## Plant Physiology and Biochemistry

| Item Text | Option Text 1 | Option Text 2 | Option Text 3 | Option Text 4 |
| :---: | :---: | :---: | :---: | :---: |
| The general formula of monosaccharides is | CnH 2 nOn | C 2 nH 2 On | CnH2O2ns | CnH 2 nO 2 n |
| A triose sugar is | Glycerose | Ribose | Erythrose | Fructose |
| Starch and glycogen are polymers of | Fructose | Mannose | $\alpha$-D-Glucose | Galactose |
| The carbohydrate reserved in human body is | Starch | Glucose | Glycogen | Inulin |
| Which of the following is not reducing sugar? | Lactose | Maltose | Sucrose | Fructose |
| Which of the following is not a polymer of glucose? | Amylose | Inulin | Cellulose | Dextrin |
| Amylose contains glucose units | 100-200 | 200-300 | 300-400 | 500-600 |
| A pentose sugar is | Dihydroxyacetone | Ribulose | Erythrose | Glucose |
| Polysaccharides are | Polymers | Acids | Proteins | Oils |
| The number of isomers of glucose is | 2 | 4 | 8 | 16 |
| The monosaccharide units are linked by $1 \rightarrow 4$ glycosidic linkage in | Maltose | Sucrose | Cellulose | Cellobiose |
| The stable ring formation in DGlucose involves | $\mathrm{C}-1$ and $\mathrm{C}-4$ | $\mathrm{C}-1$ and $\mathrm{C}-2$ | $\mathrm{C}-1$ and $\mathrm{C}-5$ | $\mathrm{C}-2$ and $\mathrm{C}-5$ |
| A dissaccharide linked by $\alpha-1-4$ Glycosideic linkages is | Lactose | Sucrose | Cellulose | Maltose |
| The general test for detection of carbohydrates is | Iodine test | Molisch test | Barfoed test | Osazone test |
| Cellulose is made up of the molecules of | $\alpha$-glucose | $\beta$-glucose | Iodine Test | Both 2 and 3 |
| Amylose is a constituent of | Starch | Cellulose | Glycogen | Sucrose |
| $\alpha$-Glycosidic bond is present in | Lactose | Maltose | Sucrose | Both 2 and 3 |
| Cane sugar is known as | Galactose | Sucrose | Fructose | Maltose |

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| Reducing ability of <br> carbohydrates is due to | Carboxyl group | Hydroxyl group | Enediol formation | Ring structure |
| :--- | :--- | :--- | :--- | :--- |
| Starch and glycogen are <br> polymers of | Fructose | Mannose | a-D-Glucose | Amylose |
| A polymeric unit of starch <br> which has a branched structure <br> is | Glucose | Amylopectin | Carbohy <br> correspond to <br> general carbon |  |
| Which of the following <br> statements is most correct? <br> hydrates of carbon | Carbohydrates correspond <br> to general formula $\left(\mathrm{CH}_{2} \mathrm{O}\right) \mathrm{n}$. | Carbohydrates are <br> polyhydroxyaldehydes and <br> their derivatives | CO2 of atmosphere through <br> photosynthesis | Lipids |
| The primary source of <br> synthesis of carbohydrates in <br> plants is, | Fat | Protein | Sucrose | Raffinose. |
| Which of the following is not <br> an oligosaccharide?. | Inulin | Maltose |  |  |

