

- Q1) All questions are compulsory
2) Figures to the right indicate full marks
3) Draw neat labeled diagram wherever applicable

Q1 Answer in brief (any 2) 20

- 1) What is Isomerism? Describe the different types of Isomerism.
- 2) Explain the biological role of carbohydrates.
- 3) Describe in detail the bonds involved in protein structure.
- 4) Write the biological role of proteins.

Q2 A Answer the following (Any 1) 10

- 1) In detail explain enzyme immobilization.
- 2) Explain cheese and yogurt making process in detail.

Q2 B Answer the following (Any 2) 10

- 1) Give the advantages of Immobilised enzymes.
- 2) Describe beer making process
- 3) Explain different types of centrifuge.
- 4) Explain temperature as a factor affecting enzyme activity.

Q3 Answer briefly (any 2) 20

- 1) Describe briefly the concept of gene.
- 2) What is gene expression? Explain it with suitable diagram.
- 3) Describe briefly cytoplasmic inheritance in paramecium.
- 4) What is pedigree? Explain the pedigree chart.

Q4 Answer the following (Any 3) 15

- 1) Write a short note on Bio-detergents
- 2) Comment on effect of hormone on heredity.
- 3) Write a short note on quaternary structure of proteins.
- 4) Give the application of enzyme immobilization.
- 5) Explain any two types of isomerism.
- 6) Write a short note on Human genetics.