


Section A

- Write the answer of the following questions. [Each carries 1 Mark] [20]
- It is said that elemental composition of living organisms and that of inanimate objects (like earth's crust) are similar in the sense that all the major elements are present in both. Then what would be the difference between these two groups ? Choose a correct answer from among the following.
    - Living organisms have more gold in them than inanimate objects.
    - Living organisms have more water in their body than inanimate objects.
    - Living organisms have more carbon, oxygen and hydrogen per unit mass than inanimate objects.
    - Living organisms have more calcium in them than inanimate objects.
  - Amino acids have both an amino group and a carboxyl group in their structure. Which amongst the following is an amino acid ?
    - Formic acid
    - Glycerol
    - Glycolic acid
    - Glycine
  - A homopolymer has only one type of building block called monomer repeated 'n' number of times. A heteropolymer has more than one type of monomer. Proteins are heteropolymers usually made of
    - 20 types of monomers
    - 40 types of monomers
    - 30 types of monomers
    - only one type of monomer
  - Proteins perform many physiological functions. For example, some functions as enzymes. One of the following represents an additional function that some proteins discharge
    - Antibiotics
    - Pigment conferring colour to skin
    - Pigments making colours of flowers
    - Hormones
  - The number of 'ends' in a glycogen molecule would be
    - Equal to the number of branches plus one
    - Equal to the number of branch points
    - One
    - Two, one on the left side and another on the right side
  - Separate, appropriate for analysis of Ca and Mg.  
 Statement X : Water is evaporated from living organs.  
 Statement Y : O<sub>2</sub> is removed from dry parts.  
 Statement Z : Various inorganic elements are present in the ash.
    - X, Y true, Z wrong
    - X, Z true, Y wrong
    - X, Z wrong, Y true
    - X, Y wrong, Z true
  - Identify given structure.
    - Primary protein
    - Secondary protein
    - Tertiary protein
    - Quaternary protein
  - What is transition stage ?
    - Formation of new structure of product
    - Formation of new structure of substrate
    - Formation of new structure of enzyme
    - Formation of new intermediate molecule
  - Arachidonic acids has how many carbon atom ?
    - 40
    - 16
    - 20
    - 22

10. Pick up the incorrect pair  
 (A) Glutamic acid - Acidic amino acid (B) Valine – Neutral amino acid  
 (C) Tyrosine – Basic amino acid (D) Tryptophan – Aromatic amino acid
11. Protein is  
 (A) homopolymer (B) heteropolymer  
 (C) inorganic compound (D) does not have nitrogen
12. Insulin is  
 (A) collagen (B) hormone  
 (C) enzyme (D) for sensory reception
13. Which one is homopolymer ?  
 (A) cellulose (B) starch (C) both (A) and (B) (D) protein
14. NADP contain  
 (A) Vitamin Biotin (B) Vitamin Niacin (C) Vitamin C (D) Vitamin E
15. A : Nucleotides are acidic compounds.  
 R : Phosphate group made them acidic.  
 (A) A and R both are correct and R is correct explanation of A.  
 (B) A and R are correct but R is not correct explanation of A.  
 (C) A is correct and R is false.  
 (D) Both A and R are false.
16. A : Amino acids are monomers of nucleic acid.  
 R : Protein amino acids have an unlimited variety.  
 (A) A and R both are correct and R is correct explanation of A.  
 (B) A and R are correct but R is not correct explanation of A.  
 (C) A is correct and R is false.  
 (D) Both A and R are false.
17. A : DNA is not the only genetic material.  
 R : Certain virus contain RNA as their genetic material.  
 (A) A and R both are correct and R is correct explanation of A.  
 (B) A and R are correct but R is not correct explanation of A.  
 (C) A is correct and R is false.  
 (D) Both A and R are false.
18. A : Haemoglobin is a quaternary protein.  
 R : It consists of 4 amino acid units.  
 (A) A and R both are correct and R is correct explanation of A.  
 (B) A and R are correct but R is not correct explanation of A.  
 (C) A is correct and R is false.  
 (D) Both A and R are false.
19. Match the following
- |                                     |               |
|-------------------------------------|---------------|
| (a) Inhibitor of catalytic activity | (i) Ricin     |
| (b) Possess peptide bonds           | (ii) Malonate |
| (c) Cell wall material in fungi     | (iii) Chitin  |
| (d) Secondary metabolite            | (iv) Collagen |

Choose the correct option from the following :

- (A) (a - iii) (b - i) (c - iv) (d - ii)  
 (B) (a - iii) (b - iv) (c - i) (d - ii)

(C) (a - ii) (b - iii) (c - i) (d - iv)

(D) (a - ii) (b - iv) (c - iii) (d - i)

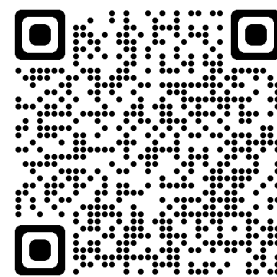
20. Identify the incorrect pair :

(A) Lectins – Concanavalin A

(B) Drugs – Ricin

(C) Alkaloids – Codeine

(D) Toxin – Abrin



Download Test  
Series

For Answer Key Contact Us  
@  
ivisionstudent@gmail.com

Wish You - All The Best (Studentivision.com)