

CHAPTER 21: NEURAL CONTROL AND COORDINATION

ONE MARK QUESTIONS:

1. Name the structural and functional unit of nervous system.(K)
2. Define coordination.(K)
3. What is synaptic knob? (K)
4. What are neurotransmitters?(U)
5. What is the role of Schwann cells? (U)
6. Name the gap between the adjacent myelin sheath.(K)
7. What is resting potential? (U)
8. Name the duct which passes through midbrain. (K)
9. What is corpora quadrigemina?(U)
10. Where are Nissl's granules located?(U)
11. What is Node of Ranvier?(U)
12. Why neurons are called excitable cells?(U)
13. Define synapse.(K)
14. Which is the major portion of human brain? (K)
15. What are Meninges? (K)
16. Name the nerve fibres which connect cerebral hemisphere. (K)
17. What is corpus callosum?(K)
18. What are cerebral hemispheres? (U)
19. What are association neurons? (U)
20. Name the centre for sensory signaling.(U)
21. You suddenly withdraw body from extreme hot. What is this called-?(U)
22. What is limbic system?(K)
23. Name the canal present between forebrain and hindbrain?(K)
24. What is brain stem?(U)
25. Which is the largest part of the human brain?(K)
26. Name the sockets of the skull in which eyes are located (K)
27. Where do you find corpora quadrigemina?(U)
28. Where is hunger centre located in human brain?(U)
29. Mention the outer layer out of three meninges?(U)
30. Define nerve impulse. (K)
31. Name the protein present in rods.(K)
32. Name the command and control system of human body.(K)
33. Define reflex arc.(U)
34. Which part of the brain maintains body equilibrium?(K)
35. What is retina? (K)
36. What forms iris of the eye?(K)
37. Name the aperture surrounded by the iris. (U)
38. Name the cells of Retina?(K)
39. What do you call anterior portion of the sclera ? (K)
40. What are photoreceptor cells?(K)
41. Name the vitamin required for the formation of rhodopsin.(K)
42. What is blind spot?(U)
43. Name the opaque and pigmented structure of eye.(K)

44. What is the function of ossicles in middle ear?(K)
45. What is the function of Eustachian tube?(U)
46. Name auditory receptors?(K)
47. Name the receptors responsible for maintenance of balance of the body and posture?(U)
48. Where do you find bipolar neurons?(K)
49. Define reflex action?(K)
50. Which cells of retina enable us to see colored objects?(U)
51. Name the exposed, transparent part of the eyeball?(U)
52. What is labyrinth? (K)
53. Name the gland present in the ear canal?(K)
54. What are neurotransmitters?(K)
55. Which part of the ear determines the pitch of a sound? (K)
56. Which kind of neuron is found in embryonic stage? (K)
57. What forms the brain stem? (U)
58. What is Eustachian tube? (U)
59. What are the fibres that transmit impulse towards cell body? (U)
60. Name the neural system which transmit impulses from the CNS to the involuntary organs and smooth muscles of the body. (U)
61. Name the neural system which transmits impulses from the CNS to skeletal system. (U)

TWO MARKS QUESTIONS:

1. Differentiate between afferent and efferent nerve fibres.(U)
2. Name the systems which coordinates and integrate all the activities in human body.(K)
3. List the divisions of PNS.(K)
4. List the divisions of ANS. (K)
5. Mention the two parts of neural system in human.(K)
6. Differentiate between myelinated and nonmyelinated neuron. (U)
7. How synapse is formed? (U)
8. Name two types synapse.(K)
9. Why cerebral cortex appears grey? (U)
10. What is reflex action?(K)
11. Which are the photoreceptor cells found in retina? (K)
12. What is photopic and scotopic vision? (A)
13. Write the differences between aqueous humour and vitreous humour. (U)
14. Which are photosensitive pigments present in human eye? (K)
15. Write a short note on organ of corti. (U)
16. Name the parts of otolith organ. (K)
17. Add a note on internal ear. (U)
18. Differentiate between grey and white matter.(U)
19. Differentiate cranial nerves and spinal nerves. (U)
20. What is somatic nervous system? Give one example.(A)
21. Mention any 4 functions of cerebrum.(U)
22. Explain the three types of ear ossicles. (U)
23. Mention the components of reflex arc.(A)
24. Write any four differences between cones and rods.(U)
25. Compare resting potential and action potential. (S)

THREE MARKS QUESTIONS:

1. Name the three cranial meninges. (K)
2. List the functions of neurons.(U)
3. Classify neurons based on number of axon and dendrites.(K)
4. What are parts of CNS? Mention its function. (U)
5. Mention the parts of neuron.(K)
6. Based on the number of axon and dendrites neurons are classified into three types.List the types.(U)
7. Explain polarised state of neural membrane.(A)
8. Add a note on electrical synapse. (A)
9. Explain the mechanism of reflex action. (U)
10. Enlist three parts of human brain.(K)
11. Enlist three functional areas of cerebral cortex. (U)
12. Explain the functions of association areas. (U)
13. List the parts forming hindbrain.(K)
14. Secretions for digestion, heart rate, breathing rate are controlled by medulla. Why?(A)
15. Which are the three layers forming wall of eye ball? (U)
16. Explain the structure of cerebrum.(U)
17. Enlist the cells present in retina.(U)
18. Which colours are identified by cones? (U)
19. Name the region of retina where photoreceptor cells are absent?(U)
20. Name the ear ossicles present in the middle ear. (K)
21. Draw sectional view of cochlea and label the parts.(S)
22. Explain chemical synapses.(U)
23. Draw neat labeled diagram of V.S of human eye.(S)

FIVE MARKS QUESTIONS:

1. Draw a neat labeled diagram of sagittal section of human brain.(S)
2. Illustrate the development of neural system from lower invertebrates to chordates.(A)
3. With suitable example plan the reflex pathway. (A)
4. Draw a neat labeled diagram of ear.(S)
5. Explain the structure of human eye.(S)
6. Draw and label multipolar myelinated neuron.(S)
7. Explain selective permeability of neural membrane. (A)
8. Explain the mechanism of conduction of nerve impulse.(U)
9. Sketch and label axon terminal and synapse.(S)
10. Explain the chemical impulse transmission through synapse.(U)
11. List various functions of human brain.(K)
12. Describe the functions of hypothalamus. (A)
13. Draw sagittal section of human brain and label the parts.(S)
14. Explain in brief mechanism of hearing. (A)

15. What is
- a. Corpus callosum
 - b. Cerebral aqueduct
 - c. Sclera
 - d. Labrynth
 - e. Blind spot
16. Explain the role of Na^+ in the generation of action potential. (A)
17. Explain mechanism of generation of light- induced impulse in the retina.(A)