Std. : IX

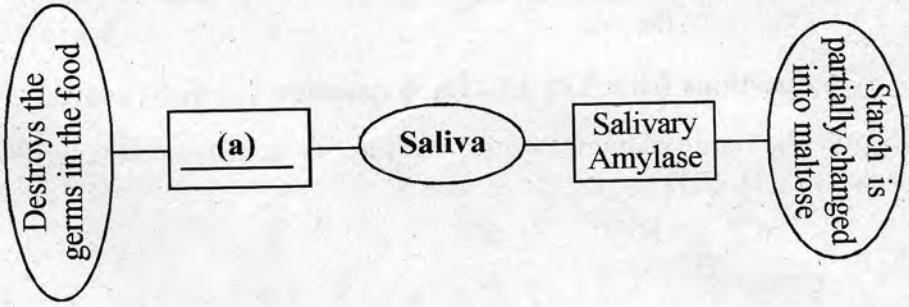
Time : 1½ Hours
Score : 40

Instructions :

1. First 15 minutes is given as cool off time. This time is to be used for reading and understanding the questions.
2. Answer the questions based on instructions.
3. Answer the questions according to the score and time.

Answer <u>any 5</u> questions from 1 to 6. Each question carries 1 score each. (5 x 1 = 5)

1. Complete the illustration related to the action of components in Saliva. (1)



2. Analyse the statements and choose the right option from those given below.

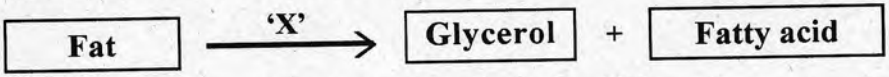
   A. Accessory pigments absorb sunlight and transfer to chlorophyll a.
   B. Chlorophyll a is bluish green in colour.

   (a) A, B correct
   (b) A correct B incorrect
   (c) A, B incorrect
   (d) A incorrect B correct

3. Analyse the following statements and find out the correct option related to bile juice.

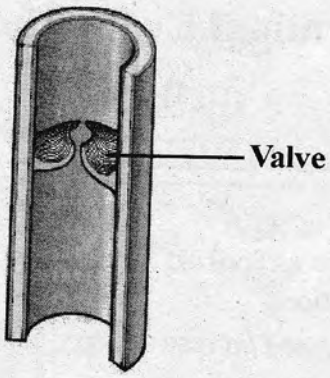
   (a) Bile is the digestive juice produced by pancreas.
   (b) Bile contains an enzyme called Amylase.
   (c) Bile makes the food alkaline.

4. Analyse the illustration and answer the questions.



Identify and write the name of the enzyme indicated as 'X'.

5. Identify the blood vessel and write its name.

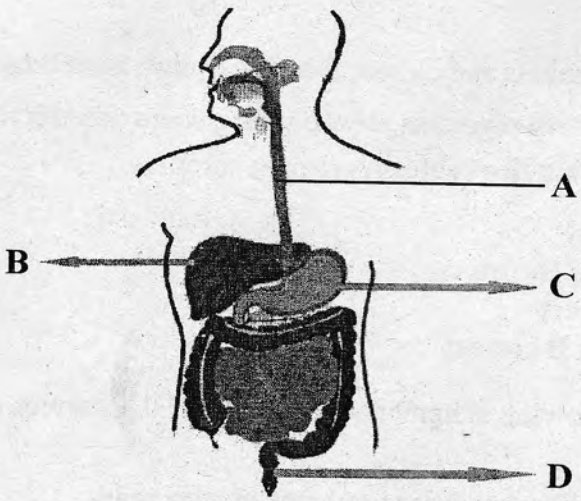


6. Analyse the indicators and identify the blood cell.

- Normal count between 45 lakh to 60 lakh/ 1 ml blood
- Disc shape.
- Helps in transport of respiratory gases.

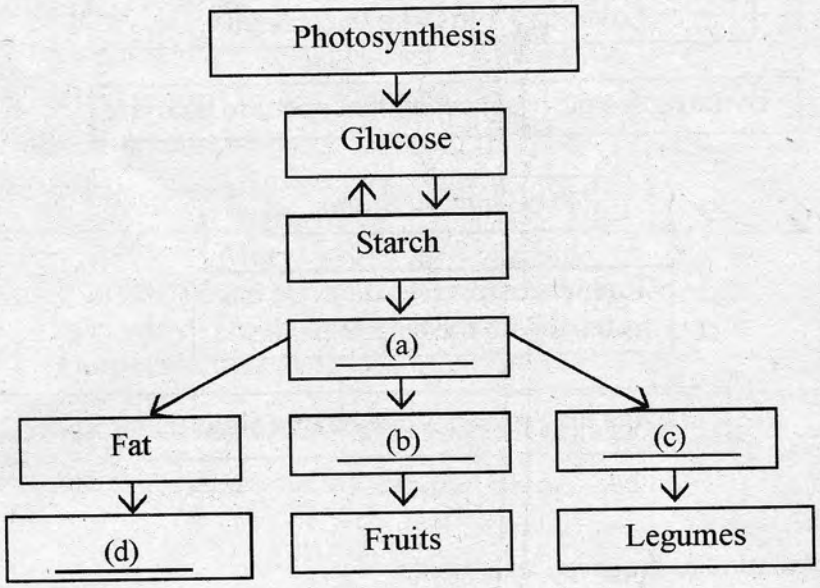
Answer <u>any 6</u> questions from 7 to 13. Each question carries 2 score. (6 x 2 =12)

7. Observe the figure of human digestive system. Identify and the write the names of the parts A, B, C, D.

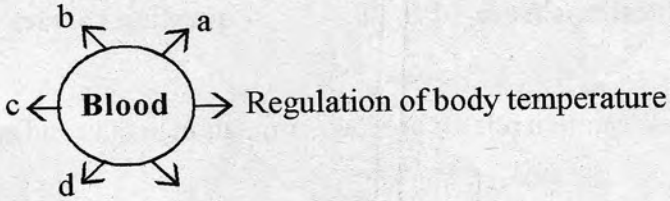


8. June 14 is celebrated as 'Blood Donation Day'. Write two concepts that can be used in the awareness class to be conducted in your School.

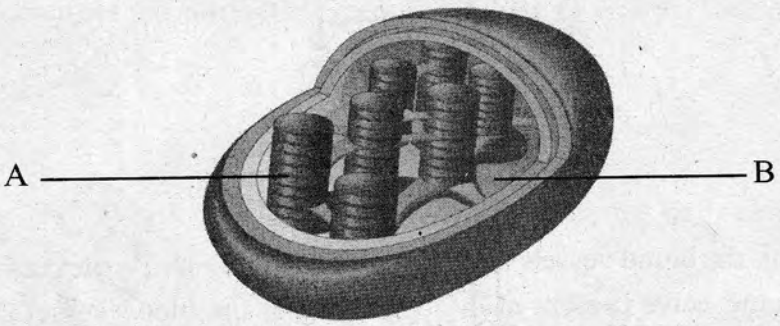
9. Complete the illustration showing the chemical changes of glucose in plants.



10. Complete the illustration related to functions of blood.



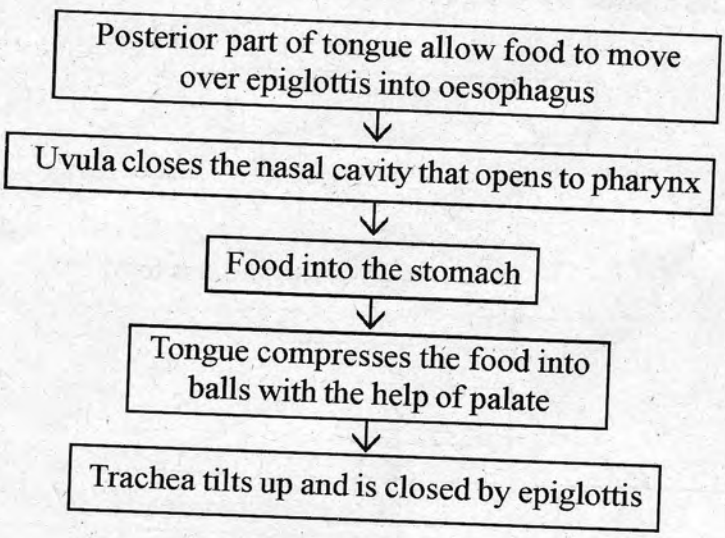
11. Analyse the figure of chloroplast and answer the questions.



(a) Identify A and B and write their names ?

(b) Explain the process of photosynthesis that take place with in 'A'.

12. Arrange the flowchart of swallowing of food in the correct sequence.



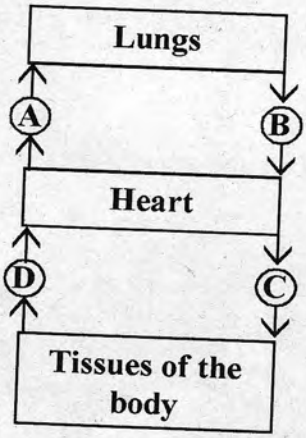
13. Give explanation to the given statement.

Consumption of fatty food causes thrombosis.

Answer <u>any five</u> questions from 14 to 20. Each question carries 3 score.

(5 x 3 = 15)

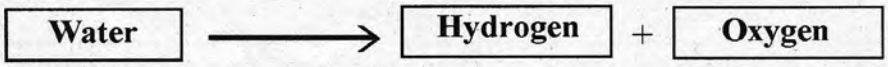
14. Observe the illustration related to blood circulation in man and answer the questions.



(a) Identify the blood vessels indicated as A, B, C, D and write their names.

(b) Name the valve present at the beginning of the blood vessel C. Write its function.

15. Analyse the illustration and answer the questions given below.



(a) Which phase of photosynthesis is indicated ?

(b) What happens to Oxygen ?

(c) Does the storage of energy occur at this phase? Justify.

16. Analyse the news paper report and answer the questions.

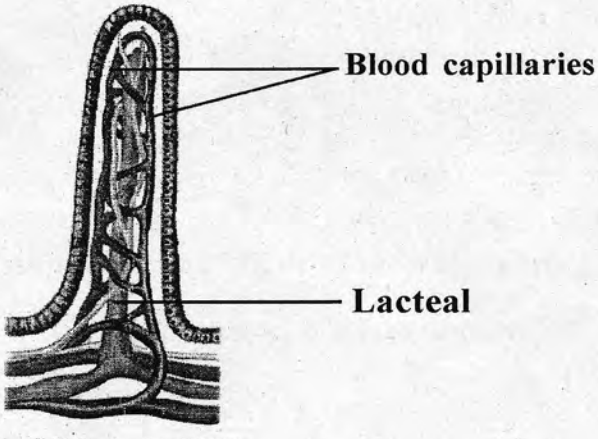
Oceans turn as waste bin

Tonnes of waste materials reach the ocean everyday. Due to these wastes the plants and animals of the ocean .....

(a) Oceanic pollution not only affect aquatic organisms. Why?

(b) Prepare a message against water pollution.

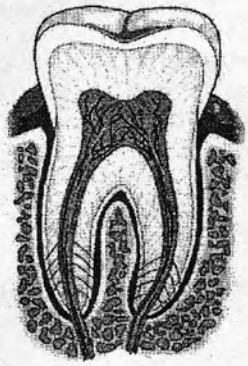
17. Observe the figure and answer the questions.



(a) Which part is indicated here?

(b) Which are the nutrients that are absorbed into lacteal and blood capillaries ?

18. Figure of human tooth is given below.



Copy the diagram. Identify the parts using the following hints and label.

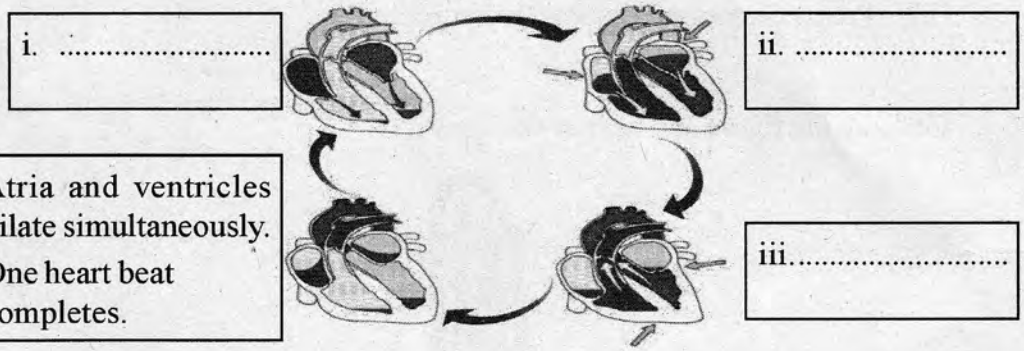
(a) Soft connective tissue

(b) Hardest part.

19. Analyse the given experiments and compare the observations.

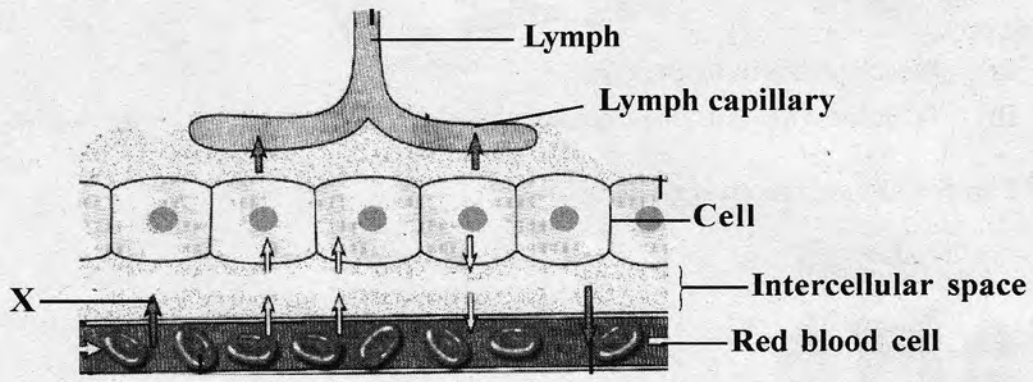
Experiment - 1	Take 5 ml of rice gruel in a test tube. Add a few drops of iodine solution and observe the colour change.
Experiment - 2	Take 5 ml of rice gruel in a test tube and add 5 ml of saliva, shake it well. After some time, add a few drops of iodine solution to it. Observe the colour change.

20. Analyse the illustration related to the stages of heart beat and complete it.



Answer <u>any 2</u> questions from 21 to 23. Each question carries 4 score. (2 x 4 =8)

21. Observe the illustration and answer the questions.

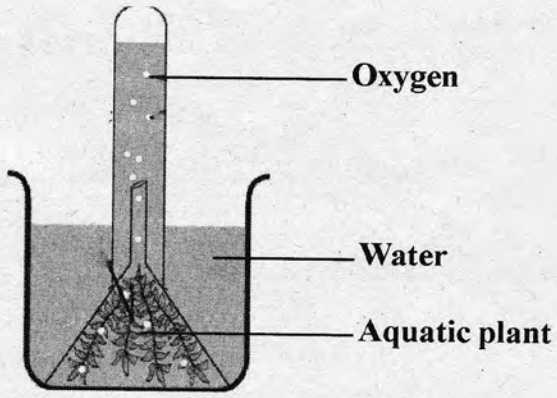


(a) Identify the fluid indicated as 'X' and write its name.

(b) Mention the function of 'X'.

(c) What is lymph ?

22. Analyse the experimental setup kept in sunlight and answer the questions.

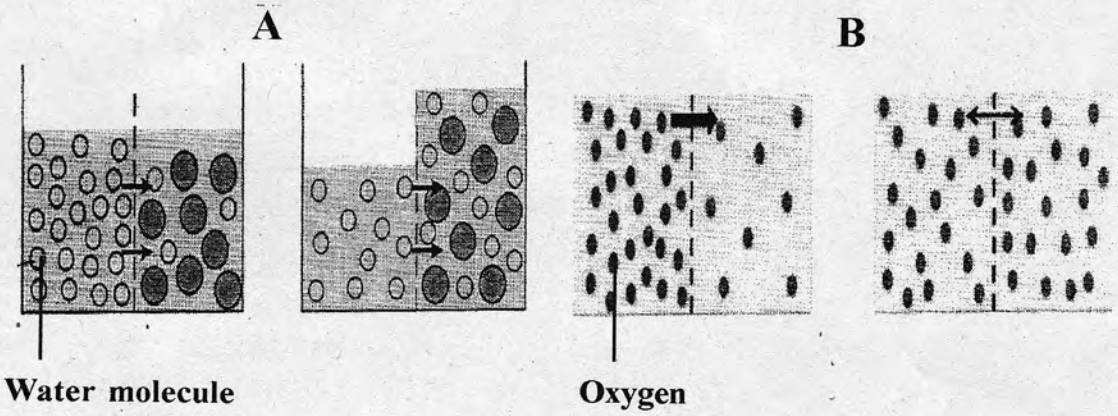


(a) Write the aim of the experiment.

(b) If this experimental set up is placed in a dark room, what will be the change in the amount of oxygen? Give reason.

(c) What are the contributions of Joseph Priestley and Van Niel with respect to photosynthesis ?

23. Analyse the figure showing the process of transport of materials and answer the questions.



(a) Identify and name the processes indicated in A and B.

(b) How does the identified processes differ each other ?

(c) How do the above processes differ from Active transport?