CHEMISTRY

JEE MAIN AND ADVANCED

MOCK TEST 3

Example

1. The percentage of ethyl alchol by weight is 46% in a mixture of ethanol and water. The mole fraction of alcohol in this solution is

A. 0.25

B. 0.75

C. 0.46

D. 0.54

Answer: A

Watch Video Solution

2. The molality of a sulphuric acid solution is0.6 'mol//kg'. The total weight of the solution which contains $1kg$ of solvent.

A. 1000 g

B. 980.3 g

C. 1058.8 g

D. 1013.3 g

Answer: C

Watch Video Solution

3. A solution of urea received from some research laboratory has been marked mole fraction (x) and molality (m) at $10^\circ C$. While calculating its molality and mole fraction in the laboratory at $24^\circ C$, you will find

A. Mole fraction (X) and molality (m)

B. Mole fraction (2X) and molality (2m)

C. Mole fraction (X/2) and molality (m/2)

D. Mole fraction (X) and molality (2m)

Answer: A

Watch Video Solution

4. If X molal solution of a compound is benzene has mole fraction of solute equal to0.4. Then the value of X is

A. 4.2

B. 8.5

C. 3.2

D. 5.1

Answer: B

Watch Video Solution

5. Equal weight of NaCl and KCl are dissolved separately in equal volumes of solutions, then the molarity

A. Will be equal for the two solutions

B. For NaCl solution will be greater than that of KCl solution

C. For KCl solution will be greater than that of NaCl solution

D. For NaCl solution will be half of that of KCl solution

Answer: B

Watch Video Solution

6. 20 ml of 1N HCl, 10 ml of $\frac{N}{2}H_2SO_4$ and 30ml of $\frac{N}{3}HNO_3$ are mixed together and volume made to 1000 ml. Find out the normality of H^+ ions in the resulting solution

A. $\frac{7}{100}N$

B. $\frac{7}{200}N$

C. $\frac{7}{18}N$

D. $\frac{7}{9}N$

Answer: B

Watch Video Solution

7. Molarity of pure water is

A. $1M$

B. 55.55m

C. 27.73m

D. 80.55m

Answer: B

Watch Video Solution

8. Calculate the volume of water to be added to 400 ml of seminormal HCl solution to make it decinormal

A. 1000 ml

B. 1200 ml

C. 1600 ml

D. 2000 ml

Answer: C

Watch Video Solution

9. Calculate the amount of $AgNO_3$ which should be added to 60 ml of solution to perpare a concentration of 0.03 gml^{-1}

A. 1.8 g

B. 1.8 mg

C. 0.018 g

D. 0.018 mg

Answer: A

Watch Video Solution

10. The relation between molarity M and molality m is given by : {p= density of solution (mg/mL)}

m_1 = Molecular weight of solute)

A. $m = \frac{1000M}{1000p - M_1}$

B. $m = \frac{1000pM}{1000p - MM_1}$

C. $m = \frac{1000MM_1}{1000p - MM_1}$

D. $m = \frac{1000M}{1000p - MM_1}$

Answer: D

Watch Video Solution

11. Given that 10g of a dibasic acid (molar mass = 100) are present in 600 mL of the solution. The density of the solution is $1.02gmL^{-1}$. Molality of solution is

A. 0.17

B. 0.34

C. 0.99

D. 0.01

Answer: A

Watch Video Solution

12. Compare mass of pure NaOH in each of the aqueous solution

50 g of 40% (w/w) NaOH

50 ml of 50% (w/v) NaOH [$d_{soln} = 1.2\frac{g}{mL}$]

A. $(ii) > (i)$

B. $(i) > (ii)$

C. $(i) = (ii)$

D. Mass in (i) is double than mass in (ii)

Answer: A

Watch Video Solution

13. Aqueous solution of urea is 20% by mass of solution. Then the percentage of urea by mass of solvent is

A. 0.2

B. 0.25

C. 0.4

D. 0.8

Answer: B

Watch Video Solution

14. The quantity remaining constant on dilution is

A. Number of moles of solute

B. Molarity of the solution

C. Mole fraction of solute

D. Mass of the solution

Answer: A

Watch Video Solution

15. A concentration of 1 ppm means that

A. 1 kg of solution contains 1 mg of solute

B. 1 kg of solution contains 1 g of solute

C. 1 kg of solution contains 1 mL of solute

D. 1 g of solution contains 1 g of solute

Answer: A

Watch Video Solution

16. Rutherford's scattering experiment led to the discovery of

A. Nucleus

B. Distribution of electrons around the nucleus

C. Presence of neutrons in the nucleus

D. Both (1) and (3)

Answer: A

Watch Video Solution

17. The charge on the atom containing 8 protons, 9 neutrons and 9 electrons is

A. -1

B. +1

C. zero

D. -2

Answer: A

Watch Video Solution

18. Among the following the heaviest subatomic particle is

A. Electron

B. Neutron

C. Proton

D. Positron

Answer: B

Watch Video Solution

19. Identify the correct match '(## AAK_MCP_03_NEET_CHE_E03_019_Q001 ##)'

A. a(iv), b(i), c(ii), d(iii)

B. a(ii), b(i), c(iv), d(iii)

C. a(iv), b(iii), c(ii), d(i)

D. a(ii), b(iii), c(iv), d(i)

Answer: A

View Text Solution

20. Which of the following species has maximum charge to mass ratio?

A. D^+

B. H^+

C. He^+

D. He^{2+}

Answer: B

Watch Video Solution

21. Find out the correct graph

A. (## AAK_MCP_03_NEET_CHE_E03_021_A001 ##)'

B. (## AAK_MCP_03_NEET_CHE_E03_021_A002 ##)'

C. (## AAK_MCP_03_NEET_CHE_E03_021_A003 ##)'

D. (## AAK_MCP_03_NEET_CHE_E03_021_A004 ##)'

Answer: A

View Text Solution

22. The threshold frequency $v_{\circ}$ for a metal is 0.5 x 10^{14} s^(-1). What will be the kinetic energy of a photoelectron emitted when radiation of frequency v=1.5 x 10^{15} s^(-1) strikes on a metal surface?

A. $h \cdot 10^{14}$ J

B. $h \cdot 10^{16}$ J

C. $h \cdot 10^{15}$J

D. hJ

Answer: C

Watch Video Solution

23. Select the incorrect statement about cathode rays.

A. Deflected by electric and magnetic field

B. Stream of electron

C. Move with same speed as that of light

D. Travel in parabolic path

Answer: D

Watch Video Solution

24. Let the mass of electron is two times, mass of proton is $\frac{1}{4^{th}}$ and mass of neutron is 3/2 of original mass. Then, the atomic weight of $6^{C^{12}}$ atom

A. Increases by 37.5%

B. Decreases by 87.5%

C. Decreases by 12.5%

D. Remains same

Answer: C

Watch Video Solution

25. How are the radius of nucleus r and mass number(A) related to each other?

A. $r = R_{\circ} A^{\frac{1}{2}}$

B. $r = R_{\circ} A^{\frac{1}{3}}$

C. $r = R_{\circ} A^{3}$

D. $r = R_{\circ} A^{2}$

Answer: B

Watch Video Solution

26. A 200 W bulb emits monochromatic light of wavelenght 1400 A and only 10% of the energy is emitted as light. The number of photons emitted by the bulb per second will be

A. $1.4 \text{ x } 10^{18}$

B. $1.4 \text{ x } 10^{20}$

C. 1.4×10^{19}

D. 1.4×10^{21}

Answer: C

Watch Video Solution

27. Charge to mass ratio of electron was determined by

A. James Chadwick

B. J.J. Thomson

C. Goldstein

D. Ernest Rutherford

Answer: B

Watch Video Solution

28. On absorbing light of wavelength 3800 A, bromine molecule undergoes dissociation and form atoms. The kinetic energy of one bromine atom assuming that one quantum of radiation is absorbed by each molecule would be (Bond energy of $Br_2 = 190k\frac{J}{m}ol$)

A. $1.04 \text{ x } 10^{-19} J$

B. $2.08 \text{ x } 10^{-19} J$

C. $1.25 \text{ x } 10^{-5} J$

D. $6.25 \text{ x } 10^{-1} J$

Answer: A

Watch Video Solution

29. The correct order of increasing frequency of electromagnetic radiations is

A. $Microwave < UV < IR < 'γ - rays$

B. $Microwave < Radiowave < Visib \leq \ < X - rays$

C. $UV < Radiowave < X - rays < \gamma - rays$

D. $Radiowave < IR < Visib \leq \ < X - rays$

Answer: D

Watch Video Solution

30. Which of the following phenomenon does not support the particle nature of electromagnetic radiation?

A. Photoelectric effect

B. Line spectrum of hydrogen

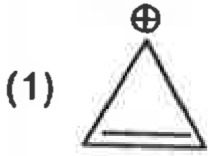
C. Interference

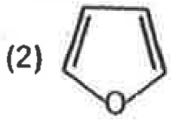
D. Blackbody radiation

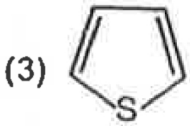
Answer: C

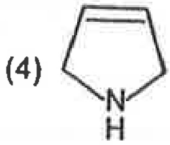
Watch Video Solution

31. Which among the following is not an aromatic species?

A. 

B. 

C. 

D. 

Answer: D

Watch Video Solution

32. The species which will not show hyperconjugation is

A. $CH_3C^+H_2$

B. $(CH_3)_3CC^+H_2$

C. $CH_3CH_2C^+H_2$

D. $CH_3C^+HCH_2$

Answer: B

Watch Video Solution

33. The shape of CH_3^+ and CH_3^- is respectively

A. plner,planer

B. plner,pyramidal

C. pyramidal,pyramidal

D. pyramidal,planer

Answer: B

Watch Video Solution

34. Which among the given compounds will react most readily with aq. $AgNO_3$?

A. 

B. 

C. 

D. 

Answer: D

View Text Solution

35. Non-aromatic compound among the given compounds is

A. 

B. 

C. 

D. 

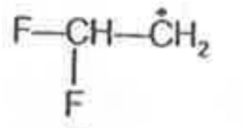
Answer: A

View Text Solution

36. Most stable radical among the following is

A. 

B. 

C. 

D. 

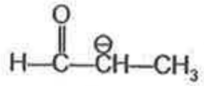
Answer: A

View Text Solution

37. In which of the given species, carbanion is sp^3 hybridised?

A. 

B. 

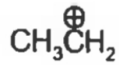
C. 

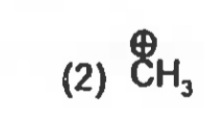
D. 

Answer: A

View Text Solution

38. Which of the following carbonium ion is most stabie?`

A. 

B. 

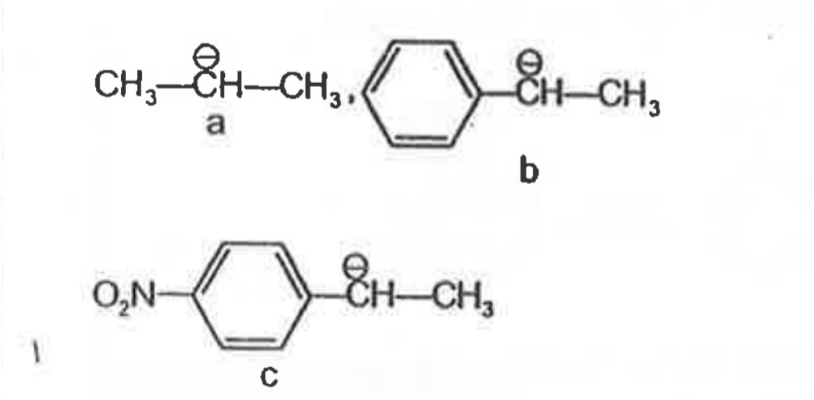
C. 

D.

Answer: C

View Text Solution

39. The correct stability order of the given carbanions is



A. $a > b > c$

B. $b > c > a$

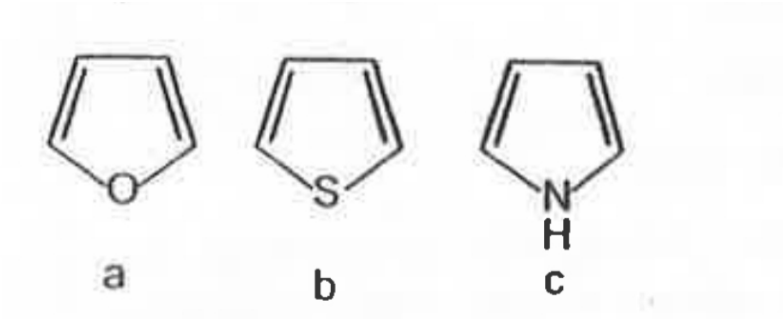
C. $c > b > a$

D. $c > a > b$

Answer: C

Watch Video Solution

40. Aromaticity order for the following aromatic compound will be



A. $a > b > c$

B. $c > b > a$

C. $b > c > a$

D. $c > a > b$

Answer: C

Watch Video Solution

41. Which one of the following is most stable?

A. 

B. (2) $(CH_3)_2C^{\ominus}$

C. (3) $CH_3CH_2^-$

D. (4) CH_3^-

Answer: A

View Text Solution

42. Identify the incorrect characteristic of carbenes,: CR_2

A. contain carbon atom with only six valence electrons

B. nutral specis

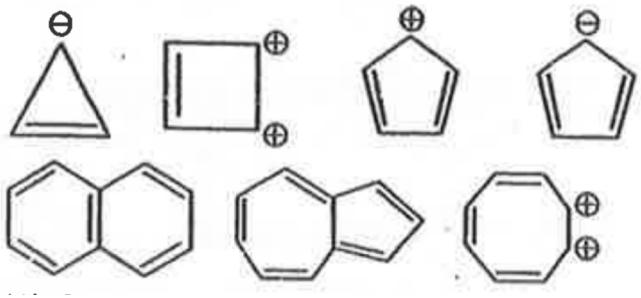
C. very reactive

D. normally neocleophylic

Answer: D

Watch Video Solution

43. Among the following species, how many are aromatic in nature?



A. 5

B. 4

C. 6

D. 3

Answer: A

Watch Video Solution

44. Peroxide plays a vital role in producing

A. carbocation

B. carbonation

C. free radical

D. carbene

Answer: C

Watch Video Solution

45. An aldehyde reacts with KCN to form cyanohydrin. In this reaction

A. CN^- acts as nucleophile and does nucleophilic addition

B. CN^- acts as nucleophile and does electrophilic addition

C. CN^- acts as an electrophilic and does electrophilic addition

D. CN^- acts as nuclcophile and does nucleophile substitution

Answer: A

Watch Video Solution

46. An addition reaction over alkene causes

A. Increase of unsaturation number in product W.r.t. reactant

B. Decrease of unsaturation number in product w.r.t reactant

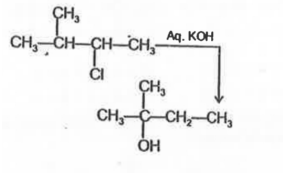
C. Formation of new bonds without breaking any bond

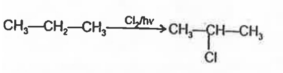
D. Both (2) and (3)

Answer: B

Watch Video Solution

47. Which of the following reaction involves rearrangement process?

A. 

B. 

C. 

D. 

Answer: A

View Text Solution

48. Attacking reagent on benzene in the above reaction is

A. An electrophile i.e. $Fe^{-C}l_2$

B. An electrophile i.e. Cl^+

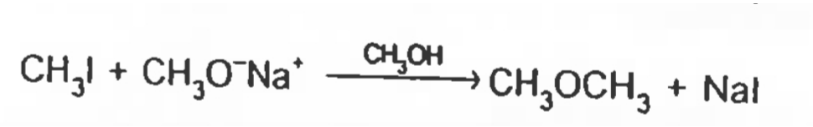
C. A nucleophile i.e. Cl^-

D. A nucleophile i.e. $FeCl_4^-$

Answer: B

Watch Video Solution

49. The following reaction falls under the category of



A. Nucleophilic addition reaction

B. Nucleophilic substitution reaction

C. Elimination reaction

D. Free radical reaction

Answer: B

Watch Video Solution

50. The intermediate formed in the electrophilic addition of HBr to propene is a

A. Carbocation

B. Carbanion

C. Carbene

D. Free radical

Answer: A

Watch Video Solution

51. How many beta-elimination products are possible for 2-bromobutane?

A. 1

B. 2

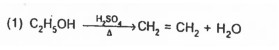
C. 3

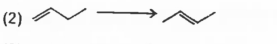
D. 4

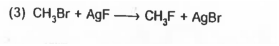
Answer: C

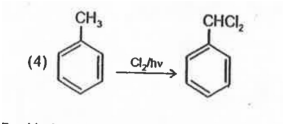
Watch Video Solution

52. Which one of the following reaction is an example of free radical substitution reaction?

A. 

B. 

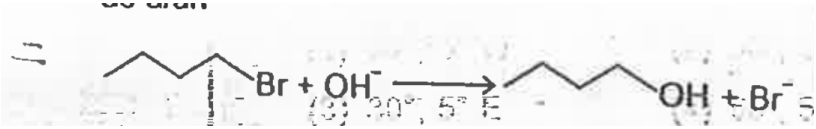
C. 

D. 

Answer: D

View Text Solution

53. Hydroxide ion in the following reaction behaves as a/an



A. Catalyst

B. Electrophile

C. Nucleophile

D. Reducing agent

Answer: C

Watch Video Solution

54. Alkenes react rapidly with bromine in non-nucleophilic solvents to form vicinal dibromides.This reaction can be best described as

A. Electrophilic addition

B. Nucleophilic addition

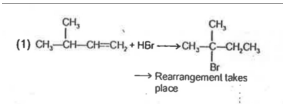
C. Nucleophilic substitution

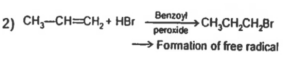
D. Electrophilic substitution

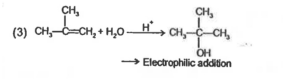
Answer: A

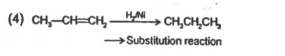
Watch Video Solution

55. Identify the incorrect match among the following

A. 

B. 

C. 

D. 

Answer: D

View Text Solution

56. In the following elimination reaction, hybridisation of carbon atom to which halogen is attached changes from

A. sp^2 to sp^3

B. sp^3 to sp^2

C. sp^2 to sp^2

D. sp^3 to sp^3

Answer: B

Watch Video Solution

57. Which element cannot be detected by Lassaigne's test?

A. Nitrogen

B. Sulphur

C. Oxygen

D. Phosphorus

Answer: C

Watch Video Solution

58. On treating sodium fusion extract with sodium nitroprusside, a violet colour was observed. This indicates the presence of which element in the organic compound?

A. Nitrogen

B. Sulphur

C. Chlorine

D. Bromine

Answer: B

Watch Video Solution

59. In a Carius tube, 0.25 g of an organic compound gave 0.699 g of barium sulphate. What is the percentage of sulphur in the compound? (Atomic weight of Ba = 137)

A. 0.425

B. 0.355

C. 0.452

D. 0.384

Answer: D

Watch Video Solution

60. During estimation of nitrogen present in an organic compound using Kjeldahl's method, the NH_3 evolved from 0.25 g of the compound was neutralised by 10 ml of 1.25 NH_2SO_4 What is the percentage of nitrogen in the organic compound?

A. 0.56

B. 0.35

C. 0.7

D. 0.66

Answer: C

View Text Solution

61. Boiling point is highest for which compound?

A. Pentane

B. 2-Methylbutane

C. 2, 2-dimethylpropane

D. 2-Methylpropane

Answer: A

Watch Video Solution

62. Number of moles of oxygen required for the complete combustion of butane are

A. 6

B. 7.5

C. 6.5

D. 7

Answer: C

Watch Video Solution

63. A mixture of two volatile liquids having little difference in their boiling points can be purified by

A. Distillation

B. Crystalization

C. Column chromatography

D. Fractional distillation

Answer: D

Watch Video Solution

64. In Duma's method for quantitative estimation of nitrogen, 0.5 g of an organic compound gave 100 ml of nitrogen collected at 27°C temperature and 680 mm of Hg pressure. What is the percentage composition of nitrogen in the sample? [Given aqueous tension at 27°C = 20mm Hg]

A. 0.2525

B. 0.1525

C. 0.2875

D. 0.1975

Answer: D

Watch Video Solution

65. Total number of isomeric products(excluding stereoisomers) formed on monochlorination of 2-methylbutane are

A. 3

B. 4

C. 5

D. 2

Answer: B

Watch Video Solution

66. Total number of conformational isomers obtained by C-C bond rotation of ethane are

A. 2

B. 4

C. 5

D. Infinite

Answer: D

Watch Video Solution

67. The catalyst used for converting methane to methanol in presence of air at 100 atm and 523 K is

A. Mo_2O_3

B. Ni

C. Cu

D. Zn

Answer: C

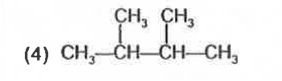
Watch Video Solution

68. Which alkane cannot be be produced using only one type of alkyl halide in Wurtz reaction?

A. $CH_3 - CH_3$

B. $Ch_3CH_2CH_2CH_3$

C. $CH_3CH_2CH_2CH_2CH_3$

D. 

Answer: C

Watch Video Solution

69. Which alkane will be formed as major product on electrolysis aqueous solution of sodium propanoate?

A. CH_4

B. CH_3CH_3

C. $CH_3CH_2CH_2CH_3$

D. $CH_3CH_2CH_3$

Answer: C

Watch Video Solution

70. The compound which gives propane on reduction with Zn and dilute hydrochloric acid is

A. $CH_3CH_2CH_2OH$

B. $CH_3CH = CH_2$

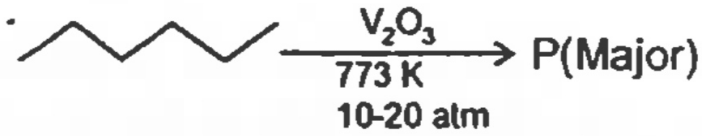
C. $CH - C \equiv CH$

D. $CH_3CH_2CH_2 - Cl$

Answer: D

Watch Video Solution

71. Which among the following is the major product (p) of the given reaction



A. (1) 

B. 

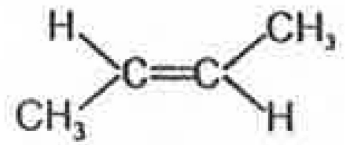
C. (3) 

D. 

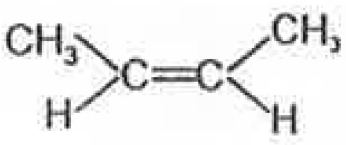
Answer: C

View Text Solution

72. Consider the two geometrical isomers of but-2-ene



trans



cis

The isomer with higher melting point and the reason for the same is respetively

A. Cis, symmetric bonding

B. Trans, close and symmetric packing

C. Cis, close packing

D. Trans, non- symmetric arrangement of similar groups around C=C

Answer: B

Watch Video Solution

73. An alkane, A on ozonolysis gives two products propanal and propanone. Which of the given statements is incorrect for A?

A. Compound A is pent-2-ene

B. Compound A on hydrogenation gives 2-methyl pentane

C. Compound A can undergo bromination reaction

D. Compound a forms 2-bromo, 2-methylpentane on treating with HBr

Answer: A

Watch Video Solution

74. Birch reduction is done in the presence of

A. Palladium supported over charcoal

B. $Na/liq.\ NH_3$

C. $H_2\ /Nickel$

D. $Alc.\ KOH$

Answer: B

Watch Video Solution

75. A compound 'X', molecular formula $C_4H_8Br_2$ on treatment with zinc in an alcoholic solution, forms an alkene Y. Compounds X and Y respectively are

A. 1, 2-dibromobutane and but-2-ene

B. 1, 3-dibromobutane and but-1-ene

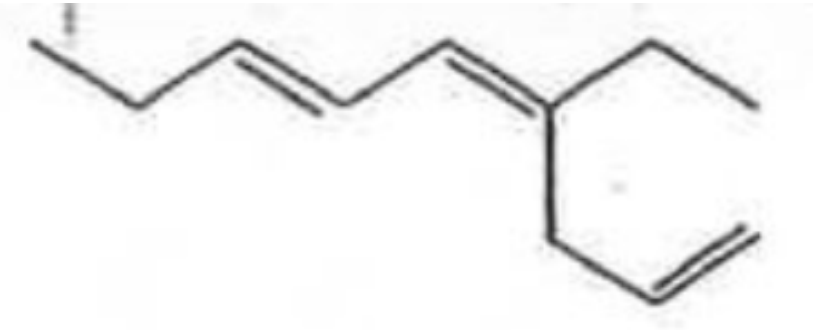
C. 1, 2-dibromobutane and but-1-ene

D. 1, 4-dibromobutane and but-2-ene

Answer: C

Watch Video Solution

76. The IUPAC name of the given compound is



Compound is

A. 4-ethyl-1, 4, 6-nonatriene

B. 6-ethyl-3, 6, 8-nonatriene

C. 4-ethyl-1, 4, 6-dectraine

D. 6-ethyl-3, 6, 8-dectriene

Answer: A

Watch Video Solution

77. The total number of sigma bonds formed by $sp^2 - sp^2$ overlapping in 1, 3-butadiene is

A. 5

B. 2

C. 3

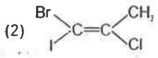
D. 4

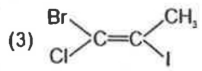
Answer: C

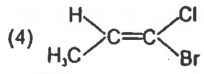
Watch Video Solution

78. Which of the following represents an E isomer?

A. 

B. 

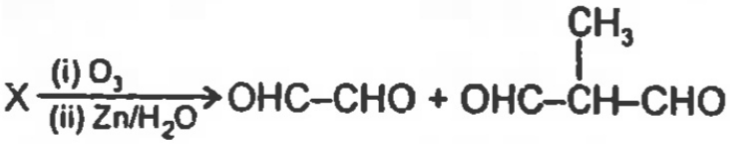
C. 

D. 

Answer: C

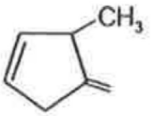
View Text Solution

79. Consider the following reaction



The compound X is

(1)

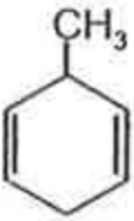


A.

(2)

B.

(3)



C.

(4) 

D.

Answer: B

Watch Video Solution

80. Which of the given statements is incorrect?

A. Peroxide effect proceeds via free radical chain mechanism

B. Peroxide effect is not observed in case of HCI

C. Tertiary carbocation is less stable than secondary carbocation

D. Kharasch effect is applicable for unsymmetrical alkenes

Answer: C

Watch Video Solution

81. Hydration of which of the given compounds leads to the formation of 2-methylpropan-2-ol?

A. 2-methylpropane

B. 1-bromopropane

C. 2-methylpropene

D. Propene

Answer: C

Watch Video Solution

82. The IUPAC name of dimethylacetylene is

A. propyne

B. ethyle acetylene

C. But-1-yne

D. But-2-yne

Answer: D

Watch Video Solution

83. The correct order of increasing acidic character is

A. 

B. 

C. 

D. 

Answer: C

View Text Solution

84. All of the following are the example of benzenoid aromatic compounds, except

A. Tolune

B. Azulene

C. Naphthalene

D. Anhracene

Answer: B

Watch Video Solution

85. Choose the incorrect statement from the following

A. Benzene is planer molecule

B. All the carbon atoms in benzene are sp^2hybridised

C. Absence of pure double bond in benzene accounts for the reluctance of benzene to show addition reactions under normal conditions

D. Presence of delocalised π electrons in benzene makes it less stable than hypothetical cyclohexatriene

Answer: D

Watch Video Solution

86. which among the following statement is incorrect regarding the product formed when two molecules of HBr add to ethyne?

A. IUPAC name is 1,1-dibromomethene

B. it is a geminal dihalide

C. It is a position isomer of 1,2-dibromomethene

D. It has a planer structure

Answer: D

Watch Video Solution

87. An example of a antiaromatic species is

A. 

B. 

C. 

D. 

Answer: D

View Text Solution

88. Number of sp hybridised carbon atoms in But-2-yne is

A. 1

B. 2

C. 3

D. 4

Answer: B

View Text Solution

89. Total number of pi-electrons in benzene is

A. 2

B. 3

C. 4

D. 6

Answer: D

Watch Video Solution

90. Total number of hydrogen molecules required to form ethane from ethyne is

A. One

B. Two

C. Three

D. Four

Answer: B

Watch Video Solution

91. In anthrcene ,number of pi electrons is equal to x. the value of x is

A. 6

B. 10

C. 14

D. 12

Answer: C

Watch Video Solution

92. The colour chage observed when excess ethyne is passed through the solution of bromine water is

A. Colourless to reddish brown

B. Colourless to green

C. reddish brown to colourless

D. Pink to colourless

Answer: C

Watch Video Solution

93. For clear water ,its BOD should be less than

A. 50 ppm

B. 17 ppm

C. 10ppm

D. 5ppm

Answer: D

Watch Video Solution

94. All the following are the effects of depletion of ozone layer, except

A. It can cause skin cancer

B. It increases transpiration in plants and hence decreases soil moisture

C. It increases the acidity of soil

D. It damages the paints over the buildings causing them to fade faster

Answer: C

Watch Video Solution

95. Which of the following is not an example of organochlorine which shows biomagnification?

A. Endrin

B. DDT

C. $HClO_4$

D. Dieldrin

Answer: C

Watch Video Solution

96. Which of the following gases combines with haemoglobin to form a very stable compound and reduces the oxygen carrying capacity of blood?

A. CO_2

B. CO

C. SO_2

D. NO_2

Answer: B

Watch Video Solution

97. In which compound the reacting electrophile will be directed to ortho and para position ?

A. 

B. 

C. 

D. 

Answer: B

View Text Solution

98. Hydrogenation of benzene is done by

A. $NaBH_4$

B. $\frac{H_2}{N}i$

C. HCl

D. $NaNH_2$

Answer: B

Watch Video Solution

99. In which of the following zones of atmosphere ozone layer is present ?

A. Troposphere

B. Stratosphere

C. Mesosphere

D. Exosphere

Answer: B

Watch Video Solution

100. Sometimes , the colour of photochemical smog becomes brown . The reason for this brown appearance is the excess of

A. NO_2

B. SO_2

C. PAN

D. CH_4

Answer: A

Watch Video Solution

101. Sulphonation of benzene is done by which reagent?

A. Conc. $HNO_3 + Conc.\ H_2SO_4$

B. Fuming sulphuric acid

C. SO_2

D. Dilute sulphuric acid

Answer: B

Watch Video Solution

102. Ethylidene chloride is a/an

A. Gem-dihalide

B. Allylic halide

C. Vinylic halide

D. Vic-dihalide

Answer: A

Watch Video Solution

103. Which of the following will not lead to the formation of an alkyl halide?

A. 

B. 

C. 

D. 

Answer: D

View Text Solution

104. Which one of the following is liquid at room temperature?

A. CH_3Cl

B. C_2H_5Cl

C. CH_3Br

D. C_2H_5Br

Answer: D

Watch Video Solution

105. The correct order of boiling points of alkyl halides is

A. $CH_3F > CH_3Cl > CH_3Br > CH_3I$

B. $CH_3F > CH_3Br > CH_3Cl > CH_3I$

C. $CH_3I > CH_3Br > CH_3Cl > CH_3F$

D. $CH_3Cl > CH_3Br > CH_3F > CH_3I$

Answer: C

Watch Video Solution

106. Which of the following alkyl halide will undergo S_N1 reaction is

A. $(CH_3)_3C - F$

B. $(CH_3)_3C - Cl$

C. $(CH_3)_3C - Br$

D. $(CH_3)_3C - I$

Answer: D

View Text Solution

107. The compound which is least reactive among the following in a nucleophilic substitution reaction is

A. $CH_2 = CHCl$

B. CH_3CH_2Cl

C. $CH_2 = CHCH_2Cl$

D. $(CH_3)_3C - Cl$

Answer: A

Watch Video Solution

108. Which of the following statement(s) is/are incorrect regarding S_N1 reaction?

I) Rearrangement is possible.

II) Proceeds with complete inversion of configuration.

III) Rate depends on polarity of solvent.

IV) The strength of the nucleophile is important in rate determining step.

A. II,IV only

B. I, II, IV only

C. III only

D. I, II only

Answer: A

Watch Video Solution

109. Which of the following molecules contain a chiral centre?

A. 2-chloropropan-2-ol

B. 1-chlorobutane

C. 2-chloropropane

D. 2-chlorobutane

Answer: D

Watch Video Solution

110. Two enantiomers differ with respect to

A. Melting point

B. Refractive index

C. Direction of rotation of plane polarised light

D. Solubility in achiral solvents

Answer: C

Watch Video Solution

111. The correct statement regarding the transition state of a S_N2 reaction in alkyl halides

A. Lower in energy than the starting materials

B. Involves both the nucleophile and leaving group

C. Closely resembles a carbonium ion intermediate

D. The carbon where substitution takes place is sp^3 hybridised

Answer: B

Watch Video Solution

112. Nucleophilic substitution reaction of optically active halide, PIC is accompanied by

A. Inversion of configuration

B. Retention of configuration

C. Racemisation

D. Both (1) and (3)

Answer: C

View Text Solution

113. The correcr order of ease of elimination of following groups in the E2 reaction is

A. $-F > -Cl > -Br > -I$

B. $-I > -Br > -F >_C l$

C. $-I > -Br > -Cl > -F$

D. $-F > -Cl > -I > -Br >$

Answer: C

Watch Video Solution

114. Ketol in the following compounds is

A.  .

B.  .

C. 

D. 

Answer: D

View Text Solution

115. Product obtained when benzaldehyde and acetophenone undergo cross aldol condensation is

A. 1, 4 – Diphenylprop -2- en -1- one

B. 1,3 - Diphenylprop -2- en -1- one

C. 1,3- Diphenylprop -1- ene -2- one

D. 1, 4 – Diphenylprop -1- ene -2- one

Answer: B

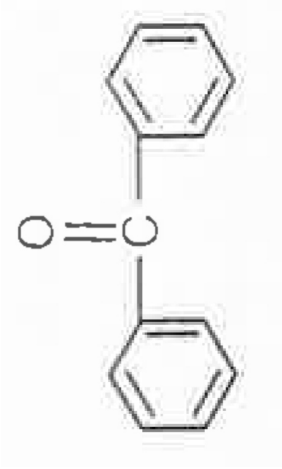
Watch Video Solution

116. Among the following compounds, select the ones which does not undergo aldol condensation.

A.

B.

C.



D. 

Answer: C

View Text Solution

117. Cannizzaro reaction is an example of

A. Disproportionation reaction

B. Decomposition reaction

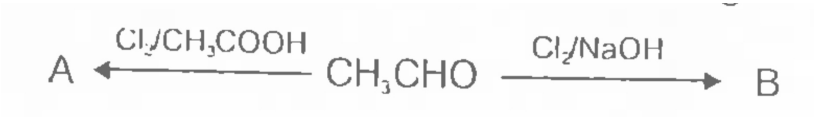
C. Condensation reaction

D. Displacement reaction

Answer: A

Watch Video Solution

118. Identify products A and B in the following reaction



A.

B.

C.

D.

Answer: A

View Text Solution

119. Which of the following compound is not affected by acidic or alkaline $KMnO_4$?

A.

B.

C. 

D. Both (2) &(3)

Answer: C

View Text Solution

120. Acidic hydrolysis of 2-methylbenzamide followed by heating with alkaline potassium permanganate and acidic work up produces

A. Benzoic acid

B. Glutaric acid

C. Oxalic acid

D. Phthalic acid

Answer: D

View Text Solution

121. Product obtained when cyclohexene is oxidised with acidic potassium dichromate will be

A. Succinic acid

B. Adipic acid

C. Benzoic acid

D. Terephthalic acid

Answer: B

View Text Solution

122. Incorrect statement with respect to physical properties of carboxylic acids is

A. Carboxylic acids have higher boiling point than alcohols of comparable molecular masses

B. Most carboxylic acids exist as dimer in the vapour phase

C. Solubility of carboxylic acids in water increases with increasing number of carbon atoms

D. Carboxylic acids are also soluble in less polar organic solvents like benzene, ether, chloroform etc.

Answer: C

Watch Video Solution

123. Among the following compounds, which will react with carbonates and bicarbonates to evolve carbon dioxide gas?

A. 

B. 

C. 

D. 

Answer: C

View Text Solution

124. pK, value of trifluoroacetic acid, benzoic acid and acetic acid are respectively

A. 4.76, 4:19 and 0:23

B. 4-19, 4-76 and 0-23

C. 0-23, 4-76 and 4-19

D. 0:23, 4-19 and 4.76

Answer: D

Watch Video Solution

125. One of the product formed when adipic acid is heated with P_2O_5 is

A. 

B. 

C. 

D. 

Answer: B

View Text Solution

126. One of the product formed in the electrolysis of sodium salt of succinic acid is

A. Ethane

B. Butene

C. Ethylene

D. Acetylene

Answer: C

Watch Video Solution

127. Carboxylic acid in which Hell-Volhard-Zelinsky reaction cannot be carried out?

A. 

B. 

C. 

D. 

Answer: B

View Text Solution

128. Amine produced by the Hoffmann degradation of benzamide is

A. Secondary amine

B. Aliphatic amine

C. Tertiary amine

D. Aromatic amine

Answer: D

Watch Video Solution

129. Identify the amine which cannot be prepared by Gabriel phthalimide synthesis

A. 

B. 

C. 

D. 

View Text Solution

130. The correct order of boiling points of isomeric amines is

A. tertiary gtsecondary gtprimary

B. secondarygt primarygt tertiary

C. primary gtsecondarygt tertiary

D. secondary gttertiary gtprimary

Answer: C

Watch Video Solution

131. The correct order of value of pk_b the following amines is (i)$C_2H_5NH_2$ (ii)$(C_2H_5)_2NH$(iii)$(C_2H_5)_3N$

A. $(i) > (ii) > (iii)$

B. $(iii) > (ii) > (i)$

C. $(ii) > (i) > (iii)$

D. $(i) > (iii) > (ii)$

Answer: D

Watch Video Solution

132. which of the following amines form foul smelling compound on heating with chloroform and ethanol KOH?

A. 

B. 

C. 

D. Both(1)&(3)

Answer: D

View Text Solution

133. Compound (s) is used for the distinction of primary, secondary and tertiary amines is/are

A. alkaline chloroform

B. benzenesulphonyl chloride

C. p-toluenesulfonyl chloride

D. both (2)& (3)

Answer: D

Watch Video Solution

134. The product which is obtained in least amount the direct nitration of aniline is

A. 

B. 

C. 

D. both (2) and (3)

Answer: A

View Text Solution

135. The major product formed when aniline reacts with concentrated H_2SO_4 followed by heating with H_2SO_4 at 453-473k is

A. 

B. 

C. 

D. 

Answer: A

View Text Solution

136. Which of the following statement is incorrect?

A. benzenediazonium chloride is a colourless crystalline solid

B. benzenediazonium chloride is readily soluble in water

C. benzenediazonium fluoroborate is soluble in water

D. benzene diazonium fluoroborate is stable at room temperature

Answer: C

View Text Solution

137. Coupling of benzene diazonium chloride and phenol to form p- hydroxy azobenzene (orange dye) is an example of

A. elimination reaction

B. electrophilic substitution reaction

C. nucleophilic substitution reaction

D. electrophilic addition reaction

Answer: B

Watch Video Solution

Exercise

1. Among the following halide ions $\left(X^{-}\right)$ reaction, which is feasible?

View Text Solution

2. The number of all possible products excluding stereoisomers obtained on monochlorination of n-butane and iso-butane are respectively

A. 2 and 3

B. 3 and 2

C. 2 and 1

D. 2 and 2

Answer: D

Watch Video Solution

3. The lisat product (B) formed in the following reaction is

A.

$$CH_3 - CH_2 - Br + Mg - - - \rightarrow (\hat{} \, dryethanol)A - - \rightarrow (\hat{}$$

B. $CH_3 - CH_2 - OH$

C. $CH_3 - CH_3$

D. $CH_3 - - CH_2 - - COOH$

Answer: C

View Text Solution

4. In dénydrohalogenation of tert-pentyl bromide using alc. KOH, major product obtained is

A. 2-Methylbut-1-ene

B. 2-Methylbut-2-ene

C. Pen! 1-ene

D. Pent-2 ene

Answer: B

Watch Video Solution

5. The one of the product formed in the reaction is $(\forall K_M CP_{35} \_ N \exists T_C HE_E 35_{005} \_ Q01)$

A. Substituted haloarene

B. Aromatic hydrocarbon

C. Organometallic compound

D. Substituted haloalkane

Answer: B

View Text Solution

6. Which of the following is not one of the products formed in the reaction?

$2CH_3 - CH_2 - \ - CI + 2Na - \ \rightarrow^{dryethanol}$

A. $CH_3 - CH_3$

B. $CH_2 = CH_2$

C. $CH_3 - CH_2 - CH_2 - CH_3$

D. $CH_3 - CH_2 - CH_3$

Answer: D

Watch Video Solution

7. For dehyetohalogenation, the order of reactivity of alkyl halides considering E1 mechanism is

A. $1^\circ > 2^\circ > 3^\circ$

B. $2^\circ > 1^\circ > 3^\circ$

C. $2^\circ > 3^\circ > 1^\circ$

D. $3^\circ > 2^\circ > 1^\circ$

Answer: D

Watch Video Solution

8. The following reaction is an example of $(\forall K_M CP_{35\_N} \exists T_C HE_E 35_{008\_Q} 01)$

A. Fittig reaction

B. Wurtz-fittig reaction

C. Sandmeyer's Reaction

D. Wurtz reaction

Answer: D

View Text Solution

9. Find the major product of the following reaction $(\forall K_M CP_{35\_N} \exists T_C HE_E 35_{009\_Q} 01)$

View Text Solution

10. Which of the following molecules would have a carbon-halogen bond least susceptible to nucleophilic aromatic substitution reaction?

View Text Solution

11. The product A obtained in the reaction is called $(\forall K_M CP_{35\_} N \exists T_C HE_E 35_{011\_} Q01)$

A. Salicylic acid

B. Citric acid

C. Picric acid

D. Benzoic acid

Answer: C

View Text Solution

12. Arrange the following compounds in order of increasing reactivity towards nitration $(\forall K_M CP_{35} \_ N \exists T_C HE_E 35_{012} \_ Q01)$

A. (ii) lt (i) lt (iii) lt (iV)

B. (iii) lt (ii) lt (iV) lt (i)

C. (iv) lt (iii) lt (ii) lt (i)

D. (iii) lt (ii) lt (i) lt (iv)

Answer: B

View Text Solution

13. In electrophilic substitution reactions of haloarenes, halogen atom is

A. Slightly activating and o, p-directing

B. Slightly deactivating and meta directing

C. Slightly activating and meta directing

D.

Answer: C

View Text Solution

14. The major product formed in the reaction is $(\forall K_M CP_{35} \_ N \exists T_C HE_E 35_{014} \_ Q01)$

View Text Solution

15. The given reaction is an example of $(\forall K_M CP_{35} \_ N \exists T_C HE_E 35_{015} \_ Q01)$

A. Wurtz reaction

B. Sandmeyer's reaction

C. Friedel-Crafts reaction

D. Fittig reaction

Answer: C

View Text Solution

16. Chemical formula of Freon 12 is

A. CH_2F_2

B. CH_2CL_2

C. $CCLF_3$

D. CCL_2F_2

Answer: D

View Text Solution

17. Which product is expected to predominate in the given reaction $(\forall K_M CP_{35} \_ N \exists T_C HE_E 35_{017} \_ Q01)$

View Text Solution

18. An important chlorinated organic insecticide is prepared from the given reaction. The structure of A is $(\forall K_M CP_{35} \_ N \exists T_C HE_E 35_{018} \_ Q01)$

View Text Solution

19. For the given reaction, the major product obtained is $(\forall K_M CP_{35} \_ N \exists T_C HE_E 35_{019} \_ Q01)$

View Text Solution

20. The correct structure of product B, formed in the reaction sequence is $(\forall K_M CP_{35} \_ N \exists T_C HE_E 35_{020} \_ Q01)$

View Text Solution

21. The reaction intermediate formed in the given reaction bears $(\forall K_M CP_{35} \_ N \exists T_C HE_E 35_{021} \_ Q01)$

A. Positive charge

B. Negative charge

C. Both positive and negative charge

D. No charge

Answer: D

View Text Solution

22. What are the products obtained from the following reaction?

$CHCL_3 + O_2 OVERSET(light) - - \rightarrow$

A. HCHO and HCI

B. HCOCI and HCI

C. $COCI_2$ and HCI

D. $COCI_2$ and HCOCI

Answer: C

View Text Solution

23. Identify P in the following series of reactions $(\forall K_M CP_{35} \_ N \exists T_C HM_E 35_{023} \_ Q01)$

View Text Solution

24. $(\forall K_M CP_{35} \_ N \exists T_C HE_E 35_{024} \_ Q01)$ Total number of isomers (including stereo isomers) of B obtained in the above reaction are

A. 2

B. 3

C. 4

D. 5

Answer: D

View Text Solution

25. Which of the following is an allylic alcohol?

View Text Solution

26. Choose the secondary alcohol among the following

A. Isobutyl alcohol

B. Isopropyl alcohol

C. Isopentyl alcohol

D. Neopentyl alcohol

Answer: B

Watch Video Solution

27. The alcohol having least solubility in water is

A. Ethanol

B. 1-Propanol

C. 1-Butanol

D. 1-Pentanol

Answer: D

Watch Video Solution

28. The correct structure of hydroquinone or quinol is

View Text Solution

29. In acid catalysed hydration of alkenes, reaction intermediate formed is

A. Free radical

B. Carbocation

C. Carbanion

D. Carbene

Answer: B

Watch Video Solution

30. The products formed in the reaction are ($\forall K_M CP_{36}\_N \exists T_C HE_E 36_{006}\_Q01$)

View Text Solution

31. Identify the products obtained in the following reaction ($\forall K_M CP_{36}\_N \exists T_C HE_E 36_{007}\_Q01$)

View Text Solution

32. Which of the following product is expected to form 13. Pa in the given reaction? ($\forall K_M CP_{36}\_N \exists T_C HE_E 36_{008}\_Q01$)

View Text Solution

33. Phenol is also known as

A. Phenolic acid

B. Hydroxy cinnamic acid

C. Carbolic acid

D. Hydroxy carbolic acid

Answer: C

Watch Video Solution

34. The product, P formed in the reaction is ($\forall K_M CP_{36\_N} \exists T_C HE_E 36_{010\_Q} 01$)

View Text Solution

35. Correct order of boiling point is

A. n-butane lt ethoxyethane lt pentan-1-ol

B. n-butane ltpentan-1-olltethoxyethane

C. Ethoxyethane ltn-butane lt pentan-1-ol

D. Pentan-1-ol ltethoxyethane ltn-bulane

Answer: A

View Text Solution

36. When cumene is oxidised in the presence of air followed by treatment with dilute acid, the products obtained are

A. Benzoic acid and Methanol

B. Phenol and Acetone

C. Benzoic acid and Acetone

D. Phenol and Acetaldehyde

Answer: B

Watch Video Solution

37. Products A, B and C in the following reactions are ($\forall K_M CP_{36}\_N \exists T_C HE_E 36_{013}\_Q01$)

View Text Solution

38. ($\forall K_M CP_{36}\_N \exists T_C HE_E 36_{014}\_Q01$) Major product P in the above reaction is

View Text Solution

39. ($\forall K_M CP_{36}\_N \exists T_C HE_E 36_{015}\_Q01$)The reagents, A and B are respectively

A. $\frac{H_2}{P}t, NaBH_4$

B. $H_2 \emptyset H^+, NaBH_4$

C. $NaBH_4$,$LiAIH_4$

D. $LiAIH_4$,$NaBH_4$

Answer: D

View Text Solution

40. Which of the following statement is correct for alcohols?

A. They react only as a nucleophile

B. They react only as an electrophile

C. They react both as a nucleophile and an electrophile

D. They neither react as a nucleophile nor an electrophile

Answer: C

Watch Video Solution

41. The reaction in which hydrogen is not one of the product is

View Text Solution

42. Arrange the following in order of increasing basic strength.

View Text Solution

43. The correct decreasing order of acidic character of following phenols is

View Text Solution

44. Acetylation of salicylic acid produces

A. Adipic acid

B. Picric acid

C. Glutaric acid

D. Aspirin

Answer: D

View Text Solution

45. Product formed in the following reaction is ($\forall K_M CP_{36\_N} \exists T_C HE_E 36_{020\_Q} 01$)

View Text Solution

46. Consider the following reaction and identify the products ($\forall K_M CP_{36\_N} \exists T_C HE_E 36_{022\_Q} 01$)

View Text Solution

47. Formation of Salicylic acid from phenol (Kolbe's reaction) is an example of

A. Electrophilic addition reaction

B. Nucleophilic addition reaction

C. Electrophilic substitution reaction

D. Nucleophilic substitution reaction

Answer: C

Watch Video Solution

48. Reaction intermediate formed in the formation of salicylaldehyde from phenol (Reimer-Tiemann reaction) is

A. Carbocation

B. Free radical

C. Carbanion

D. Carbene

Answer: D

Watch Video Solution

49. The structure the product formed on oxidation of phenol with chromic acid is

View Text Solution

50. Major product P formed in the reaction is ($\forall K_M CP_{36\_} N \exists T_C HE_E 36_{026\_} Q01$)

View Text Solution

51. Which of the following molecules has zero dipole moment?

View Text Solution

52. Product B in the following reaction is($\forall K_M CP_{36\_N} \exists T_C HE_E 36_{028\_Q} 01$)

View Text Solution

53. Identify A and B in the following sequence of reaction ($\forall K_M CP_{36\_N} \exists T_C HE_E 36_{029\_Q} 01$)

View Text Solution

54. The final product D formed in the following series of reactions is ($\forall K_M CP_{36\_N} \exists T_C HE_E 36_{030\_Q} 01$)

View Text Solution

55. Order of reactivity of hydrogen halides towards ethers is

A. $HCl > HBr > HI$

B. $HI > HBr > HCl$

C. $HBr > HI > HCl$

D. $HBr > HCl > HI$

Answer: B

Watch Video Solution

56. The major product formed in the following reaction is $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{002} \_ Q01)$

A. 4-methoxy acetophenone

B. 2-methoxy acetophenone

C. 2-methoxy anisole

D. 4-methoxy anisole

Answer: A

View Text Solution

57. The following reaction takes place through

$CH_3 - O - CH_2 - CH_3 + HI$ to

$CH_3 - I + CH_3 - CH_3 - CH_2 - OH$

A. S_N1 mechanism

B. S_N2 mechanism

C. S_N1 in first step and E2 in second step

D. S_N2 in first step and E1 in second step

Answer: B

Watch Video Solution

58. Which of the following is a appropriate set of reactants for the preparation of ethoxy benzene?

View Text Solution

59. IUPAC nome of the following compound is $(\forall K_M CP_{37\_} N \exists T_C HE_E 37_{005\_} Q01)$

A. 3-methylcyclohexanal

B. 4-methylcyclohexanal

C. 3-methylcyclohexane carbaldehyde

D. 4-methylcyclohexane carbaldehyde

Answer: C

View Text Solution

60. The common name of Prop-2-enal is

A. Catechol

B. Acrolein

C. Vanillin

D. Valeraldelyde

Answer: B

Watch Video Solution

61. For denaturation of ethanol

A. Copper sulphate is added to give colour and pyridine for foul smell

B. Nickel sulphate is added to give colour and aniline for foul smell

C. Copper sulphate is added to give colour and aniline for foul smell

D. Nickel sulphate is added to give colour and pyridine for foul smell

Answer: A

Watch Video Solution

62. In aldehydes and ketones

A. Carbonyl carbon is nucleophilic and carbonyl oxygen is electrophilic

B. Carbonyl carbon, is slectrophilic and carbonyl oxygen is nucleophilic

C. Both are electrophilic

D. Both are nucleophilic

Answer: B

Watch Video Solution

63. The correct structure of the product of the following reaction will be

$(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{009} \_ Q01)$

View Text Solution

64. Identify the major product obtained when anisole reacts with bromine in ethanoic acid

View Text Solution

65. Major product formed in the following reaction is $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{011} \_ Q01)$

A. $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{011} \_ A01)$

B.

C.

D.

Answer: A

View Text Solution

66. Reaction of $(\forall K_M CP_{37} _ N \exists T_C HE_E 37_{012} _ Q01)$with HI (one mole) leads to the formation of which one of the following as major product?

View Text Solution

67. In the following reaction: $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{013} \_ Q01)$ The major product, P is

View Text Solution

68. Major product obtained in the reaction is $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{014} \_ Q01)$

View Text Solution

69. Consider the following sequence of reaction: $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{015} \_ Q01)$ The final product, D is

View Text Solution

70. Which of the following compound(s) will give glyoxal as one of the products on reductive ozonolysis?

View Text Solution

71. Addition of water to ethyne in the presence of H_2SO_4 and HgSO_4` gives

A. Acetone

B. Acetaldehyde

C. Formaldehyde

D. Glyoxal

Answer: B

Watch Video Solution

72. The given reaction is an example of $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{018} \_ Q01)$

A. Stephen reaction

B. Rosenmund reduction

C. Etard reaction

D. Gattermann Koch reaction

Answer: B

View Text Solution

73. Product obtained in the reaction $(\forall K_M CP_{37\_} N \exists T_C HE_E 37_{019\_} Q01)$

A. $(\forall K_M CP_{37\_} N \exists T_C HE_E 37_{019\_} A01)$

B.

C.

D.

Answer: A

View Text Solution

74. The correct name and product of given reaction are respectively $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{020} \_ Q01)$

A. Kolbe's reaction,

B. Gatterman reaction,

C. Gatterman-Koch reaction, $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{020} \_ A01)$

D. Stephen reaction,

Answer: C

View Text Solution

75. The structure of product, B formed in the given reaction is $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{021} \_ Q01)$

A. $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{021} \_ A01)$

B.

C.

D.

Answer: A

View Text Solution

76. The incorrect statement for aldehydes and ketones is

A. Methanal, ethanal and propanone are miscible in water

B. All aldehydes and ketones are fairly soluble in organic solvents like benzene, chloroform, etc.

C. Many naturally occurring aldehyde and ketones are used in the blending of perfumes

D. All aldehydes and ketones are fragrant

Answer: D

Watch Video Solution

77. The shape of the intermediate formed In nucleophilic addilion reaction of aldehydes and ketones is

A. Trigonal planar

B. Tetrahedral

C. Trigonal bipyramidal

D. Bent

Answer: B

Watch Video Solution

78. Ketones are generally less reactive than Aldehydes in nucleophilic addition reactions because

A. Carbonyl carbon in ketones is sterically more protected and more electrophilic

B. Carbonyl carbon in aldehydes is sterically more protected and more electrophilic

C. Carbonyl carbon in aldehydes is sterically less protected and less electrophilic

D. Carbonyl carbon in ketones is sterically more protected and less electrophilic

Answer: D

Watch Video Solution

79. Arrange the following compounds in order of increasing reactivity towards nucleophilic addition reaction $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{025} \_ Q01)$

A. $(II) < (I) < (III)$

B. $(I) < (II) < (III)$

C. $(II) < (III) < (I)$

D. $(III) < (II) < (I)$

Answer: C

View Text Solution

80. Addition of sodium hydrogen sulphite does not take place in

View Text Solution

81. In the given reaction, product, A formed is $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{027} \_ Q01)$

A. Laevorotatory

B. Racemic nixture

C. Meso compound

D. Dextrorotatory

Answer: B

View Text Solution

82. Product formed in the reaction $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{028} \_ Q01)$

A. Hemiacetal

B. Acelal

C. Hemiketal

D. Ketal

Answer: B

View Text Solution

83. Product D in the following reaction is $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{029} \_ Q01)$

View Text Solution

84. Reactant. A which form B on ozonolys is $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{030} \_ Q01)$

View Text Solution

85. Compound represented by general formula $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{031} \_ Q01)$

A. Imine

B. Hydrazone

C. Oxime

D. Semicarbazone

Answer: D

View Text Solution

86. Tollen's reagent is

A. Aqueous copper sulphate

B. Alkaline sodium potassium tartarate

C. Ammoniacal silver nitrate

D. Ammoniacal silver chloride

Answer: C

Watch Video Solution

87. Compound which does not give yellow ppt, when treated with l_2 in alkali is

View Text Solution

88. Structure of product formod in the reaction is $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{034} \_ Q01)$

View Text Solution

89. Identify the products A and B in the following reaction $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{035} \_ Q01)$

A. $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{035} \_ A01)$

B.

C.

D.

Answer: A

View Text Solution

90. Reaction given below is an example of $(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{036} \_ Q01)$

A. Wolff-Kishner reduction

B. Clemmensen reduction

C. Rosenmund reaction

D. Stephen reduction

Answer: B

View Text Solution

91. Product obtained in the following reaction is

$(\forall K_M CP_{37} \_ N \exists T_C HE_E 37_{037} \_ Q01)$

View Text Solution

92. Carbonyl compound(s) which will not reduce Fehling's solution is/are

View Text Solution

93. Equal amount of aqueous solution of $CuSO_4$ and alkaline sodium potassium tartarate is mixed and treated with aliphatic aldehyde, then

A. Red brown ppt of Cu_2O is formed

B. Red brown ppt of Cuo is formed

C. Blue ppt of CuO is formed

D. There will be no reaction

Answer: A

Watch Video Solution

94. Mixture of carboxylic acids oblained by the oxidation of hexan-3-one does not contain

A. Methanoic acid

B. Ethanoic acid

C. Propanoic acid

D. Butanoic acid

Answer: A

Watch Video Solution

95. Benzaldehyde can be oxidised to corresponding carboxylate anion with

A. Fehling's reagent

B. Tollen's reagent

C. Both Fehling's and Tollen's reagent

D. Neither Fehling's nor Tollen's reagent

Answer: B

Watch Video Solution

96. Products A and B in the following reaction are respectively $(\forall K_M CP_{37\_N} \exists T_C HE_E 37_{042\_Q} 01)$

A. $(\forall K_M CP_{37\_N} \exists T_C HE_E 37_{042\_A} 01)$

B.

C.

D.

Answer: A

View Text Solution

97. Product obtained in the following reaction is called $(\forall K_M CP_{37\_N} \exists T_C HE_E 37_{043\_Q} 01)$

A. Acetal

B. Schiff's base

C. Carbylamine

D. Schiff's acid

Answer: B

View Text Solution

98. Product, E oblained in the following sequence of reaction is $(\forall K_M CP_{37\_} N \exists T_C HE_E 37_{044\_} Q01)$

View Text Solution

99. Compound which forms an orange red precipitate with 2, 4 - DNP reagent and gives yellow precipitate on heating with iodine in the presence of sodium hydroxide is

View Text Solution