 \times 10 = 10)$

PART B

Answer any 8 (2 marks each)

- 11. How does Agraphia differ from Alexia? Explain.
- 12. Why is the neocortex named so?
- 13. What are Chemoreceptors? Give examples.
- 14. What is decremental conduction?
- 15. Differentiate between Myelencephalon and Metencephalon.
- 16. What is all-or-none principle?
- 17. Why is Ptosis or drooping of the upper eyelid a possible effect of Midbrain impairment?
- 18. What are Mechanoreceptors? Give examples.
- 19. Write a short note on Wernicke's Aphasia.
- 20. Differentiate between Cranial and Spinal Nerves.

(2 x 8 = 16)

PART C

Answer any 5 (5 marks each)

- 21. Write a short note on Neuroglia of the Central Nervous System
- 22. What are the functions of the Enteric Nervous System?
- 23. Write a note on Neocortex.
- 24. Briefly explain the layers of meninges of brain.

- 25. Differentiate between the functions of Thalamus and Hypothalamus.
- 26. Explain the role of a neuron in transmission of impulses.
- 27. Write a note on the Spatial Skills of the Right Hemisphere.

(5 x 5 = 25)

PART D Answer any 2 (12 marks each)

- 28. Write an essay on the lobes of the Cerebrum.
- 29. Write an essay on Hemispheric asymmetry, handedness and cerebral dominance.
- 30. Write an essay on the Peripheral Nervous System.
- 31. Explain in detail the monoamine neurotransmitters.

 $(12 \times 2 = 24)$