

2014

( 5th Semester )

PSYCHOLOGY

SIXTH PAPER

( Biological Psychology )

Full Marks : 55

Time : 2 hours

( PART : B—DESCRIPTIVE )

( Marks : 35 )

The figures in the margin indicate full marks for the questions

1. What is biological psychology? Briefly describe any two methods of studying biological psychology. 2+5=7

Or

What is neuroimaging? Explain any two neuroimaging techniques. 2+5=7

2. Explain the structure and function of the peripheral nervous system.  $3\frac{1}{2}+3\frac{1}{2}=7$

Or

What is neuron? Illustrate different types of neuron with suitable diagrams. 2+5=7

3. Discuss the process of communication at the synapse. 7

Or

Differentiate between acetylcholine and dopamine.

4. Discuss the workings of the adrenal glands. 7

Or

What are different types of hormonal gland specialized for secretion?

5. Explain the brain mechanisms in learning and memory. 7

Or

What are the visceral factors in emotional behavior?

\*\*\*

2014

( 5th Semester )

**PSYCHOLOGY****SIXTH PAPER****( Biological Psychology )**

( PART : A—OBJECTIVE )

( Marks : 20 )

*The figures in the margin indicate full marks for the questions***SECTION—A**

( Marks : 5 )

Put a Tick (✓) mark against the correct answer in the brackets provided : 1×5=5

1. The method of getting the tip of an electrode or cannula to a precise location in the depths of an animal's brain is known as

- (a) sham lesion ( )
- (b) stereotaxic surgery ( )
- (c) excitotoxic lesion ( )
- (d) brain lesion ( )

( 2 )

2. The preganglionic neurons stimulate the postganglionic neurons by the release of

- (a) insulin ( )
- (b) acetylcholine (ACh) ( )
- (c) acetylcholinesterase (AChE) ( )
- (d) epinephrine ( )

3. The difference in voltage between the positive outside and the negative inside of the membrane of all living cells is called

- (a) action potential ( )
- (b) polarized condition ( )
- (c) resting potential ( )
- (d) graded potential ( )

( 3 )

4. — glands secrete norepinephrine and epinephrine when stimulated by sympathetic nerves of the ANS.

- (a) Pancreas ( )
- (b) Adrenal cortex ( )
- (c) Adrenal medulla ( )
- (d) Posterior pituitary ( )

5. The — organizes behavioral, autonomic and hormonal response to a variety of situations, including those that produce fear or anger.

- (a) amygdala ( )
- (b) pheromone ( )
- (c) serotonin ( )
- (d) prefrontal cortex ( )

( 4 )

SECTION—B

( Marks : 15 )

Write short notes on the following :

3×5=15

1. PET scans

## 2. Forebrain

## 3. Neurotransmitters

4. Endocrine and exocrine glands

5. ANS and emotions

\*\*\*