

AIEEE/MHT-CET QUESTIONS

1. Which of the following is monohalogen derivative of alkane ?
 a) CCl_4 b) CHCl_3
 c) CH_2Cl_2 d) CH_3Cl
2. Alkyl halides are classified on the basis of-
 a) Nature of halide atom
 b) Nature of carbon atom
 c) Nature of alkyl group
 d) None of these.
3. Alkyl halides can not exhibitisomerism.
 a) Chain b) Position
 c) Optical d) Functional
4. Identify 3° halide from the following compounds -
 a) Neopentyl chloride
 b) n-butyl chloride
 c) t-butyl chloride
 d) Sec-propyl chloride
5. The general formula of alkyl halide is -
 a) $\text{C}_n\text{H}_{n+2}\text{X}$ b) $\text{C}_n\text{H}_{2n+1}\text{X}$
 c) $\text{C}_{2n}\text{H}_n\text{X}$ d) $\text{C}_n\text{H}_{2n+1}$
6. Which of the following is the alkyl halide ?
 a) R-I b) R-F
 c) R-Br d) All the above
7. The order of reactivity of alkyl halide is as follows ----
 a) $\text{RCI} > \text{RBr} > \text{RI}$
 b) $\text{RI} > \text{RBr} > \text{RCI}$
 c) $\text{RBr} > \text{RI} > \text{RCI}$
 d) $\text{RI} > \text{RCI} > \text{RBr}$
8. The IUPAC name of compound $\text{CH}_3\text{CH}-\text{CH}_2-\text{CH}_2\text{Cl}$ is -----
 |
 CH_3
- a) 1-chloro-3-methyl butane
 b) 2-methyl-4-chlorobutane
 c) 2-methyl-1-chlorobutane
 d) 1-chloropentane
9. Preparation of alkyl halides by halogenation of alkanes is not a convenient method because the reaction is -
 a) Very vigorous
 b) Very slow
 c) To be carried out in the dark
 d) Can not be stopped at monohalogen stage.
10. Iodoform gives a white ppt. with AgNO_3 on heating but chloroform does not because
 a) Iodoform is ionic in nature
 b) Chloroform is covalent in nature
 c) C-I bond is weaker than C-Cl bond
 d) Iodoform decomposes AgNO_3
11. Which one of the following pairs represents a set of electrophiles?
 a) Br^+ and $:\text{CCl}_2$
 b) H^+ and H_2O
 c) AlCl_3 and Br
 d) Cl^- and NH_3
12. Compounds X on heating with alcoholic potash gives $(\text{CH}_3)_3\text{C}-\text{CH}=\text{CH}_2$. The compound X is
 a) tert-hexyl bromide
 b) sec hexyl bromide
 c) neo hexyl bromide
 d) n-hexyl bromide

Ans -

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|----------|----------|----------|
| (1 - d) | (2 - b) | (3 - d) |
| (4 - c) | (5 - b) | (6 - d) |
| (7 - d) | (8 - a) | (9 - d) |
| (10 - c) | (11 - a) | (12 - c) |

13. Addition of HBr to propene to give 1-bromopropane is an example of -
 a) Markownikoff's rule
 b) Saytzeff's rule
 c) Kharasch's rule
 d) None of the above
14. For the preparation of ethyl propionate from ethyl bromide, the other reactant can be -
 a) Silver acetate
 b) Propionic anhydride
 c) Propanoyl chloride
 d) Silver propionate
15. Which of the following alkyl halides is heavier ?
 a) C_3H_7Cl b) C_3H_7Br
 c) C_3H_7I d) C_3H_7F
16. Which alkyl halide has maximum density ?
 a) C_3H_7I b) C_2H_5I
 c) CH_3I d) CH_3Br
17. Which of the following reagent reacts with alkyl halide to give side product SO_2 ?
 a) PCl_3 b) $SOCl_2$
 c) PCl_5 d) All the above
18. Alkyl halides undergo -----
 a) Electrophilic substitution reactions
 b) Electrophilic addition reactions
 c) Nucleophilic substitution reactions
 d) Nucleophilic addition reactions
19. Which of the following alkyl halides undergoes elimination reaction readily
 a) RI b) R-Br
 c) R-Cl d) R-F
20. What is the another name for anti Markownikoff's addition ?
 a) Kharasch effect b) Saytzeff rule
 c) Peroxide effect d) Both a and c
21. In iodination of alkanes, iodic acid is used to-
 a) Catalyse the reaction
 b) Remove HI by reduction and to prevent reverse reaction.
 c) Oxidise HI to prevent reverse reaction
 d) To liberate free I_2 necessary for iodination
22. When ethyl bromide is heated with silver nitrite the product obtained is -
 a) Ethyl nitrite b) Ethyl nitrate
 c) Nitropropane d) None
23. Homolytic fission of covalent bond between carbon atoms will produce -
 a) Two carbonium ions
 b) Two molecules
 c) Free radical.
 d) Carbonium ion and carbanion
24. In which of the following species the central carbon atom is negatively charged ?
 a) Carbanion b) Carbonium ion
 c) Carbocation d) Free radicals
25. Which of the following contains three pairs of electrons ?
 a) Carbanion b) Free radical
 c) Carbocation d) None of these.

Ans -

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|----------|----------|----------|
| (13 - c) | (14 - d) | (15 - c) |
| (16 - c) | (17 - b) | (18 - c) |
| (19 - a) | (20 - d) | (21 - c) |
| (22 - b) | (23 - d) | (24 - a) |
| (25 - c) | | |

26. Which of the following is not a nucleophile?
 a) OH^- b) HSO_3^-
 c) NH_3 d) CH_3OH
27. Which of the following is not a Lewis acid?
 a) SnCl_4 b) AlCl_3
 c) BeCl_2 d) BF_3
28. Shifting of electrons of a multiple bond under the influence of reagent is called.....effect.
 a) Inductive
 b) Mesomeric
 c) Tautomeric
 d) Electromeric
29. In which of the following reaction product is always structural isomer of original compound ?
 a) Addition reaction
 b) Substitution reaction
 c) Rearrangement reaction
 d) Elimination reaction
30. Isocyanide test is given by
 a) Primary amine
 b) Secondary amine
 c) Chloroform only
 d) Primary amine and chloroform both
31. Grignard reagent shows addition on -
 a) $> \text{C} = \text{O}$
 b) $-\text{CN}$
 c) Both a and b
 d) None of these
32. Which of the following alkyl halides undergo SN^1 reaction fastest ?
 a) CH_3Cl
 b) $\text{C}_2\text{H}_5\text{Cl}$
 c) Isobutyl chloroide
 d) t-butyl chloroide
33. Thionyl chloride reacts with monohydric alcohols to gives
 a) alkyl halides
 b) haloalkanes
 c) chloro alkanes
 d) all of these
34. Peroxide effect is observed in the addition of reactions of unsymmetrical alkenes
 a) HBr and HCl
 b) HBr and HI
 c) only HBr
 d) only HI
35. Dehydrohalogenation of an alkyl halide is of an :
 a) Nucleophilic substitution reaction
 b) Elimination reaction
 c) Both nucleophilic substitution and elimination reaction
 d) Rearrangement
36. Neopentyl chloride on reaction with ethanolic KOH is likely to give
 a) Neopentyl alcohol
 b) Pentylene
 c) 2-Methyl-2-butene
 d) undergo no reaction

Ans -

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|----------|----------|----------|
| (26 - d) | (27 - b) | (28 - b) |
| (29 - c) | (30 - d) | (31 - c) |
| (32 - d) | (33 - c) | (34 - c) |
| (35 - b) | (36 - c) | |

37. Ethyl chloride on treatment with aqueous alkali gives -
 a) Ethane b) Ethene
 c) Ethanal d) Ethanol
38. The reaction between alkyl halides and sodium metal is called
 a) Wurtz reaction
 b) Kolbe's reaction
 c) Clemmensen's reaction
 d) Finkelstein reaction
39. Slow oxidation of chloroform in air leads to
 a) Formyl chloride
 b) Formic acid
 c) COCl_2
 d) Trichloroacetic acid
40. The reaction of t-Butylbromide with sodium methoxide produces mainly
 a) Isobutane
 b) Isobutylene
 c) t-Butyl methyl ether
 d) Sodium tert-butoxide
41. Taken in test tubes and boiled with NaOH solution. The end solution in each tube was made acidic with dilute HNO_3 and then some AgNO_3 solution was added. Substance B gave a yellow precipitate which one of the following statements is true for this experiment?
 a) A was $\text{C}_6\text{H}_5\text{I}$
 b) A was $\text{C}_6\text{H}_5\text{CH}_2\text{I}$
 c) B was $\text{C}_6\text{H}_5\text{I}$
 d) Addition of HNO_3
42. Propene on treatment with HBr gives
 a) n-Propyl bromide
 b) Secondary propyl bromide
 c) Isopropyl bromide
 d) Dibromo propane
43. In the reaction 1-Chloro-2-methylpropane + aq. KOH \longrightarrow X + KCl identify X
 a) 1-methylpropane
 b) 1-propene
 c) 2-methylpropane
 d) 2-methyl-1propanol
44. Halo form is represented as
 a) CH_3X
 b) CH_2X_2
 c) CHX_3
 d) CX_4
45. Propyl iodide on heating with aqueous KOH gives
 a) Propene
 b) 1-Propanol
 c) 2-Propanol
 d) Propanol
46. The reaction of alkyl halide with metallic sodium in the presence of dry ether is known as
 a) Frankland
 b) Wurtz reaction
 c) Sandmeyer reaction
 d) Kolbe's reaction
47. Westron is -
 a) Vinyl chloride
 b) Alkyl chloride
 c) Dichloroacetaldehyde
 d) Acetylene tetrachloride

Ans -

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|----------|----------|----------|
| (37 - d) | (38 - a) | (39 - c) |
| (40 - b) | (41 - a) | (42 - c) |
| (43 - d) | (44 - c) | (45 - b) |
| (46 - b) | (47 - d) | |

48. Thionyl chloride is preferred in the preparation of chlorine compounds from alcohols because -
- The reaction goes to completion
 - The by products being gases, escapes hence there is no problem of separation of the product
 - The reagent is cheap
 - None of the above
49. If alkyl halide is optically active, S_N1 reactions leads to -
- Racemisation
 - Inversion
 - Retention
 - Resolution
50. The reaction of 4-bromobenzyl chloride with NaCN in ethanol leads to -
- 4-Bromobenzyl cyanide
 - 4-Cyanobenzyl chloride
 - 4-Cyanobenzyl cyanide
 - 4-Bromo-2-cyanobenzyl chloride
51. 2-Bromopentane is heated with potassium ethoxide in ethanol. The major product obtained is -
- 2-Ethoxypentane
 - Pent-1-ene
 - cis-Pent-2-ene
 - trans-Pent-2-ene
52. Butanenitrile is formed by reaction of KCN with -
- Propyl alcohol
 - Butyl chloride
 - Butyl alcohol
 - Propyl chloride
53. Arrange the following halides in the decreasing order of S_N1 reactivity
- (I) $CH_3CH_2CH_2Cl$
 (II) $CH_2=CHCH(Cl)$
 (III) $CH_3CH_2CH_2CH(Cl)CH_3$
- I > II > III
 - II > I > III
 - II > III > I
 - III > II > I
54. The reaction of methyl bromide with aq. KOH to form methyl alcohol is
- Electrophilic addition
 - Nucleophilic addition
 - Nucleophilic substitution
 - Electrophilic substitution.
55. Which of the following converts ethanol into 1, 1-dichloroethane ?
- HCl
 - PCl_5
 - $SOCl_2$
 - Cl_2
56. Chloroform can be prepared from ethanol because
- It can be oxidised easily
 - It is good solvent
 - It has alpha hydrogen atom
 - It has low boiling point
57. When two isomers resemble each other like an object and non-superimposable mirror image. They are called
- Position isomers
 - Optical isomers
 - Recemic form
 - Geometrical isomers
58. Chloropicrin is used as
- Solvent
 - Anesthetic
 - Perfume
 - Tear gas
59. Amongst the following the compound which will give iodoform test is
- 3-pentanol
 - 3-methyl-2-pentanol
 - CCl_4
 - CH_2Cl_2

Ans -

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|----------|----------|----------|
| (48 - b) | (49 - a) | (50 - a) |
| (51 - c) | (52 - d) | (53 - c) |
| (54 - c) | (55 - b) | (56 - a) |
| (57 - b) | (58 - d) | (59 - b) |

60. Isobutylene when reacted with HBr in the presence of peroxide will give
- 2-Bromobutane
 - n-Butyl bromide
 - 1-Bromo-2-methyl propane
 - tertiary butyl bromide
61. Compound obtained by the hydrolysis of the substance A on reduction forms 3-Hexanol. Hence, the substance a is
- 3, 3-Dichlorohexane
 - 2, 3-Dichlorohexane
 - 2, 2-Dichlorohexane
 - 1, 1-Dichlorohexane
62. In alkaline hydrolysis of a tertiary halide by aqueous alkali if concentration of alkali is doubled, then the reaction rate
- Will be doubled
 - Will have halved
 - Will remain constant
 - Can't say
63. Chloropicrin is used as:
- Solvent
 - Anaesthetic
 - Perfume
 - Tear gas
64. The reaction is endothermic if -
- Energy of reactants is greater than energy of products
 - Energy of products is greater than energy of reactants
 - Energy of reactants is same as energy of products
 - None of the above
65. S_N^2 mechanism proceeds through the intervention of -
- Carbonium ion
 - Transition state
 - Free radical
 - Carbanion
66. Which of the following compounds will not give a yellow ppt. with iodine and alkali?
- Ethanal
 - Ethanol
 - 1-Propanol
 - 2-Propanol
67. Reagent is not used to prepare an alkyl halide from an alcohol is -
- HCl + ZnCl₂
 - NaCl
 - PCl₅
 - SOCl₂
68. The number of asymmetric carbon atoms in tartaric acid is -
- 1
 - 2
 - 4
 - 0
69. The number of optically active isomers of the compound C₇H₁₆ are -
- Two
 - Four
 - Five
 - Six
70. Dichloroethylene does not show -
- Geometrical isomerism
 - Optical isomerism
 - Both
 - None
71. When isopropyl iodide in ethereal solution is warmed with sodium, the product formed is -
- n-Hexane
 - Neohexane
 - 2,3-Dimethylbutane
 - Mixture of the above
72. Chloroform can be used in medicine as
- Antipyretic
 - Antihistamine
 - anaesthetic
 - Chloroethane

Ans -

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|----------|----------|----------|
| (60 - c) | (61 - a) | (62 - c) |
| (63 - d) | (64 - b) | (65 - b) |
| (66 - c) | (67 - b) | (68 - d) |
| (69 - c) | (70 - b) | (71 - c) |
| (72 - c) | | |

73. A sample of chloroform which is being used by doctors as anesthetic is generally tested by
- $\text{AgNO}_3(\text{aq})$
 - Fehling solution
 - $\text{AgNO}_3(\text{aq})$ after boiling with KOH
 - Any of the above
74. Distillation of bleaching powder and acetone gives
- CHCl_3
 - Chloral
 - CH_3Cl
 - CCl_4
75. Fire extinguisher Pyrene is
- CO_2
 - CCl_4
 - CHCl_3
 - H_2CO_3
76. Which types of isomerism is shown by the following pairs of compounds : Ethylene dichloride and Ethylenedichloride ?
- Chain isomerism
 - Position isomerism
 - Metamerism
 - Tautomerism
77. The product formed by the reaction between 2, 2, 2-trichloroethanal (Chloral) and chlorobenzene in H_2SO_4 is
- Chloretone
 - D.D.T
 - Chlorobenzaldichloride
 - Benzene sulphonic acid
78. Lindane can be obtained by reaction of benzene with
- $\text{CH}_3\text{Cl}/\text{anhy AlCl}_3$
 - $\text{Cl}_2/\text{Sunlight}$
 - $\text{C}_2\text{H}_5\text{I}/\text{anhy AlCl}_3$
 - $\text{CH}_3\text{COCl}/\text{AlCl}_3$
79. Gammhexane is the name given to
- $\text{C}_6\text{H}_3\text{Cl}_3$
 - $\text{C}_6\text{H}_4\text{Cl}_2$
 - $\text{C}_6\text{H}_6\text{Cl}_6$
 - Diphenyltrichloroethane
80. Which one of the following is used as a general anaesthetic in place of diethyl ether?
- Chloroform
 - $\text{CF}_3\text{-CHClBr}$
 - $\text{CF}_3\text{-CHBr}_2$
 - None
81. Which of the following is known as camphor substitute?
- C_2Cl_6
 - CHCl_3
 - CF_3CHClBr
 - CF_2Cl_2
82. Which of the following is called Westron?
- CH_3Cl
 - CHCl_3
 - CHCl.CHCl_2
 - $\text{CCl}_2 = \text{CHCl}$
83. The $\text{S}_{\text{N}}1$ mechanism is favoured by
- Polarity of the solvent
 - Dielectric constant of the solvent
 - Both (A) and (B)
 - None of the above
84. IUPAC name of crotyl chloride is
- 1-Chlorobut-2-ene
 - 2-Chlorobut-2-ene
 - 3-Chlorobut-1-ene
 - 4-Chlorobut-1-ene
85. Which of the following compounds would be hydrolysed most easily ?
- $\text{C}_2\text{H}_5\text{Cl}$
 - $\text{C}_2\text{H}_5\text{Br}$
 - $\text{C}_2\text{H}_5\text{F}$
 - $\text{C}_2\text{H}_5\text{I}$

Ans -

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|----------|----------|----------|
| (73 - a) | (74 - a) | (75 - b) |
| (76 - b) | (77 - b) | (78 - b) |
| (79 - c) | (80 - b) | (81 - a) |
| (82 - c) | (83 - c) | (84 - a) |
| (85 - d) | | |

86. **SN² mechanism proceeds through the intervention of -**
 a) Carbonium ion b) Transition state
 c) Free radical d) Carbanion
87. **Mustard gas is**
 a) Dichlorodiethyl sulphide
 b) Dichlorodimethyl sulphide
 c) Dichlorodiethyl ether
 d) None of these
88. **Westrosol is**
 a) Trichloroethane
 b) 1, 1, 1-Trichloroethane
 c) 1, 1, 2-Trichloroethane
 d) Trichloromethane
89. **Photochemical chlorination of an alkane is initiated by a process of**
 a) Pyrolysis b) Peroxidation
 c) Homolysis d) Rearrangement
90. **Which of the following halides would undergo nucleophilic substitution most readily ?**
 a) 1-Chloro-1-butene
 b) 2-Chloro-1-butene
 c) 3-Chloro-1-butene
 d) 4-Chloro-1-butane
91. **2,2-dichlorobutane on boiling with aqueous KOH gives :**
 a) Butanal b) 2-butanone
 c) 2-butanol d) Butanoic acid
92. **Point out the isomers -**
 a) Ethanol and ethoxy ethane
 b) Methanol and methoxy methane
 c) Propionic acid and ethyl acetate
 d) Propionaldehyde and acetone
93. **An alkyl bromide (A) forms Grignard's reagent which on treatment with water yields n-hexane. (A) with sodium in presence of dry ether forms 4,5 diethyloctane. (A) is**
 a) CH₃[CH₂]₅Br
 b) CH₃[CH₂]₃CH(Br)CH₃
 c) CH₃-[CH₂]₂-CH(Br)CH₂CH₃
 d) CH₃[CH₂]₂CH(Br)CH=CH₂
94. **The amount of rotation of plane of polarised light depends upon -**
 a) The number of molecules
 b) The nature of light beam
 c) Specific rotation
 d) Number of asymmetric carbon atom in the molecule.
95. **The reaction between pri-amine, chlor form and few drops of alcoholic KOH is known as :**
 a) Cannizaro reaction
 b) Carbyl amine reaction
 c) Wurtz reaction
 d) Frankland reaction
96. **Which isomer of C₄H₉Br will produce 2-Methyl propan-2-ol by treatment with aqueous KOH ?**
 a) n-Butyl bromide
 b) Isobutyl bromide
 c) tertiary-Butyl bromide
 d) Secondary-Butyl bromide
97. **Among the halogen derivatives of ethane, the one which has the highest boiling point is**
 a) C₂H₅F b) C₂H₅Cl
 c) C₂H₅Br d) C₂H₅I

Ans -

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|----------|----------|----------|
| (86 - a) | (87 - d) | (88 - c) |
| (89 - c) | (90 - c) | (91 - d) |
| (92 - d) | (93 - c) | (94 - d) |
| (95 - b) | (96 - c) | (97 - d) |

98. If two compounds have the same empirical formula but different molecular formula they must have ?
- Same viscosity
 - Same vapour density
 - Different percentage
 - Different molecular weight
99. The process of converting one enantiomer of an optically active compound into racemic mixture is called
- Resolution
 - Inversion
 - Epimerisation
 - Racemisation
100. Which of the following statement is not applicable to both ethylene dichloride and ethylidene dichloride ?
- They are dihaloalkanes
 - They react with alcoholic KOH
 - On hydrolysis they give products which are isomers
 - None of the above
101. Out of monochloro, monobromo and monoiodo derivatives of ethane, the most reactive compound towards nucleophilic substitutions will be
- C_2H_5Br
 - C_2H_5Cl
 - C_2H_5I
 - All are equally reactive
102. Preparation of $CHCl_3$ from ethanol and bleaching powder involves -
- Hydrolysis
 - Oxidation
 - Chlorination
 - All of the above
103. Partial reduction of chloroform is carried out by using -
- Zn-dust and H_2O
 - Zn-dust and HCl
 - Na-Hg and water
 - Na-Hg and alcohol
104. The compound that will not give iodoform on treatment with alkali and iodine is -
- Acetone
 - Diethyl ketone
 - Ethanol
 - Isopropyl alcohol
105. Ethylbromide and Isopropyl chloride can be distinguished by -
- Alcoholic $AgNO_3$
 - Comparing their colours
 - Burning the compounds on spatula
 - Aqueous KOH solution
106. Grignard reagent react with metal chlorides to form -
- $(C_2H_5)_2Hg$
 - $(C_2H_5)_4Pb$
 - $(C_2H_5)_4Si$
 - All are correct
107. Methyl carbanion is iso-electronic with
- | | |
|-----------|-------------|
| a) CH_4 | b) CH_3^+ |
| c) CH_3 | d) CH_2^+ |

Ans -

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|-----------|-----------|-----------|
| (98 - b) | (99- d) | (100 - c) |
| (101 - c) | (102 - d) | (103 - c) |
| (104 - b) | (105 - d) | (106 - d) |
| (107 - a) | | |

- 108. Optical activity in a compound is detected and measured by --**
 a) Calorimeter b) Polarimeter
 c) Colorimeter d) Spectrometer
- 109. Enantiomers have ---**
 a) Same physical properties but different chemical properties.
 b) Same chemical properties but different physical properties
 c) Same physical as well as chemical properties
 d) Same optical properties.
- 110. Geminal di halide does not give the following compound on hydrolysis:**
 a) Alkanal b) alkanol
 c) Both d) 3,4-diol
- 111. Chloroform is used as a/an ----**
 a) Fire extinguisher
 b) Industrial solvent
 c) Antiseptic
 d) Insecticide
- 112. The mixture of two organic compounds, A and B is treated with sodium metal, when isobutane was obtained as one of the products. Then if A is methyl chloride, B would be --**
 a) $\text{CH}_3\text{CH}_2\text{CH}_2\text{Cl}$
 b) $\text{CH}_3\text{CHClCH}_3$
 c) $\text{CH}_3\text{CH}_2\text{Cl}$
 d) $\text{CH}_3\text{CH}_2\text{CHClCH}_3$
- 113. Anti Markownikoff's addition of HBr is not observed in**
 a) Propene b) But-1-ene
 c) But-2-ene d) Pent-2-ene
- 114. Which of the following reactants will yield ethane ?**
 a) Methyl bromide and sodium
 b) Ethyl bromide and Mg
 c) Ethanol and H_2SO_4
 d) Ethyl bromide and KCN
- 115. The factor which prevents decomposition of iodoform is**
 a) Moisture b) Light
 c) Air d) Low temperature
- 116. How many structural isomers are possible for $\text{C}_4\text{H}_9\text{Br}$?**
 a) 2 b) 3
 c) 4 d) 5
- 117. A molecule is said to be chiral -**
 a) If it contains plane of symmetry
 b) If it contains centre of symmetry
 c) If it cannot be superimposed on its mirror image
 d) If it can be superimposed on its mirror image
- 118. For the preparation of n-propyl bromide from n-propyl alcohol which of the following reagent is most preferred**
 a) P_4/Br_2 b) HBr
 c) Br_2 d) NaBr
- 119. The process of separation of racemic mixture into d- or l-forms is called -**
 a) Resolution
 b) Racemisation
 c) Rotation
 d) None of the above

Ans -

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|-----------|-----------|-----------|
| (108 - b) | (109 - c) | (110 - d) |
| (111 - b) | (112 - c) | (113 - c) |
| (114 - a) | (115 - d) | (116 - b) |
| (117 - c) | (118 - a) | (119 - a) |

120. Vinyl chloride and ethyl chloride can be distinguished by
- Lucas reagent
 - $\text{KOH}_{(a.q.)}$
 - AgCl
 - HCl/AgCl
121. Methylene chloride on hydrolysis yields
- HCHO
 - CH_3CHO
 - CHCl_3
 - CH_3COCl
122. An optically active halide when allowed to react with CN^- gives a racemic mixture, the halide is most likely
- primary
 - sec-halide
 - tert-halide
 - none of these
123. Chloretone is used as a/an -
- Insecticide
 - Pesticide
 - Anaesthetic
 - Hypnotic
124. Non-sticking frying pan are coated with teflon which is -
- Ethylen
 - Tetrafluoroethylene
 - Styrene
 - Chlorofluoroethylene
125. Chlorination of methane proceeds by
- Electrophilic substitution
 - Nucleophilic substitution
 - Free radical mechanism
 - None of these
126. Grignard's reagent when exposed to moisture -
- Gets oxidised
 - Gets hydrolysed
 - Gets decomposed to give hydrocarbons
 - Remains unaffected
127. In the preparation of chlorofom from ethanol and bleaching powder, bleachig powder behaves as

- Bleaching agent
 - Oxidizing agent
 - Reducing agent
 - Oxidizing agent and chlorinating agent
128. The reactivity of alkyl halides towards SN_2 reaction is
- $3^\circ > 2^\circ > 1^\circ$
 - $3^\circ > 1^\circ > 2^\circ$
 - $2^\circ > 3^\circ > 1^\circ$
 - $1^\circ > 2^\circ > 3^\circ$
129. Chloropicrin is also known as
- Amino-chloroform
 - Nitro-chloroform
 - Nitro-methane
 - Nitro-haloform
130. Chlorobenzene can be prepared by reacting aniline with
- Hydrochloric acid
 - Cuprous
 - Chlorine in presence of anhydrous aluminium chloride
 - Ice cold nitrous acid followed by treatment with cuprous chloride and HCl
131. Which of the following represents Westrosol ?
- CHCl_3
 - CH_2Cl_2
 - $\text{CHCl}_2\text{CH}_2\text{Cl}$
 - $\text{CCl}_2 = \text{CHCl}$

Ans -

- | | | |
|-----------|-----------|-----------|
| (120 - b) | (121 - a) | (122 - b) |
| (123 - c) | (124 - b) | (125 - c) |
| (126 - b) | (127 - c) | (128 - d) |
| (129 - c) | (130 - d) | (131 - d) |