Life Processes

SHORT ANSWER QUESTIONS:-

1. How are fats digested in our bodies? Where does this process take place?
2. What is the role of saliva in the digestion of food?
3. What are the necessary conditions for autotrophic nutrition and what are its by-products?
4. What are the differences between aerobic and anaerobic respiration? Name some organisms that use the anaerobic mode of respiration.
5. How are the alveoli designed to maximise the exchange of gases?
6. What would be the consequences of a deficiency of haemoglobin in our bodies?
7. Describe double circulation in human beings. Why is it necessary?
8. What are the differences between the transport of materials in xylem and phloem?
9. Compare the functioning of alveoli in the lungs and nephrons in the kidneys with respect to their structure and functioning.
10. How does digestion take place in small intestine? Name all the enzymes and their functions in small intestine.

VERY-SHORT ANSWER QUESTIONS:-

1. Define nutrition? What are the different modes of nutrition?
2. What is the mode of nutrition in fungi?
3. Name the pigment, which can absorb solar energy.
4. Name the two stages in photosynthesis.
5. Name the factors, which affect photosynthesis.
6. Define a herbivore and a carnivore.
7. What is compensation point?
8. Other than chlorophyll, which other pigment is necessary for photosynthesis?
9. Where does digestion begin?
10. What is the name given to the process of using the absorbed food for producing energy?
11. What happens to visible light of the Sun when it falls on chlorophyll?
12. Name the product and by product of photosynthesis.
13. In which biochemical form the photosynthetic moves in phloem tissue?
14. What are the raw materials of photosynthesis?
15. What is the similarity between chlorophyll and haemoglobin?
16. Name the products of photolysis of water.

17. What are the end products of light dependant reaction?
18. Which cell organelle is the site of photosynthesis?
19. What is the difference between digestion of heterotrophs and saprotrophs?
20. Give example of two plants and two animal parasites.
21. Name the enzyme present in saliva, what is its role in digestion?
22. Which chemical is used to test for starch? Which colour shows the presence of starch?
23. How does amoeba engulf its food?
24. Name the parts of the digestive system of a grasshopper.
25. What are the functions of the liver and the pancreas?
26. Define breathing.
27. How is respiration different from breathing?
28. In which kind of respiration is more energy released?
29. Which part of the roots is involved in exchange of respiratory gases?
30. What are (i) stomata and (ii) lenticels?
31. Give two points of differences between respiration in plants and respiration in animals.
32. Name the respiratory organs of
(i) Fish
(ii) Mosquito
(iii) Earthworm
(iv) Dog
33. From where do the following take in oxygen? (i) prawn (ii) rat.
34. State the function of epiglottis.
35. Define photolysis.
36. What are the living organisms that cannot make their own food called?
37. What are chemotrophs?
38. Give the term- rhythmic contraction of alimentary canal muscle to propel food.
39. Name the three secretions of gastric glands.
40. What is the function of mucus in gastric gland?
41. Name the sphincter which regulates the exit of food from the stomach.
42. Give the functions of hydrochloric acid for the body.
43. What is the role of pepsin in stomach?
44. Why pancreas is called mixed gland?
45. Give two functions of bile juice, from which organ it is released?
46. Name the largest gland of our body.
47. Name any three important enzymes of pancreas and the food component on which they act.

48. Where from intestinal juice come to the small intestine?
49. What is the function of intestinal juice?
50. What are the simplest digestive product of carbohydrate, fats and protein?
51. Name the finger like projections of small intestine and what is the necessity of such type of projections in digestive system?
52. Why are intestinal villis highly vascular?
53. What is the function of anal sphincter?
54. Name the site of anaerobic and aerobic respiration in a cell.
55. A three carbon compound is the common product of both aerobic and anaerobic pathway. What is that?
56. Why do we get muscle cramp after vigorous exercise?
57. Distinguish between lactic acid and alcoholic fermentation?
58. Name the energy currency molecule of cell?
59. The breathing rate of aquatic animals is high, why?
60. What is the function of mucus and fine hair in nostrils?
61. Give the function of network of capillaries on alveoli.
62. Name the main carrier of oxygen and carbon dioxide in man.
63. Why does haemoglobin molecule act as efficient carrier of oxygen than diffusion process?
64. Give example of any three substances transported by plasma.
65. Name the organ that- (a) pushes blood around body (b) make blood to reach to tissues.
66. Name the blood vessel that carries blood from heart to lungs and from lungs to heart.
67. How many heart chambers are there in (a) fish (b) frog (c) lizard (d) crocodile (e) birds (f) man?
68. Name the device that measures blood pressure.
69. What is the normal blood pressure of man?
70. Why capillaries are thin walled?
71. Which cell of blood help in wound healing?
72. What is the other name of lymph?
73. Give two function of lymph.
74. What is the direction of flow of water in xylem and food in phloem?
75. Why do plants need less energy than animals?
76. Which process acts as suction to pull water from xylem cells of roots.
77. Mention two functions of transpiration.
78. What are the two substances transported through phloem tissue?
79. Name the food component whose digestion produce nitrogenous waste?

80. Which is the functional unit of kidney?
81. What is the cup shaped structure of nephron called?
82. Which materials are selectively reabsorbed by nephron tubule?
83. What are the two important functions of kidney.
84. What is the other name of artificial kidney?
85. A key molecule NOT found in a chloroplast is...
    i. Chlorophyll
    ii. Carbon dioxide
    iii. Water
    iv. Steroids
86. Photosynthesis is a good example of...
    i. Catabolism
    ii. Anabolism
87. Chloroplasts are found in heterotrophic cells.
    i. True
    ii. False
88. Which of these choices is NOT in the structure of a chloroplast?
    i. Granum
    ii. Stroma
    iii. Cristae
    iv. Thylakoid
89. Only plants can conduct photosynthesis with chloroplasts.
    i. True
    ii. False
90. Chloroplasts convert solar energy into physical energy.
    i. True
    ii. False
91. What are nutrients?
92. Name the life process that provides energy.
93. Which process provides all living things with raw materials for energy and growth?
94. Name the essential pigment that absorbs light.
95. Can you name the gaseous raw material of photosynthesis?
96. If grana of a chloroplast are removed then, which of the reaction of will not be carried out?
97. Name the gas that is produced as a by-product during photosynthesis.
98. Tick the correct statement.
    i. Arteries carry blood away from the heart while veins carry blood towards heart.

ii. Veins carry blood away from the heart while arteries carry blood towards heart.
iii. Both of them carry blood in the same direction.
iv. Either of them can carry blood away from the blood.

99. Artificial removal of nitrogenous wastes from the human body in the event of kidney failure is
i. Plasmolysis
ii. Dialysis
iii. Diffusion
iv. Osmosis

100. The function of salivary amylase is to convert
i. Fats into fatty acids.
ii. Proteins into amino acids.
iii. Starch into sugar.
iv. Sugar into starch