

[This question paper contains 2 printed pages.]

Sr.No. of Question Paper : 2103 GC-3 Your Roll No.....

Unique Paper Code : 32173907

Name of the Paper : Analytical Clinical Biochemistry

Name of the Course : B.Sc. (H) Chemistry / Life Science / Physical Science /
Industrial Chemistry – CBCS – Skill Enhancement Course

Semester : III

Duration : 2 Hours

Maximum Marks : 37.5

Instructions for Candidates

1. Write your Roll No. on the top immediately on the receipt of this question paper.
2. Attempt 4 Questions and Question 1 is compulsory.
3. The questions should be numbered in accordance to the number in question paper.

1. With the help of neatly labelled diagram explain the structure and functions of Proteins. (10.5)

2. Answer any **three** of the following : (3×3)

(a) Explain Watson-Crick model of DNA.

(b) Z-DNA and B-DNA.

(c) Chargaff's rule.

(d) Lipid Bilayer.

3. With the help of neatly labelled diagram, give an account of any **three** of the following : (3×3)

P.T.O.

- (a) Nucleotide
 - (b) Nucleoside.
 - (c) DNA replication.
 - (d) Polysaccharides.
4. Differentiate between **any two** of the following : (4.5×2)
- (a) Transcription and Translation.
 - (b) Primary and Secondary structure of proteins.
 - (c) Liposome and lipoproteins.
5. Explain the following : (3×3)
- (a) With the help of neat and clean diagrams explain Glycolysis.
 - (b) What are Coenzymes ? Explain their role using suitable example.
 - (c) What is denaturation of proteins ? Explain with suitable example.
6. Write short note on **any two** of the following : (4.5×2)
- (a) Composition and biochemistry of the blood.
 - (b) Isolation and characterization of proteins.
 - (c) Urine composition and analysis.