

Chapter- 21

NEURAL CONTROL AND COORDINATION

VERY SHORT ANSWER QUESTIONS (1 mark)

01. What are neurons?
02. Name two divisions of the autonomic neural system.
03. What do the grey and white matter in the brain represent?
04. Why blind spot is devoid of vision?
05. Give the technical term for eardrum?
06. Name the receptors in the human ear functions to maintain body balance.
07. Name the structure involved in the protection of the brain.
08. Why are neurons excitable?
09. Where are gustatory receptors present in our body?
10. While travelling at a higher altitude, a person complains of dizziness and vomiting sensation. Which part of the inner ear is disturbed during the journey?

SHORT ANSWER TYPE QUESTIONS (2 marks)

11. Define coordination in living organisms. Why is it necessary?
12. Differentiate between cerebrum and cerebellum.
13. What are neurotransmitters? Give an example.
14. What are corpus callosum and cerebral cortex
15. (a) Name the layers of the retina (b) What is the scotopic vision?
16. (a) Name the three ear ossicles found in the middle ear.
(b) Mention the importance of eustachian tube.
17. Write the composition of photopigments.

SHORT ANSWER TYPE QUESTIONS (3 marks)

18. Write the mechanism of vision.
19. Draw a labelled diagram showing parts of an eye.
20. (a) What is macula lutea? (b) What is the importance of fovea?

21. Describe the structure of the inner ear?
22. Explain the polarisation of the membrane of a nerve fibre.
23. (a) Where are synaptic vesicles found in a human body
(b) Name their chemical contents. (c) What is the function of these chemicals?
24. Explain the mechanism through which a sound produces a nerve impulse in the inner ear.

LONG ANSWER TYPE QUESTIONS (5 marks)

25. (a) Differentiate between electrical synapse and chemical synapse
(b) Describe the role of Na^+ in the generation of nerve impulses.
26. Write the function of the following:-
(a) Hypothalamus (b) Association area in forebrain
(c) Medulla oblongata (d) Limbic system (e) Pons
27. (a) Classify neurons based on number of axon and dendrites.
(b) What is meant by a reflex arc?

HOTS/MODEL QUESTIONS

01. What is a brain stem?
02. Define the accommodation of an eye?
03. Define PNS and ANS.
04. Name the two types of cells which form the myelin sheath.
05. Why do we not perceive the colour of a red rose in very dim light?
06. Give the role of neuroglia.
07. Besides blood, what supplies nutrients to the neurons in the brain?
08. Name the area of the retina which contains only cones.
09. How is the shape of the cornea maintained?
10. In which part of the brain pituitary gland is present?
11. What is CSF?
12. Name the band of nerve fibres that joins two cerebral hemispheres.
13. Name the type of tissue which supports the pinna of the external ear?

