

CBSE Class 12 Chemistry Chapter 12 Aldehydes, Ketones, and Carboxylic Acids Worksheet – Set 5

Q1. Which of the following olefin will yield propanal and formaldehyde on ozonolysis?

- (a) Butene
- (b) Pentene
- (c) Hexene
- (d) None of the above

Q2. What is the molecular formula of the chlorinated acetone produced in the distillation with bleaching powder?

- (a) $\text{CCl}_3\text{COCCl}_3$
- (b) $\text{CCl}_3\text{COCH}_3$
- (c) $\text{CH}_2\text{ClCOCH}_3$
- (d) None of the above

Q3. Chloral belongs to the class of

- (a) Ketone
- (b) Aldehyde
- (c) Carboxylic Acid
- (d) None of the above

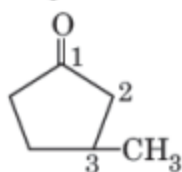
Q4. The class of compounds that are reduced to primary alcohols and also responds to Fehling's solution test are known as

- (a) Aromatic carboxylic acid
- (b) Aliphatic ketone
- (c) Aliphatic aldehyde
- (d) None of the above

Q5. Which of the following reaction is used to detect the presence of the carbonyl group?

- (a) Reaction with hydrazine
- (b) Reaction with phenylhydrazine
- (c) Reaction with hydroxyl amine
- (d) All of the above

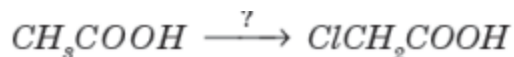
Q6. What are the IUPAC and the common name of the following compound?



Q7. What will happen if two moles of benzaldehyde are treated with concentrated sodium hydroxide?

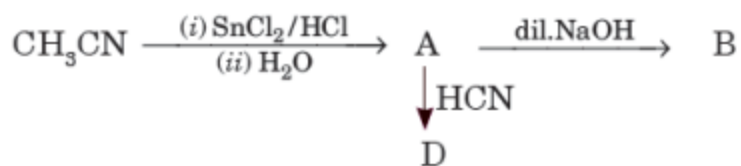
Q8. Convert butanal to butanoic acid.

Q9. Identify the reagent.



Q10. Discuss the reaction for the preparation of the benzoic acid from ethyl benzene?

Q11. Write the structure of A, B and D in the following reaction.



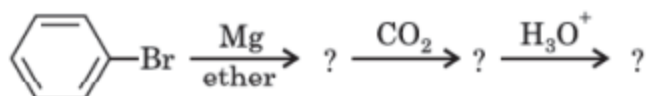
Q12. Why does aromatic carboxylic acid not undergo Friedel crafts reaction?

Q13. What is glacial acetic acid? Why is it so named?

Q14. Acetic acid can be halogenated in the presence of red phosphorous and chlorine, but formic acid can not be halogenated in the same way. Justify.

Q15. Why is the pKa value of 4-nitro benzoic acid lower than that of benzoic acid?

Q16. Complete the following reaction.



Q17. What are ketals and hemiacetals? Give an example.

Q18. What is acetylation reaction?

Q19. How will you make the following conversion?

(a) Ethanoic acid to propanoic acid

(b) Ethene to succinic acid

Q20. How will you convert acetic acid to

(a) Tertiary butyl alcohol

(b) Glycine