

CBSE Class 12 Chemistry Chapter 11 Alcohols, Phenols, and Ethers Worksheet – Set 4

Q1. What is the chemical name of picric acid?

- (a) 2, 4, 6-tribromo phenol
- (b) 2, 4, 6-trinitro phenol
- (c) 2, 4, 6-trifluoro phenol
- (d) None of the above

Q2. Acid-catalysed dehydration of tertiary butanol is more rapid than n-butanol because

- (a) Primary carbocation is more stable than the tertiary carbocation
- (b) Tertiary carbocation is more stable than the primary carbocation
- (c) Rearrangement takes place in tertiary butanol dehydration
- (d) Rearrangement takes place in n-butanol dehydration

Q3. What happens when phenol reacts with bromine in CS_2 at low temperatures?

- (a) ortho and para Bromo phenols are formed
- (b) para and meta Bromo phenols are formed
- (c) ortho Bromo phenol is formed
- (d) meta Bromo phenol is formed

Q4. What is the IUPAC name of $\text{CH}_2 = \text{CH}-\text{CH}_2\text{OCH}_3$?

- (a) 3- Methoxy -1- propene
- (b) 1- Methoxy -2- propene
- (c) Vinyl dimethyl ether
- (d) None of the above

Q5. What happens when ethylene reacts with Baeyer's reagent?

- (a) Ethyl chloride
- (b) Ethylene glycol
- (c) Ethyl bromide
- (d) None of the above

Q6. Organise the following hydrocarbons in increasing ranking of their boiling point.

$\text{CH}_3\text{CH}_2\text{OH}$, $\text{CH}_3\text{-O-CH}_3$ and CH_3CHO .

Q7. Organise the following hydrocarbons in increasing order of their acidic character.

$\text{CH}_3\text{CH}_2\text{OH}$, $\text{C}_6\text{H}_5\text{OH}$ and H_2O .

- Q8.** Why is alkoxide a more potent base than hydroxide?
- Q9.** Convert propene to propan-2-ol.
- Q10.** How can you distinguish between ethanol and phenol?
- Q11.** What is the hydroboration-oxidation reaction?
- Q12.** What will happen when benzene diazonium chloride is heated with water?
- Q13.** Why is the dipole moment of phenol lesser than the methanol?
- Q14.** Why is para nitrophenol more acidic than phenol?
- Q15.** Why is ortho nitrophenol more acidic than ortho methoxy phenol?
- Q16.** Why is the boiling point of ether less than the corresponding isometric alcohol?
- Q17.** Describe the Reimer Tiemann reaction.
- Q18.** Give the equations of reactions for the preparation of phenol from cumene.
- Q19.** Present two reactions that display the acidic character of phenol. Analogue the acidity of phenol with ethanol.
- Q20.** Why does aniline not undergo Friedel-Crafts reaction?