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Chemistry Classes

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OBJECTIVE TYPE GUESS QUESTION - 2022

ORGANIC CHEMISTRY [40 Questions] :

HALOALKANES AND HALOARENES [6 Ques]

01. Reaction $2 \text{C}_6\text{H}_5\text{X} + 2\text{Na} \xrightarrow{\text{ether}} \text{C}_6\text{H}_5\text{C}_6\text{H}_5 + 2\text{NaX}$ is known as
 (A) Fittig reaction (B) Wurtz reaction (C) Wurtz Fittig reaction (D) Kolbe's reaction
02. The product of the reaction $\text{C}_2\text{H}_5\text{Br} \xrightarrow[\text{Alcoholic}]{\text{KOH}}$ is
 (A) $\text{CH}_2 = \text{CH}_2$ (B) $\text{CH}_3\text{CH}_2\text{OH}$ (C) $\text{CH}_3\text{CH}_2\text{OCH}_2\text{CH}_3$ (D) None of these
03. Which alkyl halide follows only SN^2 hydrolysis mechanism ?
 (A) $\text{CH}_3 - \text{CH}_2 - \text{X}$ (B) $\begin{array}{l} \text{CH}_3 \\ | \\ \text{CH} - \text{X} \\ | \\ \text{CH}_3 \end{array}$ (C) $(\text{CH}_3)_3\text{C} - \text{X}$ (D) $\text{C}_6\text{H}_5 - \text{CH}_2\text{X}$
04. Rate of hydration in aqueous acid will be in the order
 $\text{Cyclopropyl-CH=CH}_2$ (I) $\text{Cyclopropyl-CH=CH-CH}_3$ (II) $\text{Cyclopropyl-C(CH}_3\text{)=CH}_2$ (III)
 (A) $\text{I} < \text{II} < \text{III}$ (B) $\text{III} < \text{II} < \text{I}$ (C) $\text{I} < \text{III} < \text{II}$ (D) $\text{II} < \text{I} < \text{III}$
05. A Grignard reagent is prepared by the action of magnesium in dry ether on
 (A) $\text{C}_2\text{H}_5\text{OH}$ (B) C_2H_6 (C) $\text{C}_2\text{H}_5\text{Cl}$ (D) $\text{C}_2\text{H}_5\text{CN}$
06. In a given reaction $\text{CH}_3 - \text{CH}_2 - \text{CH} = \text{CH}_2 + \text{HI} \longrightarrow \text{X}$, the product is
 (A) 1-Iodobutane (B) 2-Iodobutane (C) 2-Butene (D) 1,2-di iodobutane

ALCOHOL PHENOL ETHER [7 Ques]

07. The product of the reaction $\text{C}_6\text{H}_5\text{N} = \text{NCl} \xrightarrow{\text{H}_2\text{O}^+}$ is
 (A) Aniline (B) Phenol (C) Methyl alcohol (D) None of these
08. Ketone ($\text{R} - \text{CO} - \text{R}'$) on reduction with $\text{LiAlH}_4 / \text{H}_2\text{O}$ gives
 (A) Primary Alcohol (B) Secondary Alcohol (C) Tertiary Alcohol (D) Alkane






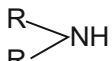

09. Which of the following is a formula of methoxy methane ?
 (A) CH_3OCH_3 (B) CH_3COCH_3 (C) $\text{C}_2\text{H}_5\text{OCH}_3$ (D) $\text{C}_2\text{H}_5\text{COCH}_3$
10. $\text{R-OH} + \text{CH}_2\text{N}_2 \rightarrow$ Leaving group in this reaction is
 (A) CH_3 (B) R (C) N_2 (D) CH_2
11. Which of the following alcohol is manufactured from water gas ?
 (A) $\text{C}_2\text{H}_5\text{OH}$ (B) CH_3OH (C) $\text{CH}_3\text{CH}_2\text{COOH}$ (D) $(\text{CH}_3)_2\text{CHOH}$
12. Primary, Secondary and Tertiary alcohols are distinguished by
 (A) Oxidation Method (B) Lucas reagent method
 (C) Victor Meyer's Method (D) All of these
13. Williamson's synthesis involves theattack of an alkoxide ion on primary alkylhalide. Fill the blank with best suitable word.
 (A) SN^1 (B) SN^2 (C) E^1 (D) E^2

ALDEHYDES, KETONES & CARBOXYLIC ACID [8 Ques]

14. The hybridisation of carbon in carbonyl group $\left(\overset{\text{O}}{\parallel}{\text{C}} \right)$ is
 (A) sp (B) sp^2 (C) sp^3 (D) sp^3d
15. Which organic acid gives silver mirror test ?
 (A) CH_3COOH (B) HCOOH (C) $\text{CH}_3-\text{CH}_2-\text{COOH}$ (D) $\text{CH}_3-\text{CH}(\text{OH})-\text{COOH}$
16. $\text{R}-\overset{\text{O}}{\parallel}{\text{C}}-\text{X} \xrightarrow[\Delta]{\text{H}_2, \text{Pd}/\text{BaSO}_4} \text{R}-\overset{\text{O}}{\parallel}{\text{C}}-\text{H} + \text{HX}$ The reaction is known as
 (A) Stephen's reaction (B) Cannizzaro's reaction (C) Rosenmund's reaction (D) Hinsbert's reaction
17. Which of the following compound is most reactive towards nucleophilic addition ?
 (A) $\text{CH}_3-\overset{\text{O}}{\parallel}{\text{C}}-\text{CH}_3$ (B) $\text{CH}_3-\overset{\text{O}}{\parallel}{\text{C}}-\text{H}$ (C) $\text{C}_6\text{H}_5-\overset{\text{O}}{\parallel}{\text{C}}-\text{CH}_3$ (D) $\text{C}_6\text{H}_5-\overset{\text{O}}{\parallel}{\text{C}}-\text{C}_6\text{H}_5$
18. Which of the following undergoes Cannizzaro's reaction
 (A) CH_3CHO (B) $\text{CH}_3\text{CH}_2\text{CHO}$ (C) $(\text{CH}_3)_2\text{CHCHO}$ (D) HCHO
19. Which of the following acids is found in Vinegar ?
 (A) HCOOH (B) CH_3COOH (C) $\text{C}_2\text{H}_5\text{COOH}$ (D) None of these
20. Which of the following undergoes Aldol condensation ?
 (A) CH_3COOH (B) CH_3CHO (C) $\text{C}_6\text{H}_5\text{CHO}$ (D) $\text{CH}_3-\text{COOCH}_3$
21. An organic compound gives iodoform test and also gives positive test with Tollens reagent. The compound is
 (A) CH_3-CHO (B) $\text{CH}_3-\overset{\text{O}}{\parallel}{\text{C}}-\text{CH}_3$ (C) $\text{CH}_3-\text{CH}_2\text{OH}$ (D) $\begin{array}{l} \text{CH}_3 \\ \diagdown \\ \text{CH}-\text{OH} \\ \diagup \\ \text{CH}_3 \end{array}$



AMINES [6 Ques]

22. Primary amine is detected by
(A) HCl (B) $\text{CHCl}_3 + \text{KOH}$ (C) NaOH (D) CHCl_3
23. The main product of the following reaction is  $\xrightarrow{\text{Sn}+\text{HCl}}$
(A) $\text{C}_6\text{H}_5\text{OH}$ (B) $\text{C}_6\text{H}_5\text{NH}_2$ (C) $\text{C}_6\text{H}_5\text{CH}_3$ (D) C_6H_6
24. The product of the reaction $\text{CH}_3\text{CN} \xrightarrow{\text{H}_3\text{O}^+}$ is
(A) CH_3COOH (B) $\text{CH}_3\text{CH}_2\text{NHOH}$ (C) CH_3CONH_2 (D) CH_3CHO
25. Which of the following gives yellow or brown precipitate with alkaline Nessler's reagent ?
(A) CO_2 (B) NH_3 (C) NaCl (D) KI
26. A 5% solution of cane sugar (Mol. Wt = 342) is isotonic with 1% solution of substance X. The molecular weight of X is
(A) 68.4 (B) 34.2 (C) 171.2 (D) 136.2
27. An organic compound reacts with benzene sulfonyl chloride and product dissolves in aqueous NaOH. The compound is
(A) $\text{R}-\text{NH}_2$ (B)  (C)  (D) All of these

BIOMOLECULES [5 Ques]

28. Carbohydrate which yields three to ten mono saccharide units on hydrolysis is called
(A) Monosaccharide (B) Disaccharide (C) Oligosaccharide (D) Polysaccharide
29. Formula of sucrose is
(A) $\text{C}_{12}\text{H}_{22}\text{O}_{12}$ (B) $\text{C}_{12}\text{H}_{22}\text{O}_{11}$ (C) $\text{C}_{12}\text{H}_{24}\text{O}_{11}$ (D) $\text{C}_{12}\text{H}_{22}\text{O}_{10}$
30. Sweetest of all sugars is
(A) Glucose (B) Lactose (C) Sucrose (D) Fructose
31. Enzyme is
(A) Carbohydrate (B) Lipid (C) Proteins (D) None of these
32. In reaction $\text{OHCH}_2 - (\text{CHOH})_4 - \text{CHO} \xrightarrow{\text{HI}, \Delta}$ product is
(A) Fructose (B) n-hexane (C) Gluconic acid (D) None of these

POLYMERS [4 Ques]

33. Buna - N and Buna - S are
(A) Natural rubber (B) Synthetic rubber (C) Latex (D) Polythene
34. Natural Rubber is a polymer of
(A) Styrene (B) Isoprene (C) Chloroprene (D) Butadiene
35. Carprolactum is the monomer of
(A) Nylon-6 (B) Nylon-6, 6 (C) Nylon-2-Nylon-6 (D) Terylene
36. In addition to $-\text{COOH}$ group, amino acid contains
(A) $-\text{OH}$ (B) $-\text{NH}_2$ (C) $> \text{CO}$ (D) $-\text{CHO}$



CHEMISTRY IN EVERYDAY LIFE [3 Ques]

37. Over production of acid in stomach can be controlled by
(A) Antacid (B) Analgesic (C) Antipyretic (D) Antibiotic
38. Antibiotic used for the treatment of typhoid is
(A) Penicillin (B) Chloramphenicol (C) Terramycin (D) Sulphadiazine
39. Drug used to reduce fever is called
(A) Antipyretic (B) Analgesic (C) Antacid (D) None of these
40. A drug which is antipyretic as well as analgesic is
(A) Chloroquin (B) Penicillin (C) Chloropromazine (D) Para acetamidophenol



ANSWER KEY

12TH BOARD GUESS QUES. 2022 (Objective Type)

ORGANIC CHEMISTRY :

01. A	02. A	03. A	04. A	05. C	06. B	07. B	08. B	09. A	10. C
11. B	12. D	13. B	14. B	15. B	16. C	17. B	18. D	19. B	20. B
21. A	22. B	23. B	24. A	25. B	26. A	27. A	28. C	29. B	30. D
31. C	32. B	33. B	34. B	35. A	36. B	37. A	38. B	39. A	40. D



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