

TEST PAPER

Class: XII

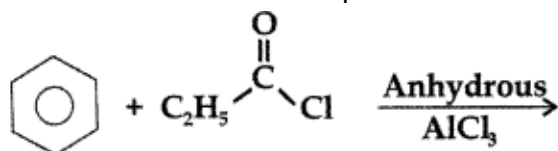
Subject: CHEMISTRY

Topic: Aldehydes, Ketones and Carboxylic Acids

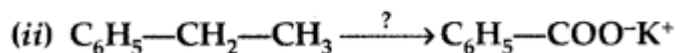
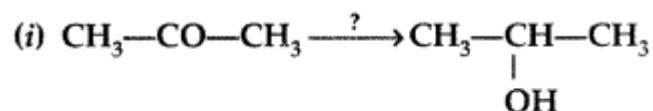
Max. Marks: 25

Max. Time: 45 Minutes

1. What is Tollen's reagent? Write one usefulness of this reagent. (All India 2010)
2. Arrange the following compounds in an increasing order of their reactivity in nucleophilic addition reactions : ethanal, propanal, propanone, butanone. (Delhi 2012)
3. Give a chemical test to distinguish between Benzoic acid and Phenol. (Comptt. Delhi 2012)
4. Give a chemical test to distinguish between Propanal and Propanone. (Comptt. Delhi 2012)
5. Formaldehyde does not take part in Aldol condensation. Why ? (Comptt. All India 2012)
6. Write the structure of the product formed in the following reaction : (Comptt. All India 2012)



7. Ethanal is soluble in water. Why? (All India 2013)
8. Carboxylic acids do not give characteristic reactions of carbonyl group. Explain why? (Comptt. Delhi 2013)
9. What type of aldehydes undergo Cannizaro reaction? (Comptt. Delhi 2017)
10. Name the reagents used in the following reactions : (Delhi 2015)



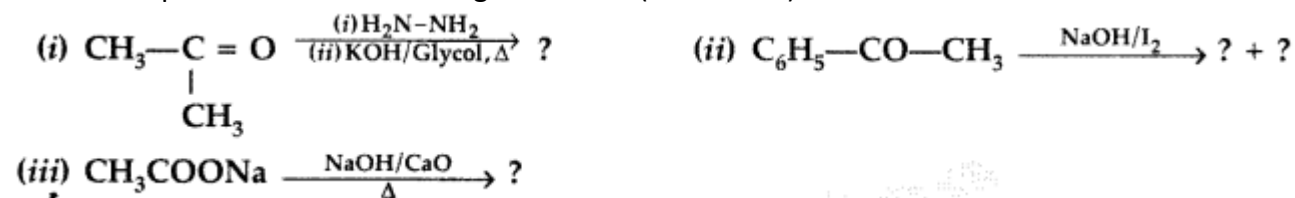
11. Write the equations involved in the following reactions:
 - (i) Wolff-Kishner reduction
 - (ii) Etard reaction
 - (iii) Hell-Volhard Zelinsky reaction
 - (iv) Decarboxylation reaction (Delhi 2017)

12. Write the reactions involved in the following reactions: (Delhi 2017)

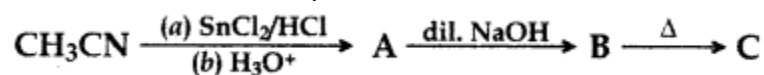
(i) Clemmensen reduction

(ii) Cannizzaro reaction

13. Predict the products of the following reactions : (Delhi 2015)



14. Write structures of compounds A, B and C in each of the following reactions: (Delhi 2017)



15. Do the following conversions in not more than two steps:

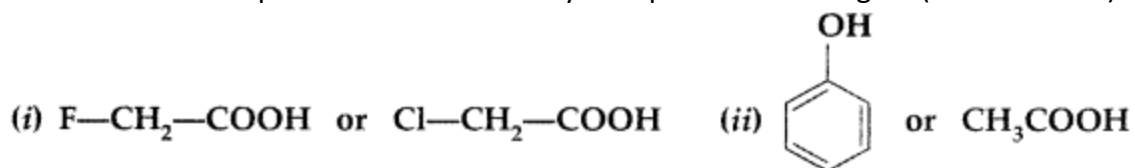
(i) Benzoic acid to benzaldehyde

(ii) Ethyl benzene to Benzoic acid

16. (a) Write the products of the following reactions :



(b) Which acid of each pair shown here would you expect to be stronger? (All India 2013)



17. Two moles of organic compound 'A' on treatment with a strong base gives two compounds 'B' and 'C'. Compound 'B' on dehydrogenation with Cu gives 'A' while acidification of 'C' yields carboxylic acid 'D' with molecular formula of CH_2O_2 . Identify the compounds A, B, C and D and write all chemical reactions involved. (Comptt. Delhi 2013)