DPP
DAILY PRACTICE PROBLEMS

Class : XIth **Subject : BIOLOGY**
Date : **DPP No. : 2**

Topic :- Biomolecules

1. Richest energy compound is
   a) Creatine phosphate b) Protein c) Carbohydrate d) Fat

2. Select the wrong statement.
   a) The building blocks of lipids are amino acids
   b) Majority of enzymes contain a non-protein part called the prosthetic group
   c) The thylakoids are arranged one above the other like a stack of coins forming a granum
   d) Crossing over occurs at pachytene stage of meiosis-I

3. Which of the following is an essential amino acids?
   a) Valine b) Leucine c) Tryptophan d) All of these

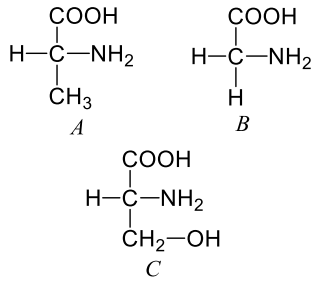
4. The aggregation of the various kinds of biomolecules in a cell is referred to as the
   a) Acid soluble pool b) Acid insoluble pool
   c) Cellular pool d) None of the above

5. Secondary metabolites can be observed in
   a) Plant cells b) Fungal cells c) Microbial cells d) All of these

6. Select the secondary metabolites from the list given below
   I. alkaloids
   II. flavonoids
   III. rubber
   IV. essential oils
   V. antibiotics
   VI. coloured pigments
   VII. scents
   VIII. gums
   IX. spices
   Choose the correct option
   a) I to IX b) All except II and IX c) I, III, IV and VI d) All except I and VII

7. What is the starting point in the production of food?
   a) Catabolism b) Metabolism c) Anabolism d) Photosynthesis

8. Name the amino acids $A - C$ correctly

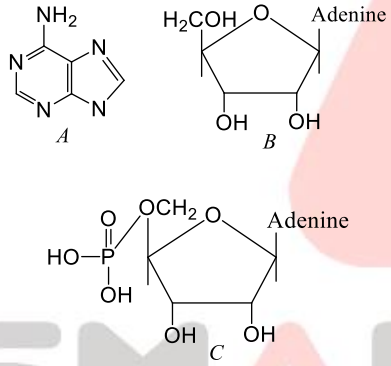


a) A-Glycine, B-Serine, C-Alanine
b) A-Alanine, B-Glycine, C-Serine
c) A-Serine, B-Glycine, C-Alanine
d) A-Serine, B-Alanine, C-Glycine

9. Name the heterocyclic compounds which are known as nitrogenous bases
Choose the most appropriate options
a) Adenine, guanine, uracil, cytosine and thymine
b) Adenine, guanine, uracil and thymine
c) Adenine, guanine, cytosine, uracil
d) None of these

10. In which one of the following enzymes copper is necessarily associated as an activator?
a) Carbonic anhydrase
b) Tryptophanase
c) Lactic dehydrogenase
d) Tyrosinase

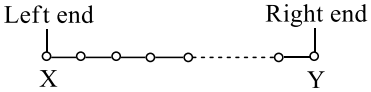
11. Identify the structural formulae and select the correct option



a) A-Adenine, B-Adenosine, C-Adenylic acid
b) A-Guanine, B-Adenosine, C-Adenylic acid
c) A-Adenosine, B-Adenylic acid, C-Adenine
d) A-Uracil, B-Adenosine, C-Adenylic acid

12. The regulation of the chemical composition of blood and body fluids and other aspects of its internal environment by an organism to maintain the physiological process is called
a) Entropy
b) Enthalpy
c) Homeostasis
d) Metabolism

13. Name the term given to the left and right ends of a polysaccharide



a) Left end—N —terminal end, Right end—C —terminal end
b) Left end—reducing end, Right end—non-reducing end
c) Left end— non-reducing end, Right end—reducing end
d) Left end—C —terminal end, Right end—N —terminal end

14. 'G' in DNA strand base pairs with 'C' by 3... bonds
a) Hydrogen
b) Von der Waal
c) Covalent
d) Ionic

15. The inhibitor which inhibits the enzyme activity by binding to the active site of the enzyme, due to the close resemblance to the substrate in its molecular structure is called
    a) Non-competitive inhibitor
    b) Competitive inhibitor
    c) Allosteric modulator
    d) Feedback inhibitor

16. Select the correct pair of substituted purines
    a) Cytosine and thymine
    b) Adenine and guanine
    c) Uracil and cytosine
    d) Guanine and uracil

17. Which one of the following is wrongly matched?
    a) Fungi – Chitin
    b) Phospholipid – Plasma membrane
    c) Enzyme – Lipopolysaccharide
    d) ATP – Nucleotide derivative

18. Amino acids are organic compounds and are called α-amino acids. Why?
    a) Amino acids are organic compounds containing an amino group and acidic group as substituents n two different carbons
    b) Amino acids are organic compounds containing an amino group and an acidic group as substituents on the same carbon
    c) Amino acids are inorganic compounds containing an amino group and acidic group as substituents on two different carbons
    d) Amino acids are inorganic compounds containing an amino group and acidic group as substituents on the same carbon

19. Enzymes that catalyze inter-conversion of optical, geometrical or positional isomers, are
    a) Ligases
    b) Lyases
    c) Hydrolases
    d) Isomerases

20. All the carbon compounds obtained from living tissues are named as
    a) Biomolecules
    b) Inorganic compounds
    c) Organic compounds
    d) Only DNA