

Chapter – 18 | Excretory Products and their Elimination

QUIZ-01

1. The neural system provides coordination through:
- Hormones only
 - Point-to-point connections
 - Blood plasma
 - Digestive enzymes

(B)

Explanation : The neural system gives quick coordination through an organised network of point-to-point connections.

2. The highly specialised cells of the neural system are called:

- Neurons
- Osteocytes
- Myocytes
- Erythrocytes

(A)

Explanation : Neurons detect, receive and transmit different kinds of stimuli.

3. The central neural system includes:

- Brain and nerves
- Spinal cord and ganglia
- Brain and spinal cord
- Cranial and spinal nerves

(C)

Explanation : CNS consists of the brain and spinal cord and acts as the site of information processing and control.

4. Afferent nerve fibres transmit impulses from:

- CNS to muscles
- Tissues/organs to CNS
- CNS to glands only
- Brain to spinal cord only

(B)

Explanation : Afferent fibres carry impulses from tissues or organs towards the CNS.

5. A neuron is mainly composed of:

- Cell body, dendrites and axon
- Nucleus, ribosome and vacuole
- Axon, tendon and ligament
- Myelin, cartilage and bone

(A)

Explanation : A neuron has three major parts: cell body, dendrites and axon.

6. Nodes of Ranvier are found between:

- Two dendrites
- Two adjacent myelin sheaths
- Two cell bodies
- Two synaptic knobs

(B)

Explanation : Nodes of Ranvier are gaps between adjacent myelin sheaths on a myelinated axon.

7. The sodium-potassium pump transports:

- 2 Na⁺ out and 3 K⁺ in
- 3 Na⁺ in and 2 K⁺ out
- 2 Na⁺ in and 3 K⁺ out
- 3 Na⁺ out and 2 K⁺ in

(D)

Explanation : The pump maintains ionic gradients by moving 3 Na⁺ out and 2 K⁺ into the cell.

8. Depolarisation of the nerve membrane occurs mainly due to:

- Exit of Na⁺
- Entry of Na⁺
- Entry of proteins
- Exit of calcium

(B)

Explanation : During depolarisation, the membrane becomes freely permeable to Na⁺, causing rapid Na⁺ influx.

9. Chemicals involved in impulse transmission at chemical synapses are called:

- Enzymes
- Hormones
- Neurotransmitters
- Antibodies

(C)

Explanation : Neurotransmitters are released into the synaptic cleft and help transmit impulses to the next neuron.

10. The medulla controls centres related to:

- Memory and intelligence only
- Respiration and cardiovascular reflexes
- Vision only
- Body temperature only

(B)

Explanation : The medulla contains centres that control respiration, cardiovascular reflexes and gastric secretions.