

**PARUL UNIVERSITY**  
**FACULTY OF ARTS**  
**B.A Summer 2017 – 18 Examination**

**Semester: 3**  
**Subject Code: 15105201**  
**Subject Name: Biological Basis of Behaviour**

**Date: 29/05/2018**  
**Time: 10.30 am to 1.00 pm**  
**Total Marks: 60**

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**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 Do as directed.****(08)****A. Multiple choice type questions. (Each of 0.5 mark)**

1. \_\_\_\_\_ theory of emotion considered emotions to be the perceptions of stimulus-induced bodily changes.
  - a. Cannon-bard theory
  - b. Cognitive- theory
  - c. James-Lange theory
  - d. Perceptual theory
2. \_\_\_\_\_ 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.
3. \_\_\_\_\_ part of hindbrain affects respiratory movement and facial expression
  - a. Medulla
  - b. Pons
  - c. Cerebellum
  - d. all of the above
4. The average weight of human brain is \_\_\_\_\_.
  - a. 1.26 kilograms
  - b. 1.36 kilograms
  - c. 1.46 kilograms
  - d. 1.56 kilograms
5. 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 par adrenal section
  - d. ATCH and BTCH section
6. The posterior pituitary stores and secretes \_\_\_\_\_.
  - a. ADH and Oxytocin
  - b. Adrenaline and insulin
  - c. Estrogen and testosterone
  - d. Aldosterone and cortisone
7. The hypothalamus regulates \_\_\_\_\_.
  - a. Heart rate
  - b. Body temperature
  - c. Water balance
  - d. All of the above
8. 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
  - d. Inter – organ and inter – organism \_\_\_\_\_.

9. 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
10. The neurotransmitter associated with the onset of anxiety is known as:
  - a. Gamma aminobutyric acid
  - b. Acetylcholine
  - c. Dopamine
  - d. endorphins
11. 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
12. Chemicals secreted by neurons that provide the means of synaptic transmission are:
  - a. Action potential
  - b. Neurons
  - c. Neurotransmitter
  - d. Hormones
13. 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
14. The endocrine gland, known as "master" gland, that regulates many of the other Endocrine glands is the.
  - a. Gonads
  - b. Testes
  - c. Adrenal glands
  - d. Pituitary glands
15. The glands of endocrine system exert their function through chemical called:
  - a. Action potential
  - b. Neurons
  - c. Reflex
  - d. Hormones
16. 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

**B. Terms/ Short notes/ Case study/ Charts/ Graphs/ Tables, etc. (Each of 01 mark)**

**(07)**

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

**Q.2 Answer the following.**

**A. Name and explain the lobes in human brain?**

**(04)**

**B. Explain neuroplasticity in brief?**

**(04)**

**C. Difference between cranial nerve and spinal nerves**

**(04)**

**OR**

- C. Describe Peripheral nervous system? (04)
- Q.3 Answer the following.**
- A. Discuss the key concepts and process of electrochemical activity in neuron. (05)
- B. What is difference between sympathetic parasympathetic nervous system? (05)
- C. . Name and explain 6 sleep disorder (05)
- OR**
- C. Explain Neurophysiology of emotion in detail (05)
- Q.4 Answer the following**
- A. Discuss about Neurophysiology of arousal? (06)
- B. Explain human brain in detail. (06)
- C. Draw the diagram of neuron and explain in detail (06)
- OR**
- C. Explain Neurophysiology of sleep?. (06)