2024/12

SET A

BA PSYCHOLOGY
FIRST SEMESTER
INTRODUCTION TO BIOPSYCHOLOGY
BPY – 103
[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

Objective

Time: 30 mins. **Marks: 20**

Choose the correct answer from the following: ***1×20=20***

1. What does biopsychology primarily focus on?
   a. Behavior patterns in different cultures.
   b. How the brain and nervous system influence behavior
   c. Genetic inheritance of traits
   d. Chemical reactions in cells

2. Which area of biopsychology focuses on how drugs affect mood, perception, and behavior?
   a. Psychophysiology
   b. Neuropsychology
   c. Psychopharmacology
   d. Cognitive Neuroscience

3. The cerebral cortex is divided into how many main lobes?
   a. 3
   b. 5
   c. 4
   d. 6

4. What is the main function of the frontal lobe?
   a. Auditory processing
   b. Decision making and impulse control
   c. Visual processing
   d. Sensory information processing

5. .....is an example of inhibitory neurotransmitter.
   a. Glutamate
   b. GABA
   c. Epinephrine
   d. None of the Above

6. X-Ray is a kind of.....method of Biopsychology.
   a. Neuroimaging
   b. Ablation
   c. Chemical Stimulation
   d. None of the Above

7. In which of the methods of Biopsychology, microscope is used to study human brain?
   a. Histological method
   b. Electrical Stimulation
   c. Neuroimaging
   d. Ablation Method

8. Neurotransmitters are.....messengers that allow neurons to connect with each other.
   a. Psychological
   b. Electrical
   c. Chemical
   d. None of the above

9. There are.....main types of neurotransmitters.
   a. 3 b. 4
   c. 2 d. 6

10. Which lobe of the brain is primarily associated with processing visual information?
   a. Frontal Lobe b. Parietal Lobe
   c. Temporal Lobe d. Occipital Lob

11. Which of the following structures is part of the central nervous system (CNS)?
   a. Spinal nerves only b. Brain& Spinal cord
   c. Peripheral nerves d. Cranial nerves

12. Which of the following cells are responsible for supporting and protecting neurons in the CNS?
   a. Erythrocytes b. Neurons
   c. Glial cells d. Myocytes

13. Which of the following is NOT a type of glial cell in the central nervous system (CNS)?
   a. Astrocytes b. Oligodendrocytes
   c. Schwann cells d. Microglia

14. Microglia are best described as which of the following?
   a. Supportive cells that help with nutrient transport b. Immune cells of the CNS that respond to injury and disease
   c. Cells that produce myelin in the CNS d. Cells that maintain the extracellular ion balance

15. A neuron consists of a cell body, dendrites and a/an.....
   a. Chemical b. Axon
   c. Soma d. None of the above

16. The word 'excitatory' means.....
   a. Stimulating b. Restricting
   c. Stopping d. None of the Above

17. The endocrine system communicates with the body primarily through:
   a. Nerve impulses b. Neurotransmitters
   c. Hormones d. Electrical signals

18. Which gland is often referred to as the "master gland" because it regulates many other glands in the body?
   a. Adrenal gland b. Thyroid gland
   c. Pituitary gland d. Pineal gland

19. The hormone cortisol, which is involved in stress response, is produced by the:
   a. Thyroid gland b. Pituitary gland
   c. Adrenal glands d. Pineal gland

20. Which hormone, released by the pineal gland, plays a key role in regulating sleep-wake cycles?

a. Melatonin
b. Insulin
c. Oxytocin
d. Cortisol

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(Descriptive)

Time : 2 Hr. 30 Mins. **Marks : 50**

[Answer question no.1 & any four (4) from the rest]

1. What do you mean by Biopsychology? Discuss any four divisions of biopsychology. Provide examples of how each division contributes to the field. 2+8=10

2. What do you understand by methods of Biopsychology? Explain any two methods used by biopsychologists to study behaviour? 2+8=10

3. What is a neuron? Explain the process of neural conduction and synaptic transmission. 2+8=10

4. What is Glial cells? Discuss its types and functions with suitable diagram? 3+7=10

5. Define neurotransmitters? Explain the various types and functions of neurotransmitters. 3+7=10

6. Describe the major parts of the brain and their primary functions in relation significance of each part in relation to overall brain function. 10

7. Describe the function of the endocrine system in regulating bodily processes. How does it interact with other systems in the body? 5+5=10

8. Describe the structure and function of the thyroid gland. How do thyroid hormones affect metabolism, growth, and overall energy levels? 4+6=10

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