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**Biology entrance test (Example)**

**Multiple choice questions**

1. **Organisms responsible for the introduction of energy into an ecosystem are known**
2. Producers
3. A[utotrophs](https://en.wikipedia.org/wiki/Autotroph)
4. [Phototrophs](https://en.wikipedia.org/wiki/Phototroph)
5. Heterotrophs
6. **In which of the following type of cells the cell junction is abundant?**a) Cardiac cells  
   b) Prokaryotic cells  
   c) Hepatic cells  
   d) Epithelial cells
7. **What is epithelial mesenchymal transistion?**a) Loss of migration and gain of adhesion  
   b) Formation of mesenchymal cells  
   c) Loss of adhesion and gain of migration  
   d) Lysis of cell
8. **Which of the following is known as the powerhouse of a cell?**a) Mitochondria  
   b) Cytoplasm  
   c) Lysosome  
   d) Nuclei
9. **Which of the following cell doesn’t contain a cell wall?**a) Plant cell  
   b) Bacteria  
   c) Fungi  
   d) Animal cell
10. **In which of the following cell nucleus is not present?**a) Eukaryotic cell  
    b) Prokaryotic cell  
    c) Both of the above  
    d) None of the above
11. **Which of the following organisms doesn’t have a cell?**a) Virus  
    b) Bacteria  
    c) Fungi  
    d) Algae
12. **RNA is present in which of the following cell organelles?**a) Cell wall  
    b) Ribosome  
    c) Nucleus  
    d) Cytoplasm  
    d) Golgi complex
13. **A cell organelle that is present in animal cells but not present in plant cells is?**a) Cytoplasm  
    b) Centrosome  
    c) Mitochondrial  
    d) Cytoplasm  
    d) Golgi complex
14. **Which of the following cell is found in the brain?**a) Neuron  
    b) Hepatocyte  
    c) Nephron  
    d) Epithelial cell
15. **Which of the following polysaccharide is not present in the eukaryotic plant cell wall?**a) Chitin  
    b) Hemicellulose  
    c) Pectin  
    d) Cellulose
16. **Which of the following is the process of synthesis of glucose?**a) saccharification  
    b) glycolysis  
    c) gluconeogenesis  
    d) neogenesis
17. **Which of the following is not a component of cell membranes?**a) Phosphotriglycerides  
    b) Cholesterol  
    c) Sphingolipids  
    d) Phosphodiglycerides
18. **Which of the following cells release insulin when glucose levels elevate in the body?**a) gamma cells  
    b) beta cells  
    c) alpha cells  
    d) zeta cells
19. **Which of the following cells do not lack the ability to divide?**a) red blood cells  
    b) muscle cells  
    c) skin cells  
    d) nerve cells
20. **Which types of bonds are found in sugars?**a) amide  
    b) acidic  
    c) glycosidic  
    d) non-covalent
21. **Sucrose and lactose are**a) monosaccharides  
    b) disaccharides  
    c) pentoses  
    d) polyssaccharides
22. **Enzyme lactase is found in**a) nucleus  
    b) ribosome  
    c) plasma membrane  
    d) golgi complex
23. **Which type of carbohydrates lead to the formation of glycolipids and glycoproteins?**a) Oligosaccharides  
    b) Monosaccharides  
    c) Glycogen  
    d) Glucose
24. **Which types of bonds are found in fats?**a) amide  
    b) glycosidic  
    c) ester  
    d) acidic
25. Which bonds are present in two neighboring amino acids?  
    a) Glycosidic bonds  
    b) Polypeptide bonds  
    c) Amide bonds  
    d) Hydrogen bonds
26. **Which monomers compose the strands of nucleic acids?**a) Amino acids  
    b) Ribose  
    c) Functional groups  
    d) Nucleotides
27. **What are the types of nucleic acids are found in living organisms?**a) deoxyribonucleic acid & nucleotide acid  
    b) deoxyribonucleic acid & ribonucleic acid  
    c) ribonucleic acid & nucleotide acid  
    d) ribonucleic acid & nucleoside acid
28. **How many types of nucleotides are present in DNA?**a) 1  
    b) 2  
    c) 3  
    d) 4
29. **ATP and GTP are**a) cells  
    b) receptors  
    c) nucleotides  
    d) nucleic acids
30. **Ribosomes consist of RNA and**a) carbohydrates  
    b) nucleic acids  
    c) proteins  
    d) nucleotides
31. **Reactions that lose heat are termed as**a) endothermic  
    b) exothermic  
    c) chemical  
    d) physical
32. **Gene is the unit of:**
33. Heredity
34. Tissue
35. Polynucleotide
36. Body
37. **Bacteria are prokaryotic organisms that reproduce by mean of:**
38. Asexual reproduction
39. Sexual reproduction.
40. Binary fission.
41. Mitosis and meiosis
42. **The result of binary fission is the formation of two bacterial cells that are:**
43. Genetically identical
44. Genetically not identical
45. Genetically partially identical
46. None of the above
47. **Which of the following are responsible virtually for every reaction that takes place inside a cell?**a) Carbohydrates  
    b) ADP  
    c) Nucleic acids  
    d) Enzymes
48. **The non-protein constituents of conjugated proteins are called**a) enzymes  
    b) cofactors  
    c) amino acids  
    d) nucleosides
49. **What is the process of synthesis of glucose by the liver is referred to as?**a) gluconeogenesis  
    b) neogenesis  
    c) glycolysis  
    d) saccharification
50. **Competitive enzyme inhibitors are**a) Reversible inhibitors  
    b) Irreversible inhibitors  
    c) Permanent inhibitors  
    d) None of the mentioned
51. **In anaerobic respiration, pyruvic acid is converted to**a) Lactate  
    b) Acetyl CoA  
    c) PEP  
    d) Acetate
52. **The TCA cycle occurs in which region of a prokaryotic cell?**a) cytosol  
    b) mitochondria  
    c) ribsomes  
    d) golgi complex
53. **Glycolysis begins with which of the following reactions?**a) reduction  
    b) oxidation  
    c) phosphorylation  
    d) acidification
54. **In case of repeated contraction, muscle cells regenerate NAD⁺ by converting pyruvate to**a) glycogen  
    b) lactate  
    c) starch  
    d) cellulose
55. **The segregation of alleles on one trait did not have any effect on the segregation of alleles on a different trait. This is based on**a) Mendel’s law of Heredity  
    b) Mendel’s law of Dominance  
    c) Mendel’s law of Independent Assortment  
    d) Mendel’s law of Segregation
56. **Loops in lampbrush chromosomes represent site of**a) Replication  
    b) Transcription  
    c) Cell division  
    d) Crossing over
57. **The method of DNA replication is**a) conservative  
    b) semi-conservative  
    c) non-conservative  
    d) disruptive
58. **DNA denaturation can occur through**a) Unwinding of DNA double strand  
    b) Absorbance of UV rays  
    c) Decrease in hydrophobic interactions of base stacking  
    d) All of the mentioned
59. **Organisms that breakdown dead and decaying organic matter and release CO2** are named:
60. Decomposers
61. Viruses
62. Animals
63. Fungi and bacteria
64. **The genome of prokaryotic organisms generally is**
65. Circular, Double-stranded of DNA
66. Double-stranded piece of DNA
67. Circular
68. Non of the above
69. **Which of the following is related to the prokaryotes?**
70. Bacteria
71. Mushrooms
72. Plants
73. Animals
74. **Which of the following contains amino acids?**
75. Molecules that make up DNA
76. Molecules that make up RNA
77. Protein-forming molecules
78. Molecules that make up carbohydrates
79. **A RNA molecule does NOT contain the following:**
80. Cytosine
81. Thymine
82. Ribose
83. Deoxyribose
84. **CO2 is removed from the atmosphere by**
85. Photosynthetic organisms
86. Fungi
87. Fish
88. Plants
89. **The information is forwarded from the neuron through which part?**  
    a) axon  
    b) soma  
    c) dendrites  
    d) nucleus
90. **Why are red blood cells anucleated?**a) Presence of nucleus leads to heavier cells that cannot flow in blood stream  
    b) Absence of nucleus leads to increased space for haemoglobin that carries molecular oxygen  
    c) Presence of nucleus leads to increased proliferation of RBCs which harms the body  
    d) All of the mentioned
91. **Which pigment constitutes majorly in absorbing sunlight for photosynthesis?**a) Chlorophyll a  
    b) Chlorophyll b  
    c) Xanthophyll  
    d) Anthocyanin
92. **The site of photophosphorylation is**a) Chloroplast  
    b) Mitochondria  
    c) Endoplasmic reticulum  
    d) Nucleus
93. **Which of the following immunoglobulin is naturally given to the fetus?**a) IgG  
    b) IgM  
    c) IgD  
    d) IgE
94. **What organism lacks cell wall?**a) Plant cells  
    b) Protozoa  
    c) Bacterial cells  
    d) Algae
95. **Which of the following is a type of endocytosis?**a) Pinocytosis  
    b) Phagocytosis  
    c) Receptor-mediated endocytosis  
    d) All of the mentioned
96. **Cilia and flagella are**a) intermediate filaments  
    b) microfilaments  
    c) microtubules  
    d) phospholipids
97. **Which of the following is involved in the intrinsic pathway of apoptosis?**a) cytochrome a  
    b) cytochrome b  
    c) cytochrome c  
    d) cytochrome d
98. **The process of killing all microorganisms along with their spores is called**a) Disinfection  
    b) Antisepsis  
    c) Sanitization  
    d) Sterilization
99. **Which of the following comes under the category of positive association?**a) neutralism  
    b) parasitism  
    c) commensalism  
    d) ammensalism
100. **The administration of vaccines is called:**
101. Vaccination
102. Infection
103. Transmission
104. Circulation