



# **BIOLOGY**

## **BOOKS - TRUEMAN'S BIOLOGY (ENGLISH)**

### **NEURAL CONTROL AND COORDINATION**

**Mcq**

1. Cluster of neuron cell bodies within peripheral nervous system are

A. Nuclei

B. Ganglia

C. Laminae

D. Fascicles

**Answer: B**



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2. The correct sequence of meanings from inner to outer side is

A. Arachnoid membrane → dura mater  
→ pia mater

B. Dura mater → arachnoid membrane  
→ pia mater

C. Pia mater → arachnoid membrane →  
dura mater

D. Dura mater → pia mater →  
arachnoid membrane

**Answer: C**



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**3. Subdural space is found between**

- A. Pia mater and arachnoid
- B. Dura mater and cranium
- C. Arachnoid and dura mater
- D. Dura mater and vertebral column

**Answer: C**



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4. Cerebrospinal fluid is present

- A. Between pia mater and arachnoid mater
- B. Between the dura mater and cranium
- C. Between arachnoid and dura mater
- D. Beneath the pia mater

**Answer: A**



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5. Cerebrospinal fluid is secreted by

A. Cerebrum

B. Cerebellum

C. olfactory lobe

D. Choroid plexus

**Answer: D**



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6. Choroid plexus is a network of

A. Nerves

B. Capillaries

C. Muscle fibres

D. Lymph vessels

**Answer: B**



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7. The largest part of human brain is

A. Cerebrum

B. Cerebellum

C. Diencephalon

D. medulla oblongata

**Answer: A**



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8. In the brain of mammals, the genu and splenium are associated with

A. Medulla

B. Vermis

C. Cerebrum

D. Cerebellum

**Answer: C**



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9. Match the entries in column I with those in column II and choose the correct combination from the option given

Column I	Column II
A Diencephalon	1. Cerebellum
B Telencephalon	2. Medulla
C Myelencephalon	3. Amygdala
D Metencephalon	4. Thalamus

A. A=4, B=3, C=2, D=1

B. A=4, B=3, C=1, D=2

C. A=1, B=2, C=3, D=4

D. A=4, B=1, C=2, D=3

**Answer: A**



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10. In human brain, central sulcus is found between

A. Frontal and Parietal lobe

B. Occipital and parietal lobe

C. Temporal and parietal lobe

D. Occipital and temporal lobe

**Answer: A**



11. Which part of brain controls intellectual ability ?

- A. Frontal lobe
- B. Parietal lobe
- C. Temporal lobe
- D. Occipital lobe

**Answer: A**



12. Olfactory area is present in

A. Frontal lobe

B. Parietal lobe

C. Temporal lobe

D. Occipital lobe

**Answer: C**



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**13.** In brain, the region for perception of pain is located in

A. Frontal lobe

B. Parietal lobe

C. Occipital lobe

D. Temporal lobe

**Answer: B**



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**14.** Somesthetic or post central area is responsible for

A. Initiation of motor impulses for voluntary muscles

B. Initiation of motor impulses for involuntary muscles

C. Perception of pain, touch and temperature

D. Coordination of speech

**Answer: C**



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**15. Broca's area is connected with**

- A. Speech function
- B. Sensation of smell
- C. Learning and reasoning
- D. Receiving impulse from eyes

**Answer: A**





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**16.** The primary visual area is located in

A. Frontal lobe

B. Parietal lobe

C. Occipital lobe

D. Temporal lobe

**Answer: C**



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17. The hippocampus converts information from

A. Short term memory to long term memory

B. Long term memory to short term memory

C. Aggression to remembering fear

D. Does not convert information

**Answer: A**



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**18.** Feelings of anger, pain and rage are experienced through

- A. basal ganglia
- B. Occipital lobe
- C. Limbic system
- D. Reticular system

**Answer: C**



19. Anterior choroid plexus is found in the roof of

- A. Iter
- B. Cerebrum
- C. Cerebellum
- D. Diencephalon

**Answer: D**



20. Crura cerebri are found in

A. Forebrain

B. Midbrain

C. Hindbrain

D. None of these

**Answer: B**



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21. Vermis is a part of

A. Optic lobe

B. Midbrain

C. Cerebellum

D. medulla oblongata

**Answer: C**



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22. Purkinje cells are found in

- A. Cerebral cortex
- B. Cerebellar cortex
- C. mammalian heart
- D. Semicircular canal

**Answer: B**



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**23.** Arbor vitae is a part of

- A. Cerebrum

B. Midbrain

C. Forebrain

D. Cerebellum

**Answer: D**



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**24.** Ventricles of brain are lined by the cells called

A. Neuroglia



B. Ependymal

C. Neuron cells

D. Schwann cells

**Answer: B**



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**25.** The hollow interior of the cerebrum is called

A. 3rd ventricle

B. 4th ventricle

C. Sub arachnoid space

D. Lateral ventricles

**Answer: D**



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**26.** Which of the following connect lateral ventricles or paracoel in brain with ventricle 3 ?

A. Iter

B. Filum terminale

C. Foramen of monro

D. Aqueduct of sylvius

**Answer: C**



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**27.** The cavity in the region of diencephalon in the brain is called the

A. Iter

B. Third ventricle

C. lateral ventricle

D. Foramen of monro

**Answer: B**



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**28. Hypothalamus form the floor of**

A. Optocoel

B. 3rd ventricle

C. lateral ventricle

D. 4th ventricle

**Answer: B**



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**29.** Column I list the parts of the human brain and column II lists the functions. Match the two columns and identify the correct choice

from those given

Column I	Column II
A Cerebrum	p Controls the pituitary
B Cerebellum	q Controls vision and hearing
C Hypothalamus	r Controls the rate of heartbeat
D Midbrain	s Seat of intelligence
	t Maintains body posture

A. A=t, B=s, C=q, D=p

B. A=s, B=t, C=q, D=p

C. A=t, B=s, C=p, D=q

D. A=s, B=t, C=p, D=q

**Answer: D**



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**30.** Voluntary muscular coordination is under control of

- A. Cerebellum
- B. Hypothalamus
- C. Medulla oblongata
- D. Cerebral hemisphere

**Answer: D**



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**31.** Memory weakens if one of the following parts is injured.

A. Medulla

B. Cerebrum

C. Cerebellum

D. Hypothalamus



**Answer: B**



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**32.** A person feels no sensation when he puts his hand over flame, the part of the brain which has damaged is

- A. Cerebellum
- B. Cerebrum
- C. Hypothalamus
- D. medulla oblongata

**Answer: B**



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**33.** The major relay station for sensory input that projects to the cerebral cortex is the

A. Pons

B. Thalamus

C. Cerebellum

D. Hypothalamus

**Answer: B**



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**34. Hypothalamus does not control**

- A. Sexual behaviour
- B. Osmoregulation
- C. Hunger and satiety
- D. Creative thinking and consciousness

**Answer: D**



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**35.** Which part of the brain is involved in loss of control when a person drinks alcohol ?

A. Thalamus

B. Hypothalamus

C. Pons varoli

D. Cerebellum

**Answer: D**



36. Which of the following is mismatched ?

A. Cerebrum - Memory

B. Olfactory lobes - Sense of smell

C. Cerebellum - Equilibrium of body

D. Medulla oblongata - Temperature  
regulation

**Answer: D**



37. All the unconscious activities like heartbeat, involuntary breathing and gut peristalsis are controlled by

- A. Medulla oblongata
- B. Cerebrum and medulla
- C. Cerebellum and medulla
- D. Cerebrum and cerebellum

**Answer: A**



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**38.** The spinal cord in man extends from the

A. Medulla oblongata to the coccyx

B. Level of third cervical vertebra to the  
coccyx

C. Level of the axis to the lowest lumbar  
vertebra

D. Medulla oblongata to the level of the  
second lumbar vertebra

**Answer: D**



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**39.** In the spinal cord, white matter is

- A. Surrounded by gray matter
- B. Mixed with gray matter
- C. Around the gray matter
- D. Absent

**Answer: C**





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40. Which is a part of spinal cord ?

- A. Ventricle
- B. Vertebral canal
- C. Ventral canal
- D. Central canal

**Answer: D**



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**41.** The central canal of spinal cord is lined by

A. Goblet cells

B. Epithelial tissue

C. Ependymal cells

D. Keratinized epithelium

**Answer: C**



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42. which cranial nerves are purely sensory ?

A. I, II and VIII

B. I, II and IV

C. I, V and VII

D. None of these

**Answer: A**



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**43.** A list of cranial nerves are given below

1. Optic 2. Oculomotor 3. Trochlear 4. Trigeminal 5. Abducent

Select the nerves that are involved in moving the eyes

A. 1, 2, 3

B. 2, 3, 5

C. 2, 3, 4

D. 2, 4, 5

**Answer: B**



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44. The third, sixth and eleventh cranial nerves in mammals are respectively

- A. Trigeminal, abducens and vagus
- B. Trochlear, facial and spinal accessory
- C. Oculomotor, abducens and hypoglossal
- D. Oculomotor, abduces and spinal accessory

**Answer: D**



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**45.** In the serial wise arrangement of cranial nerves, after which nerves we got trochlear nerve ?

A. Optic

B. Olfactory

C. Oculomotor

D. Trigeminal

**Answer: C**



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**46.** The fourth, fifth and ninth cranial nerves in mammals are respectively

A. (a) Oculomotor, facial and vagus

B. (b) Trigeminal, facial and spinal  
accessory

C. (c) Trochlear, facial and  
glossopharyngeal

D. (d) Trochlear, trigeminal and  
glossopharyngeal

**Answer: D**



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**47.** Which of the following are pure motor nerves ?



- A. Trochlear and vagus
- B. Abducens and auditory
- C. Trochlear and abducens
- D. Trochlear and trigeminal

**Answer: C**



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**48. Trochlear nerve supplies**

- A. Superior rectus

B. Inferior oblique

C. Superior oblique

D. Nasal epithelium

**Answer: C**



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**49.** The trigeminal nerve arises from the brain  
in the region of

A. Pons and divides into ophthalmic, maxillary and mandibular branches

B. Medulla and divides into palatine, chorda tympani and hyomandibular branches

C. Cerebellum and divides into palatine, chorda tympani and hyomandibular branches

D. Cerebellum and divides into ophthalmic, maxillary and mandibular branches

**Answer: A**



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**50.** The cranial nerve involved in chewing of food is the

A. Accessory spinal

B. Trochlear

C. Abducent

D. Trigeminal

**Answer: D**



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**51. The largest cranial nerve is**

A. Optic

B. Facial

C. maxillary

D. Trigeminal

**Answer: D**



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52. Which one of these transmits nerve impulse away from CNS ?

A. Optic

B. Olfactory

C. Abducens

D. Auditory

**Answer: C**



**53.** Indicate the correct match in the following

A. II cranial nerve - vagus

B. V cranial nerve - heart

C. VIII cranial nerve - lower jaw muscle

D. VI cranial nerve - external rectus muscle  
of eye

**Answer: D**



54. A mixed cranial nerve is

A. Facial

B. Auditory

C. Abducens

D. Spinal accessory

**Answer: A**



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55. Movement of tongue muscle is controlled by

A. Hypoglossal nerve

B. Trigeminal nerve

C. Facial nerve

D. Vagus nerve

**Answer: A**



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**56.** Which of the following cranial nerves are mixed ?

1. Vagus 2. Trigeminal 3. Glossopharyngeal 4. Auditory

A. 1 & 2 are correct

B. 2 & 4 are correct

C. 1 & 3 are correct

D. 1, 2 & 3 are correct

**Answer: D**



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57. The only cranial nerve which does not supply the cranial region but to visceral region is

- A. (a) Vagus
- B. (b) Abducens
- C. (c) Trigeminal
- D. (d) Hypoglossal

**Answer: A**





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58. The lungs, heart and stomach are supplied by

- A. (a) Vagus
- B. (b) Trigeminal
- C. (c) Hypoglossal
- D. (d) Glossopharyngeal

**Answer: A**



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**59.** The inhibitory effect of the vagus nerve on the heart is due to the secretion of

- A. (a) Glycine
- B. (b) Dopamine
- C. (c) Acetylcholine
- D. (d) Norepinephrine

**Answer: C**



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**60.** Which of the following is not under the control of vagus nerve ?

A. Gastrointestinal movement

B. Respiratory movement

C. Salivation

D. Heart beat

**Answer: C**



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61. Which of the following cranial is found only in amniotes ?

A. Vagus

B. Trigeminal

C. Hypoglossal

D. Glossopharyngeal

**Answer: C**



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**62.** Select the correct statement regarding spinal nerves

A. Dorsal root is motor and sensory both

B. Ventral root is sensory and motor both

C. Dorsal root is sensory and ventral root is motor

D. Dorsal root is motor and ventral root is sensory

**Answer: C**





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**63.** In after cutting through the dorsal root of a spinal nerve of a mammal, an associated receptor in the skin were simulated, the animal would

- A. Show no response
- B. Show a normal but slow response
- C. Still be able to feel the stimulation

D. Respond but only at a different level of  
spinal cord

**Answer: A**



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**64.** Which of these statements is a correct ?

A. All arteries carry purified blood

B. Urine of all vertebrates is similar

C. All motor fibres leave spinal cord via  
ventral root

D. Red blood corpuscles of all vertebrates  
are nucleated

**Answer: C**



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**65.** Which of these is a correct count of the  
spinal nerves in man ?

A. 9 Cervical, 12 thoracic, 5 lumbar, 5 sacral,  
1 coccygeal

B. 8 cervical, 12 thoracic, 5 lumbar, 5 sacral,  
1 coccygeal

C. 7 cervical, 12 thoracic, 5 lumbar, 5 sacral,  
1 coccygeal

D. 8 cervical, 11 thoracic, 4 lumbar, 6 sacral, 1  
coccygeal

**Answer: B**



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**66.** In a frog, the connection between brain and spinal cord is severed. The leg of such a frog is picked by a sharp needle. Then it is most likely that the animal will

- A. Not show any reaction
- B. Move the leg that is picked
- C. Move the leg and feel the pain
- D. Do not move the leg but feel the pain

**Answer: B**



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67. Pavlov is famous for his pioneer work on

- A. Double circulation
- B. Treatment of rabies
- C. Mutation in primrose
- D. Conditioned reflex in dog

**Answer: D**



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**68.** Sympathetic nerve fibres in mammals arise from

- A. Sacral nerve
- B. Cervical nerves
- C. Thoracolumbar nerves
- D. III, IV, X cranial nerves

**Answer: C**



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69. Post-ganglionic nerve fibres of sympathetic system are

- A. Adrenergic
- B. Cholinergic
- C. Voluntary
- D. None of these

**Answer: A**



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70. The neurotransmitter of preganglionic sympathetic fibre is

- A. Dopamine
- B. Epinephrine
- C. Acetylcholine
- D. Norepinephrine

**Answer: C**



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71. Which of these fibres release epinephrine ?

A. Preganglionic parasympathetic fibres

B. Postganglionic parasympathetic fibres

C. Postganglionic sympathetic fibres in the  
heart

D. Postganglionic sympathetic fibres in  
sweat glands

**Answer: C**



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**72.** Release of catecholamines from adrenal medulla (human) is an action of

A. (a) Preganglionic sympathetic nerves

B. (b) Postganglionic sympathetic nerves

C. (c) Preganglionic parasympathetic  
nerves

D. (d) Postganglionic parasympathetic  
nerves

**Answer: B**



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**73.** Craniosacral outflow refers to

- A. Sympathetic
- B. Parasympathetic
- C. Both of these
- D. None of these

**Answer: B**



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**74.** A list of cranial nerves are given below

1. Oculomotor    2. Trigeminal    3. Facial    4. Vestibulocochlear  
5. Glossopharyngeal    6. Vagus

Select the nerves that are part of the parasympathetic division of the ANS

A. 1, 4, 5, 6

B. 2, 3, 4, 5

C. 1, 2, 4, 5

D. 1, 3, 5, 6

**Answer: D**



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**75. Preganglionic fibres is long in**

- A. Sympathetic
- B. Parasympathetic
- C. Equal in both
- D. None of these

**Answer: B**



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**76.** Parasympathetic ganglia are located in

- A. Next to or within the organs innervated
- B. A chain parallel to the spinal cord
- C. The root of spinal nerves
- D. The brain

**Answer: A**



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77. A polarized neuron is said to be in

- A. (a) Action potential
- B. (b) Resting potential
- C. (c) Conducting stimulus
- D. (d) None of these

**Answer: B**



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**78.** A nerve impulse will travel through a nerve fibre only if its membrane suddenly becomes more permeable to ions of

A. Sodium

B. Calcium

C. Chloride

D. Potassium

**Answer: A**



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**79.** Sodium pump stop operating during

A. (a) Repolarization

B. (b) Action potential

C. (c) Resting potential

D. (d) None of the above

**Answer: B**



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80. During repolarization of nerve

- A.  $Na^+$  channels are closed and  $K^+$  channel are open
- B.  $K^+$  gate closes and  $Na^+$  gate open
- C. Both  $K^+$  and  $Na^+$  gates are closed
- D. Both gates remain open

**Answer: A**



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81. Absolute refractory period during nerve impulse conduction is the period of

A. Repolarization

B. Depolarization

C. Both repolarization and depolarization

D. Neither repolarization and depolarization

**Answer: A**



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82. At the time of conduction of nerve impulse, the repolarization occurs with me

- A. Efflux of  $K^+$  ions
- B. Influx of  $K^+$  ions
- C. Efflux of  $Na^+$  ions
- D. Efflux of both  $Na^+$  and  $K^+$  ions

**Answer: A**



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**83.** Saltatory conduction of impulse occurs in

A. Myelinated nerve fibres

B. Nonmyelinated fibres

C. Both of these

D. None of these

**Answer: A**



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**84.** Unidirectional transmission of nerve impulse is maintained by

A. Synapses

B. Graymatter

C. Myelin sheath

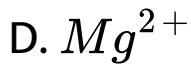
D. Membrane polarity

**Answer: A**



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85. which of the following helps in transmission of impulse across the synapse ?



**Answer: C**



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**86.** Once a synaptic junction between neurons has allowed transmission of a nerve impulse, it is made ready to transmit next impulse by the action of

- A. Secretin
- B. Acetylcholine
- C. Cholecystokinin
- D. Acetylcholinesterase

**Answer: D**



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**87.** Among which one of the following groups of chemicals, all are neurotransmitters ?

- A. Glycine, dopamine, melatonin
- B. Somatostatin, serotonin, acetylcholine
- C. Noradrenaline, somatostatin, threonine
- D. Acetylcholine, noradrenaline, dopamine

**Answer: D**



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88. Broca's motor speech area occurs in

A. Frontal lobe

B. Temporal lobes

C. Temporal and occipital lobes

D. parietal lobe and partially in temporal lobe

**Answer: A**



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**89.** Part of the brain concerned with the muscular movement is

A. (a) Thalamus

B. (b) Cerebellum

C. (c) Hippocampus

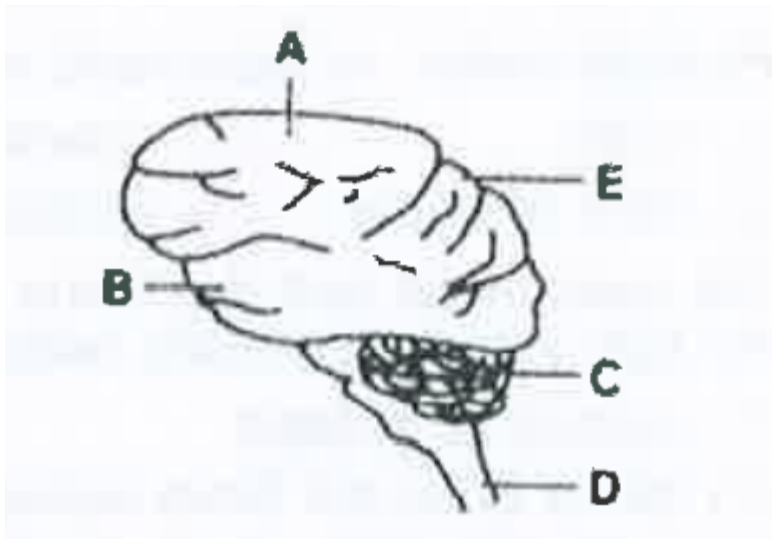
D. (d) Temporal lobe of cerebrum

**Answer: B**



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**90.** In the diagram of the lateral view of the human brain, parts are indicated by alphabets. Choose the answer in which these alphabets have been correctly matched with the parts which they indicate ?



A. A = Temporal lobe, B = Parietal lobe, C =  
Cerebellum, D = Medulla oblongata, E =

Frontal lobe

B. A = Frontal lobe, B = Temporal lobe, C =  
cerebrum, D = medulla oblongata, E =

Occipital lobe

C. A = Temporal lobe, B = Parietal lobe, C =  
cerebrum, D = medulla oblongata, E =

Frontal lobe

D. A = Frontal lobe, B = temporal lobe, C =  
cerebellum , D = medulla oblongata , E =

Parietal lobe

**Answer: D**



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**91.** Read the statements.

A. Preganglionic nerve fibres of III, VII, IX and X cranial nerves are a part of the parasympathetic nervous system

B. V, VII, IX and X cranial nerves are mixed nerves

C. Trochlear nerves are the largest cranial nerves

D. Abducens nerves are sensory in nature

which of the above statements are correct ?

A. A and D

B. A and B

C. B and C

D. A and C

**Answer: B**



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92. A man is admitted to a hospital. He is suffering from an abnormally low body temperature, loss of appetite and extreme thirst. His brain scan would probably show a tumor in

A. Pons

B. Cerebellum

C. Medulla oblongata

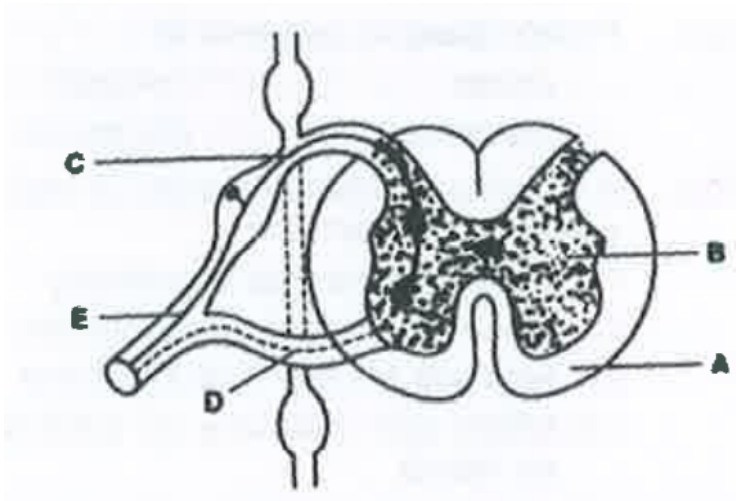
D. Hypothalamus

**Answer: D**



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**93.** In a cross section of the spinal cord A, B, C, D and E represent



A. A = white matter, B = gray matter, C =  
ventral root, D = dorsal root, E = spinal

nerve

B. A = gray matter, B = white matter, C =

Ventral root, D = Dorsal root, E = spinal

nerve

C. A = gray matter, B = white matter, C =

dorsal root, D = ventral root, E = spinal

nerve

D. A = white matter, B = gray matter, C =

dorsal root, D = ventral root, E = spinal

nerve

**Answer: D**



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**94.** Which function will be lost due to damaged of occipital lobe

A. Hearing

B. Speech

C. Vision

D. Memory

**Answer: C**



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**95.** Pain is experienced by

A. Caloreceptor

B. Algesireceptor

C. Proprioceptor

D. Hygroreceptor

**Answer: B**



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96. The receptors found in the muscles, tendons and joints are

A. Visceroceptors

B. Teloreceptors

C. Proprioceptor

D. None of these

**Answer: C**



97. Cornea is a transparent part of

- A. Retina
- B. Choroid
- C. Sclerotic
- D. Conjunctiva

**Answer: C**



98. which layer of the wall of an eyeball contains abundant blood vessels ?

A. Lens

B. Retina

C. Choroid

D. Sclerotic

**Answer: C**



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99. The black pigment in the eye, which reduces the internal reflection, is located in

A. Iris

B. Cornea

C. Sclerotic

D. Retina

**Answer: D**



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**100.** Eye lens is

A. Convex

B. Concave

C. Biconcave

D. Biconvex

**Answer: D**



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**101.** Protein found in eye lens is

A. Opsin

B. Callagene

C. Crystallin

D. Rhodopsin

**Answer: C**



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**102.** If the circular ciliary muscles of the eye are unable to contract, the

A. Vision will be lost completely

B. Lens will become more convex

C. Lens will be thin and stretched

D. Bright light will have no adverse effect  
on retina

**Answer: C**



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**103.** Anterior chamber of the eye is the space between

- A. Lens and iris
- B. Cornea and iris
- C. Lens and retina
- D. Cornea and lens

**Answer: B**



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**104.** Aqueous and vitreous humor are divided  
by

A. Lens

B. Iris

C. Retina

D. Optic nerve

**Answer: A**



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**105.** The space between cornea and the lens is called

A. Anterior chamber

B. Aqueous chamber

C. Vitreous chamber

D. Canal of schlemm

**Answer: B**



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**106.** The lens and cornea is not having blood supply. So the nutrients are supplied by

A. Retina

B. Eye lash

C. Blind spot

D. Aqueous humor

**Answer: D**



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**107.** Ora serrata is

- A. Anterior edge of sensory portion of the retina
- B. Gland present in oral cavity of frog
- C. Oral cavity of protochordates
- D. A part of sclera

**Answer: A**



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**108.** Retina is most sensitive at

A. In front of ora serrata

B. Fovea centralis

C. Blind spot

D.

**Answer: C**



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**109.** The point in eye of mammals from which optic nerves and blood vessels leave the eye ball is called

- A. Blind spot
- B. Fovea centralis
- C. Yellow spot
- D. None of these

**Answer: A**



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**110.** An area of the retina which does not have rods or cones is

A. Red spot

B. Blue spot

C. Blind spot

D. Black spot

**Answer: C**



**Watch Video Solution**

**111.** In nocturnal birds, the retina contains mostly

A. Rods

B. Cones

C. Both in equal numbers

D. None of these

**Answer: A**



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**112.** If is present in rod cells and useful in night vision ,

A. Melanin

B. Rhodopsin

C. Vitamin C

D. Vitamin K

**Answer: B**



**Watch Video Solution**

**113.** Pigment Iodopsin is contained in

- A. Rod cells
- B. Cone cells
- C. Amacrine cells
- D. Horizontal cells

**Answer: B**



**Watch Video Solution**

**114.** Photopic vision is associated with

A. Rods

B. Cones

C. Both of these

D. Vitreous humor

**Answer: B**



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**115.** The eye of cat and dog shine (reflect back the light focused on them) because



A. Cornea is opaque

B. Retina does not have enough rods

C. Retina has only rods and no cones

D. Choroid is provided with tapetum  
lucidum

**Answer: D**



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**116.** The image formed on the eye retina is

A. (a) Erect and real

B. (b) Erect and virtual

C. (c) Inverted and real

D. (d) Inverted and virtual

**Answer: C**



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**117.** Eyeball can be moved in the orbit by eyeball muscles. The number of eyeball muscles in each eye is

A. Six

B. Four

C. Five

D. Three

**Answer: A**



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**118.** Myopia (near-sightedness) is a defect in human eye in which the image is formed

A. In front of retina and can be corrected  
by using a concave lens

B. In front of retina and can be corrected  
by using a convex lens

C. Behind the retina and can be corrected  
by using a concave lens

D. Behind the retina and can be corrected  
by using a convex lens

**Answer: A**



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**119.** Hypermetropia (long sight) is a condition in human eye in which the image is formed

A. Behind retina and can be corrected by using a concave lens

B. Behind retina and can be corrected by using a convex lens

C. In front of retina and can be corrected by using a concave lens

D. In front of retina and can be corrected  
by using a convex lens

**Answer: B**



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**120.** If eyeball is shorter, then probable defect  
would be

A. Presbyopia

B. Astigmatism

C. Near-sightedness

D. Far-sightedness

**Answer: D**



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**121.** Lenses used by those who cannot see near objects are

A. Plain

B. Concave

C. Convex

D. Any of the above

**Answer: C**



**Watch Video Solution**

**122.** Reduction in elasticity of eye lens with age causes

A. Myopia

B. Cataract



C. Presbyopia

D. Astigmatism

**Answer: C**



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**123.** Irregular cornea results in

A. Cataract

B. Glaucoma

C. Strabismus

## D. Astigmatism

**Answer: D**



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**124.** Astigmatism can be corrected by using

- A. (a) Plain lens
- B. (b) Convex lens
- C. (c) Concave lens
- D. (d) Cylindrical lens

**Answer: D**



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**125.** Opacity of the lens in the eye lead to

A. Cataract

B. Hyperopia

C. Presbyopia

D. Astigmatism

**Answer: A**



**Watch Video Solution**

**126.** In the following abnormalities of the eye which one is a serious condition that leads to blindness ?

- A. (a) Myopia
- B. (b) Glaucoma
- C. (c) Presbyopia
- D. (d) Astigmatism

**Answer: B**



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**127.** Glaucoma is due to

- A. Increase in intraatrial pressure
- B. Increase in intraocular pressure
- C. Increase in intravesical pressure
- D. Increase in intraventricular pressure

**Answer: B**



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**128.** Glaucoma can be caused by

A. (a) Opacity of lens

B. (b) Drying of vitreous humor

C. (c) Increase in the size of eye ball

D. (d) Blockage of canal of schlemm

**Answer: D**



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**129.** Helicotrema is located at

A. (a) Middle of cochlea

B. (b) Tip of cochlea

C. (c) Start of cochlea

D. (d) Near fenestra ovalis

**Answer: B**



**Watch Video Solution**

**130.** The waxy substance which coats the surface of auditory canal is produced by

- A. Zeis glands
- B. Parotid glands
- C. Meibomian glands
- D. Ceruminous glands

**Answer: D**



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**131.** Identify the correct sequence of organs/ regions in the organization of human ear as an auditory mechanoreceptor organ

A. Pinna - Auditory canal - Tympanic membrane - Malleus - incus - Stapes - cochlea - Auditory nerve

B. Pinna- Malleus- incus- stapes- auditory canal- tympanic membrane

C. Pinna - cochlea - Tympanic membrane - Auditory canal - Malleus - Stapes - Incus -

Auditory nerve

D. Pinna - Tympanic membrane - Auditory

canal - Incus - malleus - Stapes - Cochlea -

Auditory nerve

**Answer: A**



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**132.** Sound is amplified by the

A. Pinna

B. Ear ossicles

C. Round window

D. Tympanic membrane

**Answer: B**



**Watch Video Solution**

**133.** In the human ear, which bone is connected with the tympanum ?

A. Anvil

B. Stirrup

C. Hammer

D. None of these

**Answer: C**



**Watch Video Solution**

**134.** Anvil-shaped bone is

A. Incus

B. Stapes

C. Malleus

D. Columellaaris

**Answer: A**



**Watch Video Solution**

**135.** Which of the following bones is in direct contact with oval window ?

A. Incus

B. Stapes

C. Malleus

D. All of these

**Answer: B**



**Watch Video Solution**

**136.** Which of the following bones is in contact with fenestra rotundus ?

A. Incus

B. Stapes

C. Malleus

D. None of these

**Answer: D**



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**137.** Eustachian tube helps to

A. Equalise pressure on both sides of  
tympanum

B. Keep tympanic chamber moist

C. Amplify sound vibrations

D. Maintain balance

**Answer: A**



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**138.** In the ear of man, the perilymph passes from middle ot inner ear through

A. Foramen ovalis

B. Fenestra ovalis



C. Fenestra rotundus

D. Tympanic membrane

**Answer: B**



**Watch Video Solution**

**139.** Bony labyrinth is filled with a fluid called

A. Lymph

B. Perilymph

C. Endolymph

D. Hemolymph

**Answer: B**



**Watch Video Solution**

**140.** Nerve impulse for hearing originates in

A. Eardrum

B. Cochlea

C. Ear ossicles

D. Auditory nerve

**Answer: B**



**Watch Video Solution**

**141.** Which of the following is known as 'cochlear duct' ?

- A. Scala media
- B. Scala vestibuli
- C. Scala tympani
- D. None of these

**Answer: A**



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**142.** In the internal ear, the 'organ of corti' which bear hair cells is located in

- A. Sacculus
- B. Scala media
- C. Scala tympani
- D. Scala vestibuli

**Answer: B**



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**143.** Scala vestibuli and scala media contain respectively

- A. Endolymph and perilymph
- B. Perilymph and endolymph
- C. Endolymph only
- D. Perilymph only

**Answer: B**



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**144.** Which of the following arises from the sacculus

- A. Semicircular cannals
- B. Endolymphatic duct
- C. Eustachian tube
- D. None of these

**Answer: B**



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**145.** Which of the following is balancing organ ?

- A. Organ of corti
- B. Cochlea
- C. Vestibular apparatus
- D. Oval window

**Answer: C**



**Watch Video Solution**

**146.** Statolith is an organ which helps in

A. Vision

B. Equilibrium

C. Tactile stimulation

D. Chemical stimulation

**Answer: B**





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**147.** Receptor cells for balance in human ear are located in

- A. Utricle, Saccule and semicircular canals
- B. malleus, incus and stapes
- C. Eustachian tube
- D. Organ of corti

**Answer: A**



**148.** Otolith is mainly composed of

- A. Lipid
- B. Calcium carbonate
- C. Mucopolysaccharide
- D. Calcium phosphate

**Answer: B**



**149.** The glands which help in absorbing odoriferous substances to stimulate olfactory nerve are

- A. Bidder's glands
- B. Cowper's glands
- C. Meibomian glands
- D. Bowman's glands

**Answer: B**



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**150.** A molecule cannot be tasted or smelled until it has been

- A. Dissolved in a liquid
- B. Converted into a liquid
- C. Converted into a neurotransmitter
- D. Grouped into a multimolecular complex

**Answer: A**



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**151. The ciliary body**

A. Is the part of sclera

B. is the part of the iris of the eye

C. Secretes the vitreous humor

D. Contains smooth muscles that attach to  
the lens by suspensory ligaments

**Answer: D**



**Watch Video Solution**

**152.** Given these structures

1. Lens 2. Aqueous humor 3. vitreous humor 4.

Cornea

Choose the correct sequence of the pathway of light from outside to inside the eyeball

A. 4, 2, 1, 3

B. 1, 2, 3, 4

C. 4, 3, 2, 1

D. 1, 4, 2, 3

**Answer: A**



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**153.** Aqueous humor

- A. Is the pigment responsible of the black colour of the choroid
- B. Exits the eye through the canal of schlemm
- C. Can cause cataracts if over produced
- D. Is secreted by iris

**Answer: B**



**Watch Video Solution**

**154.** Given the area of the retina

1. Macula 2. Fovea centralis 3. Optic disc 4.

Periphery of the retina

Choose the arrangement that lists the areas according to the density of cones, starting with the area that has highest density of cones



A. 2, 1, 4, 3

B. 2, 4, 1, 3

C. 1, 2, 3, 4

D. 1, 3, 2, 4

**Answer: A**



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**155.** Which of the following is correct for lens focusing, while seeing distant object ?

A. Tight suspensory ligaments and rounded lens

B. Contracted ciliary muscles and rounded lens

C. Relaxed ciliary muscles and tight suspensory ligament

D. Contracted ciliary muscles and relaxed suspensory ligaments

**Answer: C**



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**156.** Fovea in the eye is a central pit in the yellowish pigmented spot called

A. Retina

B. Cornea

C. Choroid

D. Macula lutea

**Answer: D**



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## 157. Match the following

1. Fovea	A. Provides opening for entry of light
2. Iris	B. Transduces RGB light
3. Pupil	C. Transmits information to CNS
4. Lens	D. Controls amount of light entering
5. Optic nerve	E. Focuses light on the retina

A. 1-D, 2-A, 3-E, 4-B, 5-C

B. 1-A, 2-B, 3-C, 4-D, 5-E

C. 1-B, 2-D, 3-A, 4-E, 5-C

D. 1-E, 2-A, 3-D, 4-C, 5-B

**Answer: C**



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**158.** High frequency sound waves vibrate the basilar membrane

- A. Near the helicoterma
- B. Near the oval window
- C. In the middle of cochlea
- D. Towards tip of cochlea

**Answer: B**



**Watch Video Solution**

**159.** The order of the three layers of cells in the retina of human eye from inside to outside is

A. Ganglion cells, rods, cones

B. Bipolar cells, photoreceptor cells,  
ganglion cells

C. Ganglion cells, bipolar cells,  
photoreceptor cells

D. Photoreceptor cells, ganglion cells,  
bipolar cells

**Answer: C**



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**160.** In the statement "three are several ventricles in the brain and some of these ventricles are connected by foramen of morno."

This foramen connects X which are located in the Y of the brain" , X and Y stand respectively for

A. Lateral ventricles and cerebral hemisphere

B. Third and fourth ventricles in cerebral hemisphere and medulla oblongata

C. Lateral ventricles and third ventricles in cerebral hemisphere and mesencephalon



D. Lateral ventricles and third ventricle in cerebral hemispheres and diencephalon

**Answer: D**



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**161.** Which of the following statement *is / are* correct ?

(i) Formation of rhodopsin takes place in dark adaptation

(ii) Destruction of rhodopsin takes place in

light adaptation

(iii) Destruction of rhodopsin takes place in dark adaptation

(iv) Formation of rhodopsin takes place in light adaptation

A. (i) and (ii)

B. (ii) and (iv)

C. (i) and (iii)

D. (iv) alone

**Answer: A**



**162.** Fight or flight activation of the autonomic nervous system causes which of the following to occur ?

- A. Pupli muscle constriction
- B. Blood flow shifts from digestive to skeletal muscle circulation
- C. Constriction of bronchi results
- D. Blood glucose drastically decreases

**Answer: B**



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**163.** The adrenal medulla is a mass of neurons with all of the following characteristics except

- A. Its products are tyrosine derived
- B. It releases epinephrine
- C. It is responsible for the production of cortisol and aldosterone

D. It is located above the kidney

**Answer: C**



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**164.** Action potential is

A. Decremental phenomenon

B. Does not obey all or none

C.  $K^+$  goes from ECF to ICF

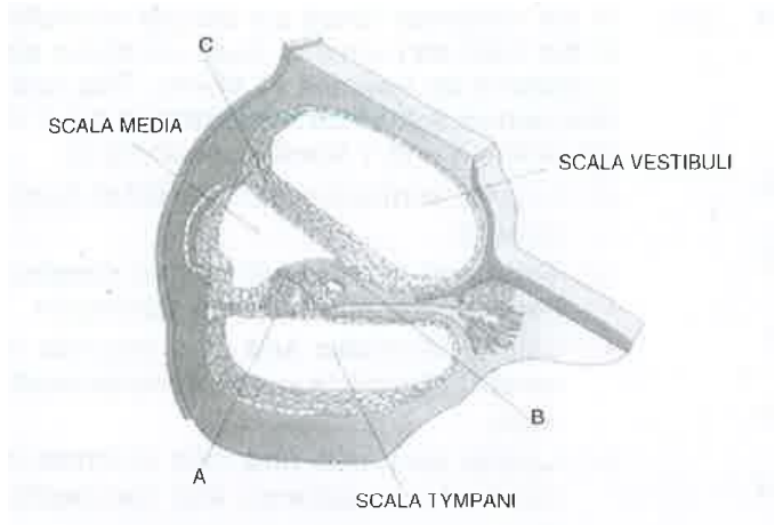
D. Always same for any one neuron

**Answer: D**



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**165.** In the figure related to human ear, what do A, B and C stand for respectively



A. A) Reissners, Basilar and Tectorial  
membrane

B. B) Tectorial, Basilar and Reissners  
membrane

C. C) Basilar, Tectorial and Reissners  
membrane

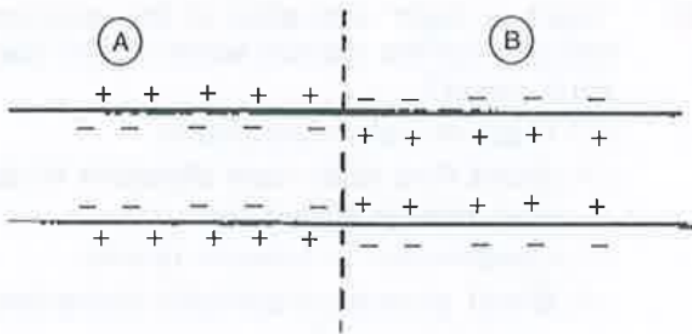
D. D) Basilar, Reissners and Tectorial  
membrane

**Answer: C**



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**166.** In the given figure two regions (1) and (2) of a neuron are shown. Which option tells us best the state of the neuron at the two sites and the direction of flow of nerve impulse ?



- A. 1) A - depolarised , B - repolarised , A to B
- B. 2) A - resting , B - depolarised , B to A



C. 3) A - depolarised , B - resting , A to B

D. 4) A - resting , B - polarised , B to A

**Answer: B**



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**167.** Which of the following is wrongly matched

?

A. Fovea - Retina

B. Corpus callosum - Forebrain

C. Limbic system - Forebrain

D. Visual purple - Cones

**Answer: D**



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**168.** Match list-I with list-II and select the correct answer using the codes given below

# lists

List-I	List-II
A. Sodium gate	1. Saltatory conduction of nerve impulse
B. Nodes of Ranvier	2. Synaptic transmission
C. Acetylcholine	3. Action potential
D. Photoreceptor	4. Transduction
	5. Dendrite



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**169.** Which one of the following is the correct sequence of cranial nerves in chordates ?

A. Facial, abducens, auditory,  
glossopharyngeal

B. Auditory, facial, abducens,  
glossopharyngeal

C. Abducens, facial, auditory,  
glossopharyngeal

D. Glossopharyngeal, facial, auditory,  
abducens

**Answer: C**



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**170.** Cochlea is divided into three chambers or spaces

1. Scala vestibuli 2. Scala media 3. Scala tympani

Basilar membrane and Reissner's membrane are respectively found between

A. (i) and (iii) and (i) & (ii)

B. (i), (ii) and (iii)

C. (ii) & (iii) and (i) & (iii)

D. (ii) and (iii) and (i) & (ii)

**Answer: D**



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**171.** Consider the following statements  
sympathetic nervous system is characterised  
by

1. Acetylcholine as neuro secretion
2. Fight of flight activities
3. Longer preganglionic fibres

4. Non-medullated postganglionic fibres

5. Arising from thoracic-lumbar portion

A. 1, 2 and 3

B. 2, 4, and 5

C. 2 and 4

D. 1, 3 and 5

**Answer: B**



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**172.** Consider the following statements regarding Na-K Pump

1. It utilizes ATP.
2. It acts on a resting neuron.
3. It involves efflux of 3  $Na^+$  per ATP.
4. It involves influx of 2  $K^+$  per ATP.
5. Metabolic poisons stop the pump.

A. 1 and 2

B. 1, 2 and 5

C. 3, 4 and 5



D. 1, 2, 3, 4 and 5

**Answer: D**



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**173.** A 35-year-old female patient presents with weakness and spasticity in the left lower extremity, visual impairment and throbbing in her left eye. MRI confirms areas of demyelination in the anterior corpus callosum.

Which of the following cells are specifically targeted in her condition ?

A. Microglia

B. Oligodendrocytes

C. Astrocytes

D. Schwann cells

**Answer: B**



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**174.** A teenage girl presents for evaluation of hearing loss in her right ear. She has a history of at least 12 episodes of otitis media as a child, at least one time she perforated her eardrum. Her hearing loss is most likely due to

- A. Conductive deafness
- B. Sensorineural deafness
- C. Central deafness
- D. Tinnitus

**Answer: A**



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**175.** What is not true about the sympathetic nervous system ?

- A. It has functions antagonistic to those of parasympathetic system
- B. It has bilateral ganglionated cords
- C. It has longer post ganglionic fibres
- D. It has stimulatory influence on all involuntary organs, it supplies

**Answer: D**



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**176.** Smulation of target organs by the parasympathetic vagus nerve would exert which of the following effects ?

A. Acetylcholine inhibition of the GI tract

B. Norepinephrine-stimulated increase in the heart rate

C. Norepinephrine inhibition of pancreatic secretion

D. Acetylcholine-stimulated increase in pancreatic secretion

**Answer: D**



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**177.** Digitalis is a drug that block the  $Na^+ / K^+$  ATPase and causes which of the following consequences ?

A. Decreased intracellular calcium concentration

B. Decreased intracellular sodium concentration

C. Decreased intracellular potassium concentration

D. increased extracellular sodium concentration

**Answer: C**



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**178.** Given below are a list of certain metabolic effect

(i) Lipolysis (ii) Glycogenesis (iii) Increased blood glucose (iv) Proteolysis

Which option shows the correct effect by the hormone of fight or flight ?

A. (i), (ii), (iii)

B. (i), (iii), (iv)

C. (i) , (ii), (iv)



D. All of them

**Answer: B**



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**179.** Which of the following is not involved in kneejerk reflex ?

A. Muscle spindle

B. Motor neuron

C. Brain

D. Inter neurons

**Answer: C**



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**180.** Excessive stimulation of vagus nerve in humans may lead to

A. Hoarse voice

B. Peptic ulcer

C. Efficient digestion of proteins

## D. Irregular contraction of diaphragm

**Answer: B**



**Watch Video Solution**

**181.** A person is wearing spectacles with concave lenses for correcting vision. While not using the glasses, the image of a distant object in his case will be formed

A. On the blind spot

B. Behind the retina

C. In front of the retina

D. On the yellow spot

**Answer: C**



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**182.** Unidirectional transmission of nerve impulse through nerve fibre is due to the fact that

A. Nerve fibre is insulated by a medullary sheath

B. Sodium pump start operating only at the cyton and then continues into the nerve fibre

C. Neurotransmitters are released by dendrites and not by axon endings

D. Neurotransmitters are released by the axon endings and not by dendrites

**Answer: D**



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**183.** Assertion: Our body secretes adrenaline in intense cold.

Reason: Adrenaline raises metabolic rate.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion, then mark  
a.

B. If both assertion and reason are true but the reason is not the correct explanation of the assertion, then mark b.

C. If assertion is true statement but reason is false, then mark c.

D. If both assertion and reason are false statements, then mark d.

**Answer: A**



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**184.** Given below is a table comparing the effects of sympathetic and parasympathetic nervous system for four feature (1-4). Which one feature is correctly described ?

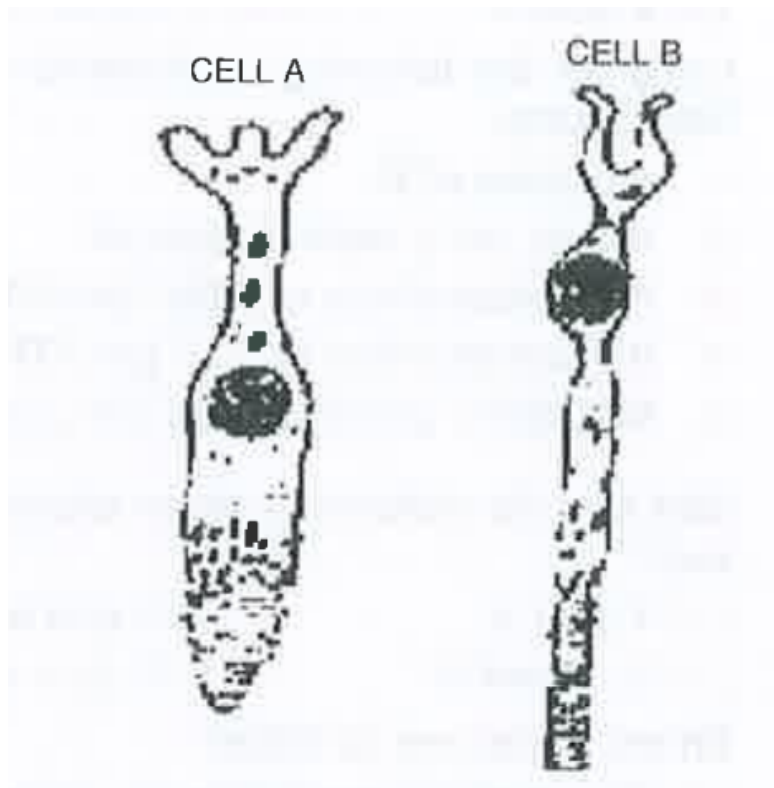
S. Feature No.	Sympathetic nervous system	Parasympathetic nervous system
(1) Salivary glands	Stimulates secretion	Inhibits secretion
(2) Pupil of the eye	Dilates	Constricts
(3) Heart rate	Decreases	Increases
(4) Intestinal peristalsis	Stimulates	Inhibits



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**185.** Examine the diagram of the two cell types A and B given below and select the correct option



A. Cell A is the rod cell found evenly all over retina.

B. Cell A is the cone cell more concentrated  
in the fovea centralis

C. Cell B is concerned with colour vision in  
bright light

D. Cell A is sensitive to low light intensities

**Answer: B**



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**186.** Find out the wrong statement

A. Organ of Corti is located on the tectorial membrane

B. The membranous semi-circular canals of internal ear are suspended in the perilymph of the bony canals

C. At the posterior pole of the lateral to the blind spot, there is a yellowish pigmented spot called macula lutea with a central pit called the fovea

D. Along with the hypothalamus, the limbic system is involved in the regulation of sexual behaviour, expression of emotional reactions and motivation.

**Answer: A**



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**187.** In the resting state of the neural membrane diffusion due to concentration gradients, allowed, would drive

A.  $Na^+$  into the cell

B.  $Na^+$  out of the cell

C.  $K^+$  into the cell

D.  $K^+$  and  $Na^+$  out of the cell

**Answer: A**



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**188.** Injury to nerve in human is not likely to affect

A. Pancreation secretion

B. Cardiac movements

C. Tongue movements

D. Gastrointestinal movements

**Answer: C**



**Watch Video Solution**

**189.** Parkinson's diseases (characterised by tremorse and progressive rigidity of limbs) is caused by degeneration of brain neutrons

that are involved in movement control and make use of neurotransmitter

A. Norepinephrine

B. Acetylcholine

C. GABA

D. Dopamine

**Answer: D**



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**190.** In a man, abducens nerve is injured. Which one of the following functions will be affected

A. Swallowing

B. Movement of the eye ball

C. Movement of the neck

D. Movement of the tongue

**Answer: B**



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**191.** Which one of the following does not act as a neurotransmitter ?

A. Acetylcholine

B. Epinephrine

C. Norepinephrine

D. Cortisone

**Answer: D**



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**192.** Which hormone causes dilation of blood vessels, increased oxygen consumption and gluconeogenesis

A. ACTH

B. Insulin

C. Adrenaline

D. Glucagon

**Answer: C**



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**193.** Bowman's glands are located in the

A. Anterior pituitary

B. Female reproductive system of  
cockroach

C. Olfactory epithelium of our nose

D. Proximal end of uriniferous tubules

**Answer: C**



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**194.** During the transmission of nerve impulse through a nerve fibre, the potential on the inner side of the plasma membrane has which type of electric charge ?

A. First positive, then negative and continue to be negative

B. First negative, then positive and continue to be positive

C. First positive, then negative and again back to positive

D. First negative, then positive and again  
back to negative

**Answer: D**



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**195.** Which of the following is an example of  
negative feedback loop in humans

A. Secretion of tears after falling of sand  
particles in to the eye.

B. Salivation of mouth at the sight of  
delicious food

C. Secretion of sweat glands and  
constriction of skin blood vessels when  
it is too hot.

D. Constriction of skin blood vessels and  
contraction of skeletal muscles when it  
is too cold

**Answer: D**



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**196.** Feeling of tremors of an earthquake, a scared resident of seventh floor of a multistoried building starts climbing down the stairs rapidly. Which hormone initiated this action ?

A. Adrenaline

B. Glucagon

C. Gastrin

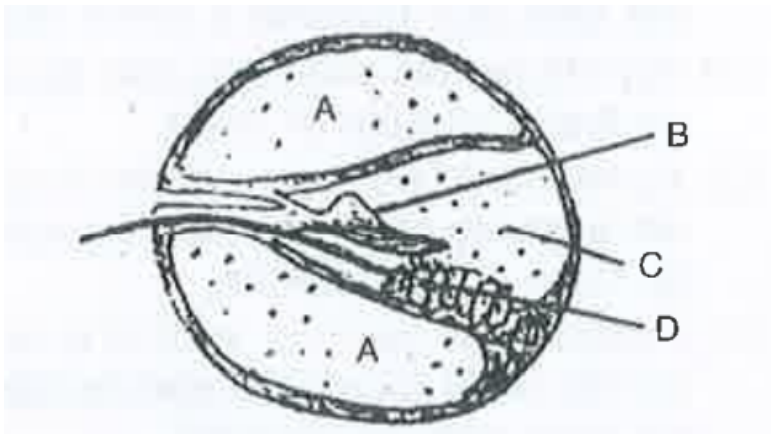
D. Thyroxin

**Answer: A**



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**197.** Given below is a diagrammatic cross section of a single loop of human cochlea



Which one of the following options correctly



represents the names of three different parts

?

A. A : Perilymph, B : Tectorial membrane C :

Endolymph

B. B : Tectorial membrane, C : Perilymph, D :

Secretory cells

C. C : Endolymph, D : Sensory hair cells, A :

serum

D. D : Sensory hair cells, A : Endolymph B :

Tectorial membrane

**Answer: A**



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**198.** The nerve centres which control the body temperature and the urge for eating are contained in

- A. Thalamus
- B. Hypothalamus
- C. Pons
- D. Cerebellum

**Answer: B**



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**199.** When a neuron is in resting state i.e. not conducting any impulse, the axonal membrane is

- A. Comparatively more permeable to  $Na^+$  ions and nearly impermeable to  $K^+$  ions

B. Equally permeable to both  $Na^+$  and

$K^+$  ions

C. Impermeable to both  $Na^+$  and  $K^+$

ions

D. Comparatively more permeable to  $K^+$

ions and nearly impermeable to  $Na^+$

ions

**Answer: D**



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200. The purplish red pigment rhodopsin contained in the rods type of photoreceptor cells of the human eye, is a derivative of

A. Vitamin  $B_1$

B. Vitamin C

C. Vitamin D

D. Vitamin A

**Answer: D**



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**201.** A person entering an empty room suddenly finds a snake right in front on opening the door. Which one of the following is likely to happen in his neuro-hormonal control system

A. Neurotransmitters diffuse rapidly across the cleft and transmit a nerve impulse

B. Hypothalamus activates the parasympathetic division of brain

C. Sympathetic nervous system is activated releasing epinephrin and norepinephrin from adrenal cortex

D. Sympathetic nervous system is activated releasing epinephrin and norepinephrin from adrenal medulla

**Answer: D**



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**202.** Which part of the human ear plays no role in hearing as such but is otherwise very much required ?

- A. Organ of corti
- B. Vestibular apparatus
- C. Ear ossicles
- D. Eustachian tube

**Answer: B**



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**203.** The human hind brain comprises three parts, one of which is

A. Corpus callosum

B. Cerebellum

C. Hypothalamus

D. Spinal cord

**Answer: B**



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**204.** A nerve impulse is generated when the nerve cell undergoes

A. Hyperpolarisation

B. Repolarisation

C. Depolarisation

D. Pseudopolarisation

**Answer: C**



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**205.** Cerebrospinal fluid is secreted by

A. Ependymal epithelium

B. Choroid plexus

C. Pituitary body

D. Pineal body

**Answer: B**



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**206.** The capacity to differentiate colours lies in

A. Cones

B. Rods

C. Pigment epithelium

D. Ganglion cell layer

**Answer: A**



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**207.** In ear, the membranous labyrinth is filled with fluid called

A. Endolymph

B. Perilymph

C. Plasma

D. Haemolymph

**Answer: A**



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**208.** The region of the vertebrate eye, where the optics nerve passes out of the retina and photoreceptor cells are not present in that region is called

A. Fovea

B. Iris

C. Blind spot

D. Optic chiasma

**Answer: C**



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**209.** The specific receptor responsible for the balance of the body and posture are

- A. Organ of corti
- B. Crista and macula
- C. Tectorial membrane
- D. Basilar membrane

**Answer: B**



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210. Smallest bone in human system is

A. Incus

B. Stapes

C. Malleus

D. Maxilla

**Answer: B**



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211. The charge on the outer side of the neuron is

A.  $+Ve$

B.  $-Ve$

C. Zero

D. Alternate  $-Ve$  and  $+Ve$

**Answer: A**



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**212.** Colour perception in man is due to

A. Rhodospin pigment in rod cells

B. Iodospin pigment in cone cells

C. Iodospin pigment in rod cells

D. Rhodopsin pigment in cone cells

**Answer: B**



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**213.** Vomitting centre is located in the

A. Medulla oblongata

B. Stomach and sometimes in duodenum

C. GI tract

D. Hypothalamus

**Answer: A**



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**214.** In  $Na^+ - K^+$  pump of active transport there is

A. Efflux of  $Na^+$  and influx of  $K^+$

B. Only efflux of  $Na^+$

C. Influx of  $Na^+$  and efflux of  $K^+$

D. Influx and efflux of  $Na^+$  only

**Answer: A**



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**215.** Which of the following does not act as a neurotransmitter ?

A. Acetylcholine

B. Glutamic acid

C. Epinephrine

D. Tyrosine

**Answer: D**



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**216.** Which is thickened to form organ of corti

?

A. Tectorial membrane

B. Reissner's membrane

C. Basilar membrane

D. All of the above

**Answer: C**



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**217.** Satiety centres of brain is present on

A. Cerebral hemisphere

B. Hypothalamus

C. Cerebellum

D. Medulla oblongata

**Answer: B**



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**218.** The part of hind brain that is responsible for hand eye coordination is

A. Pons varoli

B. Hippocampus

C. Cerebellum

D. Medulla oblongata

**Answer: C**



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**219.** Which of the following is not related to the autonomic nervous system ?

A. Peristalsis



B. Digestion

C. Excretion

D. Memory and learning

**Answer: D**



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**220.** The bactericidal protein present in human tears is

A. Transducin

B. Lysozyme

C. Opsin

D. Retinene

**Answer: B**



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**221.** The brain stem is made up of

A. Midbrain, pons, cerebellum

B. Midbrain, pons, medulla oblongata

C. Diencephalon, medulla oblongata,  
cerebellum

D. Cerebellum, cerebrum, medulla  
oblongata

**Answer: B**



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**222.** Movement of tongue muscle is controlled  
by

- A. Facial nerve
- B. Trigeminal nerve
- C. Hypoglossal nerve
- D. Vagus nerve

**Answer: C**



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**223.** Which centre is stimulated during increase in body temperature ?

A. Anterior hypothalamus

B. Posterior hypothalamus

C. Limbic system

D. Red nucleus

**Answer: A**



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**224.** Which function will be lost due to damage of occipital lobe ?

A. Hearing

B. Speech

C. Vision

D. Memory

**Answer: C**



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**225.** The optic lobes in humans are represented by the corpora

A. Bigemina

B. Arenacea

C. Allata

D. Quadrigemina

**Answer: D**



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**226.** Identify the origin of sympathetic nerve fibres and the location of their ganglia

- A. They arise from thoraco-lumber region of spinal cord and form ganglia just beside the vertebral column
- B. They arise from thoraco-cervical region of spinal cord and form ganglia just beside the vertebral column
- C. They arise from thoraco-sacral region of spinal cord and form ganglia very close effector organ



D. They arise from thoraco-lumber region of spinal cord and form ganglia very close effector organ

**Answer: A**



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**227.** The number of spinal nerves in human is

A. 10 pairs

B. 12 pairs

C. 43 pairs

D. 31 pairs

**Answer: D**



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**228.** During synaptic transmission of nerve impulse, neurotransmitter (p) is released from synaptic vesicles by the action of ions (Q).  
Choose the correct P and Q

A. P = acetylcholine, Q =  $Ca^{++}$

B. P = acetylcholine, Q =  $Na^{++}$

C. P = GABA, Q =  $Na^{+}$

D. P = cholinesterase, Q =  $Ca^{++}$

**Answer: A**



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**229.** Third and fourth ventricles of the brain are connected by

A. Aqueduct of sylvius

B. Foramen of mono

C. Foramen of magnum

D. Corpus callosum

**Answer: A**



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**230.** Parts A, B, C and D of the human eye are shown in the diagram. Select the option which gives correct identification along with its

## functions/ characteristics



A. C - aqueous chamber - reflects the light

which does not pass through the lens

B. D - choroid - its anterior part forms

ciliary body

C. A - Retina - contains photo receptors -

rods and cones

D. B - Blind spot - has only a few rods and

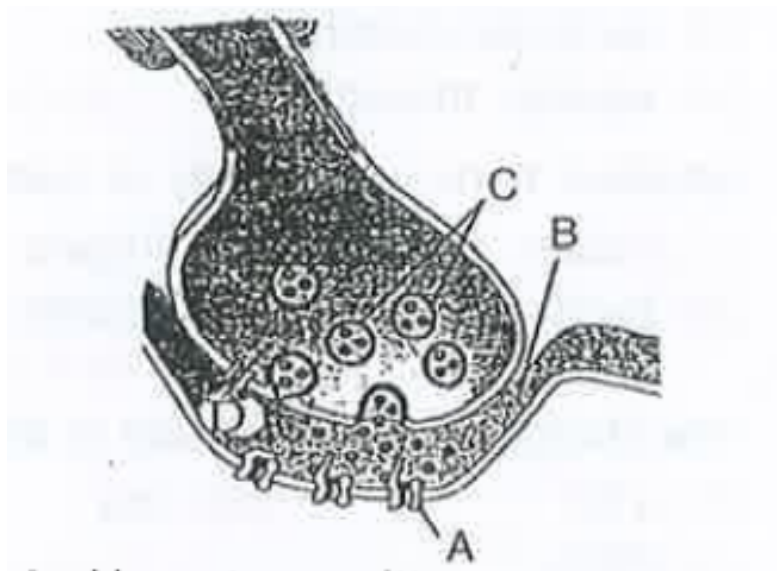
cones

**Answer: C**



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**231.** A diagram showing axon terminal and synapses is given. Identify correctly at least two of A-D.



A. A - Neurotransmitter B - Synaptic cleft

B. C - Neurotransmitter D -  $Ca^{++}$

C. A - Receptor C - Synaptic vesicles

D. B - Synaptic connection D -  $K^{+}$

**Answer: C**



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**232.** A pregnant female delivered a baby who suffers from stunted growth, mental

regardation, Low intelligence quotient and abnormal skin. This is the result of,

- A. Cancer of the thyroid gland
- B. Over secretion of pars distalis
- C. Deficiency of iodine in diet
- D. Low secretion of growth hormone

**Answer: C**



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**233.** Injury localized to the hypothalamus would most likely disrupt

A. Regulation of body temperature

B. Short - term memory

C. Co-ordination during locomotion

D. Executive functions, such as decision making

**Answer: A**



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**234.** Fight or flight reaction cause activation of

- A. The pancreas leading to a reduction in the blood sugar levels
- B. The parathyroid glands, leading to increased metabolic rate
- C. The kidney, leading to suppression of renin-angiotensin-aldosterone pathway
- D. The adrenal medulla, leading to increased secretion of epinephrine and

norepinephrine

**Answer: D**



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**235.** Which one of the following statements is not correct ?

A. Rhodospin is the purplish red protein present in rods only

B. Retina is the light absorbing portion of visual photo pigments

C. In retina the rods have the photo pigment rhodopsin while cones have three different photopigments.

D. Retina is a derivative of vitamin C

**Answer: D**



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**236.** A gymnast is able to balance his body upside down even in the total darkness because of

A. Vestibular apparatus

B. Tectorial membrane

C. Organ of corti

D. Cochlea

**Answer: A**



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**237.** Which of the following regions of the brain is incorrectly paired with its function ?

A. Cerebellum - language comprehension

B. Corpus callosum - communication  
between the left and right cerebral  
cortices

C. Cerebrum - calculation and  
contemplation

D. Medulla oblongata - homeostatic control

**Answer: A**



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**238.** Destruction of the anterior horn cells of the spinal cord would result in loss of

- A. Sensory impulses
- B. Voluntary motor impulses
- C. Commissural impulses
- D. Integrating impulses

**Answer: B**



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**239.** In mammalian eye, the 'fovea' is the centre of the visual field, where

- A. High density of cones occur, but has no rods
- B. The optic nerve leave the eye
- C. Only rods are present.



D. More rods than cones are found

**Answer: A**



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**240.** Photosensitive compound in human eye is made up of:

A. Opsin and Retinal

B. Opsin and retinol

C. Transducin and retinene

## D. Guanosine and Retinol

**Answer: A**



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**241.** Choose the correct statement.

A. Nociceptors respond to change in pressure.

B. Meissner's corpuscles are thermoreceptors.

C. Photoreceptors in the human eye are depolarized during darkness and become hyperpolarized in response to the light stimulus

D. Receptors do not produce graded potentials.

**Answer: C**



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**242.** Receptor sites for neurotransmitters are present on

A. Membranes of synaptic vesicles

B. Pre-synaptic membrane

C. Tips of axons

D. Post-synaptic membrane

**Answer: D**



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## 243. Choose the correct statements

Good vision depends on adequate intake of carotene rich food.

Select the best option from the following statements.

- (i) Vitamin A derivatives are formed from carotene.
- (ii) The photopigments are embedded in the membrane discs of the inner segment.
- (iii) Retinal is a derivative of Vitamin A.
- (iv) Retinal is a light absorbing part of all the visual photopigments.

A. (i) and (ii)

B. (i), (iii) and (iv)

C. (i) and (iii)

D. (ii), (iii) and (iv)

**Answer: B**



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**244.** Which of the following structures or regions is incorrectly paired with function ?

A. Corpus : band of fibres connecting left and right cerebral hemispheres.

B. Hypothalamus : production of releasing hormones and regulation of

temperature, hunger and thirst.

C. Limbic system : Consists of fibres tracts that interconnect different regions of brain, control movement.

D. Medulla oblongata : Controls respiration and cardiovascular reflexes.

**Answer: C**



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**245.** The transparent lens in the human eye is held in its place by

- A. Smooth muscles attached to the ciliary body
- B. Smooth muscles attached to the iris
- C. Ligaments attached to the iris
- D. Ligaments attached to the ciliary body

**Answer: D**



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**246.** Nissl bodies are mainly composed of

A. Free ribosomes and RER

B. Nucleic acids and SER

C. DNA and RNA

D. Proteins and lipids

**Answer: A**



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