

B.Sc Second Year (Semester-III)
Organic Chemistry

1. The alkaline hydrolysis of fats or oil is called
(a) Hydrogenation **(b) Saponification**
(c) Transesterification (d) Rancidity
2. The degree of unsaturation of fat or oil is measured by its
(a) Iodine value (b) Saponification value
(c) Acid value (d) None of these
3. Synthetic detergents called as
(a) Hard soap (b) Soft soap
(c) Syndets (d) None of these
4. The number of milligrams of potassium hydroxide (KOH) required to completely saponify 1 gram of fat or oil is called
(a) Acid value **(b) Saponification value**
(c) Iodine value (d) None of these
5. Toluene on oxidation with KMnO_4 to form
(a) Phthalic acid **(b) Benzoic acid**
(c) Anthranilic acid (d) Salicylic acid
6. o-xylene on oxidation with KMnO_4 gives
(a) Salicylic acid (b) Anthranilic acid
(c) Benzoic acid **(d) Phthalic acid**
7. o-nitro benzoic acid on reduction with Sn/HCl gives
(a) Benzoic acid (b) Phthalic acid
(c) Anthranilic acid (d) Salicylic acid
8. When Salicylic acid on heating with soda-lime, it gives
(a) Phenol (b) Phthalic acid
(c) Benzoic acid (d) Anthranilic acid
9. is also called salicylic acid.
(a) o-amino benzoic acid **(b) o-hydroxy benzoic acid**
(c) Benzoic acid (d) Aniline
10. In ketones, carbonyl carbon is hybridized.
(a) SP **(b) SP²**
(c) SP³ (d) SP^{2d}
11. Benzene react with gives acetophenone.
(a) Acetic acid (b) Acetone
(c) Acetyl chloride (d) Carbon monoxide
12. Benzaldehyde on reduction with LiAlH_4 gives
(a) Benzyl alcohol (b) Phenol
(c) Ethyl alcohol (d) Benzene
13. LiAlH_4 reduces ketone to

- (a) Primary alcohol (b) **Secondary alcohol**
 (c) Tertiary alcohol (d) None of these
14. Benzene react with CO and HCl in presence of AlCl_3 gives
 (a) **Benzaldehyde** (b) Formaldehyde
 (c) Benzoic acid (d) Acetophenone
15. Aldehydes and ketones having same general formula
 (a) C_nH_{2n} (b) $\text{C}_n\text{H}_{2n+1}\text{O}$
 (c) $\text{C}_n\text{H}_{2n+2}\text{O}$ (d) **$\text{C}_n\text{H}_{2n}\text{O}$**
16. Methyl magnesium bromide is commonly known as
 (a) **Grignards reagent** (b) Organozinc compounds
 (c) Organolithium compounds (d) None of these
17. Methyl lithium reacts with water to give
 (a) Methanol (b) **Methane**
 (c) Ethane (d) Ethanol
18. Which of the following is not organometallic compound
 (a) CH_3MgBr (b) $(\text{CH}_3)_2\text{Zn}$
 (c) $(\text{C}_2\text{H}_5)_2\text{Zn}$ (d) **CH_3Cl**
19. Benzaldehyde condenses with malonic acid in the presence of base to give
 (a) Benzoin (b) Acetic anhydride
 (c) **Cinnamic acid** (d) Benzoic acid
20. Acetophenone condense with formaldehyde and amine to give
 (a) Schiff base (b) **Mannich base**
 (c) Benzyl alcohol (d) None of these
21. Acetophenone on reduction with LiAlH_4 gives
 (a) Acetaldehyde (b) Formaldehyde
 (c) Benzoic acid (d) **1-phenyl ethanol**
22. In ketones, carbonyl carbon is hybridized.
 (a) sp (b) **sp^2**
 (c) sp^3 (d) sp^2d
23. Sodium borohydride (NaBH_4) reduces ketone to
 (a) Primary alcohol (b) **Secondary alcohol**
 (c) Tertiary alcohol (d) None of these
24. Phenyl cyanide on hydrolysis, it gives
 (a) Phthalic acid (b) **Benzoic acid**
 (c) Anthranilic acid (d) Salicylic acid
25. Anthranilic acid is also known as
 (a) **o-amino benzoic acid** (b) m-amino benzoic acid
 (c) p-amino benzoic acid (d) None of these
26. Phthalic acid on heating at 160°C , it gives
 (a) Benzene (b) Benzoic acid

- (c) Phthalic anhydride (d) None of these
27. Natural fats and oils are of glycerol.
(a) Diesters (b) Triesters
(c) Tetraesters (d) Monoesters
28. Sodium or potassium salts of fatty acids are called as
(a) Oils (b) Fats
(c) Detergents (d) Soaps
29. Dimethyl zinc reacts with formaldehyde to give
(a) Propanone (b) 1-propanol
(c) 2-propanol (d) Ethanol
30. When ethyl iodide reacts with zinc in presence of CO_2 , it gives
(a) $(\text{CH}_3)_2\text{Zn}$ (b) $\text{C}_2\text{H}_5\text{Zn}$
(c) $(\text{C}_2\text{H}_5)_2\text{Zn}$ (d) CH_3Zn
31. Methyl iodide react with Mg metal, to give
(a) $\text{CH}_3\text{-Mg-Br}$ (b) $\text{CH}_3\text{-Mg-I}$
32. Oxidation of acetophenone using reagent is called Baeyer-villiger oxidation.
(a) $\text{KMnO}_4/\text{H}_2\text{SO}_4$ (b) $\text{K}_2\text{Cr}_2\text{O}_7/\text{H}_2\text{SO}_4$
(c) CH_3COOOH (d) MnO_2/HCl
33. Acetophenone on Clemmensen reduction with Zn-Hg/HCl gives
(a) Benzaldehyde (b) Ethyl benzene
(c) Benzoyl alcohol (d) Methyl benzene
34. Benzene react with HCN and HCl in presence of AlCl_3 gives
(a) Benzaldehyde (b) Formaldehyde
(c) Benzoic acid (d) Acetophenone