

Summative Assessment- Term I 2025-'26 BIOLOGY Class 9

Qn	Answer Key / Hints (English medium)	Score
1	b). P-iii, Q-iv, R-i, S-ii	4x1
3	a). Statement correct, reason incorrect	
4	d). A-Lungs, B-Pulmonary vein, C-Systemic circulation, D-Aorta	
5	a). Starch, which is insoluble in water, is stored for the energy for the life processes. b). Fructose in fruits, Proteins in leguminous plants.	
6	A. Plants provide economically important products like spices, drinks like tea and coffee, medicines, rubber latex, biopesticides etc. (any 2) OR B. Mangrove forests serve as a storehouse of biodiversity, a source of fish wealth, protect the soil of coastal areas, reduce global warming and prevent tsunamis. (any 2)	7x2
7	a). i. Mechanical digestion, ii, Chemical digestion. b). Pepsin partially digests the proteins.	
8	a). X- Light phase, Y- Dark phase. b). Glucose, formed in Y, is essential to all living beings. (Heterotrophs get nutrients from this)	
9	a). During swallowing food, the epiglottis closes trachea from reaching food into it.	
10	A. a). i. Artery, ii. Capillary. b). The valves in iii (vein) allow blood to flow towards the heart. OR	
11	B. WBCs- Help in immunity or resistance, Platelets- Help in blood clotting. a). X has normal blood pressure. The normal rate=120/80mmHg. b). The person Y should reduce the intake of fatty and salty food items and avoid unhealthy food habits.	
12	a. The extra cellular fluid serves as internal environment in animals. The cellwall and its components, extracellular fluid and air sacs between the cells serve as internal environment in plants. b. Homeostasis needs to be maintained for the smooth functioning of metabolism. Disruption of the internal environment can be threatening to life.	
13	a) X= Dentine, Y= Pulp cavity b) Z (cementum) holds the tooth in the socket of the gum.	3
14	A. a). Fatty acids and glycerol. b). Villi have an outer single layered epithelial cells, branch of artery to form capillaries and branch of lymph capillary (lacteal) OR B. a). X is Portal vein, Y is Hepatic vein. b). Nutrients from the villus reach the liver through the portal vein. From liver it reaches the heart through the hepatic vein.	1+ 2
15	a). Heart attack, Stroke, Atherosclerosis, Coronary thrombosis (any 2) b). Reduce the intake of fatty and salty food items. Avoid unhealthy food and drinks. Do regular exercise. Reduce mental stress (any 2)	1+ 2
16	A. a). Active transport. b). Energy is required. Occur with the help of proteins. Movement of salts from its lower concentration to higher conce. (any 2) OR B. Cell wall, Extracellular spaces, Plasmodesmata, Plasma mem.	3
17	a). Osmosis. b). Water enters into the cell, which is placed in fresh water by osmosis. Water comes out from the cell, which is placed in salt water by osmosis. In both cells, movement of water occurred from its higher concentration to lower concentration.	1+ 2 6x3
18	a). During ventricular systole, blood enter into pulmonary artery and aorta. b). Both the bicuspid and tricuspid valves prevent the back flow of blood. c). SA node is located in the wall of right atrium. It produces the electrical impulses necessary for the contraction of the heart chambers. OR a). Pericardium. b). Pericardial fluid. It protects the heart from external shocks and helps to reduce friction. c). Heart is protected inside the thoracic cavity, by the ribs, vertebral column and sternum.	1+1 +2 1+2 +1 1x4 (40)

