

SAMAGRA SHIKSHA, KERALA

FIRST TERMINAL EVALUATION 2022-23

BIOLOGY

STD- IX

Time : 1½ hrs.

Total Score : 40

Instructions:

- 15 minutes is given as cool off time. This time is to be used for reading the question paper.
- Attempt the questions according to the instructions.
- Keep in mind the score and time while answering the questions.

Answer any 5 questions from 1 to 6. Each question carries 1 score.**(5x1=5)**

1. Find the odd one. Write the common feature of others. (1)
Chlorophyll a, Chlorophyll b, Carotene, Xanthophyll
2. Identify the word pair relation in (a) and fill in the blank in (b). (1)
(a) Albumin : Regulates blood pressure
(b) : Helps in defence
3. Plants cannot store glucose, the product of photosynthesis as such. Which of the following is the reason for this? (1)
 - Glucose is soluble in water.
 - Glucose is insoluble in water.
 - Glucose can be converted into other forms.
 - Glucose is an unstable compound.
4. Identify and name the fluid mentioned in the given statement. (1)
"When the heart beats, this fluid helps to reduce friction between the membranes"
5. Identify and name the teeth labelled as 'A' and 'B'. (1)



A



B

6. Identify the enzymes involved in the digestion of proteins. (1)

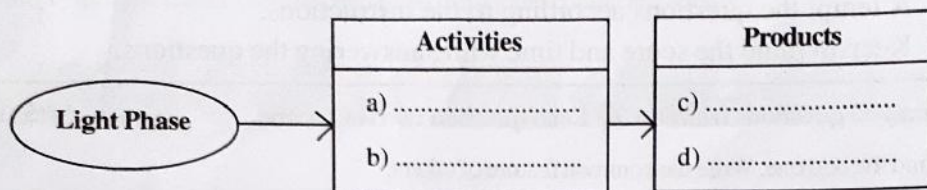
- Salivary amylase and Pancreatic amylase.
- Pepsin and Trypsin.
- Gastric lipase and Pancreatic lipase:
- Salivary amylase and Pancreatic lipase.

Answer any 6 questions from 7 to 13. Each question carries 2 score. (6x2=12)

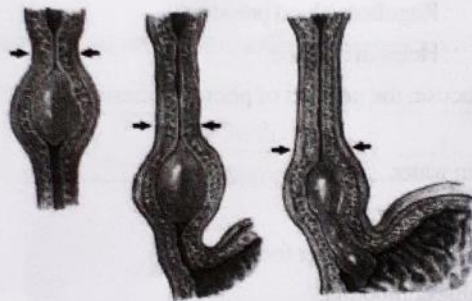
7. Choose the suitable ones from the given hints and complete the illustration related to the phase of photosynthesis. (2)

Hints:

- Produces glucose
- Releases oxygen
- Glucose
- Hydrogen
- Oxygen
- Water splits



8. Observe the given figure related to digestion and answer the following questions.

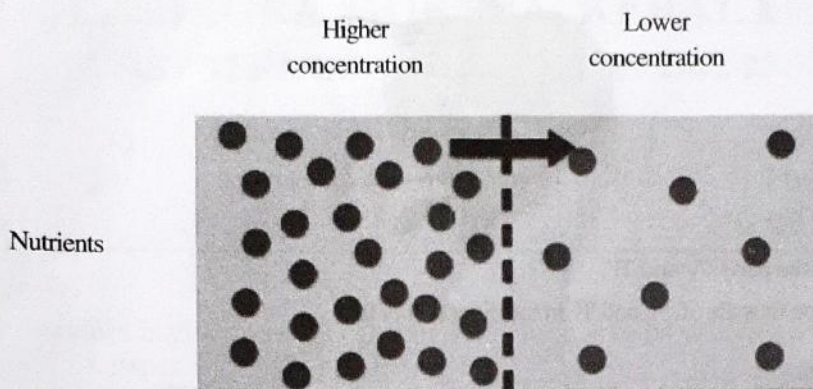


- a) Which process does the figure represent? (1)
 - b) What is the significance of this process? (1)
9. As shown in the model, make suitable pairs using the information given in the box. (2)

Model: Tubers - Starch

Starch, Oilseeds, Legumes, Protein, Fats, Tubers,
Fructose, Sucrose, Fruits, Sugarcane

10. Observe the given diagram related to the absorption of substances into lacteals and answer the questions.



- a) Identify the process. (1)
- b) Which nutrients are absorbed through this process? (1)
11. Justify the given statement with examples. (2)
- "Plants have a major role in the mitigation of natural disasters."***
12. Write the steps of swallowing food in correct order. (2)
- Uvula closes the nasal cavity that opens to the pharynx.
 - Tongue compresses the food into balls with the help of the palate.
 - Posterior part of the tongue allows food to move over the epiglottis into the oesophagus.
 - Trachea rises up and is closed by Epiglottis.
13. Given indicators are related to a specific part of the wall of heart. Analyse them and answer the questions.
- Functions like an electric cell.
 - Located on the right atrial wall.
- a) Which part of the heart is mentioned in the hints? (1)
- b) What is its function? (1)

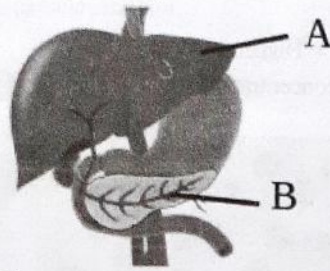
Answer any 5 questions from 14 to 20. Each question carries 3 score each. (5x3=15)

14. Analyse the statement and answer the questions.

"Photosynthesis in Ocean ecosystem plays an important role in the existence of the living world."

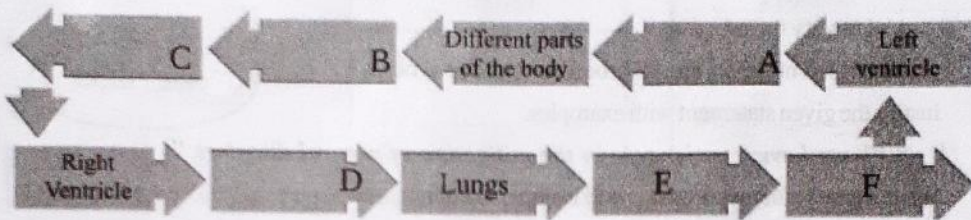
- a) Who are the chief producers in the ocean ecosystem? (1)
- b) How they become inevitable for the existence of living world (2)

15. Observe the illustration related to digestive system and answer the questions given below.

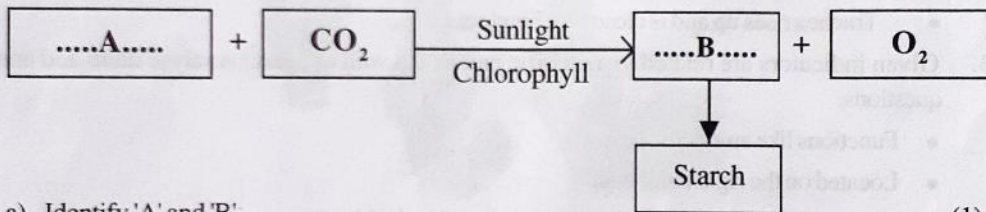


- a) Name the parts 'A' and 'B'. (1)
 b) Mention the role of 'A' and 'B' in the digestion of fat. (2)

16. Observe the flow chart of double circulation in man and complete it suitably. (3)



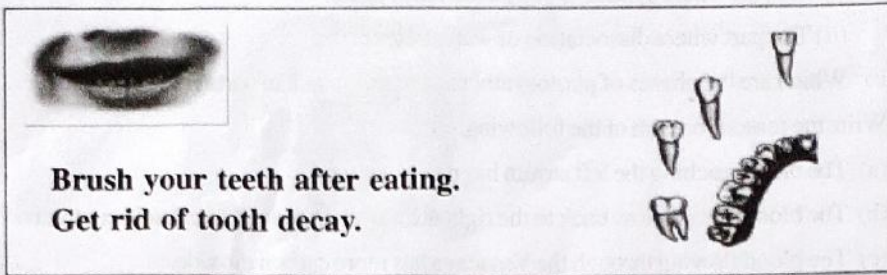
17. Observe the illustration showing the chemical reactions in the process of photosynthesis and answer the questions.



- a) Identify 'A' and 'B'. (1)
 b) How does 'A' reach the leaves? (1)
 c) How do plants utilize starch? (1)
18. Arrange the columns B and C according to column A. (3)

A	B	C
Salivary glands	Trypsin	Converts protein into peptides.
Gastric glands	Salivary amylase	Converts maltose into glucose
Pancreas	Pepsin	Converts starch into maltose
		Converts protein into peptones

19. A poster displayed in a primary health center is shown below. Observe it and answer the questions.



- a) Not cleaning the teeth after eating causes tooth decay. How? (2)
- b) Although different in external structure, teeth are similar in their internal structure. Justify the statement with two examples. (1)

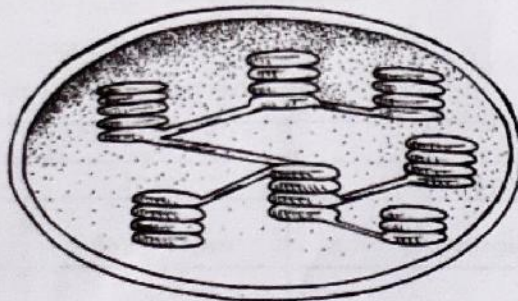
20. Features of different types of blood vessels are given. Select the suitable ones from them and complete the following table. (3)

- Carries blood to the heart.
- Wall is formed of a single layer of cells.
- Blood flows with high speed and high pressure.
- Thick walls.
- Minute pores on the walls.
- Valves are seen inside.

Vein	Artery	Capillaries
• •	• •	• •

Answer any 2 questions from 21 to 23. Each question carries 4 score. (2x4=8)

21. Redraw the diagram of chloroplast and answer the questions.



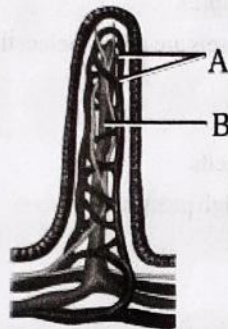
For drawing the diagram

(1)

- a) Name and label the parts according to the following hints.

Hints:

- (i) The part where synthesis of glucose takes place. (1)
- (ii) The part where dissociation of water takes place. (1)
- b) Which are the phases of photosynthesis that take place in parts (i) and (ii)? (1)
- 22. Write the reason for each of the following.
- (a) The blood reaching the left atrium has more oxygen. (1)
- (b) The blood doesn't flow back to the right atrium when the right ventricle contracts. (1)
- (c) The blood flowing through the Venacava has more carbon dioxide. (1)
- (d) Blood plasma has a role in the clotting of blood. (1)
- 23. Observe the figure of villus and answer the questions given below.



- a) Name the parts labelled as 'A' and 'B'. (1)
- b) Which nutrients are absorbed into 'A'? (1)
- c) How far is the structure of villus suitable for the absorption of substances? (2)
