

1.What is nervous system?

- is highly organized network of cells that detect changes and control metabolic process.

2.what is the ability of nervous system?

- the ability of nervous system to monitor and respond to changes of both external and internal.

{Nerve tissue is responsible for coordinating and controlling many body activities}

3.what is nervous tissue is composed?

- it composed neurons and neuroglia.

4.what is neurons?

- neurons are working unit of nerve systems and it generate the transmit of nerve impulse.

5.what is the structure of neurons?

- they are three structure Size, Length, Shape.

6.what are neurons consist?

- neurons consist of three main region Cellbody,Axon,Dendrites.

7.what is Dendrites?

- it receives signals called impulses from other neurons and conduct the impulses to the cell body.

8.what is Cell body?

- cell body is where they found the nucleus of the neuron and many of cell organelles.

9.what is Axon?

- it carries the nerve impulse from the cell body to other neurons and muscles.

10.what is myelin sheath?

- is fatty material that wraps around nerve cell project.

11.what is the another name of myelin sheath?

- is called modulated sheath.

12.compare neurons which have myelin and those lacks?

- neurons with myelin carries impulses that associated with sharp pain.
- neuron lack myelin carries impulse associated with dull,throbbing pain

13.classified types of neurons?

- there are four types of neuron(Anaxonic,Unipolar,Bipolar and Multipolar.

14. what is sensory neurons (afferent neuron)?

- are neurons that get information about what is going on inside or outside of the body and take the information to the brain and spinal cord.

15. what is motor neurons (efferent neurons)?

- are neurons that get information from the brain or spinal cord and convey command to the effector organs like muscles and glands.

16. what is nerve?

- is consist of numerous neurons collected into each bundle has several covering of protective connective tissue.

17. what is epineurium?

- is fibrous tissue which surrounds and encloses a number of bundles of nerve fibres.

18. what is perineurium?

- is a smooth connective tissue surrounding each bundle of fibres.

19. what is endoneurium?

- is a delicate tissue which is continuous with septa that pass inwards from the perineurium.

20. what is a nerve impulse?

- is an electrical charge traveling the length of neuron.

21. what is resting potential?

- is non conducting nerve fibre

22. in this State the membrane is ?

- is far more permeable to K^+ than Na^+

23. what is polarized?

- when the plasma membrane is inside – ion and outside +ion

24. what is action potential?

- is localised change in the resting membrane potential between inside and outside

25. in this state the membrane is ?

- is far more permeable to Na^+ than K^+

26. what is depolarization?

- when the plasma membrane is inside + ion and outside - ion

27. what is Synapse?

- is the junction between dendrites of two adjacent neurones

28. what is Synaptic knobs?

- is presynaptic neuron break up into minute that terminate in small swellings

29.what is synaptic cleft?

- Is Physical space between two neurons and separate by tiny gaps

30.what is neurotransmitter?

- chemical messengers that transmit a message from a nerve cell across the synapse to a target cell.

31.what is Exocytose?

- It transport of material out of the cell by vesicles

32.state structure of nervous system?

- 1.the central nervous system ●2.the peripheral nervous system

33.what is the central NS and the peripheral NS consist of?

- central NS consist (Brain and Spinal cord)
- Peripheral NS consist (sensory neuron and motor neuron)

34.what is the motor neuron consist of ?

- it consist of two part
- 1.Autonomic NS (involuntary) 2.Somatic NS (voluntary)

35.what is meninges?

- is membranous covering that provide further protection.

36.the brain and spinal cord completely surrounded by three layers of tissue meninges called 1.Dura mater 2.Arachnoid 3.Pia mater.

37.what is Dura mater?

- is tough outer membrane covering the brain and spinal cord.

38.what is Arachnoid mater?

- is fibrous tissue that lies between the Dura and pia maters.

39.what is pia mater?

- is innermost membrane covering the brain and spinal cord.

40.what is brain?

- is one of the most important organ of the human body.

41.brain consist of 100 billion neurons and it is mass is1.4 kg and it take body oxygen around 20% it takes as food only Glucose.

42.What is parts of brain?

- 1.the cerebrum 2.the diencephalon 3.the brain 4.the cerebellum

43.what is cerebrum?

- is most largest and complex part and constitutes about 90% the volume.

44.what is corpus callosum?

- it separate the two cerebral hemispheres and penetrates.

45.the cerebrum consist of 4 lobes?

- frontal lobe,parietal lobe,temporal lobe, occipital lobe

46.what are the three main type of cerebral cortex?

- Higher order function=the mental activities involved in memory.
- Sensory perception= reception of pain, temperature and touch.
- initiation and control=they initiate and control skeletal muscles contraction and voluntary movement.

47.what is diencephalon?

- It connects the cerebrum and the midbrain and it consist thalamus and hypothalamus.

48.what is thalamus?

- it consist of two masses of grey&white matter, just below corpus callosum.

{this relays impulse from most part of the brain to the cerebral cortex}

49mwhat is hypothalamus?

- small structure that situated below and in front of the thalamus.

50.what is it's function?

- in control the output of hormones from pituitary gland.

◇{also it controls autonomic nerve system,appetite,satiety}◇

51.what is brain stem?

- it consist of mid brain, pons and medulla oblongata.

52.what is mid brain?

- is the area of brain situated between the cerebrum above and pons.

53.what is it's function?

- is to visual and auditory information{e.g. moving neck and head}

54.what is pons?

- situated front of cerebrum, below the mid & above the medulla oblongata.

55.what is medulla oblongata & [simply the medulla]?

- it controls the involuntary activities.

56.what is cerebrum?

- situated behind the pons and below the back of the cerebrum.

57.what is it's function?

- is to control and coordinates movement of various group.

58.what is the spinal cord?

- is the elongated, almost cylindrical part of central nerve tissue.

59.what is it's function?

- transfer the nerve information b/w brain and other part of body except head region.
- control the simple reflex action.

60. what is reflex action?

- is rapid automatic response to a certain stimulus.

61. what is simple reflex action?

- it doesn't depend to learn/single stimulus.

62. what is conditional reflex action?

- it depends to learn/more stimulus.

63. what is peripheral nerve system?

- is nerve system consist of cranial nerve and spinal nerve?

64. what is cranial nerves?

- are nerve that arise from the brain and innervates areas head and face & have 12 pairs of cranial nerve human.

65. what is the spinal nerve?

- are nerves that arise from the spinal cord and innervates limbs and the trunk & 31 pairs of spinal nerve human.

66. what is somatic nervous system?

- relays information from external sensory receptors to the CNS and motor nerve relay information from the CNS to skeletal muscles.

67. what is autonomic nervous system?

- carries impulses from the CNS to the heart and other internal organ.

68. what are the two branch of autonomic nervous system?

- 1. **sympathetic nervous system**= most active in time emergency.
- 2. **parasympathetic nervous system**= most active when body is relax.

69. state the health problems of nervous system?

- they are three,
 1. Dementia= causes progressive of the cerebral cortex (especially loss short term memory).
 2. Alzheimer disease= cause by genetic factor involved.
 3. Bacterial meningitis= refer to inflammation and transmit through contact.

Note;

Read the taste and smell, sight, hearing and touch.