

TB244637G

Reg. No : .....

Name : .....

**BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, MARCH 2024**  
**2022 ADMISSIONS REGULAR**  
**SEMESTER IV - Psychology COMPLEMENTARY COURSE 1**  
**PY4CMT11 - Biophysiology of Behaviour**

**Time : 30 Hours**

**Maximum Marks : 80**

**Part A**

**I. Answer any Ten questions. Each question carries 2 marks**

**(10x2=20)**

1. Define pathogen and explain how does it function?
2. Define immunity and immunology?
3. Write a short note on types of lymphocytes?
4. Explain humoral immunity with an example?
5. What are the hormones produced by hypothalamus?
6. Write a short note on the functions and hormones produced by the butterfly-shaped organ located at the base of our neck?
7. Explain how physical activity and food consumption influences memory retrieval process?
8. What happens when new information contradicts with those already stored in memory?
9. Write the functions of any two neurotransmitters in the brain?
10. Explain SSRIs and SNRIs and how these two anti-anxiety medications helps in treatment for anxiety disorders?
11. Write a short note on substrates that are used for energy production in cerebral tissues?
12. Write a short note on regions (areas) where opioids acts in the brain and nervous system ?



**Part B**

**II. Answer any Six questions. Each question carries 5 marks**

**(6x5=30)**

13. Explain humoral and cell mediated immunity, state with suitable examples?
14. "Life is fight against foreign substances". What system in our human body helps in fight against foreign substances and how?
15. Discuss thyroid and parathyroid gland? list down the hormones produced by these two glands and explain its role?
16. Write a short note on limbic lobe and its functions? Explain how Mammillary bodies and Amygdala influences human behavior?
17. What are the physiological changes during learning?
18. Explain Memory Retrieval process and discuss the four basic ways in retrieving memory from human brain?
19. Write a short note on the following : a)Sensory Memory b)Short-term memory c)Long-term memory
20. Write a short note on excitatory neurotransmitters?
21. Discuss neurotransmitters and explain its transmission and functions?

**Part C**

**III. Answer any Two questions. Each question carries 15 marks**

**(2x15=30)**

22. Write a short note on Cell Mediated Immunity and explain how does Cell-Mediated Immunity works?
23. Discuss the hormonal influence on learning, memory and behavior?

24. Describe memory retrieval in human brain ? Enumerate and explain the factors that trigger memory retrieval in human brain?
25. Explain opioid peptides and receptors and explain the mechanism of action?

