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**Max Time : 1 hr** **Class = 12th Chemistry Test Max Marks : 25**

**Biomolecules (Carbohydrates & Protein)**

1. What are the expected products of hydrolysis of lactose ? **[ 1 ]**
2. What are reducing sugars? **[ 1 ]**
3. What do you understand by the term glycosidic linkage? **[ 1 ]**
4. Which disaccharides is found only in animals not in plants? **[ 1 ]**
5. Which carbohydrates is the main constituent of plant cell wall? **[ 1 ]**
6. Why are carbohydrates generally optically active? **[ 1 ]**
7. Which component of starch is a branched polymer of – glucose and insoluble in water? **[ 1 ]**
8. Which of the two components of starch is water soluble? **[ 1 ]**
9. Name two – amino acids which forms a dipeptide which is 100 times more sweet than cane sugar.

**[ 1 ]**

1. Draw the Haworth structure of – D – Glucopyranose. **[ 1 ]**
2. Classify the following into monosaccharides and disaccharides : **[ 2 ]**

Ribose , 2-deoxyribose , maltose , galactose , fructose and lactose

1. What are essential and non-essential amino acids? Give two examples of each type. **[ 2 ]**
2. (i) Draw the pyranose structure of glucose. **[ 2 ]**

(ii) What type of linkage is present in proteins?

1. What happens when D – glucose is treated with the following reagents ? **[ 3 ]**

(i) HI (ii) bromine water (iii) HNO3

1. Explain Epimers with examples? **[ 3 ]**
2. Draw the structure of sucrose and lactose. **[ 3 ]**