

EXERCIS-1

NEURON, TYPES OF NEURON, PHYSIOLOGY OF NERVE, STNAPSE, NEUROGLIA

1. GABA (gama amino butyric acid) is a :-
 - (1) Inhibitory neurohormone
 - (2) Transmitter neuro humor
 - (3) Anti co-agulant
 - (4) None
2. Nissl's bodies found in neurons are :-
 - (1) Made of DNA
 - (2) Masses of ribosome and RER
 - (3) Help in formation of neurofibrils
 - (4) Masses of mitochondria
3. Chemical transmission of nerve impulses from one neuron to another at a synapse is by :-
 - (1) Cholesterol
 - (2) Acetylcholine
 - (3) Cholecystinin
 - (4) ATP
4. "Nodes of Ranviers" are found in :-
 - (1) Brain
 - (2) Heart
 - (3) Axon
 - (4) Eye
5. Afferent nerve conducts impulse from :-
 - (1) C.N.S. to effector
 - (2) Receptor to C.N.S.
 - (3) Receptor to effector
 - (4) Effector to receptor
6. Saltatory conduction occurs in :-
 - (1) Non-myelinated fibers
 - (2) Myelinated fibers
 - (3) Both of them
 - (4) None of them
7. Chemical substance which take part in synaptic transmission is :-
 - (1) Adrenaline
 - (2) Epinephrine
 - (3) Colchicine
 - (4) Acetylcholine
8. Nissl granules occur in which part and what is their function :-
 - (1) Neurons and help in nutrition & increase metabolic activity of neuron
 - (2) Blood and help in nutrition and excretion
 - (3) Sarcoplasm and help in contraction
 - (4) Cell and secrete mucous
9. When a nerve fibers is stimulated the inside of the membrane becomes :-
 - (1) Filled with acetyl choline
 - (2) Negatively charged
 - (3) Positively charged
 - (4) Neutral
10. The parts of the neuron that perform basic cellular functions such as protein synthesis etc :-
 - (1) Axons
 - (2) Dendrites
 - (3) Synaptic knobs
 - (4) Soma
11. The nerves leading to the central nervous system are called :-
 - (1) Afferent
 - (2) Efferent
 - (3) Motor
 - (4) None
12. "Jumping of the action potential" at the nodes of ranvier is known as :-
 - (1) Saltatory conduction
 - (2) Neuro transmission
 - (3) Recovery phase
 - (4) Active phase
13. Nerve impulses are initiated by nerve fibers only when the membrane shall become more permeable to :-
 - (1) Adrenaline
 - (2) Phosphorus
 - (3) Sodium
 - (4) Potassium ions
14. Power of regeneration is lowest in :-
 - (1) Brain cell
 - (2) Liver cell
 - (3) Bone
 - (4) Muscle cell
15. Unit of nervous system :-
 - (1) Neuron
 - (2) Neuroglia
 - (3) Axon
 - (4) Cyton
16. Speed of impulse on nerves in mammals is :-
 - (1) 1 meter /sec.
 - (2) 100 meter /sec.
 - (3) 1000 meter / sec.
 - (4) None of these
17. The functional connection between two neurons is called :-
 - (1) Synapse
 - (2) Synapsis
 - (3) Chiasma
 - (4) Chiasmata
18. Conduction of nerve impulse is :-
 - (1) Faster in non-myelinated fibres
 - (2) Faster in myelinated fibres

- (3) No difference in the rate of conduction in myelinated & non myelinated fibres
(4) None of the above
19. Enzyme acetyl cholinesterase is concerned with :-
(1) Digestion of protein
(2) Synthesis of protein
(3) Digestion of polypeptide
(4) conduction of nerve impulse
20. Integrative system in the body are :-
(1) Endocrine system (2) Nervous system
(3) Blood vascular system (4) Both 1 & 2
21. During refractory period :-
(1) Nerve transmits impulse very slowly
(2) Nerve can not transmit impulse
(3) Nerve transmits impulse very rapidly
(4) None of the above
22. The Schwann sheath is :-
(1) A non myelinated nerve fibres
(2) Associated with myelin sheath
(3) A connective tissue cell
(4) Associated with myelinated & non myelinated nerve fibre
23. The function of an axon is :-
(1) Transformation of nerve impulse
(2) Reception of stimuli from neurons
(3) Reception of external stimuli
(4) Conduction of nerve impulse
24. A short period during which a nerve is unable to conduct nerve impulse is called :-
(1) Synaptic delay (2) refractory period
(3) Resting potential (4) Critical period
25. Rapid integration of the functional activities in human is achieved by :-
(1) Nervous system (2) Endocrine system
(3) Blood (4) Muscular system
26. Which cell-organelle synthesizes acetyl choline :-
(1) Golgi complex (2) Ribosome
(3) Mitochondria (4) Lysosome
27. Synapse name proposed by :-
(1) Charles sherrington (2) Marshall
(3) Pavlov (4) None of the above
28. Which one of the following types of neurons are most numerous in the body :-
(1) Unipolar (2) Multipolar
(3) Bipolar (4) Pseudounipolar
29. When the axon membrane is positively charged outside and negatively charged in side , then the condition is known as :-
(1) Action potential (2) Resting potential
(3) Action potential (4) Differential potential
30. The rate at which a nerve impulse travels along a nerve fibers is dependent up on :-
(1) Length of the nerve fibre
(2) Diameter of the nerve fibre
(3) Presence of connective tissue sheath
(4) None of the above
31. Sheath of Schwann occurs on :-
(1) Neurons (2) Axon
(3) Dendrons (4) Neuroglia
32. Which cell-organelle absent in neurons :-
(1) Mitochondria (2) Ribosome
(3) Centriole (4) Nucleus
33. Nerve fibres are surrounded by an insulating fatty layer called :-
(1) Adipose sheath (2) Myelin sheath
(3) Hyaline sheath (4) Peritoneum
34. The main function of acetylcholine is to :-
(1) Increase heart beat
(2) Help in synaptic transmission of nerve impulse
(3) Help in conduction of nerve impulse through axon
(4) Control reflex action
35. Ions needed for nerve conduction :-
(1) Na^+ (2) Ca^{++}
(3) Mg^{++} (4) None
36. Myelogenesis (Myelin formation) process occur in C.N.S. (central nervous system)
(1) By Schwann cells (2) By oligodendrocytes
(3) By Axolemma (4) By neurolemma
37. Depolarization of axolemma during nerve conduction takes place because of –
[AIPMT -2000]
(1) Equal amount of Na^+ & K^+ move out across axolemma

- (2) Na^+ move inside
 (3) More Na^+ outside (4) None
38. Which of the following statement is correct for node of Ranvier of nerve :- **[AIPMT -2002]**
 (1) Neurilemma is discontinuous
 (2) Myelin sheath is discontinuous
 (3) Both neurilemma & Myelin sheath are discontinuous
 (4) Covered by myelin sheath
39. What used to be described as Nissl granules in a nerve cell are now identified as :- **[AIPMT -2003]**
 (1) Cell metabolites (2) Fat granules
 (3) Ribosomes (4) Mitochondria
40. The "Nissle's granules" of nerve cell's are made up of :- **[RPMT -2003]**
 (1) Ribosomes (2) Protein
 (3) DNA (4) Mitochondria
41. In the resting state of the neural membrane, diffusion due to concentration gradients, if allowed, would drive :- **[AIPMT -2004]**
 (1) K^+ and Na^+ out of the cell
 (2) Na^+ into the cell
 (3) Na^+ out of the cell
 (4) K^+ into the cell
42. Unidirectional transmission of a nerve impulse through nerve fibre is due to the fact that :- **[AIPMT -2004]**
 (1) Nerve fibre is insulated by a medullary sheath.
 (2) Sodium pump starts operating only at the cyton and then continues into the nerve fibre.
 (3) Neurotransmitters are released by dendrites and not by axon endings.
 (4) Neurotransmitters are released by the axon endings and not by dendrites.
43. Repolarisation of Neuron is occurred due to :-
 (1) Influx of Na^+ (2) Influx of K^+
 (3) Influx of Na^+ (4) Influx of K^+
44. If GABA is released at synapse area then what will happens :-
 (1) Depolarization of neuron
 (2) Repolarization of neuron
 (3) Hyperpolarization of neuron
 (4) No effect
45. None Myelinated axons differ from myelinated in that they :-
 (1) Are more excitable
 (2) Lack nodes of Ranvier
 (3) Are not capable of regeneration
 (4) Are not associated with Schwann cells
46. If myelin sheath is continue in myelinated nerve fibre then what will happens in neuronal conduction
 (1) Velocity is increased (2) Conduction is slow
 (3) Conduction is stopped (4) No effect
47. Nerve cells donot possess: - **[MANIPAL -2005]**
 (1) Neurilemma (2) Sarcolemma
 (3) Dendrites (4) Axon
48. Myelin sheath covers which of the following – **[MPPMT-2005]**
 (1) Muscle fibre (2) Nerve fibre
 (3) Collagen fiber (4) Tendons
49. Dendrites are associated with which system – **[MPPMT -2006]**
 (1) Nervous system (2) Digestive system
 (3) Muscular system (4) Blood vascular system
50. Nerve impulse travel through nerve with the help of **[MPPMT- 2006]**
 (1) Acetylcholine and sympathetin
 (2) Choline and acetylcho line
 (3) adrenaline and noradrenaline
 (4) None of the above
51. A typical value of resting membrane potential is – **[KERALA PMT -2006]**
 (1) -40 mv (2) -60 mv
 (3) -70 mv (4) -80 mv
52. During the transmission of nerve impulse through a nerve fiber, the potential on the inner side of the plasma membrane has which type of electric charge? **[AIPMT -2007]**
 (1) First positive, then negative and continue to be negative
 (2) First negative, then positive and continue to be positive
 (3) First positive, then negative and continue to be positive
 (4) First negative, then positive and continue to be Negative

EXERCISE – II

C.N.S., MENINGES, C.S.F. CEREBRUM, CORPUS CALLOSUM, MID BRAIN, HIND BRAIN

1. Posterior choroid plexus in brain is found in the :-
(1) Diencephalon
(2) Cerebrum
(3) Cerebellum
(4) Space b /w pons & medula (anteriorly) & cerebellum (Posteriorly)
2. Meanings surrounding the brain of Human from outside to inside are :-
(1) Duramater, arachnoid, piamater
(b) Piamater, arachnoid, duramater
(3) Duramater, Piamater, arachnoid
(4) Piamater, duramater, arachnoid
3. Corpus callosum connects :-
(1) Two cerebral hemisphere
(2) Two optic lobes
(3) Two olfactory lobes
(4) Optic chiasma
4. Outer most covering of brain is called :-
(1) Choroid (2) Duramater
(3) Piamater (4) Arachnoid
5. The membrane which cover the brain and the spinal cord is :-
(1) White matter (2) Grey matter
(3) Peritonium (4) Menix
6. Cerebellum is concerned with :-
(1) Co –ordination of muscular movement
(2) Memory
(3) Vision
(4) Reflex action
7. Crura cerebri is located in :-
(1) Fore brain (2) Hind brain
(3) Mid brain (4) None
8. Arbor vitae is present in :-
(1) Cerebellum (2) Cerebrum
(3) Diencephalon (4) Optooel
9. How many lobes are present in cerebellum :-
(1) 1 (2) 3 (3) 5 (4) 7
10. Piamater is :-
(1) Inner most meninge (2) Middle meninge
(3) Outer meninge (4) None
11. The box like bony structure which encloses the brain is called :-
(1) Cranium (2) Pericardium
(3) Peritoneum (4) Periosteum
12. In brain of crura cerbri is a structure made of :-
(1) Six bands of nerve fibres
(2) Eight bands of nerve fibres
(3) Two large bands of nerve fibres
(2) Four bands of nerve fibres
13. Leptomenix of brain is formed by the joining of :-
(1) Piamater and arachnoid layer
(2) Piamater and duramater
(3) Duramatter and arachnoid layer
(4) Grey matter and white matter
14. Which one of the following menix is present only in mammalian brain :-
(1) Duramater (2) Arachnoid
(3) Piamater (4) None of them
15. The pneumotaxic center of rabbit is located in :-
(1) Brain (Pons) (2) Heart
(3) Medulla (4) Lungs
16. The function of cerebrospinal fluid surrounding CNS is to :-
(1) Protect the brain from external jerks
(2) Provide nourishment and O₂ to the brain
(3) Take away unwanted substance from the brain
(4) All of the above
17. Septum lucidum is part of the :-
(1) Pseudocoel (2) Metacoel
(3) Diocoel (4) Rhinocoel
18. Small, solid and four optic lobes or colliculus called corpora quadrigemina are found in :-
(1) Mammals (2) Amphibians
(3) Aves (4) Reptiles

19. Hypothalamus is situated on the :-
 (1) Upper lateral surface of diencephalon
 (2) Lower lateral surface of diencephalon
 (3) Ventral side of optic lobes
 (4) Dorsal side of optic lobes
20. Epithalamus is situated on the :-
 (1) Roof of diencephalon
 (2) Lateral wall of diencephalon
 (3) Dorsal side of optic lobes
 (4) Floor of diencephalon
21. The gray matter differs from white matter in the :-
 (1) Absence of axon
 (2) Absence of neurilemma
 (3) Presence of myelin sheath
 (4) Absence of myelin sheath
22. Which of the following is not an organ of the central nervous system :-
 (1) Brain (2) Spinal cord
 (3) Medulla oblongata (4) Vagus
23. Which of the following is a richly vascular layer with lot of blood capillaries :-
 (1) Duramater (2) Piamater
 (3) Epidermis of skin (4) Both (1) & (2)
24. Intelligence quotient value of Normal person is :-
 (1) 60 – 70 % (2) 90 – 100 %
 (3) 80 – 90 % (4) >100 %
25. Which of the following is not a part of hind brain :-
[RPMT-2004]
 (1) Medulla oblongata (2) Thalamus
 (3) Cerebellum (4) Pons
26. A 6 year old child is having mental status of 2 year old child then what he will be called
 (1) Normal (2) Imbecile
 (3) Idiot (4) Moron
27. Which is correct about pons varolii:-
 (1) Situated between midbrain & M.O.
 (2) Pons regulates pneumotoxic centre
 (3) Inner gray, outer white matter
 (4) All of the above
28. If the corpus callosum is removed in mammalian brain then what will be affected:-
 (1) Coordination of Cerebrum
 (2) Involuntary activity of brain
 (3) Coordination of Cerebellum
 (4) Behaviour and emotional disturbances
29. Parkinson's disease is present due to lesion in :-
 (1) Corpus striatum
 (2) RAS
 (3) Limbic system
 (4) Analysis centre of Cerebrum
30. The name of nervous band connecting the cerebral hemispheres in rabbit is -
[MANIPAL -2005, MPPMT -1995, MHCET – 2004]
 (1) Corpus albicans
 (2) Corpus callosum
 (3) Corpus striatum
 (4) Corpus spongiosum
31. Arobor vitae is a part of - **[MANIPAL -2005]**
 (1) Cerebrum (2) Cerebellum
 (3) Midbrain (4) Forebrain
32. Which has H-shaped gray matter ?
[MANIPAL -2005]
 (1) Cerebrum (2) Spinal cord
 (3) Cerebellum (4) Gray matter
33. Human brain is covered by an extremely hard layer called -
[MPPMT -2005]
 (1) White matter (2) Duramater
 (3) Piamater (4) Gray matter
34. Which of the following is the part of mid brain of rabbit?
[JIPMER -2004]
 (1) Cerebrum
 (2) Diencephalon
 (3) Corpora quadrigemina
 (4) None of these
35. The function of cerebrospinal fluid does not include:
[HPPMT- 2006]
 (1) Protection of brain and spinal cord by containing antibody
 (2) Protection of delicate brain and spinal cord from shock
 (3) As a medium for excretion of waste product
 (4) Buoyancy to brain ?

EXERCISE – III

INTERNAL STRUCTURE OF BRAIN, CHOROID PLEXUS, BASAL NUCLEI, LIMBIC SYSTEM, ANALYSIS CENTER

1. The cavity of brain is lined by :-
 - (1) Neural epithelium
 - (2) Ependymal epithelium
 - (3) Cerebrospinal fluid
 - (4) Glandular epithelium
2. Cerebral hemispheres of mammals consist of :-
 - (1) Outer gray matter and central white matter
 - (2) Outer white matter and central gray matter
 - (3) Gray matter and white matter inter mingled
 - (4) Gray matter only
3. Third ventricle is found in :-
 - (1) Heart of rabbit
 - (2) Brain of rabbit
 - (3) Heart of frog
 - (4) Kidney of frog
4. "Foramen of monro" is an aperture found between :-
 - (1) Third ventricle and forth ventricle
 - (2) Diocoel and Metacoel
 - (3) Brain and spinal cord
 - (4) Lateral ventricle and third ventricle
5. Largest cavity in brain is called :-
 - (1) Diocoel
 - (2) Paracoel
 - (3) Metacoel
 - (4) Rhinocoel
6. The cavity of diocoel is known as :-
 - (1) I – ventricle
 - (2) II – ventricle
 - (3) III- ventricle
 - (4) Iter
7. Which of the following forms the cerebro spinal fluid :-
 - (1) Choroid plexus
 - (2) Duramater
 - (3) Arachnoid mater
 - (4) Cerebrum and spinal cord
8. Clogging of magandii foramen will prevent the flow of cerebro spinal fluid from IV ventricle to :-
 - (1) Central canal
 - (2) II-ventricle
 - (3) III-ventricle
 - (4) Outside the brain
9. Optocoel cavity found in brain of :-
 - (1) Rabbit
 - (2) Man
 - (3) Frog
 - (4) None of these
10. Broca's area is located in :-
 - (1) Ventral part of temporal lobe
 - (2) Lateral part of frontal lobe
 - (3) Dorsal part of optic lobe
 - (4) None of optic lobe
11. If Braca's area is injured then what happen firstly :-
 - (1) Concerning speech muscle are paralysed
 - (2) Speech stattered & not clear
 - (3) Unable to speak
 - (4) Only able to speak written word
12. Which part of cerebrum convert short term memory into long term memory-
 - (1) Limbic lobe
 - (2) Temporal lobe
 - (3) Prefrontal cortex
 - (4) Hippocampal lobe
13. Which structure is not formed of gray matter
 - (1) Colliculi
 - (2) Olfactory lobe
 - (3) Neopallium
 - (4) None of these
14. Basal nuclei situated in :-
 - (1) Thalamus
 - (2) Hypothalamus
 - (3) Wall of cerebral hemisphere
 - (4) Independently situated
15. Third ventricle lies in –

[MAINPAL -2003, MPPMT -1999]

 - (1) Medulla oblongata
 - (2) Mid brain
 - (3) Diencephalon
 - (4) Cerebrum
16. Ventricles of brain are lined by the cells called –

[MPPMT -2004]

 - (1) Neuroglia
 - (2) Ependymal
 - (3) Neuroncells
 - (4) Schwann cells
17. In man the osmotic centres are situated in –

[MPPMT -2005]

 - (1) Cerbrum
 - (2) Hypothalamus
 - (3) Pituitary gland
 - (4) Medulla oblongata
18. Hypothalamus does not control –

[KERALA PMT -2005]

 - (1) libido
 - (2) Osmoregulation
 - (3) Creative thinking and consciousness
 - (4) Thermoregulation
19. Choroid plexus is a network of –

[KARNATAKA CET -2004]

 - (1) Nerves
 - (2) Muscle fibres
 - (3) Capillaries
 - (4) Lymph vessels

EXERCISE –IV

FUNCTION OF BRAIN, SPINAL CORD, REFLEX ACTION

1. Voluntary activities of body are controlled by :-
(1) Diencephalon (2) Cerebrum
(3) Crura cerebri (4) Cerebellum
2. Ventral root of spinal nerve has :-
(1) Sensory fibers
(2) Motor
(3) Sensory and motor fibers both
(4) None of these
3. Cavity in spinal cord is called :-
(1) Enterocoel (2) Blastocoel
(3) Schizocoel (4) Neurocoel
4. Thermo regulatory center in human brain is :-
(1) Pituitary (2) Diencephalon
(3) Hypothalamus (4) None
5. Number of cranial nerves in human :-
(1) 12 (2) 24
(3) 11 (4) 29
6. Respiratory control in brain occurs in :-
(1) Medulla (2) Cerebellum
(3) Hypothalamus (4) Pericardium
7. Drinking of alcohol affects mostly :-
(1) Cerebrum (2) Cerebellum
(3) Medulla oblongate (4) Diencephalon
8. Which part of the brain regulates the body temperature, hunger and water balance:-
(1) Hypothalamus (2) Infundibulum
(3) Medulla oblongate (4) Pons verioil
9. Cell bodies of neurons bringing afferent information into the spinal cord are located in :-
(1) Grey matter of spinal cord
(2) White matter of spinal cord
(3) Dorsal root ganglia
(4) Ventral root ganglia
10. Which of the following is responsible for control of reflex actions :-
(1) Motor nerves
(2) Sensory nerves
(3) Central nervous system
(4) Sympathetic nervous system
11. Last end of spinal cord is called :-
(1) Cauda equine (2) Filum terminale
(3) Funiculus (4) Fasciculi
12. Reflex action is controlled by :-
(1) Muscles (2) Limbs
(3) Central nervous system
(4) Autonomic nervous system
13. Lower part of filum terminale has only :-
(1) Piamater (2) Duramater
(3) Arachnoid (4) All of the above
14. If cerebral hemispheres of rabbit are removed , then it will :-
(1) Die immediately (2) Die after some time
(3) Behave normally (4) Stop feeding
15. Find out the correct sequence of a simple reflex are :
(1) Brain-spinal cord – nerves – effector
(2) Effector – CNS – sensory nerves – receptor
(3) Muscles – spinal cord – brain –receptor
(4) Receptor – spinal nerves – CNS – effector
16. Weight of spinal cord is :-
(1) 100 gm. (2) 1400 gm.
(3) 150 gm. (4) 35 gm.
17. Through which aperture the spinal cord passes out of skull :-
(1) Foramen of monro (2) Foramen of paninze
(3) Foramen of magnum (4) None of the above
18. Most of the involuntary action the spinal cord passes out of skull :-
(1) Medulla (2) Cerebrum
(3) Cerebellum (4) Diencephalon
19. The cerebrospinal fluid passes out from the ventricle of medulla oblongate into the space between meninges of brain through :-
(1) Foramen of monro (2) Foramen of magnum
(3) Foramen of magandii & luschaka
(4) Foramen of ovale

20. If cerebellum of man gets damaged , his movement become :-
 (1) Shaky & speech become defective
 (2) Unbalanced, walk uncontrolled, defective speech & intention tremor
 (3) Jerky & defective speech
 (4) Jerky & walked uncontrolled
21. The “butter fly” like structure surrounding the central of human’s spinal cord is called :-
 (1) Funiculus (2) Horn
 (3) White (4) Gray matter
22. Hearing is controlled by :-
 (1) Cerebral hemisphere (2) Temporal lobes
 (3) cerebellum (4) Hypothalamus
23. When the medulla oblongate (M.O.) is compressed, then what happen ?
 (1) Immediately die
 (2) Die after few hrs.
 (3) Live at 1 hrs & after it may die
 (4) No effect
24. Cerebral hemisphere is not the centre of :-[**RPMT-2003**]
 (1) taste (2) smell
 (3) balance (4) thinking
25. Which part of brain is supposed to be damaged if in an accident , a person lost control of water balance, hunger and body temp. :- [**RPMT -2003**]
 (1) Cerebellum
 (2) Hypothalamus
 (3) Medula oblongata (4) Corpora quadrigemina
26. Which part of brain controls emotions like love, anger and pleasure-
 (1) M.O. (2) Hypothalamus
 (3) Cerebrum (4) Cerebellum
27. Which statement is wrong about the function of brain
 (1) Hypothalamus mainly controls A.N.S.
 (2) Voluntary muscle activity is started by cerebellum
 (3) Medulla oblongata regulates involuntary activity of our body
 (4) Thalamus is responsible for crude sensation
28. All are the functions of M.O., except :-
 (1) Regulate respiration (2) Regulate heart beats
 (3) Vomiting reflex (4) Body balance
29. Column ‘I’ list the parts of human brain and column ‘II’ lists the functions. Match the two columns and identify the correct choice from those given
- [KARNATAKA CET-2005]**
- | Column-I | Column-II |
|----------------------------|--------------------------------------|
| (A) Cerebrum | (i) Control the pituitary |
| (B) Cerebellum | (ii) Control vision and hearing |
| (C) Hypothalamus | (iii) Control the rate of heart beat |
| (D) Midbrain | (iv) Seat of intelligence |
| (v) Maintains body posture | |
- (1) A = v, B = iv, C = ii, D = i
 (2) A = iv, B = v, C = ii, D = i
 (3) A = v, B = iv, C = i, D = ii
 (4) A = iv, B = v, C = i, D = ii

EXERCISE - V

PNS, ANS, DIFFERENCE BETWEEN RABBIT AND HUMAN SPECIAL POINT

- | | |
|--|--|
| <p>1. Which cranial nerves are sensory :-
 (1) 1, 2, 8 (2) 3,4,6,11,12
 (3) 5, 7 ,9, 10 (4) None of them</p> <p>2. Smallest cranial nerve is :-
 (1) X - cranial nerve (2) X - cranial nerve
 (3) VII- cranial nerve (4) II - cranial nerve</p> <p>3. Which cranial nerve is th longest and supplies all parts of body other then head :-
 (1) Trochlear nerve (2) Vagus nerve
 (3) Oculomotor nerve (4) Auditory nerve</p> <p>4. Purely motor cranial nerve includes :-
 (1) I, V, VII (2) I, II, IV
 (3) III, IV, VI, XI (4) None of these</p> <p>5. Parasympathetic system increase activity of :-
 (1) Lacrimal gland, swstemgland, arrector pili
 (2) Heart, lacrimal gland, pancreas
 (3) Heart, adrenal gland and sweat gland
 (4) Gut, iris and urinary bladder</p> <p>6. Which nerves is purely motor :-
 (1) Abducens (2) Trigeminal
 (3) Olfactory (4) Vagus</p> <p>7. The III, VI and XI cranial nerve in mammals are respectively :-
 (1) Oculomotor, abducens and hypolossal
 (2) Oculomotor, abducens and spinal accessory (3) Trochlear, facial and spinal accessory
 (4) Trigeminal, abducens and vagus</p> <p>8. Heart is innervated by :-
 (1) Vagus (2) Trigeminal
 (3) Facial (4) Glossopharyngeal</p> <p>9. Brain of rabbit differs from that of frog in having :-
 (1) Large olfactory lobe (2) Small hypothalamus
 (3) Small cerebellum (4) Corpus callosum</p> <p>10. Number od spinal nerves in human :-
 (1) 31 pairs (2) 32 pairs
 (3) 12 pairs (4) 37 pairs</p> | <p>11. Which nerves originates from medulla :-
 (1) Optic (2) Oculomotor
 (3) Vagus (4) Trigeminal</p> <p>12. Difference between brain of frog and that of rabbit is :-
 (1) Presence of corpus callosum
 (2) Corpus albicans
 (3) Four optic lobes
 (4) All of these</p> <p>13. Total number of spinal nerves in frog are :-
 (1) 31 pairs (2) 33 pairs
 (3) 10 pairs (4) 12 pairs</p> <p>14. The sympathetic nervous system (S.N.S.) work through secretion of :-
 (1) Noradrenaline which stimulates the organ
 (2) Acetyl choline which stimulates the organ
 (3) Adrenaline which inhibits the organ
 (4) Acetyl choline which inhibits the organ</p> <p>15. In human , autonomic nervous system is composed of :-
 (1) Sympathetic and parasympathetic nerves
 (2) Cranial and spinal nerves
 (3) Brain and spinal nerves
 (4) Medullated and non-medullated nerves</p> <p>16. How many pairs of cranial nerves are purely sensory :-
 (1) Two (2) Three
 (3) Four (4) Five</p> <p>17. Optic nerve is the :-
 (1) Fifth cranial nerves (2) Second cranial nerve
 (3) Seventh cranial nerves (4) Ninth cranial nerves</p> <p>18. Parasympathetic nervous system increases the activity of :-
 (1) Heart, adrenaline gland and sweat gland
 (2) Gut, salivary gland and urinary bladder
 (3) Lacrymal gland, sweat gland and arteries
 (4) Heart, pancreas and lachrymal gland</p> |
|--|--|

19. All spinal nerves are:-
 (1) Motor (2) Sensory
 (3) Mixed (4) None of the above
20. Phrenic nerve is a :-
 (1) Cranial nerve (2) Spinal nerve
 (3) Sciatic nerve (4) Lumber nerve
21. Smallest cranial nerve :-
 (1) Aducens (2) Optic
 (3) Olfactory (4) Auditory
22. Lumbar spinal nerve in rabbit :-
 (1) 4 -pairs (2) 6 -pairs
 (3) 7 -pairs (4) 5 -pairs
23. Which of the following nerve helps in maintaining the equilibrium of body :-
 (1) Trochlear (2) Abducens
 (3) Auditory (4) Facial
24. Autonomic nervous system control :-
 (1) Conditioned reflexes
 (2) Functioning of spinal cord
 (3) Functioning of visceral organs
 (4) Reflex actions
25. Stimulation of sympathetic nervous system causes :-
 (1) Constriction of blood vessels and high blood pressure
 (2) Dilation of bronchi & pupil
 (3) Erection of hair
 (4) All of the above
26. The two additional nerves present in mammals are :-
 (1) Pharyngeal & vagus
 (2) Spinal accessory and hypoglossal
 (3) Trigeminal and glossopharyngeal
 (4) Hypoglossal and sciatic
27. On the cerebrum of rabbit, gyri and sulci are :-
 (1) Poorly developed (2) Best developed
 (3) Vestigeal (4) Absent all together
28. Hippocampal lobes are the parts of :-
 (1) Olfactory lobes
 (2) Cerebrum
 (3) Cerebellum
 (4) Medulla Oblongata
29. Which of the following spinal nerves does not found in human :-
 (1) Caudal nerves (2) Sacral nerves
 (3) Cervical nerves (4) Lumber nerves
30. Smallest cavity in brain of rabbit is called :-
 (1) Rhinocoel (2) Paracoel
 (3) Diocoel (4) Metacoel
31. Which of the following cranial nerves of human are mixed in nature :-
 (1) Vagus & trigeminal (2) Optic & vagus
 (3) Auditory & olfactory (4) Trochlear and vagus
32. The cranial and spinal nerves are included under :-
 (1) Autonomic nervous system
 (2) Peripheral nervous system
 (3) Central nervous system
 (4) Cutaneous nervous system
33. A remus communicans consists of :-
 (1) White ramus only (2) Grey ramus only
 (3) Both of the above (4) None of the above
34. Glands of swimmerdams are associated with :-
 (1) Nervous system (2) Muscles
 (3) Bones (4) All
35. Conservation of energy take place by :-
 (1) Sympathetic A.N.S.
 (2) Parasympathetic A.N.S.
 (3) Reflex action (4) None
36. If the cervical ganglia of one side are cut then what will happen on affected side
 (1) Pupil constricts
 (2) Dropping of eyelids
 (3) Lacrymal secretion absent
 (4) All of the above
37. Which destroys the acetylcholinesterase :-
[AIPMT-98]
 (1) Malathion (2) CO
 (3) KCN (4) Colchicine
38. Botulism affects :- :- **[AIPMT-98]**
 (1) Digestive system
 (2) Blood vascular system
 (3) Nervous system
 (4) Respiratory system

39. Which of the following nerve innervates upper jaw of frog :- **[RPMT -2000]**
 (1) Maxillary (2) Pathetic
 (3) Palatine (4) Oculomotor
40. In Rabbit, the number of spinal nerves are :- **[RPMT-2000]**
 (1) 30 pairs (2) 37 pairs
 (3) 32 pairs (4) 38 pairs
41. If parasympathetic nerve of the Rabbit is cut, then heart beat :- **[RPMT -2001]**
 (1) Unaffected (2) Decreases
 (3) Increases (4) Stop
42. How many cranial nerves found in the Amniota- **[RPMT -2001]**
 (1) 6 (2) 8
 (3) 12 (4) 10
43. In Rabbit, optic lobes are small because the eye sight is controlled by :- **[RPMT -2001]**
 (1) Temporal lobe (2) Occipital lobe
 (3) Frontal lobe (4) Parietal lobe
44. Norepinephrine leads to increase in :- **[RPMT -2004]**
 (1) Blood pressure
 (2) Urine production
 (3) Cellular respiration
 (4) Release of epinephrine
45. Injury to vagus nerve in humans is **not** likely to affect – **[AIPMT -2004]**
 (1) Gastrointestinal movement
 (2) Pancreatic secretion
 (3) Cardiac movement
 (4) Tongue movement
46. In a man, it abducens nerve is injured. Which one of the following functions will be affected ? **[AIPMT -2005]**
 (1) Movement of the neck
 (2) Movement of the tongue
 (3) Movement of the eye ball
 (4) Swallowing
47. One of the examples of the action of the autonomous nervous system is - **[AIPMT -2005]**
 (1) Pupillary reflex
 (2) Swallowing of food
 (3) Peristalsis of the intestines
 (4) Knee-jerk response
48. Excessive stimulation of vagus nerve in humans may lead to :- **[AIIMS -2003]** (1) Hoarse voice
 (2) Peptic ulcers
 (3) Efficient digestion of proteins
 (4) Irregular contractions of diaphragm
49. Which cranial nerve provides taste sensation in anterior 2/3rd part of tongue –
 (1) Trigeminal (2) Facial
 (3) Glossopharyngeal (4) Hypoglossal
50. Post ganglionic sympathetic cholinergic innervation seen in –
 (1) Heart (2) Stomach
 (3) Sweet glands (4) Intestine
51. In emergency condition, what changes occur in our body except –
 (1) Heart beat increases
 (2) Dilates blood vessels of brain, lungs, heart and striated muscle
 (3) Bronchodilation
 (4) Micturition is done
52. All cranial nerves are related to parasympathetic nerves fibres except –
 (1) Oculomotor (2) Facial
 (3) Accessory spinal (4) vagus
53. Which related structure not forms synapse in sympathetic trunk of sympathetic nervous system
 (1) Heart (2) Stomach
 (3) Lungs (4) Lacrymal gland
54. Cholinergic fibre present in :-
 (1) Preganglionic sympathetic nerve fibre
 (2) Post ganglionic sympathetic nerve fibre of sweat glands
 (3) Post ganglionic parasympathetic nerve fibre
 (4) All the above
55. After vagotomy, what happens in affected person
 (1) Heart rate increases
 (2) Gastric juice secretion increases
 (3) Inhibits micturition
 (4) All the above

EXERCISE-VI

COMPLETE NERVOUS SYSTEM

- The nervous system is derived from :-
(1) Ectoderm (2) Endoderm
(3) Mesoderm (4) Ecto and Mesoderm
- Epiphysis and Hypophysis are found attached with :-
(1) Fore brain (2) Mid brain
(3) Hind brain (4) None
- Aqueduct of Sylvius occurs in :-
(1) Heart (2) Eye
(3) Brain (4) Ear
- The nerve cell can be distinguished from other cells of the body by the presence of :-
(1) Neuroplasm (2) Neurolemma
(3) Mitochondria (4) Neurites
- Function of nervous tissue is :-
(1) Irritability (2) Sensitivity
(3) Responsiveness (4) Contraction
- Lateral ventricles are found in :-
(1) Heart (2) Thyroid
(3) Brain (4) Brain and heart
- Which of the following processes occur only in animals :-
(1) Hormonal control (2) Respiration
(3) Nervous control (4) Nutrition
- Which cell in our body is more than a foot long :-
(1) Nerve cell (2) Muscle cell
(3) Bone cell (4) Gland cell
- Number of cranial nerve in frog is :-
(1) Ten only (2) Ten pairs
(3) Twenty pairs (4) Twelve pairs
- Which cell stop dividing after birth :-
(1) Epithelium (2) Neuron
(3) Glial cells (4) Liver
- Which part of the brain is more developed in human is
(1) Medulla (2) Cerebellum
(3) Cerebrum (4) Optic lobes
- The part of the brain show progressive increase in size, from a fish to mammals is :-
(1) Cerebrum (2) Olfactory lobes
(3) Optic lobes (4) Medulla oblongata
- A neopallium or cerebral cortex is not found in the brain of :-
(1) Mammals (2) Birds
(3) Reptiles (4) Frog
- “Purkinje cells” occurs in :-
(1) Brain (2) Heart
(3) Liver (4) Muscles
- Sight of delicious food usually makes mouth watery, it is a :-
(1) Hormonal response
(2) Neural response
(3) Optic response
(4) Olfactory response
- Effect of anaesthetics on body :- [AIPMT -98]
(1) Inhibits Na-K pump
(2) Kills nerves
(3) Stops brain functions
(4) Inactivates skin cells
- Deficiency of oxygen affects mainly the :-
[AIPMT-99]
(1) Brain (2) Skin
(3) Kidney (4) Intestine
- Neuroglial cells associated with :- [AIPMT -99]
(1) Heart (2) Kidney
(3) Brain (4) Eyes
- Adrenaline direct effect on :-
(1) S.A. Node
(2) β -cells of Langerhans
(3) Dorsal root of spinal cord
(4) Epithelial cells of stomach
- In which animal, nerve cell is present but brain is absent :-
[AIPMT-2002]
(1) Sponge (2) Earthworm
(3) Cockroach (4) Hydra

21. Which of the following is dominant intracellular anion :- **[RPMT -2000]**
 (1) Potassium (2) Chloride
 (3) Phosphate (4) Calcium
22. Nervous system develops from :- **[RPMT -2000]**
 (1) Ectoderm (2) Mesoderm
 (3) Ectomesoderm (4) Endomesoderm
23. Which of the following is not correctly matched :- **[RPMT-2002]**
 (1) Rhinon cephalon – Olfaction
 (2) Hypothalamus – Pituitary
 (3) Cerebellum – Balance
 (4) Medulla oblongata – Temperature
24. Internal carotid supply blood to :-
 (1) Kidney (2) Liver
 (3) Heart (4) Brain
25. Which one of the following characters is not typical of the class Mammalia ? **[AIPMT -2005]**
 (1) Seven cervical vertebrae
 (2) Thecodont dentition
 (3) Alveolar lungs
 (4) Ten pairs of cranial nerves
26. Parkinson's disease (characterized by tremors and progressive rigidity of limbs) is caused by degeneration of brain neurons that involved in movement control and make use of neurotransmitter **[AIPMT-2005]**
 (1) acetylcholine (2) norepinephrine
 (3) dopamine (4) GABA
27. Which of the following pair is mismatched –
 (1) Cerebrum – voluntary activities
 (2) Cerebellum – body balance
 (3) M.O. – Pneumotaxic centre
 (4) Spinal cord – reflex action
28. After sympathetic stimulation, which type of activities are not present in human being :-
 (1) Tachycardia (2) Bronchodilation
 (3) Micturition (4) Semen Ejaculation
29. Which one of the following statements is correct :?
 (1) Neither hormones control neural activity nor the neuron control endocrine activity
 (2) Endocrine glands regulate neural activity, but not vice versa
 (3) Neurons regulate endocrine activity, but not vice versa
 (4) Endocrine glands regulate neural activity, and nervous system regulates endocrine glands
30. Which one of the following does not act as a neurotransmitter ? **[AIPMT-2006]**
 (1) Norepinephrine (2) Cortisone
 (3) Acetylcholine (4) Epinephrine
31. Which of the following two systems are opposite in action to each other ? **[MANIPAL -2004]**
 (1) Nervous – Sensory
 (2) Nervous – Endocrine
 (3) Sensory - Endocrine
 (4) Parasympathetic – Sympathetic
32. Which of the following structure is present only in mammalian brain ? **[MPPMT-2004]**
 (1) Corpus luteum (2) Corpus striatum
 (3) Corpus fibrosum (4) Corpus Callosum
33. You are watching a horror movie and you notice your heart is beating fast and mouth is dry. It is because of :-
 (1) Fight and flight response
 (2) Autonomic nervous system
 (3) Sympathetic nervous system
 (4) Both 1 and 3
34. Tongue is under the control of – **[CPMT -2004]**
 (1) Trigeminal (2) Facial
 (3) Autonomic system (4) Glossopharyngeal
35. Number of cranial nerves in frog is – **[CPMT-2005]**
 (1) Ten (2) Twelve
 (3) Ten pairs (4) Twelve pairs
36. Intercellular communication in multicellular organism occurs through – **[CPMT-2004]**
 (1) Nervous system only
 (2) Digestive system only
 (3) Respiratory system only
 (4) Both nervous and endocrine system
37. Which of the following substances leads to the inhibition of central nervous system ? **[CPMT-2004]**
 (1) Glycine (2) GABA
 (3) Norepinephrine (4) Both 1 and 2

38. Which one of the following pairs of structures distinguishes a nerve cell from other types of cell ?

[AIPMT-2007]

- (1) Vacuoles and fibres
- (2) Flagellum and medullary sheath
- (3) Nucleus and mitochondria
- (4) Perikaryon and dendrites

39. 5th cranial nerve of frog is called - [BHU -2006]

- (1) Optic nerve (2) Vagus
- (3) Trigeminal (4) Ophthalmic

40. If dorsal root of spinal cord is broken down then its effect is [JIPMER-2006]

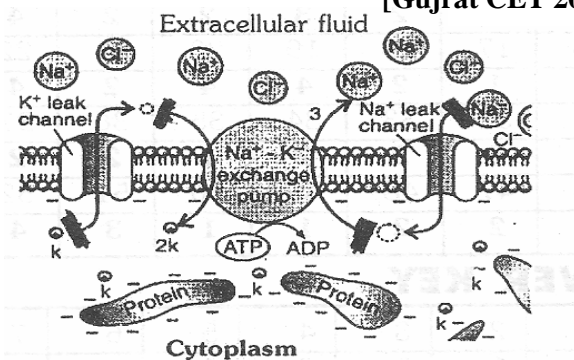
- (1) No effect on impulse
- (2) Impulse is transmitted fast
- (3) Impulse is transmitted but slowly
- (4) No impulse is transmitted from receptor

41. Acetylcholinesterase enzyme splits acetylcholine into : [Pb.PMT -2005]

- (1) Acetone and choline
- (2) Acetic acid and choline
- (3) Amino acid and choline
- (4) Aspartic acid and acetylcholine

42. In the given diagram which stage of conduction of nerve impulse through nerve fibre is observed ?

[Gujrat CET 2006]



- (1) Polarization (2) Repolarization
- (3) Depolarization (4) Resting potential

ANSWER KEY**EXERCISE-I**

Q.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A.	1	2	2	3	2	2	4	1	3	4	1	1	3	1	1
Q.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
A.	2	1	2	4	4	2	4	4	2	1	3	1	2	2	2
Q.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
A.	2	3	2	2	1	2	2	2	3	1	2	4	4	3	2
Q.	46	47	48	49	50	51	52								
A.	3	2	2	1	1	3	4								

ANSWER KEY**EXERCISE-II**

Q.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A.	4	1	3	2	4	1	3	1	2	1	1	3	1	2	1
Q.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
A.	4	1	3	2	4	1	3	1	2	1	1	3	1	2	1
Q.	31	32	33	34	35										
A.	2	2	2	3	1										

ANSWER KEY**EXERCISE-III**

Q.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A.	2	1	2	4	2	3	1	4	3	2	3	4	4	3	3
Q.	16	17	18	19											
A.	2	2	3	3											

ANSWER KEY**EXERCISE-IV**

Q.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A.	2	2	4	3	2	1	2	1	3	3	2	3	1	2	4
Q.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
A.	4	3	1	3	2	4	2	1	4	2	2	2	4	4	

ANSWER KEY**EXERCISE-V**

Q.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A.	1	2	2	3	4	1	2	1	4	1	3	4	3	1	1
Q.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
A.	2	2	2	3	2	1	3	3	3	4	2	1	2	1	1
Q.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
A.	1	2	3	1	2	4	1	3	1	2	3	3	2	1	4
Q.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
A.	3	3	2	2	3	4	3	2	4	1	1	2	4	3	2
Q.	61	62	63	64											
A.	3	3	3	2											

ANSWER KEY

EXERCISE-VI

Q.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A.	1	1	3	4	1	3	3	1	2	2	3	1	4	1	2
Q.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
A.	1	1	3	1	4	3	1	4	4	4	3	3	3	4	2
Q.	31	32	33	34	35	36	37	38	39	40	41	42			
A.	4	4	4	4	3	4	4	4	3	4	2	1			

NERVOUS SYSTEM

STATE PMT EXAMS EXERCISE

- Nissl's granules are found in : **[UTTARANCHAL – 2005]**
 (1) liver cells (2) nerve cells
 (3) kidney (4) heart
- Main function of cerebellum is :- **[UTTARANCHAL– 2005]**
 (1) Balancing (2) Sight
 (3) Hearing (4) Memory
- The correct sequence of meninges from inner to outer side is **[UTTARANCHAL-2006]**
 (1) arachnoid- duramater-piamater
 (2) arachnoid- Piamater-duramater
 (3) Piamater- duramater-arachnoid
 (4) Piamater- arachnoid- duramater
- Somaesthetic or post central area is responsible for: **[UTTARANCHAL – 2005]**
 (1) initiation of motor impulses for voluntary muscles
 (2) initiation of motor impulses for involuntary muscles
 (3) perception of pain, touch and temperature
 (4) co-ordination of speech
- Vagus nerve is composed mainly of parasympathetic fibres. The preganglionic fibres forms a network is known as : **[UTTARANCHAL – 2005]**
 (1) choroid plexus (2) nervous plexus
 (3) auerbach nerve (4) brachial plexus
- Lateral rectus muscle of the eye is served by which cranial nerve ? **[West Bengal – 2007]**
 (1) oculomotor nerve (2) pathetic nerve
 (3) abducens nerve (4) spinal accessory
- Synaptic delay last for : **[West Bengal -2007]**
 (1) 0.1 (2) 0.3ms

- (3) 0.4 ms (4) 0.5 ms
- During nerve impulse transmission permeability of membrane is greater for : **[West Bengal-2007]**
 (1) Na⁺ (2) K⁺
 (3) equal for both(1) and (2)
 (4) Ca²⁺
 - Parkinson's disease is associated with : **[JHARKHAND -2002]**
 (1) midbrain (2) thalamus
 (3) hypothalamus (4) cerebrum
 - The thermoregulatory centre in the body is : **[JHARKHAND -2004]**
 (1) thalamus (2) hypothalamus
 (3) pons (4) medulla oblongata
 - Nissl's granules are : **[Bihar – 2004]**
 (1) RNA bodies (2) DNA
 (3) carbohydrate (4) protein
 - Which part of the brain is affected first in a drunk person : **[Bihar -2004]**
 (1) Cerebrum (2) Olfactory lobe
 (3) Cerebellum (4) Medulla oblongata
 - In mammals, the brain centre , which regulates body temperature is situated in : **[UP-CPMT 2001]**
 (1) Cerebrum (2) Olfactory lobe
 (3) Cerebellum (4) Medulla oblongata
 - The 3rd , 6th and 11th cranial nerves are : **[UP- CPMT 2001]**
 (1) optic , facial and spinal nerves
 (2) oculomotor, trigeminal and spinal
 (3) trigeminal , abducens and vagus
 (4) oculomotor, abducens and spinal

15. The junction between the axon of one of one neuron and the dendrite of the next is called :
[UP-CPMT 2001]
 (1) a joint (2) a synapse
 (3) constant bridge (4) junction point
16. Which one of the following is a motor nerve ?
[UP-CPMT -2001]
 (1) auditor (2) Abducens
 (3) optic nerve (4) trigeminal nerve
17. Nissl's granules are absent in :
[UP-CPMT 2001]
 (1) axon (2) cyton
 (3) dendron (4) Schwann cells
18. Which one of the following is purely motor cranial nerve ?
[UP-CPMT 2001]
 (1) Olfactory (2) Optic
 (3) Abducens (4) Vagus
19. Trigeminal nerve in case of frog is :
[UP-CPMT 2001]
 (1) I cranial nerve (2) II cranial nerve
 (3) IV cranial nerve (4) V cranial nerve
20. In human body muscular co-ordination is controlled by :
[MP PMT -2005]
 (1) Spinal cord (2) Cortex
 (3) Cerebellum (4) Cerebral emisphare
21. Sense of smell is by :
[MP PMT -2003]
 (1) cerebrum (2) cerebellum
 (3) olfactory lobe (4) hypothalamus
22. Thired ventricle connects to lateral ventricles through :
[MP PMT -2003]
 (1) foramen magnum
 (2) foramen monor
 (3) foramen Magendie
 (4) foramen luschka
23. Connection between axon and dendrite is :
[MP PMT-2007]
 (1) synapse (2) synapsis
 (3) desmosome (4) tight junction

STATE PMT WXAMS EXERCISE

ANSWER KEY

Q.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A.	2	1	4	3	3	3	1	1	4	2	1	1	1	4	2
Q.	16	17	18	19	20	21	22	23							
A.	2	1	3	4	3	1	2	1							