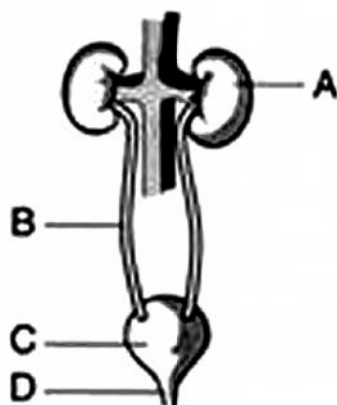
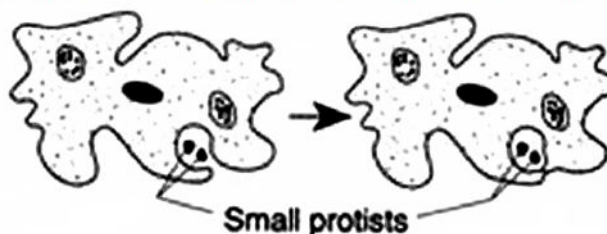


**ASSIGNMENT QUESTIONS SET – 2**  
**CHAPTER – 6**  
**LIFE PROCESSES**

1. Name the pore through which gaseous exchange takes place in older stems.
2. Why the blood is red ?
3. What is the functional unit of kidney?
4. Define translocation.
5. Name the vessel that brings oxygenated blood from lungs to heart.
6. Why the colour of lymph is yellow?
7. Name the reagent which is used to test the presence of starch.
8. Why walls of articles are thinner than ventricles?
9. The mode of nutrition in which digestive enzymes are secreted out side the body.
10. What is ATP?
11. The diagram below represents urinary system in the human body. Identify the structure through which urine leaves the urinary bladder.

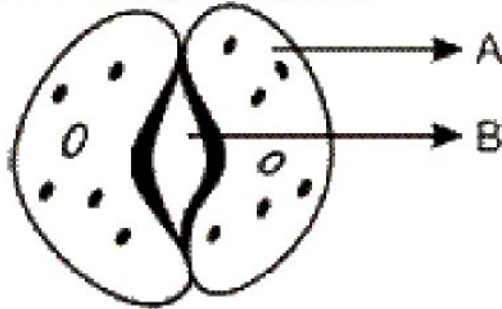


12. Which activity is illustrated in the diagram of an Amoeba shown below?



13. Why is the rate of breathing in terrestrial animals slower than aquatic animals?

14. A student covered a leaf from a destarched plant with a black paper strip and kept it in the garden outside his house in fresh air. In the evening, he tested the covered portion of the leaf for presence of starch. What the student was trying to show? Comment.
15. The parts shown as A and B in the given diagram are



The parts shown as A and B in the given diagram are

- A) A is epidermal cell, B is stomatal pore  
 B) A is guard cell, B is stomatal pore  
 C) A is epidermal cell, B is guard cell  
 D) A is guard cells, B is epidermal cell
16. The kidneys in human beings are a part of the system for  
 (a) nutrition.  
 (b) respiration.  
 (c) excretion.  
 (d) transportation.
17. The xylem in plants are responsible for  
 (a) transport of water.  
 (b) transport of food.  
 (c) transport of amino acids.  
 (d) transport of oxygen.
18. The autotrophic mode of nutrition requires  
 (a) carbon dioxide and water.  
 (b) chlorophyll.  
 (c) sunlight.  
 (d) all of the above.
19. The breakdown of pyruvate to give carbon dioxide, water and energy takes place in  
 (a) cytoplasm.  
 (b) mitochondria.  
 (c) chloroplast.  
 (d) nucleus.
20. Movement of food through oesophagus is due to  
 (a) Lubrication by saliva  
 (b) Peristalsis  
 (c) Gravitational Pull  
 (d) All of the above
21. Where is bile produced?  
 (a) Gall bladder                      (b) Blood  
 (c) Liver                                (d) Spleen

22. In normal expiration, the diaphragm is  
(a) Arched  
(b) Flattened  
(c) Perforated  
(d) None of these
23. The correct pathway of blood in circulatory system is  
(a) atria → ventricles → arteries → veins  
(b) ventricles → atria → veins → arteries  
(c) ventricles → veins → arteries → atria  
(d) veins → ventricles → atria → arteries
24. Respiration is a process in which  
(a) Energy is stored in the form of ADP  
(b) Energy is released and stored in the form of ATP  
(c) Energy is used up  
(d) Energy is not released at all.
25. In Photosynthetic process, atmospheric carbon di oxide is \_\_\_\_\_ to carbohydrates  
a) oxidised  
b) Reduced  
c) Neutralised  
d) Burnt
26. When water enters the guard cells the stomata  
a) Opens  
b) Closes  
c) Open or closes  
d) No effect
27. Wastes concentrated in the tubules of Bowman's capsule are called \_\_\_\_\_.  
(a) salts.  
(b) juices  
(c) urine  
(d) amino acids
28. On seeing good food our mouth waters. This fluid is actually  
a) Water  
b) Hormone  
c) Enzyme  
d) None of the above
29. The enzyme Pepsin is inactive in stomach without the presence of  
a) Nitric Acid  
b) Hydrochloric acid  
c) Acetic acid  
d) Butyric acid
30. Villi present on the inner lining of the intestinal wall  
a) Secrete enzymes for digestion  
b) Secrete hormones  
c) Decreases the surface area for absorption  
d) Increases the surface area for absorption



31. During cellular respiration one molecule of glucose is first broken down into two molecules of \_\_\_\_\_  
a) Acetic acid  
b) Pyruvic acid  
c) Lactic acid  
d) None of the above
32. Rajib was absent in the class because of muscle pain which he claims to be due to excess physical exercise he had done yesterday. This pain is due to  
a) Formation of lactic acid  
b) Formation of acetic acid  
c) Formation of Pyruvic acid  
d) Formation of Hydrochloric acid
33. Right part of the human heart contains  
a) Oxygenated blood  
b) Mixed blood  
c) Deoxygenated blood  
d) No blood
34. The transport of soluble products of photosynthesis is called translocation and it occurs in the part of the vascular tissue called  
a) Xylem  
b) Sclerenchyma  
c) Phloem  
d) Collenchyma
35. In human each kidney has large numbers of filtration units called \_\_\_\_  
a) Neutrons  
b) Neurons  
c) Neptune  
d) Nephrons
36. Haemoglobin is a type of  
(a) Carbohydrate  
(b) Skin Pigment  
(c) Vitamin  
(d) Respiratory Pigment
37. If kidney fails to reabsorb water, the tissues would  
(a) remain unaffected  
(b) shrink to shrivel  
(c) absorb water from blood  
(d) take more oxygen from blood
38. Name an organ which is part of two body systems.
39. Why do raw bread taste sweeter on mastication?
40. How are fats digested in our bodies? Where does this process take place?
41. What is the role of saliva in the digestion of food?

42. Why will simple diffusion not meet the requirement of human beings?
43. What criteria do we use to decide whether something is alive?
44. After long running, you may experience cramps in your leg muscles. What's the reason behind this?
45. What processes would you consider essential for maintaining life?
46. How do villi enhance absorption of food in the intestine?
47. Why bile juice is considered important even though it does not contain any digestive enzymes?
48. Which organs secrete the following enzymes:
  - (i) Trypsin
  - (ii) Pepsin
49. Name the factors that affect photosynthesis.
50. Name the vestigial part of human alimentary canal?
51. What is the name given to rhythmic wave like manner occurring in alimentary canal?
52. The bark of woody plants is dead but the inner layers inside the bark are living. How do they get oxygen and release carbon dioxide?
53. What are lenticels?
54. How does photosynthesis occur?
55. Name the mode of nutrition in an organism that uses simple substances like CO<sub>2</sub> and water to prepare food inside its body?
56. What are the differences between autotrophic nutrition and heterotrophic nutrition?
57. Read following statements from A to E and identify the relevant life process from the following word list.  
**growth, transport, synthesis, regulation, nutrition**
  - A. A butterfly sucking the nectar from the flowers in a garden.
  - B. A boy shouts with excitement when his school team wins the match on the last ball.
  - C. After finishing lunch, Mohan's blood distributes the food molecules to different cells of his body.
  - D. Green plants prepares starch (complex substance) from simpler chemicals.
  - E. Radha finds her height has increased by 4 cm since her last birthday.
58. What is osmoregulation?
59. What are the different ways in which glucose is oxidized to provide energy in various organisms?
60. Which organ of the plant body helps in osmo-regulation?



61. Which organelle of the cell in animals helps in osmo-regulation?
62. How does transpiration pull help in ascent of sap?
63. In what form excretion takes place in plants?
64. What are the components of the transport system in highly organised plants?
65. What is meant by double circulation? Mention its advantages.
66. Who has longer small intestine tiger or cow?
67. Leaves of a healthy potted plant are coated with Vaseline to block the stomata. Will this plant remain healthy for long? State three reasons to support your answer.
68. Outline inhalation-exhalation cycle.
69. What are the components of the transport system in human beings? What are the functions of these components?
70. Why is it necessary to separate oxygenated and deoxygenated blood in mammals and birds?
71. Why is there extra air in our lungs after exhaling?
72. Which cell are the site of exchange of gases?
73. How are the lungs designed in human beings to maximize the area for exchange of gases?
74. Why blood is necessary for oxygen delivery to all parts of the body in larger animals?
75. Define homeostasis.
76. Name the organ systems that help us maintain homeostasis.
77. What in kidneys is analogous to alveoli in lungs?
78. State the role and function of lymph in human transport system.
79. What is the basic reason of urine production?
80. State the role of kidneys in human transport system.
81. Who discovered systemic blood circulation system in human body?
82. What is pulmonary circulation and systemic circulation?
83. Which fluid is also known as tissue fluid?
84. What is sphygmomanometer?
85. What is the function of ureter?

**86. Assertion and Reason Type**

**Assertion:** Bile is essential for fat digestion

**Reason:** Fats cannot be digested without emulsification

Use the following Key to choose the appropriate answer.

- (a) Both Assertion & Reason are True & Reason is a correct explanation of the Assertion.
  - (b) If both Assertion & Reason are True but Reason is not a correct explanation of the Assertion.
  - (c) If Assertion is True but the Reason is False.
  - (d) If both Assertion and Reason are False
87. Chyme is \_\_\_\_.
- (a) Digestive enzyme secreted by stomach.
  - (b) Hormone secreted by islets of Pancreas
  - (c) food which enters into intestine from stomach.
  - (d) Part of bile juice which stores in gall bladder.
88. What is the nature of Chyme? Acidic or Basic or Neutral?
89. During daytime transpiration and photosynthesis are interlinked. What do you mean by this statement?
90. 'Sweating in animals' is equivalent to what in plants?
91. What factor contribute to rate of transpiration?
92. How does transpiration help plants?
93. Name the mineral required for healthy growth of teeth.
94. Name the chemical used to detect presence of starch.
95. What is the function of mucus secreted in stomach during digestion?
96. What is the optimum temperature for photosynthesis?
97. Differentiate between Blood and Lymph
98. How does diaphragm help in inhalation?
99. Which activity is basic to living?
100. Give one term-science that deals with life processes.
101. What is the similarity between chlorophyll and haemoglobin?
102. Define Chemosynthesis.
103. What is photolysis of water? What are its products?
104. What are the important enzymes of pancreatic juice and their function?
105. Give reasons of dental caries in people.



106. With schematic diagram explain double circulation in man.
107. Explain mechanism of urine formation.
108. Why is diffusion insufficient to meet oxygen requirement of multicellular organisms like us?
109. Explain the role of HCl in our stomach.
110. What is the advantage of terrestrial organisms over aquatic organisms for obtaining oxygen for respiration?
111. How are lungs designed to maximize area for gaseous exchange?
112. Describe fat digestion in human body and the organ where it occurs.
113. How are water and minerals transported in plants?
114. How are food and other substances transported in plants?
115. Give labeled Diagrams for the following.
  - a. Digestive system of man.
  - b. Respiratory system of man.
  - c. Structure of Nephron.
  - d. Structure of Stomata.
  - e. Structure of Heart.
  - f. Parts of Brain.
  - g. Reflex action and reflex arc.
116. Due to availability of less water, how does the plant cope up with lack of water in desert conditions?
117. After a vigorous exercise, you may experience cramps in your leg muscles. Why does this happen?
118. What will happen if carbon monoxide combines with haemoglobin?
119. Food moves down the gut by peristalsis. Which region of brain controls peristalsis?
120. Name the pigment present in plants, which can absorb solar energy.
121. Name the respiratory organs of (i) fish (ii) mosquito (iii) earthworm.
122. Which of the four chambers of the human heart has the thickest muscular walls?
123. What will be the outcome if a farmer floods his field everyday?
124. Which part of visible spectrum is absorbed by chlorophyll pigments?
125. How does respiration in plants differ from that in animals?



126. Name the cartilaginous flap which closes the glottis to check the entry of food into it during swallowing.
127. Which equipment is used to facilitate breathing during serious breathing problems?
128. Chloroplast are called energy convertors. Explain.
129. Why is the rate of breathing much faster in aquatic organisms than those of terrestrial organisms?
130. Why are glomeruli considered as dialysis bags?
131. Autotrophs synthesise food for the living world. Justify this statement in one sentence only interconnecting autotrophs and heterotrophs.
132. Veins and arteries carry blood. Which of these carry blood?  
 a) Away from the heart?  
 b) Back to the heart?
133. Which of the organs perform the following functions in humans?  
 1. Absorption of food.  
 2. Absorption of water
134. Name the areas in a woody stem through which respiratory exchange of gases take place.
135. Tooth enamel is one of the hardest substances in our body. How does it undergo damage due to eating chocolates and sweets?
136. A certain tissue in a green plant somehow get blocked and the leaves wilted. What was the tissue that got blocked?
137. Write one feature which is common to each of the following pairs of the term/organs.  
 i) glycogen and starch  
 ii) chlorophyll and haemoglobin  
 iii) gills and lungs  
 iv) arteries and veins.
138. Why doesn't the lungs collapse even after forceful expiration?
139. The two openings of the pharynx, one leading to trachea and the other leading to oesophagus, lie very close to each other. Yet food we swallow normally does not enter into our trachea. Why?
140. How would it affect the digestion of proteins and carbohydrates if the duodenum of man if there is a blockade in the pancreatic duct?