

Class – X

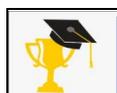
Subject – Biology (Control & Co-ordination)

MM: – 30

Section-A

1 X 10 = 10

- The gap between two neurons is :**
A) dendrite B) synapse C) axon D) impulse
- Which of the following is not an involuntary action?**
A) salivation B) chewing C) heart beat D) vomiting
- Which of the following pairs of brain part and its function are not correctly matched?**
A) Pons -consciousness B) cerebrum-memory and intelligence
C) cerebellum -balancing and posture D) medulla -involuntary actions
- In a neuron, conversion of electric signal to chemical reaction occurs at _____.**
A) cell body B) dendritic end C) axonal terminals D) axon
- Impulse flows from ____.**
A) dendrite to axon in same neuron B) axon to dendrite
C) nodes of ranvier to axon D) none
- Any change in the environment to which an organism responds is called**
(a) stimulus (b) coordination (c) response (d) hormone
- A part of the body which responds to the in-structions sent from nervous system is called**
(a) receptor (b) effector (c) nerves (d) muscles
- Which nerves transmit impulses from the cen-tral nervous system towards muscle cells?**
(a) Sensory nerves (b) Motor nerves
(c) Relay nerves (d) Cranial nerves
- Involuntary actions in the body are controlled by ____.**
A) Medulla in fore brain B) medulla in mid brain
C) medulla in hind brain D) medulla in spinal cord
- In a synapse chemical signal is transmitted from _____.**
A) from dendrite of one neuron to axonal end of other neuron
B) axon to cell body of same neuron
C) cell body to axonal end of same neuron
D) axonal end of one neuron to dendrite of another neuron



Section – B (2 Marks Each)

- Q1. Mention the parts of human nervous system .
Q2. What are the functions cerebellum ?

Section – C (3 Marks Each)

- Q3. Which is the largest part of brain ? Mention its parts & their functions.
Q4. Explain the conduction of nerve impulse bw 2 neurons with diagram.

Section – D (5 Marks)

- Q5. [i] Draw a neat and labelled diagram of Neuron & Mention the function of each part of it . [3]
[ii] Mention the types of neuron . [2]

CASE BASED STUDY (5 Marks)

- Q6. In animals, such control and coordination are provided by nervous and muscular tissues. Touching a hot object is an urgent and dangerous situation for us. We need to detect it, and respond to it. How do we detect that we are touching a hot object? All information from our environment is detected by the specialised tips of some nerve cells. These receptors are usually located in our sense organs, such as the inner ear, the nose, the tongue, and so on. So gustatory receptors will detect taste while olfactory receptors will detect smell.

- i) **What are the parts of neuron?**
- ii) **Which part of neuron receive the information first?**
- iii) **At which place the electrical impulse get converted to a chemical impulse?**
- iv) **What is neuromuscular junction?**
- v) **What do you understand by synapse?**

