# Question bank 2022-2023

* **Complete the following chemical equations:………..**
* **Write the principle of potassium permanganate test by Lehman.**
* **Write scheme to hydrolysis of starch**
* **Why do sugars dissolve in water?**
* **Compare between:………………**
* **Chemical equation of the test reaction:………….**
* **Definitions:…………..**

**Trioses sugar, tetroses sugar, pentose sugar, hexose sugar, monosaccharide , disaccharide , oligosaccharide, reducing sugar , non redusing sugar, Aldose sugar and ketose sugar.**

* **Trioses, and tetroses, give negative result with Molish's Test.**
* **What are roles of Copper sulphate, sodium carbonate and sodium citrate in Benedict ’s test**
* **Wire the mechanism of Benedict’s test**
* **Maltose and Sucrose are disaccharide. Maltose is a reducing sugar but Sucrose is non-reducing sugar. Why**
* **All Polysaccharides are non-reducing sugars. Explain.**
* **What are roles of copper acetate and glacial acetic acid in Barfoed’s test**
* **In Barfoed’s test, Do not boil the solution for longer period**
* **Sucrose will give positive result Seliwanoff's test but with Benedicts test will be negative.**

**- Glucose, fructose and mannose are same osazon product. Why.**

**- How glucose, fructose and mannose are distinguished by Osazon test**

**- Why non-reducing sugar cannot form osazon product**

**- Draw the structure of Glucose , fructose , mannose , galactose**

**- Draw the structure of maltosazone, Glucosazone and lactosazone**

**- Sucrose, a non-reducing sugar, would not be expected to produce an osazone when treated with phenylhydrazine but osazone dose form after 30 min. Explain.**

**- Draw the structure of gluconic acid, glucouronic acid and saccharic acid**

**- Explain role temperature , acid concentration and type of acid on hydrolysis of Disaccharides**

**- Definition:** [**Glycosidic bond**](https://www.google.iq/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0CB4QFjAB&url=http%3A%2F%2Fwww.princeton.edu%2F~achaney%2Ftmve%2Fwiki100k%2Fdocs%2FGlycosidic_bond.html&ei=eBxeVIS0HKSs7Aa584HQCw&usg=AFQjCNFiojEmxoKjkznLSedGzN9naXxW8w&bvm=bv.79189006,d.ZGU)

**- Writ type of glycosidic bond in maltose, lactose and sucrose.**

**- Draw the structure of maltose, lactose and sucrose.**

**- How can the iodine test be used to distinguish between amylose and glycogen?**

**- How do the results of the iodine test indicate that hydrolysis of starch occurred?**

**- Design the Experiment which iodine test are used as indicator**

**- After hydrolysis polysaccharides, sodium carbonate should add before** **Benedict's test.**

**- Methionine does not answer this test.**