

**B. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2022**  
**SEMESTER 4 : PSYCHOLOGY**  
**COURSE : 19U4CPBHS4: BIOPHYSIOLOGY OF BEHAVIOUR II - PAPER IV**  
*(For Regular - 2020 Admission)*

Time : Three Hours

Max. Marks: 75

**PART A**

**Answer All (1 mark each)**

1. The immune response where antibodies are formed against self-antigen is called \_\_\_\_\_.
2. Name the antibody that is also known as transplacental antibody.
3. The endocrine activity is regulated through releasing and inhibiting hormones by \_\_\_\_\_.
4. Melatonin is secreted by the \_\_\_\_\_.
5. \_\_\_\_\_ is the first substance identified as a neurotransmitter in the CNS.
6. \_\_\_\_\_ proposed a learning theory stating that when individual cells are activated at the same time, they grow connecting synapses or strengthen existing ones and thus become a functional unit.
7. Alzheimer's Disease is an example of which group of disorders associated with progressive cognitive decline?
8. \_\_\_\_\_ was discovered by German physician Paul Ehrlich in the late 19th Century.
9. The \_\_\_\_\_ buoys the brain so that it "floats" in the cranial cavity.
10. A poverty or slowness of movement including a blankness of facial expression or a lack of blinking, swinging of the arms when walking, spontaneous speech, or normal movements of fidgeting is called \_\_\_\_\_.

**(1 x 10 = 10)**

**PART B**

**Answer any 8 (2 marks each)**

11. What is psychoneuroimmunology?
12. Define hypersensitivity. Give an example.
13. Explain the placebo effect with the help of examples.
14. Differentiate between positive and negative feedback systems for the regulation of hormones.
15. Why is pituitary gland called the master gland?
16. What are the major functions of Prolactin.
17. List out the physiological changes that occur during learning.
18. What is lewy body dementia?
19. Differentiate between positive and negative symptoms of mental disorders.
20. Which are the two classes of anxiolytics? Explain.

**(2 x 8 = 16)**

**PART C**

**Answer any 5 (5 marks each)**

21. Write a note on the role of the complement system in immunity.
22. Write a note on anaphylaxis.
23. Write a short note on the regulation of secretion and action of TSH.

24. Explain in detail the role of FSH and LH in the reproductive system.
25. What is hippocampus? Explain the major theories about the role of hippocampus in memory.
26. Write a note on the composition and functions of CSF.
27. What is a neurotransmitter? Describe any two neurotransmitters with their functions.  
**(5 x 5 = 25)**

**PART D**

**Answer any 2 (12 marks each)**

28. Write an essay on immune response with reference to the processes and cells involved in the immune response.
29. Write an essay on innate immunity, explaining the first and second lines of defense.
30. Write an essay on the HPT axis and the HPA axis.
31. Write an essay on Adrenal gland, the hormones it secretes and the conditions associated with the gland.  
**(12 x 2 = 24)**