3 SEM TDC ZOOH (CBCS) C 7

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(Held in April–May, 2021)

ZOOLOGY

(Core)

Paper : C–7

(Fundamentals of Biochemistry)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Fill in the blanks :   1×5=5

   (a)   Amino acids are linked together by _____ bond in a polypeptide.

   (b)   In _____ fatty acids, there is no double bond.

   (c)   The diameter of a DNA helix is _____ Å.

   (d)   Glycogen is an example of _____.

   (e)   Chemically the enzymes are _____.

2. Distinguish between the following pairs : 3×2=6

   (a)   Phospholipids and Glycolipids

   (b)   Saturated and Unsaturated fatty acid

3. Write short notes on any *two* of the following :   4×2=8

   (a)   Glycoconjugates

   (b)   Disaccharides

   (c)   Biological importance of polysaccharides

4. What is nucleotide? Describe the structure of pyrimidine, purine and base pairing.   1+10=11

   Or

   What is nucleoside? Write about the different types of DNA and RNA.   1+5+5=11

5. Write about the levels of organisation of proteins.   11

   Or

   What is immunoglobulin? Write about the different classes of immunoglobulin and their function.   1+5+5=11

6. What are allosteric enzymes? Explain the mechanism of enzyme action with suitable example. Also discuss the factors affecting the rate of enzyme-catalyzed reactions.

2+6+4=12

Or

What is Michaelis-Menten equation? Describe the concept of K_m and V_{max}. Add a note on enzyme inhibition.　　2+5+5=12

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