

1. The process by which green plants prepare their own food is:  
A. Respiration      B. Digestion  
C. Photosynthesis ☒      D. Transpiration
2. Photosynthesis requires:  
A. Oxygen, glucose, water      B. Carbon dioxide, water, sunlight ☒  
C. Water, protein, nitrogen      D. Nitrogen, oxygen, glucose
3. Which is a heterotrophic organism?  
A. Green plant      B. Algae      C. Fungi ☒      D. Cyanobacteria
4. Which organ secretes salivary amylase?  
A. Stomach      B. Salivary glands ☒      C. Liver      D. Pancreas
5. Salivary amylase breaks down:  
A. Protein      B. Fat      C. Starch ☒      D. Vitamins
6. In humans, digestion of proteins begins in the:  
A. Mouth      B. Stomach ☒      C. Liver      D. Small intestine
7. The part of alimentary canal where bile is released:  
A. Stomach      B. Small intestine ☒  
C. Large intestine      D. Mouth
8. Bile is produced by:  
A. Gallbladder      B. Pancreas      C. Liver ☒      D. Intestine
9. Bile helps in digestion of:  
A. Proteins      B. Carbohydrates      C. Fats ☒      D. Vitamins
10. Which part has villi for absorption?  
A. Mouth      B. Stomach      C. Small intestine ☒  
D. Large intestine
11. Translocation in plants is done by:  
A. Xylem      B. Phloem ☒      C. Cambium      D. Parenchyma
12. Emulsification of fats is carried out by:  
A. Pancreas      B. Liver ☒      C. Gallbladder      D. Small intestine
13. In Amoeba, food is engulfed by:  
A. Cilia      B. Flagella      C. Pseudopodia ☒      D. Tentacles
14. Paramoecium uses which structure to intake food?  
A. Tentacles      B. Pseudopodia      C. Cilia ☒      D. Flagella
15. Which mode of nutrition is seen in Cuscuta?  
A. Autotrophic      B. Saprotrophic      C. Parasitic ☒      D. Insectivorous
16. The site of complete digestion is:  
A. Stomach      B. Mouth  
C. Small intestine ☒      D. Large intestine
17. Herbivores have a longer small intestine to:  
A. Absorb more fat      B. Digest cellulose ☒  
C. Store food      D. Secrete bile
18. Which enzyme breaks proteins in the stomach?  
A. Amylase      B. Lipase  
C. Pepsin ☒      D. Trypsin
19. Pancreatic juice contains:  
A. Pepsin, bile      B. Trypsin, lipase ☒  
C. Amylase only      D. Maltase
20. Which organ stores bile?  
A. Liver      B. Pancreas  
C. Gallbladder ☒      D. Appendix
21. Starch turns blue-black with:  
A. Benedict's solution      B. Iodine ☒  
C. Biuret reagent      D. Fehling's solution
22. Which element is required for protein synthesis?  
A. Magnesium      B. Potassium  
C. Nitrogen ☒      D. Calcium
23. The opening and closing of stomata is regulated by:  
A. Xylem      B. Chloroplasts  
C. Guard cells ☒      D. Phloem
24. Which molecule is the energy currency?  
A. DNA      B. RNA      C. ATP ☒      D. ADP
28. Anaerobic respiration in yeast produces:  
A. CO<sub>2</sub> and water      B. Alcohol and CO<sub>2</sub> ☒  
C. Lactic acid      D. Oxygen
29. Site of glycolysis is:  
A. Nucleus      B. Mitochondria  
C. Cytoplasm ☒      D. Ribosomes

30. Pyruvate is formed from:  
A. Protein      B. Fat      C. Glucose ☒      D. Cellulose
31. Lactic acid is formed in muscles due to:  
A. Oxygen deficiency ☒      B. Carbon dioxide excess  
C. Protein digestion      D. Water loss
32. Which produces more energy?  
A. Aerobic respiration ☒      B. Anaerobic respiration  
C. Fermentation      D. Photosynthesis
33. In humans, respiration is:  
A. Anaerobic      B. Fermentative  
C. Aerobic ☒      D. Gaseous
34. The air sacs in lungs are:  
A. Bronchi      B. Tracheae  
C. Alveoli ☒      D. Bronchioles
35. Oxygen is carried by:  
A. Plasma      B. White blood cells  
C. Haemoglobin ☒      D. Platelets
36. Carbon dioxide is mostly transported in:  
A. RBCs      B. Plasma ☒  
C. WBCs      D. Haemoglobin
37. Ringed air tube is called:  
A. Bronchi      B. Oesophagus  
C. Trachea ☒      D. Alveolus
38. Fish breathe through:  
A. Lungs      B. Gills ☒  
C. Skin      D. Mouth
39. Air enters the lungs through:  
A. Esophagus      B. Nostrils ☒  
C. Tongue      D. Pharynx
40. The function of mucus in the respiratory tract is:  
A. Break food      B. Remove germs and dust ☒  
C. Absorb water      D. Help breathing
41. The number of ATP molecules produced by complete oxidation of one glucose is:  
A. 2      B. 18      C. 36 ☒      D. 8
42. Which structure prevents collapse of the trachea?  
A. Mucus      B. Ribs  
C. Cartilage rings ☒      D. Bronchi
43. Respiration is required to:  
A. Produce protein      B. Absorb CO<sub>2</sub>  
C. Release energy ☒      D. Synthesize vitamins
44. Anaerobic respiration occurs in:  
A. Human liver      B. Muscles during heavy work ☒  
C. RBCs      D. Mitochondria
45. Stomata exchange gases by:  
A. Active transport      B. Endocytosis  
C. Diffusion ☒      D. Osmosis
46. In humans, breathing rate increases when:  
A. CO<sub>2</sub> decreases      B. CO<sub>2</sub> increases ☒  
C. O<sub>2</sub> increases      D. Body temperature drops
47. Respiration in yeast is:  
A. Aerobic      B. Anaerobic ☒  
C. Facultative      D. Photosynthetic
49. Which organ has alveoli?  
A. Kidney      B. Heart  
C. Lungs ☒      D. Liver
50. Which is the first step of respiration?  
A. Krebs cycle      B. Glycolysis ☒  
C. Electron transport      D. Pyruvate oxidation
51. The main pumping organ in humans is:  
A. Lungs      B. Brain  
C. Heart ☒      D. Kidney
52. The fluid part of blood is called:  
A. Plasma ☒      B. Lymph  
C. Water      D. Serum
53. Blood cells responsible for oxygen transport:  
A. WBCs      B. Platelets  
C. RBCs ☒      D. Plasma
54. Haemoglobin is present in:  
A. WBCs      B. Plasma  
C. RBCs ☒      D. Platelets

55. Which blood vessels carry blood away from the heart?  
A. Veins                      B. Arteries ☒  
C. Capillaries              D. Lymph vessels
56. Which vessels have valves?  
A. Arteries                      B. Veins ☒  
C. Capillaries              D. None
57. Capillaries are:  
A. Thick-walled              B. Muscular  
C. One-cell thick ☒      D. Valve-bearing
58. Which blood cells help in clotting?  
A. RBCs                      B. WBCs  
C. Platelets ☒              D. Plasma
59. The normal systolic pressure in humans is:  
A. 80 mm Hg                  B. 100 mm Hg  
C. 120 mm Hg ☒              D. 140 mm Hg
60. Double circulation means:  
A. Blood flows once through heart  
B. Blood flows twice through heart ☒  
C. Blood flows in veins only  
D. None of the above
61. Lymph differs from blood in not containing:  
A. WBCs                      B. RBCs ☒  
C. Plasma                      D. Water
62. Lymph helps in:  
A. Absorbing proteins              B. Transport of oxygen  
C. Fat absorption ☒              D. Carbon dioxide transport
63. The human heart has:  
A. 2 chambers                  B. 3 chambers  
C. 4 chambers ☒              D. 5 chambers
64. Blood flows from the left ventricle to:  
A. Lungs                      B. Right atrium  
C. Whole body ☒              D. Brain only
65. Which blood vessel carries oxygenated blood from lungs to heart?  
A. Pulmonary vein ☒              B. Pulmonary artery  
C. Aorta                      D. Vena cava
66. Transport of water in plants is through:  
A. Phloem                      B. Xylem ☒  
C. Cortex                      D. Cambium
67. Transport of food in plants is by:  
A. Xylem                      B. Phloem ☒  
C. Root hair                      D. Parenchyma
68. The loss of water vapor from plants is called:  
A. Photosynthesis              B. Respiration  
C. Transpiration ☒              D. Translocation
69. Opening and closing of stomata is due to:  
A. Water pressure                  B. Chloroplast movement  
C. Guard cells ☒              D. Light
70. Transpiration creates:  
A. Root pressure                  B. Suction pull ☒  
C. Capillary action              D. Osmosis
71. Translocation in plants is:  
A. Passive                      B. Energy-dependent ☒  
C. Osmotic                      D. Through xylem
72. Companion cells help in:  
A. Water transport                  B. Fat digestion  
C. Translocation ☒              D. Starch breakdown
73. Which tissue conducts water in plants?  
A. Collenchyma                  B. Phloem  
C. Xylem ☒                      D. Parenchyma
74. In plants, sugar moves from:  
A. Leaves to roots ☒              B. Roots to leaves  
C. Stem to leaves                  D. Flower to leaf
75. Root pressure mainly works:  
A. Day                      B. Night ☒  
C. Afternoon                  D. Morning
77. Main excretory organ in humans:  
A. Heart                      B. Liver                      C. Kidney ☒              D. Lungs
78. Functional unit of kidney:  
A. Neuron                      B. Nephron ☒              C. Alveolus                  D. Tubule

79. Urine is stored in:  
 A. Kidney      B. Ureter      C. Bladder ☒      D. Urethra
80. Urea is formed in:  
 A. Kidney      B. Liver ☒      C. Stomach      D. Heart
81. The tube connecting kidney to bladder:  
 A. Urethra      B. Fallopian tube      C. Ureter ☒      D. Nephron
82. Blood is filtered in which part of nephron?  
 A. Loop of Henle      B. Ureter      C. Bowman's capsule ☒      D. Collecting duct
83. Which structure collects urine from nephrons?  
 A. Ureter      B. Bladder      C. Collecting duct ☒      D. Alveolus
84. Major component of urine is:  
 A. Glucose      B. Uric acid      C. Water ☒      D. Protein
85. Artificial kidney performs:  
 A. Excretion of oxygen      B. Digestion  
 C. Dialysis ☒      D. Respiration
86. Dialysis removes:  
 A. Bile      B. Enzymes  
 C. Nitrogenous waste ☒      D. RBCs
87. The amount of urine produced depends on:  
 A. Blood sugar      B. Water in body ☒  
 C. Salt intake      D. Oxygen
88. Filtration in nephron occurs in:  
 A. Glomerulus ☒      B. Tubule  
 C. Loop of Henle      D. Bladder
89. Reabsorption of useful substances occurs in:  
 A. Bladder      B. Ureter  
 C. Tubule ☒      D. Glomerulus
90. Which organ helps remove carbon dioxide?  
 A. Liver      B. Kidney  
 C. Lungs ☒      D. Skin
91. Waste stored in old xylem:  
 A. Resin ☒      B. Latex  
 C. Sugar      D. Protein
92. Plants excrete waste through:  
 A. Glands      B. Stomata ☒  
 C. Roots only      D. Cambium
93. Excretory waste in plants is stored in:  
 A. Cytoplasm      B. Vacuoles ☒  
 C. Chloroplasts      D. Xylem vessels
94. Gum in plants is a:  
 A. Food      B. Protein  
 C. Waste product ☒      D. Hormone
95. Plants excrete excess water by:  
 A. Photosynthesis      B. Transpiration ☒  
 C. Guttation      D. Exocytosis
96. Kidneys help regulate:  
 A. Oxygen      B. Digestion  
 C. Blood pressure      D. Water and salts ☒
97. Urine contains:  
 A. Urea, water ☒      B. Protein, glucose  
 C. DNA      D. Fat and enzymes
98. Urine passes out through:  
 A. Ureter      B. Urethra ☒  
 C. Rectum      D. Nephron
99. Plant wastes are also excreted into:  
 A. Fruit      B. Soil ☒  
 C. Flowers      D. Stem
100. Main nitrogenous waste in humans:  
 A. Uric acid      B. Urea ☒  
 C. Ammonia      D. Creatinine