

Topic :- Neural Control & Coordination

- Which one is correct about the physiology of eye?
 - The pressure within the eye (the intraocular pressure) is about 1.5 mm Hg (0.2 kPa)
 - When light is shone in one eye both pupils constrict
 - The pupils dilate when the eye is focused on a near object
 - The aqueous humour is an ultrafiltrate of plasma
- Part of ear where sound is transduced is
 - Tympanic membrane
 - Malleus, incus and stapes
 - Semi-circular canal
 - Cochlea
- You are watching a horror movie and you notice your heart is beating fast and mouth is dry. It is because of
 - Fight and flight response
 - Autonomic nervous system
 - Sympathetic nervous system
 - Both (a) and (c)
- When the stimulus reaches the end of one neuron, it is conducted to the adjacent neuron through the secretions of
 - Acetaldehyde
 - Acetylcholine
 - Acetylcholine esterase
 - Acetyl Co-A
- The reflex pathway comprises
 - One afferent neuron
 - One efferent neuron
 - One afferent and one efferent neuron
 - One afferent and one receptor neuron
- The highly specialized cells called neurons can
 - Detect stimuli
 - Receive stimuli
 - Transmit stimuli
 - All of the above
- If a motor nerve has a conduction velocity of 10 ms^{-1} , how long will it take an action potential to reach a muscle 0.75 m from the spinal cord?
 - 75 m
 - 1.07 m
 - 14 m
 - 1.4 m

8. Which of the following statements are correct about the midbrain?
 I. Located between the thalamus/hypothalamus
 II. Has a canal named cerebral aqueduct passes through
 III. Dorsal part consists of 4 lobes
 Choose the correct option
 a) I and II b) II and III c) I and III d) I, II and III
9. Presynaptic neuron and a post-synaptic neuron may or may not be separated by a gap called
 a) Synaptic knob b) Neuroreceptor gap c) Synapse d) Synaptic cleft
10. The band of fibre which joins corpora quadrigemina to cerebellum is called
 a) Pons Varolii b) Valve of Vieussens c) Corpus callosum d) Corpus striatum
11. What kind of neural organization can be seen in lower vertebrates?
 a) Simple neural system b) Complex neural system
 c) Highly developed neural system d) Very poor neural system
12. The movement of the nerve impulse across synaptic cleft is primarily
 a) A chemical event b) A physical event c) An electrical event d) A biological event
13. During the conduction of nerve impulse, the repolarization occurs with the
 a) Influx of K^+ ions b) Influx of Na^+ ions
 c) Efflux of K^+ ions d) Efflux of Mg^{2+} ions
14. How many pairs of spinal nerve are found in human?
 a) 32 b) 31 c) 30 d) 33
15. Which of the following are the properties of neural system?
 a) Conductivity and elasticity b) Excitability and elasticity
 c) Flexibility and excitability d) Excitability and conductivity
16. Which part of brain controls intellectual ability?
 a) Frontal lobe b) Parietal lobe c) Temporal lobe d) Occipital lobe
17. Which of these processes occur during repolarisation of nerve fibre?
 I. Open Na^+ channel
 II. Closed Na^+ channel
 III. Closed K^+ channel
 IV. Open K^+ channel
 a) II and IV b) I and III c) II and III d) I and II

18. The middle layer of human eye, choroid contains ...A... and looks ...B... in colour
Choose the correct option for A, B
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|--------------------------------|----------------------------------|
| a) A-blood vessels, B-bluish | b) A-connective tissue, B-redish |
| c) A-bipolar cells, B-blackish | d) A-muscle fibre, B-brownish |
19. Which pair of systems jointly coordinate and integrate all the activities of the organs, so that they function in a synchronized fashion?
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|--------------------------------|----------------------------------|
| a) Neural and respiratory | b) Neural and digestive system |
| c) Neural and endocrine system | d) Neural and circulatory system |
20. Photoreceptor cells that contains the light sensitive proteins are called
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| a) Rhodopigments | b) Photopigments | c) Conopigments | d) None of these |
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