

**Q 1/ Define the following:**

- 1- Saponification of oils
- 2- Acid Value (AV)
- 3- Protein denaturation
- 4- Reducing sugar
- 5- Rancidity of lipids

**Q2/ Answer the following:**

A- Explain the ninhydrin test in brief.

B- What are the main differences between amylose and amylopectin?

C- When the benedict's solution is mixed with the following hot solutions, the color of the solutions will be:

1) With starch: ..... color.

2) With starch + concentrated HCl: .....  
color

3) With honey: ..... color.

4) With Sucrose ..... color.

**Q 3/**

A large size lemon was squeezed and about **100 ml** of lemon juice was collected. **10 ml** of the lemon juice was titrated with Iodine solution using starch as an indicator, and **8 ml** of the Iodine solution was needed to reach the endpoint of the titration. **Calculate the total amount of Vitamin C in the lemon.**

**Q4/How to follow the hydrolysis of starch?**

**Q5/What is the fat solvent?**

**Q6/What are the denaturing agents of proteins?**

**Q7/What is honey adulteration?**

**Q8/ what are the main difference between fat and oil?**