

## **BIOLOGY**

## **BOOKS - A2Z BIOLOGY (HINGLISH)**

## **NEURAL CONTROL AND COORDINATION**

Section A: Topicwise Questions Topic 1: Neural System And Humans Neural System

- 1. The process by which two or more organs interact is called
  - A. Homeostasis
  - **B.** Coordination
  - C. Accommodation
  - D. Adaption

**Answer: B** 

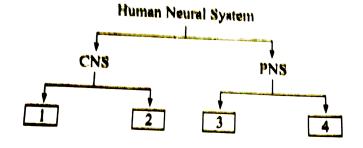


- 2. The human neural system is divided into
  - A. Two parts CNS and PNS
  - B. Two parts CNS and ANS
  - C. Three parts CNS, PNS and ANS
  - D. Three parts Forebrain, midbrain and hindbrain

## Answer: A



3. Recognise the figure and find out the correct matching ltBrgt



- A.1 autonomic neural system, 2 somatic neural system, 3
  - sympathetic neural system 4 parasympathetic neural system
- B. 1 cranial nerves, 2 spinal nerves, 3 autonomic neural system, 4 somatic neural system
- C. 1 brain, 2 spinal cord, 3 somatic neural system, 4 autonomic neural system
- D. 1 spinal cord, 2 brain, 3 sympathetic neural system, 4 parasympathetic neural system

### Answer: C



- **4.** All the nerves of the body associated with the CNS (brain and spinal cord), comprised in
  - A. Peripheral neural system

- B. Somatic neural system
- C. Autonomic neural system
- D. Sympathetic neural system

### **Answer: A**



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- **5.** The nerve fibres transmit impulse from tissue/organs to the CNS and the nerve fibres transmit regulatory impulse from the CNS to the concerned peripheral tissue/organ.
  - A. a afferent, b efferent
  - B. a efferent, b afferent
  - C. a sympathetic, b parasympathetic
  - D. a parasympathetic, b sympathetic

### Answer: A

- 6. Read the following statements and find out the incorrect statements.
- a. The CNS is the size of information processing and control.
- b. The somatic neural system relays impules from the CNS to the involuntary organs and smooth muscels of the body.
- c. The autonomic neural system transmits impules from the CNS to skeleton muscles.
- d. The autonomic neural system is further classified into sympathetic and parasympathetic neural system.
  - A. a and b
  - B. b and c
  - C. c and d
  - D. a and d

### **Answer: B**



**Watch Video Solution** 

7. How many pairs of cranial nerves in mammals are purely sensory
A. Six
B. Two
C. Three
D. Five
Answer: A
Watch Video Solution
8. Afferent nerve fibres carry impulses from
A. Effector organs to CNS
B. Receptor to CNS
C. CNS to receptors
D. CNS to muscles

### Answer: B



**Watch Video Solution** 

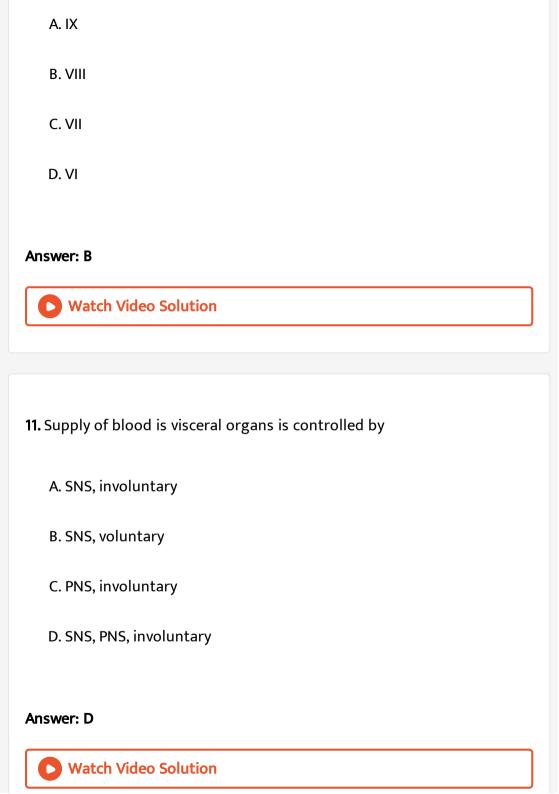
- 9. On stimulation, sympathetic nervous system
  - A. Increases sweat secretion
  - B. Decreases tear secretion
  - C. Decreases saliva
  - D. All of the above

### **Answer: D**



**Watch Video Solution** 

**10.** In man which one of the following cranial nerve is associated with the sense of the body balance



12. Parasympathetic nervous system is not involved in
A. Peristalsis
B. Secretion of saliva
C. Dilation of pupil
D. Excitation of reproductive organs
Answer: C
Watch Video Solution
13. Body coordination is maintained by
A. Circulatory system
B. Nervous system
C. Endocrine system

Answer: D	
Watch Video Solution	
<b>14.</b> Eye muscles are innervated by	
A. Oculomotor, abducens and vagus	
B. Oculomotor, trochlear and abducens	
C. Oculomotor, abducens and facial	
D. Oculomotor, facial and vagus	
Answer: B	
Watch Video Solution	
<b>15.</b> Cranial nerves supplying eyes are	

D. Both B and C

D. 3, 4, 6 Answer: D **Watch Video Solution** 16. Which of the following are the two extra cranial nerves found in rabbit A. Hypoglossal and spinal accessory B. Hypoglossal and pneumogastric C. Spinal accessory and glossopharyngeal D. Hypoglossal and glossopharyngeal

A. 3, 4, 5

B. 4, 6, 7

C.4, 5, 6

Answer: A

Watch Video Solution

A. Heart beat
B. Secretion of saliva
C. Secretion of digestive juices
D. All of the above
Answer: A
Watch Video Solution
<b>18.</b> Common neurotransmitter of peripheral nervous system is
A. Colchicine
B. Epinephrine
C. GABA

**17.** Sympathetic nervous system increases

Answer: D
Watch Video Solution
<b>9.</b> Which part of nervous system is activated under stress?
A. Whole autonomous nervous system
B. Parasympathetic nervous system
C. Sympathetic nervous system
D. Spinal cord
Answer: C
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20. A cranial nerve with maximum branches in the body is

D. Acertylcholine

A. Vagus **B.** Auditory C. Facial D. Trigeminal Answer: D **Watch Video Solution** 21. Excessive stimulatio of vagus nerve in human may lead to A. Hoarse voice B. Peptic ulcers C. Efficiet digestion of proteins D. Irregular contraction of diaphragm **Answer: B Watch Video Solution** 

A. Optic
B. Auditory
C. Trigeminal
D. Oculomotor
Answer: C
Watch Video Solution
23. Intercellular communication in multicellular organism occurs through
A. Digestive system
B. Nervous system
C. Both nervous and endocrine systems

22. Cranial nerve called dentist's nerve is

D. Respiratory system only
Answer: C
Watch Video Solution
<b>24.</b> Tongue is under control of
A. Facial nerve
B. Glossopharyngeal nerve
C. Trigeminal nerve
D. Autonomous nervous system
Answer: B
Watch Video Solution

**25.** Choose the type of nervous system and type of muscle supplying visceral organs.

- A. Sympathetic nervous system, voluntary
- B. Sympatheic nervous system, involuntary
- C. Parasympathetic nervous system, involuntary
- D. Both sympathetic and parasympathetic nervous system, involuntary

#### Answer: D



- **26.** In a man, abducens nerve is injured. Which one of the following functions will be affected?
  - A. Movement of eye ball
  - B. Movement of tongue
  - C. Swallowing

D. Movement of neck

#### **Answer: A**



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27. Match the columns and find out the correct combination.

Column II Column II

- $(a) \quad \hbox{Cervical nerves} \qquad (i) \qquad 5 \ \hbox{pairs}$
- (b) Thoracic nerves (ii) 1 pair
- (c) Lumbar nerves (iii) 12 pairs
- (d) Coccygeal nerves (iv) 8 pairs
  - A. a-ii, b-iv, c-i, d-iii
  - B. a-iv, b-iii, c-i, d-ii
  - C. a-i, b-iv, c-ii, d-iii
  - D. a-iv, b-i, c-ii, d-iii

### **Answer: B**

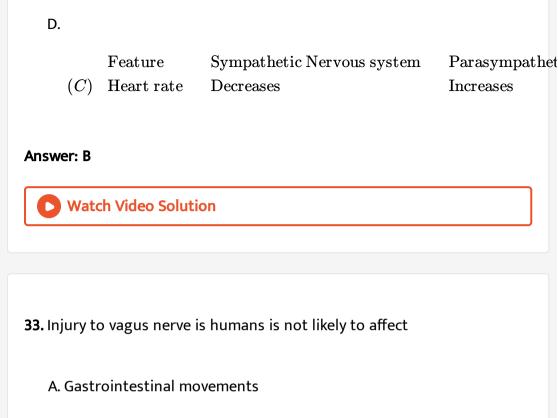


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## Answer: D **Watch Video Solution** 30. Facial nerve arising from medulla is A. Motor **B.** Sensory C. Both A and B D. None of the above **Answer: C Watch Video Solution** 31. Which cranial nerve is present in man but absent in frog? A. Glossopharyngeal

C. Olfactory D. Optic **Answer: B Watch Video Solution** 32. Which one is correctly matched? A. Feature Sympathetic Nervous system Parasymp Stimulates secretion Inhibits se (A)Salivary glands В. Feature Sympathetic Nervous system Parasympathe Constricts Pupil of eye **Dilates** (B)C. Feature Sympathetic Nervous system Parasympathet Decreases Increases (C)Heart rate

B. Hypoglossal



B. Tongue movements

C. Cardiac movements

D. Pancreatic secretion

**Watch Video Solution** 

**Answer: B** 

<b>34.</b> Skeletal muscles are controlled by
A. Somatic nerves
B. Autonomic nerves
C. Parasympathetic nerves
D. Sympathetic nerves
Answer: A
Watch Video Solution
<b>35.</b> The process by which two or more organs interact is called
A. Homeostasis
B. Coordination
C. Accommodation
D. Adaption

### **Answer: B**



**Watch Video Solution** 

## 36. The human neural system is divided into

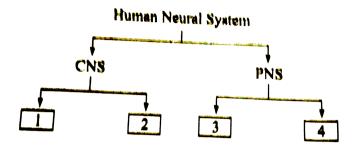
- A. Two parts CNS and PNS
- B. Two parts CNS and ANS
- C. Three parts CNS, PNS and ANS
- D. Three parts Forebrain, midbrain and hindbrain

## Answer: A



**Watch Video Solution** 

37. Recognise the figure and find out the correct matching :



- A. 1 autonomic neural system, 2 somatic neural system, 3 sympathetic neural system 4 parasympathetic neural system
- B. 1 cranial nerves, 2 spinal nerves, 3 autonomic neural system, 4 somatic neural system
- C. 1 brain, 2 spinal cord, 3 somatic neural system, 4 autonomic neural system
- D.1 spinal cord, 2 brain, 3 sympathetic neural system, 4 parasympathetic neural system

### **Answer: C**



**38.** All the nerves of the body associated with the CNS (brain and spinal cord), comprised in

- A. Peripheral neural system
- B. Somatic neural system
- C. Autonomic neural system
- D. Sympathetic neural system

### **Answer: A**



**Watch Video Solution** 

**39.** The …a… nerve fibre transmit impules from tissue/organs to the CNS and the …b… nerve fibres transmit regulatory impules from the CNS to the concerned peripheral tissue/organ.

A. a - afferent, b - efferent

- B. a efferent, b afferent
- C. a sympathetic, b parasympathetic
- D. a parasympathetic, b sympathetic

### Answer: A



**Watch Video Solution** 

- **40.** Read the following statements and find out the incorrect statements.
- a. The CNS is the size of information processing and control.
- b. The somatic neural system relays impules from the CNS to the involuntary organs and smooth muscels of the body.
- c. The autonomic neural system transmits impules from the CNS to skeleton muscles.
- d. The autonomic neural system is further classified into sympathetic and parasympathetic neural system.
  - A. a and b
  - B. b and c

C. c and d
D. a and d
Answer: B
Watch Video Solution
1. How many pairs of cranial nerves in mammals are purely sensory
A. Six
B. Two
C. Three
D. Five
answer: A
Watch Video Solution

<b>42.</b> Afferent nerve fibres carry impulses from
A. Effector organs to CNS
B. Receptor to CNS
C. CNS to receptors
D. CNS to muscles
Answer: B
Watch Video Solution
<b>43.</b> On stimulation, sympathetic nervous system

A. Increases sweat secretion

B. Decreases tear secretion

C. Decreases saliva

D. All of the above

## Answer: D Watch Video Solution 44. In man which one of the following cranial nerve is associated with the sense of the body balance A. IX B. VIII C. VII D. VI **Answer: B** Watch Video Solution 45. Supply of blood is visceral organs is controlled by

B. SNS, voluntary C. PNS, involuntary D. SNS, PNS, involuntary Answer: D **Watch Video Solution** 46. Parasympathetic nervous system is not involved in A. Peristalsis B. Secretion of saliva C. Dilation of pupil D. Excitation of reproductive organs Answer: C **Watch Video Solution** 

A. SNS, involuntary

<b>47.</b> Body coordination is maintained by
A. Circulatory system
B. Nervous system
C Endocrine system

D. Both B and C

### **Answer: D**



**Watch Video Solution** 

48. Eye muscles are innervated by

A. Oculomotor, abducens and vagus

B. Oculomotor, trochlear and abducens

C. Oculomotor, abducens and facial

D. Oculomotor, facial and vagus	
swer: B	
Watch Video Solution	
. Cranial nerves supplying eyes are	
A. 3, 4, 5	
B. 4, 6, 7	
C. 4, 5, 6	
D. 3, 4, 6	





**50.** Which of the following are the two extra cranial nerves found in rabbit

- A. Hypoglossal and spinal accessory
- B. Hypoglossal and pneumogastric
- C. Spinal accessory and glossopharyngeal
- D. Hypoglossal and glossopharyngeal

## **Answer: A**



## **51.** Sympathetic nervous system increases

- A. Heart beat
- B. Secretion of saliva
- C. Secretion of digestive juices
- D. All of the above

# **Watch Video Solution** 52. Common neurotransmitter of peripheral nervous system is A. Colchicine B. Epinephrine C. GABA D. Acertylcholine **Answer: D Watch Video Solution** 53. Which part of nervous system is activated under stress? A. Whole autonomous nervous system

Answer: A

C. Sympathetic nervous system D. Spinal cord **Answer: C Watch Video Solution** 54. A cranial nerve with maximum branches in the body is A. Vagus **B.** Auditory C. Facial D. Trigeminal Answer: D **Watch Video Solution** 

B. Parasympathetic nervous system

<b>55.</b> Excessive stimulatio of vagus nerve in human may lead to
A. Hoarse voice
B. Peptic ulcers
C. Efficiet digestion of proteins
D. Irregular contraction of diaphragm
Answer: B
Watch Video Solution
<b>56.</b> Cranial nerve called dentist's nerve is
A. Optic
B. Auditory
C. Trigeminal
D. Oculomotor

# **Answer: C Watch Video Solution** 57. Intercellular communication in multicellular organism occurs through A. Digestive system B. Nervous system C. Both nervous and endocrine systems D. Respiratory system only

**Answer: C** 

**Watch Video Solution** 

58. Tongue is under control of

A. Facial nerve

- B. Glossopharyngeal nerve
- C. Trigeminal nerve
- D. Autonomous nervous system

### Answer: B



**Watch Video Solution** 

- **59.** Choose the type of nervous system and type of muscle supplying visceral organs.
  - A. Sympathetic nervous system, voluntary
  - B. Sympatheic nervous system, involuntary
  - C. Parasympathetic nervous system, involuntary
  - D. Both sympathetic and parasympathetic nervous system, involuntary

### **Answer: D**



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

A. Movement fo eye ball

B. Movement of tongue

C. Swallowing

D. Movement of neck

#### **Answer: A**



(d)

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61. Match the columns and find out the correct combination.

(iv)

8 pairs

Coccygeal nerves

D. a-iv, b-i, c-ii, d-iii **Answer: B Watch Video Solution** 62. Parasympathetic nerve endings release A. Adrenaline B. GABA C. Acertylcholine D. Noradrenaline **Answer: C Watch Video Solution** 

A. a-ii, b-iv, c-i, d-iii

B. a-iv, b-iii, c-i, d-ii

C. a-i, b-iv, c-ii, d-iii

<b>63.</b> Second cranial nerve supplies
A. Retina and lens
B. Retina and iris
C. Cilitary muscles
D. Retina only
Answer: D
Watch Video Solution
<b>64.</b> Facial nerve arising from medulla is
A. Motor
B. Sensory

C. Both A and B

D. None of the above
Answer: C
Watch Video Solution
65. Which cranial nerve is present in man but absent in frog?
A. Glossopharyngeal
B. Hypoglossal
C. Olfactory
D. Optic
Answer: B
Watch Video Solution
<b>66.</b> Which one is correctly matched ?
, , ,

A.			
( 4)	Feature	Sympathetic Nervous sy	, T
(A)	Salivary glan	ds Stimulates secretion	${ m Inhibits} \ { m sec}$
В.			
	Feature	Sympathetic Nervous system	
(B)	Pupil of eye	Dilates	Constricts
C.			
	Feature	Sympathetic Nervous system	n Parasympathet
(C)	Heart rate	Decreases	Increases
D.			
	Feature	Sympathetic Nervous system	n Parasympathet
(C)	Heart rate	Decreases	Increases
Answer: B			
<b>○</b> Wate	ch Video Soluti	on	



- **67.** Injury to vagus nerve in humans is not likely to affect
  - A. Gastrointestinal movements
  - B. Tongue movements

D. Pancreatic secretion
nswer: B
Watch Video Solution
8. Skeletal muscles are controlled by
A. Somatic nerves
B. Autonomic nerves
C. Parasympathetic nerves
D. Sympathetic nerves
answer: A
Watch Video Solution

C. Cardiac movements

Section A: Topicwise Questions Topic 2: Neuron As Structure And Functional Unit Of Neural System (

1. Which of the following cells can detect, receive and transmit different kinds of stimuli ?

A. Nephron

B. Neuron

C. Neuroglia

D. Macrophage

Answer: B



2. Nissl's granules are not found in

A. Cell body

B. Axon

C. Dendrites
D. Both B and C
Answer: B
Watch Video Solution
3. The axon is a long fibre, the distal end of which is branched. Each
branch terminates as a bulb-like structure called the
A. Dendrites
B. Node of Ranvier
C. Myelin sheath
D. Synaptic knob
Answer: D
Watch Video Solution

- **4.** Read the following statements and find out the incorrect statement.
  - A. Dendrites transmit impules away from the cell body to a synapse or NMI.
  - B. Synaptic knob possess synaptic vesicles containing chemicals called neurotransmitters.
  - C. Based on the number of axon and dendrites, the neurons are divided into three types, i.e. unipoler, bipolar and multipolar.
  - D. In Hydra, the neural system is composed of a network of neurons.

### **Answer: A**



**Watch Video Solution** 

**5.** Match the columns I and II, and choose the correct combination from the options given.

Cerebral cortex Unipolar neuron 1. a. b. Bipolar neuron 2. Embryonic stage Multipolar neuron 3. Retina of eye c. A. a -1, b-2, c-3 B. a-3, b-1, c-2 C. a-2, b-3, c-1 D. a-2, b-1, c-3 **Answer: C Watch Video Solution** 6. Match the columns I and II, and choose the correct combination from the options given. ltBrgt Column I Column II Unipolar neuron One axon and one dendrite a.1.

Column II

A. a -1, b-2, c-3

Bipolar neuron

Multipolar neuron

2.

3.

Cell body with one axon

One axon and two or more dendrites

b.

c.

Column I

- B. a-3, b-1, c-2
- C. a-2, b-3, c-1
- D. a-2, b-1, c-3

### Answer: D



**Watch Video Solution** 

- 7. Schwan cells are found in
  - A. Myelinated nerve fibres
  - B. Unmyelinated nerve fibres
  - C. Both A and B
  - D. None of the above

# **Answer: C**



**8.** Match the columns I and II, and choose the correct combination from the options given.

Column I

- a. Myelinated nerve fibre
- b. Unmyelinated nerve fibre

Column II

- 1 Somatic neural system
- 2. Autonomic neural system
- 3. Cranial nerves
- 4. Spinal nerves

A. a-1, 2, b-3, 4

B. a-3, 4, b-1, 2

C. a-1, 3, b-2, 4

D. a-2, 4, b-1, 3

**Answer: B** 



**Watch Video Solution** 

9. The gaps between the two adjacent myelin sheaths are called

A. Node of Raunkier

B. Synaptic knob

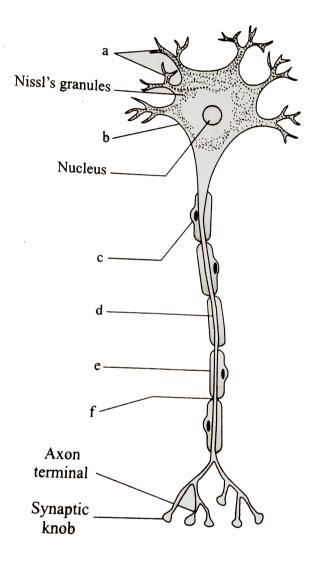
C. Synaptic cleft

D. Node of Ranvier

# **Answer: D**



# 10. Recognise the figure and find out the correct matching.



A. a-axon, b-cell body, c-myelin sheath, d-dendrites, e-node of Ranvier, f-

Schwan cell

B. a-dendrites, b-axon, c-Schwan cell, d-cell body, e-myelin sheath, f-

node of Ranvier

C. a-dendrites, b-cell body, c-Schwan cell, d-axon, e-myelin sheath, f-

Node of Ranvier

D. a-synaptic knobs, b-cell body, c-myelin sheath, d-axon, e-Schwan cell,

f-Node of Ranvier

#### **Answer: C**



**Watch Video Solution** 

11. In resting condition, the concentration gradient is maintained by

A. Sodium-potassium pump

B. Active transport of ions

C. Utilisation of ATP energy

D. All of the above

### Answer: D



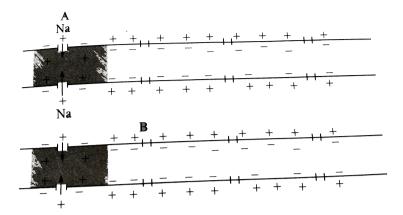
**Watch Video Solution** 

- **12.** The electrical potential difference across the resting plasma membrane is called as the
  - A. Resting potential
  - B. Action potential
  - C. Nerve impulse
  - D. Both B and C

# Answer: A



# 13. During nerve impulse conduction, current flows



- A. From site A to site B on the inner surface
- B. From site B to site A on the outer surface
- C. In anticlockwise manner
- D. All of the above

# **Answer: D**



14. Fill in the blanks.

- A nerve impules is …a… from one neuron to another through junctions called …b….
- â∈¹¡câ∈¹¡ of an impulse across electrical synapses is very similar to impulse â∈¹¡dâ∈¹¡ along a single axon.

A. a-conducted, b-NMJ, c-conduction, d-transmission

 $\hbox{\bf B. a-transmitted, b-NMJ, c-transmission, d-conduction.}\\$ 

 $\hbox{C. a-conducted, b-synapses, c-conduction, d-transmission}\\$ 

D. a-transmitted, b-synapses, c-transmission, d-conduction

### **Answer: D**



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15. Synapses are of

A. Two types-pre synaptic and post synaptic

- B. Two types-electrical and chemical
- C. Three types-electrical, chemical and mechanical
- D. Two types chemical and mechanical

#### Answer: B



- **16.** Read the following statements and find out the incorrect statements.
- a. A synapse is formed by the membranes of a pre-synaptic neuron and a post-synaptic neuron, which may or may not be separated by a gap called synaptic cleft.
- b. At electrical synapses, the membranes of pre-and post-synaptic neurons are in very close proximity.
- c. Electrical current can flow directly from one neuron into the other across chemical synapses.
- d. Impulse trasmission across a chemical synapse is always faster than

that across a electric synapse.
e. Electrical synapses are rare in our system.
A. a and b
B. b and c
C. c and d
D. d and e
Answer: C
Watch Video Solution
<b>17.</b> During transmission of nerve impulse, the released neurotransmitter bind to their specific receptors, present on the
A. Pre-synaptic membrane
B. Post-synaptic membrane
C. Both A and B

D. Synaptic vesicl	les
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#### **Answer: B**



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**18.** The binding of the neurotransmitter with the receptors opens ion channels allowing the entry to ions which can generate a new potential in the

- A. Pre-synaptic membrane
- B. Post-synaptic membrane
- C. Synaptic cleft
- D. Synaptic vesicles

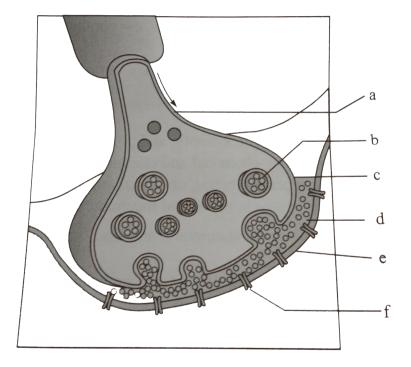
### **Answer: B**



19. The new potential developed in the post-synaptic neuron is
A. Excitatory
B. Inhibitory
C. Either excitatory or inhibitory
D. Neither excitatory nor inhibitory
Answer: C
Watch Video Solution
<b>20.</b> The change on the outer side of neuron is
A. Positive
B. Negative
C. Zero
D. Alternate negative and positive



21. Recognise the figure and find out the correct matching.



A. a-axon,b-synaptic cleft, c-pre synaptic membrane, d-synaptic vesicle, e-receptor, f-post synaptic membrane

B. a-axon terminal, b-synaptic vesicles, c-presynaptic membrane, f-

neurotransmitters

C. a-synaptic vesicles, b-axon terminal, c-post synaptic membrane, dneurotransmitter, e-pre synaptic membrane, f-receptor

D. a-axon terminal, b-synaptic vesicles, c-pre synaptic membrane, d-synaptic cleft, e-post synaptic membrane, f-receptors

#### **Answer: D**



22. Release of cheminal messenge from synaptic vesicles is triggered by

A.  $Mq^{2+}$  ,  $Sr^{2+}$ 

 $\mathsf{B.}\, Fe,\, S$ 

 $\mathsf{C}.\,Cl$ 

D.  $Ca^{2\,+}$ 

# Answer: D



**23.** The potential difference between outside and inside of a nerve before excitation is known as

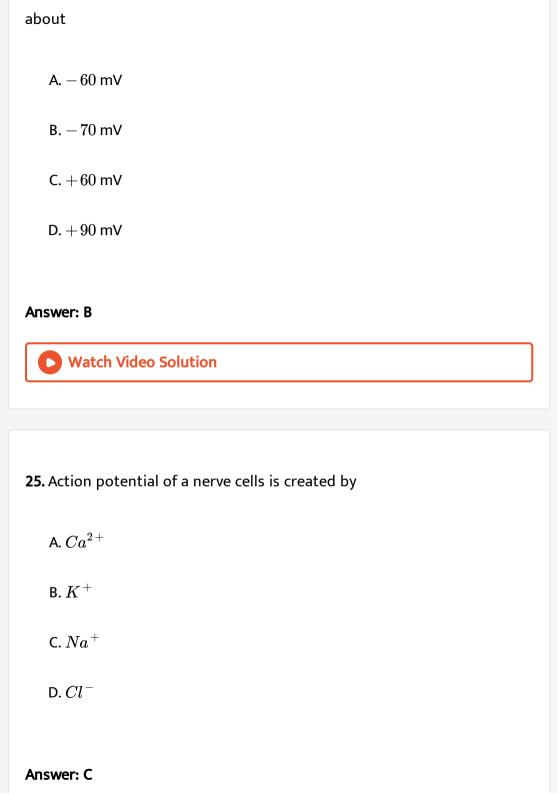
- A. Reaction potential
- B. Action potential
- C. Spike potential
- D. Resting potential

#### Answer: D



**Watch Video Solution** 

**24.** The potential difference across the membrane of nerve fibre when it does not show any physiological activity is called resting potential. It is



**26.** During development of action potential in a nerve fibre, positive and negative charges on outer and inner side of axon membrane are reversed due to

A. Excretion of all  $K^{\,+}$  ions

B. More  $K^{\,+}$  ions enter than  $Na^{\,+}$  ions leave the axon

C. More  $Na^{\,+}$  ions enter the axon than  $K^{\,+}$  ions have leave the same

D. All  $Na^{\,+}\,$  ions enter the axon

**Answer: C** 



**Watch Video Solution** 

27. Joint between axon of a neuron and dendrite of next neuron is called

A. Synapse

- B. Synapsis
- C. Junction
  - D. Bridge

# Answer: A



**Watch Video Solution** 

- - A. Regulate  $Na^+$  /  $K^+$  pump
  - B. Increase in size of action potential
  - C. Increase in speed of conduction by preventing leakage of nerve

28. Primary function of myelin sheath around vertebrate axon is to

- impulse
- D. Deactivate the release of neurotransmitter

# Answer: C



29. Unidirectional transmission of nerve impulse is maintained by
A. Synapses
B. Myelin sheath
C. Membrane polarity
D. Interneurons
Answer: A
Watch Video Solution
<b>30.</b> Synaptic vesicle is found in
A. Presynaptic neuron
B. Post-synaptic neuron
C. Synaptic cleft

D. None of the above
Answer: A
Watch Video Solution
31. Node of Ranvier occurs over
A. Muscle
B. Dendrite
b. Defidite
C. Right auricle
D. Axon
Answer: D
Allower. D
Watch Video Solution
32. Depolarisation of nerve cell involves

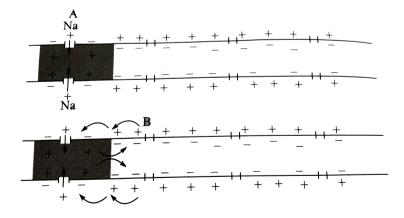
- A. Influx of  $K^{\,+}$
- B. Influx of  $Na^+$
- C. Influx of  $Ca^{2+}$  and  $Cl^{-}$
- D. Effux of  $Na^{2+}$

#### **Answer: B**



**Watch Video Solution** 

# 33. In the given figure, site A and site B represents



A. Site A-polarised state, site B -depolarised state

- B. Site A depolarised state, site B polarised state
- C. Site A polarised state, site B repolarised state
- D. Site A repolarised state site, B depolarised state

#### **Answer: B**

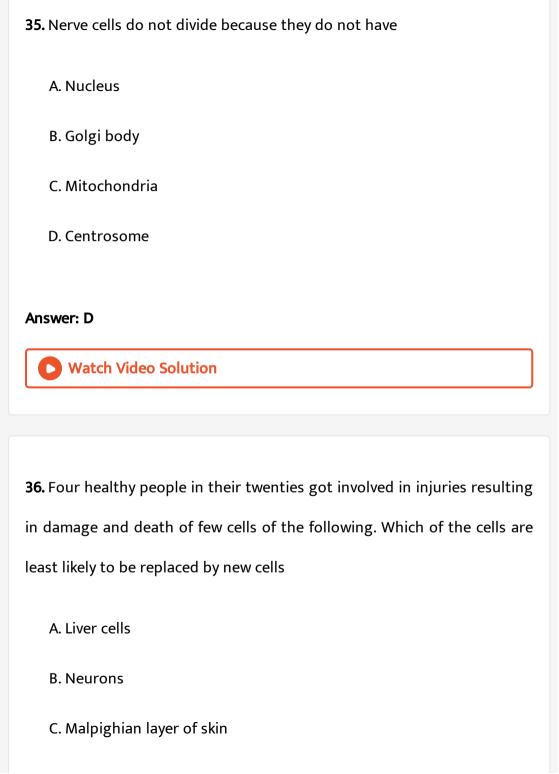


**Watch Video Solution** 

- 34. Node of Ranvier occurs where
  - A. Nerve is covered with myelin sheath
  - B. Neurilemma is discontinuous
  - C. Neurilemma and myelin sheath are discontinuous
  - D. Myelin seath is discontinuous

# Answer: D





D. Osteocytes
answer: B
Watch Video Solution
7. Movement of nerve impulse across synaptic cleft is primarily
A. Physical event
B. Electrical event
C. Chemical event
D. Biological event
Answer: C
Watch Video Solution

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

B. Epinephrine C. Cortisone/Tyrosine D. Norepinephrine Answer: C **Watch Video Solution 39.** Transmission of nerve impulse is unidirectional due to A. Insulation of nerve fibre by medullary sheath B. Neurotransmitter released only at axon ending C. Neurotransmitter released only at dendrite ends D. Sodium pump starts from cyton and proceeds axon end Answer: B

A. Acetylcholine

<b>40.</b> The nature of nerve impules is
A. Physical
B. Chemical
C. Electrochemical
D. Biophysical
Answer: C  Watch Video Solution
41. Nerve impulse travels as
A. Mechanical impulse
B. Chemical impulse
C. Electrical impulse

D. Magnetic impulse
Answer: C
Watch Video Solution
<b>42.</b> A polarised neurons is the one that is
A. Conducting stimulus
B. At resting potential
C. Having action potential
D. None of the above
Answer: B
Watch Video Solution
<b>43.</b> During conduction of nerve impulse

A.  $Na^+$  moves out of axoplasm

B.  $Na^+$  moves into axoplasm

C.  $K^+$  moves into axoplasm

D.  $Ca^{2+}$  moves into axoplasm

## **Answer: B**



**Watch Video Solution** 

- 44. Energy transformation during nerve conduction is
  - A. Chemical of radiant
  - B. Chemical to mechanical
  - C. Chemical to electrical
  - D. Chemical to osmotic

# Answer: C



- **45.** Which is incorrect about  $Na^+$  ?
  - A. Conducts impulse along nerve
  - B. Transmits impulse across synapse
  - C. Is reabsorbed in kidney with the help of aldosterone
  - D. Transports some sustances across membrane

#### **Answer: B**



- **46.** Nerve axon takes part in
  - A. Receiving impulse
  - B. Transformation of energy
  - C. Conduction of impulse

D. Providing energy for impulse transmission

### **Answer: C**



**Watch Video Solution** 

- 47. At resting stage nerve cell has
  - A. Low  $K^{\,+}\,$  outside and high  $Na^{\,+}\,$  inside
  - B. High  $K^{\,+}\,$  inside and high  $Na^{\,+}\,$  outside
  - C. High  $K^{\,+}\,$  inside and low  $Na^{\,+}\,$  outside
  - D. High  $K^{\,+}$  outside and low  $Na^{\,+}$  inside

## **Answer: B**



**Watch Video Solution** 

**48.** Action potential of a nerve cell is

- $A.-60~\mathrm{mv}$ 
  - B.-80 mv
  - C. + 20 my
  - $D. + 60 \, mv$

## **Answer: C**



**Watch Video Solution** 

- **49.** During recovery, a nerve fibre becomes
  - A. + vely charged on outside and vely charged on inside
  - B. + vely charged on both outside and inside
  - C. vely charged on outside and + vely charged on inside
  - D. vely charged on both outside and inside

## Answer: A



**50.** The jumping of action potential form node to node (of Ranvier) in a fibre is called

A. Nodal conduction

B. Saltatory conduction

C. Saltatory stimulus

D. Mechanical conduction

### **Answer: B**



**Watch Video Solution** 

51. In an axon, nerve impulse travels

A. Away from cell body

B. Towards cyton

C. Both away and towards cyton

D.	Not	known

Answer: A



**Watch Video Solution** 

**52.** Which of the following cells can detect, receive and transmit different kinds of stimuli?

- A. Nephron
- B. Neuron
- C. Neuroglia
- D. Macrophage

Answer: B



53. Nissl's granules are not found in A. Cell body B. Axon C. Dendrites D. Both B and C **Answer: B Watch Video Solution** 54. The axon is a long fibre, the distal end of which is branched. Each branch terminates as a bulb-like structure called the A. Dendrites B. Node of Ranvier C. Myelin sheath D. Synaptic knob

### **Answer: D**



**Watch Video Solution** 

- **55.** Read the following statements and find out the incorrect statement.
  - A. Dendrites transmit impules away from the cell body to a synapse or NMJ.
  - B. Synaptic knob possess synaptic vesicles containing chemicals called neurotransmitters.
  - C. Based on the number of axon and dendrites, the neurons are divided into three types, i.e. unipoler, bipolar and multipolar.
  - D. In Hydra, the neural system is composed of a network of neurons.

## **Answer: A**



56. Match the columns I and II, and choose the correct combination from the options given. Column I Column II Unipolar neuron Cerebral cortex 1. a. Bipolar neuron 2. Embryonic stage h. 3. Multipolar neuron Retina of eve c. A. a -1, b-2, c-3 B. a-3, b-1, c-2 C. a-2, b-3, c-1 D. a-2, b-1, c-3 Answer: C



#### 57. Match the columns I and II, and choose the correct combination from the options given. **ItBrgt** Column I Column II Unipolar neuron One axon and one dendrite 1. a.

- b. Bipolar neuron 2. Cell body with one axon c.
  - Multipolar neuron 3. One axon and two or more dendrites

C. a-2, b-3, c-1 D. a-2, b-1, c-3 **Answer: D Watch Video Solution** 58. Schwan cells are found in A. Myelinated nerve fibres B. Unmyelinated nerve fibres C. Both A and B D. None of the above **Answer: C Watch Video Solution** 

A. a -1, b-2, c-3

B. a-3, b-1, c-2

**59.** Match the columns I and II, and choose the correct combination from the options given.

Column I

- a. Myelinated nerve fibre
- b. Unmyelinated nerve fibre

Column II

- 1 Somatic neural system
- 2. Autonomic neural system
- 3. Cranial nerves
- 4. Spinal nerves

A. a-1, 2, b-3, 4

B. a-3, 4, b-1, 2

C. a-1, 3, b-2, 4

D. a-2, 4, b-1, 3

## Answer: B



**Watch Video Solution** 

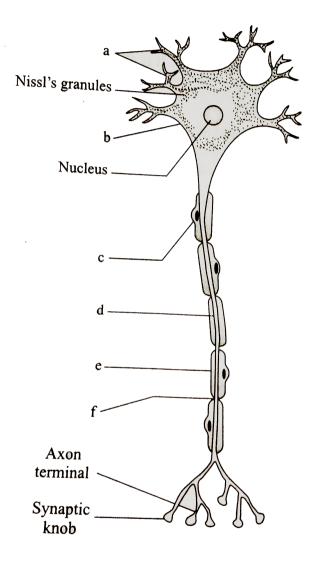
**60.** The gaps between the two adjacent myelin sheaths are called

- A. Node of Raunkier
- B. Synaptic knob
- C. Synaptic cleft
- D. Node of Ranvier

## **Answer: D**



# **61.** Recognise the figure and find out the correct matching.



A. a-axon, b-cell body, c-myelin sheath, d-dendrites, e-node of Ranvier, f-

Schwan cell

B. a-dendrites, b-axon, c-Schwan cell, d-cell body, e-myelin sheath, f-

node of Ranvier

C. a-dendrites, b-cell body, c-Schwan cell, d-axon, e-myelin sheath, f-

Node of Ranvier

D. a-synaptic knobs, b-cell body, c-myelin sheath, d-axon, e-Schwan cell,

f-Node of Ranvier

## **Answer: C**



62. In resting condition, the concentration gradient is maintained by

A. Sodium-potassium pump

B. Active transport of ions

C. Utilisation of ATP energy

D. All of the above

## Answer: D



**Watch Video Solution** 

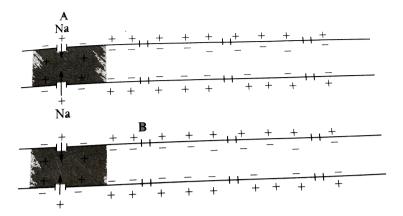
**63.** The electrical potential difference across the resting plasma membrane is called as the

- A. Resting potential
- B. Action potential
- C. Nerve impulse
- D. Both B and C

## **Answer: A**



# 64. During nerve impulse conduction, current flows



- A. From site A to site B on the inner surface
- B. From site B to site A on the outer surface
- C. In anticlockwise manner
- D. All of the above

## **Answer: D**



65. Fill in the blanks.

- 1. A nerve impulses is (a.)...... from one neuron to another through junctions called (b.) .......
- 2. (c.).....of an impulse across electrical synapses is very similar to impulse(d.) .....along a single axon.

A. a-conducted, b-NMJ, c-conduction, d-transmission

 $\hbox{\bf B. a-transmitted, b-NMJ, c-transmission, d-conduction.}\\$ 

 $\hbox{C. a-conducted, b-synapses, c-conduction, d-transmission}\\$ 

D. a-transmitted, b-synapses, c-transmission, d-conduction

## **Answer: D**



**Watch Video Solution** 

66. Synapses are of

A. Two types-pre synaptic and post synaptic

- B. Two types-electricla and chemical
- C. Three types-electrical, chemical and mechanical
- D. Two types chemical and mechanical

#### Answer: B



- **67.** Read the following statements and find out the incorrect statements.
- a. A synapse is formed by the membranes of a pre-synaptic neuron and a post-synaptic neuron, which may or may not be separated by a gap called synaptic cleft.
- b. At electrical synapses, the membranes of pre-and post-synaptic neurons are in very close proximity.
- c. Electrical current can flow directly from one neuron into the other across chemical synapses.
- d. Impulse trasmission across a chemical synapse is always faster than

that across a electric synapse.
e. Electrical synapses are rare in our system.
A. a and b
B. b and c
C. c and d
D. d and e
Answer: C
Watch Video Solution
<b>68.</b> During transmission of nerve impulse, the released neurotransmitter bind to their specific receptors, present on the
A. Pre-synaptic membrane
B. Post-synaptic membrane
C. Both A and B
C. Both A and B

s

### **Answer: B**



**Watch Video Solution** 

**69.** The binding of the neurotransmitter with the receptors opens ion channels allowing the entry to ions which can generate a new potential in the

- A. Pre-synaptic membrane
- B. Post-synaptic membrane
- C. Synaptic cleft
- D. Synaptic vesicles

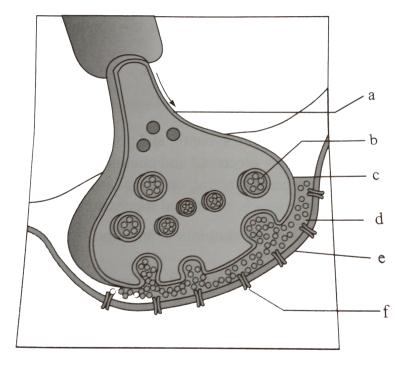
## **Answer: B**



70. The new potential developed in the post-synaptic neuron is
A. Excitatory
B. Inhibitory
C. Either excitatory or inhibitory
D. Neither exciatory nor inhibitory
Answer: C
Watch Video Solution
<b>71.</b> The charge on the outer side of neuron is
A. Positive
B. Negative
C. Zero
D. Alternate negative and positive



**72.** Recognise the figure and find out the correct matching.



A. a-axon,b-synaptic cleft, c-pre synaptic membrane, d-synaptic vesicle, e-receptor, f-post synaptic membrane

B. a-axon terminal, b-synaptic vesicles, c-presynaptic membrane, f-

neurotransmitters

C. a-synaptic vesicles, b-axon terminal, c-post synaptic membrane, dneurotransmitter, e-pre synaptic membrane, f-receptor

D. a-axon terminal, b-synaptic vesicles, c-pre synaptic membrane, d-synaptic cleft, e-post synaptic membrane, f-receptors

#### **Answer: D**



73. Release of cheminal messenge from synaptic vesicles is triggered by

A.  $Mq^{2+}$  ,  $Sr^{2+}$ 

 $\mathsf{B.}\, Fe,\, S$ 

 $\mathsf{C}.\,Cl$ 

D.  $Ca^{2\,+}$ 

# Answer: D



**74.** The potential difference between outside and inside of a nerve before excitation is known as

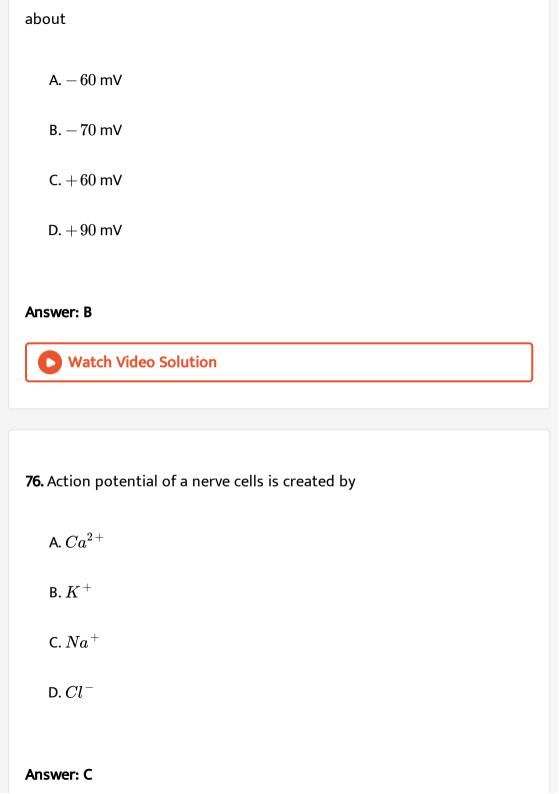
- A. Reaction potential
- B. Action potential
- C. Spike potential
- D. Resting potential

## Answer: D



**Watch Video Solution** 

**75.** The potential difference across the membrane of nerve fibre when it does not show any physiological activity is called resting potential. It is



77. During development of action potential in a nerve fibre, positive and negative charges on outer and inner side of axon membrane are reversed due to

A. Excretion of all  $K^{\,+}$  ions

B. More  $K^{\,+}$  ions enter than  $Na^{\,+}$  ions leave the axon

C. More  $Na^{\,+}$  ions enter the axon than  $K^{\,+}$  ions have leave the same

D. All  $Na^{\,+}\,$  ions enter the axon

**Answer: C** 



**Watch Video Solution** 

78. Joint between axon of a neuron and dendrite of next is called

A. Synapse

- **B.** Synapsis
- C. Junction
  - D. Bridge

## Answer: A



**Watch Video Solution** 

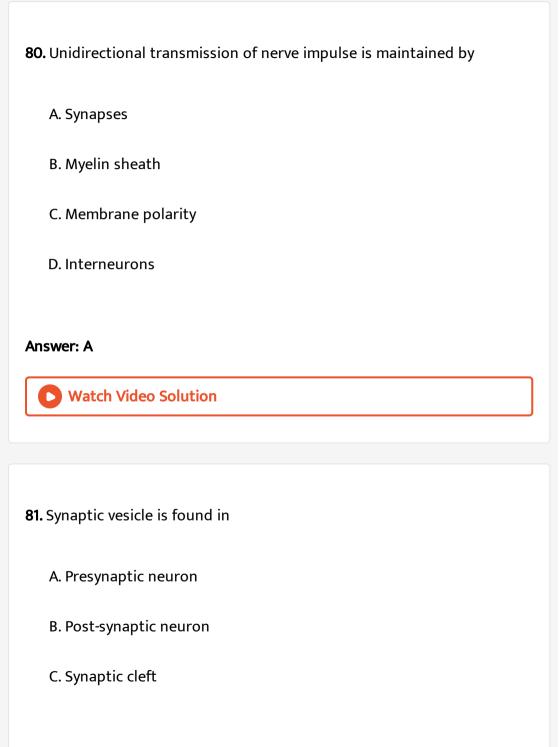
- - A. Regulate  $Na^+$  /  $K^+$  pump
  - B. Increase in size of action potential
  - C. Increase in speed of conduction by preventing leakage of nerve

79. Primary function of myelin sheath around vertebrate axon is to

- impulse
- D. Deactivate the release of neurotransmitter

## Answer: C





D. None of the above
Answer: A
Watch Video Solution
82. Node of Ranvier occurs over
A. Muscle
B. Dendrite
C. Right auricle
D. Axon
Answer: D
Watch Video Solution
83. Depolarisation of nerve cell involves

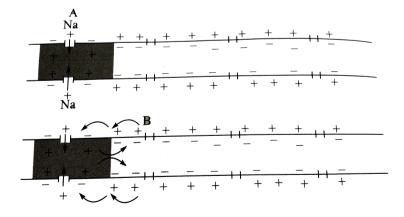
- A. Influx of  $K^{\,+}$
- B. Influx of Na(+)
- C. Influx of  $Ca^{2+}$  and  $Cl^{-}$
- D. Effux of  $Na^{2+}$

#### **Answer: B**



**Watch Video Solution** 

# 84. In the given figure, site A and site B represents



A. Site A-polarised state, site B -depolarised state

- B. Site A depolarised state, site B polarised state
- C. Site A polarised state, site B repolarised state
- D. Site A repolarised state site, B depolarised state

#### **Answer: B**

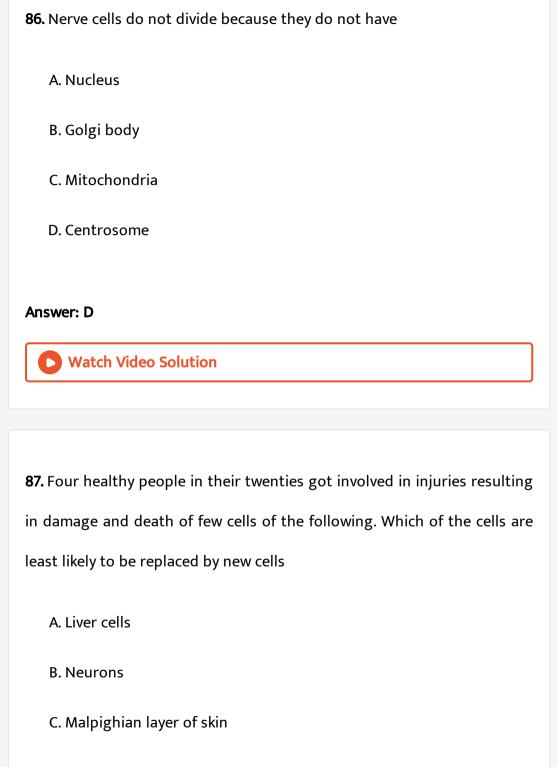


**Watch Video Solution** 

- 85. Node of Ranvier occurs where
  - A. Nerve is covered with myelin sheath
  - B. Neurilemma is discontinuous
  - C. Neurilemma and myelin sheath are discontinuous
  - D. Myelin seath is discontinuous

## Answer: D





, and the second
nswer: B
Watch Video Solution
8. Movement of nerve impulse across synaptic cleft is primarily
A. Physical event
B. Electrical event
C. Chemical event
D. Biological event
nswer: C
Watch Video Solution

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

D. Osteocytes

B. Epinephrine C. Cortisone/Tyrosine D. Norepinephrine **Answer: C Watch Video Solution** 90. Transmission of nerve impulse is unidirectional due to A. Insulation of nerve fibre by medullary sheath B. Neurotransmitter released only at axon ending C. Neurotransmitter released only at dendrite ends D. Sodium pump starts from cyton and proceeds axon end Answer: B **Watch Video Solution** 

A. Acetylcholine

91. The nature of nerve impules is
A. Physical
B. Chemical
C. Electrochemical
D. Biophysical
Answer: C  Watch Video Solution
92. Nerve impulse travels as
A. Mechanical impulse
B. Chemical impulse
C. Electrical impulse

D. Magnetic impulse
Answer: C
Watch Video Solution
93. A polarised neurons is the one that is
A. Conducting stimulus
B. At resting potential
C. Having action potential
D. None of the above
Answer: B
Watch Video Solution
<b>94.</b> During conduction of nerve impulse

A.  $Na^+$  moves out of axoplasm

B.  $Na^+$  moves into axoplasm

C.  $K^+$  moves into axoplasm

D.  $Ca^{2+}$  moves into axoplasm

#### **Answer: B**



**Watch Video Solution** 

- 95. Energy transformation during nerve conduction is
  - A. Chemical of radiant
  - B. Chemical to mechanical
  - C. Chemical to electrical
  - D. Chemical to osmotic

## Answer: C



- **96.** Which is incorrect about  $Na^+\,$  ?
  - A. Conducts impulse along nerve
  - B. Transmits impulse across synapse
  - C. Is reabsorbed in kidney with the help of aldosterone
  - D. Transports some sustances across membrane

#### **Answer: B**



- 97. Nerve axon takes part in
  - A. Receiving impulse
  - B. Transformation of energy
  - C. Conduction of impulse

D. Providing energy for impulse transmission

#### **Answer: C**



**Watch Video Solution** 

- **98.** At resting stage nerve cell has
  - A. Low  $K^{\,+}\,$  outside and high  $Na^{\,+}\,$  inside
  - B. High  $K^{\,+}\,$  inside and high  $Na^{\,+}\,$  outside
  - C. High  $K^{\,+}\,$  inside and low  $Na^{\,+}\,$  outside
  - D. High  $K^{\,+}$  outside and low  $Na^{\,+}$  inside

#### **Answer: B**



**Watch Video Solution** 

99. Action potential of a nerve cell is

- $A.-60~\mathrm{mv}$
- B.-80 mv
- $\mathsf{C.} + 20 \, \mathsf{mv}$
- $D. + 60 \, mv$

#### **Answer: C**

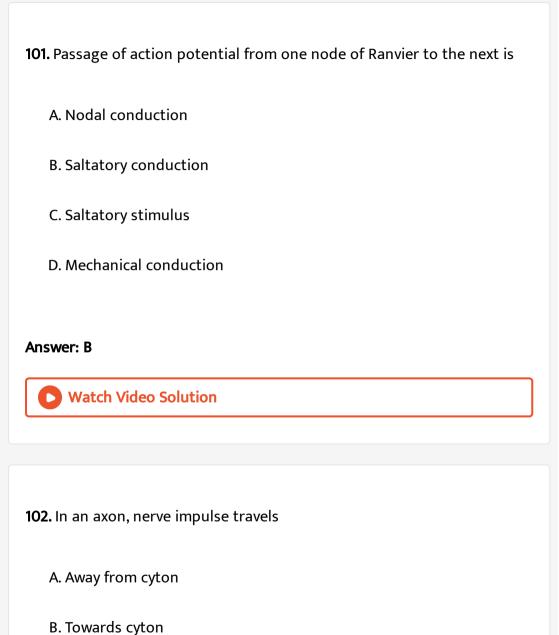


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- **100.** During recovery, a nerve fibre becomes
  - A. + vely charged on outside and vely charged on inside
  - B. + vely charged on both outside and inside
  - C. vely charged on outside and + vely charged on inside
  - D. vely charged on both outside and inside

# Answer: A





C. Both away and towards cyton

D. Not known
Answer: A
Watch Video Solution
Section A : Topicwise Questions Topic 3 : Central Neural System (forebrain , Midbrain And Hindbrain)
1. Which acts as the command and control system of of body?
A. Brain
B. Spinal cord
C. Hipothalamus
D. Pituitary gland
Answer: A
Watch Video Solution

- 2. The brain can be divided into
  - A. Three major parts cerebrum, thalamus and hypothalamus
  - B. Three major parts piamater, arachnoid and duramater
  - C. Three major parts pons, cerebellum and medulla
  - D. Three major parts forebrain, midbrain and hindbrain

#### **Answer: D**



- 3. The forebrain consists of
  - A. Cerebellum, thalamus and hypothalamus
  - B. Pons, cerebrum and medulla
  - C. Amygdala, hippocampus and brain stem
  - D. Thalamus, hypothalamus and cerebrum

# Answer: D



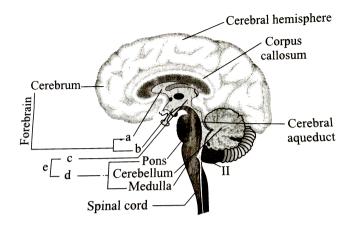
4. Major part of human brain is formed by

- A. Cerebrum
- B. Cerebellum
- C. Corpora quadrigemina
- D. Medulla oblongata

## Answer: A



# 5. Recognise the figure and find out the correct matching



- A. d brain stem, e hindbrain, b thalamus, c hypothalmus, a midbrain
- B. e brain stem, d hindbrain, a- thalamus, b hypothalmus, c midbrain
- C. e brain stem, d hindbrain, b thalamus, a- hypothalmus, c midbrain
- D. e brain stem, c- hindbrain, a thalamus, b hypothalmus, d midbrain

# **Answer: B** Watch Video Solution 6. The cerebal cortex contains A. Sensory areas B. Motor areas C. Association areas D. All of the above **Answer: D** Watch Video Solution 7. Association areas as A. Sensory in function

- B. Motor in function

  C. Neither clearly sensory nor motor in function

  D. Neurosecretory in function

  Answer: C

  Watch Video Solution
- **8.** Which part of the brain is a major coordinating centre for sensory and motor signaling ?
  - A. Associating area
  - B. Thalamus
  - C. Hypothalamus
  - D. Limbic system

# Answer: B



- 9. Association areas are responsible for complied functions like A. Memory B. Communication C. Intersensory association D. All of the above Answer: D **Watch Video Solution** 10. Hormones are secreted by
  - B. Neurosensory cells of the thalamus

A. Neurosecretory cells of the thalamus

- C. Neurosecretory cells of the hypothalamus
- D. Neurosecretory cells of the hippocampus

#### Answer: C

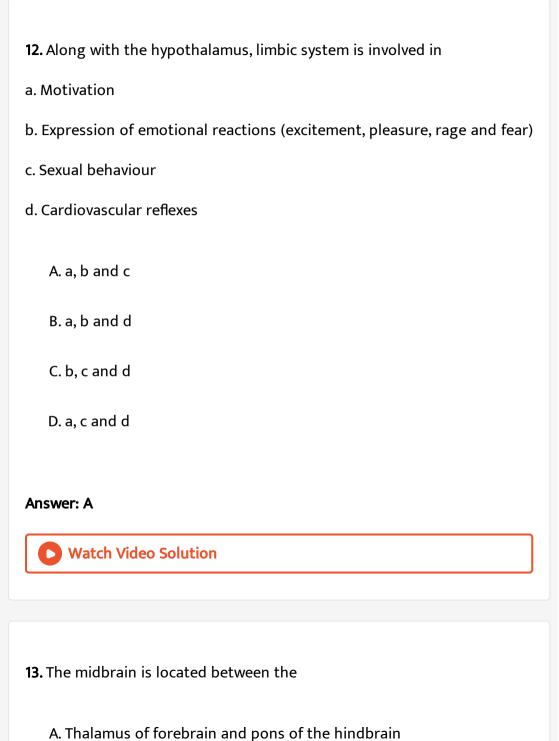


**Watch Video Solution** 

- 11. Limbic system or limbic lobe is formed by
- a. Hippocampus
- b. Amygdala
- c. Hypothalamus
- d. Outer parts of cerebral hemispheres ltBrgt e. Inner parts of cerebral
- hemispheres
  - A. a, b and c
  - B. a, b and d
  - C. a, b and e
  - D. a, b, c and e

#### **Answer: C**





- B. Hypothalamus of forebrain and pons of the hindbrain
- C. Thalamus and hypothalamus
- D. Both A and B

#### Answer: D



- 14. Read the following statements and find out the incorrect statements.
- a. The ventral portion of the midbrain consists mainly of four round swellings (lobes) called corpora quadrigemmina.
- b. Midbrain and hindbrain form the brain stem.
- c. Cerebellum consists of fibre tracts that interconnect different regions
- of brain.
- $\mbox{\it d.}$  The midbrain receives and integrates visual, lactile and auditory inputs.
- e. Limbic system is concerned with olfaction and autonomic responses.
  - A. a, c and d
  - B. b and e

D. a, c, d and e
Answer: C
Watch Video Solution
<b>5.</b> Cerebral cortex consists of
A. Grey matter
B. White matter
C. Duramatter
D. Arachnoid matter
Answer: A
Watch Video Solution

C. a and c

A. Third and fourth ventricles
B. Two lateral ventricles
C. Lateral ventricles and third ventricles
D. Rhinocoel and lateral ventricles
Answer: A
Watch Video Solution
17. Cavity present in the spinal cord is termed as
A. Central canal
B. Fourth ventricle
C. Volkmann's canal
C. VOIKMann's canal
D. Neural canal

**16.** Iter or cerebral aquiduct or aquiduct of sylvius

# Answer: A Watch Video Solution 18. Unique about humans is A. Free hand B. Tool use C. Articulated speech D. Social set up **Answer: C** Watch Video Solution 19. Fourth ventricle of brain occurs in A. Olfactory lobe

- B. Medulla oblongata

  C. Cerebral hemisphere

  D. Diencephalon

  Answer: B

  Watch Video Solution
- 20. CNS is mostly made of
  - A. Motor neurons and sensory neurons
  - B. Sensory neurons and association neurons
  - C. Association neurons
  - D. Motor neurons and association neurons

# **Answer: C**



21. In cerebrum, auditory area occurs in
A. Frontal lobe
B. Parietal lobe
C. Temporal lobe
D. Occipital lobe.
Answer: C
Watch Video Solution
22. Coordination of hand-eye or voluntary muscle activity is connected
22. Coordination of hand-eye or voluntary muscle activity is connected with
with
with  A. Cerebrum

# Answer: B **Watch Video Solution** 23. Brain venticles are lined by A. Neurons B. Schwan cells C. Neuroglia D. Ependymal cells **Answer: D Watch Video Solution** 24. Respiration heart beat and peristalsis are controlled by A. Medulla oblongata

- B. Medulla oblongata and cerebrumC. Medulla oblongata and cerebellum
- D. Cerebellum

#### Answer: A



**Watch Video Solution** 

# 25. Hearing is controlled by

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

# **Answer: C**



<b>26.</b> Third ventricle of rabbit's brain is called
A. Metacoel
B. Rhincoel
C. Paracoel
D. Diocoel
Answer: D
Watch Video Solution
27. Memory centre is present in
A. Cerebellum
B. Parietal lobe
C. Temporal lobe
D. Occipital lobe

# **Watch Video Solution** 28. Which one occurs in mesencephalon/midbrain? A. Cerebellum B. Inferior colliculus C. Thalamus D. Mammillary body **Answer: B Watch Video Solution** 29. Structure connected h vision is human is A. Corpus callosum

**Answer: C** 

- B. Corpora quadrigemina

  C. Corpus albicans

  D. Hippocampus

  Answer: B

  Watch Video Solution
- **30.** Broca's area is connected with
  - A. Sensation of smell
  - B. Learning and reasoning
  - C. Speech
  - D. Receiving impulse from eye

# **Answer: C**



31. The medulla oblongata encloses the
A. Fourth ventricle
B. Third ventricle
C. Second ventricle
D. Optic lobes
Answer: A
Watch Video Solution
32. Ventricles connecting medulla oblongata with spinal cord is
32. Ventricles connecting medulla oblongata with spinal cord is  A. Fourth
A. Fourth
A. Fourth B. Fifth

# Answer: A **Watch Video Solution**

- 33. Broco's area in human brain controls
  - A. Breathing
  - B. Movement of vocal cords
  - C. Movement of tongue
  - D. Both B and C

## **Answer: B**



Watch Video Solution

**34.** Arbor vitae is

A. Tree-like structure in cerebrum

- B. Tree of life in cerebellum

  C. End part of spinal cord

  D. Branched dendrites of a neuron

  Answer: B

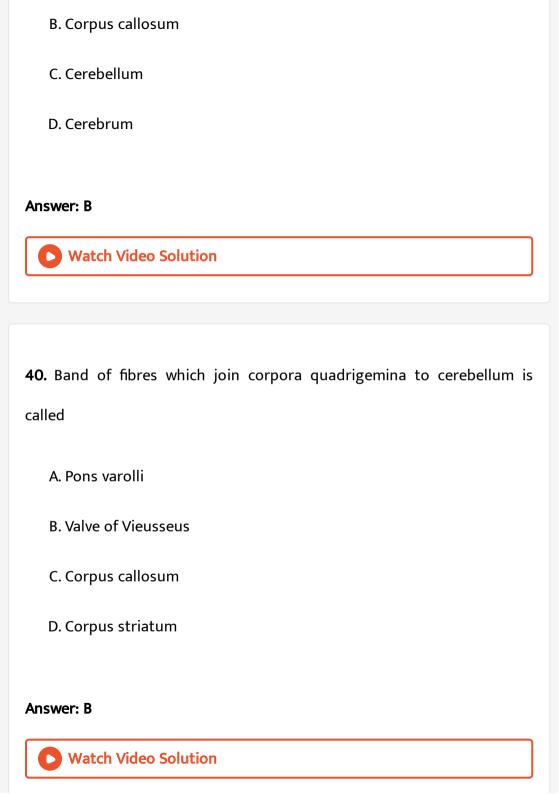
  Watch Video Solution
- **35.** Foramen of Monro is an aperture between
  - A. Third and fourth ventricles
  - B. Rhinocoel and diacoel
  - C. Lateral and third ventricles
  - D. Diacoel and metacoel.

# **Answer: C**



<b>36.</b> What is the space between arachnoid and piameter called?
A. Supra-arachnoid
B. Subarachnoid
C. Subdural
D. Epidural
Answer: B
Watch Video Solution
37. Cerebrum regulates
A. Speech
B. Hearing
C. Vision
D. All of the above

# Answer: D **Watch Video Solution** 38. Alcohol affects A. Medulla oblongata B. Cerebellum C. Cerebral cortex D. Thalamus **Answer: B** Watch Video Solution 39. Mammalian brain differs from an amphibian brain in possessing A. Optic lobes



41. Match column I with column II and select the correct option from the

codes given below.

Column I Column II

A. Cerebrum (i)Controls the pituitary

B. Cerebellum (ii)Controls vision and hearing

C. Hypothalamus (iii) Controls the rate of heart beat

D. Midbrain (iv)Seat of intelligence

(v)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



**Watch Video Solution** 

42. Which acts as the command and control system of of body?

A. Brain B. Spinal cord C. Hipothalamus D. Pituitary gland Answer: A **Watch Video Solution** 43. The brain can be divided into A. Three major parts - cerebrum, thalamus and hypothalamus B. Three major parts - piamater, arachnoid and duramater C. Three major parts - pons, cerebellum and medulla D. Three major parts - forebrain, midbrain and hindbrain Answer: D **Watch Video Solution** 

- 44. The forebrain consists of
  - A. Cerebellum, thalamus and hypothalamus
  - B. Pons, cerebrum and medulla
  - C. Amygdala, hippocampus and brain stem
  - D. Thalamus, hypothalamus and cerebrum

## **Answer: D**



- 45. Major part of human brain is formed by
  - A. Cerebrum
  - B. Cerebellum
  - C. Corpora quadrigemina

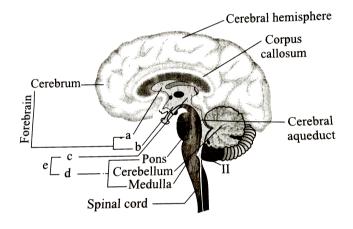
# D. Medulla oblongata

# **Answer: A**



**Watch Video Solution** 

# 46. Recognise the figure and find out the correct matching



A. d - brain stem, e - hindbrain, b - thalamus, c - hypothalmus, a - midbrain

B. e - brain stem, d - hindbrain, a- thalamus, b - hypothalmus, c - midbrain

C. e - brain stem, d - hindbrain, b - thalamus, a- hypothalmus, c midbrain D. e - brain stem, c- hindbrain, a - thalamus, b - hypothalmus, d midbrain **Answer: B** Watch Video Solution

# 47. The cerebal cortex contains

B. Motor areas

A. Sensory areas

C. Association areas

D. All of the above



Answer: D

- **48.** Association areas as
  - A. Sensory in function
  - B. Motor in function
  - C. Neither clearly sensory nor motor in function
  - D. Neurosecretory in function

# **Answer: C**



- **49.** Which part of the brain is a major coordinating centre for sensory and motor signaling ?
  - A. Associating area
  - B. Thalamus
  - C. Hypothalamus

D. Limbic system
Answer: B
Watch Video Solution
<b>50.</b> Association areas are responsible for complied functions like
A. Memory
B. Communication
C. Intersensory association
D. All of the above
Answer: D
Watch Video Solution
51. Hormones are secreted by

- A. Neurosecretory cells of the thalamus
- B. Neurosensory cells of the thalamus
- C. Neurosecretory cells of the hypothalamus
- D. Neurosecretory cells of the hippocampus

#### **Answer: C**



- **52.** Limbic system or limbic lobe is formed by
- a. Hippocampus
- b. Amygdala
- c. Hypothalamus
- d. Outer parts of cerebral hemispheres e. Inner parts of cerebral
- hemispheres
  - A. a, b and c
  - B. a, b and d

C. a, b and e
D. a, b, c and e

Answer: C



Watch Video Solution

- **53.** Along with the hypothalamus, limbic system is involved in
- a. Motivation
- b. Expression of emotional reactions (excitement, pleasure, rage and fear)
- d. Cardiovascular reflexes

c. Sexual behaviour

- A. a, b and c
  - B. a, b and d
  - C. b, c and d
  - D. a, c and d



54. The midbrain is located between the

A. Thalamus of forebrain and pons of the hindbrain

B. Hypothalamus of forebrain and pons of the hindbrain

C. Thalamus and hypothalamus

D. Both A and B

## **Answer: D**



**Watch Video Solution** 

**55.** Read the following statements and find out the incorrect statements.

- a. The ventral portion of the midbrain consists mainly of four round swellings (lobes) called corpora quadrigemmina.
- b. Midbrain and hindbrain form the brain stem.
- c. Cerebellum consists of fibre tracts that interconnect different regions

of brain.
d. The midbrain receives and integrates visual, lactile and auditory inputs.
e. Limbic system is concerned with olfaction and autonomic responses.
A. a, c and d
B. b and e
C. a and c
D. a, c, d and e
Answer: C
Watch Video Solution
<b>56.</b> Cerebral cortex consists of
A. Grey matter
B. White matter
C. Duramatter

D. Arachnoid matter
Answer: A
Watch Video Solution
<b>57.</b> Iter or cerebral aquiduct or aquiduct of sylvius
A. Third and fourth ventricles
B. Two lateral ventricles
C. Lateral ventricles and third ventricles
D. Rhinocoel and lateral ventricles
Answer: A
Watch Video Solution
<b>58.</b> Cavity present in the spinal cord is termed as

A. Central canal
B. Fourth ventricle
C. Volkmann's canal
D. Neural canal
Answer: A
Watch Video Solution
<b>59.</b> Unique about humans is
A. Free hand
B. Tool use
C. Articulated speech
D. Social set up
Answer: C
Watch Video Solution

# **60.** Fourth ventricle of brain occurs in

- A. Olfactory lobe
- B. Medulla oblongata
- C. Cerebral hemisphere
- D. Diencephalon

# **Answer: B**



**Watch Video Solution** 

# **61.** CNS is mostly made of

- A. Motor neurons and sensory neurons
- B. Sensory neurons and association neurons
- C. Association neurons

D. Motor neurons and association neurons
Answer: C
Watch Video Solution
62. In cerebrum, auditory area occurs in
A. Frontal lobe
B. Parietal lobe
C. Temporal lobe
D. Occipital lobe.
Answer: C

63. Coordination of hand-eye or voluntary muscle activity is connected with

A. Cerebrum

B. Cerebellum

C. Medulla oblongata

D. Crura cerebri

# Answer: B



**64.** Brain venticles are lined by

A. Neurons

B. Schwan cells

C. Neuroglia

D. Ependymal cells

# Answer: D **Watch Video Solution** 65. Respiration heart beat and peristalsis are controlled by A. Medulla oblongata B. Medulla oblongata and cerebrum C. Medulla oblongata and cerebellum D. Cerebellum





**Watch Video Solution** 

66. Hearing is controlled by

A. Frontal lobes

C. Temporal lobes D. Occipital lobes **Answer: C Watch Video Solution** 67. Third ventricle of rabbit's brain is called A. Metacoel B. Rhincoel C. Paracoel D. Diocoel **Answer: D Watch Video Solution** 

B. Parietal lobes

<b>68.</b> Memory centre is present in
A. Cerebellum
B. Parietal lobe
C. Temporal lobe
D. Occipital lobe
Answer: C
Watch Video Solution
<b>69.</b> Which one occurs in mesencephalon/midbrain ?
A. Cerebellum
B. Inferior colliculus
C. Thalamus
D. Mammillary body

# Answer: B Watch Video Solution

70. Structure connected h vision is human is

- A. Corpus callosum
- B. Corpora quadrigemina
- C. Corpus albicans
- D. Hippocampus

**Answer: B** 



- 71. Broca's area is connected with
  - A. Sensation of smell

D. Receiving impulse from eye **Answer: C Watch Video Solution** 72. The medulla oblongata encloses the A. Fourth ventricle B. Third ventricle C. Second ventricle D. Optic lobes Answer: A **Watch Video Solution** 

B. Learning and reasoning

C. Speech

73. Ventricles connecting medulla oblongata with spinal cord is
A. Fourth
B. Fifth
C. Third
D. Second
Answer: A
Watch Video Solution
<b>74.</b> Broca's area controls
A. Breathing
B. Movement of vocal cords
C. Movement of tongue
D. Both B and C

# Answer: B



**Watch Video Solution** 

# **75.** Arbor vitae is

- A. Tree-like structure in cerebrum
- B. Tree of life in cerebellum
- C. End part of spinal cord
- D. Branched dendrites of a neuron

# **Answer: B**



**Watch Video Solution** 

**76.** Foramen of Monro is an aperture between

A. Third and fourth ventricles

- B. Rhinocoel and diacoel

  C. Lateral and third ventricles

  D. Diacoel and metacoel.

  Answer: C

  Watch Video Solution
- 77. What is the space between arachnoid and piameter called ?
  - A. Supra-arachnoid
  - B. Subarachnoid
  - C. Subdural
  - D. Epidural

# Answer: B



<b>78.</b> Cerebrum regulates
A. Speech
B. Hearing
C. Vision
D. All of the above
Answer: D
A WILLIAM COLUM
Watch Video Solution
Watch Video Solution
Watch Video Solution
79. Alcohol affects
<b>79.</b> Alcohol affects
79. Alcohol affects  A. Medulla oblongata

# **Watch Video Solution** 80. A mammalian brain is characterised by the presence of A. Optic lobes B. Corpus callosum C. Cerebellum D. Cerebrum **Answer: B Watch Video Solution** 81. Band of fibres which join corpora quadrigemina to cerebellum is called A. Pons varolli

Answer: B

- B. Valve of Vieusseus
- C. Corpus callosum
- D. Corpus striatum

### Answer: B



# **Watch Video Solution**

82. Match column I with column II and select the correct option from the

codes given below.

Column II Column II

- A. Cerebrum (i)Controls the pituitary
- B. Cerebellum (ii)Controls vision and hearing
- C. Hypothalamus (iii) Controls the rate of heart beat
- D. Midbrain (iv)Seat of intelligence (v)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** 



**Watch Video Solution** 

# Section A: Topicwise Questions Topic 4: Reflex Action And Reflex Arc

- **1.** The entire process of response to peripheral nervous stimulation, that occurs involuntaily, i.e., without conscious effort or thought and requires the involvement of a part of CNS is called a
  - A. Limbic system
  - B. Sensory reception
  - C. Reflex arc
  - D. Reflex action

Answer: D



watch video Solution

- 2. In the knee jerk reflex effector and receptor are
  - A. Muscle spindle and motor endplate respectively
  - B. Afferent neuron and efferent neuron respectively
  - C. Motor endplate and muscle spindle respectively
  - D. Sensory neuron and motor neuron respectively

### Answer: C



- 3. Fill in the blanks according to the process of reflex action. ItBrgt 1. The reflex pathway comprises at least one …a‹ neuron (receptor) and one ‹b‹ (effector or excitor) neuron appropriately arranged in a series
- 2. The …a… neuron receives signal from a sensory organ and transmit the impulse via a ...c... nerve root into the CNS (at the level of spinal cord).

ItBrgt 3. The ...b... neuron then carriers signals from CNS to the effector.

4. The stimulus and response thus form a reflex ...d...

A. a-afferent, b-efferent, c-dorsal, d-arc

B. a-afferent, b-efferent, c-ventral, d-arc

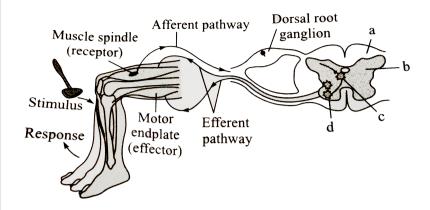
C. a-efferent, b-afferent, c-dorsal, d-pathway

D. a-efferent, b-afferent, c-ventral, d-action

# **Answer: A**



4. Recognise the figure and find out the correct matching.



- A. a-grey matter, b-white matter, c-motor neuron, d-interneuron
- B. a-grey matter, b-white matter, d-motor neuron, c-interneuron
- C. b-grey matter, a-white matter, c-motor neuron, d-interneuron
- D. b-grey matter, a-white matter, d-motor neuron, c-interneuron

# **Answer: D**



**Watch Video Solution** 

**5.** Hypoglossal nerve controls the movements of

A. Tongue
B. Heart
C. Eye
D. Ear
Answer: A
Watch Video Solution
6. The reflex arc which is made of two neurons is known as
A. Asynaptic
B. Monosynaptic
C. Disynaptic
D. Polysynaptic
Answer: B
Watch Video Solution

7. Temporal lobe does not contain
A. Wernicke's area
B. Olfactory area
C. Auditory area
D. Broca's area
Answer: D
Watch Video Solution
8. Which one is not a reflex action ?
A. Clossing of eye lids against frickling
B. Release of saliva on seeing sweets

C. Perspiration due to heat

D. Obeying the order to run
Answer: D
Watch Video Solution
9. Which one does not involve brain ?
A. Spinal reflex
B. Cerebral reflex
C. Cranial reflex
D. Voluntary action
Answer: A
Watch Video Solution
10. Dorsal root of spinal nerve contains

- A. Sensory neurons only B. Relay and sensory neurons C. Sensory and motor neurons
  - D. Motor and relay neurons

# Answer: A



**Watch Video Solution** 

- 11. Motor neuron of reflex arc carries impulse from
  - A. Receptor to central nervous system
  - B. Central nervous system to effectors
  - C. Central nervous system to receptors
  - D. Effectors to central nervous system

# Answer: B



- **12.** Which one controls reflex action ?
  - A. Central nervous system
  - B. Sympathetic nervous system
  - C. Parasympathetic nervous system
  - D. Sensory nerves

# **Answer: A**



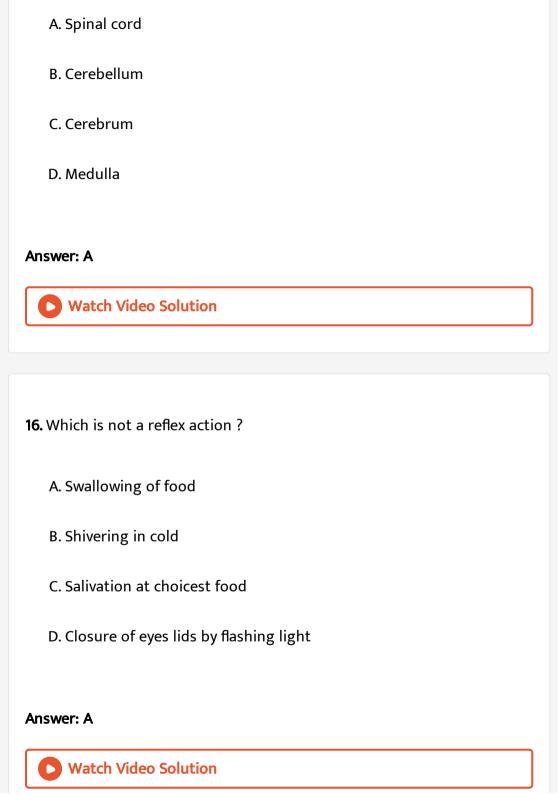
- **13.** In after cutting through the dorsal root of a spinal nerve of a mammal, an associated receptor in the skin were simulated, the animal would
  - A. Still be able to feel the stimulation
  - B. Show no response
  - C. Show a normal but slow response

D. Respond but only at a different level of spinal cord
Answer: B
Watch Video Solution
<b>4.</b> Reflex action (withdrawal of hand from heat source) is controlled by
A. Sympathetic nervous system
B. Autonomic nervous system
C. Spinal cord
D. Peripheral nervous system

**Answer: C** 

**Watch Video Solution** 

**15.** Which of the following has H-shaped grey matter?



#### 17. Route of reflex arc is

- A. Effectors, grey matter, motor fibres, sensory fibres and receptors
- B. Receptors, sensory fibres, grey matter and motor fibres
- C. Receptors sensory fibres, grey matter, motor fibres and effectors
- D. Sensory fibres, grey matter, motor fibres, receptors and effectors

#### **Answer: C**



- 18. In Pavlon experiments the sound of bell represents
  - A. Conditioned stimulus
  - B. Unconditioned response
  - C. Unconditioned stimulus

Answer: A
Watch Video Solution
<b>19.</b> An example of conditioned reflex is
A. Withdrawal of hand on touching a hot surface
B. Sneezing during cold
C. Running indoor or arrival of rain
D. Salivation in Dog on seeing bread as found by Pavlov
Answer: D
Watch Video Solution
20. Father of conditioned reflex is

D. Conditioned response

A. Pavlov
B. Kalvin
C. Operin
D. Smith and Neil
Answer: A
Watch Video Solution
21. The entire process of response to peripheral nervous stimulation, that
occurs involuntaily, i.e., without conscious effort or thought and requires
the involvement of a part of CNS is called a
A. Limbic system
B. Sensory reception
C. Reflex arc
D. Reflex action

#### **Answer: D**



**Watch Video Solution** 

- 22. In the knee jerk reflex effector and receptor are
  - A. Muscle spindle and motor endplate respectively
  - B. Afferent neuron and efferent neuron respectively
  - C. Motor endplate and muscle spindle respectively
  - D. Sensory neuron and motor neuron respectively

#### Answer: C



**Watch Video Solution** 

**23.** Fill in the blanks according to the process of reflex action. 1. The reflex pathway comprises at least one ......neuron (receptor) and one ...... (effector or excitor) neuron appropriately arranged in a series

2. The .....neuron receives signal from a sensory organ and transmit the impulse via a ...c... nerve root into the CNS (at the level of spinal cord).

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A. a-afferent, b-efferent, c-dorsal, d-arc

B. a-afferent, b-efferent, c-ventral, d-arc

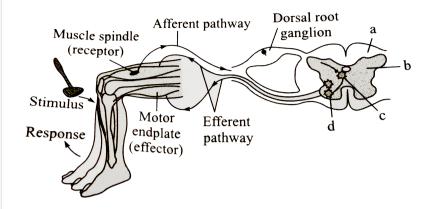
C. a-efferent, b-afferent, c-dorsal, d-pathway

D. a-efferent, b-afferent, c-ventral, d-action

#### Answer: A



#### 24. Recognise the figure and find out the correct matching.



- A. a-grey matter, b-white matter, c-motor neuron, d-interneuron
- B. a-grey matter, b-white matter, d-motor neuron, c-interneuron
- C. b-grey matter, a-white matter, c-motor neuron, d-interneuron
- D. b-grey matter, a-white matter, d-motor neuron, c-interneuron

#### Answer: D



A. Tongue
B. Heart
C. Eye
D. Ear
Answer: A
Watch Video Solution
<b>26.</b> The reflex arc which is made of two neurons is known as
A. Asynaptic
B. Monosynaptic
C. Disynaptic
D. Polysynaptic
Answer: B
Watch Video Solution

### **27.** Temporal lobe does not contain

- A. Wernicke's area
- B. Olfactory area
- C. Auditory area
- D. Broca's area

#### **Answer: D**



**Watch Video Solution** 

#### 28. Which one is not a reflex action?

- A. Clossing of eye lids against frickling
- B. Release of saliva on seeing sweets
- C. Perspiration due to heat

D. Obeying the order to run
Answer: D
Watch Video Solution
29. Which one does not involve brain ?
A. Spinal reflex
B. Cerebral reflex
C. Cranial reflex
D. Voluntary action
Answer: A
Watch Video Solution
<b>30.</b> Dorsal root of spinal nerve contains

- A. Sensory neurons only B. Relay and sensory neurons C. Sensory and motor neurons D. Motor and relay neurons Answer: A **Watch Video Solution**
- 31. Motor neuron of reflex arc carries impulse from
  - A. Receptor to central nervous system
  - B. Central nervous system to effectors
  - C. Central nervous system to receptors
  - D. Effectors to central nervous system



Answer: B

- **32.** Which one controls reflex action?
  - A. Central nervous system
  - B. Sympathetic nervous system
  - C. Parasympathetic nervous system
  - D. Sensory nerves

#### **Answer: A**



- **33.** 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. Still be able to feel the stimulation
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- C. Show a normal but slow response

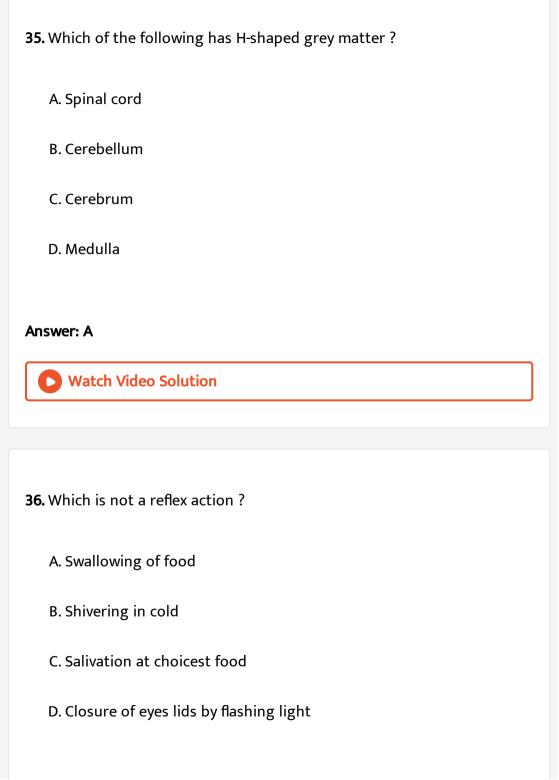
  D. Respond but only at a different level of spinal cord

  Answer: B

  Watch Video Solution
- **34.** Reflex action (withdrawal of hand from heat source) is controlled by
  - A. Sympathetic nervous system
  - B. Autonomic nervous system
  - C. Spinal cord
  - D. Peripheral nervous system

#### Answer: C





#### **Answer: A**



**Watch Video Solution** 

#### 37. Route of reflex arc is

- A. Effectors, grey matter, motor fibres, sensory fibres and receptors
- B. Receptors, sensory fibres, grey matter and motor fibres
- C. Receptors sensory fibres, grey matter, motor fibres and effectors
- D. Sensory fibres, grey matter, motor fibres, receptors and effectors

#### **Answer: C**



- 38. In Pavlon experiments the sound of bell represents
  - A. Conditioned stimulus

- B. Unconditioned response

  C. Unconditioned stimulus

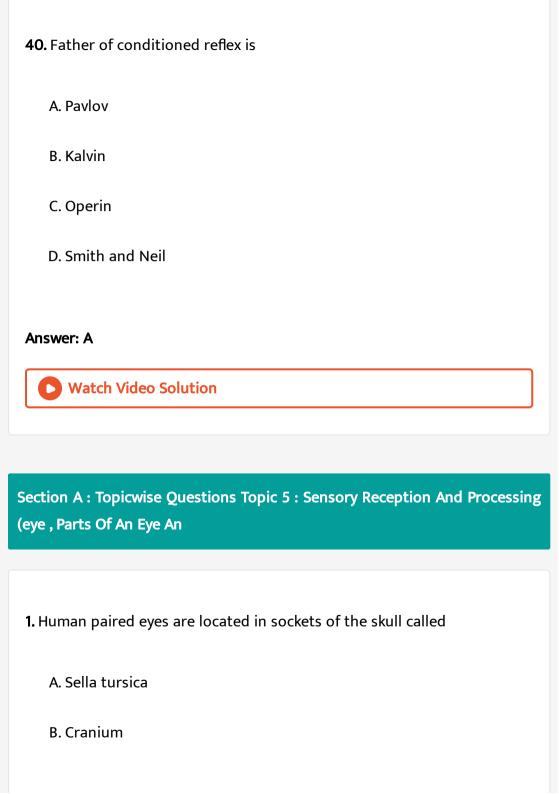
  D. Conditioned response

  Answer: A

  Watch Video Solution
- **39.** An example of conditioned reflex is
  - A. Withdrawal of hand on touching a hot surface
  - B. Sneezing during cold
  - C. Running indoor or arrival of rain
  - D. Salivation in Dog on seeing bread as found by Pavlov

#### Answer: D





D. Suture	
Answer: C	
Watch Video Solution	
<b>2.</b> The adult human eye ball is nearly a	
A. Spherical structure	
B. Cylindrical structure	
C. Biconvex structure	
D. Biconcave structure	
Answer: A	
Watch Video Solution	

C. Orbits

3. The wall of the eye ball is composed of A. Three layers-photoreceptor, bipolar and ganglion cells B. Three layers-sclera, cornea and retina C. Three layers-sclera, choroid and cornea D. Three layers-sclera, choroid and retina **Answer: D Watch Video Solution** 4. The external layer of the eyeball is sclera which is made of A. Loose connective tissue B. Dense connective tissue C. Specialised connective tissue D. Both A and B

#### Answer: B



Watch Video Solution

- 5. The anterior portion on of the sclera is called
  - A. Cornea
  - B. Pupil
  - C. Ciliary body
  - D. Iris

#### **Answer: A**



**Watch Video Solution** 

**6.** Which of the following layer of the eye ball contains many blood vessel and looks bluish in colour ?

A. Sclera B. Choroid C. Retina D. Both B and C **Answer: B** Watch Video Solution 7. The choroid layer is thin over the posterior two-thirds of the eye ball, but it becomes thick in the anterior part to form the A. Iris B. Ciliary body C. Pupil D. Suspensory ligament **Answer: B** 

Watch Video Solutio	n
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<b>8.</b> The	e ciliary	body	itself	continues	forward	to	form	а	pigmented	and
opaqı	ue struc	ture ca	illed th	ne						

A. Pupil

B. Iris

C. Lens

D. Ligaments

#### **Answer: B**



Watch Video Solution

**9.** Which is the visible coloured portion of eye

A. Cornea

B. Iris

C. Lens
D. Retina
Answer: B
Watch Video Solution
10. The eye ball has a transparent crystalline lens which is held in place by
A. Ligaments attached to the iris
B. Tendons attached to the iris
C. Ligaments attached to the ciliary body

D. Tendons attached to the ciliary body

Watch Video Solution

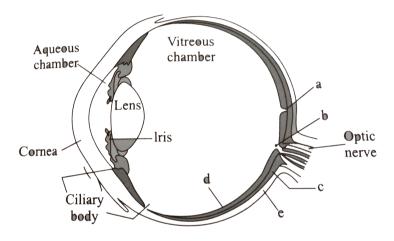
**Answer: C** 

11. In front of the lens, the aperture surrounded by the iris is called the
A. Pupil
B. Cornea
C. Retina
D. Rods
Answer: A
Watch Video Solution
12. The diameter of the pupil is regulated by the
A. Muscle fibres of ciliary body
B. Muscle fibres of iris
C. Muscle fibres of lens
D. Ligaments of ciliary body



#### **Watch Video Solution**

13. Recognise the figure and find out the correct matching.



A. c-sclera, d-retina, e-choroid, b-fovea, a-blind spot

B. d-sclera, e-retina, c-choroid, b-fovea, a-blind spot

C. e-sclera, c-retina, d-choroid, a-fovea, b-blind spot

D. e-sclera, d-retina, c-choroid, a-fovea, b-blind spot



**Watch Video Solution** 

**14.** Match the column I and II, and choose the correct combination from the options given.

Column I

Column II

a. Rods

1. Scotopic vision

b. Cones

- 2. Photopic vision
- 3. Twilight vision
- 4. Daylight vision
- 5. Colour vision

A. a-1, 4, 5, b-2, 3

B. a-2, 4, 5, b-1, 3

C. a-1, 3, b-2, 4, 5

D. a-1, 3, 5, b-2, 4

**Answer: C** 



**15.** When the blue, red and green cones are stimulated equally, it produced a sensation of

A. Black light

B. Orange light

C. White light

D. No light

#### Answer: C



**16.** The point of eye where the visual activity (resolution) is greatest

A. Blind spot

B. Macula lutea

C. Fovea

D. Corpus lutea

# **Watch Video Solution** 17. The space between cornea and the lens is called A. Aqueous chamber B. Vitreous chamber C. Labyrinth D. Vestibule Answer: A Watch Video Solution 18. The space between the lens and retina is called A. Aqueous chamber

Answer: C

- B. Vitreous chamber
- C. Labyrinth
- D. Vestibule

#### **Answer: B**



- 19. Which is the incorrect about the mechanism of vision?
  - A. Light rays in visible wavelength focused on the retina induces dissociation of the retinal from opsim resulting in changes in the structure of the opsin.
  - B. Due to change in the structure of opsin membrane permeability changes and potential difference are generated in the photoreceptor cells.

C. A signal is produced in photoreceptor cell that generates action

potentials in the bipolar cells through the ganglion cells.

D. The action potentials (impulses) are transmitted by the optic nerve to the visual cortex area of the brain, where the neural impulses are analysed and the image formed on the retina is recognised based on earlier memory and experience.

#### **Answer: C**



20. Suppose a person wears convex galsses for proper vision. Where you think the image of the object is formed in his eyes when he is not using the glasses

A. On blind spot

B. On yellow spot

C. In front of retina

D. Behind the retina
Answer: D
Watch Video Solution
21. Cornea and lens of eye are
A. Transparent and help in image formation on retina
B. Transparent and diverge light rays on retina and image formation
C. Sensitive and richly supplied by nerves
D. Sensitive and richly supplied by blood vessels
Answer: A

### 22. Pigments present in cones of retina are connected with

B. Accommodation of eye C. Colour discrimination D. Image formation **Answer: C Watch Video Solution** 23. In hypermetropia, the image is formed A. Before retina and is corrected by convex lens B. Behind the retina and is corrected by covex lens C. Before retina and is corrected by concave lens D. Before retina and is corrected by concave lens **Answer: B Watch Video Solution** 

A. Night blindness

<b>24</b> .	<b>Function</b>	າ ດf	iris	is	to
<b>4</b> T.	i unction	1 01	11 13	13	LU

- A. Move lens forward and backward
- B. Refract light rays
- C. Bring about movements of eyelids
- D. Alter the size of pupil

#### **Answer: D**



**Watch Video Solution** 

#### 25. Reduction in elastricity of eye lens with age causes

- A. Myopia
- B. Presbyopia
- C. Cataract

A. Pupil
26. Light rays entering the eye is controlled by  A. Pupil
A. Pupil
B. Iris
C. Cornea
D. Lens
Answer: A
Watch Video Solution

27. The defective condition of accomodation of the eye in which distant objects are seen distinctly but near objects are indistinct is

- A. Myopia
- B. Astigmatism
- C. Presbyopia
- D. Hypermetropia

#### **Answer: D**



- 28. Eye lens is
  - A. Biconcave
  - B. Concave
  - C. Convex
  - D. Biconvex

## Answer: D Watch Video Solution 29. Concave lens is employed to correct A. Presbyopia B. Hypermetropia C. Cataract D. Myopia **Answer: D** Watch Video Solution 30. Cornea transplantation is successful as cornea is A. Easily available

B. Without blood supply C. Easily preserved D. Easily stitched **Answer: B Watch Video Solution** 31. Which is absent in aqueous humor? A. Carbon dioxide B. Oxygen C. Hyaluronic acid D. Glucose **Answer: C Watch Video Solution** 

# **32.** Endolymph has good quantity of

- A.  $Na^+$
- B.  $Ca^{2+}$
- C.  $Mg^{2\,+}$
- D.  $Cl^-$

#### **Answer: B**

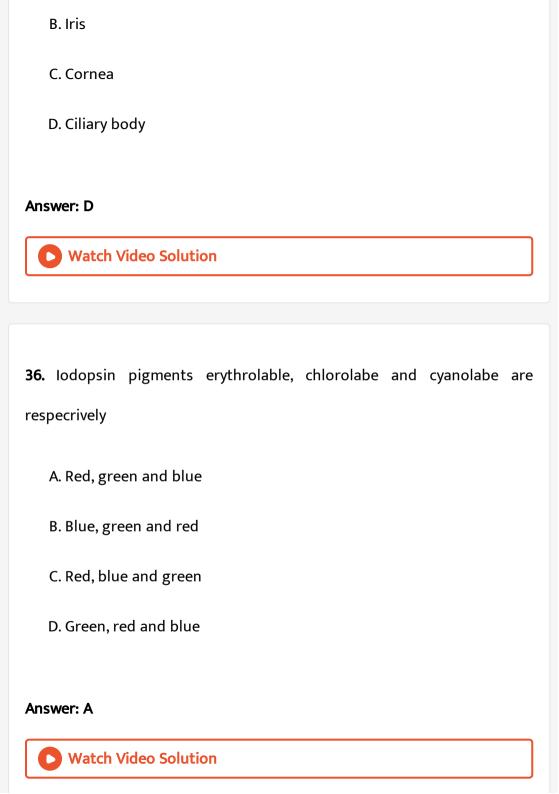


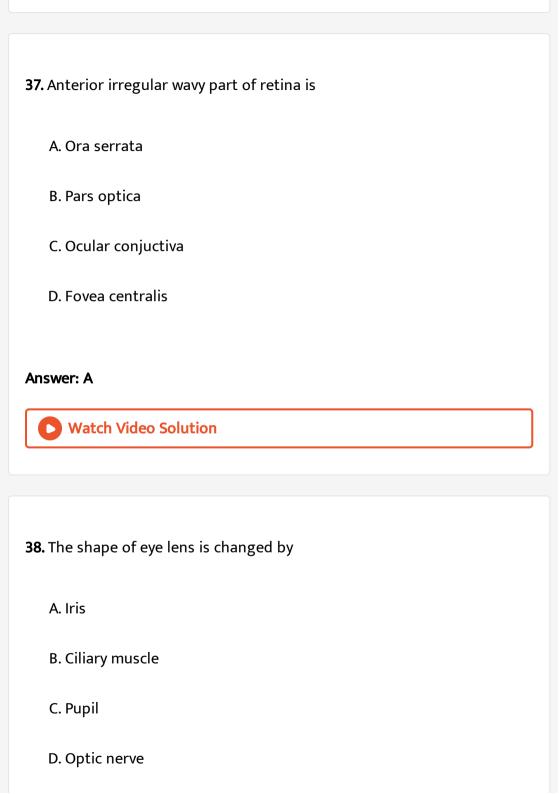
**Watch Video Solution** 

## 33. Glaucoma is due to

- A. Blocking of canal of Schlemn
- B. Drying up of vitreous humor
- C. Increased size of eye
- D. Opacity of lens

# Answer: A Watch Video Solution 34. Colour blindness is due to defect in A. Cones B. Rods C. Rods and cones D. None of the above Answer: A Watch Video Solution 35. Focal length of eye lens is changed by A. Pupil







**Watch Video Solution** 

- 39. A characteristic of human cornea is
  - A. Absence of blood circulation
  - B. Causes cataract in old age
  - C. Has lacrimal gland for secretion of tears
  - D. Secreted by conjuctiva and glandular layer

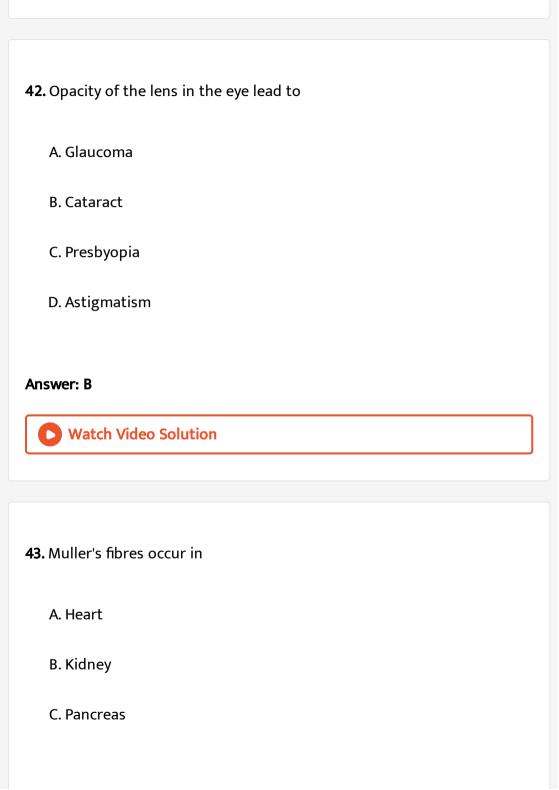
#### Answer: A



**Watch Video Solution** 

**40.** When we move from dark to light, we fail to see for some time but soon the visibility become normal. It is

A. Accommodation
B. Adaptation
C. Photoperiodism
D. Mutation
Answer: B
Watch Video Solution
<b>41.</b> Glaucoma is caused by increase in
A. Intraarterial pressure
B. Intraocular pressure
C. Intraventricular pressure
D. Intravesicular pressure
Answer: B
Watch Video Solution



D. Retina
Answer: D
Watch Video Solution
<b>44.</b> In a similarity with photographic camera, retina acts as
A. Shutter
B. Lens
C. Diaphragm
D. Film
Answer: D
Watch Video Solution

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

A. Myopia

B. Hypermetropia

C. Presbyopia

D. Glaucoma

#### Answer: D



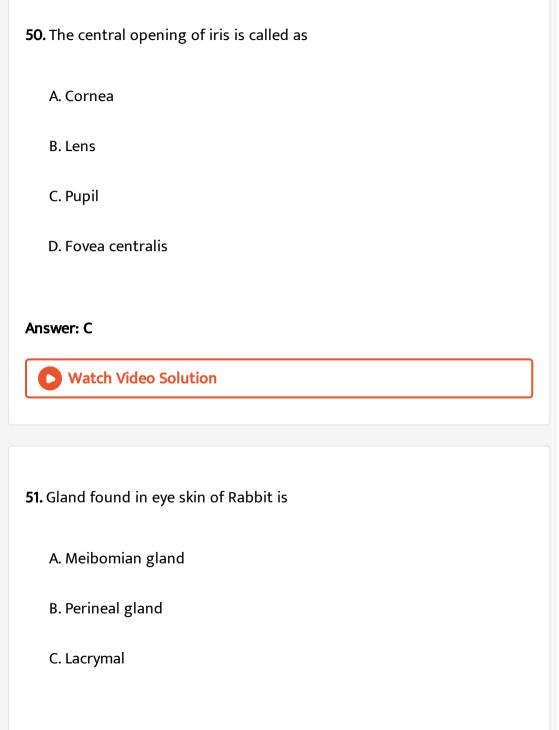
Watch Video Solution

- **46.** In myopia or short sightedness
  - A. Image is formed slightly in front of retina because eye ball is longer.
  - B. Eye ball is normal but image is formed over blind spot
  - C. Eye ball is normal but images is formed slightly behind the retina

due to faulty lens

D. Curvature of cornea becomes irregular
Answer: A
Watch Video Solution
<b>47.</b> The rods and cones of the eye retinal layer are modified
A. Bipolar neurons
B. Unipolar neurons
C. Multipolar neurons
D. Hairs
Answer: A
Watch Video Solution
<b>48.</b> Which of the following disorder is not hereditary?

A. Bipolar neurons B. Unipolar neurons C. Multipolar neurons D. Hairs **Answer: B View Text Solution** 49. Glands responsible for secreting tears are A. Meibomian glands B. Glands of Moll C. Glands of Zeis D. Lacrymal glands **Answer: D Watch Video Solution** 



D. Harderian gland
Answer: A
Watch Video Solution
<b>52.</b> Cones are concentrated at
A. Fovea centralis
B. Blind spot
C. Edge of retina
D. Choroid
Answer: A
Watch Video Solution
<b>53.</b> Proteins present in eye lens is

B. Collagen C. Crystallin D. Rhodopsin **Answer: C Watch Video Solution** 54. Fovea in the eye is a central pit in the yellowish pigmented spot called A. Retina B. Blind spot C. Macula lutea D. Cornea **Answer: C Watch Video Solution** 

A. Opsin

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

- A. Bipolar cells, photoreceptors, ganglion cells
- B. Ganglion cells, rods, cones
- C. Ganglion cells, bipolar cells, photoreceptor cells
- D. Photoreceptor cells, ganglion cells, bipolar cells

#### **Answer: C**



**Watch Video Solution** 

**56.** Human paired eyes are located in sockets of the skull called

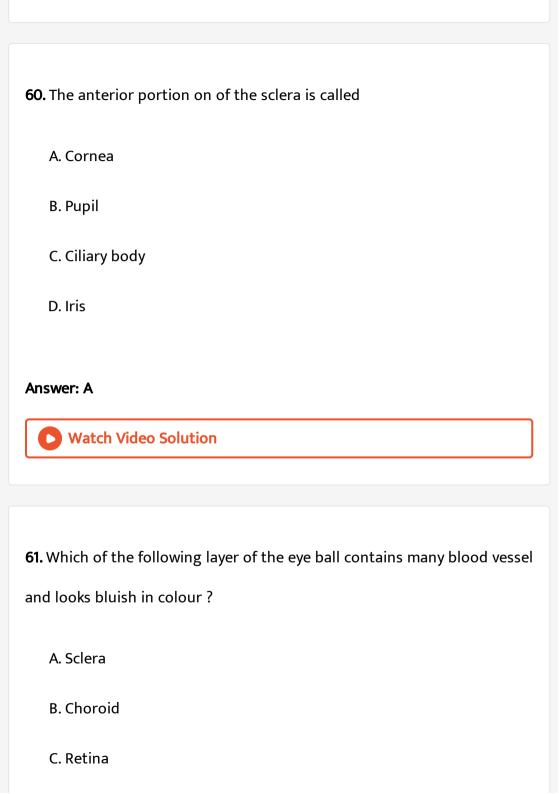
- A. Sella tursica
- B. Cranium
- C. Orbits

D. Suture
Answer: C
Watch Video Solution
57. The adult human eye ball is nearly a
A. Spherical structure
B. Cylindrical structure
C. Biconvex structure
D. Biconvex structure
Answer: A
Watch Video Solution

**58.** The wall of the eye ball is composed of

- A. Three layers-photoreceptor, bipolar and ganglion cells B. Three layers-sclera, cornea and retina C. Three layers-sclera, choroid and cornea D. Three layers-sclera, choroid and retina Answer: D **Watch Video Solution** 59. The external layer of the eyeball is sclera which is made of A. Loose connective tissue B. Dense connective tissue
- - C. Specialised connective tissue
  - D. Both A and B







**Watch Video Solution** 

- **62.** The choroid layer is thin over the posterior two-thirds of the eye ball, but it becomes thick in the anterior part to form the
  - A. Iris
  - B. Ciliary body
  - C. Pupil
  - D. Suspensory ligament

Answer: B



<b>63.</b> The ciliary body itself continues forward to form a pigmented and
opaque structure called the
A. Pupil
B. Iris
C. Lens
D. Ligaments
Answer: B
Watch Video Solution
<b>64.</b> Which is the visible coloured portion of eye
<b>64.</b> Which is the visible coloured portion of eye  A. Cornea
A. Cornea



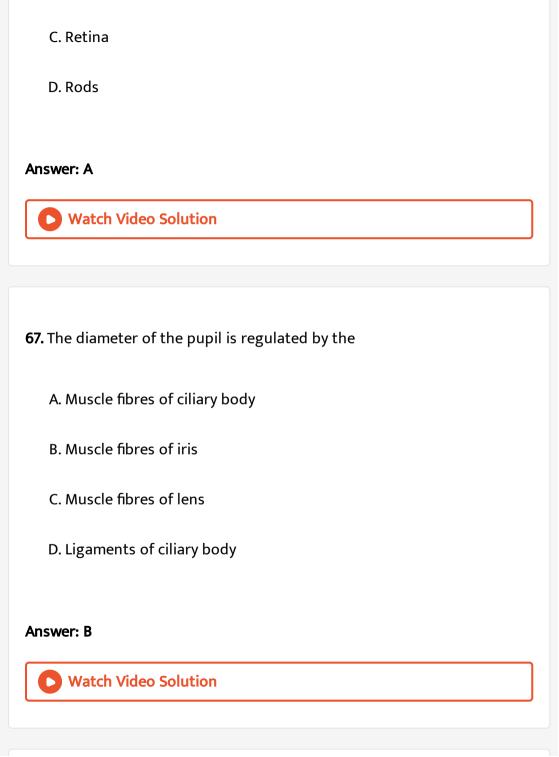
**Watch Video Solution** 

- 65. The eye ball has a transparent crystalline lens which is held in place by
  - A. Ligaments attached to the iris
  - B. Tendons attached to the iris
  - C. Ligaments attached to the ciliatry body
  - D. Tendons attached to the ciliatry body

#### **Answer: C**

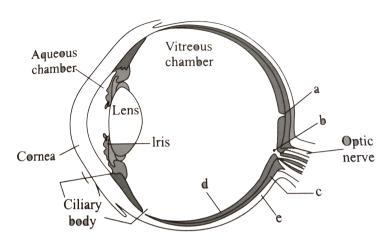


- **66.** In front of the lens, the aperture surrounded by the iris is called the
  - A. Pupil



B. Cornea

**68.** Recognise the figure and find out the correct matching.



A. c-sclera, d-retina, e-choroid, b-fovea, a-blind spot

B. d-sclera, e-retina, c-choroid, b-fovea, a-blind spot

C. e-sclera, c-retina, d-choroid, a-fovea, b-blind spot

D. e-sclera, d-retina, c-choroid, a-fovea, b-blind spot

#### **Answer: D**



**69.** Match the column I and II, and choose the correct combination from

the options given.

b.

Column I Column II

a. Rods 1. Scotopic vision

Cones 2. Photopic vision

3. Twilight vision

4. Daylight vision

5. Colour vision

A. a-1, 4, 5, b-2, 3

B. a-2, 4, 5, b-1, 3

C. a-1, 3, b-2, 4, 5

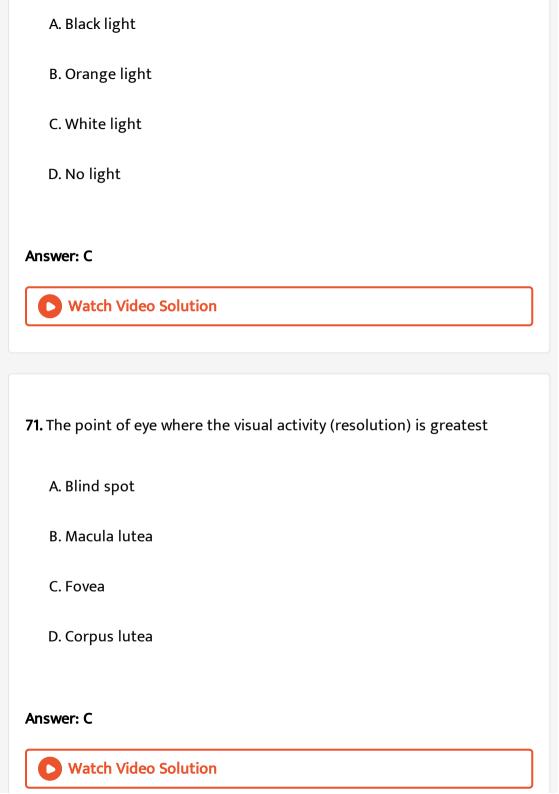
D. a-1, 3, 5, b-2, 4

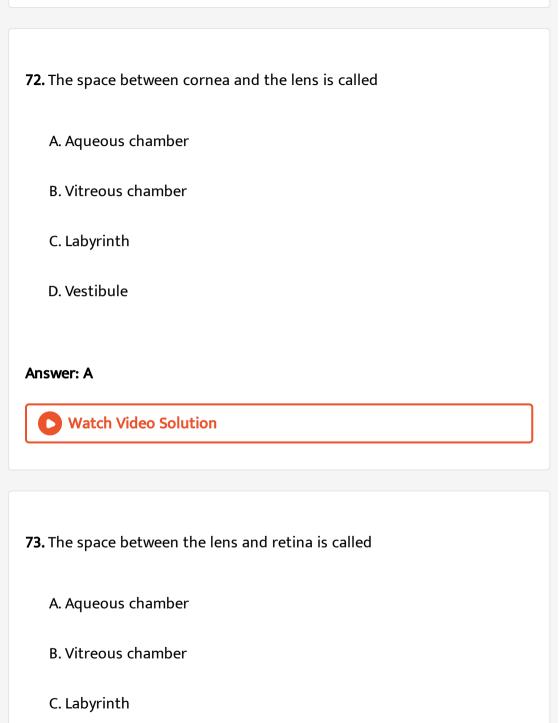
**Answer: C** 



**Watch Video Solution** 

**70.** When the blue, red and green cones are stimulated equally, it produced a sensation of





D. Vestibule

#### **Answer: B**



**Watch Video Solution** 

#### 74. Which is the incorrect about the mechanism of vision?

- A. Light rays in visible wavelength focused on the retina induces dissociation of the retinal from opsim resulting in changes in the structure of the opsin.
- B. Due to change in the structure of opsin membrane permeability changes and potential difference are generated in the photoreceptor cells.
- C. A signal is produced in photoreceptor cell that generates action potentials in the bipolar cells through the ganglion cells.

D. The action potentials (impulses) are transmitted by the optic nerve to the visual cortex area of the brain, where the neural impulses are analysed and the image formed on the retina is recognised based on earlier memory and experience.

#### **Answer: C**



**Watch Video Solution** 

**75.** Suppose a person wears convex galsses for proper vision. Where you think the image of the object is formed in his eyes when he is not using the glasses

- A. On blind spot
- B. On yellow spot
- C. In front of retina
- D. Behind the retina

# Answer: D



**Watch Video Solution** 

76. Cornea and lens of eye are

- A. Transparent and help in image formation on retina
- B. Transparent and diverge light rays on retina and image formation
- C. Sensitive and richly supplied by nerves
- D. Sensitive and richly supplied by blood vessels

#### Answer: A



- 77. Pigments present in cones of retina are connected with
  - A. Night blindness

- B. Accommodation of eye
- C. Colour discrimination
- D. Image formation

#### **Answer: C**



**Watch Video Solution** 

78. In hypermetropia, the image is formed

- A. Before retina and is corrected by convex lens
- B. Behind the retina and is corrected by covex lens
- C. Before retina and is corrected by concave lens
- D. Before retina and is corrected by concave lens

#### **Answer: B**



# **79.** Function of iris is to A. Move lens forward and backward B. Refract light rays C. Bring about movements of eyelids D. Alter the size of pupil **Answer: D Watch Video Solution** 80. Reduction in elastricity of eye lens with age causes

A. Myopia

B. Presbyopia

C. Cataract

D. Hypermetropia

# Answer: B Watch Video Solution

**81.** Light rays entering the eye is controlled by

- A. Pupil
- B. Iris
- C. Cornea
- D. Lens

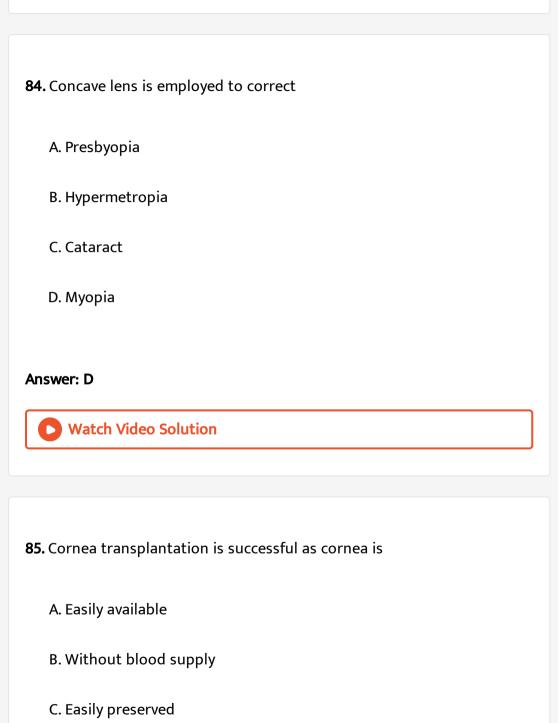
#### **Answer: A**



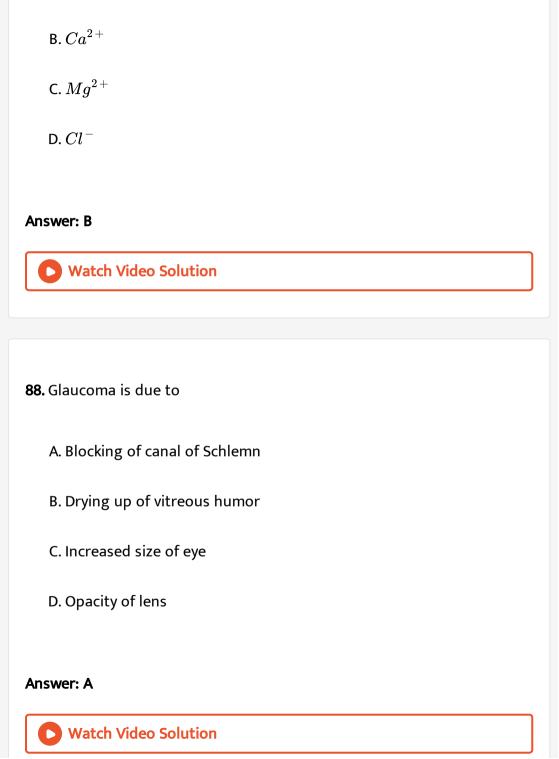
**Watch Video Solution** 

**82.** The defective condition of accomodation of the eye in which distant objects are seen distinctly but near objects are indistinct is

A. Myopia
B. Astigmatism
C. Presbyopia
D. Hypermetropia
Answer: D
Watch Video Solution
<b>83.</b> Eye lens is
A. Biconcave
B. Concave
C. Convex
D. Biconvex
Answer: D
Watch Video Solution



D. Easily stitched
Answer: B
Watch Video Solution
<b>86.</b> Which is absent in aqueous humor ?
A. Carbon dioxide
B. Oxygen
C. Hyaluronic acid
D. Glucose
Answer: C
Watch Video Solution
<b>87.</b> Endolymph has good quantity of



A.  $Na^+$ 

89. Colour blindness is due to defect in
A. Cones
B. Rods
C. Rods and cones
D. None of the above
Answer: A  Watch Video Solution
90. Focal length of eye lens is changed by
A. Pupil
B. Iris
C. Cornea

D. Ciliary body

#### **Answer: D**



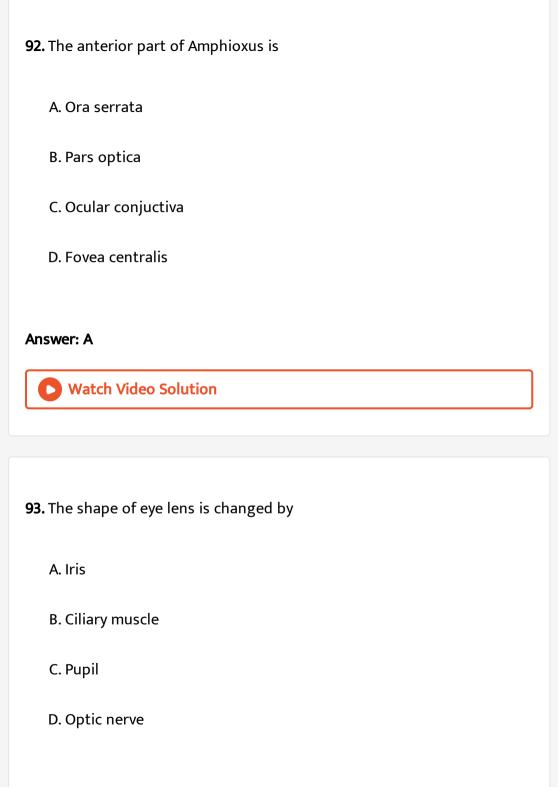
**Watch Video Solution** 

**91.** rodopsin pigments erythrolable, chlorolabe and cyanolabe are respectively

- A. Red, green and blue
- B. Blue, green and red
- C. Red, blue and green
- D. Green, red and blue

#### **Answer: A**





#### **Answer: B**



**Watch Video Solution** 

- 94. A characteristic of human cornea is
  - A. Absence of blood circulation
  - B. Causes cataract in old age
  - C. Has lacrimal gland for secretion of tears
  - D. Secreted by conjuctiva and glandular layer

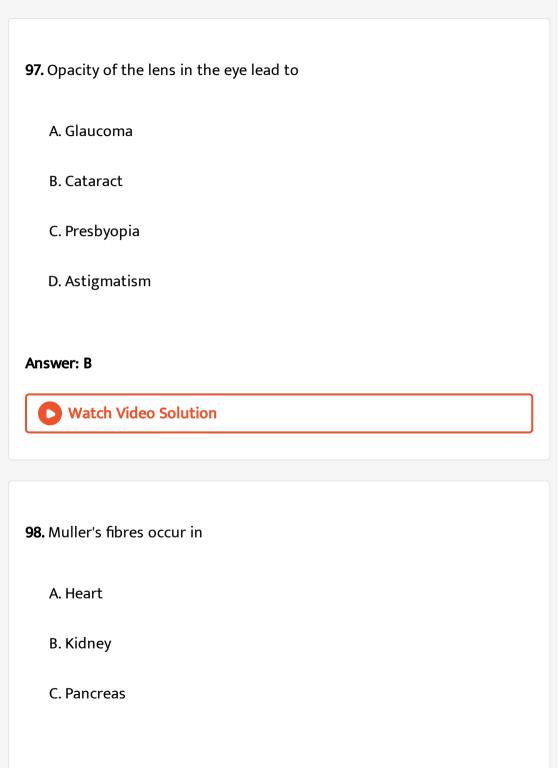
#### Answer: A



**Watch Video Solution** 

**95.** When we move from dark to light, we fail to see for some time but soon the visibility become normal. It is

A. Accommodation
B. Adaptation
C. Photoperiodism
D. Mutation
Answer: B
Watch Video Solution
<b>96.</b> Glaucoma is caused by increase in
A. Intraarterial pressure
B. Intraocular pressure
C. Intraventricular pressure
D. Intravesicular pressure
Answer: B
Watch Video Solution



D. Retina
Answer: D
Watch Video Solution
99. In a similarity with photographic camera, retina acts as
A. Shutter
B. Lens
C. Diaphragm
D. Film
Answer: D
Watch Video Solution

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

- A. Myopia
- B. Hypermetropia
- C. Presbyopia
- D. Glaucoma

#### Answer: D



**Watch Video Solution** 

- 101. In myopia or short sightedness
- A. Image is formed slightly in front of retina because eye ball is longer.
  - B. Eye ball is normal but image is formed over blind spot
  - C. Eye ball is normal but images is formed slightly behind the retina

due to faulty lens

D. Curvature of cornea becomes irregular
nswer: A
Watch Video Solution
<b>02.</b> The rods and cones of the eye retinal layer are modified
A. Bipolar neurons
B. Unipolar neurons
C. Multipolar neurons
D. Hairs
nswer: A
Watch Video Solution

**103.** Which of the following disorder is not hereditary?

B. Unipolar neurons C. Multipolar neurons D. Hairs **Answer: B View Text Solution** 104. Glands responsible for secreting tears are A. Meibomian glands B. Glands of Moll C. Glands of Zeis D. Lacrymal glands **Answer: D Watch Video Solution** 

A. Bipolar neurons

105. The central opening of iris is called as
A. Cornea
B. Lens
C. Pupil
D. Fovea centralis
Answer: C
Watch Video Solution
Watch Video Solution
Watch Video Solution  106. Gland found in eye skin of Rabbit is
106. Gland found in eye skin of Rabbit is
106. Gland found in eye skin of Rabbit is  A. Meibomian gland

D. Harderian gland
Answer: A
Watch Video Solution
107. Cones are concentrated at
A. Fovea centralis
B. Blind spot
C. Edge of retina
D. Choroid
Answer: A
Watch Video Solution
<b>108.</b> Proteins present in eye lens is

A. Opsin B. Collagen C. Crystallin D. Rhodopsin **Answer: C** Watch Video Solution 109. Fovea in the eye is a central pit in the yellowish pigmented spot called A. Retina B. Blind spot C. Macula lutea D. Cornea **Answer: C** 



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

- A. Bipolar cells, photoreceptors, ganglion cells
- B. Ganglion cells, rods, cones
- C. Ganglion cells, bipolar cells, photoreceptor cells
- D. Photoreceptor cells, ganglion cells, bipolar cells

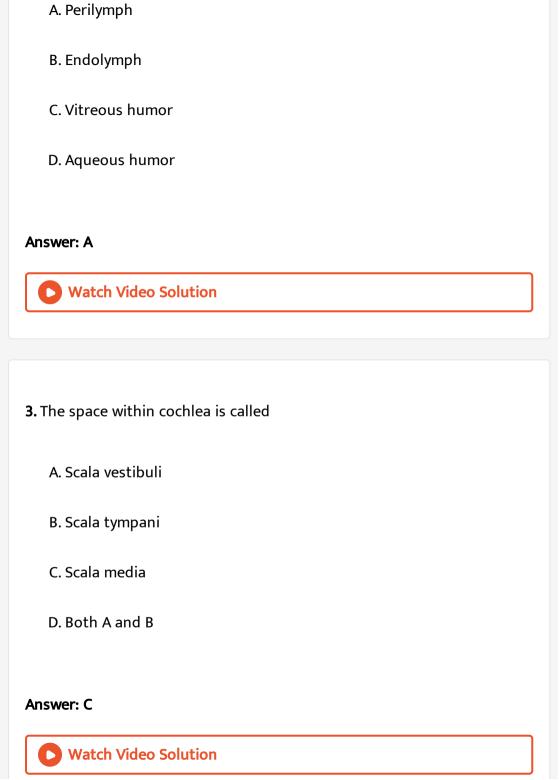
#### **Answer: C**



## Section A: Topicwise Questions Topic 6: The Ear (mechanism Of Hearing)

- **1.** Read the following statements and find out the incorrect statements.
- a. Anatomically, the ear can be divided into three major sections called

the outer ear, the middle ear and the inner ear. b. The outer ear consists of the pinna and external auditory meatus (canal). c. The tympanic membrane (ear drum ) is composed of connective tissue covered with mucus membrane outside and with skin inside. d. The ear ossicles reduces the efficiency of transmission of sound waves to the inner ear. e. The pinna collects the vibrations in the air which produce sound. A. a and b B. b and c C. c and d D. d and e Answer: C **Watch Video Solution** 2. Membranous labyrinth is surrounded by a fluid called



- **4.** The membrane constituting cochlea, the Reissner's and basilar, divide the surrounding perilymph filled bony labyrinth into an
  - A. Upper scala vestibuli and lower scala tympani
  - B. Upper scala tympani and lower scala vestibuli
  - C. Upper scala vestibuli and lower scala media
  - D. Upper scala tympani and lower scala media

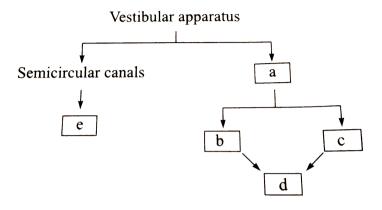
#### Answer: A



- 5. At the base of cochlea, the scala vestibuli ends at the …a‹ window, while the scala tympani terminates at the ‹b‹ window which open to the middle ear.
  - A. a-round, b-oval

B. a-oval, b-round C. a-spherical, b-oval D. a-circular, b-spherical **Answer: B Watch Video Solution** 6. In the organ or corti, above the rows of the hair cells is a thin elastic membrane called A. Reissner's membrane B. Tectorial membrane C. Basilar membrane D. Both A and C **Answer: B Watch Video Solution** 

7. Recognise the figure and find out the correct matching.



- A. a-saccule, b-crista, c-macula, d-ampulla, e-utricle
- B. a-otolith organ, b-saccule, c-utricle, d-ampulla, e-macula
- C. a-otolith organ, b-saccule, c-utricle, d-macula, e-ampulla
- D. a-crista ampullaris, b-ampulla, c-macula, d-saccule, e-otolith organ

#### **Answer: C**



**Watch Video Solution** 

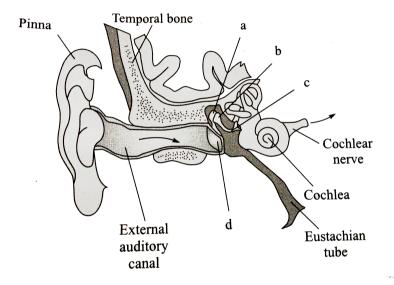
8. The saccule and utricle contain a projecting ridge called

A. Crista
B. Ampulla
C. Macula
D. Semi-circular canal
Answer: C
Watch Video Solution
9. The sound vibrations are passed through the middle ear to oval
window on to the fluid of the cochlea, where they generate waves in the
lymph induce a ripple in the
A. Basilar membrane
B. Tectorial membrane
C. Reissner's membrane
D. Tympanic membrane



#### **Watch Video Solution**

10. Recognise the figure and find out the correct matching.



A. a-malleus, b-incus, c-stapes, d-tympanic membrane

B. b-malleus, a-incus, d-stapes, c-tympanic membrane

C. c-malleus, d-incus, b-stapes, a-tympanic membrane

D. d-malleus, c-incus, a-stapes, b-tympanic membrane

## Watch Video Solution 11. Which part of the ear is influenced by gravity and movements? A. Vestibular apparatus B. Cochlea C. Organ of Corti D. Ear ossicles Answer: A **Watch Video Solution** 12. Statoacoustic receptors are located in A. Cerebrum

Answer: A

C. Middle ear D. Internal ear Answer: D **Watch Video Solution** 13. Eustachian tube connects A. External ear with middle ear B. External ear with internal ear C. Middle ear with pharynx D. Middle ear with internal ear **Answer: C Watch Video Solution** 

B. Cerebellum

14. Which one is used in balancing?
A. Organ of Corti
B. Vestibular region
C. Middle ear
D. Cochlea
Answer: B
Watch Video Solution
15. Bony labyrinth is filled with a fluid called
15. Bony labyrinth is filled with a fluid called  A. Endolymph
A. Endolymph
A. Endolymph  B. Perilymph

# Watch Video Solution 16. Scala tympani is connected to scala vestibuli by means of A. Stapes B. Helicotrema C. Basilar membrane D. Tectorial membrane **Answer: B** Watch Video Solution 17. Phonoreceptors occur in A. Skin

Answer: B

- B. Middle ear
- C. Tympanum
- D. Internal ear

#### **Answer: D**



- **18.** Correct sequence of regions in organisation of auditory mechanoreceptor organ is
  - A. Pinna-Tympanic membrane-Auditory canal-Cochlea-Malleus-Incus-
    - Stapes-Auditory nerve
  - B. Pinna-Malleus-Incus-Stapes-Auditory canal-Tympanic membrane-
    - Cochlea-Auditory nerve
  - C. Pinna-Auditory canal-Tympanic membrane-Malleus-Incus-Stapes-
    - Cochlea-Auditory nerve

D. Pinna-Cochlea-Tympanic membrane-Auditory membrane-Auditory

canal-Incus-Malleus-Stapes-Cochlea-Auditory nerve

#### **Answer: C**



Watch Video Solution

19. In mammals, the organs of Corit is found in

A. Scala vestibuli

B. Scala tympani

C. Scala media

D. Cochlear canal

#### **Answer: C**



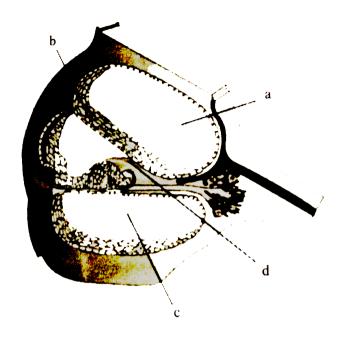
#### 20. Ear ossicle, incus is modified

- A. Jugal bone
- B. Articular bone
- C. Quadrate bone
- D. Hyomandibular bone.

#### **Answer: C**



21. Identify a, b, c, d in given diagram.



A. a-scala vestibuli, b-Reissner's membrane, c-scala tympani, d-tectorial membrane

- B. a-scala tympani, b-organ of corti, c-scala vestibuli, d-tectorial membrane
- C. a-scala vestibuli, b-tectorial membrane, c-scala media, d-basilar membrane

D. a-scala tympani, b-basilar membrane, c-scala vestibuli, d-Reissner's membrane.

#### Answer: A



### 22. Our ear can hear the frequency of sound waves

- A. 5-100 cycles/sec
- B. 20-20000 cycles/sec
- C. 20000-50000 cycles/sec
- D. 2000-3000 cycles/sec

#### **Answer: B**



23. Receptor cells for balancing occur in human ear in
A. Malleus, incus and stapes
B. Utriculus, sacculus and semicircular canals
C. Organ of Corti
D. Eustachian tube
Answer: B
Watch Video Solution
<b>24.</b> Organ of Corti sends information to brain through cranical nerve
A. V
A. V B. VI

## **Answer: D** Watch Video Solution 25. Largest ear ossicle is A. Incus B. Stapes C. Malleus D. Stapedial plate **Answer: C** Watch Video Solution 26. Middle ear contains A. Fluid

C. Air
D. Wax
Answer: C
Watch Video Solution
27. Which pair has the same meaning ?
A. Sternum-Chest bone
B. Stapes-Anvil bone
C. Patella-Knee knot
D. Malleus-Hammer bone
Answer: D
Watch Video Solution

B. Blood

A. Tensor tymphani
B. Scala tympani
C. Tympanic membrane
D. Scala vestibuli
Answer: C
Watch Video Solution
29. Cell of Deiter occurs in
A. Retina
A. Retina  B. Organ of Corti

28. Ear drum is

# Answer: B Watch Video Solution

- 30. Sound is transmitted from middle ear to internal ear due to
  - A. Vibrations to tympanum
  - B. Vibrations of stapes
  - C. Striking of shapes
  - D. All of the above

#### **Answer: C**



- **31.** Part of ear concerned with hearing is
  - A. Reissner's membrane and tectorial membrane

B. Basilar membrane and tectorial membrane
C. Reissner's membrane and basilar membrane

Answer: B

D. Ampulla



**Watch Video Solution** 

- 32. Middle ear has
  - A. Two sets of tiny bones
  - B. Three sets of tiny bones
  - C. Two sets of large bones
  - D. Three sets of large bones

## Answer: B



33. Nerve impulse for hearing originates in
A. Ear drum
B. Auditory nerve
C. Ear ossicles
D. Cochlea
Answer: B
Watch Video Solution
<b>34.</b> Scala vestibuli is connected with
A. Fenestra rotundus
A. Fenestra rotundus  B. Fenestra ovalis

#### **Answer: B**



**Watch Video Solution** 

# **35.** Select the corect matching.

A.

Structure Location Function
(A) Eustachian tube Anterior part of internal ear Equalises a

B.

Structure Location Function

(B) Cerebellum Mid brain Controls respiration and gastric s

C.

Structure Location Function

(C) Hypothalamus Fore brain Controls body temperature, u

D.

Structure Location Function (D) Blind spot Place of departure of optic nerve from eye Roc

#### **Answer: C**



**36.** Read the following statements and find out the incorrect statements.

a. Anatomically, the ear can be divided into three major sections called the outer ear, the middle ear and the inner ear.

b. The outer ear consists of the pinna and external auditory meatus (canal).

c. The tympanic membrane (ear drum ) is composed of connective tissue covered with mucus membrane outside and with skin inside.

d. The ear ossicles reduces the efficiency of transmission of sound waves to the inner ear.

e. The pinna collects the vibrations in the air which produce sound.

A. a and b

B. b and c

C. c and d

D. d and e

## Answer: C



<b>37.</b> Membranous labyrinth is surrounded by a fluid called
A. Perilymph
B. Endolymph
C. Vitreous humor
D. Aqueous humor
Answer: A
Watch Video Solution
<b>38.</b> The space within cochlea is called
A. Scala vestibuli
B. Scala tympani
C. Scala media

water video Solution

D. Both A and B

#### **Answer: C**



**Watch Video Solution** 

**39.** The membrane constituting cochlea, the Reissner's and basilar, divide the surrounding perilymph filled bony labyrinth into an

- A. Upper scala vestibuli and lower scala tympani
- B. Upper scala tympani and lower scala vestibuli
- C. Upper scala vestibuli and lower scala media
- D. Upper scala tympani and lower scala media

## Answer: A



**40.** At the base of cochlea, the scala vestibuli ends at the .....window, while the scala tympani terminates at the ...... window which open to the middle ear.

- A. a-round, b-oval
- B. a-oval, b-round
- C. a-spherical, b-oval
- D. a-circular, b-spherical

#### **Answer: B**



- **41.** In the organ or corti, above the rows of the hair cells is a thin elastic membrane called
  - A. Reissner's membrane
    - B. Tectorial membrane

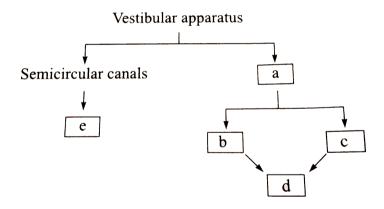
- C. Basilar membrane
- D. Both A and C

#### **Answer: B**



**Watch Video Solution** 

42. Recognise the figure and find out the correct matching.



- A. a-saccule, b-crista, c-macula, d-ampulla, e-utricle
- B. a-otolith organ, b-saccule, c-utricle, d-ampulla, e-macula
- C. a-otolith organ, b-saccule, c-utricle, d-macula, e-ampulla
- D. a-crista ampullaris, b-ampulla, c-macula, d-saccule, e-otolith organ

## Answer: C



Watch Video Solution

- 43. The saccule and utricle contain a projecting ridge called
  - A. Crista
  - B. Ampulla
  - C. Macula
  - D. Semi-circular canal

## Answer: C



**Watch Video Solution** 

**44.** The sound vibrations are passed through the middle ear to oval window on to the fluid of the cochlea, where they generate waves in the lymph induce a ripple in the

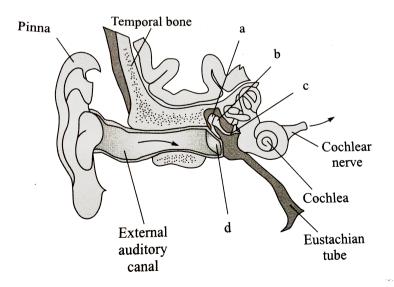
- A. Basilar membrane
- B. Tectorial membrane
- C. Reissner's membrane
- D. Tympanic membrane

#### Answer: A



**Watch Video Solution** 

## **45.** Recognise the figure and find out the correct matching.



- A. a-malleus, b-incus, c-stapes, d-tympanic membrane B. b-malleus, a-incus, d-stapes, c-tympanic membrane

C. c-malleus, d-incus, b-stapes, a-tympanic membrane

D. d-malleus, c-incus, a-stapes, b-tympanic membrane

## Answer: A

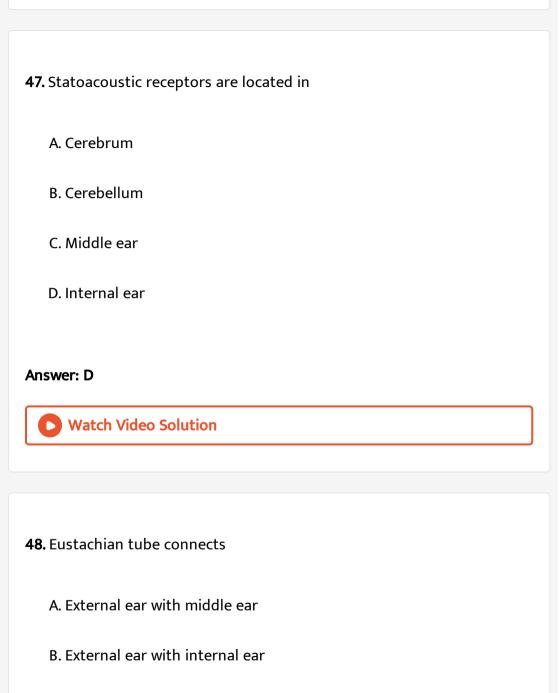


**Watch Video Solution** 

- **46.** Which part of the ear is influenced by gravity and movements?
  - A. Vestibular apparatus
  - B. Cochlea
  - C. Organ of Corti
  - D. Ear ossicles

## Answer: A



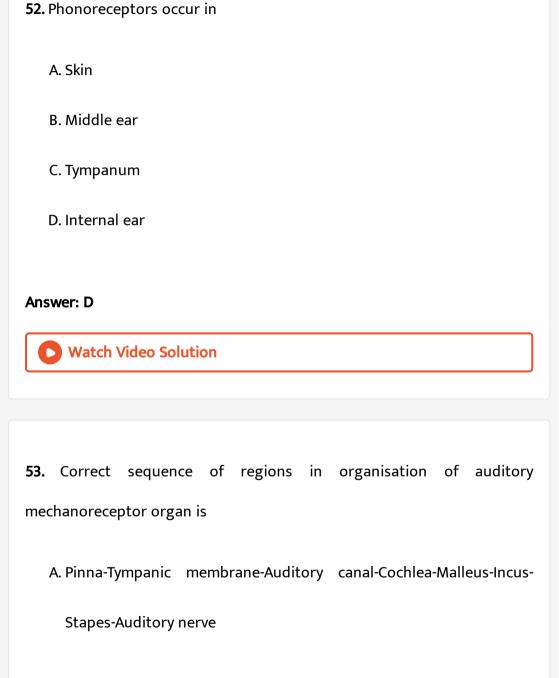


C. Middle ear with pharynx

D. Middle ear with internal ear
Answer: C
Watch Video Solution
<b>49.</b> Which one is used in balancing ?
A. Organ of Corti
B. Vestibular region
C. Middle ear
D. Cochlea
Answer: B
Watch Video Solution
<b>50.</b> Bony labyrinth of ear contians a fluid known as

B. Perilymph
C. Humor
D. Synovial fluid
Answer: B
Watch Video Solution
<b>51.</b> Scala tympani is connected to scala vestivuli by means of
A. Stapes
B. Helicotrema
C. Basilar membrane
D. Tectorial membrane
Answer: B
Watch Video Solution

A. Endolymph



B. Pinna-Malleus-Incus-Stapes-Auditory canal-Tympanic membrane-

Cochlea-Auditory nerve

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

Cochlea-Auditory nerve

D. Pinna-Cochlea-Tympanic membrane-Auditory membrane-Auditory canal-Incus-Malleus-Stapes-Cochlea-Auditory nerve

#### **Answer: C**



# **54.** In mammals, the organs of Corit is found in

A. Scala vestibuli

B. Scala tympani

C. Scala media

D. Cochlear canal

## Answer: C



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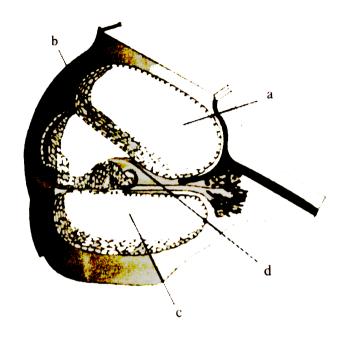
# 55. Ear ossicle, incus is modified

- A. Jugal bone
- B. Articular bone
- C. Quadrate bone
- D. Hyomandibular bone.

## **Answer: C**



**56.** Identify a, b, c, d in given diagram.



A. a-scala vestibuli, b-Reissner's membrane, c-scala tympani, d-tectorial membrane

B. a-scala tympani, b-organ of corti, c-scala vestibuli, d-tectorial membrane

C. a-scala vestibuli, b-tectorial membrane, c-scala media, d-basilar membrane

D. a-scala tympani, b-basilar membrane, c-scala vestibuli, d-Reissner's membrane.

## **Answer: A**



# 57. Our ear can hear the frequency of sound waves

- A. 5-100 cycles/sec
- B. 50-20000 cycles/sec
- C. 20000-50000 cycles/sec
- D. 2000-3000 cycles/sec

## Answer: B



<b>58.</b> Receptor cells for balancing occur in human ear in
A. Malleus, incus and stapes
B. Utriculus, sacculus and semicircular canals
C. Organ of Corti
D. Eustachian tube
Answer: B
Watch Video Solution
<b>59.</b> Organ of Corti sends information to brain through cranical nerve
A. V
B. VI
C. VII
D. VIII

# **Answer: D** Watch Video Solution 60. Largest ear ossicle is A. Incus B. Stapes C. Malleus D. Stapedial plate **Answer: C** Watch Video Solution 61. Middle ear contains A. Fluid

C. Air
D. Wax
Answer: C
Watch Video Solution
<b>62.</b> Which pair has the same meaning ?
A. Sternum-Chest bone
B. Stapes-Anvil bone
C. Patella-Knee knot
D. Malleus-Hammer bone
Answer: D
Watch Video Solution

B. Blood

<b>63.</b> Ear drum is
A. Tensor tymphani
B. Scala tympani
C. Tympanic membrane
D. Scala vestibuli
Answer: C  Watch Video Solution
<b>64.</b> Cell of Deiter occurs in

A. Retina

B. Organ of Corti

D. Sebaceous glands

C. Utriculus

## **Answer: B**



**Watch Video Solution** 

**65.** Sound is transmitted from middle ear to internal ear to internal ear due to

- A. Vibrations to tympanum
- B. Vibrations of stapes
- C. Striking of shapes
- D. All of the above

## **Answer: C**



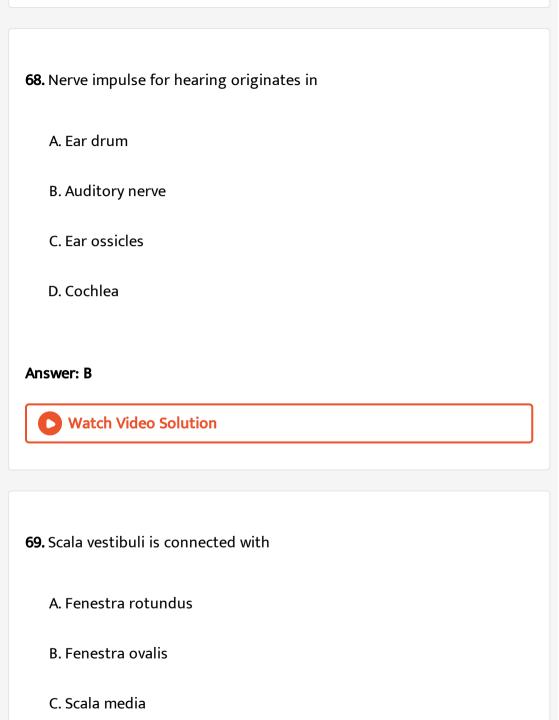
**Watch Video Solution** 

**66.** Part of ear concerned with hearing is

A. Reissner's membrane and tectorial membrane B. Basilar membrane and tectorial membrane C. Reissner's membrane and basilar membrane D. Ampulla **Answer: B Watch Video Solution** 67. Middle ear has A. Two sets of tiny bones B. Three sets of tiny bones C. Two sets of large bones

- Answer: A
  - Watch Video Solution

D. Three sets of large bones



D. Eustachiau tube

Answer: B



Watch Video Solution

**70.** Select the corect matching.

Structure

A.

Structure Location Function
(A) Eustachian tube Anterior part of internal ear Equalises a

В.

Structure Location Function
(B) Cerebellum Mid brain Controls respiration and gastric s

C.

(C) Structure Location Function (C) Hypothalamus Fore brain Controls body temperature, u

Location

D.

(D) Blind spot Place of departure of optic nerve from eye Roc

Fu

Answer: C

# Section B: Assertion-reasoning Questions

1. Assertion: The function of muscles, lungs, heart, blood vessels, kidney and other organs are coordinated while performing physical exercise.

Reason: In our body the neural system and the endocrine system jointly coordinate all the activities of the organs so that they function in a synchronised fashion.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### **Answer: A**



**Watch Video Solution** 

**2.** Assertion: The neural system provides an organised network of point-to-point connections for a quick coordination

Reason: The endocrine system provides chemical integration through hormones.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### **Answer: B**



**3.** Assertion: The cerebral cortex is referred to as the grey matter due to its greyish appearance.

Reason: The neuron cell bodies are concentrated in the cerebral cortex.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## **Answer: A**



4. Assertion: Aqueous humor is a transparent get like fluid.

Reason: Vitreous humor contains a thin watery fluid.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## Answer: D



**Watch Video Solution** 

**5.** Assertion: Cerebellum has very convoluted surface in order to provide the additional space for many more neurons.

Reason: The medulla oblongata control respiration, cardiovascular reflexes and gastric secretions.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## **Answer: B**



**6.** Assertion: The inner part of cerebral hemisphere is called white matter.

Reason: Fibres of the tracts are covered with the myelin sheath, which constitute the inner part of cerebral hemisphere. There give an opaque white appearance.

A. Both assertion and reason are true and the reason is the correct explanation of the assertion.

B. Both assertion and reason are true but reason is not the correct explanation of the assertion.

C. Assertion is true but reason is false.

D. Both assertion and reason are false.

#### **Answer: A**



**7.** Assertion : The base of semi-circular canal is swollen and is called crista ampullaris.

Reason: Crista ampullaris contains a projectings ridge called ampulla which has hair cells.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### **Answer: D**



Watch Video Solution

**8.** Assertion: In the human eye, there are three types of rods which possess their own characteristic photopigments that respond to red, green and blue lights.

Reason: The sensations of different colour are produced by various combinations of these rods and their photopigments.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### Answer: D



**Watch Video Solution** 

**9.** Assertion: A neuron is a microscopic structure composed of three major parts, namely, cell body, dendrites and axon.

Reason: Short fibres which branch repeatedly and project out of the cell body are called axons.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

#### **Answer: C**



Watch Video Solution

**10.** Assertion : The neural organisation is very simple in lower invertebrates.

Reason: The vertebrates have a more developed neural system.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

## **Answer: B**



## **Watch Video Solution**

11. Assertion: Neurons are excitable cells.

Reason: The membrane of the neurons are in a polarised state.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## **Answer: A**



## **Watch Video Solution**

12. Assertion : When a neuron is not conducting any impulse, i.e. resting, the axoplasm inside the axon contains high concentration of  $K^\pm$  and negatively charged proteins and low concentration of  $Na^\pm$ .

Reason : In resting, the axonal membrane is comparatively more permeable to  $K^+$  ions and nearly impermeable to  $Na^+$  ions. Similarly, the membrane is impermeable to negatively charged proteins present in axoplasm

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## Answer: A



**Watch Video Solution** 

**13.** Assertion: Myelinated nerve fibre are enveloped with Schwan cells, which form a myelin sheath around the axon

Reason: Unmyelinated nerve fibre is not enclosed by a Schwan cell and hence does not form a myelin sheath around the axon.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## **Answer: C**



**Watch Video Solution** 

**14.** Assertion: The function of muscles, lungs, heart, blood vessels, kidney and other organs are coordinated while performing physical exercise.

Reason: In our body the neural system and the endocrine system jointly coordinate all the activities of the organs so that they function in a synchronised fashion.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## Answer: A



**Watch Video Solution** 

**15.** Assertion : The neural system provides an organised network of point-to-point connections for a quick coordination

Reason: The endocrine system provides chemical integration through hormones.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## **Answer: B**



**Watch Video Solution** 

16. Assertion: The cerebral cortex is referred to as the grey matter due to its greyish appearance.

Reason: The neuron cell bodies are concentrated in the cerebral cortex.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## **Answer: A**



17. Assertion: Aqueous humor is a transparent get like fluid.

Reason: Vitreous humor contains a thin watery fluid.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### **Answer: D**



Watch Video Solution

**18.** Assertion : Cerebellum has very convoluted surface in order to provide the additional space for many more neurons.

Reason: The medulla oblongata control respiration, cardiovascular reflexes and gastric secretions.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

### **Answer: B**



Watch Video Solution

**19.** Assertion: The inner part of cerebral hemisphere is called white matter.

Reason: Fibres of the tracts are covered with the myelin sheath, which constitute the inner part of cerebral hemisphere. There give an opaque white appearance.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.

D. If both assertion and reason are false.

### **Answer: A**



**Watch Video Solution** 

**20.** Assertion: The base of semi-circular canal is swollen and is called crista ampullaris.

Reason: Crista ampullaris contains a projectings ridge called ampulla which has hair cells.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

## **Answer: D**



**21.** Assertion: In the human eye, there are three types of rods which possess their own characteristic photopigments that respond to red, green and blue lights.

Reason: The sensations of different colour are produced by various combinations of these rods and their photopigments.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

### Answer: D

**22.** Assertion: A neuron is a microscopic structure composed of three major parts, namely, cell body, dendrites and axon.

Reason: Short fibres which branch repeatedly and project out of the cell body are called axons.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## **Answer: C**



**Watch Video Solution** 

**23.** Assertion : The neural organisation is very simple in lower invertebrates.

Reason: The vertebrates have a more developed neural system.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## **Answer: B**



Watch Video Solution

**24.** Assertion : Neurons are excitable cells.

Reason: The membrane of the neurons are in a polarised state.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

### **Answer: A**



**Watch Video Solution** 

**25.** Assertion : When a neuron is not conducting any impulse, i.e. resting, the axoplasm inside the axon contains high concentration of  $K^+$  and negatively charged proteins and low concentration of  $Na^+$ .

Reason : In resting, the axonal membrane is comparatively more permeable to  $K^+$  ions and nearly impermeable to  $Na^+$  ions. Similarly, the membrane is impermeable to negatively charged proteins present in axoplasm

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## Answer: A



Watch Video Solution

26. Assertion: Myelinated nerve fibre are enveloped with Schwan cells, which form a myelin sheath around the axon

Reason: Unmyelinated nerve fibre is not enclosed by a Schwan cell and hence does not form a myelin sheath around the axon.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

B. If both assertion and reason are true but reason is not the correct

explanation of the assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

## **Answer: C**



## Section C : Previous Years' Examination Questions (NEET/AIPMT QUESTIONS )

- **1.** During transmission of nerve impulse through a nerve fibre, the potential on the inner side of plasma membrane would change
- A. First negative, then positive and continue to be positive
  - B. First positive, then negative and continue to be negative
  - C. First positive, then negative and again back to positive
  - D. First negative, then positive and again back to negative

## Answer: D



**Watch Video Solution** 

- 2. Neurosecretory cells occurs in
  - A. Hypothalamus
  - B. Cerebral cortex
  - C. Medulla oblongata
  - D. Corpus callosum

## Answer: A



**Watch Video Solution** 

**3.** During the propagation of a nerve impulse, the action potential results from the movement of

- A.  $Na^+$  from intracellular fluid to extracellular fluid
- B.  $Na^+$  from extracellular fluid to intracellular fluid
- C.  $Na^+$  towards both directions
- D. None of the above

#### **Answer: B**



**Watch Video Solution** 

**4.** Which one of the following is the correct difference between Rod Cells and cone cells of our retina

		Rod Cells	Cone Cells
(a)	Overall	Vision in poor	Colour vision
	function	light	and detailed vision in
			bright light
(b)	Distibution	More	Evenly
		concentrated	distributed all
		in centre of retina	Over retina
(c)	Visual acuity	High	Low
(d)	Visual	Iodopsin	Rhodopsin
	pigment containe	ed	



5. Sensory neurons of retina of eye are				
A. Macula and cristae				
B. Pacinian and Ruffini's corpuscles				
C. Rods and cones				
D. All of the above				
Answer: C				
Watch Video Solution				
Watch Video Solution				
Watch Video Solution				
6. Cerebrum is in direct contact with				
6. Cerebrum is in direct contact with				
6. Cerebrum is in direct contact with  A. Duramater				

## Answer: C



**Watch Video Solution** 

- 7. In myasthenia gravis, acetylcholine
  - A. Receptors on motor end plate are reduced
  - B. Secretion from nerve terminals is reduced
  - C. Esterase activity is prohibited
  - D. Secretion from nerve terminals is enhanced

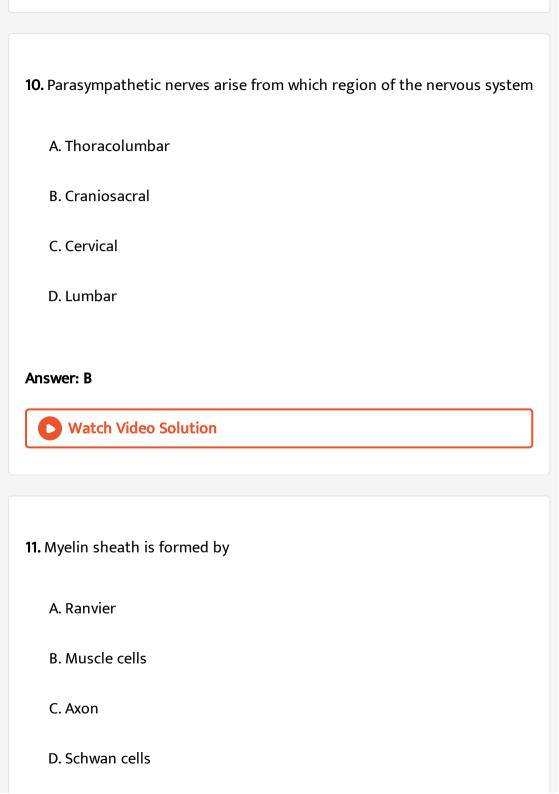
## Answer: A



**Watch Video Solution** 

- 8. The optic lobes in humans are represented by the corpora
  - A. Bigemina

B. Quadrigemina			
C. Arenacea			
D. Striata			
Answer: B			
Watch Video Solution			
9. In a medullated nerve fibre, the conduction of impulse is faster due to			
the presence of			
A. Pericytes			
B. Endoneurium and epineurium			
C. Myelin sheath and nodes of Ranvier			
D. Nissl granules			
Answer: C			
Watch Video Solution			



## Answer: D **Watch Video Solution** 12. Opening in skull is A. Foramen of Monro B. Foramen magnum C. Coronal nature D. Lamboidal suture **Answer: B Watch Video Solution** 13. Colour perception in human is due to A. Rhodopsin pigment in rod cells

B. Rhodopsin pigment in cone cells

C. lodopsin pigment in rod cells

D. Iodopsin pigment in cone cells

Answer: D



**Watch Video Solution** 

- 14. Sympathetic nerves in mammals develop from
  - A. Sacral region
  - B. Cervical region
  - C. Thoracico-lumbar region
  - D.  $3^{rd}$ ,  $7^{th}$ ,  $9^{th}$  and  $10^{th}$  cranial nerves

## **Answer: C**



**Watch Video Solution** 

15. Light sensitive cells of eye are present in			
A. Cones			
B. Sclera			
C. Choroid			
D. Retina			
Answer: D			
Watch Video Solution			
<b>16.</b> Colour blindness is due to defect in			
16. Colour blindness is due to defect in  A. Cones			
A. Cones			
A. Cones B. Rods			

# Answer: A Watch Video Solution 17. The innermost layer of the human eye is A. Retina B. Lens C. Sclera D. Choroid Answer: A **Watch Video Solution** 18. Sensory structure that responds to pressure change is A. Meissner's corpuscle

B. Pacinian corpuscle C. Fnd bulb of Krause D. Organ of Ruffini Answer: B **Watch Video Solution** 19. The point in eye of mammals from which optic nerves and blood vessels leave the eye ball is called A. Yellow spot B. Blind spot C. Pars optica D. Pupil **Answer: B Watch Video Solution** 

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

- A. Vitamin A
- B. Vitamin B
- C. Vitamin C
- D. Vitamin D

## Answer: A



- 21. Read the given statements and select the correct option.
- (i)Synaptic cleft of neurons secreates adrenaline.
- (ii)Myelinated nerve fibres are enveloped with Schwann cells, which form a myelin sheath around the axon.
- (iii)Non-myelinated nerve fibre is enclosed by a Schwann cell that does

not form a myelin sheath.

(iv)Spinal and cranial nerves are made of non-myelinated nerve fibres.

A. a, b, c - correct, d - incorrect

B. c, d - correct, a, b - incorrect

C. a, b - correct, c, d - incorrect

D. b, c - correct, a, d - incorrect

### **Answer: D**



**Watch Video Solution** 

## 22. Medulla oblongata develops from

A. No vision

B. No memory

C. No thermoregulation

D. No response when pricked with needle

# Answer: D **Watch Video Solution** 23. Which function will be lost due to damaged of occipital lobe A. Vision B. Hearing C. Speech D. Memory Answer: A **Watch Video Solution** 24. The co-ordinator between Nervous and endocrine system is A. Thalamus

C. Limbic system D. Parietal lobe **Answer: B Watch Video Solution** 25. Homeostasis is maintained by A. Cerebellum B. Cerebrum C. Diencephalon D. Medulla oblongata **Answer: C Watch Video Solution** 

B. Hypothalamus

<b>26.</b> Diencephalon is the centre of the following except		
A. Sweating		
B. Sneezing		
C. Thirst		
D. Hunger		
Answer: B		
Watch Video Solution		
27. Initiation of nerve impulse is due to		
A. Release of $Ca^{2+}$		
B. Absorption of $Ca^{2+}$		
C. Stoppage of $Na^+ / K^+$ ATP-ase pump		
D. Activation of $Na^+/K^+$ ATP-ase pump		

# Answer: C **Watch Video Solution** 28. Rods are sensitive to A. Dim light B. High intensity light C. Colour preception D. All of the above Answer: A **Watch Video Solution** 29. Specific receptors responsible for the balance of the body A. Organ of Corti

- B. Crista and macula
- C. Basilar membrane
- D. Tectorial membrane

## Answer: B



**Watch Video Solution** 

- **30.** During transmission of nerve impulse through a nerve fibre, the potential on the inner side of plasma membrane would change
  - A. First negative, then positive and continue to be positive
  - B. First positive, then negative and continue to be negative
  - C. First positive, then negative and again back to positive
  - D. First negative, then positive and again back to negative

## **Answer: D**



**Watch Video Solution** 

<b>31.</b> Neurosecretory cells occurs	in

A. Hypothalamus

B. Cerebral cortex

C. Medulla oblongata

D. Corpus callosum

## **Answer: A**



**Watch Video Solution** 

**32.** During the propagation of a nerve impulse, the action potential results from the movement of

A.  $Na^+$  from intracellular fluid to extracellular fluid

B.  $Na^+$  from extracellular fluid to intracellular fluid

C.  $Na^+$  towards both directions

## D. None of the above

## **Answer: B**



**Watch Video Solution** 

**33.** Which one of the following is the correct difference between Rod Cells and cone cells of our retina

			Rod Cells	Cone Cells	
	(a)	Overall	Vision in poor	Colour vision	
		function	light	and detailed vision in	
				bright light	
(	(b)	Distibution	More	Evenly	
			concentrated	distributed all	
			in centre of retina	Over retina	
(	(c)	Visual acuity	High	Low	
(	d)	Visual	Iodopsin	Rhodopsin	
	pigment contained				



**Watch Video Solution** 

34. Sensory neurons of retina of eye are

A. Macula and cristae B. Pacinian and Ruffini's corpuscles C. Rods and cones D. All of the above **Answer: C** Watch Video Solution 35. Cerebrum is in direct contact with A. Duramater B. Arachnoid C. Piamater D. Enterocoel **Answer: C** Watch Video Solution

<b>36.</b> In Myasthenia gravis acetylch	oline
--	-------

- A. Receptors on motor end plate are reduced
- B. Secretion from nerve terminals is reduced
- C. Esterase activity is prohibited
- D. Secretion from nerve terminals is enhanced

#### **Answer: A**



**Watch Video Solution** 

37. The optic lobes in humans are represented by the corpora

- A. Bigemina
- B. Quadrigemina
- C. Arenacea

D. Striata			
nswor. P			

#### Answer: B

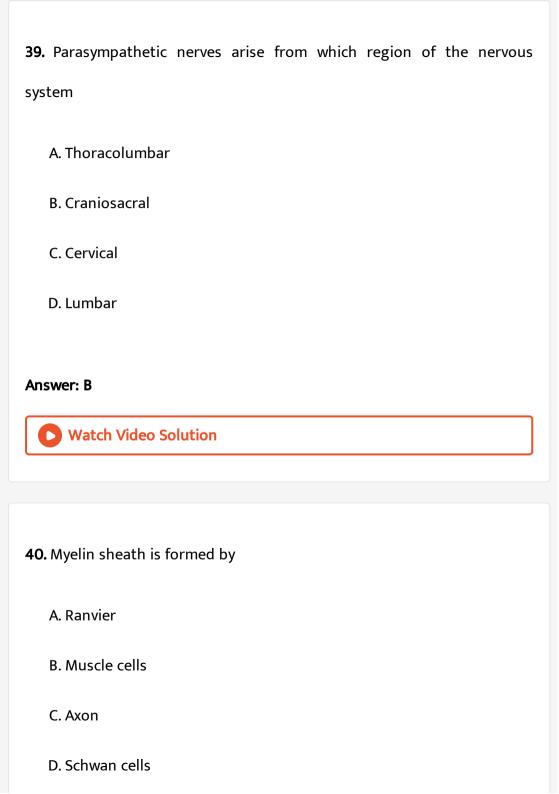


38. In a medullated nerve fibre, the conduction of impulse is faster due to the presence of

- A. Pericytes
- B. Endoneurium and epineurium
- C. Myelin sheath and nodes of Ranvier
- D. Nissl granules

#### **Answer: C**





## Answer: D **Watch Video Solution** 41. Opening in skull is A. Foramen of Monro B. Foramen magnum C. Coronal nature D. Lamboidal suture **Answer: B** Watch Video Solution 42. Colour pereception in human is due to A. Rhodopsin pigment in rod cells

B. Rhodopsin pigment in cone cells

C. Iodopsin pigment in rod cells

D. Iodopsin pigment in cone cells

#### **Answer: D**



**Watch Video Solution** 

- **43.** Sympathetic nerves in mammals develop from
  - A. Sacral region
  - B. Cervical region
  - C. Thoracico-lumbar region
  - D.  $3^{rd}$ ,  $7^{th}$ ,  $9^{th}$  and  $10^{th}$  cranial nerves

#### Answer: C



<b>44.</b> Light sensitive cells of eye are present in
A. Cones
B. Sclera
C. Choroid
D. Retina
Answer: D
Watch Video Solution
<b>45.</b> Colour blindness is due to defect in
A. Cones
B. Rods
B. Rods C. Rods and cones

## Answer: A Watch Video Solution 46. The innermost layer of the human eye is A. Retina B. Lens C. Sclera D. Choroid Answer: A **Watch Video Solution** 47. Sensory structure that responds to pressure change is A. Meissner's corpuscle

B. Pacinian corpuscle C. Fnd bulb of Krause D. Organ of Ruffini **Answer: B Watch Video Solution** 48. The point in eye of mammals from which optic nerves and blood vessels leave the eye ball is called A. Yellow spot B. Blind spot C. Pars optica D. Pupil **Answer: B Watch Video Solution** 

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

- A. Vitamin A
- B. Vitamin B
- C. Vitamin C
- D. Vitamin D

#### Answer: A



- **50.** Read the given statements and select the correct option.
- (i)Synaptic cleft of neurons secreates adrenaline.
- (ii)Myelinated nerve fibres are enveloped with Schwann cells, which form a myelin sheath around the axon.
- (iii)Non-myelinated nerve fibre is enclosed by a Schwann cell that does

not form a myelin sheath.

(iv)Spinal and cranial nerves are made of non-myelinated nerve fibres.

A. a, b, c - correct, d - incorrect

B. c, d - correct, a, b - incorrect

C. a, b - correct, c, d - incorrect

D. b, c - correct, a, d - incorrect

#### **Answer: D**



**Watch Video Solution** 

51. If medulla oblongata is destroyed what function is affected

A. No vision

B. No memory

C. No thermoregulation

D. No response when pricked with needle

## Answer: D **Watch Video Solution** 52. Which function will be lost due to damaged of occipital lobe A. Vision B. Hearing C. Speech D. Memory Answer: A **Watch Video Solution** 53. The co-ordinator between Nervous and endocrine system is A. Thalamus

C. Limbic system D. Parietal lobe **Answer: B Watch Video Solution** 54. Homeostasis is maintained by A. Cerebellum B. Cerebrum C. Diencephalon D. Medulla oblongata **Answer: C Watch Video Solution** 

B. Hypothalamus

<b>55.</b> Diencephalon is the centre of the following except
A. Sweating
B. Sneezing
C. Thirst
D. Hunger
Answer: B
Watch Video Solution
<b>56.</b> Initiation of nerve impulse is due to

A. Release of  $Ca^{2\,+}$ 

B. Absorption of  $Ca^{2\,+}$ 

C. Stoppage of  $Na^{\,+}\,/K^{\,+}\,$  ATP-ase pump

D. Activation of  $Na^{\,+}\,/\,K^{\,+}$  ATP-ase pump

## **Answer: C Watch Video Solution** 57. Rods are sensitive to A. Dim light B. High intensity light C. Colour preception D. All of the above Answer: A **Watch Video Solution**

**58.** Specific receptors responsible for the balance of the body

A. Organ of Corti

B. Crista and macula C. Basilar membrane D. Tectorial membrane Answer: B **Watch Video Solution** 

### 59. Hypothalamus of the brain is not in involved in this function

- A. Osmoregulation and thirst
- B. Temperature control
- C. Accuracy of muscular movement
- D. Sleep wake cycle

#### **Answer: C**



<b>60.</b> The number of spinal nerves in man is
A. 31 pairs
B. 10 pairs
C. 12 pairs
D. 24 pairs
Answer: A
Watch Video Solution
<b>61.</b> Part of mammalian brain controlling muscular coordination, equilibrium and posture is
A. Cerebrum
B. Corpus callosum
C. Medulla oblongata
D. Cerebellum

## **Watch Video Solution** 62. Third and fourth ventricles of brain are connected by A. Foramen of Monro B. Foramen magnum C. Corpus callosum D. Aqueduct of Sylvius Answer: D **Watch Video Solution** 63. Injury localized to the hypothalamus would mostly likely disrupt A. Regulation of body temperature

Answer: D

- B. Short-term memory
- C. Co-ordination during locomotion
- D. Executive functions, such as decision making.

#### **Answer: A**



**Watch Video Solution** 

- **64.** Which one of the following statements is not correct?
  - A. Rhodopsin is the purplish red protein presents in rods only.
  - B. Retinal is the light absorbing portion of visual photo pigments q
  - C. In retina the rods have the photopigment rhodopsin while cones
    - have three different photopigments.
  - D. Retinal is a derivative of Vitamin C.

#### Answer: D



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

A. Tectorial membrane

B. Organ of corti

C. Cochlea

D. Vestibular apparatus

#### **Answer: D**



**Watch Video Solution** 

**66.** The defect in which part of the human brain would result in inability to express the emotions

A. Thalamus

B. Medulla

C. Limbic lobe

D. Pons

**Answer: C** 



**Watch Video Solution** 

**67.** Which of the following statements is incorrect?

A. Humans focus the eye by changing the shape of the lens

B. Human eye adjusts the amount of light entering the eye by contracting the ciliary muscles.

,

C. Human eye focuses by moving the lens closer to or farther from the

retina

cones

D. Colour blindness is due to an inherited lack of one or more types of

Answer: C



- **68.** Conduction of nerve impulse is a
  - A. Chemical process
  - B. Physical process
  - C. Electrochemical process
  - D. Biochemical process

## Answer: C



- **69.** Proprioceptors are associated with
  - A. Sense of touch
  - B. Sense of temperature
  - C. Internal body pressure

D. Auditory sense
Answer: C
Watch Video Solution
<b>70.</b> The organ of Corti in rabbit is concerned with the sense of
or
Cochlea of mammalian internal ear is concerned with
A. Taste
B. Smell
C. Hearing
D. Equilibrium
Answer: C
Watch Video Solution

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

A. Voluntary motor impulses

B. Commissural impulse

C. Integrating impulses

D. Sensory impulses

#### **Answer: A**



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

A. The optic nerve leaves the eye

B. Only rods are present

C. More rods than cones are found

D. High desity of cones occur, but has no rods

#### Answer: D



**Watch Video Solution** 

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

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

- B. Cerebrum calculation and contemplation
- C. Medulla oblongata homeostatic control
- D. Cerebellum language comprehension

#### **Answer: D**



74. Left and right cerebral hemispheres are linked by a broad nerve band called

A. Corpus callosum

B. Corpus luteum

C. Corpora quandrigimina

D. Anterior choroid plexus

#### Answer: A



**Watch Video Solution** 

75. Human body temperature is regulated by the centre located in

A. Cerebrum

B. Cerebellum

C. Medulla

D. Hypothalamus

# **Answer: D** Watch Video Solution **76.** Third ventricle of brain is located in A. Diecephalon B. Rhombencephalon C. Mesencephalon D. Cerebrum Answer: A Watch Video Solution 77. Choose the correct statement.

A. Photoreceptors in the human eye are depolarized during darkness

and become hyperpolarized in response to the light stimulus

B. Receptors do not produce graded potentials

C. Nociceptors respond to changes in pressure

D. Meissner's corpuscles are thermo-receptors

#### Answer: A



**Watch Video Solution** 

### **78.** Receptor sites for neuotransmitters are presents on

A. Pre-synaptic membrane

B. Tips of axons

C. Post-synaptic membrane

D. Membrane of synaptic vesicles

### Answer: C

- **79.** Good vision depends on adequate intake of cacotene rich food Select the best option from the following statements
- (A) Vitamin A derivatives are formed from carotene
- (B) The photopigments are embedded in the membrane discs of the ineer segment
- (C) Retinal is a derivative of Vitamin A
- (D) Retinal is a light absorbing part of all the visual photopigments
  - A. a, c and d
  - B. a and c
  - C. b, c and d
  - D. a and b

#### Answer: A



A. Proteins and lipids
B. DNA and RNA
C. Nucleic acids and SER
D. Free ribosomes and RER
Answer: D
Watch Video Solution
<b>81.</b> which of the following structures or regions is incorrectly paired with
its function.
A. Medulla oblongata: controls respiration and cardiovascular reflexes
B. Limbic systems : consists of fibre tracts that interconnect different
regions of brain, controls movement

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

C. Hypothalamus: production of releasing hormones and regulation of temperature hunger and thirst

D. Corpus callosum : band of fibers connecting left and right cerebral hemispheres

#### **Answer: B**



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

A. ligaments attached to the ciliary body

B. ligaments attached to the iris

C. smooth muscles attached to the iris

D. smooth muscles attached to the ciliary body

## Answer: A



### Section C: Previous Years' Examination Questions AIIMS QUESTIONS

**1.** If frog's brain is crushed, even then its leg moves on pinpointing. It is called

A. simple reflex

B. conditional reflex

C. neurotransmitter functions

D. autonomic nerve conditions

### Answer: A



**Watch Video Solution** 

**2.** 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 .

B. behind the retina C. in front of the retina D. on the yellow spot **Answer: C Watch Video Solution** 3. Both corpus lutea and macula lutea are A found in human ovaries B. a source of hormones C. characterized by a yellow colour D. contributory in maintaining pergnancy Answer: C

A. on the blind spot

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

A. nerve fibre is insulated by a medullary sheath

B. sodium pump starts operating only at the cyton and then continues into the nerve fibre

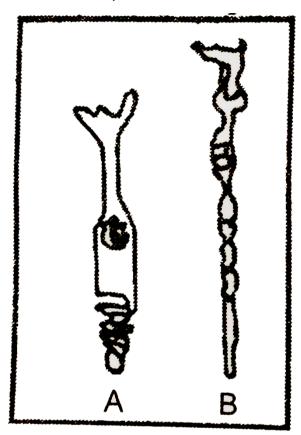
C. neurotransmitters are released by dendrites and not by axon endings

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

#### **Answer: D**



**5.** 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



Watch Video Solution

- 6. Hearing impairment affects which part of brain?
  - A. Frontal lobe
  - B. Parietal lobe
  - C. Temporal lobe
  - D. Cerebellum

#### **Answer: C**



**Watch Video Solution** 

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

A. retina B. iris C. cornea D. sclerotic Answer: A **Watch Video Solution** 8. Which set of terms would most likely be used in a description of the nervous system of chordates? A. Brain, dorsal nerve cord, highly developed receptors B. Brain, fused ganglia, ventral nerve cord C. No brain, fused ganglia, tympana D. No brain, nerve net, modified neurons Answer: A



- **9.** During  $Na^{\,+}-K^{\,+}$  pump
  - A.  $3Na^{\,+}$  and  $2K^{\,+}$  are transported
  - B.  $1Na^{\,+}$  and  $2K^{\,+}$  are transported
  - C.  $3Na^{\,+}$  and  $3K^{\,+}$  are transported
  - D. Depends on requirement of cell

#### **Answer: A**



**Watch Video Solution** 

- **10.** Bipolar nerve cells are present in
  - A. Skin tactile corpuscles
  - B. Spinal cord
  - C. Retina of eye

D. All the above
Answer: C
Watch Video Solution
11. Fenestra ovalis is the opening of
A. Cranium
B. Tympanum
C. Tympanic cavity
D. Brain
Answer: C
Watch Video Solution
12. Multipolar nerve cells are present in

A. Cochlea B. Dorsal root ganglia of spinal cord C. Retina of eye D. Brain **Answer: B** Watch Video Solution 13. Neurons receive signals through their.\_\_\_ and send signals to other neurons through their . A. dendrites, receptors B. end feet, cell bodies and dendrites C. cell bodies and dendrites, axons D. transmitter vesicles, axons Answer: C

#### Section C: Previous Years' Examination Questions(ASSERTION AND REASON)

**1.** Read the assertion and reson carefully to mark the correct option out of the options given below:

Assertion : The imbalance in concentration of  $Na^+,\,K^+$  and proteins generates resting potential.

Reason : To maintain the unequal distribution of  $Na^+\ \&\ K^+,$  the neurons use electrical energy.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### **Answer: C**



2. Assertion: Astigmatism is due to uneven curvature of lens.

Reason: It is treated with cylindrical lenses.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### **Answer: B**



**Watch Video Solution** 

**3.** Assertion : A cerebellum is related with skillful voluntary movement and involuntary activity like body balance, equilibrium etc.

Reason: It is part of hind brain and it is situated behind the pons.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### Answer: B



**Watch Video Solution** 

**4.** Assertion : The brain stem contains centres for controlling activities.

Reason: Brain stem is very sensitive.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### **Answer: B**



**Watch Video Solution** 

**5.** Assertion: The chemical stored in the synaptic vesicles are termed as neurotransmitters.

Reason: Synaptic vesicles release these chemicals in the synaptic cleft.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### **Answer: B**



**Watch Video Solution** 

**6.** Read the assertion and reson carefully to mark the correct option out of the options given below:

Assertion: All motor neurons are efferent neurons.

Reason: Motor neurons conduct nerve impulses from the spinal cord to the brain.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### **Answer: C**



**Watch Video Solution** 

**7.** Assertion : A cerebellum is related with skillful voluntary movement and involuntary activity like body balance, equilibrium etc.

Reason: It is part of hind brain and it is situated behind the pons.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.
Answer: B
Watch Video Solution
ection D : Chapter-end Test
I. Nerve gas affects neuromuscular activity by
A. Enhancing release of acetylocholine
B. Inhibiting acetylcholinesterase

C. Inhibiting release of acetylcholine

D. Blocking acetylcholine receptors

**Watch Video Solution** 

**Answer: B** 

2. It converts short term memory into long term remembrance.
A. Reticular system
B. Thalamus
C. Medulla oblongata
D. Hippocampus
Answer: D
Watch Video Solution
3. The brain stem is made up of
A. Mid brain, pons, cerebellum
B. Mid brain, pons, medulla oblongata
C. Diencephalon, medulla oblongata, cerebellum
D. Cerebellum, cerebrum, medulla oblongata

# Answer: B Watch Video Solution

- **4.** Cranial nerves are part of
  - A. Sympathetic nervous system
  - B. Parasympathetic nervous system
  - C. Somatic nervous system
  - D. Central nervous system

#### **Answer: C**



**Watch Video Solution** 

- 5. Bactericidal protein present in human tears is
  - A. Opsin

- B. Retinene C. Transduction D. Lysozyme **Answer: D Watch Video Solution** 6. In human brain, number of glial cells is A. Significantly greater than number of neurons
- - B. Significantly lower than the number of neurons
  - C. Roughly equal to number of Schwan cells
  - D. Roughly equal to number of neurons

#### Answer: D



7. Comprehension of spoken and written words take place in the region of

A. Association area

B. Motor area

C. Broca's area

D. Wernicke's area

#### Answer: D



**Watch Video Solution** 

#### 8. Match the columns:

- Column I Column II
- 1. Fovea a. Provides opening for entry of light
- 2. Iris b. Transduces RBG light
- 3. Pupil c. Transmits information to CNS
- 4. Lens d. Controls amount of light entering
- 5. Optic Nerve e. Focus light on retina
  - A. 1-b, 2-d, 3-a, 4-e, 5-c
  - B. 1-a, 2-b, 3-c, 4-d, 5-e

- C. 1-c, 2-a, 3-d, 4-e, 5-b
- D. 1-e, 2-a, 3-d, 4-c, 5-b

#### **Answer: A**



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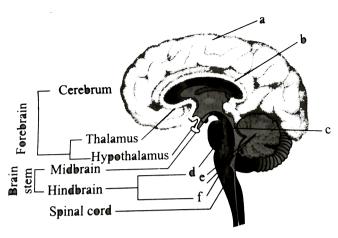
- 9. Which is thickened to form organ of corti
  - A. Tectorial membrane
  - B. Reissner's membrane
  - C. Basilar membrane
  - D. All of the above

#### **Answer: C**



**Watch Video Solution** 

10. Recognise the figure and find out the correct matching.



A. a-corpus callosum, c-cerebral aqueduct, b-cerebral hemisphere, d-cerebellum, f-pons, e-medulla

- B. b-corpus callosum, a-cerebral aqueduct, c-cerebral hemisphere, e-cerebellum, d-pons, f-medulla
- C. b-corpus callosum, c-cerebral aqueduct, a-cerebral hemisphere, e-cerebellum, d-pons, f-medulla
- D. a-corpus callosum, c-cerebral aqueduct, b-cerebral hemisphere, f-cerebellum, e-pons, d-medulla

#### Answer: C



**Watch Video Solution** 

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

- A. Pons
- B. Cerebellum
- C. Medulla oblongata
- D. Hypothalamus

#### Answer: D



Watch Video Solution

12. Medulla oblongata controls

A. Respiration
B. Cardiovascular reflexes
C. Gastric secretion
D. All of the above
Answer: D
Watch Video Solution
<b>13.</b> Pecten, a comb-like structure occurs in the eye of
A. Fishes
A. FISHES
B. Birds
B. Birds
B. Birds C. Mammals
B. Birds C. Mammals

<b>14.</b> Static equilibrium is maintianed by
A. Sacculus
B. Utriculus
C. Semicircular canals
D. Both A and B
Answer: D
Watch Video Solution
15. Acetylcholinesterase enzymes splits acetylcholine into
15. Acetylcholinesterase enzymes splits acetylcholine into  A. Acetic acid and choline

C. Aspartic acid and acetylcholine

D. Aspartic acid and choline
Answer: A
Watch Video Solution
<b>16.</b> Olfactory membrane is connected with
A. Taste
B. Vision
C. Smell
D. Hearing
Answer: C
Watch Video Solution

**17.** A 22 years student goes to his opthalamologist.He has prooblem in reading books because he is not able to contract his

A. Suspensory ligament

B. Ciliary muscles

C. Pupil

D. Iris

#### **Answer: B**



**Watch Video Solution** 

**18.** Parkinson's disease (Characterized by tremors and progressive rigidity of limbs) is cause by degeneration of brain neurons that are involved in movement control and make use of neurotransmitter

A. Acetylcholine

B. Norepinephrine

D. GABA
Answer: C
Watch Video Solution
<b>19.</b> Under prolonged starvation, brian receives energy from
A. Carbohydrates
B. Fats
C. Proteins
D. Acetoacetate
Answer: C
Watch Video Solution

C. Dopamine

### 20. Cerebrospinal fluid is produced by A. Ependymal cells B. Choroid plexus C. Neurons D. Neuroglial cells **Answer: B Watch Video Solution** 21. Cerebrospinal fluid is present A. Between arachnoid and durameter B. Beneath piameter C. Between arachnoid and piameter D. Between durameter and cranium

#### Answer: C



**Watch Video Solution** 

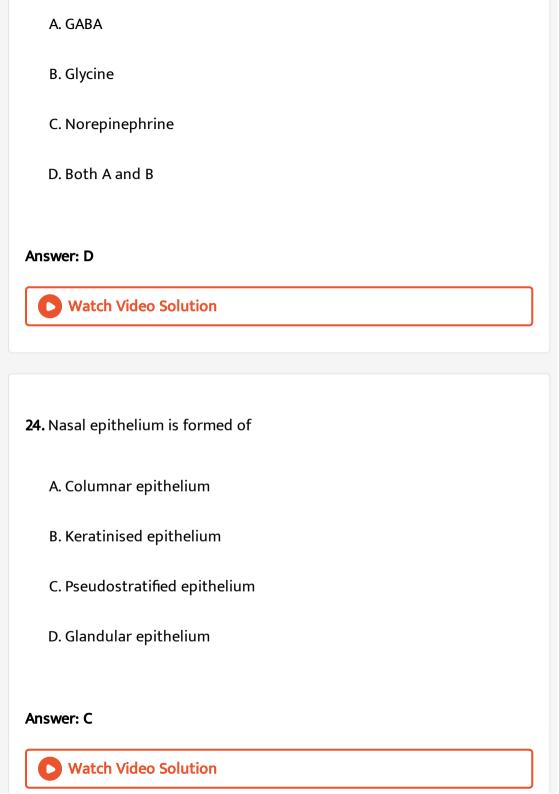
- 22. Choroid plexus is a network of
  - A. Muscle fibres
  - B. Lymph capillaries
  - C. Blood capillaries
  - D. Nerves

#### **Answer: C**

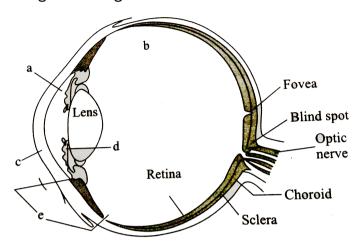


**Watch Video Solution** 

**23.** Which of the following substances leads to the inhibition of central nervous system



25. Recognise the figure and find out the correct matching.



A. c-iris, d-ciliary body, e-cornea, b-vitreous chamber, a-aqueous chamber

- B. d-iris, e-ciliary body, c-cornea, b-vitreous chamber, a-aqueous chamber
- C. e-iris, c-ciliary body, d-cornea, a-vitreous chamber, b-aqueous chamber
- D. d-iris, e-ciliary body, c-cornea, a-vitreous, chamber, b-aqueous chamber

## **Answer: B** Watch Video Solution 26. Vater's corpuscles are sensitive to A. Pressure B. Smell C. Temperature D. Touch Answer: A Watch Video Solution 27. Neurotransmitter between neuron and a muscle cell is A. Dopamine

B. Serotonin
C. Endorphin
D. Acetylcholine
Answer: D
Watch Video Solution
28. Organs of Ruffini are receptors of
A. Cold
B. Pressure
C. Heat
D. Touch
Answer: C
Watch Video Solution

<b>29.</b> The nerve related with diaphragm is
A. Vagus
B. Phrenic
C. Trigeminal
D. Glossopharyngeal
Answer: B
Watch Video Solution
<b>30.</b> Ratio of actual age to mental age is
A. Intelligence quotient
B. Idiocy
C. Rationality
D. Both B and C

# **Watch Video Solution** 31. Organs of Golgi is the sensing structure formed at the junction of A. Two nerves B. Two bones C. Nerve and muscles D. Muscle and tendon **Answer: D Watch Video Solution** 32. Arbor vitae is composed of

Answer: A

A. Grey matter

- B. White matter

  C. Neuroglia cells

  D. All of the above

  Answer: B

  Watch Video Solution
- **33.** Brain is dependent on blood supply for
  - A.  ${\cal O}_2$  and ATP
  - ${\sf B.}\ O_2$  and electrolytes
  - ${\sf C.}\ O_2$  and glucose
  - D. ATP and glucose

#### **Answer: C**



### 34. Pacinian corpuscles are A. Glands B. Pain receptors C. Naked tactile receptors D. Encapsulated pressure receptors **Answer: D Watch Video Solution** 35. Sensation of stomach pain is due to A. Proprioceptors **B.** Teloreceptors C. Enteroreceptros D. Exteroceptors

#### **Answer: C**



**Watch Video Solution** 

36. Saltatory conduction is uninterrupted conduction because of

- A. Less energy required
- B. More speed
- C. Less  $Na^{\,+}\,/K^{\,+}\,$  pump
- D. All of the above

#### **Answer: D**



**Watch Video Solution** 

37. Fish are able to see under water because

A. Both lens and cornea are spherical

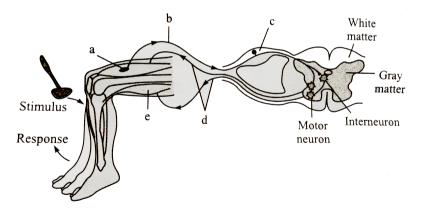
- B. Cornea is spherical, lens is flat
- C. Cornea is flat, lens is spherical
- D. Both lens and cornea are flat

#### **Answer: D**



**Watch Video Solution** 

#### 38. Recognise the figure and find out the correct matching.



A. a-receptor, e-effector, b-afferent pathway, d-efferent pathway, c-dorsal root ganglion

B. e-receptor, a-effector, d-afferent pathway, b-efferent pathway, c-

ventral root ganglion

C. a-receptor, e-effector, d-afferent pathway, b-efferent pathway, c-dorsal root ganglion

D. e-receptor, a-effector, b-afferent pathway, d-efferent pathway, c-ventral root ganglion

#### **Answer: A**



**39.** Propioreceptors are found in

A. Sole of feet

B. Adrenal cortex

C. Hypothalamus

D. Medulla

### Answer: A Watch Video Solution 40. Conjuctiva of eye is derived from A. Mesoderm B. Ectoderm C. Endoderm D. Endomesoderm **Answer: B** Watch Video Solution 41. Which ones are gustatoreceptors? A. Rod cells of eyes

- B. Cone cells of eyes

  C. Taste buds of tongue

  D. Receptors in skin

  Answer: C

  Watch Video Solution
- **42.** Meissner's corpuscles are located in
  - A. Pancreas and secrete trypsinogen
  - B. Adrenal and secrete trypsinogen
  - C. Spleen and destroy erythrocytes
  - D. Skin and perceive gentle pressure

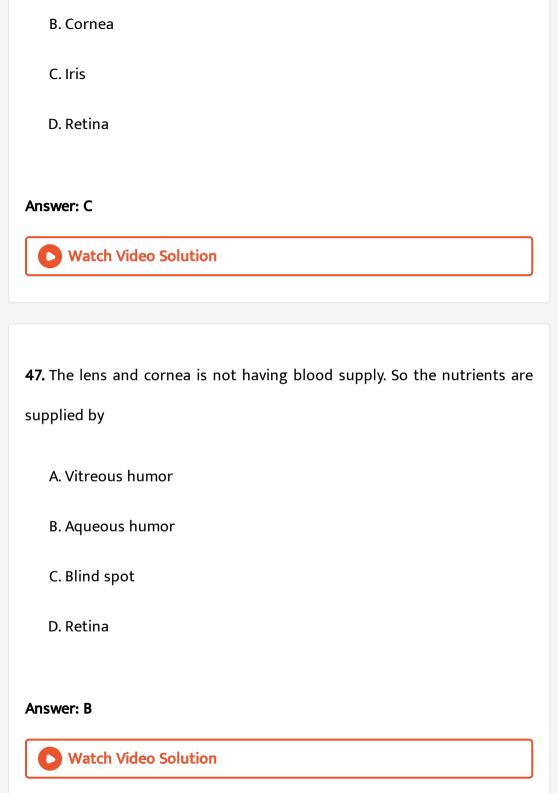
### **Answer: D**



<b>43.</b> The number of cranial nerves in a mammal including man is
A. 10
B. 12
C. 24
D. 20
Answer: C
Watch Video Solution
<b>44.</b> The centre for sence of smell in brain is
<b>44.</b> The centre for sence of smell in brain is  A. Cerebellum
A. Cerebellum
A. Cerebellum  B. Olfactory lobes

# Answer: C **Watch Video Solution** 45. If an organism has more rods it will A. More active at night B. More active during day C. More active during dusk D. Having colour vision Answer: A **Watch Video Solution** 46. Aperture of pupil is controlled by

A. Conjunctiva



48. Area of cerebral cortex controlling vision is A. Frontal lobe B. Parietal lobe C. Temporal lobe D. Occipital lobe Answer: D **Watch Video Solution** 49. Intellectual ability is controlled by A. Frontal lobe B. Parietal lobe C. Temporal lobe D. Occipital lobe

# Answer: A Watch Video Solution 50. The membrane labyrinth of internal ear contains a fluid called A. Perilymph B. Haemolymph C. Lymph D. Endolymph **Answer: D** Watch Video Solution

Others

- **1.** During transmission of nerve impulse through a nerve fibre, the potential on the inner side of plasma membrane would change
  - A. First negative, then positive and continue to be positive
  - B. First positive, then negative and continue to be negative
  - C. First positive, then negative and again back to positive
  - D. First negative, then positive and again back to negative

#### **Answer: D**



- 2. Neurosecretory cells occurs in
  - A. Hypothalamus
    - B. Cerebral cortex
    - C. Medulla oblongata
    - D. Corpus callosum

### **Answer: A**



**Watch Video Solution** 

- **3.** During the propagation of a nerve impulse, the action potential results from the movement of
  - A.  $Na^{\,+}$  from intracellular fluid to extracellular fluid
  - B.  $Na^{\,+}$  from extracellular fluid to intracellular fluid
  - C.  $Na^+$  towards both directions
  - D. None of the above

### Answer: B



**Watch Video Solution** 

**4.** Which one of the following is the correct difference between Rod Cells and cone cells of our retina

		Rod Cells	Cone Cells
(a)	Overall	Vision in poor	Colour vision
	function	light	and detailed vision in
			bright light
(b)	Distibution	More	Evenly
		concentrated	distributed all
		in centre of retina	Over retina
(c)	Visual acuity	High	Low
(d)	Visual	<b>l</b> odopsin	Rhodopsin
	pigment containe	ed	



Watch Video Solution

### 5. Sensory neurons of retina of eye are

- A. Macula and cristae
- B. Pacinian and Ruffini's corpuscles
- C. Rods and cones
- D. All of the above

### **Answer: C**



6. Cerebrum is in direct contact with	
A. Duramater	
B. Arachnoid	
C. Piamater	
D. Enterocoel	
Answer: C	
Watch Video Solution	
7. In myasthenia gravis, acetylcholine	
A. Receptors on motor end plate are reduced	
B. Secretion from nerve terminals is reduced	
C. Esterase activity is prohibited	
D. Secretion from nerve terminals is enhanced	

## Answer: A



**Watch Video Solution** 

- 8. The optic lobes in humans are represented by the corpora
  - A. Bigemina
  - B. Quadrigemina
  - C. Arenacea
  - D. Striata

### **Answer: B**



**Watch Video Solution** 

**9.** In a medullated nerve fibre, the conduction of impulse is faster due to the presence of

A. Pericytes B. Endoneurium and epineurium C. Myelin sheath and nodes of Ranvier D. Nissl granules **Answer: C Watch Video Solution** 10. Parasympathetic nerves arise from which region of the nervous system A. Thoracolumbar B. Craniosacral C. Cervical D. Lumbar Answer: B **Watch Video Solution** 

11. Myelin sheath is formed by
A. Ranvier
B. Muscle cells
C. Axon
D. Schwan cells
Answer: D
Watch Video Solution
Watch Video Solution
Watch Video Solution  12. Opening in skull is
12. Opening in skull is

answer: B
Watch Video Solution
3. Colour perception in human is due to
A. Rhodopsin pigment in rod cells
B. Rhodopsin pigment in cone cells
C. Iodopsin pigment in rod cells
D. Iodopsin pigment in cone cells
answer: D
Watch Video Solution

**14.** Sympathetic nerves in mammals develop from

D. Lamboidal suture

- A. Sacral region B. Cervical region
- C. Thoracico-lumbar region
- D.  $3^{rd}$ ,  $7^{th}$ ,  $9^{th}$  and  $10^{th}$  cranial nerves

### **Answer: C**



Watch Video Solution

- 15. Light sensitive cells of eye are present in
  - A. Cones
  - C. Choroid

B. Sclera

D. Retina

**Answer: D** 

<b>16.</b> Colour blindness is due to defect in	
A. Cones	
B. Rods	
C. Rods and cones	
D. Rhodopsin	
Answer: A	
Watch Video Solution	
17. The innermost layer of the human eye is	
A. Retina	
B. Lens	
C. Sclera	

D. Choroid	
nswer: A	
Watch Video Solution	
8. Sensory structure that responds to pressure change is	
A. Meissner's corpuscle	

B. Pacinian corpuscle

C. End bulb of Krause

Watch Video Solution

D. Organ of Ruffini

**Answer: B** 

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

- A. Yellow spot
- B. Blind spot
- C. Pars optica
- D. Pupil

### **Answer: B**



**Watch Video Solution** 

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

- A. Vitamin A
- B. Vitamin B
- C. Vitamin C

### D. Vitamin D

### Answer: A



- 21. Read the given statements and select the correct option.
- (i)Synaptic cleft of neurons secreates adrenaline.
- (ii)Myelinated nerve fibres are enveloped with Schwann cells, which form a myelin sheath around the axon.
- (iii)Non-myelinated nerve fibre is enclosed by a Schwann cell that does not form a myelin sheath.
- (iv)Spinal and cranial nerves are made of non-myelinated nerve fibres.
  - A. a, b, c correct, d incorrect
  - B. c, d correct, a, b incorrect
  - C. a, b correct, c, d incorrect
  - D. b, c correct, a, d incorrect

# Answer: D **Watch Video Solution** 22. Medulla oblongata develops from A. No vision B. No memory C. No thermoregulation D. No response when pricked with needle **Answer: D Watch Video Solution** 23. Which function will be lost due to damaged of occipital lobe A. Vision

C. Speech
D. Memory
Answer: A
Watch Video Solution
<b>24.</b> The co-ordinator between Nervous and endocrine system is
A. Thalamus
B. Hypothalamus
C. Limbic system
D. Parietal lobe
Answer: B
Watch Video Solution

B. Hearing

25. Homeostasis is maintained by
A. Cerebellum
B. Cerebrum
C. Diencephalon
D. Medulla oblongata
Answer: C
Watch Video Solution
26. Diencephalon is the centre of the following except
26. Diencephalon is the centre of the following except  A. Sweating
A. Sweating
A. Sweating B. Sneezing

### **Answer: B**



Watch Video Solution

### 27. Initiation of nerve impulse is due to

- A. Release of  $Ca^{2+}$
- B. Absorption of  $Ca^{2+}$
- C. Stoppage of  $Na^+/K^+$  ATP-ase pump
- D. Activation of  $Na^{\,+}\,/\,K^{\,+}$  ATP-ase pump

### **Answer: C**



Watch Video Solution

28. Rods are sensitive to

A. Dim light

- B. High intensity light

  C. Colour preception

  D. All of the above

  Answer: A

  Watch Video Solution
- **29.** Specific receptors responsible for the balance of the body
  - A. Organ of Corti
  - B. Crista and macula
  - C. Basilar membrane
  - D. Tectorial membrane

### Answer: B



**30.** During transmission of nerve impulse through a nerve fibre, the potential on the inner side of plasma membrane would change

- A. First negative, then positive and continue to be positive
- B. First positive, then negative and continue to be negative
- C. First positive, then negative and again back to positive
- D. First negative, then positive and again back to negative

### **Answer: D**



- **31.** Neurosecretory cells occurs in
  - A. Hypothalamus
  - B. Cerebral cortex
  - C. Medulla oblongata
  - D. Corpus callosum

### **Answer: A**



**Watch Video Solution** 

- **32.** During the propagation of a nerve impulse, the action potential results from the movement of
  - A.  $Na^{\,+}$  from intracellular fluid to extracellular fluid
  - B.  $Na^{\,+}$  from extracellular fluid to intracellular fluid
  - C.  $Na^+$  towards both directions
  - D. None of the above

### Answer: B



**Watch Video Solution** 

**33.** Which one of the following is the correct difference between Rod Cells and cone cells of our retina

on in



**34.** Sensory neurons of retina of eye are

A. Macula and cristae

B. Pacinian and Ruffini's corpuscles

C. Rods and cones

D. All of the above

### **Answer: C**



<b>35.</b> Cerebrum is in direct contact with
A. Duramater
B. Arachnoid
C. Piamater
D. Enterocoel
Answer: C
Watch Video Solution

36. In Myasthenia gravis acetylcholine

C. Esterase activity is prohibited

A. Receptors on motor end plate are reduced

B. Secretion from nerve terminals is reduced

D. Secretion from nerve terminals is enhanced

## Answer: A



**Watch Video Solution** 

- 37. The optic lobes in humans are represented by the corpora
  - A. Bigemina
  - B. Quadrigemina
  - C. Arenacea
  - D. Striata

### **Answer: B**



**Watch Video Solution** 

**38.** In a medullated nerve fibre, the conduction of impulse is faster due to the presence of

A. Pericytes B. Endoneurium and epineurium C. Myelin sheath and nodes of Ranvier D. Nissl granules **Answer: C Watch Video Solution** 39. Parasympathetic nerves arise from which region of the nervous system A. Thoracolumbar B. Craniosacral C. Cervical D. Lumbar Answer: B



- **40.** Myelin sheath is formed by
  - A. Ranvier
  - B. Muscle cells
  - C. Axon
  - D. Schwan cells

### Answer: D



- **41.** Opening in skull is
  - A. Foramen of Monro
  - B. Foramen magnum
    - C. Coronal nature

Answer: B
Watch Video Solution
<b>42.</b> Colour pereception in human is due to
A. Rhodopsin pigment in rod cells
B. Rhodopsin pigment in cone cells
C. Iodopsin pigment in rod cells
D. Iodopsin pigment in cone cells
Answer: D
Watch Video Solution
<b>43.</b> Sympathetic nerves in mammals develop from

D. Lamboidal suture

A. Cones

B. Sclera

C. Choroid

D. Retina

A. Sacral region

B. Cervical region

**Answer: C** 

C. Thoracico-lumbar region

Watch Video Solution

D.  $3^{rd}$ ,  $7^{th}$ ,  $9^{th}$  and  $10^{th}$  cranial nerves

**44.** Light sensitive cells of eye are present in

**Answer: D** 



<b>45.</b> Colour blindness is due to defect in
A. Cones
B. Rods
C. Rods and cones
D. Rhodopsin
Answer: A  Watch Video Solution
Watch video Solution
<b>46.</b> The innermost layer of the human eye is
A. Retina
B. Lens
C. Sclera
e. seieru

D. Choroid	
Answer: A	
Watch Video Solution	
7. Sensory structure that responds to pressure change is	
A. Meissner's corpuscle	
B. Pacinian corpuscle	
C. End bulb of Krause	
D. Organ of Ruffini	

**Answer: B** 

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

A. Yellow spot

B. Blind spot

C. Pars optica

D. Pupil

### **Answer: B**



**Watch Video Solution** 

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

A. Vitamin A

B. Vitamin B

C. Vitamin C

D. Vitamin D

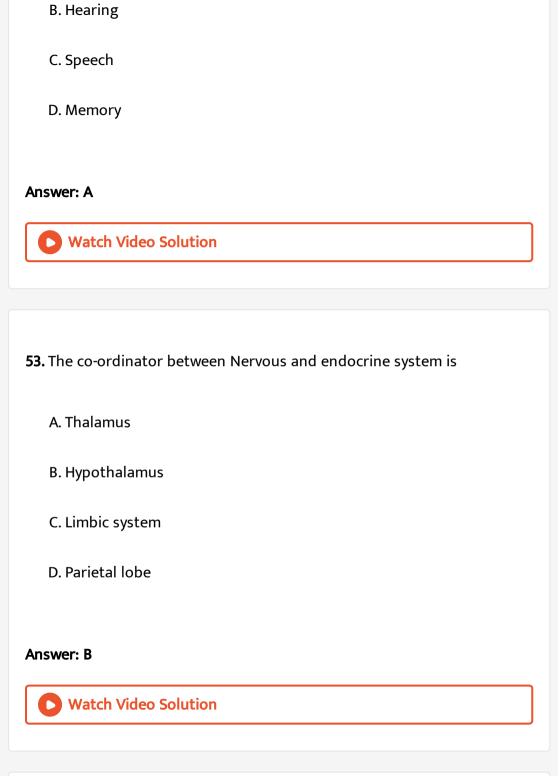
#### **Answer: A**



- **50.** Read the given statements and select the correct option.
- (i)Synaptic cleft of neurons secreates adrenaline.
- (ii)Myelinated nerve fibres are enveloped with Schwann cells, which form a myelin sheath around the axon.
- (iii)Non-myelinated nerve fibre is enclosed by a Schwann cell that does not form a myelin sheath.
- (iv)Spinal and cranial nerves are made of non-myelinated nerve fibres.
  - A. a, b, c correct, d incorrect
  - B. c, d correct, a, b incorrect
  - C. a, b correct, c, d incorrect
  - D. b, c correct, a, d incorrect

# **Watch Video Solution** 51. If medulla oblongata is destroyed what function is affected A. No vision B. No memory C. No thermoregulation D. No response when pricked with needle **Answer: D Watch Video Solution** 52. Which function will be lost due to damaged of occipital lobe A. Vision

Answer: D



<b>54.</b> Homeostasis is maintained by
A. Cerebellum
B. Cerebrum
C. Diencephalon
D. Medulla oblongata
Answer: C
Watch Video Solution
<b>55.</b> Diencephalon is the centre of the following except
55. Diencephalon is the centre of the following except  A. Sweating
A. Sweating
A. Sweating B. Sneezing

# **Answer: B**



**Watch Video Solution** 

# **56.** Initiation of nerve impulse is due to

- A. Release of  $Ca^{2\,+}$
- B. Absorption of  $Ca^{2+}$
- C. Stoppage of  $Na^+/K^+$  ATP-ase pump
- D. Activation of  $Na^{\,+}\,/\,K^{\,+}$  ATP-ase pump

# **Answer: C**



**Watch Video Solution** 

57. Rods are sensitive to

A. Dim light

- B. High intensity light
  C. Colour preception
  - D. All of the above

# **Answer: A**



**Watch Video Solution** 

- **58.** Specific receptors responsible for the balance of the body
  - A. Organ of Corti
  - B. Crista and macula
  - C. Basilar membrane
  - D. Tectorial membrane

# **Answer: B**



<b>59.</b> Hypothalamus of the brain is not in involved in this function
A. Osmoregulation and thirst
B. Temperature control
C. Accuracy of muscular movement
D. Sleep wake cycle
Answer: C
Watch Video Solution
<b>60.</b> The number of spinal nerves in man is
A. 31 pairs
B. 10 pairs
C. 12 pairs
C. 12 pairs D. 24 pairs

# Answer: A



Watch Video Solution

**61.** Part of mammalian brain controlling muscular coordination, equilibrium and posture is

- A. Cerebrum
- B. Corpus callosum
- C. Medulla oblongata
- D. Cerebellum

# **Answer: D**



Watch Video Solution

62. Third and fourth ventricles of brain are connected by

A. Foramen of Monro B. Foramen magnum C. Corpus callosum D. Aqueduct of Sylvius Answer: D **Watch Video Solution** 63. Injury localized to the hypothalamus would mostly 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 **Watch Video Solution** 

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

A. Rhodopsin is the purplish red protein presents in rods only.

B. Retinal is the light absorbing portion of visual photo pigments q

C. In retina the rods have the photopigment rhodopsin while cones

D. Retinal is a derivative of Vitamin C.

have three different photopigments.

#### **Answer: D**



**Watch Video Solution** 

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

A. Tectorial membrane

B. Organ of corti

C. Cochlea
D. Vestibular apparatus
Answer: D
Watch Video Solution
<b>66.</b> The defect in which part of the human brain would result in inability
to express the emotions
A. Thalamus
B. Medulla
C. Limbic lobe
D. Pons
Answer: C
Watch Video Solution

- **67.** Which of the following statements is incorrect?
  - A. Humans focus the eye by changing the shape of the lens
  - B. Human eye adjusts the amount of light entering the eye by contracting the ciliary muscles.
  - C. Human eye focuses by moving the lens closer to or farther from the
  - D. Colour blindness is due to an inherited lack of one or more types of cones

# **Answer: C**



- **68.** Conduction of nerve impulse is a
  - A. Chemical process
  - **B. Physical process**

D. Biochemical process **Answer: C Watch Video Solution** 69. Proprioceptors are associated with A. Sense of touch B. Sense of temperature C. Internal body pressure D. Auditory sense **Answer: C Watch Video Solution** 

C. Electrochemical process

70. The organ of Corti in rabbit is concerned with the sense of or Cochlea of mammalian internal ear is concerned with A. Taste B. Smell C. Hearing D. Equilibrium **Answer: C Watch Video Solution** 71. Destruction of the anterior horn cells of the spinal cord would result in loss of A. Voluntary motor impulses B. Commissural impulse

- C. Integrating impulses

  D. Sensory impulses

  Answer: A

  Watch Video Solution
- 72. In mammalian eye, the 'fovea' is the centre of the visual field, where
  - A. The optic nerve leaves the eye
  - B. Only rods are present
  - C. More rods than cones are found
  - D. High desity of cones occur, but has no rods

# **Answer: D**



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

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

B. Cerebrum - calculation and contemplation

C. Medulla oblongata - homeostatic control

D. Cerebellum - language comprehension

#### **Answer: D**



**Watch Video Solution** 

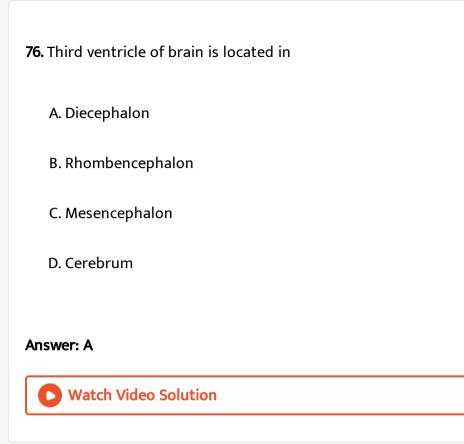
**74.** Left and right cerebral hemispheres are linked by a broad nerve band called

A. Corpus callosum

B. Corpus luteum

D. Anterior choroid plexus
Answer: A
Watch Video Solution
<b>75.</b> Human body temperature is regulated by the centre located in
A. Cerebrum
B. Cerebellum
C. Medulla
D. Hypothalamus
Answer: D
Watch Video Solution

C. Corpora quandrigimina



**77.** Choose the correct statement.

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

- B. Receptors do not produce graded potentials
- C. Nociceptors respond to changes in pressure

D. Meissner's corpuscles are thermo-receptors	
A	
Answer: A	
Watch Video Solution	
<b>78.</b> Receptor sites for neuotransmitters are presents on	

- A. Pre-synaptic membrane
- B. Tips of axons
- C. Post-synaptic membrane
- D. Membrane of synaptic vesicles

# **Answer: C**



**79.** Good vision depends on adequate intake of cacotene rich food

Select the best option from the following statements

- (A) Vitamin A derivatives are formed from carotene
- (B) The photopigments are embedded in the membrane discs of the ineer segment
- (C) Retinal is a derivative of Vitamin A
- (D) Retinal is a light absorbing part of all the visual photopigments
  - A. a, c and d
  - $\boldsymbol{B}.$  a and  $\boldsymbol{c}$
  - C.b, c and d
  - D. a and b

# Answer: A



B. DNA and RNA C. Nucleic acids and SER D. Free ribosomes and RFR Answer: D **Watch Video Solution** 81. which of the following structures or regions is incorrectly paired with its function. A. Medulla oblongata: controls respiration and cardiovascular reflexes B. Limbic systems: consists of fibre tracts that interconnect different regions of brain, controls movement C. Hypothalamus: production of releasing hormones and regulation

of temperature hunger and thirst

A. Proteins and lipids

D. Corpus callosum : band of fibers connecting left and right cerebral hemispheres

#### **Answer: B**



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

A. ligaments attached to the ciliary body

B. ligaments attached to the iris

C. smooth muscles attached to the iris

D. smooth muscles attached to the ciliary body

# Answer: A



**83.** If frog's brain is crushed, even then its leg moves on pinpointing. It is called

A. simple reflex

B. conditional reflex

C. neurotransmitter functions

D. autonomic nerve conditions

# Answer: A



**Watch Video Solution** 

**84.** 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 Watch Video Solution** 85. Both corpus lutea and macula lutea are
- - A. found in human ovaries
  - B. a source of hormones
  - C. characterized by a yellow colour
  - D. contributory in maintaining pergnancy

# **Answer: C**



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

A. nerve fibre is insulated by a medullary sheath

B. sodium pump starts operating only at the cyton and then continues into the nerve fibre

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

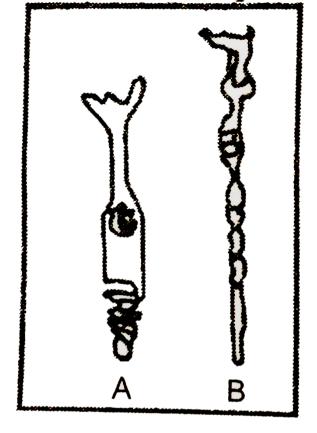
D. neurotansmitters are released by the axon endings and not by dendrites

# **Answer: D**



Watch Video Solution

**87.** 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**



88. Hearing impairment affects which part of brain ?
A. Frontal lobe
B. Parietal lobe
C. Temporal lobe
D. Cerebellum
Answer: C
Watch Video Solution
Watch Video Solution
Watch Video Solution  89. The black pigment in the eye, which reduces the internal reflection, is located in
89. The black pigment in the eye, which reduces the internal reflection, is
89. The black pigment in the eye, which reduces the internal reflection, is located in

D. sclerotic

#### Answer: A



**Watch Video Solution** 

- **90.** Which set of terms would most likely be used in a description of the nervous system of chordates ?
  - A. Brain, dorsal nerve cord, highly developed receptors
  - B. Brain, fused ganglia, ventral nerve cord
  - C. No brain, fused ganglia, tympana
  - D. No brain, nerve net, modified neurons

# **Answer: A**



**91.** During  $Na^+-K^+$  pump

A.  $3Na^{\,+}$  and  $2K^{\,+}$  are transported

B.  $1Na^{\,+}$  and  $2K^{\,+}$  are transported

C.  $3Na^{\,+}$  and  $3K^{\,+}$  are transported

D. Depends on requirement of cell

#### **Answer: A**



**Watch Video Solution** 

92. Bipolar nerve cells are present in

A. Skin tactile corpuscles

B. Spinal cord

C. Retina of eye

D. All the above

# **Answer: C** Watch Video Solution 93. Fenestra ovalis is the opening of A. Cranium B. Tympanum C. Tympanic cavity D. Brain **Answer: C** Watch Video Solution 94. Multipolar nerve cells are present in A. Cochlea

B. Dorsal root ganglia of spinal cord
C. Retina of eye
D. Brain
Answer: B
Watch Video Solution
<b>95.</b> Neurons receive signals through their and send signals to other
neurons through their
A. dendrites, receptors
B. end feet, cell bodies and dendrites
C. cell bodies and dendrites, axons
D. transmitter vesicles, axons
Answer: C
Watch Video Solution

**96.** Read the assertion and reson carefully to mark the correct option out of the options given below:

Assertion : The imbalance in concentration of  $Na^+,\,K^+$  and proteins generates resting potential.

Reason : To maintain the unequal distribution of  $Na^+\ \&\ K^+,$  the neurons use electrical energy.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

# Answer: C



97. Assertion: Astigmatism is due to uneven curvature of lens.

Reason: It is treated with cylindrical lenses.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

# Answer: B



**Watch Video Solution** 

**98.** Assertion: A cerebellum is related with skillful voluntary movement and involuntary activity like body balance, equilibrium etc.

Reason: It is part of hind brain and it is situated behind the pons.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

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

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### **Answer: B**



**Watch Video Solution** 

**99.** Assertion : The brain stem contains centres for controlling activities.

Reason: Brain stem is very sensitive.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

B. If both assertion and reason are true but reason is not the correct

explanation of the assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### **Answer: B**



Watch Video Solution

**100.** Assertion: The chemical stored in the synaptic vesicles are termed as neurotransmitters.

Reason: Synaptic vesicles release these chemicals in the synaptic cleft.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion.

B. If both assertion and reason are true but reason is not the correct

explanation of the assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

#### **Answer: B**



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**101.** Read the assertion and reson carefully to mark the correct option out of the options given below:

Assertion: All motor neurons are efferent neurons.

Reason: Motor neurons conduct nerve impulses from the spinal cord to the brain.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

#### **Answer: C**



# **Watch Video Solution**

**102.** Assertion: A cerebellum is related with skillful voluntary movement and involuntary activity like body balance, equilibrium etc.

Reason: It is part of hind brain and it is situated behind the pons.

- A. If both assertion and reason are true and the reason is the correct explanation of the assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of the assertion.
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

# **Answer: B**



