- 1. The process of obtaining energy through consumption of food is called as
 - a. Nutrition
 - b. Excretion
 - c. Respiration
 - d. Transportation
- 2. Most of these food sources are
 - a. carbon-based
 - b. ogygen-based
 - c. Plant-based
- 3. The process of acquiring oxygen through breathing and make it available to cells for

the process of breaking down of organic substances into simpler compounds

- is called as
- a. Nutrition
- b. Excretion
- c. Respiration
- d. Transportation
- 4. The process by which the food and oxygen is carried from one organ to other organs in the body is
 - a. Nutrition
 - b. Excretion
 - c. Respiration
 - d. Transportation
- 5. The process by which the metabolic waste by-products are removed from the different organs and released out from the body
 - a. Nutrition
 - b. Excretion
 - c. Respiration
 - d. Transportation
- 6. Materials which provide nutrition to organisms are called
 - a. Food
 - b. Nutrients
 - c. Vitamins
 - d. Proteins
- 7. Which among the following in NOT a macro nutrient

- a. Carbohydrates
- b. Proteins
- c. Vitamins
- d. Fats
- 8. Which among the following in a micro nutrient
 - a. Carbohydrates
 - b. Proteins
 - c. Minerals
 - d. Fats
- 9. The mode of nutrition in which an organism prepares its own food is called a. Autotrophic nutrition
 - b. Heterotrophic nutrition
- 10. Green plants and blue-green algae followtype of nutrition
 - a. Autotrophic
 - b. Heterotrophic
- 11. Saprophytic nutrition is a type of nutrition
 - a. Autotrophic
 - b. Heterotrophic
- 12. The most common chemical means to break-down molecules is
 - a. Oxidising-reducing reactions
 - b. Photosynthesis
- 13. Heterotrophic organisms include
 - a. Animals and fungi
 - b. Animals and bacteria
 - c. Animals and algae
- 14. What are the three types of heterotrophic nutrition? Saprophytic nutrition, holozoic nutrition, and parasitic
- 15. Carbon and energy requirements of the autotrophic organism are fulfilled by
 - a. Photosynthesis
 - b. Oxidising-reducing reactions
- 16. The process by which autotrophs take in substances from the outside and convert them into stored forms of energy is known as
 - a. Photosynthesis
 - b. Chemosynthesis

- 17. During Photosynthesis carbon dioxide and water are converted into
 - a. Carbohydrates
 - b. Proteins
 - c. Fats

18.are utilised for providing energy to the plant

- a. Carbohydrates
- b. Proteins
- c. Oxygen
- 19. The plants store carbohydrates which are not used immediately, in the form of
 - a. Stem
 - b. Starch
 - c. Roots
 - d. Fruits

20. In human beings the energy derived from the food we eat is stored in our body in the form of

- a. Glucose
- b. Glycogen
- c. Fats

21. Equation, Photosynthesis

- 22. The chlorophylls are contained in
 - a. Stem
 - b. Leaf
 - c. Chloroplasts
- 23. The tiny pores present on the surface of the leaves are called
 - a. Granules
 - b. Stomata
- 24. Massive amounts of gaseous exchange takes place in the leaves through for the purpose of photosynthesis.
 - a. Leaf edges
 - b. Stomata
 - c. Leaf veins
- 25. The plant closes stomata when it does not need carbon dioxide for photosynthesis using specialized cells called
 - a. Tissue
 - b. Stomatic pores
 - c. Guard cells
- 26. The stomatal pore open when
 - a. Water flows into guard cells
 - b. Water flows out of guard cells
- 27. Plants take Nitrogen, which is an essential element used in the synthesis of proteins and other compounds, from soil in the form of
 - a. Inorganic nitrates or nitrites
- 28. Plants collect Nitrogen in the form of organic compounds which have been prepared by bacteria from atmospheric nitrogen
- 29. Examples for organisms which break-down the food material outside the body and then absorb it are:

- a. Fungi like bread moulds, yeast and mushrooms
- b. Algae
- c. Bacteria
- 30. The organisms which derive nutrition from plants or animals without killing them are called
 - a. Parasites
 - b. Heterotrophs
- 31. Give an example of parasitic plant
 - Cuscuta (amar-bel)
- 32. Give an example of parasitic animals

Ticks, lice, leeches and tape-worms

- 33. In single-celled organisms, the food may be taken in
 - a. Entire surface
 - b. Middle of the body
 - c. Outer layer
- 34. Amoeba takes in food using temporary finger-like extensions of the cell surface which fuse over the food particle forming
 - a. Food-vacuole
 - b. Food capsule
- 35. In Amoeba, Inside the food-vacuole, complex substances are broken down into simpler ones which then diffuse into
 - a. Cytoplasm
 - b. Nucleus
- 36. In Paramoecium, the food is taken in at a specific spot by
 - a. Movement of cilia
 - b. Movement of cytoplasm
- 37. The long tube extending from the mouth to the anus in human being is called
 - a. Alimentary canal
 - b. Intestine
- The food is broken into smaller molecules by Biological catalysts called enzymes
- 39. The saliva contains an enzyme called Salivary amylase
- 40. Salivary amylase breaks down starch which is a complex molecule to give sugar
- 41. The rhythmic movement of the lining of Alimentary canal muscles to push the food forward is known as Peristaltic movements
- 42. From the mouth, the food is taken to the stomach through the food-pipe called...

Oesophagus

- 43. The gastric glands present in the Wall of the stomach
- 44. The digestive functions in our body are taken care of by Gastric glands
- 45. The gastric glands present in the wall of the stomach release Hydrochloric acid, a protein digesting enzyme called pepsin, and mucus
- 46. The protein digesting enzyme released by the gastric glands is called Pepsin
- 47. The hydrochloric acid creates an acidic medium which facilitates the action of the enzyme pepsin
- 48. The mucus protects the inner lining of the stomach from the action of the acid under normal conditions
- 49. The longest part of the alimentary canal is Small intestine
- 50. sphincter muscle is a muscle which regulates the exit of food from the stomach into small intestine
- 51. The exit of food from the stomach is regulated by a sphincter muscle which releases it in small amounts into the small intestine
- 52. The small intestine is the site of the complete digestion of carbohydrates, proteins and fats.
- 53. Small intestine, the longest part of the alimentary canal is fitted into a compact space because of extensive coiling
- 54. The length of the small intestine differs in various animals depending on The food they eat
- 55. Herbivores have a longer small intestine. Why? They eat grass which needs a longer small intestine to allow the cellulose to be digested.

56. Carnivores have a longer small intestine. Why? They eat meat which is easier to digest, hence carnivores like tigers have a shorter small intestine.

- 57. Rhythmic contraction of muscles of the lining of the alimentary canal to push thefood forward is known as
 Peristaltic movement
- 58. Describe two functions of Bile juice
 - a. The bile juice make the acidic food coming from the stomach to alkaline so that pancreatic enzymes can act on the food.
 - b. Bile juice also breaks the fats in the intestine in the form of large globule into small ones
- 59. The Bile juice is released by ...

Liver

60. Bile gets stored in

Gall bladder

- 61. The process of breaking down of fat into smaller particles is known as Emulsification of fat
- 62. The juice secreted by the pancreas is Pancreas juice
- 63. The enzymes contained in the Pancreas juice are Trypsin and lipase
- 64. The function of Trypsin is to.... Digest the protein
- 65. Name the enzyme which digest the protein Trypsin
- 66. The function of Lipase enzyme is Breaking down of emulsified fats
- 67. Name the enzyme that breaks down emulsified fats Lipase
- 68. The enzymes contained in the walls of the small intestine converts the Proteins into Amino Acids, complex Carbohydrates into Glucose and Fats into Fatty Acids and Glycerol
- 69. The digested food is taken up by the walls of the intestine
- 70. The inner linings of the small intestine has small finger-like projections called villi, which helps in absorption of the food. The villi contains a lot of blood vessels.
- 71. Most of the water absorption in the body takes place at Large intestine
- 72. The waste materials exit from the body through Anus
- 73. The muscle which regulates the exit of waste through anus is Anal Sphincter
- 74. Large intestine is smaller than small intestine. True OR False? True
- 75. Name the three-carbon molecule produced by breaking the six-carbon glucose molecule

Pyruvate

- 77. The conversion of pyruvate into ethanol and carbon dioxide takes place in

Yeast during fermentation

- 78. During fermentation, pyruvate is converted into and Ethanol and carbon dioxide
- 79. The Break-down of pyruvate using oxygen takes place in the Mitochondria
- 80. Respiration is of two types,and

Aerobic respiration and anaerobic respiration

- 81. The type of respiration happens in the presence of oxygen is known as .. Aerobic respiration
- 82. The type of respiration happens in the absence of oxygen is known as ..

Anaerobic respiration

83. The process of conversion of pyruvate into lactic acid is an example for ...

Anaerobic respiration

- 84. When someone runs too fast, he may experience a throbbing pain in the leg muscles. This happens because of anaerobic respiration taking place in the muscles. During running, the energy demand from the muscle cells increases. This is compensated by anaerobic respiration and lactic acid is formed in the process. The deposition of lactic acid causes the pain the leg muscles. The pain subsides after taking rest for some time.
- 85. In Yeast, the Pyruvate is converted into Ethanol, Carbon di Oxide and Energy in the absence of Oxygen
- 86. In our muscles, the Pyruvate is converted into Lactic Acid and Energy in the absence of Oxygen
- 87. In our body, the Pyruvate is converted into Carbon dioxide, Water and Energy in mitochondria in the presence of Oxygen
- 88. Mitochondria is the site of aerobic respiration
- 89. The energy released in aerobic respiration is used for forming a molecule called ... using ADP (Adenosine Di Phosphate). and inorganic phosphate ATP (Adenosine trii phosphate).
- 90. The ATP is stored in and is released as per need Mitochondria
- 91. Carbon dioxide and oxygen are exchanged by diffusion atin plants Stomata
- 92. At night, when there is no photosynthesis occurring, more CO2 is diffuses from plants to the environment
- 93. At day time, when there is photosynthesis occurring, more O2 is diffuses from plants to the environment
- 94. During the day, CO2 generated during respiration is used up for photosynthesis, hence there is no CO2 release. Instead, oxygen release is the major event at this time.
- 95. Since the amount of dissolved oxygen is fairly low compared to the amount of oxygen in the air, the rate of breathing in aquatic organisms is much faster than that seen in terrestrial organisms.
- 96. Thepresent in the throat of human beings ensures that the air passage does not collapse Rings of Cartilage

- 97. Within the lungs, the air passage divides into smaller and smaller tubes which finally terminate in balloon-like structures which are called alveoli
- 98. The respiratory pigment in human beings is known as Haemoglobin
- 99. The Haemoglobin is present in blood in Red Blood Corpuscles
- 100. Carbon dioxide is more soluble in water than oxygen is and hence is mostly transported in the dissolved form in our blood
- 101. The fluid medium of the blood is called ... Plasma
- 102. Plasma transports food, carbon dioxide and nitrogenous wastes in dissolved form
- 103. The chambers of the heart which pump blood to different body organs is .. Ventricles
- 104. The ventricles have thick muscular walls than atria because,
- 105. Blood goes only once through the heart in the fish during one cycle of passage through the body
- 106. Blood goes only once through the heart in the fish during one cycle of passage through the body
- 107. The blood goes through the heart twice during each cycle in vertebrates other than fish. This is known as double circulation
- 108. The force that blood exerts against the wall of a vessel is called Blood pressure
- 109. The pressure of blood inside the artery during ventricular systole (contraction) is called Systolic pressure
- 110. The pressure in artery during ventricular diastole (relaxation) is called Diastolic pressure
- 111. The normal systolic pressure is about 120 mm of Hg
- 113. Blood pressure is measured with an instrument called Sphygmomanometer
- 114. High blood pressure is also called Hypertension
- 115. High blood pressure is caused by ...
- Constriction of arterioles, which results in increased resistance to blood flow 116. High blood pressure can lead to
 - Repture of an artery and internal bleeding
- 117. Arteries are the vessels which carry blood away from the heart to various organs of the body.

118. Veins collect the blood from different organs and bring it back to the heart

- 119. Veins do not need thick walls because the blood is no longer under pressure, instead they have valves that ensure that the blood flows only in one direction.
- 120. The blood has platelet cells which circulate around the body and plug these leaks by helping to clot the blood at these points of injury
- 121. Blood capillaries are the