

Model Question Paper
Biomolecules - Part I

12th Standard

Chemistry

Reg.No. :

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I. Answer all the questions.

II. Use blue pen only.

Time : 01:30:00 Hrs

Total Marks : 65

4 x 1 = 4

Part-A

- 1) Which is a mono saccharide among the following:
(a) Sucrose (b) Cellulose (c) Maltose (d) Glucose
- 2) The amino acid without chiral carbon is
(a) Glycine (b) Alanine (c) proline (d) Thyrosine
- 3) The building block of proteins are
(a) α - hydroxy acids (b) α -amino acids (c) β - hydroxy acids (d) β - amino acids
- 4) which is not true of amino acid?
(a) amino acid forms Zwitter ion (b) has isoelectric point (c) dual behaviours (d) amino acid is insoluble in NaOH solution

Part-B

7 x 3 = 21

- 5) What are carbohydrates? Give their sources
- 6) How are carbohydrates broadly classified?
- 7) What are monosaccharides? Give an example
- 8) What are oligosaccharides? Give an example
- 9) What are non-sugars or poly saccharides? Give an example
- 10) What happens when sucrose is hydrolyzed?
- 11) What happens when raffinose is hydrolysed?

Part-C

4 x 5 = 20

- 12) Outline the classification of carbohydrates giving an example for each.
- 13) How can a reducing sugar differ from non-reducing sugar
- 14) Distinguish glucose from fructose
- 15) Show the formation of a peptide bond with an equation.

Part-D

2X10=20

- 16) a) Mention the biological importance of lipids.
b) Write about the preparation and properties of glucose.
- 17) a) How is the structure of fructose determined?
b) Write short notes on the manufacture of Soap and Wax?
