

Class 11 Biology – Nervous System (MCQs)

1. The structural and functional unit of the nervous system is:

- a) Nephron
- b) Neuron
- c) Neuroglia
- d) Axon

2. Which part of the neuron receives impulses?

- a) Axon
- b) Cell body
- c) Dendrite
- d) Myelin sheath

3. Myelin sheath is formed by:

- a) Astrocytes
- b) Oligodendrocytes
- c) Schwann cells
- d) Microglia

4. The gap between two neurons is called:

- a) Node of Ranvier
- b) Synapse
- c) Neurolemma
- d) Axon hillock

5. Which ion is mainly responsible for depolarization of neuron membrane?

- a) K^+
- b) Ca^{2+}
- c) Na^+
- d) Cl^-

6. The resting membrane potential of a neuron is approximately:

- a) +70 mV
- b) -70 mV
- c) -90 mV
- d) +90 mV

7. Which neurotransmitter is released at neuromuscular junction?

- a) Dopamine
- b) Serotonin
- c) Acetylcholine
- d) Adrenaline

8. Central nervous system consists of:

- a) Brain and nerves
- b) Spinal cord and nerves
- c) Brain and spinal cord
- d) Ganglia and nerves

9. Which part of brain controls balance and posture?

- a) Cerebrum
- b) Medulla
- c) Cerebellum
- d) Hypothalamus

10. The largest part of human brain is:

- a) Midbrain
- b) Cerebellum
- c) Pons
- d) Cerebrum

11. Which lobe of cerebrum is associated with vision?

- a) Frontal
- b) Parietal
- c) Temporal
- d) Occipital

12. Autonomic nervous system controls:

- a) Voluntary actions
- b) Skeletal muscles
- c) Involuntary actions
- d) Reflex actions

13. Sympathetic nervous system prepares the body for:

- a) Rest
- b) Digestion
- c) Sleep
- d) Emergency situations

14. Parasympathetic nervous system is also called:

- a) Fight or flight
- b) Rest and digest
- c) Stress system
- d) Emergency system

15. Which cranial nerve is responsible for vision?

- a) Optic nerve
- b) Olfactory nerve
- c) Auditory nerve
- d) Vagus nerve

16. Number of cranial nerves in humans:

- a) 10 pairs

- b) 11 pairs
- c) 12 pairs
- d) 13 pairs

17. Number of spinal nerves in humans:

- a) 29 pairs
- b) 30 pairs
- c) 31 pairs
- d) 32 pairs

18. Reflex actions are controlled by:

- a) Brain
- b) Cerebellum
- c) Spinal cord
- d) Hypothalamus

19. The protective membranes covering brain are called:

- a) Peritoneum
- b) Pleura
- c) Meninges
- d) Pericardium

20. Which fluid protects the brain from mechanical shocks?

- a) Blood
- b) Lymph
- c) Cerebrospinal fluid
- d) Plasma

21. Grey matter of brain mainly contains:

- a) Myelinated axons
- b) Non-myelinated axons and cell bodies

c) Only dendrites

d) Only axons

22. White matter of brain is made up of:

a) Neuron cell bodies

b) Dendrites

c) Myelinated axons

d) Synapses

23. Which hormone-like substance acts as neurotransmitter?

a) Insulin

b) Thyroxine

c) Adrenaline

d) Estrogen

24. The nerve impulse transmission across synapse is:

a) Electrical only

b) Chemical only

c) Both electrical and chemical

d) Mechanical

25. Which part of brain regulates body temperature?

a) Cerebrum

b) Hypothalamus

c) Medulla

d) Pons

26. The brain stem includes:

a) Cerebrum and cerebellum

b) Midbrain, pons, medulla

c) Cerebellum and medulla

d) Pons and cerebrum

27. Which nerve controls heart beat and breathing?

a) Optic

b) Vagus

c) Auditory

d) Trigeminal

28. The functional junction between nerve and muscle is:

a) Synapse

b) Neurolemma

c) Neuromuscular junction

d) Axon hillock

29. Which cells provide nutrition and support to neurons?

a) Neurons

b) Schwann cells

c) Neuroglial cells

d) Axons

30. The all-or-none principle is related to:

a) Hormone action

b) Reflex arc

c) Nerve impulse

d) Muscle fatigue