

Q1- Choose the correct answer below:

1. What is biology?

- A) The study of chemistry
- B) The scientific study of life**
- C) The study of Earth's atmosphere
- D) The study of machines

2. Which of the following is NOT a property of life?

- A) Order
- B) Growth and development
- C) Energy processing
- D) Inactivity**

3. The ability of organisms to control their internal environment is called:

- A) Evolutionary adaptation
- B) Regulation**
- C) Reproduction
- D) Energy processing

4. The basic unit of life is:

- A) Tissue
- B) Organelle
- C) Cell**
- D) Organ

5. Which type of cells lack a nucleus?

- A) Plant cells
- B) Prokaryotic cells**
- C) Eukaryotic cells
- D) Fungal cells

6. In an ecosystem, producers are mainly:

- A) Animals
- B) Decomposers
- C) Plants**
- D) Bacteria

7. DNA is important because it:

- A) Produces energy directly
- B) Controls cell activities**
- C) Is made only of proteins
- D) Exists only in eukaryotic cells

8. Taxonomy is concerned with:

- A) Recycling nutrients
- B) Naming and classifying species**
- C) Energy flow in ecosystems
- D) DNA sequencing

9. Which of the following domains includes multicellular organisms such as animals and plants?

- A) Bacteria
- B) Archaea
- C) Eukarya**
- D) Protists

10. Which statement about a scientific theory is TRUE?

- A) It is narrower than a hypothesis
- B) It is unsupported by evidence
- C) It is broader in scope than a hypothesis**
- D) It is never tested

11. Which of the following is considered as a type of disaccharides?

- A) Glucose
- B) Fructose
- C) Lactose**
- B) Galactose

12. What is building blocks of carbohydrates?

- A) Amino acid
- B) Monosaccharides**
- C) Nucleotides
- D) Fatty acids

13. Which of the following serves as a primary energy source in animals?

- A) Starch
- B) Glycogen**
- C) Protein
- D) Cellulose

14. A fat or oil molecule that contains one glycerol linked to three fatty acids is often called:

- A) phospholipid
- B) Monoglyceride
- C) Triglycerides
- D) steroids

15. At room temperature, saturated fats are usually:

- A) liquid
- B) Gaseous
- C) Solid
- D- mixed with water

16. Major components of ALL cell membranes

- A) Amino acids
- B) Phospholipid
- C) Carbohydrate
- D) Cellulose

17. Which of the following is a type of steroid:

- A) Glycine
- B) Beta Alanine
- C) Estrogen
- D- Chitin

18. What are the building blocks of proteins?

- A) Fatty acids
- B) Amino acids
- C) Carbon
- D) Water

19. Speed up the chemical reactions

- A) Enzymes
- B) Glucose
- C) Hemoglobin
- D) Lipid

20. Which of the following nitrogen bases found in RNA only

- A) Thymine
- B) Cytosine
- C) Uracil
- D) Guanine

Q2- Answer the following questions:

1- Mention the types of carbohydrate:

- A- [Monosaccharides](#).....
- B- [Disaccharides](#).....
- C- [Polysaccharides](#).....

2- Write the building blocks of the following:

- A- Protein:.... [Amino acids](#).....
- B- Carbohydrate:.. [Monosaccharides](#).....
- C- Nucleic acids:.. [Nucleotide](#).....

3- Mention the main types of organic compounds:

- [Carbohydrates](#).....
- [Proteins](#).....
- [Lipids](#).....
- [Nucleic acids](#).....

4- Write down the 2 types of fats and compare their state at room temperature

- [1- Saturated - solid at room temperture](#).....
- [2- unsaturated - liquid at room temperat](#).....