

Carboxylic Acids

Std. XII
CHEMISTRY

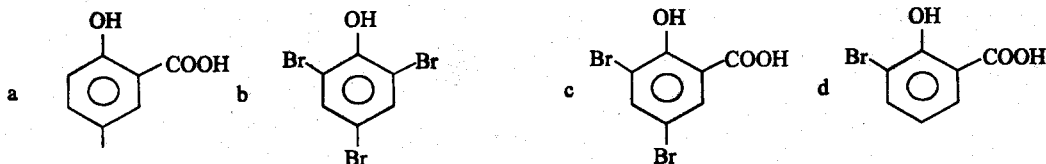
Time: 30 mts
Max.Marks: 25

- When trichloro ethane is treated with aqueous KOH the product obtained is
 - Trihydroxy ethane
 - Acetone
 - Acetic acid
 - Ethanol
- Pentanoic acid and 3-methyl butanoic acid are
 - Position isomers
 - Functional isomers
 - Metamers
 - Chain isomers
- Nitration of benzoic acid given
 - Ortho nitro benzoic acid only
 - Meta nitro benzoic acid only
 - Para nitro benzoic acid only
 - Both ortho and para nitro benzoic acid
- The formation of salicylic acid from phenol by the action of NaOH and CO₂ (at - 403 K under pressure) is known as
 - Reimer-Tirmann reaction
 - Claisen condensation
 - Kolbe's reaction
 - Hell Volthard Zelinsky reaction
- The compound, which fumes in moist air, is
 - (CH₃CO)₂O
 - CH₃COOH
 - CH₃COCl
 - CH₃COOCH₃
- The natural source of acetic acid is
 - Vinegar
 - Butter
 - Lemon
 - Laurel oil
- Identify the incorrect statement regarding methyl acetate
 - It is a pleasant smelling liquid
 - It is a functional isomer of propanoic acid
 - It is fairly soluble in water
 - It has high boiling point than alcohol and acid
- Ethyl magnesium iodide reacts with carbon dioxide followed by hydrolysis to give
 - Formic acid
 - Acetic acid
 - Propanoic acid
 - Butyric acid
- The optically active compound among the following
 - CH₃CH₂COOH
 - HOOC - CH₂ - COOH
 - CH₃CH (OH)COOH
 - Cl₂CHCOOH
- Formic acid liberates hydrogen when treated with
 - Zn
 - NaOH
 - Na₂CO₃
 - P₂O₅
- The weakest acid among the following is
 - Acetic acid
 - Phenol
 - Water
 - Acetylene
- The acidity of carboxylic acids are greater than phenols and alcohols due to
 - Inter molecular hydrogen bonding
 - Formation of dimers
 - Highly acidic hydrogen
 - Greater resonance stabilisation of their conjugate base

13. When an aqueous solution of sodium acetate is electrolysed, the product formed is
 a CH_4 b CH_3CH_3
 c $\text{CH}_3\text{CH}_2\text{CH}_3$ d $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_3$
14. When acetic acid is heated with HI and red phosphorous the product formed is
 a $\text{CH}_3\text{CH}_2\text{I}$ b $\text{CH}_3\text{CH}_2\text{OH}$
 c CH_3CH_3 d CH_4
15. The IUPAC name of $\text{CH}_3\text{CH}_2\text{CH}(\text{CH}_3)\text{COOH}$ is
 a α -methyl butyric acid b 2-methyl butanoic acid
 c β -methyl butanoic acid d 3-methyl butanoic acid
16. The acid that cannot be prepared by Grignard reaction is
 a Propanoic acid b Benzoic acid
 c Ethanoic acid d Methanoic acid
17. Tollen's reagent is reduced by
 a Acetic acid b Benzoic acid
 c Formic acid d Oxalic acid
18. The Carboxylic acid that will not undergo Hell-Volhard-Zelinsky reaction is
 a HCOOH b CH_3COOH
 c $\text{CH}_3\text{CH}_2\text{COOH}$ d $\text{C}_6\text{H}_5\text{CH}_2\text{COOH}$

19. $\text{CH}_3\text{CH}(\text{OH})\text{COOH} \xrightarrow{\text{H}_2\text{O}_2/\text{Fe}^{2+}} (\text{A})$ Identify (A)
 a CH_3COCOOH b $\text{CH}_3\text{CH}_2\text{COOH}$
 c $\text{CH}_3\text{CHOHCHO}$ d $\text{HOOC}-\text{CH}_2-\text{COOH}$

20. When salicylic acid is treated with bromine water, the product formed is



21. The acid that undergoes intramolecular dehydration with P_2O_5 is
 a Acetic acid b Formic acid
 c Propionic acid d Butyric acid
22. Among the following which is the least acidic in nature?
 a $\text{C}_2\text{H}_5\text{OH}$ b CH_3COOH
 c $\text{C}_6\text{H}_5\text{OH}$ d $\text{ClCH}_2-\text{COOH}$
23. Stony deposit in kidneys is cause due to the formation of
 a Potassium oxalate b Oxalic acid
 c Potassium succinate d Calcium oxalate
24. Acetic anhydride can be prepared by distilling anhydrous sodium acetate with
 a Acetyl chloride b Ethyl chloride
 c Zinc duct d Con. H_2SO_4
25. Oil of winter green is
 a Methyl salicylate b Methyl salicylic acid
 c Acetyl salicylate d Acetyl salicylic acid