21UPCCT1002

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS) (Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC) Chromepet, Chennai - 600 044. B.Sc.Psychology - END SEMESTER EXAMINATIONS APRIL - 2024 SEMESTER - I 21UPCCT1002 - Biological Psychology I

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions $(6 \times 5 = 30 \text{ Marks})$

- 1. Describe the techniques used for recording brain activity in Biological Psychology.
- 2. Discuss the structure and function of the blood-brain barrier.
- 3. Define neurotransmitters and provide examples of different types of neurotransmitters and explain their functions in regulating neuronal activity.
- 4. Explain the role of the sympathetic nervous system in the "fight or flight" response.
- 5. Explain the effects of brain damage on behavior and cognitive function.
- 6. Discuss the structure, types and function of neuron.
- 7. Explain how hormones exert their effects on target cells and tissues through various cellular mechanisms.
- 8. Describe the structure and function of the Autonomic Nervous System (ANS).

Section C

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Answer any THREE questions (3 \times 10 = 30 \text{ Marks})
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- 9. Explain the approaches that relate brain and behavior in biological psychology. Discuss the different levels of analysis used in studying the relationship between biology and behavior.
- 10. Provide an overview of the main divisions of the brain with a diagram and discuss the anatomical features and functions associated with each division.
- 11. How is the production of cerebrospinal fluid (CSF) regulated within the central nervous system and explain the role of cerebrospinal fluid (CSF) in maintaining brain function and homeostasis.

- 12. Provide an overview of the endocrine glands and their specific hormones. Describe the functions of each gland and the hormones they produce.
- 13. Explain the concept of membrane potential. Describe the mechanisms underlying the generation and propagation of action potentials.
