

INDIAN SCHOOL NIZWA
CLASS :XIA,SUB: BIOLOGY

CH-18 NEURAL CONTROL AND COORDINATION -MCQ + A/R , QUES

1. Which one of the following is the function of the parasympathetic nervous system?
(a) Stimulates oil and sweat glands in the skin (b) Pupil constriction (c) Acceleration of heartbeat (d) Contraction of hair muscles
2. During resting state, fluid outside axon contains
(a) low concentration of K^+ (b) low concentration of Na^+ (c) low concentration of Cl^- (d) high concentration of Cl^-
3. Which portion of the brain is responsible for various emotions such as pleasure, fear, and happiness?
(a) Thalamus (b) Reticular formation (c) Hypothalamus (d) Limbic system
4. The basic cyclic pattern of inspiration and expiration is established by a respiratory center within the
(a) Cerebellum (b) Medulla oblongata (c) Cerebral cortex (d) Thalamus
5. Identify the proper sequence and mark the correct option.

I. Opening of ion channels.

II. Release of neurotransmitters.

III. Action potential arrives at axon terminals.

IV. Action potential stimulates movement of synaptic vesicles towards the membrane.

V. Binding with receptors, present on postsynaptic membrane.

VI. New action potential generated.

I → II → III → IV → V → VI

VI → V → IV → III → II → I

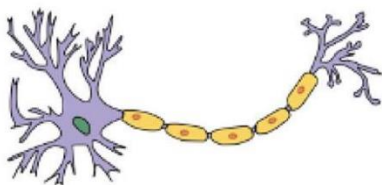
III → IV → II → V → I → VI

III → I → IV → V → II → VI

6. There are pairs of cranial nerves arising from the brain.

(a) 8 (b) 12 (c) 18 (d) 25

7. Identify the given diagram and mark the correct option.



Unipolar neuron B Multipolar neuron C. Bipolar neuron D. None of these

8. . Which layer is in contact with brain tissues?
(a) Piamater (b) Arachnoid (c) Duramater (d) Piamater and Arachnoid
9. The thin and convoluted outer layer of gray matter that covers the cerebral hemispheres is
(a) Medulla oblongata (b) Thalamus (c) Cerebral cortex (d) Meninges
10. Which part of the human brain is concerned with the regulation of body temperature?
(a) Cerebrum (b) Hypothalamus (c) Medulla Oblongata (d) Cerebellum
11. Through which aperture the spinal cord passes out of skull:-
(a) Foramen of Monro (b) Foramen of paninze (c) Foramen of magnum (d) None of the above
12. Injury to vagus nerve in humans is not likely to affect:
(a) tongue movements (b) gastrointestinal movements (c) pancreatic secretion (d) cardiac movements muscles (d) Iris

1, **Assertion(A):** Cyton region of nerve fibre collects information for the brain.

Reason (R): Nerve fibres can either have or lack myelin sheath. D

2. **Assertion(A):** A nerve impulse is an electrochemical event.

Reason (R) : In a nerve impulse there are changes in the resting potential which spreads down the nerve fibre. A

3. Assertion : The neural system provides an organised network of point-to-point connections for a quick coordination

Reason : The endocrine system provides chemical integration through hormones. B

4. Assertion : The cerebral cortex is referred to as the grey matter due to its greyish appearance.

Reason : The neuron cell bodies are concentrated in the cerebral cortex. A

5. Assertion : The cerebral cortex is referred to as the grey matter due to its greyish appearance.

Reason : The neuron cell bodies are concentrated in the cerebral cortex. A

ANSWER THE FOLLOWING QUESTIONS

1. Classify the neural system in form of flow chart.
2. Draw labeled diagram of neuron.
3. What are neurotransmitters & synaptic knob?
4. Classify the neurons on basis of function and number of axons & dendrites.
5. Give differences between myclinated and non myclinated fibers.
6. Describe the generation and conduction of nerve impulse.
7. Draw a labeled diagram showing axon terminal and synapse. Give difference between electrical and chemical synapse.
8. (a) Name 3 meninges of human brain.
(b) Draw labeled diagram of human brain.
(c) What are parts of forebrain?
(d) What is corpus callosum?
(e) What is association area in cerebrum?
(f) Give functions of hypothalamus & thalamus.
9. What are the functions of hind brain?