First Terminal Evaluation 2023-'24 BIOLOGY

Qn	Answer Key / Hints (English medium)	Score	Tota
1	Pancreas. By Rasheed Odakkal, 9846626323 GVHSS Kondotty	1	
2	a). <u>eyespot</u>	1	
3	Hypothalamus – Maintains homeostasis.	1	
ŀ	Ganglion	1	
5	Lens of the eyes become opaque.	1	5x1
5	Thymosin. Others are related with the metabolism of glucose.	1	0/11
, 7	a). Myelin sheath /Schwann cells.	-	
,	b). Provide nutrients and oxygen to the axon /Accelerate impulses. /Act as an electric		
	insulator. /Protects the axon from external shocks.(any 1)	1+1	
8	a). Parathormone. b). Reabsorbs calcium from kidneys to blood or prevents the storage		
	of calcium in bones.	1+1	
9		1 1 1	
)	a). X- Auditory nerve, Y- Cochlea.	1.1	
0	b). Auditory nerve carries impulses to brain to experience hearing.	1+1	
0	a). Peripheral Nervous System, b). Cranial nerves. c). 12 pairs. d). 31 pairs.	1⁄2 each	L
1	Epinephrine and norepinephrine continuously acts when the sympathetic system gets		
	stimulated.	2	
12	Aromatic particles enter the nostrils through the inhaled air.		
	Aromatic particles dissolve in the mucus and stimulate the olfactory receptors. Generate		
	impulses. Impulses reach the brain and experience smell.	2	6x2
13	a). Synapse. b). The secretion (neurotransmitters), stimulate the adjacent dendrite or		
	cell to generate new impulses.	2	
14	a). Colourblind persons can not recognize certain colours clearly.		
	b). Tears containig the enzyme, lysozyme destroy germs.	1+1+1	
	c). Photoreceptors are absent and hence no vision at at the blindspot.		
15	Myxoedema- Prolonged deficiency of thyroxine in adults- Low metabolic rate and sluggishness.		
	Hyperthyroidism–Continuous and excessive production of thyroxine–High metabolic rate and	1+1+1	
	weight loss.		
	Goitre -The production of thyroxine is blocked in the absence of iodine -Thyroid gland enlarges.		
16	a). X- Circular muscles, Y- Radial muscles.	1+1+1	
	b). fig i c). In dim light, the radial muscles contract to increase the size of pupil.		
17	A-Sympathetic system B- Parasympathetic system		1
	i. Glycogen is converted to glucose. ii. Glucose is converted to glycogen.	1∕2 eac	h
	iii. Regains normal state. iv. Contracts.		
18	a). Pineal. b). The production of hormone, melatonin will be high at night and low		
	during day. c). controls the reproductive activities of organisms that have definite	1+1+1	
	reproductive periods.		
9	a). X- Ventral root. Y- Dorsal root.		
	b). Ventral root carries motor impulses and dorsal root carries sensory impulses.	1+1+1	
	c). The fluid (CSF) provide nutrients and oxygen to the tissues.		5x3
20	a). X- Aqueous humor. Y- Vitreous humor.		
	b). Aqueous humor provides oxygen and nourishment and the vitreous humor maintains	1+2	
	the shape of eyeball.	172	
21	a). Insulin. b). Production decreases. c). Insulin accelerates cellular uptake of glucose		
	molecules and helps to convert glucose into glycogen in the liver and muscles.	1+1+2	
22	a). i. Cerebrum. ii. Thalamus iii. Medulla oblongata iv. Cerebellum.		
	b). Thalamus acts as relay station of impulses to and from the cerebrum / also analyses		
	impulses and sends the important ones to the cerebrum.	2+2	
	Medulla oblongata controls involuntary actions like heart beat, breathing etc.		
23	(redrawing)		
5	a). i. Pinna ii. Auditory canal i ji		
	b) The sustachean tube, which connect the middle can and	1+1+2	
	b). The eustachean tube, which connect the middle ear and		2x4
	pharynx, helps to maintain the pressure.		(40)
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