CBSE Class 12 Chemistry Chapter 11 Alcohols, Phenols, and Ethers Worksheet – Set 3

Q1. Which reagents can not be used to oxidise primary alcohols to aldehydes?
(a) Acidic $KMnO_4$
(b) Anhydrous CrO_3
(c) Both (a) and (b)
(d) None of the above

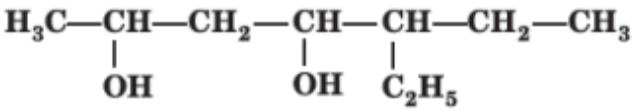
Q2. Name a reagent that can be used to oxidise alcohol to aldehyde?
(a) $NaBH_4$
(b) $LiAlH_4$
(c) PCC
(d) None of the above

Q3. Which of the following compound has two hydroxyl groups?
(a) Picric acid
(b) o- Cressol
(c) Both (a) and (b)
(d) None of the above

Q4. What happens when phenol is treated with dihydrogen in the presence of the nickel catalyst?
(a) Benzene
(b) Cyclo hexanol
(c) Toluene
(d) None of the above

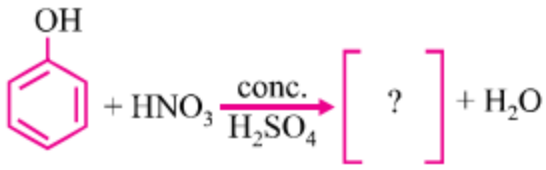
Q5. Name a reagent that is used to convert chloro ethane to diethyl ether.
(a) Sodium ethoxide
(b) Sodium hydroxide
(c) Sulphuric Acid
(d) None of the above

Q6. Write the IUPAC name of the compound mentioned below.



Q7. Draw the structure of 2-Methyl Butan-2ol.

Q8. Identify the compound formed in the reaction mentioned below.



Q9. Why does ethanol have a higher boiling point than methoxy methane?

Q10. What is Kolbe's reaction?

Q11. Why does phenol give electrophilic substitution reactions?

Q12. What is the IUPAC name of the glycerol? Draw its structure.

Q13. Why ortho- Nitro phenol is steam volatile while para- Nitro phenol is less volatile?

Q14. Why is ortho- nitrophenol less soluble in water than para- and meta-nitro phenols?

Q15. Compound C_2H_6O has two isomers, X and Y. On reaction with HI, X gives alkyl iodide and water while Y gives alkyl iodide and alcohol. Identify compounds X and Y.

Q16. What happens when sodium ethoxide and ethyl chloride are heated together?

Q17. Convert phenol to anisole.

Q18. Convert ethanol to propan-2-ol.

Q19. Why is lewis acid not required in the bromination of phenol?

Q20. Draw all the isomeric structures of alcohol with the molecular formula $C_5H_{12}O$.