

**Class : XII WORKSHEET NO.1 Date: 11.11.19**

**Subject: CHEMISTRY**

1. Write the structural formula of 3- oxopentanal.

2. How will you distinguish between acetaldehyde and acetone?

3. Carboxylic acids contain carbonyl group but do not show the nucleophilic addition reaction like aldehydes and ketones. Why?

 4. Explain the following reactions:

 a) Aldol condensation

b) Cannizaro’s reaction

 c) Clemmenson reduction

d) Hell volhard zelinsky reaction

5. Would you expect benzaldehyde to be more reactive or less reactive in nucleophilic addition reactions than propanal? Explain your answer.

6. Sodium bisulphite is used for the purification of aldehydes and ketones. Why?

7. An organic compound (A) molecular formula C8H16O2 was hydrolysed with dilute sulphuric acid to give a carboxylic acid (B) and an alcohol (C). Oxidation of (C) with chromic acid also produced (B). On dehydration (C) gives but-1- ene.

Write the equations for the reactions involved.

8. Give simple chemical tests to distinguish between the following pairs of compounds:

 a) Propanal and Propanone

 b) Acetophenone and Benzophenone

c) Phenol and Benzoic acid

d) Benzoic acid and Ethyl benzoate

 e) Pentan-2-one and pentan-3-one

f) Benzaldehyde and Acetophenone

g) Ethanal and propanal