Seat No: _____ Enrollment No: _____

# PARUL UNIVERSITY

## FACULTY OF ARTS

## B.A, Winter 2017 – 18 Examination

**Semester: 3** **Date: 04/12/2017**
**Subject Code: 15105201** **Time: 10:30 am to 1:00 pm**
**Subject Name: Biological Basis of Behaviour** **Total Marks: 60**

**Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

**Q.1 (A) Do as directed** **(08)**

1. The division of the peripheral nervous system that controls automatic, involuntary physiological processes is known as the:
   a. Central nervous system b. Peripheral nervous system
   c. Autonomic nervous system d. sympathetic nervous system
2. The glands of endocrine system exert their function through chemical called:
   a. Action potential b. Neurons
   c. Reflex d. Hormones
3. The endocrine gland, known as "master" gland, that regulates many of the other Endocrine glands if the.
   a. Gonads b. Testes
   c. Adrenal glands d. Pituitary glands
4. A white fatty substance that forms sheaths around certain axons and increases the speed of neural impulses is known as:
   a. Dendrites b. Axons
   c. Glial cells d. Myelin
5. Chemicals secreted by neurons that provide the means of synaptic transmission are:
   a. Action potential b. Neurons
   c. Neurotransmitter d. Hormones
6. The disease which is marked by movement disorders caused by the destruction of dopamine neurons in the brain is known as:
   a. Parkinson's disease b. Alzheimer's disease
   c. Reticular formation d. Hemispheric specialization
7. The neurotransmitter associated with the onset of anxiety is known as:
   a. Gamma aminobutyric acid b. acetylcholine
   c. dopamine d. endorphins
8. The group of brain structure the influences emotion, motivation, and consequently the individual's survival, is known as the:
   a. cerebral cortex b. reticular formation
   c. limbic system d. endocrine system
9. Hormones are substances that fall into two basic categories:_____.
   a. Stimulator hormones and receptor hormones b. Protein and sugar
   c. Non-steroid hormones and steroid hormones d. Inter-organ and inter-organism
10. The hypothalamus regulates_____.
    a. Heart rate b. Body temperature
    c. Water balance d. All of the above

11. The posterior pituitary stores and secretes _____.
    a. ADH and Oxytocin
    b. Adrenaline and insulin
    c. Estrogen and testosterone
    d. Aldosterone and cortisone
12. The adrenal glands consist of _____.
    a. The inner and outer layer of the kidney
    b. The inner medulla and the outer cortex
    c. Lower adrenal and upper paradrenal sections
    d. ATCH and BTCH section
13. the average weight of human brain is_____ .
    a. 1.26 kilograms
    b. 1.36 kilograms
    c. 1.46 kilograms
    d. 1.56 kilograms
14. _____ part of hindbrain affects respiratory movement and facial expression
    a. Medulla
    b. Pons
    c. Cerebellum
    d. all of the above
15. _____ is responsible for motor control and feeding in lower level animals.
    a. Basal ganglia
    b. Limbic system
    c. Both a and b
    d. None of the above.
16. _____ theory of emotion considered emotions to ne the perceptions of stimulus-induced bodily changes.
    a. Cannon-bard theory
    b. Cognitive- theory
    c. James-Lange theory
    d. Perceptual theory

**Q.1 (B) Define the following** **(07)**

1. Emotion
2. Arousal
3. Attention
4. Sleep
5. Hormones
6. Inhibition
7. Antagonist

**Q.2 Answer the following** **(12)**

1. Explain neuroplasticity in brief?
2. Name and explain the lobes in human brain?
3. Describe Peripheral nervous system?

**OR**

4. Difference between cranial nerve and spinal nerves

**Q.3 Answer the following** **(15)**

1. What is difference between sympathetic parasympathetic nervous system?
2. Discuss the key concepts and process of electrochemical activity in neuron
3. Explain Neurophysiology of emotion in detail

**OR**

4. Name and explain 6 sleep disorder.

**Q.4 Answer the following** **(18)**

1. Draw the diagram of human brain and explain in detail.
2. Discuss about Neurophysiology of arousal?
3. Explain Neurophysiology of sleep?

**OR**

4. Draw the diagram of neuron and explain in detail