

First Terminal Evaluation 2023-'24 BIOLOGY Class 9

Qn	Answer Key / Hints (English medium)	Score	Total						
1	Protein.								
3	b). (ii) only correct	1							
5	Vein.	each	5x1						
7	a). Pigments that absorb sunlight are found in the grana of chloroplast.	1+1							
8	b). Pigments other than chlorophyll a, absorb light and transfer it to chlorophyll a.	1+1							
9	a). Circular muscles.								
	b). Muscles evoke peristalsis to convert food into a paste form and the circular muscles retain food for a specific period.	1+1							
9	-Mangrove forests help in controlling Tsunami to some extent.								
	-Bamboo forests, reed, vetiver, lemongrass etc. protect the river banks from collapsing during flood. -Trees and bushes prevent soil erosion and landslide. (any 2)	2							
10	a). Enzymes in pancreas / Trypsin b). Amino acids	1+1							
11	Fibre content in food do not undergo digestion and hence help in the absorption process, ease defecation and thus protect the health of the digestive system.	2							
12	a). Dark phase.								
	b). The reactions in the dark phase were discovered by the scientist Melvin Calvin.	1+1							
13	a). Bicuspid and tricuspid valves. b). Bicuspid is seen in between the left atrium and left ventricle. Tricuspid valve is in between the right atrium and right ventricle.	1+1	6x2						
14	Absorption of salts utilising energy - Active transport.								
	Absorption of water molecules - Osmosis. Absorption of fatty acid - Simple diffusion.	1+1+1							
15	<table border="1"> <thead> <tr> <th>Veins</th> <th>Arteries</th> <th>Capillaries</th> </tr> </thead> <tbody> <tr> <td>-Valves are seen inside, -Carries blood to the heart.</td> <td>-Blood flows with high speed and high pressure, -Thick and elastic wall.</td> <td>-Minute pores on the walls, -Made up of single row of cells</td> </tr> </tbody> </table>	Veins	Arteries	Capillaries	-Valves are seen inside, -Carries blood to the heart.	-Blood flows with high speed and high pressure, -Thick and elastic wall.	-Minute pores on the walls, -Made up of single row of cells	1+1+1	
Veins	Arteries	Capillaries							
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16	a). Bacteria residing in the large intestine produce substances like vitamin K.								
	b). HCl destroy germs and regulate food pH level.								
	c). Villi increase the area of absorption of nutrients.	1+1+1							
	Nutrients like fatty acid, glycerol, amino acids or glucose are absorbed to the villi.								
17	a). Yes, agree. About 70-80% atmospheric oxygen is released by the algae and planktons living the ocean.								
	b). Pollutants expelled from factories, Oil refineries, Mining, Plastics etc.(any 2 reasons)	1+2							
18	i). Since glucose is readily soluble in water, it can not be stored. Hence it is converted in to insoluble starch.								
	ii). Starch is utilized as a source of energy for life activities and to prepare substances required for growth.								
	iii). Starch is converted to sucrose and is transported through phloem to various plant parts and stored there in different forms.	1+1+1							
19	a). X- Gall bladder. Y- Pancreas. b). The bile breaks down fat into smaller particles	1+1+1							
	c). Pancreatic amylase, Tripsin, Pancreatic lipase (any 2)								
	i). Double circulation. ii). Systemic circulation.								
20	iii). Start from the right ventricle and ends in the left atrium.	1+1+2	5x3						
21	Right atrium – Inferior venacava – From different parts of the body to heart.								
	Right ventricle – Pulmonary artery – From heart to lungs.								
	Leftt atrium – Pulmonary vein - From lungs to heart.								
	Leftt ventricle – Aorta - From heart to different part of... (Redrawing)	1each							
22	a). Dentine b). Pulp c). Enamel	1							
		draw+							
		1+1+1							
23	a). X- Grana, Y- Stroma.								
	b). <u>Grana- Light phase</u> : Water splits into hydrogen and oxygen. Light energy is converted and stored in ATP.	1+3	2x4						
	<u>Stroma – Dark phase</u> : Energy in ATP is used to combine hydrogen and carbon dioxide to produce glucose.		(40)						

