

# DPP

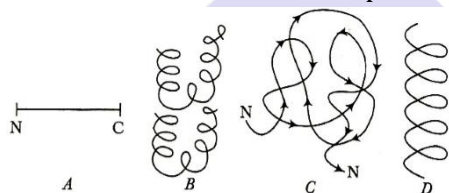
DAILY PRACTICE PROBLEMS

Class : XI<sup>th</sup>  
Date :

Subject : BIOLOGY  
DPP No. : 1

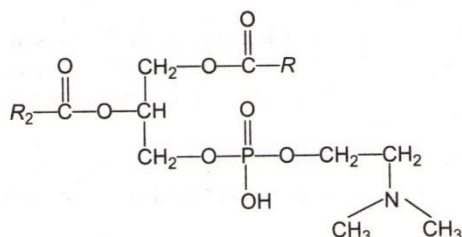
## Topic :- Biomolecules

1. Which kinds of structures of proteins are shown in the figures given below

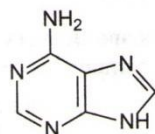


- a) A = 1° structure, B = 2° structure, C = 3° structure, D = 4° structure  
b) A = 4° structure, B = 2° structure, C = 3° structure, D = 1° structure  
c) A = 1° structure, B = 4° structure, C = 3° structure, D = 2° structure  
d) A = 4° structure, B = 3° structure, C = 2° structure, D = 1° structure
2. Lipid are found in acid insoluble fraction during the analysis of chemical composition of tissues. Given the reason
- a) It has very high molecular weight  
b) It is polymer  
c) It has low molecular weight  
d) On grinding, the biomembranes are broken into pieces and form insoluble vesicles
3. Choose the element which is negligible in living matter
- a) Si                      b) Mg                      c) Ca                      d) S
4. Name the plant pigments present in the following
- I. Carrots                      II. Tomatoes
- a) I-Tycopene    II-Carotene                      b) I-Carotene    II-Lycopene  
c) I-Leucopene    II-Carotene                      d) None of the above

5. Which one of the following structural formulae of two organic compounds is correctly identified along with its related function?



(A)

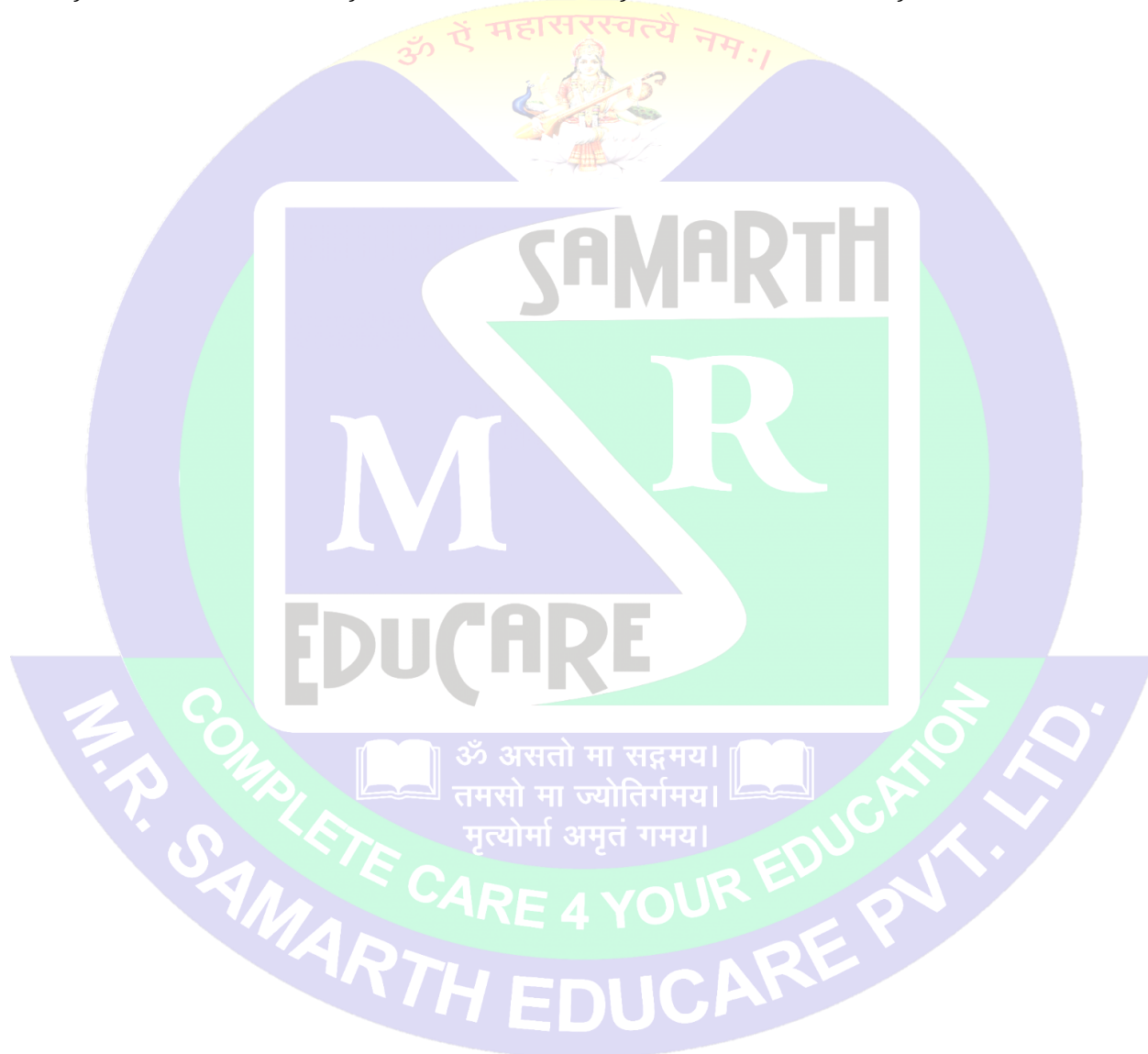


(B)

- a) A- Triglyceride major-Source of energy  
 b) B- Uracil -A component of DNA  
 c) A-Lecithin -A component of cell membrane  
 d) B-Adenine -A nucleotide that makes up nucleic acids
6. Silk consists of  
 a) Central core of sericin  
 b) Central core of fibroin  
 c) Both (a) and (b)  
 d) A fine mixture of fibroin and sericin
7. Which statement regarding coenzyme is incorrect?  
 a) Every coenzyme is a cofactor and every cofactor is a coenzyme  
 b) Every coenzyme is a cofactor but every cofactor is not a coenzyme  
 c) Most of the coenzymes are nucleotides and are composed of vitamins  
 d) Coenzymes are the active constituents of enzymes
8. The rate of the reaction doubles or decreases by half, for every... °C change in either direction  
 a) 10°      b) 15°      c) 20°      d) 27°
9. Enzyme often have additional parts in their structures that are made up of molecules other than proteins. When this additional chemical part is an organic molecule, it is called  
 a) Cofactor      b) Coenzyme      c) Substrate      d) Both (a) and (b)
10. Which one is imino acid?  
 a) Pepsin      b) Proline      c) Cysteine      d) Rennin

11. The sum total composition of acid soluble and acid insoluble fraction pool represents the  
a) Molecular                      b) Dead cells                      c) Gene library                      d) Cellular pool
12. The 'lock' and 'key' model of enzyme action illustrates that a particular enzyme molecule  
a) May be destroyed and resynthesised several times  
b) Interacts with a specific type of substrate molecule  
c) Reacts at identical rates under all conditions  
d) Forms a permanent enzyme-substrate complex
13. Acidic amino acids carry two  $-COOH$  and one  $-NH_2$  groups per molecule. Keeping this in mind, select the correct pair of acidic amino acid  
a) Lysine and arginine                      b) Aspartic acid and glutamic acid  
c) Glycine and alanine                      d) Both (a) and (b)
14. After doing the chemical analysis of organic compounds found in living organisms, two fractions were observed namely  
a) Acid soluble pool and acid insoluble pool  
b) Carbon pool and hydrogen pool  
c) Inorganic pool and organic pool  
d) Aqueous pool and non-aqueous pool
15. Which one is not an example for hydrolases?  
a) Dehydrogenase                      b) Protease                      c) Amylase                      d) Esterase
16. Which type of protein is present in human skin?  
a) Primary proteins                      b) Secondary proteins  
c) Tertiary proteins                      d) Quaternary proteins
17. The metabolic flow is called  
a) Dynamic state of body constituents  
b) Flow of traffic junctions  
c) Turn over flow  
d) Adiabatic flow of reactions
18. Read the two reaction A and B given below and select the correct option accordingly  
A.  $ADP + P_i \rightarrow ATP$   
B.  $ATP \rightarrow ADP + P_i$   
a) A-Endergonic; B-Exergonic  
b) A-Exergonic; B-Endergonic  
c) A-Endergonic; B-Endergonic  
d) A-Exergonic; B-Exergonic

19. The pyrimidine base, which confers additional stability to DNA over RNA, is  
a) Adenine                      b) Guanine                      c) Cytosine                      d) Thymine
20. If the total amount of adenine and thymine in a double-stranded DNA is 60%, then the amount of guanine in this DNA will be  
a) 15%                      b) 20%                      c) 30%                      d) 40%



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