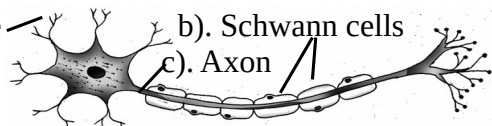


First Terminal Evaluation 2024-'25 BIOLOGY Class 10

| Qn | Answer Key / Hints (English medium) | Score | Total |
|----|--|----------------|---------------------------|
| 1 | Melanin. 2. iii)- a, d correct. By Rasheed Odakkal, 9846626323 GVHSS Kondotty | 1, 1 | |
| 3 | a). Statement (ii) is the reason for statement (i). | 1 | |
| 4 | X= Sensory neuron, Y= Motor neuron. | ½ +½ | |
| 5 | (i) -Ommatidia, (ii) –Thousands of small eyes/for clear vision/cluster of Photoreceptors. | ½ +½ | 5x1 |
| 6 | b). Vasopressin/ADH. d). Goitre. | ½ +½ | |
| 7 | a). Grey matter. b). Myelin sheath, which accelerates impulse, is absent in it. | 1+1 | |
| 8 | a). (i)- Eustachean tube (ii) – Auditory canal. | ½ +½ | |
| | b). Protects the tympanum by balancing the pressure on either side of it. | +1 | |
| 9 | True. The action of epinephrine and norepinephrine prolongs body activities for a longer time, when the sympathetic nervous system gets stimulated. | | |
| 10 | a). Continuous and irregular flow of electric charge. | ½ | |
| | b). Epilepsy: Continuous muscular contraction/ frothy discharge from the mouth/ clenching of the teeth/ the patient falls unconscious. (any 2 symptoms). | ½+1 | |
| 11 | a). Thymus, Thymosin. b). Thymus control the activities and maturation of T lymphocytes which help to impart immunity. | ½ +½ +1 | |
| 12 | a). (i)-Semicircular canals, (ii)- Cochlea. | ½ +½ | |
| | b). Defects of (ii) adversely affects body balancing and that of (iii) affects hearing. | +1 | |
| 13 | Take 2ml of the sample in a test tube. Add 2ml Benedict solution into it. Heat for 2 minutes. Observe the change in colour. | 2 | 6x2 |
| 14 | a). Rod cell. b). This leads to the formation of impulses, which are transmitted to the cerebrum through optic nerves and this enables vision. | | |
| | c). Affect the production of retinal which is a derivative of Vitamin A. | 1+1+1 | |
| 15 | (a). Cerebrum (b). Grey coloured cortex and white coloured medulla. | 2 | |
| | (c). Cerebellum (d). Seen as two flaps. | | |
| | (e). Rod shaped (f). Controls involuntary actions. | ½each | |
| 16 | a). X= Testis. GTH stimulates this gland. | 1½ | |
| | b). Testosterone : Controls secondary sexual characters and sperm production. | 1½ | |
| 17 | a). X= Synaptic knob. b). Acetylcholine, Dopamine. | | |
| | c).No, the part Y can't secrete neurotransmitters. | 1+1+1 | |
| 18 | A-Pancreas B- Islets of Langerhans E- Glucagon F- Insulin H- Synthesizes glucose from amino acids J- Cellular uptake of glucose molecules. | ½each | |
| 19 | a). (i). Cornea, (ii). Iris. | | |
| | b). (iii). Lens : Focuses the light rays from the object / formation of image on retina. (iv). Optic nerve : Transmits impulses from photoreceptors to the visual centre in the brain. | 1+2 | |
| 20 | Aromatic particles enter the nostrils and dissolve in the mucus inside the nostrils. The olfactory receptors in the mucus membrane get stimulated. Impulse thus formed reaches the brain through the olfactory nerve. Feel the smell. | 3 | 5x3 |
| 21 | a). Dendrite  b). Schwann cells c). Axon | 1Draw 1+1+1 | |
| 22 | a). X- Parathyroid, Prathormone. b). When a decrease in the level of calcium in blood occur. c). Parathormone increases the level of calcium in blood by reabsorbing calcium from kidneys to blood and also preventing the storage of calcium in bones. | 1+1+2 | |
| 23 | * Pinna collects sound waves. * Sound waves cause the eardrum to vibrate. * Bones in the Ear ossicles vibrate. * Oval window vibrates. * The fluid in the cochlea moves. * The sensory hair cells of the Organ of Corti are stimulated. * Impulses are generated in the sensory hair cells. * Impulses reach the cerebrum through the auditory nerve. | 4 | 2x4 (40) |