Seat No:_____ **Enrollment No:_____**

PARUL UNIVERSITY

FACULTY OF ARTS

M.Arts Winter 2019 – 20 Examination

Semester: 3 **Date: 22/11/2019**
Subject Code: 15203202 **Time: 10:30am to 01:00pm**
Subject Name: Foundations of Physiological Psychology **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 Do as directed. **(08)**

A. Multiple choice type questions. (Each of 0.5 mark)

1.A large bundle of nerve fibers that connect corresponding parts of one side of the brain with those of the other ……
a) Left & Right hemisphere b) Corpus Callosum c) Nerve fibers d) Split brain

2.---------- is an automatic, stereotyped movement produced as the direct result os a stimulus.
a) Reaction b) Impulse c) Reflex d) Response

3. A type of scientific explanation, a phenomenon is described in terms of the more elementary processes that underlie it
a) Generalization b) Natural selection c) Reduction d) Functionalism

4. A gradual change in the structure and physiology of plant and animal species, generally producing more complex organisms as a result of natural selection
a) Evolution b) Model c) Natural selection d) Mutation

5. A neuron located entirely within the central nervous system
a) Motor neuron b) Sensory neuron c) Local neuron d) Interneuron

6. A chemical that is released by a terminal button, has an excitatory or inhibitory effect on another neuron
a) Neurotransmitter b) Cytoplasm c) Membrane d) Dendrites

7. A strand of DNA with associated proteins found in the nucleus carries genetic information
a) Gene b) Nucleus c) Chromosome d) Protein

8. A region of the medulla where the blood-brain barrier is weak, poisons can be detected there and can initiate vomiting
a) Axons b) Node of Ranvier c) Schwann cells d) Area postrema

9. A thin and delicate layer of the meninges that clings to the surface of the brain
a) Dura mater b) Pia mater c) Subarachnoid space d) Arachnoid space

10. The outermost layer of gray matter of the cebebral hemispheres
a) Ventricles b) Astrocytes c) Founder cells d) Cerebral cortex

11. The group of the diencephalon situated beneath the thalamus involved in regulation of the autonomic nervous system, control of the anterior and posterior pituitary glands and integration of species-typical behaviours
a) Hypothalamus b) Frontal lobe c) Optic chiasm d) Fornix

12. The protrusion at the end of the olfactory nerve receives input from the olfactory receptors
a) Pituitary gland b) Olfactory bulb c) Spinal cord d) Spinal nerves

13. The portion of the peripheral nervous system that controls the body's vegetative functions
a) Sympathetic ganglia b) Autonomic nervous system c) Sympathetic division d) Somatic nervous system

14. The region of the prefrontal cortex at the base of the anterior frontal lobes
a) Orbitofrontal cortex b) Frontal cortex c) Motor association cortex d) Temporal lobe

15. A change in the genetic information contained in the chromosomes of sperms or eggs which can be passed on to an organism's offspring and provides genetic variability
a) Natural selection b) Mutation c) Selective advantage d) Evolution

16. A slowing of the process of maturation, allowing more time for growth which is also an important factor in the development of large brains
a) Neoteny b) Doctrine of specific nerve energy c)Experimental ablation d)Artificial selection

B. Terms/ Short notes/ Case study/ Charts/ Graphs/ Tables, etc. (Each of 01 mark) **(07)**

1. Define Hormones
2. Define Cerebrospinal fluid
3. Define Neural tube
4. Define Fissure
5. Define Forebrain
6. Define Primary motor cortex
7. Define Limbic system

Q.2 Answer the following.

A. Write a brief note on facial expression of emotions. (04)

B. Briefly describe James Lange theory of emotions with an example (04)

C. What is a neuron? Elaborate on the parts of a neuron. (04)

OR

C. Define the four lobes of the brain. (04)

Q.3 Answer the following.

A. Define the Spinal cord and its parts. (05)

B. Sympathetic division of ANS (05)

C. Parasympathetic division of ANS (05)

OR

C. Brief note on development of the brain. (05)

Q.4 Answer the following.

A. Brief note on supporting cells. (06)

B. Blood-Brain Barrier. (06)

C. Action potential. (06)

OR

C. Structure of Synapse. (06)