PAPER CODE

PAPER/II-06/CHEMISTRY

Roll No. : _____

Name of the Candidate : _____

| Test Duration : 03 Hours | Total Questions : 100 | Total Maximum Marks : 200 |

INSTRUCTIONS TO CANDIDATES

1. Candidates will be admitted to the Examination Hall/Room on production of their Admit Card and Original ID such as **EPIC/Aadhaar/Driving License** with a view to establish the true identity of the candidate.

2. Candidates shall reach the venue of examination at least 30 minutes in advance and admission will be refused to a candidate who is late by 10 minutes from the start of the examination.

3. No candidate shall be permitted to leave the Examination Hall/Room until the time for the examination is over or until permitted to do so but not until the half of the allotted time.

4. Candidates must use a **BLUE/BLACK** ball point pen ONLY to make entries on the OMR Answer Sheet.

5. The candidates should not bring any articles (other than those specified above) such as books, notes, loose sheets, mobile phones, pagers, digital diaries, calculators, smart watches, etc. inside the Examination Hall/Room. Any candidate found in possession of the said articles will be liable to be de-barred from applying all future examinations to be conducted by the Board.

6. After receiving the Test Booklet with OMR inserted, the candidates may pull out the OMR Answer Sheet and fill in the necessary details. However the candidates are not allowed to break open the seal of the Test Booklet until the invigilator informs them to do so.

7. Mark carefully your Roll Number, Question Booklet Code and Booklet Series on the OMR Answer Sheet and append signature at the appropriate place. Write your Roll Number and **Name in the Question Booklet.** In the absence of the Roll Number and Question Booklet Series on the OMR Answer Sheet, it may NOT be evaluated.

8. The entire Test is of Objective Type Questions comprising 100 questions.

9. Candidates must check that the Question Booklet contains 100 multiple choice questions. If any discrepancy found, report to the invigilator immediately.

10. Every question carries a total of 2 marks each. Candidates will also keep in mind that there is negative marking of $1/3^{rd}$ for every wrong answer.

11. Rough work may be done on the space provided in this Question Booklet, but not on the OMR Answer Sheet.

12. In the event of a mistake made in marking the Roll Number in the OMR Answer Sheet or the OMR Series the candidates will not be given a new OMR Answer Sheet but he/she will be allowed to use whitener or correcting fluid for correction of the Roll Number and the Booklet Series only.

13. **Change of answer will not be permitted in the OMR Answer Sheet. Using of correcting fluid (of any sort) will be treated as wrong attracting negative marking.**

14. The candidates must abide by such instructions as may be specified on the cover of the Answer Paper or instructions to candidates given at the back of the Admit Card. If a candidate fails to do so or indulges in improper conduct, he/she will render himself/herself liable to expulsion from the examination or such other punishment as the Board deemed fit to impose.

15. At the end of the Test, candidates must submit the OMR Answer Sheet to the invigilator on duty. Candidates shall be allowed to take their Question Booklet only after the end of the examination session.

16. Any candidate found to be intoxicated with alcohol and/or psychotropic substances will be expelled from the Examination Hall/Room.

17. Examination centre once opted cannot be changed.

PLEASE REFER THE BACKSIDE OF THE QUESTION BOOKLET FOR MORE INSTRUCTIONS.

SEAL

1. The Miller indices for a plane when the intercepts along the axes are 2a, 3b and 2c are

   (A) 3, 3, 2   (B) 2, 3, 2

   (C) 2, 2, 3   (D) 3, 2, 3

2. A defect which involves a cation and an anion vacancy in the crystal lattice is called _____ defect.

   (A) Frenkel   (B) Interstitial

   (C) Impurity   (D) Schottky

3. Heat capacity C_p = _____

   (A) $\left(\dfrac{\partial H}{\partial T}\right)_P$ (B) $\left(\dfrac{\partial V}{\partial T}\right)_P$

   (C) $\left(\dfrac{\partial E}{\partial T}\right)_P$ (D) $\left(\dfrac{\partial Q}{\partial E}\right)_P$

4. All substances in their normal crystalline state at absolute zero would be the most ordered state with

   (A) Zero enthalpy

   (B) Zero entropy

   (C) Maximum enthalpy

   (D) Maximum entropy

5. In case of systems involving salt and water, the eutectic point is known as the

   (A) Cryohydric point

   (B) Cryptoscopic point

   (C) Congruent point

   (D) Incongruent point

6. At eutectic point of silver-lead system the composition is

   (A) 95.5% Pb, 4.5% Ag

   (B) 97.5% Pb, 2.5% Ag

   (C) 2.5% Pb, 97.5% Ag

   (D) 90% Pb, 10% Ag

7. Ferrocene undergoes Vilsmeir reaction to yield

   (A) Ferrocene oxide

   (B) Ferrocene carboxylic acid

   (C) Ferrocene carboxyaldehyde

   (D) Nitroferrocene

8. _____ is the customary standard used in proton magnetic resonance spectroscopy.

   (A) $(C_2H_5)_2Si$

   (B) $(CH_3)_2Si$

   (C) $(CH_3)_4Si$

   (D) $(C_6H_4)Si$

9. Reformatsky reaction consists in treating an α-bromoester with aldehyde or ketone in the presence of

   (A) Silver

   (B) Platinum

   (C) Zinc

   (D) Palladium

10. For ice-water-vapour system, degree of freedom, F =

(A) 1   (B) 2

(C) 3   (D) 0

11. _____ are water-repellents and are good insulators. Therefore used for water proofing and in electrical condensers.

(A) Boranes

(B) Silicones

(C) Fluorides

(D) Diboranes

12. $\Delta G = \Delta H + Td\left(\dfrac{\Delta G}{dT}\right)_p$. This is _____ equation.

(A) Maxwell

(B) Kirchoff's

(C) Gibb's Helmholtz

(D) None of the above

13. If the van der Waals equation is obeyed by gases at their critical points, then critical compressibility factor $Z_c = \left(\dfrac{P_c V_c}{nRT_c}\right)$ should be equal to

(A) $\dfrac{3}{8}$ (B) $\dfrac{7}{8}$

(C) $\dfrac{5}{8}$ (D) $\dfrac{1}{8}$

14. The boiling point of a liquid is the temperature at which its _____ is equal to the external pressure.

(A) Vapour pressure

(B) Normal pressure

(C) Gaseous pressure

(D) Atmospheric pressure

15. If two thermodynamic systems are in thermal equilibrium with a third, they are also in thermal equilibrium with each other. This is _____ law of thermodynamics.

(A) First   (B) Zeroth

(C) Second   (D) Third

16. _____ increases in irreversible processes.

(A) Enthalpy

(B) Heat content

(C) Free energy

(D) Entropy

17. The distribution constant of a certain solid X between two immiscible solvents A and B is 8 at 298 K. If the solubility of the solid in solvent A is 4.2 mol dm^{-3}, what is its solubility in B ?

(A) 0.525 mol dm^{-3}

(B) 5.25 mol dm^3

(C) 8 mol dm^{-3}

(D) 0.42 mol/dm^3

18. The molecularity and order for an elementary reaction are

(A) Different   (B) Equal

(C) Very high   (D) Very low

19. _____ law states that only those radiations which are absorbed by the reacting systems are effective in producing a chemical change.

(A) Stark-Einstein

(B) Dulong-Petit

(C) Lambert-Beer

(D) Grotthuss-Draper

20. Metal carbonyl _____ exists in the form of a trigonal bipyramid.

(A) $Ni(CO)_4$ (B) $Fe(CO)_5$

(C) $[Co(CO)_4]$ (D) $[Fe(CO)_4]^{2-}$

21. Gibbs Duhem equation is applicable to a system at constant

(A) Volume and temperature

(B) Concentration

(C) Volume and pressure

(D) Temperature and pressure

22. Molal elevation constant is defined as the elevation in boiling point of a solution of

(A) Unit molarity

(B) Zero molality

(C) Unit molality

(D) None of the above

23. _____ reaction is an example of self-oxidation reduction reaction.

(A) Mannich

(B) Benzoic

(C) Perkin

(D) Cannizzaro

24. When calcium salt of an acid other than formic acid is heated, _____ is formed.

(A) Aldehyde (B) Ketone

(C) Ester   (D) Ether

25. According to _____ the rate of a reaction of the nth order is proportional to the nth power of concentration.

(A) Differential method

(B) Half-life period

(C) Graphical method

(D) Ostwald's isolation method

26. Freundlich adsorption isotherm is represented as

(A) $\dfrac{P}{X} = \dfrac{1}{k'} + \dfrac{P}{k''}$

(B) $\dfrac{w}{m} = kC^{1/2}$

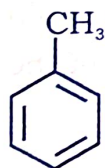(C) $P = \dfrac{1}{k'} + \dfrac{P}{k''}$

(D) $\dfrac{w}{m} = kP^{1/n}$

27. The potential of calomel electrode depends on the activity of ____ ions.

(A) Hydroxyl

(B) Chloride

(C) Potassium

(D) None of the above

28. _____ is the abbreviated form of Schrödinger equation.

(A) $\dfrac{d^2\psi}{dx^2} = \dfrac{-4\pi^2\psi}{\lambda^2}$

(B) $H\psi + E\psi = \frac{1}{2}mv^2$

(C) $H\psi = E\psi$

(D) $H\psi = -E\psi$

29. [benzene ring] $+ CH_3Cl \xrightarrow{\text{anhyd.AlCl}_3}$

[toluene ring with CH₃] $+ HCl$. This reaction is

(A) Birch reduction

(B) Friedel-Crafts alkylation

(C) Wurtz fittig reaction

(D) None of the above

30. Benzene reacts with chlorine in the presence of light and in the absence of halogen carrier gives addition product

(A) Benzene hexachloride

(B) Benzene chloride

(C) Benzo trichloride

(D) Benzal chloride

31. $2H_2O_2 \longrightarrow 2H_2O + O_2$, the enzyme _____ lowers the activation energy of the same reaction to less than 2 kcal/mole.

(A) Zymase   (B) Urease

(C) Invertase (D) Catalase

32. _____ isomerism shown by $[PtCl_2(NH_3)_4]Br_2$ and $[PtBr_2(NH_3)_4]Cl_2$.

(A) Linkage

(B) Coordination position

(C) Coordination

(D) Ionisation

33. In case of _____, the number of solute particles increases and consequently the colligative properties will show abnormally enhanced values.

(A) Association

(B) Dissociation

(C) Combination

(D) Degradation

34. By considering Ellingham diagram, _____ is used to reduce Cr_2O_3 to Cr.

(A) Copper

(B) Nickel

(C) Aluminium

(D) Silver

35. Ethers are basic in that they form _____ with strong acids.

(A) Acid chlorides

(B) Strong electrolytes

(C) Peroxides

(D) Oxonium salts

36. Base catalysed cleavage of epoxide follows _____ mechanism.

(A) S_N^2 (B) S_N^1

(C) E^1 (D) E^2

37. Complexes which permit quick exchange of one or more ligands from their coordination sphere by other ligands are called

(A) Labile complexes

(B) Inert complexes

(C) Reactive complexes

(D) Chelates

38. The ligands which produce small Δ(or 10Dq) like I^-, Br^- etc. are known as _____ ligands.

(A) Strong field

(B) Low spin

(C) Weak field

(D) High spin

39. The Schrodinger wave equation for an electron wave propagating in three dimensions in space is written as

(A) $\nabla^2\psi + \dfrac{8\pi^2 m}{h^2}(E - V)\psi = 0$

(B) $\nabla^2\psi - \dfrac{8\pi^2 m}{h^2}(E - V)\psi = 0$

(C) $\nabla^2\psi + \dfrac{8\pi^2 m}{h^2}(E + V)\psi = 0$

(D) $\nabla^2\psi - \dfrac{8\pi^2 m}{h^2}(E + V)\psi = 0$

40. The magnitude of the spin angular momentum of the electron is given by

(A) $\sqrt{s}\ h/2\pi$

(B) $\sqrt{s(s+1)}\ h/2\pi$
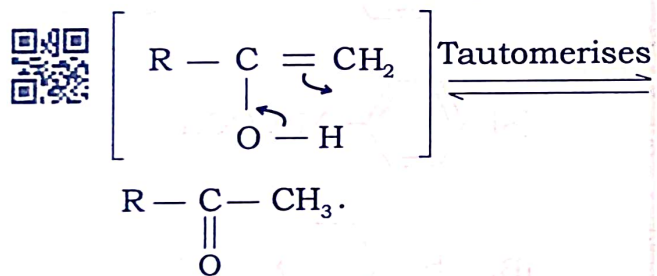
(C) $\sqrt{s(s+1)}$

(D) $\sqrt{(s+1)}\ h/2\pi$

41. In _____ liquid crystals molecules are parallel to each other like soda straws but they are free to slide or roll individually.
   - (A) Smectic
   - (B) Nematic
   - (C) Cholesteric
   - (D) Discotic

42. The pH of a solution of HCl is 2. Find out the amount of acid present in a litre of the solution.
   - (A) $0.365\ gl^{-1}$
   - (B) $0.536\ gl^{-1}$
   - (C) $0.635\ gl^{-1}$
   - (D) $0.453\ gl^{-1}$

43. $R - C \equiv C - H + H_2O \longrightarrow$

$$\left[\begin{array}{c} R - C = CH_2 \\ | \\ O - H \end{array} \right] \xrightleftharpoons{\text{Tautomerises}}$$

$R - \underset{\parallel}{\underset{O}{C}} - CH_3 .$

This reaction is catalysed by

   - (A) $HgSO_4 / H_2SO_4$
   - (B) $H_2O_2 / \overset{\ominus}{O}H$
   - (C) Pd / H_2
   - (D) $AlCl_3 / \overset{\ominus}{O}H$

44. The angle of strain in cyclobutane is
   - (A) 24.75°
   - (B) 90°
   - (C) 9.75°
   - (D) 54.75°

45. _____ is used for producing dense white smoke screens and for making writings in the sky in army operations.
   - (A) $TiCl_4$
   - (B) VCl_4
   - (C) Sc_2O_3
   - (D) CrO_2

46. Turnbull's blue is formed on the addition of iron (III) salt to
   - (A) Potassium permanganate
   - (B) Potassium ferrocyanide
   - (C) Potassium dichromate
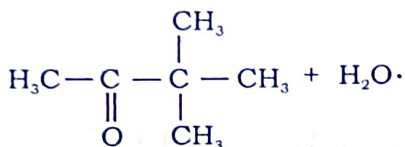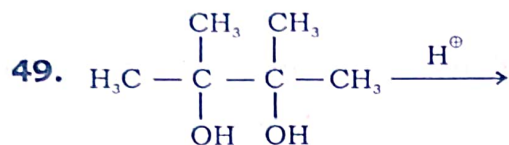   - (D) Potassium ferricyanide

47. The extent of screening of an electron by other electrons in the atom is calculated with the help of some empirical rules known as
   - (A) Zeeman's effect
   - (B) Paulis principle
   - (C) Slater's rule
   - (D) Bohr's theory

48. Isoelectronic ions among the following
   - (A) F^-, Na^+, Fe^{2+}
   - (B) Mn^{2+}, Pb^{2+}, O^{2-}
   - (C) $Na^+, Cl^{\ominus}, F^{\ominus}$
   - (D) F^-, Na^+, Mg^{2+}

49.

$$H_3C - \underset{\underset{OH}{|}}{\overset{\overset{CH_3}{|}}{C}} - \underset{\underset{OH}{|}}{\overset{\overset{CH_3}{|}}{C}} - CH_3 \xrightarrow{H^{\oplus}}$$

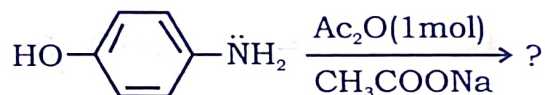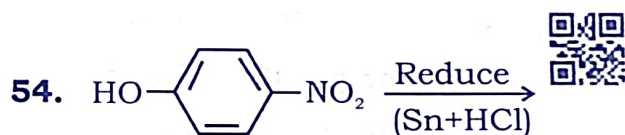$$H_3C - \underset{\underset{O}{\|}}{C} - \underset{\underset{CH_3}{|}}{\overset{\overset{CH_3}{|}}{C}} - CH_3 + H_2O \cdot$$

This is _____ rearrangement.

(A) Pinacol-Pinacolone

(B) Claisen

(C) Smith

(D) Fries

50. Wilkinson's catalyst is

(A) $[(C_6H_5)_2P]_3 \, RhCl$

(B) $[(C_6H_5)_3P]_3 \, RhCl$

(C) $[(C_2H_5)_3P]_3 \, RhCl$

(D) $[(C_2H_5)_6P]_3 \, RhCl$

51. _____ process is used for the extraction of gold.

(A) Hydrometallurgy

(B) Pyrometallurgy

(C) Amalgamation

(D) Electrolytic reduction

52. Van Arkel-de-Boer process is used for ultrapurification of

(A) Ni and Cu

(B) Zr and Ti

(C) Au and Ag

(D) Au and Pt

53. The higher the _____ , the greater the percentage of short chain acids in the glycerides of the oil or fat.

(A) Acid value

(B) Rancidity

(C) Base value

(D) Saponification value

54. $HO-\langle \bigcirc \rangle-NO_2 \xrightarrow[\text{(Sn+HCl)}]{\text{Reduce}}$

$HO-\langle \bigcirc \rangle-\ddot{N}H_2 \xrightarrow[CH_3COONa]{Ac_2O(1mol)} ?$

(A) $\langle \bigcirc \rangle-NHCOCH_3$

(B) $CH_3-\langle \bigcirc \rangle-NHCOCH_3$

(C) $H_2N-\langle \bigcirc \rangle-NHCOCH_3$

(D) $HO-\langle \bigcirc \rangle-\ddot{N}HCOCH_3$

55. Common oxidation state of all lanthanoids is

(A) +2   (B) +1

(C) +3   (D) +4

56. In _____ different samples of the material under test having different concentrations are analysed by the new and the standard methods.
   (A) F-test
   (B) S-test
   (C) t-test
   (D) Q-test

57. Mulliken suggested that the average of the Ionisation Energy (IE) and Electron Affinity (EA) of an atom should be a measure of the
   (A) Electronegativity
   (B) Atomic radii
   (C) Atomic spectra
   (D) Reactivity

58. The higher the magnitude of the _____, the greater is the tendency of the formation of an ionic bond.
   (A) Ionization energy
   (B) Bond energy
   (C) Enthalpy
   (D) Lattice energy

59. The reactions in which the final product is formed through one or more intermediate steps are called
   (A) Parallel reactions
   (B) Opposing reactions
   (C) Consecutive reactions
   (D) Perpendicular reactions

60. _____ is prepared by passing a mixture of xenon and fluorine, in the molecular ratio of 1:5 through a nickel tube, at 400°C under a pressure of 5-6 atm.
   (A) XeF_6
   (B) XeF_2
   (C) $XeOF_4$
   (D) XeF_4

61. _____ is the classical example of a vat dye.
   (A) Martius yellow
   (B) Ingrain dye
   (C) Malachite green
   (D) Indigo

62. _____ is used for making electrical goods, buttons, toys, laminated sheets.
   (A) Urea-formaldehyde
   (B) Polyurethane
   (C) Bakelite
   (D) PTFE

63. In ice, H_2O molecules are _____ oriented with respect to one another.
   (A) Tetrahedrally
   (B) Triagonally
   (C) Parallelly
   (D) Hexagonally

64. The electrostatic forces of attraction between induced dipoles and the original dipoles are known as
   (A) Molecular forces
   (B) London forces
   (C) Nuclear forces
   (D) None of the above

65. For a salt of a weak base and strong acid, $\alpha =$

(A) $\sqrt{\dfrac{K_w}{K_a \times K_b}}$ (B) $\sqrt{\dfrac{K_w}{K_b \times C}}$

(C) $\sqrt{\dfrac{K_w}{K_a \times C}}$ (D) $\sqrt{\dfrac{K_w}{C}}$

66. _____ effect is distance dependent.

(A) Inductive

(B) Resonance

(C) Electromeric

(D) Mesomeric

67. The _____ coordinated high spin Fe(II) is present in myoglobin and haemoglobin.

(A) Five (B) Six

(C) Two (D) Three

68. _____ react with reactive aromatic compounds like phenols, dialkylanilines to form strongly coloured azo-compounds.

(A) Aniline

(B) Quarternary ammonium

(C) Nitriles

(D) Diazonium salts

69. Geometry of _____ is octahedral.

(A) IF_7 (B) $SbCl_2$

(C) PF_5 (D) SF_6

70. Of the species O_2, O_2^+, O_2^-, O_2^{2-} which would have maximum bond strength ?

(A) O_2 (B) O_2^+

(C) O_2^- (D) O_2^{2-}

71.
$CH_3CH_2CH = CH_2 \xleftarrow{\text{alc.KOH}}$
1–Butene

$CH_3CH_2CH(Br)CH_3 \xrightarrow{\text{alc.KOH}}$
2–Bromobutane

$CH_3CH = CHCH_3$,
2–Butene

the percentage of 2-Butene is

(A) 20% (B) 50%

(C) 80% (D) 45%

72. The hydroboration has immense utility as alkyl boranes undergo a variety of useful transformations to yield _____ products.

(A) Markownikov

(B) Anti-Markownikov

(C) Saytzeff

(D) Hofmann

73. Peroxodisulphuric acid is obtained by the electrolysis of _____ sulphuric acid in cold.

(A) 25% (B) 75%

(C) 50% (D) 30%

74. _____ hybridisation of Cl orbitals are involved in the formation of ClF_3 molecule.

(A) sp
(B) sp^2
(C) sp^3
(D) sp^3d

75. Primary amines give obnoxious smelling of carbylamines or isocyanides when heated with _____ and alcoholic potash.

(A) Phosgene
(B) Stannous chloride
(C) Thionyl chloride
(D) Chloroform

76. Anthracene on oxidation gives anthraquinone which on oxidation with KOH gives two molecules of

(A) Benzene
(B) Napthalene
(C) Benzoic acid
(D) Toluene

77. Water molecule is known to have a bent structure with H — O — H angle of
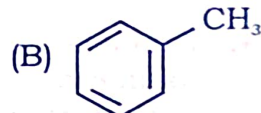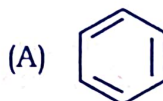
(A) 109°
(B) 89.5°
(C) 104.5°
(D) 92.5°

78. A _____ is a map depicting the conditions of potential and pH under which a given metal species is thermodynamically stable towards oxidation or reduction.

(A) Frost diagram
(B) Latimer diagram
(C) Hydrogen diagram
(D) Pourbaix diagram

79.

X is

(A)
(B)
(C)
(D)
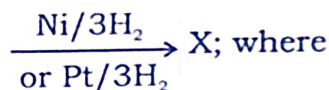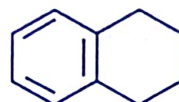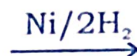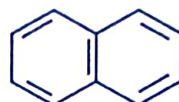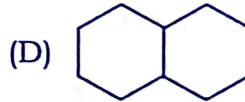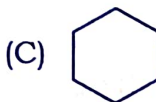
80. Madelung synthesis involves cyclisation of an o-acylamidotoluene by a

(A) Strong acid
(B) Weak acid
(C) Strong base
(D) Weak base

81. For a three quarter neutralised acid [salt] = 3[acid] and

(A) $pH = pK_a + 0.48$
(B) $pH = pK_a \pm 1$
(C) $pH = pK_a - 0.48$
(D) $pH = pK_a \pm 3$

82. The reaction between methyl chloride and aqueous potassium hydroxide to form methyl alcohol is an example of _____ reaction.

(A) Nucleophilic substitution
(B) Elimination
(C) Electrophilic substitution
(D) Rearrangement

83. The distance of closest approach between the centres of molecules is known as the
   (A) Collision frequency
   (B) Collision radius
   (C) Collision diameter
   (D) Collision length

84. The molar heat capacity at constant volume is _____ and is true in case of monoatomic gases like He, Ne, Ar, etc.
   (A) $\frac{1}{2}R$ (B) $\frac{3}{2}R$
   (C) $\frac{2}{3}R$ (D) $\frac{5}{3}R$

85. According to Lambert-Beer's law the ratio $\frac{I}{I_0}$ is the
   (A) Transmittance, T
   (B) Absorbance, A
   (C) Reflection, R
   (D) Refraction, F

86. Normal human blood has a pH of about
   (A) 6.1   (B) 7.4
   (C) 5.0   (D) 8

87. According to Lux-Flood concept, an acid is a substance which accepts
   (A) Oxide ion   (B) H^+ ions
   (C) $\overset{\ominus}{O}H$ ions   (D) None of the above

88. A solvent in which various strong acids appear equally strong is known as a _____ solvent.
   (A) Basic   (B) Acidic
   (C) Universal   (D) Levelling

89. Mathematical representation of Ostwald's dilution law is
   (A) $K_a = \dfrac{C\alpha^2}{1-\alpha^3}$
   (B) $K_a = \dfrac{C\alpha^2}{(1-\alpha)}$
   (C) $K_a = C\alpha^2(1-\alpha)$
   (D) $K_a = C^2\alpha(1-\alpha)$

90. The transfer of energy to and from the molecules follows the same quantum laws, both Stokes and anti-Stokes lines appear at equal spacing from the
   (A) Raman lines
   (B) Quantum lines
   (C) Rayleigh line
   (D) Lyman lines

91. According to Fajan's rule, _____ with large size have low polarizing power.
   (A) Anions   (B) Cations
   (C) Radicals   (D) Dipoles

92. Kinetic gas equation is
   (A) $PV = \frac{1}{3}mn'\bar{c}^2$
   (B) $PV = \frac{1}{2}mn'\bar{c}^2$
   (C) $PV = \frac{1}{3}mn'c^2$
   (D) $PV = \frac{1}{2}mn'c^2$

93. In _____, the molecule is viewed from the front.
   (A) Asymmetric projection
   (B) Fischer projection
   (C) Newman projection
   (D) Sawhorse projection

94. $CH_3-Br + 2Na + Br-CH_3 \xrightarrow{X}$ $CH_3CH_3 + 2NaBr$. In this reaction X is

(A) Sunlight

(B) $AlCl_3$

(C) Acetic acid

(D) Dry ether

95. H. A. Lorenz and L. V. Lorenz deduced the following relation between refractive index (n) and density of the medium (d)

(A) $R_s = \left(\dfrac{n^2-1}{n^2+2}\right)\left(\dfrac{1}{d}\right)$

(B) $R_s = \left(\dfrac{n^2+1}{n^2+2}\right)\left(\dfrac{1}{d}\right)$

(C) $R_s = \left(\dfrac{n^2-2}{n^2-1}\right)\left(\dfrac{1}{d}\right)$

(D) $R_s = \left(\dfrac{n^2}{n^2-1}\right)\left(\dfrac{1}{d}\right)$

96. Nucleosides believed to be formed by the combination of purine or pyrimidine bases with pentose sugar in _____ form.

(A) Galactose (B) Cytosine

(C) Furanose (D) Thymine

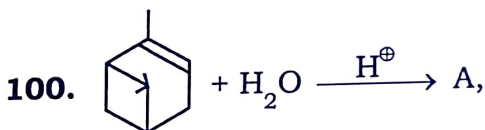97. _____, unlike sulphates of other alkali metals, does not form alums.

(A) Li_2SO_4 (B) Na_2SO_4

(C) K_2SO_4 (D) Rb_2SO_4

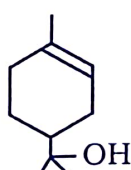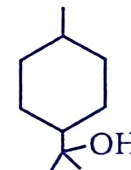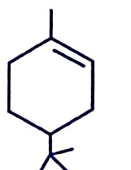98. Nitrogen forms hydride of the formula HN_3. This is called

(A) Nitrous acid

(B) Hydrazoic acid

(C) Per nitric acid

(D) Nitric acid

99. _____ and its salts are used in the form of drug to kill malarial parasite.

(A) Hygrine (B) Quinine

(C) Terpineol (D) Reserpine

100. $+ H_2O \xrightarrow{H^{\oplus}} A$,

where A is

(A)

(B)

(C)

(D)