Chemistry

1. 20 ml of a gas of NTP contains…….ml at 273^0C at 2 atm pressure.
   a. 20 b. 30 c. 50 d. 10
2. A has valency 3, B has 4, the possible compound is
   a. A_2B_3 b. A_3B_4 c. A_4B_3 d.AB
3. The atomic mass and molecular mass is based on
   a. O^{16} b. H^1 c. C^{12} d. $C^{35.5}$
4. One mole of He gas represent
   a. $6.02\times10^{23}\,He$ b. $6.02\times10^{23}\,He_2$
   c. $3.011\times10^{23}\,He_2$ d. $12.069\times10^{23}\,He$
5. Fractional crystilization is based on the difference between
   a. melting point b. solubilities
   c. vapor pressure d. boiling point
6. Chromatography is used for separating
   a. gases b. liquids
   c. solids d. all of the above
7. Essential oil can be extracted by
   a. sublimation
   b. steam distillation
   c. fractional distillation
   d. distillation under reduced pressure
8. Mixture of liquids having close boiling point can be separated by
   a. separating funnel
   b. steam distillation
   c. fractional distillation
   d. distillation under reduced pressure
9. Solids soluble in solvent can be obtained from its aq. Solution by
   a. crystallization b. fractional crystallization
   c. sublimation d. filtration
10. Given the numbers: 161 cm, 0.161cm, 0.0161 cm. The number of significant figures for three numbers is
    a. 3,4 and 5 respectively b. 3,3 and 3 respectively
    c. 3, 3 and 4 respectively d. 3, 4 and 4 respectively
11. A substance which can't be further decomposed by ordinary chemical means is
    a. water b. air c. sugar d. silver
12. Which of the following processes is a chemical change?
    a. Dissolution of common salt in water
    b. heating platinum wire
    c. Dissolution of sodium metal in water
    d. heating of water
13. Which one is a physical change?
    a. Burning of S in air
    b. Burning of C in air
    c. Conversion of white phosphorus to red
    d. Heating of water
14. A mixture of ZnCl2 and PbCl2 can be separated by
    a. distillation b. crystallization
    c. sublimation d. adding acetic acid
15. A mixture that can be separated by sublimation method is
    a. $MgCl_2 + NaCl$ b. $HgCl_2 + NaCl$
    c. $AgCl + NaCl$ d. $BaCl_2 + NaCl$
16. Calcium phosphate containing magnesium sulphate as impurity is separated by
    a. distillation b. crystallization
    c. chromatography d. fractional crystallization
17. Fractional at.wt. of an element is because
    a. of the existence of allotropic forms
    b. valency of elements have fractional values

c. equivalent weights are not whole members
d. of the existence of isotopes for all elements

18. Which of the following pairs is isomorphous?
a. $FeSO_4.7H_2OandCuSO_4$.5H2O
b. $FeSO_4.7H_2O$ and $MnSO_4.4H_2O$
c. $FeSO_4.7H_2O$ and $ZnSO_4.7H_2O$
d. $CuSO_4.5H_2O$ and $MnSO_4.4H_2O$

19. 1 amu is equal to
a. 1/12 of C^{12} b. 1 g of H_2
c. 1/14 of O^{16} d. 1.66×10^{-23} kg

20. A gas A of molecular weight of 4 diffuse thrice as fast as the gas, the molecular weight of B is
a. 24 b. 4 c. 36 d. 18

21. One of important postulation of Dalton's atomic theory is
a. an atom is made up of electrons, protons and neutrons
b. atom can be neither be created nor destroyed
c. atoms of the same element are not alike
d. all elements are available naturally as atoms only

22. According to Dalton's atomic theory, in a chemical change
a. atoms are destroyed
b. atoms are made into new and of different kind
c. atoms are created
d. atoms are rearranged

23. The weight of one atom of uranium is 238 amu. Its actual weight is
a. 1.43×10^{26} g b. $3.94\times10^{-22}\,g$
c. 6.99×10^{-27} g d. None of these

24. The specific heat of an element of 0.214 cal/gm. The atomic weight is nearly
a. 6.6 b. 12 c. 30 d. 65

25. The product of atomic weight and specific heat of any element is a constant, approximately 6.4. This is known as
a. Dalton's law b. Avogador's law
c. Newton's law d. Dulong and Pettit law

26. The specific heat of a metal is 0.11 and its equivalent weight is 18.61. Its exact atomic weight is
a. 58.2 b. 29.1
c. 55.83 d. 27.91

27. Approxmaite atomic weight of an element is 26.89. If its equivalent weight is 8.9, the exact atomic weight of the element would be
a. 25.89 b. 8.9
c. 17.8 d. 26.7

28. The crystals of which pair are isomorphous?
a. $ZnSO_4$,$SnSo_4$ b. $MgSO_4$, $CaSO_4$
c. $ZnSO_4$, $MgSO_4$ d. $PbSO_4$, $NiSO_4$

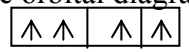
29. Atomic weight of a trivalent element of equivalent weight 9 is
a. 9 b. 18
c. 27 d. 36

30. In chemical scale the relative mass of the isotopic mixture of oxygen atom (O^{16}, O^{17}, O^{18}) assumed to be equal to
a. 16.0002 b. 16.00
c. 16.20 d. 15.89

31. Which property of an element is always a whole number
a. atomic number b. equivalent weight
c. atomic number d. atomic volume

32. The molecular weight of hydrogen peroxide is 34, What is the unit of molecular weight?
a. g b. mol
c. g mol^{-1} d. mol g^{-1}

33. The equivalent weight of an element is 4. Its chloride has a V.D. 59.25. then the valency of the element is
a. 4 b. 3 c. 2 d. 1

34. Which of the following has the largest no. of atoms?
    a. 5 g atom of Cu b. 0.635g of Cu
    c. 0.25 moles of Cu atom d. 1 g of Cu
35. Compound having similar molecular formulae and identical crystal structures are called
    a. Allotropes b. Isomers
    c. Isomorps d. Polymers
36. No. of electron of present in CO_2 is
    a. 22 b. 44
    c. 11 d. 24
37. One Fermi is
    a. 10^{-13} cm b. 10^{-15} cm
    c. 10^{-10} cm d. 10^{-12} cm
38. No. of mole of in 16 gm of oxygen gas is
    a. 1 b. 0.5
    c. 2 d. 0.25
39. No. of molecules in 2 gm of H_2 is
    a. 6.023×10^{23} b. $2\times6.023\times10^{23}$
    c. $\frac{6.023\times10^{23}}{2}$ d. 1.2018×10^{22}
40. 22 gm of Co_2 at NTP occupies
    a. 22.4 L b. 1.12 L
    c. 11200 cc d. 2.24 L
41. Which of the following pairs of gases contain the same number of molecules
    a. 16g oxygen , 14 g of nitrogen
    b. 8g of oxygen and 22g of nitrogen
    c. 28g of nitrogen, 22 g of Co2
    d. 32g of oxygen, 32g of nitrogen
42. One mole of CO_2 contains
    a. 18.1×10^{23} molecules of CO_2
    b. 6.02×10^{23} atoms of oxygen
    c. 6.02×10^{23} atoms of C
    d. 3 grams of atoms of CO_2
43. Avogadro number is the number of molecules present at NTP in
    a. 22.4 ml of gas b. 1ml of gas
    c. 22.4 L of gas d. 1 L of gas
44. Equal volumes of all gases at some temperature and pressure contain equal number of
    a. molecules b. atoms
    c. electrons d. protons
45. Equivalent weight of an element varies with
    a. valency b. oxidization number
    c. electronic number d. none
46. Magnetic quantum no. is related to
    a. size b. shape
    c. orientation d. spin
47. Isotopes were discovered by
    a. Pauling b. Thomson
    c. Powel d. Soddy
48. The orbital diagram of an atom in the ground state   is not correct because
    a. Aufbau principle is violated
    b. Hund's rule is violated
    c. Pauli's exclusion principle is violated
    d. Uncertainty principle is violated
49. A free neutron decays in to
    a. proton b. electron
    c. meson d. both a & b
50. Cathode rays are:
    a. electron b. proton
    c. neutron d. positron

51. The number of unpaired electrons in ground state of carbon is
    a. 1 b. 2
    c. 3 d. 4
52. Cathode rays lead to discovery of
    a. electron b. proton
    c. neutron d. nucleus
53. The name electron was given by
    a. Stoney b. Thomson
    c. Goldesteion d. Pauling
54. When n = 3, the permissible value of 1 are
    a. 1, 2, 3 b. 0, 1, 2
    c. +1, 0, -1 d. +2, 1, -2
55. CO has same electron as
    a. N_2^+ b. CN
    c. O_2^+ d. O_2^-
56. Total number of electrons in a molecule of CO_2 is
    a. 22 b. 44
    c. 66 d. 30
57. Proton is the name of
    a. Hydrogen atom
    b. Nucleus of deuterium
    c. Fundamental particle
    d. Ionised hydrogen molecule
58. Which of the following sets of quantum number is possible?

	n	**l**	**m**	**s**
a.	3	2	3	½
b.	3	1	0	+ ½
c.	3	3	1	- ½
d.	2	1	-2	½

59. The ratio of the radii of 1st three Bohr's orbit is
    a. 5 : 6 : 7 b. 1 : 4 : 9
    c. 1 : 9 : 27 d. √2 : √3 : √9
60. Which of the following sets of quantum number is not allowed?

	n	**l**	**m**	**s**
a.	3	2	-2	½
b.	4	0	-3	½
c.	4	0	0	½
d.	5	3	0	- ½

61. Wavelength associated with electron motion.
    a. Increases with increase in speed of electron
    b. Remains same irrespective of speed of electron
    c. Decreases with increasing speed of electron
    d. Is zero
62. Which of the following a pair of isobar?
    a. $^{30}Si_{14}$ & $^{32}S_{16}$
    b. $^{35}Cl_{17}$ & $^{37}Cl_{17}$
    c. Diethyl ether & butyl alcohol
    d. $^{40}Ar_{18}$ & $^{40}Ca_{20}$
63. If the distribution of electrons were disturbed by some applied energy, the electrons were supposed to vibrate about their equilibrium positions causing emission of light waves.This is in accordance with
    a. J. J. Thomson's model b. Rutherford's model
    c. Bohr's Model d. None of the above
64. "Scintillation" is concerned with
    a. particle nature of electron b. wave nature of light
    c. wave nature of electron d. none of the above
65. Thershold frequency depends upon
    a. frequency of radiation incident on metallic surface
    b. intensity of radiation
    c. nature of metal surface
    d. none of the above
66. The magnetic quantum number for valence electron of sodium

in ground state is

a. 1 b. 2 c. 3 d. none

67. Maximum no. of electrons that can be accommodated in a sub-shell is

a. n^2 b. $2n^2$ c. $2(2l + 1)$ d. none

68. Total number of orbitals in a shell is

a. n^2 b. $2n^2$ c. $4l + 2$ d. all

69. The quantum number which is designed by letters s, p, d and f instead of number is

a. n b. l c. m d. s

70. The statement "orbitals equivalent energy are filled before electrons before spin pairing occurs"

a. Uncertainty principle b. Pauli exclusion principle

c. Hund's rule d. Zeeman effect

71. Which of the following is correct configuration?

a. 2 2 -1 -1/2 b. 3 2 1 +1/2

c. 3 0 -2 +1/2 d. b & c

72. Splitting of line spectra in electric field is called

a. Zeeman effect b. Stark effect

c. De – Broglie hypothesis d. None of the above

73. As electron jumps from higher orbit, Then energy of electron:

a. increases b. decreases

c. remains constant d. 1st increase then decrease

74. In a set of degenerate orbitals the electron distribute themselves To retain like spins as far as possible.

a. Paul's exclusion principle

b. Aufbau principle

c. Hund's rule of maxim multiplicity

d. Heisenberg's uncertainty principle

75. The electronic configuration of Cu^{2+} is

a. $1s^2\ 2s^2\ 2\ p^6\ 3s^2\ 3p^6\ 4s^2\ 3d^8$

b. $1s^2\ 2s^2\ 2\ p^6\ 3s^2\ 3p^6\ 4s^0\ 3d^9$

c. $1s^2\ 2s^2\ 2\ p^6\ 3s^2\ 3p^6\ 4s^2\ 3d^7$

d. $1s^2\ 2s^2\ 2\ p^6\ 3s^2\ 3p^6\ 4s^1\ 3d^{10}$

76. The type of bonding is formed, enery

a. pure covalent b. polar covalent

c. highly polar d. hydrogen bond

77. When an atomic bond is formed, energy

a. is released

b. is consumed

c. is constant

d. depends on nature bonding

78. Which of the following contains both covalent and ionic bond

a. CCl_4 b. $CaCl_2$ c. NH_4Cl d. H_2O

79. Which has covalent bond?

a. NaH b. NaCl c. $MgCl_2$ d. NaBr

80. In covalency

a. Transference of electrons take place

b. Electrons are shared by only one electron

c. Sharing of electron takes place

d. None of these

81. Element of A is strongly electropositive and element of B is strongly electronegative both univalent. Compound formed between A and B.

a. A^+B^- b. A^-B^+

c. A-B d. $A \rightarrow B$

82. In a double covalent bond connecting two atoms involves sharing of

a. 2 electrons b. 4 electrons

c. 6 electrons d. all

83. Kinetic theory of gases states that the force of attraction between molecules is

a. strong b. negligible

c. very strong d. not sure

84. Which of the following bond is non-directional
    a. Covalent b. Ionic
    c. Davite d. None of these
85. Which of the following is covalent compound?
    a. H_2 b. NaCl
    c. KCl d. Na_2S
86. Which has maximum percentage of ionic character?
    a. CsF b. LiI
    c. $MgCl_2$ d. $AlCl_3$
87. Which is the strongest reducing agent s or weakest oxidizing agent
    a. F b. CI
    b. Br d. I
88. The best oxidizing agent or weakest reducing agent among following is,
    a. F b. CI
    c. Br d. I
89 The strongest reducing agent among following is
    a. Li b. Na
    c. K d. Cs
90. The strongest reducing agent in solution is
    a. Li b. Na
    c. K d. Cs
91. The strongest oxidizing agent among following is
    a. O_3 b. O_2
    c. Br d. CI
92. The order of oxidizing power (to gain e-) of element in gr. VIIA of periodic table, is
    a. CI < Br < I < F b. CI< I< Br< F
    c. I< F< CI<Br d. I< Br<CI<F
93. The order of reducing power (to gain e-) of element in gr. IA of periodic table is
    a. Li<Na<K<Cs b. Li>Na>K>Cs
    c. Cs<K<Li>Na d. None
94. The oxidation number of P in H_3PO_4 is
    a. 3 b. 4 c. 5 d. 0
95. The oxidation number of P in PCl_5 is
    a. +1 b. -5 c. +5 d. 0
96. In which of the following compounds, O.N. of C is +5,
    a. $HClO_4$ b. $HClO_3$ c. $HClO_2$ d. HClO
97. The oxidation number of P in Na_3PO_4 is
    a. +2 b. +5 c. -7 d. 0
98. The oxidation number of Pb in Pb_3O_4 is
    a. +2 b. +8/3 c. +8 d. 0
99. For the reaction, $2S_2O_3^{2-} + I_2 \rightarrow S_4O_6^{2-} + 2I$, choose the correct statement.
    a. I_2 is reduced and $S_2O_3^{2-}$ is oxidized
    b. I_2 is reduced and $S_2O^2{}_3^-$ is oxidized
    c. I_2 is oxidized and $S_2O^2{}_3^-$ is reduced
    d. It is not a redox reaction
100. In the reaction, $SO_3^{2-} + MnO_4^- \rightarrow Mn^{2+} + SO_4^{2-}$
    a. SO_3^{2-} is oxidized and MnO_4^- is reduced
    b. SO_3^{2-} gains electrons and MnO_4^- looses electron
    c. SO_3^{2-} looses electrons and MnO_4^- gains electrons
    d. Both a & c
101. $I^- + IO_3^- + H^+ \rightarrow I_2 + H_2O$,
    a. I^- is oxidized and IO_3^- is reduced
    b. I^- is reduced and IO_3^- is oxidized
    c. I^- loses electrons and IO_3^- gains electron
    d. Both a & c
102. $I^- + O_2 + H_2O \rightarrow I_2 + OH^-$,
    a. I^- is oxidized to I2 and O2 is reduced to OH^-
    b. It is redox reaction
    c. It is a auto – oxidation reaction

d. Both a & b

103. When $K_2Cr_2O_7$ is converted into K_2CrO_4, the change in oxidation number of Cr is
a. 0 b. 6 c. 4 d. 3

104. The oxidation number of C in CH_2O is
a. 0 b. +2 c. -2 d. +4

105. Oxidation number of P in $Mg_2P_2O_7$ is
a. +1 b. +3 c. +5 d. +7

106. The O.N. of Hydrogen in CaH_2 is,
a. +1 b. +2 c.-2 d. -1

107. The O.N. of Cl_2 in $CaOCl_2$ is,
a. 0 b. +1 c. -1 d. +2

108. The O.N. of Cl in Ca (OCl) Cl,
a. one has +1 and other has -1 b. 0
c. both Cl has +1 d. both Cl has -1

109. The O.N. of C in $C_{12}H_{22}O_{11}$ is
a. 0 b. – 6 c. +2 d. +6

110. The O.N. of S in S2Cl2 is
a. 0 b. +1 c. +2 d. +6

111. O.N. of which of the following element does not change or fixed in any compound.
a. F b. Cl c. Br d. I

112. In M (HxO3)2, the O.N. of X is
a. +1 b. +2 c. +3 d. +4

113. In Haemoglobin, iron has O. N.
a. +1 b. +2 c. +3 d. +4

114. In Chlorophyll Mg has O.N.
a. +1 b. +2 c. +3 d. +4

115. Which of the following is the strongest reducing agent?
a. Cr(s) b. Fe+(aq) c. Zn(s) d. $H_2(g)$

116. In which of the following reaction H2O2 is reducing agent?
a. $2FeCl_2 + 2HCl + H_2O_2 \rightarrow 2FeCl_3 + 2H_2O$
b. $Cl_2 + H_2O_2 \rightarrow 2HCl + O_2$
c. $2HI + H_2O_2 \rightarrow 2H_2O + I_2$
d. $H_2SO_3 + H_2O_2 \rightarrow H_2SO_4 + H_2O$

117. The color of $K_2Cr_2O_7$ changes from red orange to lemon yellow on treatment with aq. KOH because of
a. reduction of Cr^{6+} to Cr^{3+}
b. formation of chromium hydroxide
c. conversion of dichromate ion to chromate
d. oxidation of KOH to potassium peroxide

118. In which of the following O.N. is not changed
a. $VO_2^+ \rightarrow V_2O_3$ b. $Na \rightarrow Na^+$
c. $CrO_4^{2-} \rightarrow Cr_2O_7^{2-}$ d. $Zn^{2+} \rightarrow Zn$

119. The O.N. of I in $H_4IO_6^-$ is
a. +7 b. -1 c. +5 d. +1

120. O.N. of Fe in K_3 [Fe(CN)$_6$] is
a. +2 b. +3 c. 0 d. +4

121. O. N. of P in H_3PO_5 and $H_4P_2O_8$ (peroxyphosphoric acid)
a. +5 b. +3 c. 0 d. +4

122. Which of the following is not a redox reaction?
a. Burning of candle
b. Rusting of iron
c. Action of d. 1. H_2SO_4 on Zn
d. Inversion of can sugar

123. Which of the following oxides when heated strongly reduced to metal?
a. ZnO b. HgO
c. CuO d. Fe_2O_3

124. In an oxidation reaction, oxidation number
a. increases b. decreases
c. does not change d. both a & b

125. In a chemical reaction, an oxidant

a. loses electrons b. gains electrons
c. neither a & b d. both a & b

126. Oxidation number of Nitrogen in NH_3 is
a. +3 b. -1 c. +1 d. -3

127. O. N.of O in OF_2 is
a. Zero b. -1 c. +1 d. -3

128. Oxidation state of carbon in sucrose (C_{12} H_{22} O_{11}) is
a. 0 b. +1 c. +2 d. +4

129. Oxidation number of Cr in $K_2Cr_2O_7$ is
a. +6 b. -6 c. +2 d. -4

130. If 3 electrons are lost by a metal ion M^{3+}, final oxidation numbers will be
a. 0 b. +2 c. +3 d. +6

131. Nitrogen was discovered by:
a. Rutherford b. Henry Cavendish
c. Loyher Hayer d. none

132. The first organic compound synthesized in laboratory from its element is
a. Urea b. CH_4
c. CH_3COOH d. H_2H_2

133. Bleaching action of SO_2 is due to
a. Reduction b. Oxidation
c. Hydrolysis d. Its acidic nature

134. Diagonal relationship is shown by
a. elements 1^{st} period b. elements of 2^{nd} period
c. element of 3^{rd} period d. none

135. B.H.C. is used as……
a. antiseptic b. disinfectant
c. insecticide d. None

136. Thermal decomposition of organic compounds is known as
a. Cracking b. Pyrolysis
c. Isomerisation d. Rearrangement

137. The general formula for alkenes is
a. C_nH_{2n} b. C_nH_{2n-2}
c. C_nH_{2n+2} d. C_nH_{2n+4}

138. Which of the following gas in biogas ?
a. C_2H_6 b. CH_4
c. CO_2 d. CO

139. The compound of water gas is
a. Water vapour b. $CO+H_2$
c. $CO+N_2$ d. $CO_2+C_2H_4$

140. Which of the following has maximum protein?
a. ground nut b. egg
c. wheat d. cow milk

141. Maximum freezing point falls in
a. Camphor b. Naphthalene
c. Benzene d. water

142. Which of the following chemical reaction is an example of decomposition reaction?
a. $2Na + Cl_2 \longrightarrow 2NaCl$
b. $N_2+3H_2 \longrightarrow 2NH_3$
c. $2AgBr \longrightarrow 2Ag+Br_2$
d. Both a & b

143. Which of the following is the strongest acid?
a. HF b. HCl
b. HBr d. HI

144. Which of the following is the strongest acid?
a. HCN b. $HClO_2$
c. HNO_2 d. HF

145. $FeCl_3$ solution is
a. Acidic b. Basic
c. Amphoteric d. Neutral

146. Strength of an acid depends upon
a. its density b. its viscosity

c. its degree of ionization d. all of the above

147. Thermal decomposition of organic compounds is known as
a. Cracking b. Pyrolysis
c. Isomerisation d. Rearrangement

148. Lightest gas is
a. H_2 b. O_2
c. He d. Xe

149. Slag is the product of
a. Gangue b. Gangue + Flux
c. Colloidal d. None

150. The allotrope of oxygen is
a. hydrogen b. nitrogen
c. ozone d. ammonia

151. Natural rubber is polymer of
a. butadiene b. ethylene
c. isoprene d. propylene

152. In long form of periodic table, elements are arrange in
a. increasing mass b. increasing volume
c. increasing atomic number d. alphabetically

153. Which of the following was first discovered in the chormosphere of the sum?
a. He b. Ne c. Ar d. Rn

154. One g hydrogen contains
a. 6.02×10^{23} no. of molecules
b. 3.02×10^{23} no. of molecules
c. 6.02×10^{26} no. of molecules
d. 4.6×10^{20} no. of molecules

155. Pressure remaining constant at what temperature the volume of a gas will be doubled of its volume at 0^oC
a. -546^oc b. 546^oc c. 273 K d. 546 K

156. The compressibility factor of an ideal gas is
a. 1.5 b. 2.0 c. 1.0 d. infinite

157. Liquid diffuses slowly as compared to gases because
a. liquids have no definite shape
b. the molecules of liquids are heavy
c. the molecules of liquids move fast
d. the molecules are held together by strong intermolecular forces

158. At high altitudes, the b.p. of water gets lowered because
a. temperature is low b. atmosphere pressure is low
c. both a & b d. none of the above

159. Density of oxygen at N.T.P. is 16, if pressure remains constant, at what temperature its density will be equal to that of nitrogen
a. 312^oc b. 39^oc c. 58.5^0c d. 273 K

160. 2.016 g hydrogen and 16g oxygen are enclosed in a flask, the partial pressure of oxygen in flask is
a. 1/3 of total pressure b. 2/3 of total pressure
c. ½ of total pressure d. about eight times that of H2

161. If P, V and T stands for Pressure, Volume and Temperature of a gas, which of the following express Boyle's Law.
a. $V\alpha T$ (when P is constant)
b. $V\alpha 1/P$ (when T is constant)
c. PV = CRT
d. PV = RT

162. Equal volumes of all gases contain equal number of atoms at the same temperature and pressure. This hypothesis was proposed by
a. Avogadro b. Berzelius
c. Dalton d. Gay Lussac

163. The temperature at which the volume of a gas therretically becomes zero is
a. 273 K b. 1/273 K
c. -273 K d. -273^oc

164. Gases deviate from ideal gas behavior because molecules.
a. contain covalent bonds b. attract each other
c. repel each other d. are colorless

165. A gas is heated in such a way that its volume and absolute temperature both are doubled. The pressure of the gas
a. becomes 2 times b. becomes 4 times
c. becomes 6 times d. remains same

166. The critical temperature of a gas is that temperature
a. at which a gas is liquefied
b. at which a gas is solidified
c. above which a gas can not be liquefied
d. above which a gas can not remain in gaseous state

167. The relative rate of diffusion of a gas (of molecular weight 128) as compared to oxygen will be
a. ½ b. $1/4^{th}$ c. $1/8^{th}$ d. 2 times

168. If equal weights of oxygen and nitrogen are placed in separate containers of equal volume at the same temperature, which of the following statement is true.
a. both flasks contain same number of molecules
b. the pressure in the oxygen flask is smaller than in the nitrogen flask
c. more molecules are present in the oxygen flask
d. the pressure in the nitrogen flask is smaller than in the oxygen flask

169. According to Avogadro's hypothesis, under similar conditions of temperature and pressure equal volumes of all gases contain equal number of
a. Atoms b. Molecules
c. Electrons d. Charged atoms

170. One liter of a gas collected at STP will occupy ……. At 2 atmosphere and 27°C.

2 300 1 300

a. $1 \times \frac{1}{2} \times \frac{273}{27}$ liters b. $1 \times \frac{2}{1} \times \frac{273}{273}$ liters

c. $1 \times \frac{1}{2} \times \frac{273}{300}$ liters d. $1 \times \frac{2}{1} \times \frac{273}{300}$ liters

171. Equal volumes of H_2 and Cl_2 were mixed. How will the mixture change after the reaction?
a. It will not change b. It will increase two fold
c. It will be halved d. None of these

172. A vessel is filled with a mixture of oxygen and nitrogen. At what ratio of the partial pressure will the masses of the gases be identical? [Assuming partial pressure of O_2 is P_1 and partial pressure of N_2 is P_2]
a. $P_1 = P_2$ b. $P_1 = 0.875\ P_2$
c. $P_1 = 1.14\ P_2$ d. none of these

173. 100 c.c. oxygen is collected over water at 23°c and 80.0 mm pressure. Calculate the volume of gas at NTP
(vapour pressure of water vapour at 23°C 21.mm)
a. 90 cc b. 94.5 cc c. 150 cc d. 100 cc

174. How should the conditions be changed to prevent the volume of given gas from growing when mass is increased?
a. temperature is lowered and pressure is increased
b. temperature is increased and pressure is lowered
c. temperature and pressure both are lowered
d. temperature and pressure both are increased

175. The rate of diffusion of a gas is
a. directly proportional to its density
b. directly proportional to its mol. Wt.
c. directly proportional to square root of its mol. Wt.
d. inversely proportional to square root of its mol. Wt.

176. Equal weights of methane and hydrogen are mixed in an empty container at 25°C . The fraction of the total pressure due to hydrogen is
a. ½ b. 1/9

c. 8/9 d. 16/17

177. According to Kinetic theory of gas there are
a. intermolecular attractions
b. molecule have considerable volume
c. no intermolecular attraction
d. the velocity of molecules decreases of each collision

178. Postulate of Kinetic theory is
a. atom is indivisible
b. gases combine in a simple ratio
c. there is no influence of gravity on the molecules of a gas
d. none of the above

179. The Kinetic theory of gases predicts that, the total kinetic energy of a Gaseous assembly depends on.
a. pressure of the gas
b. temperature of the gas
c. volume of the gas
d. pressure, temperature and volume of the gas

180. Helium atom is two times heavier than a hydrogen molecule. At 298 K, the average kinetic energy of a helium atom is
a. two times that of a hydrogen molecule
b. same as that of hydrogen molecule
c. four times that of hydrogen molecule
d. half that of hydrogen molecule

181. In deriving the kinetic gas equation, the root mean square velocity of the molecules is used because it is
a. The average velocity of the molecule
b. The most probable velocity of the molecule
c. The square root of the average square velocity of the molecules
d. The most accurate form in which velocity can be used in these calculations

182. Which is not true in case of an ideal gas?
a. It can not be converted into a liquid
b. There is no interaction between the molecules
c. All molecules of the gas move with same speed
d. At a given temperature PV is proportional

183. The temperature at which real gases obey the ideal gas laws over a wide range of pressure is called
a. Critical temperature b. Boyle temperature
c. Inversion temperature d. Reduced temperature

184. The temperature at which the second virial coefficient of a real gas is called
a. critical temperature is always above 0^oC
b. eutectic point
c. boiling point
d. Boyle's temperature

185. The liquid is in equilibrium with its vapour at its boiling point. On the average, the molecules in the two phases have equal
a. potential energy b. total energy
c. kinetic energy d. intermolecular forces

186. A closed flask contains water in all its three states, solid, liquid and vapour at 0^oC. In this situation the average kinetic energy of water molecules will be
a. the greatest in the vapour state
b. the same in all the three states
c. the greatest in the solid state
d. less than that of water

187. Vibrational energy is
a. partially potential and partially kinetic
b. only potential
c. only kinetic
d. none of the above

188. An ideal gas can't be liquefied because

a. its critical temperature is always above 0^oC
b. its molecular are relatively smaller in size
c. it solidifies before becoming a liquid
d. forces operative between its molecules are negligible

189. When an ideal gas undergoes unrestricted expansion, no cooling occurs because the molecules
a. are above the inversion temperature
b. exert no attractive forces on each other
c. do work equal to the loss in kinetic energy
d. cooled without loss of energy

190. An ideal gas, obeying kinetic theory of gases, can be liquidified if
a. it can be liquidified an any P and T
b. Its pressure is more than P at a temperature less than T
c. its temperature is more than critical temperature T
d. Its pressure is more than critical pressure p

191. When there is more deviation in the behaviour of a gas from the ideal gas equation PV=nRT?
a. At high temperature and low pressure
b. At low temperature and high pressure
c. At high temperature and high pressure
d. At low temperature and low pressure

192. A relation between vapour pressure and temperature is known as
a. gas equation
b. Calpeyron equation
c. Claussius equation
d. Claussius Clapeyron equation

193. Which of the following mixtures of gases does not obey Dalton's law of partial pressure?
a. O2 and CO2 b. N2 and O2
c. Cl2 and SO2 d. CO2 and H2

194. The constant R is
a. work done per molecule
b. work done per degree absolute
c. work done per degree par mole
d. work done per molecules

195. Pressure of a gas is due to
a. collisions of gas molecules
b. the random movement of gas molecules
c. the intermolecular forces of attraction between the gas molecules
d. the collision of gas molecules against the walls of the container

196. Volume of a gas at 27^0 C is 4 liters. If temperature of a gas is lowered to 150K at the same pressure, its volume will be
a. 0.5 litre b. 1.0 litre
c. 2.0 liter d. 4.0 litre

197. Hydrogen diffuses five times as rapidly as another gas X, the molecular weight of X will be?
a. 10 b. 25 c. 50 d.100

198. Correct gas equation is,
a. $\frac{P_1T_1}{V_1}=\frac{P_2T_2}{V_2}$ b. $\frac{P_1T_2}{P_2T_1}=\frac{V_2}{V_1}$
c. $\frac{P_1P_2}{T_1}=\frac{V_1V_2}{T_2}$ d. PR=VT

199. At constant pressure, the volume of gas is doubled, the R.M.S. velocity become
a. $\sqrt{2}$ times b. ½ times
c. 2 times d. constant as previous

200. Equal weight of methane & oxygen are mixed in empty

container at 25^{oC} . The fraction of total pressure exerted is .
a. 1/3 b. 2/3 c. 8/9 d. 9/8

201. Which of the following mixture of gases does not obey Dalton's law of partial
a. O_2, CO_2 b. N_2, O_2
c. Cl_2,O_2 d. NH_3, HCl

202. He intermolecular space between the particles in gaseous state:
a. is less than in liquid state
b. is more than that in solid state
c. increases with in temperature
d. increase with in pressure

203. Maximum deviation from ideal behavior is shown by
a. N_2 b. NO
c. NH_3 d. NF_3

204. At what temperature, the kinetic energy of 0.3 mol. of. He is equal to the kinetic energy of 0.4 mol of Ar at 400 k.
a. 533 K b. 400 K
c. 300 K d. 270

205. Which gas has density 1.6 g/l at 26.5^oC under 680.2 mmHg pressure?
a. CH_4 b. C_2H_6 c. CO_2 d. SF_6

206. Diamond is an example of
a. covalent solid b. electrovalent solid
c. solid with h- bond d. pseudo solid

207. How many types of space lattice are possible in a crystal ?
a. 23 b. 7 c. 230 d. 4

208 The material used in solar cell contain
a. Cs b. Si c. Sn d. Ti

209. The solubility of a salt in water is 40 at 30^0C. the amount of water required to dissolve 120 g of the salt at the same temp is about
a. 400 g. b. 4 L c. 300 g. d. 22.4 L

210. A solution contains 10 g of a solute in 10^3 Kg of solutions. Its concentration in the units of ppm is
a. 1000 b. 1 c. 10 d. 10^{-3}

211. The solubility of a salt at 90 degree C is 80 and at 30C it is 20. The amount of salt crystallite out on cooling 60gm saturated solution is,
a. 20 g b. 40 g c. 500 g d. 30 g

212. The atmospheric pollution is generally measured in the units of:
a. mass percentage b. volume percentage
c. ppm d. volume fraction

213. Molality is preferred unit for measuring concentration because it is
a. convenient to measure b. a small quantity
c. concentration of gases in liquid d. volume

214. The solubility of gases in liquids increases with an increase of
a. pressure b. temperature
c. concentration of gases in liquid d. volume

215. Which of following is colligative property?
a. molar mass b. osmotic pressure
c. viscosity d. optical activity

216. The properties of a solution which depends only on the number of particles and not on their nature are called
a. constitutive property b. colligative property
c. additive property d. non ideal property

217. A mixture which boils off like a single pure compound is called
a. eutectic b. zoetrope
c. ideal solution d. non ideal solution

218. A non-volatile solute when dissolved is a violet solvent

lowers the vapour pressure of the liquid. This happens due to
a. stronger solute solvent interaction
b. loss of kinetic energy of the liquid molecules
c. lowering of surface layer concentration
d. decrease of the boiling point of the liquid

219. Solution I contains 1 mole of urea in 100 g of water, while solution II contains 1 mole of cansugar in 100g of water (molar mass of urea = 60 $gmol^{-1}$ and that of cansugar = 342 $gmol^{-1}$)
a. Solution I boils at higher temperature
b. solution II boils at higher temperature
c. both the solution boils at the same temperature
d. none of above

220. Which of 0.1 M aqueous solution will have lowest freezing point?
a. Potassium sulphate b. sodium chloride
c. Urea d. sucrose

221. If mortality of a solution is X at 25 ^{0}C then molarity at higher temperature 50 ^{0}C is
a. X/2 b. more than X
c. less than X d. none

222. One of the disadvantage of normality, molarity and formality of solution is that they
a. are independent of temperature
b. changes with temperature
c. changes with pressure
d. both (a) and (b)

223. Molality is preferred over molarity, because
a. molality is independent temperature
b. molality involves wt. of solvent
c. both (a) and (b)
d. none

224. What is the mole fraction of methanol in solution containing 3.3 g of method in 18 g of water
a. 0.18 b. 0.41
c. 0.09 d. 0.33

225. What is the mole fraction of ethyl alcohol and water in a solution in which 46 kg of ethyl alcohol and 180 g of water are mixed together?
a. $X_{alco} = 0.46, X_{water} = 0.18$
b. $X_{alco} = 0.09, X_{water} = 0.91$
c. $X_{alco} = 0.08, X_{water} = 0.81$
d. none

226. If 4 g of NaOH are dissolved in 100 cm^3 of the solution, what shall be the difference in its normality and molarity?
a. 2 b. 1
c. NO different d. 3

227. The temperature independent ways of expressing concentration is
a. Normality b. Molarity
c. Molality d. Formality

228. A normal solution contains
a. 1 geq of solute per kg of solution
b. 1 geq wt of solute per litre of solution
c. 1 g mol of solute per litre of solution
d. 1 g mol of solute per kg of solution

229. 1 centi molar solution contains
a. 1 g mole of solute per litre of solution
b. $1/100^{th}$ of g mol of solute per litre of solution
c. 100^{th} of mol of solute per litre of solution
d. none

230. The morality of water in pure water is
a. 55.55 b. 55.65 c. 55.75 d. None

231. The molarity of solution containing 10 m moles of solute in 100ml of solution is
a. 0.1 b. 0.01 c. 1 d. none

232. The normality of the resulting mixture obtained by mixing 150 ml of 0.2 M HCl and 100 ml of 0.04 M H_2SO_4
a. 0.40 b. 0.44 c. 0.82 d. none

233. The most convenient way of expressing concentration is
a. Normality b. Molarity
c. Molalilty d. Mole fraction

234. Molality is the most inconvenient unit for concentration because
a. it depends on temp.
b. it involves measurement of wt. of liquid
c. both (a) and (b)
d. none

235. Which is the heaviest?
a. 25 g of Hg b. 2 mole of H_2O
c. 2 moles of CO_2 d. 4 g atoms of O_2

236. For preparing 0.1N solution of a compound from its impure sample of which percentage purity is known, the weight of substance required will be
a. more than the theoretical weight
b. less than the theoretical weight
c. same as the theoretical weight
d. none of the above

237. During dialysis
a. solvent molecules and ions diffuse
b. solvent molecules, ions and colloidal diffuse
c. all kinds of particles can diffuse through semi permeable membrane
d. only solvent molecules can diffuse

238. Which of the following molecules would diffuse through a cell membrane?
a. Fructose b. Glycogen
c. Hemoglobin d. Catalose

239. Maximum freezing point falls in
a. Camphor b. Naphthalene
c. Benzene d. water

240. The osmotic pressure of dilute solution increase when
a. more of the solute is added
b. more of solvent is added
c. temp is increased
d. any of the change in made

241. The concentration of a saturated solution of a certain polypeptide is 1×10^{-3} M at 25^0C. The osmotic pressure of this solution in mm of Hg is (R=0.082lit atm deg^{-1} mol^{-1})
a. 18.6 b. 0.0245 c. 24.5 d. 0.76

242. The number of moles of sucrose that should be present in 1 litre of solution to exert an osmotic pressure of 56 atm at 27^0C.
a. 4 b. 0.25 c. 0.227 d. 0.454

243. Which of the following decrease with increase of temperature?
a. molarity b. molality
c. mole fraction d. mole number

244. A solution of $FeCl_3$ (molecular mass = 162) has density 1.19 g/ml molar concentration is
a. 8.35 m b. 7.35M c. 5.35 M d. 6.35M

245. A compound has solubility 90 at 80^0C. 25 g of saturated solution has……..amount of the compound present in it
a. 10.5 b. 12.5 c. 13.5 d. 11.5

246. 200 ml of 1 NH_2SO_4 (f = 1.05) has……g of H_2SO_4
a. 200 b. 96 c. 48 d. 10.299

247. Which of the following conditions is not correct for ideal solution?
a. no change in volume on mixing
b. It obeys Raoult's law
c. Its vapour pressure is negligible
d. No change in enthalpy in mixing

248. A can sugar solution has an osmotic pressure of 2.46 atm at 7^0C. Determine the strength of the solution
a. 34.22 g/L b. 2 g/L c. 11.2 g/L d. 0.5 g/L

249. Which one is a colligative property?
a. Boiling point b. Vapour pressure
c. Osmotic pressure d. Freezing point

250. Boiling point of liquids depends on all of the following factors except
a. viscosity of liquid
b. external pressure
c. volume of liquid taken
d. vapour pressure of the liquid
e. hexane and heptane

251. The component of blood which maintain osmotic pressure is
a. mineral salt b. globulin
c. red blood cells d. blood platelets

252. Terylene is
a. polyamide b. polyester
c. poly acid d. polypeptide

253. How many valance electrons are there in an argon atom ?
a. 7 b.8
c. 9 d. 10

254. Aluminium nitrate is
a. $AlNO_3$ b. $Al_2(NO_3)_3$
c. $Al(NO_3)_3$ d. $Al(NO_3)_2$

255. Smallest among the following is
a. Na^+ b. Mg^{2+} c. Al^{3+} d. Si^{4+}

256. Which is not a group 18 element?
a. He b. Be
c. Ve d. Ne

257. Iron falls under group
a. 1 b. 4
c. 8 d. 16

258. Atomic number of Fe is
a. 17 b. 27
c. 26 d. 47

259. The most reactive form of carbon is
a. diamond b. graphite
c. coal d. charcoal

260. Portland cement is manufacture by using
a. Limestone, clay and sand
b. Limestone, gypsum and sand
c. Limestone, gypsum and alumina
d. Limestone, clay and gypsum

261. Hydrogen is
a. reducing agent b. oxidizing agent
c. both a and b d. None

262. Water has PH 7. A salt is added to it even though the pH of solution remains same. The salt is made up of
a. strong acid + strong base
b. strong acid + weak base
c. strong base + weak base
d. weak acid + weak base

263. pH is
a. +ve logarithm of H^+ concentration
b. – ve logarithm of H^+ concentration
c. +ve logarithm of OH^- concentration
d. - ve logarithm of OH^- concentration

264. pH of solution on dilution
a. Increase b. Decrease
c. Remains constant d. None
265. Indicator having pH range 4.2 of 6.3 is
a. methylene blue b. phenolphthalein
c. methyl orange d. methyl red
266. What NH_4OH is reacted with acid at end point, pH of the solution will be
a. 0 b. 11 c. 7 d. 13
267. Which of the following indicator is used for pH 31 to 4.5
a. methyl orange b. Phenolphthalein
c. litmus d. none
268. Which of the following will not change the pH on addition of drops of acid or alkali?
a. CH3COOH solution
b. mixture of 0.1 M HCL and 0.1 M HCO_3
c. solution containing mixture of CH_3COOH and $CH_3COOHNa$
d. solution containing 1 M KOH and 1 M NaOH
269. If a solution of pH = 0, 100 ml of pure water added, the mixture will be
a. acidic (pH = 2) b. alkaline (pH = 18)
c. amphoteric d. Neutral (pH = 7)
270. The pH of a solution of NH_4OH has been measured if NH_4Cl is now added
a. the pOH will increase b. the pH will increase
c. the pH will decrease d. the acidity will decrease
271. The [OH] of a solution is 1×10^{-8}. The pH of the solution is
a. 10.0 b. 8.0 c. 6.0 d. 4.0
272. In a mixture of an aqueous solution of acetic acid and solution acetate. When the ratio of the concentration of salt to acid is increased tenfold the pH of the solution
a. increases 10 fold b. decreases ten fold
c. increases by 1 d. decreases by 1
273. The extent of ionization increase
a. with the increase in the concentration of the solute
b. by adding excess of water to the solution or dilution
c. on decreasing temp of the solution
d. on starting the solution vigorously
274. The degree of dissociation of weak electrolyte increases
a. with increasing dilution
b. with increasing pressure
c. with decreasing dilution
d. concentration of the solution
275. The degree of ionization of an electrolyte does not depend on
a. the nature of solute and solvent
b. size of the solvent molecules
c. the temperature
d. concentration of the solution
276. Ethyl chloride does not give white ppt with $AgNO_3$ solution because
a. AgNO3 doesn't dissociates as Ag+ and NO3- in the presence of ethyl chloride
b. ethyl chloride is very stable compound
c. ethyl chloride does not dissociate to give Cl-
d. ethyl radicals interfere between the reaction of ethyl chloride and AgNO3 solution
277. Molten NaCl conducts electricity due to the presence of
a. free electrons b. free ions
c. Free molecules d. Na and Cl atoms
278. The degree of ionization of a compound depends on
a. size of solutes

b. Nature of solutes
c. nature of vessels
d. Quantity of electricity passed

279. An electrolyte
a. undergoes dissociation into atoms
b. undergoes dissociation in water ions
c. generate ions on passing electric current
d. is ionized in solid state

280. The degree of ionization of a substance
a. decrease with dilution b. increase with dilution
c. may increase or decrease d. is constant

281. When $CuSO_4$ is dissolved in water pH of the solution
a. is increased b. is decreased
c. remains unchanged d. may increase or decrease

282. The addition of solid sodium carbonate to pure water causes
a. an increase in $[H_3O^+]$ b. an increase in pH
c. no change in pH d. a decrease in $[OH^{-1}]$

283. The solution f KCl in water is
a. acidic b. alkaline c. acidic d. neutral

284. If acid to salt concentration is increased 10 times, pH
a. decreases by 10 b. increases by 10
c. decreases by 1 d. increases by 1

285. An aqueous solution of 0.1M NH_4Cl will have a pH close to
a. 9.1 b. 8.1 c. 5.1 d. 7.1

286. If the pH of a solution is 2, its normally will be
a. 2 N b. 0.5N c. 0.01 N d. 0.001 N

287. An aqueous solution of ammonium acetate is
a. change blue litmus to red b. do not affect litmus
c. neutral d. none

288. An aqueous solution of ammonium acetate is
a faintly acidic b. faintly alkaline
c. may be acidic, neutral or alkaline d. fairly acidic

289. The aqueous solution of Aluminum sulphate is acidic due to
a. cationic hydrolysis
b. anionic hydrolysis
c. both cationic and anionic hydrolysis
d. dissociation to ions

290.The compound, whose 0.1 M solution is basic is
a. Ammonium acetate b. KOH
c. $AlCl_3$ d. Sodium acetate

291. A solution of NH4Cl is
a. acidic b. basic c. neutral d. amphoteric

292. The one which has highest value of pH is
a. Distilled water b. NH_3 solution of water
c. NH3 d. water saturated with O2

293. A buffer solution
a. is a weak acid and its conjugate base
b. is a weak base and its conjugate acid
c. shows no change in pH on adding small amount of acid or base
d. All

294. An acidic buffer solution can be obtained by mixing aqueous solution of
a. CH_3COONa and excess of HCl
b. CH_3COONa and CH_3COOH
c. NaCl and HCl
d. CH_3COOH and excess of NaOH

295. pH of blood is
a. less than 6
b. greater than 7 and less than 8
c. greater than 8 and less than 9
d. acidic

296. Fear on excitement generally causes on to breath rapidly and it result in the decrease of CO_2 concentration in blood, the pH of blood will
a. increase b. decrease
c. not change d. will adjust to 7

297. If pH of A,B, C and D are 9.5, 2.5, 3.5 and 5.5 respectively, then strongest acid is (AFMC – 95)
a. A b. B c. C d. D

298. If a neutral solution has Pk_w =13.36 at 50 degree C, then pH of the solution is
a. 6.68 b. 7 c. 7.63 d. none

299. pH of boiling water is
a. 7 b. < 7 c. > 7 d. none

300. Calculate pH when $[OH] = 4.8 \times 10^{-3}$
a. 11.6 b. 2.4 c. 8.4 d. 1.2

301. A buffer solution prepared by mixing two solutions
a. strong acid and its salt with strong base
b. weak acid and its salt with strong base
c. weak base and its salt with strong base
d. both b and c

302. Calculate the pH of a solution prepared by dissolving 2 gram of NaOH (Mw =40) in water and diluting to 500 ml
a. 1.3 b. 3.1 c. 13 d. 31

303. If the rate of reaction is independent of the concentration of the reaction, the reaction of…….order
a. Zero b. first c. Second d. third

304. The specific rate constant of a first order reaction depends on the
a. concentration of reactant b. time
c. Temperature d. concentration of product

305. The rate of reaction is
a. always positive b. Always –ve
c. +ve or –ve d. Always constant

306. A catalyst
a. Increase the free energy change of reaction
b. Decrease the free energy change
c. Does not alter free energy of a reaction
d. May do any one of above depending upon the reaction

307. The rate of a zero order reaction is independent of the
a. Temperature of the reaction
b. concentration of the reactant
c. Concentration of product
d. None of these

308. The rate of reaction is independent of
a. temperature b. concentration
c. nature of reactants d. molecularity

309. In photosynthesis
a. Chlorophyll is completely converted to carbohydrate
b. Chlorophyll is partly converted to carbohydrate
c. Chlorophyll acts as photosensitizers
d. Chlorophyll has a little role

310. The rate of reaction is independent of
a. Pressure b. Temperature
c. Concentration d. Catalyst

311. The rate of chemical reaction
a. increases with time
b. decreases with time
c. may increase or decrease during the reaction
d. remains constant with time

312. The enzymic activity of Human body enzyme is maximum at
a. 298 K b. 310 K
c. 320 K d. 330 K

313. Rusting of iron is catalyzed by

a. Fe b. O_2
c. Zn d. H^+

314. Hydrolysis of sugar to glucose and fructose is catalyzed by
a. Invertase b. Zymase
c. Lactic Bacilli d. Disatase

315. Ethylene readily undergoes
a. addition reactions
b. substitution reactions
c. elimination reactions
d. rearrangement

316. Zinc displaces
a. Cu b. Li c. Na d. K

317. In the Daniel cell, current in the external circuit flows from
a. Cu to Zn b. Zn to Cu
c. Do not flow d. None

318. In a dry cell, the depolarizer is
a. NH_4Cl b. Zn
c. MnO_2 d. Charcoal powder

319. Galvanization is a process which involves the coating of iron surface with
a. Rn b. Al c. Sn d. Cu

320. Primary cells are
a. reversible b. everlasting
c. non-reversible d. none

321. The emf of an electrochemical cell is measured by the null method at a constant temperature to
a. avoid heat generation b. avoid corrosion
c. avoid charge in electrolyte concentration d. none

322. Corrosion always occurs at
a. cathodic area b. anodic area
c. both d. none

323. Conductivity of a solution is directly proportional to
a. dilution b. number of ions
c. current density d. volume of the solution

324. The best conductor of electricity is 1 M solution of
a. boric acid b. acetic acid
c. sulphuric acid d. phosphoric acid

325. Electrolytic conduction differs from metallic conduction in that in the case of electrolytic conduction
a. Resistance increases with increasing temp
b. Resistance decreases with increasing temp
c. The flow of current does not generate heat
d. the resistance is independent of temp

326. The molar conductivity of a strong electrolyte
a. increases on dilution
b. does not charge considerably on dilution
c. decreases on dilution
d. depends on density

327. Pure water is poor conductor of electricity because it
a. has low boiling point b. is almost unionized
c. is neutral d. is readily decomposed

328. As a lead storage battery is charged
a. PbO_2 dissovles
b. is almost unionized
c. lead electrode becomes coated with lead sulphate
d. the amount of sulphuric acid decreases

329. When a lead storage battery is discharged
a. SO_2 is evolved b. Lead sulphate is consumed
c. Lead is formed d. H_2SO_4 is consumed

330. Calomel is electrode is made from
a. $ZnCl_2$ b. $CuSO_4$
c. Hg_2Cl_2 d. $HgCl_2$

331. If a stripe of copper metal is placed in a solution of ferrous

sulphate
a. copper will precipitate out
b. Iron will precipitate out
c. Cu and Fe both will dissolve
d. No reaction will take place

332. Which of the following does not displace hydrogen from dilute hydra acids
a. Na b. K c. Ca d. Pb

333. When a copper wire is placed in a solution of AgNo3, the solution acquires blue color due to formation of
a. Cu^{2+} ions
b. Cu^{+} ions
c. Soluble complex of $AgNO_3$
d. Cu^{-} ion by the reduction of Cu

334. H2/O2 fuel cells are used in spacecraft to supply
a. power of heat and light b. power of pressure
c. oxygen d. water

335. Which of the following cells convert chemical energy of H_2 and O_2 directly into electrical energy
a. Hg cell b. Daniel cell
c. Fuel cell d. Lead storage cell

336. A coulomb of charge corresponds to
a. $6.2\times10^{15}e^{-}$ b. $6.2\times10^{16}e^{-}$
c. $6.2\times10^{17}e^{-}$ d. $6.2\times10^{18}e^{-}$

337. Gold is found in electrolytic refining of copper
a. at anode b. in anode mud
c. in electrolyte d. in cathode mud

338. In metals conduction of electron is due to
a. free electrons b. bound electrons
c. ions d. atoms

339. Copper does not displace……..from their salt solution.
a. Ag b. g/A c. g/C d. C/g

340. When a lead battery is discharged
a. SO_2 dissolved b. $PbSO_4$ consumed
c. Lead formed d. H_2SO_4 consumed

341. Process in which no heat is transferred to and from the system is
a. Isothermal b. adiabatic
c. isochoric d. isolated

342. The apparatus used for the experimental determination of heat of a reaction is called
a. thermometer b. voltmeter
c. calorimeter d. colorimeter

343. Which of the following is the correct consequence of radioactivity?
a. emission of only α particle
b. emission of only β particle
c. stability of the nucleus
d. instability of the nucleus

344. The diameter of the nucleus is of the order
a. 10^{-10} m b. 10^{-15} m
c. 10^{-14} cm d. 10^{-10} cm

345. The rate of nuclear reaction
a. Increase with increase of temperature
b. Decrease with decrease of temperature
c. Decrease with increase of temperature
d. Independent of temperature

346. Which of the following has one proton and no neutron?
a. Protium b. Deuterium
c. Tritium d. F

347. Radioactivity lead to
a. Stability of nucleus
b. Instability of nucleus

c. Emission of α particle only
d. emission of only β particle only

348. The rate of decay of radioactive element
a. Increase with increase in time
b. Decrease with increase in time
c. Remains constant with increase in time
d. Decrease exponently with time

349. The alpha particle is
a. An ionized H atom b. Ionized He atom
c. Doubly ionized He atom d. Neutral particle

350. Which of the does not contain material particles?
a. α- rays b. β-rays c. anode rays d. γ-rays

351. In nuclear reactors D_2O or graphite is used as
a. Fuel b. Moderator
c. Energy producer d. None

352. In carbon dating following is used
a. C^{12} b. C^{13}
c. C^{14} d. C^{15}

353. The most effective projectile file is
a. Electron b. Proton
c. Neutron d. α particle and meson

354. The total weight of fission products is always
a. More than that of parent nucleus
b. Less than that of parent nucleus
c. Depends upon external condition
d. Neither more nor less

355. Large energy in an atomic bomb explosion is due to
a. Conversion of heavier to lighter atom
b. Products having a lesser mass than initial substance
c. Release of neutrons
d. Release of electrons

356. The basic of C-14 dating is that the
a. C-14 fraction is same in all objects
b. C-14 is highly unstable and is readily lost from objects
c. C-14/C-12 ratio is always constant in atmosphere
d. Living tissue will not absorb C-14 but absorb C-12

357. Age of fossil is determined by
a. U-Pb method
b. C-14 method
c. C-H-N cycle
d. Neutron activation analysis

358. The heaviest particle is
a. Electron b. Proton c. Neutron d. Meson

359. Atomic bomb is discovered by
a. E. Rutherford b. O. Hann
c. Curie d. Einstein

360. Colloidal solutions are not purified by
a. Dialysis b. Electrophoresis
c. Electro dialysis d. Ultra filtration

361. Butter is a collide containing
a. Water dispersed in fat
b. Fat globules are dispersed in water
c. Fat is dispersion in casein
d. Suspension of casein in water

362. Which of following methods is used for sol destruction?
a. Condensation
b. Dailysis
c. Diffusion through animal membrane
d. Addition of an electrolyte

363. Dialysis is a process of
a. Precipitating colloids by addition of electrolyte
b. Separating suspension from colloidal solution
c. Removing suspensions from colloidal solutions
d. Dispersion of freshly precipated substance into colloids

364. Colloidal systems are
a. Homogeneous b. Heterogeneous
c. Suspensions d. None of these
365. Who is regarded as founder of colloidal chemistry
a. Goldberg and wage b. Rutherford
c. Thomas Graham d. Berzelius
366. Those substances which reality diffuse through animal membrane are known as
a. Crystalloid b. Colloids
c. Suspensions d. Electroly
367. Soap is alcohol is
a. Crystalloid b. Colloid
c. Suspension d. None of these
368. Which of the following is not a colloid?
a. Ruby glass b. Gum Arabic
c. Chlorophyll d. Albumin
369. Suspensions are
a. Invisible
b. Visible under microscope
c. Visible under naked eyes
d. Visible under electron microscope
370. Fog is an example of colloidal system containing
a. Gas dispersed b. Liquid dispersed in gas
c. Solid dispersed in gas d. Liquid dispersed in solid
371. Collodial systems containing solid dispersed in liquid are known as
a. Aerosol b. Gel c. Sol d. Emulsion
372. Milk is an emulsion containing
a. Fat is dispersed in solid casein
b. Fat globules are dispersed in water
c. Water is dispersed in fat
d. Suspension of casein in water
373. Tyndall effect is shown by
a. True solutions b. Colloidal solution
c. Dilute solution d. Suspensions
374. Gelatin is often used as an ingredient in manufacture of ice-cream
a. to prevent the formation of colloid
b. to stabilize the colloid and prevent crystal growth
c. for improving the flavor
d. to stabilize the mixture
375. The coagulating power of an ion depends on
a. its size b. sign of charge on it
c. magnitude of charge on it
d. Both magnitude and sign of charge
376. Berdig's are method used for preparation of colloidal solution is
a. Dispersion method
b. Condensation method
c. Combination of dispersion and condensation
d. Neither dispersion nor condensation
377. The stability of lyophilic colloids is due to
a. Charge on their particles
b. a layer of dispersion medium on their particles
c. large size of particles
d. small size of particles
378. When dispersion method of a colloidal system is gas, it is known as
a. Aerosol b. Sol
c. emulsion d. Hydrosol
379. Which of the following gives positively charged sol?
a. Gold b. Metal sulphide
c. Ferric hydroxide d. Acidic dye
380. When a small quantity of an electrolyte is added to a freshly

prepared precipate, it readily passes into colloidal state, it is known as

a. Electrophoresis b. Dispersion
c. Peptisation d. Coagulation

381. Tyndall effect in colloidal solutions is due to
a. Reflection of light by colloidal particles
b. Scattering of light by colloidal particles
c. Absorption of light
d. Presence of charged particles

382. The size range of colloidal particles range from
a. 5A to 100 A^0 b. 1m μ to 200 m μ
c. 1 m μ to 5 m μ d. 200 m μ to 500 m μ

383. The sky looks blue due to
a. Dispersion of effect b. reflection
c. Transmission d. Scattering

384. Gold number represents
a. Amount of god present in the colloid
b. Amount of gold required to break the colloid
c. Amount of gold required to protect the colloid
d. None of these

385. Brownian movement was discovered by
a. Zsigmondy b. Robert Brown
c. Hardy – Schulze d. Graham

386. Medicines are generally used in colloidal state because these
a. are cheaper
b. are more effective and readily assimilated
c. act as germicide
d. are easily prepared

387. At isoelectric point
a. Peptisation occurs
b. colloidal solutions become stable
c. coagulation is not possible
d. Colloidal particles carry no charge

388. Hydrophillic colloids are readily coagulated by addition of
a. An electrolyte
b. An ethanol
c. An electrolyte with ethanol
d. Hydrophobic colloid

389. Which of the following is not related with colloidal systems?
a. Ultrafication b. Brownian movement
c. Wave length d. Coagulation

390. Which of the following does not contain a hydrophobic structure?
a. Linseed oil b. Lanolin
c. Glycogen d. Rubber

391. Purple of cassius is a colloidal solution of
a. Cu b. Ag c. Au d. Pt

392. Enulsifying agents are generally
a. Ions with negative charge b. Protective colloids
c. Ions with positive charge d. Lyphobic substance

393. Whipped cream is an example of
a. Gas dispersed in liquid b. Liquid dispersed in gas
c. Liquid dispersed in liquid d. Liquid dispersed in solid

394. Alum is added in purification of water
a. to make in conducting
b. as germicide
c. to settle down the suspended impurities
d. for making dirt particles electrically charged

395. The emulsifying agent in milk is
a. lactic acid b. casein
c. Lactose d. fat

396. Butter is
a. gel b. emulsion c. sol d. none

397. Gels on standing exude amount of liquid. This phenomenon

is known as
a. synersis b. efflorescence
b. thixotropy d. absorption

398. Which is used is treating eye diseases?
a. Colloidal sulphur b. Collidal antimony
c. colloidal gold d. Colloidal silver

399. The blue colour of water in the sea is due to
a. scattering of blue light by water molecules
b. reflection of blue sky by sea water
c. refraction of the blue of light by the impurities in sea water
d. absorption of other colors except the blue color by water molecules

400. Blue color of the sky is due to
a. dispersion effect b. reflection
c. transition d. scattering

401. Alum purify muddy water by
a. dialysis b. absorption
c. coagulation d. peptization

402. Addition of salt to colloid lead to
a. dialysis b. absorption
c. coagulation d. peptization

403. The minimum concentration of an electrolyte required to cause coagulation of a sol is called
a. flocculation value b. gold number
c. protective value d. none of these

404. A lump of coal burns slowly in air while coal dust burns explosively. This is because of
a. high mass of lump of coal
b. lower ignition temperature of coal dust
c. higher ignition temperature of coal dust
d. lager surface are coal dust

405. Copper is extracted from copperpyrites ($CuFeS_2$) by roasting the concentrated ore in air to form Cu_2S, the impure Cu_2S in then heated in air forming CH_2O which is finely reduced to copper by
a. Heating with unchanged Cu_2S
b. Heating with Si in a closed furnance
c. Heating with coke in the absence of air
d. Heating with coke in a blast furnance

406. Which of the follwing is reduced by H_2
a. CuO b. SnO_2
c. Al_2O_3 d. Fe_2O_3

407. Chromatography a method for the separation of mixture and purification of compound is based on
a. absorption b. solubility
c. colour change d. selective absorption

408. Dolomite is…… form of Mg
a. Carbonate b. Sulphate
c. Oxide d. Carbite

409. Gold is found in electrolytic refining of copper
a a. at anode b. In anode mud
c. at cathode d. In cathode mud

410. Copper does not displace which of the following metal from their salt solution
a. Ag b. Au
c. Zn d. Hg

411. Granite is an
a. Alloy b. Amalgam
c. Ore d. Rock

412. Which among the following is an ore of copper?
a. Calamite b. Bauxite
c. Malachite d. Haemitite

413. Which is an element?

a. Sand b. Gun powder
c. Brass d. Hydragyrum

414. Iron is made soft during extraction using
a. CO b. CO_2
c. H_2O d. C

415. Cinnabar is the ore of
a. Zn b. Cd
c. Hg d. Fe

416. The waste material in an ore (mineral) is called
a. flux b. Litter
c. Gangue d. Slag

417. Malachite is an ore of
a. Zn b. Cu
c. Hg d. Fe

418. Which of the following is not an ore of sulphur
a. Galena b. Iron pyrites
c. Zinc blende d. Malachite

419. Froth floating is the process of purification of…….ore
a. Oxide b. Sulphide
c. Carbonate d. Sulphate

420. Dolomite is
a. $MgSO_4$, $7H_2O$ b. $MgCO_3$
c. $MgCO_3$,$CaCO_3$ d. None

421. The process of converting hydrated alumina to anhydrous alumina is known as
a. Roasting b. Smelting
c. Calcination d. Cupellation

422. Acid flux is
a. $CaCO_3$ b. CaO
c. SiO_2 d. MgO

423. Which one is not ore of Aluminium
a. Topaz b. Corrundom
c. Anglesite d. Mica

424. Forth floatation process is based on
a. Wetting characteristic of ore and gangue
b. Floating properties of one ore and gangue
c. Both a and b
d. None

425. Mixture of powdered ore and water is called
a. Slurry b. slag
c. eluant d. none

426. Froth floatation process involves
a. absorption b. adsorption
c. coagulation d. sedimentation

427. Calcination is carried out mostly for
a. Carbonate b. sulphide
c. Oxide d. Hydroxide

428. Calcined ore is
a. oxide b free metal
c. sulphide d. infusible compound

429. Roasting is mainly for
a. sulphide b. Hydrated oxide
c. Oxide d. None

430. Wolframite is ore of
a. W b. X
c. Y d. Z

431. The ore of Mg is
a. Asbestos b. Siderite
c. Galena d. Diaspore

432. The precious stone originating from Beryllium is
a. Granite b. Garnet
c. Salinanite d. Shale

433. Quartzite is

a. Igneous rock b. Sedimentary rock
c. Metamorphic rock d. stone

434. The silicate layer of earth correspond to
a. Lithophil b. Siderophil
c. Chalcophil d. Atmophil

435. Elements which have tendency to associate with iron are
a. Lithophil b. Siderophil
c. Ferophil d. Atmophil

436. Manganese nodule
a. is potato shaped nodule b. is nodule of potato
c. is potato containing Mn d. none

437. The metals occurring in the form of their compounds in nature is called
a. Minerals b. Flux
c. Slag d. Ores

438. The oil used in froth floatation process is
a. Pine oil b. Mustard oil
c. Coconut oil d. None of above

439. Flux is used to
a. Remove all impurities form ore
b. Remove silica
c. Remove silica and undesirable metal oxide
d. Reduce metal oxide

440. Metallurgy is process in which
a. Pure metal is extracted
b. Alloy in nature
c. Ore is concentrated
d. Metal is extracted from ore

441. The impurities associated with minerals are called
a. Ore b. Slag
c. Flux d. Gangue

442. The method used for the concentration of sulphide ores of copper is
a. Magnetic separation b. electro refining
c. Smelting d. Froth floatation

443. Froth floatation process is applicable for
a. Sulphates ore b. Sulphide ore
c. Oxides ore d. Chloride ores

444. An alloy is
a. A solid containing two or metals
b. Mixture of two or more non metal
c. Intermetallic compound
d. a solid containing one non metal

445. During smelting an addition all substance is added which combines with impurity to form a fusible product which is called
a. Gangue b. Mud
c. Slag d. Flux

446. Electrolytic reduction method is used in the extraction of
a. Noble metals b. Transitioned metal
c. Highly electro –ve d. Highly electro +ve

447. Heating of ore in limited air is called
a. Smelting b. Roasting
c. Calcination d. Bessemerisation

448. Which of the following is extracted by electrolytic process?
a. Cu b. Na
c. Fe d. Al

449. Calcination is the process of heating ore
a. in absence of air b. in presence of air
c. in a blast furnance d. None

450. A naturally occurring substance form which metal can

be profitably extraction is known as

a. Gangue b. Slag

c. Ore d. Mineral

451. Which of the following statement is true?

a. An ore can not be minerals

b. A mineral can not be done

c. All minerals are ore

d. All ores are minerals

452. The roasting is done in case of

a. Carbonates b. Sulphide

c. Oxide ore d. Silicate ores

453. Alumino thermic process is used for the extraction of

a. Zn b. Fe

c. Al d. Cr

454. Zinc hydroxide, when heated gives

a. $Zn+H_2O$ b. $ZnO+H_2$

c. $ZnO+O_2$ d. $ZnO+H_2O$

455. Which of the following is ore of lead

a. Galena b. Magentite

c. Cinnabar d. Calamine

456. Zn(NO3)2 when heated gives

a. $ZnO+O_2+N_2$ b. $Zn+NO_2+O_2$

c. $ZnO+NO_2+O_2$ d. $ZnNO_2+O_2$

457. Product obtained when KNO3 is heated are

a. $NO2+O_2+K_2O$ b. KNO_2+O_2

c. $KNO_2+N_2+O_2$ d. $K_2O+O_2+NO_2$

458. Which of the following is soluble in water

a. $Zn(NO_3)_2$ b. $NaNO_3$

c. $Cu(NO_3)_2$ d. All of above

459. Molecular formula of calamine is

a. $CaSO_4$ b. Al_2O_3

c. $ZnCO_3$ d. ZnS

460. Product obtained by heating $AgNO_3$ are

a. $Ag_2O+NO_2+O_2$ b. $AgNO_2+NO_2$

c. $Ag+NO_2\uparrow + O_2$ d. $AgNO_2+O_2$

461. Amaglam is an alloy of

a. Mercury b. Iron

c. Aluminium d. Chromium

462. Brass is an alloy of

a. Cu+Sn b. Cu+Zn

c. Zn+Sn d. $Cu+Fe^+$

463. Bauxite is an ore of

a. Lead b. Aluminium

c. iron d. Copper

464. Bronze is an alloy of

a. . Cu+Sn b. Cu+Fe

c. Cu+Cr d. Cu+Zn

465. Stainless steel consist of

a. Fe+Zn+Cu b. Fe+Ni+Al

c. Fe+Ni+Cr d. Fe+C+Cr

466. Important ore of iron is

a. Hamatite b. Malachite

c. Pitch blend d. Cinnabar

467. Which of the following is soluble in water

a. K_2O b. $BaSO_4$

c. CuO d. All of above

468. Which of the following is insoluble in water?

a. eCl_2 b. Hg_2Cl_2

c. NaCl d. CaO

469. Which of the following is the ampphoteric oxides

a. PbO b. SiO_2

c. ZnO d.CaO

470. The substance which converts infeasible ore into fusible ore is called

a. Gangue b. Slag
c. Flux d. Matrix

471. Which of the following is the acidic oxides
a. ZnO b. SiO_2
c. MgO d. CaO

472. Which of the following doesnot decompose on heating
a. K_2CO_3 b.$CaCO_3$
c. $ZnCO_3$ d. $Cu(NO_3)_2$

473. Which of the following does not decompose on heating
a. Na_2CO_3 b. KOH
c. NaOH d. all of above

474. Which of the following is the iron ore
a. Dolomite b. Bauxite
c. Galena d. Haematite

475. Which of the following sulphate is insoluble in water?
a. $FeSO_4$ b. $BaSO_4$
c. Na_2SO_4 d. $CuSO_4$

476. Na_2CO_3 is
a. decomposes when heated
b. insoluble in water
c. soluble in water
d. sparingly soluble in water

477. Froth floatation is used for the concentration of
a. Sulphide ore b. carbonate ore
c. Oxide ore d. none of above

478. Sal Soda is
a. $AgNO_3$ b. Na_2O_3
c. $Na_2CO_3.10H_2O$ d. NH_4Cl

479. Which of the following metal gives hydrated chloride
a. Mg b. Ag
c. Hg d. Na

480. Which of the following hydroxide is stable to heat
a. $Ca(OH)_2$ b. NaOH
c. $Fe(OH)_3$ d. $Cu(OH)_2$

481. Which of the following gives a mixture of NO2 and O2 on heating
a.$NaNO_3$ c. $LiNO_3$
d. $RbNO_3$ d. KNO_3

482. Which of the following gives a mixture of NO_2 and O_2 on heating
a. $LiNO_3$ b. $NaNO_3$
c. $Hg(NO_3)_2$ d. KNO_3

483. Malachite is a basis carbonate of
a. Zn b. Fe
c. Cu d. Pb

484. Pearl ash is a basis carbonate of
a. a b. Fe
c. Cu d. Fe

485. Calamine in an ore of
a. Cu b. Zn
c. Fe d. K

486. The ppt which remains undissolved in water and dil.acid is
a. $BaSO_4$ b. $BaSO_3$
c. CuS d. BaCO

487. From a solution of ZnCl2, zinc carbonate can be precipitated by adding
a. Na_2CO_3 b. $CaCO_3$
c. $MgCO_3$ d. $NaHCO_3$

488. The sulphate which is slightly soluble in water is
a. $CuSO_4$ b. Hg_2SO_4
c. $PbSO_4$ d. $BaSO_4$

489. The metal which gives basic carbonate by adding Na_2CO_3 solution, to its salt solution in water is

a. Mg b. Ba
c. Ag d. Sr

490. The substance added to remove impurities is called
a. Slag b. Flux
c. Gangue d. Catalyst

491. Electrolytic reduction method is used in the extraction of
a. highly electropositive element
b. highly electronegative element
c. inert metals
d. transitional metals

492. Which of the following properties of elements always increases down the groups in the periodic table
a. Ionization energy b. Electronegativity
c. melting point d. None of above

493. Which of the following pairs of elements is expected to form the least polar covalent bond?
a. Al & Cl b. N & F c. O & F d. H and Cl

494. Given is the successive ionization energies in KJ $mole^{-1}$ an element, 740, 1500, 7700, 10500. The element could be
a. Na b. Mg c. Al d. Si

495. Which of the following acts as bridge elements
a. Li b. Na c. K d. Mg

496. Arrange these in increasing atomic size
a. Na,K,P,N b. N,P,Na,K
c. P,Na,K,N d. K,N,Na,P

497. The correct order of second ionization potential of C, N, O and F is
a. O>F>N>C b. O>N>F>C
c. C>N>O>F d. F>O>N>C

498. Smallest among the following is
a. Na^+ b. Mg^{2+} c. Al^{3+} d. Si^{4+}

499. Correct order of 1st I.P. among the following
a. N>O>C>B b. C>B>N>O
c. B>C>O>N d. O>B>C>N

500. Which of the following elements show variable valency?
a. Li b. Cl c. F d. Fr

501. Which of the following elements shows variable valency?
a. Typical element b. normal elements
c. Transitional element d. S- block element

502. The chemist who has helped in the discovery of maximum number of transuranic elements is
a. Seaborg b. Thomson c. Robinson d. Bohr

503. No of group represents the valency of elements with respect to
a. H b. O c. N d. Cl

504. Which one is false?
a. Oxidising power of elements decreases along a period
b. Reducing power of element increases along a period
c. electronegativity of elements increase along a period
d. Basic number of oxides increase along a group

505. Which of the following has highest 1st I.P?
a. Li b. Be c. N d. O

506. Which of the following is most active non metal?
a. F b. N c. O d. S

507. Which of the following electronic configuration shows lowest 1st I.P?
a. $1s^{-1}$ b. $1s^2 2s^2 2p^6$

c. $1s^2 2s^2 2p^6 3s^1$ d. $1s^2 2s^2 2p^5$

508. Which one form coloured salts?
a. Cu^+ b. Zn^{2+}
c. Mn^{2+} d. all of above

509. Form the left to right along a period
a. acidic nature of oxide decreases
b. atomic size increases
c. basic nature of oxides decreases
d. reducing power of elements increases

510. Which of the following is rough element?
a. H b. Li c. He d. C

511. The telluric helix was given by
a. De chan courtois b. Newlands
c. Meyer d. Mendeleef

512. The most important active step in the development of periodic table was taken by
a. Mendeleef b. Dalton
c. Avogardo d. Cavendish

513. Mendeleef's periodic law is based on
a. atomic number b. atomic weight
c. number of neutrons d. none of above

514. In long form of periodic table, elements are arrange in
a. increasing mass b. increasing volume
c. increasing atomic number d. alphabetically

515. Bohr's periodic table is based on the atomic number of elements. The experiment which proved the significance of the atomic number was
a. Mulliken's oil drop experiment
b. Mosley's work on X-ray spectra
c. Bragg's work on x- diffraction
d. Discovery of x rays by Rontgen

516. The smallest one is
a. N^{3-} b. O^{2-} c. F^- d. N^+

517. The size of the following species increases in the order
a. $Mg^2 < Na^+ < F < Al$
b. $F < AL < Na^+ > Mg^{2+}$
c. $Al < Mg < P < Na^+$
d. $Na^+ < Al < F < Mg^{2+}$

518. Which has maximum atomic radius
a. Al b. Si
c. p d. Mg

519. Who developed the long form of the periodic table?
a. LotherMayer b. Niels
c. Mendeleef d. Mosseley

520. Which one is not paramagnetic?
a. Cl b. Be
c. Ne^{2+} d. As^+

521. Which of the following is ferroelectric compounds?
a. $BiTiO_2$ b. $K_4[Fe(CN)_6]$
c. Pb_2O_3 d. None of these

522. E.A. of Mg is
a. 1.3 b. 2.5 c. 0 d. 4

523. Variable valency is due to
a. Lone pair effect b. inert pair effect
c. high m.p d. high b.p

524. The lighest metal and non metal respectively are
a. H,Li b. Na, O c. Fe,F d. Be, He

525. The first element of the rate earth metal is
a. Cerium b. Actinium
c. Uranium d. Lanthanum

526. Set containing isoelectric species is
a. $C^{2-}{}_2, NO^+, CN^-, O_2^{2+}$

b. CO, NO, O_2, CN^-

c. CO_2, NO_2, O_2, N_2O_5

d. CO, CO_2, NO, NO_2

527. The element with atomic number 51 exist is

a. s-block b. d-block

c. p-block d. f-block

528. The odd one is

a. N^{3-} b. Na^+ c. F^- d. Ti^+

529. The incorrect statement among the following is:

a. The IE_1 of AI is less than that of Mg

b. The IE2 of Mg is greater than that of Na

c. The I E1 of Na is less than that of Mg

d. The IE3 of Mg is greater than that of Al

530. The IE of 2^{nd} group element is higher than the member of 3^{rd} group because of

a. partially filled p-orbital of 2^{nd} group element

b. completely filled s-orbital of 2^{nd} group element

c. completely filled p-orbital of 3^{rd} group element

d. half filled p-orbital of 3^{rd} group element

531. Which has the least first ionization enthalphy(IE_1)

a. H b. He c. Xe d. Li

532. Atomic radius is nearly equal in

a. Na, K, Cs, Fr b. B, C, N, O

c. Cr, Mn, Fe, Co d. He, Ne, Ar, Kr

533. An ion has 18^{e-} in the outermost shell, it is

a. Cu^+ b. Th^{4+}

c. Cs^+ d. K^+

534. The decreasing order of size of following ion is

a. $Li > H^+ > H^-$ b. $H^+ > H^+ > Li^+$

c. $H^+ > Li^+ > H^+$ d. $H^- > H^+ > Li^+$

535. Correct the order of increasing ionization energy is:

a. Na<P<N<Ne b. Na<N<P<Ne

c. Rb<K<Na<Li d. Na<Ne<P<N

536. The density of neon will be highest at

a. STP b. 0^0C

c. 273^0C, 1 atm d. 273^0C, 2 atm

537. Which of the following gas is used in conducting tube to tube light for colouring propose

a. Neon b. Argon

c. Xenon d. nitrogen

538. First stable compound of noble gas was prepared by

a. Rayleigh b. Rutherford

c. Ramsay d. Neil Bertlett

539. Clatherate is

a. Cage compound b. Liquid crystal

c. Mixture d. solid solution

540. Helium is used with oxygen in the apparatus of divers because it…….

a. is lighter than N_2

b. is not soluble in blood in high pressure

c. is easily available

d. is less reactive than N_2

541. The spectrum of He is similar to that of

a. He^2 b. He^{2+}

c. Li^+ d. He^+

542. XeF_2 and XeF_6 on hydrolysis gives

a. XeO_3 b. XeO

c. XeO_2 d. Xe

543. The gases used for treatment of asthma

a. Mixture of He and O_2

b. Mixture of Ne and O_2

c. Mixture of Xe and N_2
d. Mixture of Ar and O_2

544. Beacon lights are obtained from
a. Tungsten lamps b. Hydrogen lamps
c. neon Lamps d. Xenon lamps

545. In incandescent and fluorescent lamps the gas filled extensively is
a. Ne b. Ar c. N_2 d. Xe

546. In coloured discharge tube the one used is
a. Ne b. Ar c. Kr d. He

547. The gas that surrounds a radioactive element is
a. He b. Ne c. N_2 d. O_2

548. The most useful noble gas is
a. He b. Ar c. Ne d. Xe

549. Which has least tendency to form compound?
a. He b. Ne c. Kr d.Xe

550. Monozite is source of
a. He b. Kr c. Ar d. Ne

551. Nuclear fusion produces
a. Ar b. $_1D^2$ c. He^4 d. Kr

552. Percentage of Ar in air is about
a. 10% b. 0.1% c. <0.1% d. 1%

553. Which one is abundant in air
a. He b. Ne c. Ar d. Kr

554. The forces acting between noble gas atoms are
a. van der waals forces
b. Ion-dipole forces
c. London dispersion forces
d. magnetic forces

555. The valency of noble element is
a. 0 b.1 c. 2 d. 3

556. Which of the following was first discovered in the chormosphere of the sum?
a. He b. Ne c. Ar d. Rn

557. Mixture of inert gas when kept in contact with charcoal at -100 degree celcius then which are not absorbed?
a. He, Kr, Ar b. Ar, Kr, Xe
c. He, Ne d. Xe, Kr

558. The ratio of Cp/Cv for inert gases is
a. 1.33 b. 1.66 c. 2.33 d. 1.5

559. The one used in radio valves is
a. He b. Ne c. Ar c. Rn

560. Which cannot be obtained from air?
a. He b. Kr c. Xe d. Rn

561. The one used in filling electric bulb.
a. He b. Ne c. Ar d. Xe

562. The noble gas having lowest ionization energy is
a. He b. Ar c. Rn d. Ne

563. Which one is not present in air?
a. He b. Ne c. Ar d. Rn

564. Which one has highest b.p?
a. He b. Ne c. Kr d. Xe

565. Which one is least polarizeble?
a. He b. Ne c. Kr d. Xe

566. B.P. and m.p. of inert gas are
a. High b. Low
c. very high d. very low

567. The chemistry of noble gas was discovered by
a. Bohr b.Bartlet
c. Ramsay d. Rutherford

568. The forces acting between noble gas atoms are
a. Van der waals forces
d. Ion-dipole forces

c. London dispersion forces
d. Magnetic forces

569. The gas tha surrounds a radioactive element is
a. He b. Ne
c. N_2 d. O_2

570. The odd one is
a. CF_4 b. SF_6
c. HeF_4 d. XeF_4

571. Out of noble gas only Xe forms compound like oxygen because
a. ionization enthalpies of Xe and O_2 is almost same
b. electron affinity of X and O_2 is almost same
c. they are present of Xe and O_2 is almost same
d. none of these

572. Which of the following substance can be purified by sublimation
a. urea
b. benzoic acid
c. Ammonium cyanate
d. none

573. Petroleum is mixture of
a. alkane and alkenes b. cycloalkanes
c. aromatic hydrocarbons d. all above

574. The water which contain calcium bicarbonate and calcium chloride is……..
a. Temprorary b. Permanent
c. a and b d. None

575. Hydrogen, deuterium, tritium has
a. different proton b. different electron
c. different neutron d. same no. of neutron

576. A hydrated salt when exposed to air loses water, it is called as
a. Efflorescent b. Deliquescent
c. Hygroscopic d. None

577. Sodium is kept under
a. Alcohol b. Water c. Kerosene d. Aqua regia

578. The material used in solar cell contains
a. Cs b. Si c. Sn d. Ti

579. Alkali metals are good reducing agent because
a. they are metal
b. they are monovalent
c. their ionization potential is low
d. they have small atomic

580. A solution of sodium metal in liquid ammonia is strongly reducing due to the presence of
a. Sodium atoms b. Sodium hydride
c. Sodium amide d. Solvated electrons

581. A solution of sodium metal in liquid ammonia is blue due to the presence of
a. Sodium atoms b. ammonium ions
c. Solvated sodium ion d. Solvated electrons

582. Which one is not suitable for sorting sodium metal?
a. Benzene b. Kerosene
c. Alcohol d. Tolune

583. Causticization process is used for the preparation of
a. Caustic soda b. Caustic potash
c. Baryta d. Slaked lime

584. Which one is soluble in non-polar solvent?
a. NaCl b. LiCl c. RbCl d. CsCl

585. NaOH is manufactured by electrolysis of brine solution. The product of the reaction are
a. Cl_2 and H_2 b. Cl_2 and Na-Hg
c. Cl_2 and Na d. Cl_2 and O_2

586. White phosphorous reacts with caustic soda to produce PH_3

and NaH_2PO_4. The reaction is an example of
a. oxidation b. reduction
c. neutralization d. oxidation-reduction

587. Glauber's salt is
a. $Na_2CO_3.\ 10H_2O$ b. $CuSO_4.\ 5H_2O$
c. $Na_2SO_4.\ 10H_2O$ d. $FeSO_4.\ 7H_2O$

588. Fires that results from the combustion of alkali metals can be extinguished by
a. Kerosene b. CCl_4 c. Sand d. Water

589. Molten sodium is used in nuclear reactors to
a. absorb neutrons in order to control the chain reaction
b. slow down the fast reactions
c. absorb the heat generated by nuclear fission
d. extract radio isotope produced in the reactor

590. Squashes are stored by adding
a. Citric acid b. KCI
c. Na_2SO_3 d. sod. metabisulphite

591. Sodium thiosulphate ($Na_2S_2O_3.\ 5H_2O$) is used in photography to
a. reduce AgBr to Ag
b. convert Ag to Ag- salt
c. remove undecomposed Ag Br as a soluble silver thiosulphate complex
d. removed unreduced Ag

592. Which one is possible?
a. Li_3N b. Na_2N c. K_2N d. Cs_3N

593. Li_3N is
a. covalent b. ionic c. coordinate d. dative

594. L_3N dissolves in water liberating
a. NH_3 and LiOH b. Li and N_2
c. LiOH and N_2 d. None

595. Which one does not form soluble bicarbonate?
a. Li b. Na c. K d. Cs

596. Li can store in
a. Kerosene b. Paraffin wax
c. Alcohol d. Water

597. Conductance of ions follows the order
a. $Cs^+ > Rb^+ > K^+ > Na^+ > Li^+$
b. $Cs^+ < Rb^+ < K^+ < Na^+ < Li^+$
c. $Li^+ > Rb^+ < Cs^+ > K^+$
d. $Li^+ < Rb^+ < Cs^+ > K^+$

598. Which does not form alumnus?
a. Li b. Na
c. K d. Rb

599. Which one is liquid at room temperature 37 degree celsius
a. Na b. Hg
c. Os d. Ce

600. Salt of following undergo hydrolysis
a. Li b.Na
c. Os d. Ce

601. Fenton reagent is
a. $SnCl_2$+HCl b. $AgNO_3$+NH_2OH
c. $CUSO_4$+NaOH d. $FeSO_4$+H_2O_2

602. When hair dyes and H_2O_2 are mixed H_2O_2
a. is added to it, the solution of dye
b. odxidies the dye to give the desired colour
c. acidifies the solution of the dye
d. reduce the dye to give the desired colour

603. Kingzett's formula of H_2O_2 is accounted for
a. oxidizing properties of H_2O_2
b. for reducing properties of H_2O_2
c. both a and b
d. None

604. Merk's process is for
a. H_2 b. NaOH
c. Na_2CO_3 d. H_2O_2

605. 20 volume of H_2O_2 means
a. 20 ml and 1.785 m
b. 1 ml of H_2O_2 give 20ml O_2 at NTP
c. 20 ml H_2O_2give 1 ml O_2 at NTP
d. None

606. Reaction velocity in D_2O is
a. less b. more
c. same as water d. none

607. Calgon process is for
a. Prepartion of H_2O
b. removing permanent hardness
c. preparation of H_2
d. preparation of H_2O_2

608. The strongest hydride is
a. complex b. metallic
c. molecular d. ionic

609. The reactive form of hydrogen is
a. Atomic b. ordinary
c. nascent d. absorbed

610. Ortho and para form of hydrogen can be separated by
a. Ion exchange process b. solvent extraction
c. gas chromatography d. chromatography

611. Para hydrogen can be converted to ortho form by
a. mixing with atomic hydrogen
b. treatment with catalyst like pt
c. heating para form to 800^0C
d. All of the above

612. At the temperature of liquefaction of air para:ortho ratio in ordinary hydrogen is
a. 1:2 b.1:1
c. 2:1 d. None

613. At is melting point ice is lighter than water because
a. H_2O molecules are more closely packed in solid state
b. ice crystals have hollow hexagonal arrangement of H_2O molecule
c. on melting of ice of H_2O molecules shrinks in size
d. ice forms mostly heavy water on first melting.

614. Heavy water freezes at
a. 0 degree C b. 3.8 degree C
c. 3-3.8 degree C d. 4 degree C

615. Hardness of water is expressed in
a. molality b. mole fraction
c. ppm d. 9/L-1

616. The hydride of an element E reacts with water producing hydrogen and an alkaline solution. The element E is probably
a. an alkali metal
b. a transition metal
c. a metal low in activity series
d. a metal in group IV

617. Metallic luster of sodium metal can be explained on the basis of
a. diffusion of Na ions
b. oscillation of loose electrons
c. excitation of free protons
d. existence of body centered cubic lattice

618. Fire extinguisher contain H_2SO_4 and
a. $NaHCO_3$ and Na_2CO_3
b. $NaHCO_3$ solution

c. Na_2CO_3
d. NaOH

619. The oxide that gives H_2O_2 on treatement with dilute acid is
a. PbO_2 b. Na_2O_2
c. MnO_2 d. TiO_2

620. Temporary hardness of water can be removed by adding
a. CaO b. $Ca(OH)_2$
c. $CaCO_3$ d. CaI_2

621. H2O2 is manufactured from
a. BaO_2 b. PbO_2
c. MnO_2 d. none

622. The formula of nitre is
a. KNO_3 b. $NaNO_3$
c. NaCl d. HNO_3

623. Surface water contains
a. salt + organic matter b. only salt
c. organic matter d. suspended impurity

624. Which has maximum basicity
a. NaCl b. NaF
c. NaCN d. $NaNO_3$

625. Which is solid at room temperature?
a. CS_2 b. $RaCl_2$
c. HCN d. F_2

626. Which of the following is a measure of organic pollution of water?
a. DO b. BOD
c. COD d. MOD

627. Which of the following oxides is unlikely to dissolve in aqueous sodium hydroxide?
a. Al_2O_3 b. MgO
c. SiO_2 d. SO_2

628. The formula of plaster of paris is
a. $CaSO_4$ b. $CaSO_4.\ 2H_2O$
c. $2CaSO_4.H_2O$ d. $CaSO_4.\ H_2O$

629. Bordeaux mixture is
a. Lime + $CuSO_4$ b. Lime + CuO
c. Lime + CaCO3 d. CuO +$CuSO_4$

630. Which of the following acts as bridge element:
a. Li b. Na c. K d. Mg

631. Atomic no. of calcium is
a. 11 b. 20 c. 40 d. 19

632. Dolomite is the …….. form of magnesium
a. Carbonate b. Sulphate
c. Oxide d. Carbide

633. Slaked lime is
a. $Ca(OH)_2$ b. CaO
c. $CaCO_3$ d. None

634. $CaSO_4.\ 2H_2O$ is called
a. Plaster of paris b. Gypsum
c. Both d. None

635. When H_2O is added to CaO, a cracking sound appears because there is the formation of
a. Quick lime b. Slaked lime
c. Plaster of paris d. None

636. Which of the following oxides is soluble in water and gives pink color when phenolphthalein is added?
a.K_2O b. MgO
c. ZnO d. None

637. Be lies above Mg in periodic table, when Be dust is added to $MgCl_2$ solution, then
a. Nothing happens b. Evolution of gas
c. Mg precipitates d. MgO precipitates

638. Used in tooth paste

a. BeF_2 b. SnF_2 c. BaF_2 d. SrF_2

639. Mg burns in air forming
a. MgO b. $MgCO_3$ c. Mg_3N_2 d. both a & c

640. Which of the following imparts brick red color to the flame?
a.Ca b. Ba
c. Sr d. None of these

641. The wire of flash bulb is made of
a. Mg b. Cu c. Ba d. Ag

642. Bone ash contains
a. CaO b. $CaSO_4$
c. $Ca_3(PO_4)_2$ d. $Ca(H2PO_4)_2$

643. Lithopone is a combination of ZnS and
a. $PbSO_4$ b. $CaSO_4$ c. $SrSO_4$ d. $BaSO_4$

644. A substance absorbs CO_2 and violently reacts with water that substance is
a. $CaCO_3$ b. CaO c. H_2SO_4 d. ZnO

645. Gypsum is
a. Mg SO_4. $2H_2O$ b. $CaSO_4$. $2H_2O$
c. $2CaSO_4$ d. $CaSO_4$. $3H_2O$

646. Gypsum $CaSO_4$. $2H_2O$ on heating to about 120^oC from plaster of paris which has chemical composition represented by
a. $2CaSO_4$. $3H_2O$ b. $CaSO_4$. H_2O
c. $2CaSO_4$.. H_2O d. $CaSO_4$

647. Plaster of paris is
a. $CaSO_4$. H_2O b. $CaSO_4$. $2H_2O$
c. $CaSO_4$. ½ H_2O d. $CaSO_4$. 1½ H_2O

648. Identify the correct statement
a. Plaster of paris is obtained by partial oxidation of gypsum
b. Gypsum is obtained by heating plaster of paris
c. Gypsum contains a lower percentage of calcium than plaster of paris
d. Plaster of paris can be obtained by hydration of Gypsum

649. Which of the fillowing salts becomes plaster of paris on being appropriately hydrated?
a. $CaCO_3$ b. $MgSO_4$
c. $CaSO_4$ d. Zn CO_3

650. Setting of cement is an
a. Exothermic reaction
b. Endothermic reaction
c. Neither exothermic nor endothermic
d. None

651. Setting (hardening) of plaster of paris is
a. Oxidation with atmospheric oxygen
b. Combination with atmospheric CO_2
c. Dehydration
d. Hydration to yield another hydrate

652. Of the following the commonly used as a laboratory dessicator is
a. Na_2CO_3 b. $CaCl_2$
c. NaCl d. None of the above

653. Which of the following is not a drying and dehydrating agent?
a. Silica gel b. P_2O_5
c. Conc. H_2SO_4 d. Hydrated $CaCl_2$

654. Which is quick lime?
a. $Ca(OH)_2$ b. Calcium carbonate
c. Ca O d. Slaked lime

655. Mark the compound which does not contain calcium carbonate
a. Fluorspar b. Iceland spar
c. marble d. Lime stone

656. Slaked lime is used in the manufacture of
a. Cement b. Fire bricks

c. Pigment d. Medicine

657. Which one of the following substances is used in the laboratory for a fast drying of neutral gases?
a. P_2O_5 b. Activated charcoal
c. Anhydrous $CaCl_2$ d. Na_3PO_4

658. The formula for calcium chloride is
a. $Ca(ClO_4)_2$ b. $Ca(ClO_3)_2$
c. $CaClO_2$ d. $Ca(ClO_2)_2$

659. All the following substances react with water. The pair that yields the same gaseous product is
a. K and KO_2 b. Na and Na_2O_2
c. Ca and CaH_2 d. Ba and BaO_2

660. A major constituent of Portland cement except lime
a. Silica b. Alumina
c. Iron oxide d. Magnesia

661. Portland cement is manufacture by using
a. Limestone, clay and sand
b. Limestone, gypsum and sand
c. Limestone, gypsum and alumina
d. Limestone, clay and gypsum

662. Which one of the following components of cements sets at the lowest rate?
a. dicalciium silicate
b. tricalcium silicate
c. tricalciium aluminate
d. tetracalcium aluminoferrite

663. On heating quick lime with coke in electic furnance, we get
a. Ca & CO_2 b. $CaCO_3$
c. CaO d. CaC_2

664. Principle component of limestone:
a. CaO b. $CaCO_3$
c. Na_2CO_3 d. $Ca(OH)_2$

665. Which of the following oxides is unlikely to dissolve in aqueous sodium hydroxide?
a. Al_2O_3 b. MgO
c. SiO_2 d. SO_2

666. Which element from diods?
a. Si b. Cl c. O d. B

667. Which of the following has discrete molecules?
a. Soda-lime b. CCl_4
c. White vitriol d. Green vitriol

668. The chief ore of aluminium s
a. Alunite b. Bauxite
c. Cryolite d. Felspar

669. Bauxite is an oxide mineral of
a. Barium b. Boron
c. Bismuth d. Aluminium

670. Sapphire is mineral of
a. Cu b. Zn c. Al d. Mg

671. Which is not a compound of aluminum?
a. Corundum b. Ruby
c. Diaspora d. dolomite

672. Aluminum is present in
a. Ultramarine b. Lapis lazuli
c. Ruby d. All

673. Which is amphoteric in nature?
a. K_2O b. CaO
c. MgO d. Al_2O_3

674. Alumina
a. is a good conductor of electricity
b. is a bad is conductor of electricity
c. melts at 1000 degree Celsius
d. is an electrovalent compound

675. Which metal is extracted only by electrolytic reduction?

a. Al b. Ag c. Cu d. Fe

676. Aluminum becomes passive in
   a. conc. HNO_3 b. H_2CrO_4
   c. $HClO_4$ d. all

677. Aluminum is not acted upon by pure water as
   a. Impurities in water are essential for the reaction to occur
   b. It is protected by a film of aluminum oxide
   c. it is light metal
   d. it is not a reactive metal

678. When Al is added to KOH solution
   a. no action takes place b. oxygen is evolved
   c. water is produced d. hydrogen is evolved

679. Which metal is protected by a layer of its own oxide?
   a. Aluminum b. Silver
   c. Gold d. Iron

680. Aluminum is more reactive than iron but aluminum is less less easily corroded than iron because
   a. aluminum is a noble metal
   b. oxygen forms a protective oxide layer
   c. iron undergoes reaction easily with water
   d. iron forms mono and divalent ions

681. Which one is amphoteric oxide?
   a. Na_2O b. MgO c. Al_2O_3 d. SO_2

682. Which of the following halide is not expected to exist?
   a. PbF_4 b. $PbCl_4$
   c. $PbBR_4$ d. $PbBP_4$

683. Lead is present in the petrol in the form of
   a. Triethyl lead b. Tetraethly acid
   c. Lead powder d. Pentethyl lead

684. The chloride of which element is insoluble in water
   a. Mg b. Al
   c. Ca d. C

685. The inner pair effect is predominant in
   a. Si b. Sn
   c. Pb d. Ge

686. Diamond is used in glass cutting due to its
   a. hard nature
   b. high refractive index
   c. high m.p.
   d. high metallic bonding

687. Among the various allotropes of carbon
   a. diamond is the hardest and graphite is the softest
   b. diamond is the hardest and coke is the softest
   c. diamond is the hardest and lamp black is the softest
   d. coke is the hardest and graphite is the softest

688. The nature of chemical bonding in diamond is
   a. Ionic b. covalent
   c. coordinate d. metallic

689. Carbon atoms in diamond are bonded with each other in a configuration
   a. linear b. tetrahedral
   c. planar d. octahedral

690. Which of the following statement is false?
   a. the lattice structure of diamond and graphite are different
   b. graphite is an impure form of carbon while diamond is a pure form
   c. graphite conducts electricity while diamond does not
   d. graphite has lower density than diamond

691. Which of the following is a conductor of electricity?
   a. graphite b. Diamond
   c. CO_2 d. SiO_2

692. Which of the following is not an allotrope of carbon?

a. Graphite b. Diamond
c. Soot d. carborundum

693. Which of the following is a good conductor of heat and electricity?
a. anthracite b. diamond
c. charcoal d. graphite

694. Graphite is a conductor of electricity
a. Because all the carbon bonds are satisfied
b. Because some of the electrons are free to move through the crystal
c. Because it is soft
d. Because it has giant molecule structure

695. Most impure form of carbon is
a. wood charcoal b. animal charcoal
c. lamp black d. graphite

696. Graphite is used in nuclear reactors
a. as a lubricant
b. as a fuel
c. for lining inside of the reactors as an insulator
d. for reducing the velocity of neutrons

697. In the sale of diamonds the unit of weight is carat. One carat is equal to
a. 100 mg b. 200 mg
c. 300 mg d. 400 mg

698. The refractive index of diamond is highest among solids, its value is
a. 1.843 b. 2.122 c. 2.235 d. 2.417

699. Diamond and graphite have which thing common?
a. their crystalline structures are identical
b. they are both forms of carbon
c. both are extremely hard substances
d. the same volume of each substance contains the same number of atoms.

700. The charcoal used to decolorize brown sugar solution is
a. wood charcoal b. coconut charcoal
c. animal charcoal d. sugar charcoal

701. Moderate electrical conductivity is shown by
a. silica b. graphite
c. diamond d. carborundum

702. Activated charcoal is employed to remove coloring matter from pure substance. Its works by
a. Bleaching b. oxidation
c. reduction d. adsorption

703. Variety of carbon used in gas makes is
a. lamp black b. wood charcoal
c. graphite d. gas carbon

704. Which of the following is used in making printer's ink shoe polish, black varnish and paint?
a. Bone black b. Carbon black
c. Gas black d. Lamp black

705. Wood charcoal is used for decolourization of sugar because
a. it oxidizes coloured material
b. it reduces coloured material
c. it converts coloured material into colourless
d. it adsorbs coloured materials

706. Charcoal is
a. crystalline b. amorphous
c. efflorescent d. hygrosopic

707. The common variety of coal is
a. coke b. anthracite
c. semiituminous . bituminous

708. Coke is obtained from coal by

a. cracking
b. destructive distillation
c. fractional distillation
d. fractionation

709. The purest form of coal is
a. peat b. bitumimous
c. anthracite d. lignite

710. If the two compounds have the same crystal structure and analogous formula, they are called
a. isobars b. isomers
c. isotopes d. isomorphs

711. The most reactive form of carbon is
a. diamond b. graphite
c. coal d. charcoal

712. The inert form of carbon is
a. diamond b. graphite
c. coal d. charcoal

713. A gas which burns with blue flame is
a. CO b. O_2
c. N_2 d. CO_2

714. Piosonous gas present in the exhaust fumes of car is
a. CH_4 b. C_2H_2
c. CO d. CO_2

715. Which one is the strongest oxidizing agent
a. Pb^{2+} b. Pb^{4+}
c. Ge^{2+} d. Ge^{4+}

716. CCl_4 cannot hydrolyse in water due to
a. available d-orbital
b. lack of vacant d-orbital
c. lack of d-orbital
d. none of these

717. BF_3 is weakest Lewis acid among boron halides due to
a. back π- bonding b. available d-orbital
c. lack of d orbital d. none of these

718. On heating quick lime coke in electric furnance,we get
a. Ca & CO b. $CaCO_3$
c. CaO d. CaC_2

719. Which of the following species from gaint molecular structure
a. Si b. O_2 c. Na d. Fe

720. Glass is
a. micro crystalline solid b. super cooled liquid
c. gel d. polymeric mixture

721. Amongst the oxides of nitrogen, the neutral oxide is

s. NO b. N_2O_5 c. N_2O_3 d. NO_2

722. Aqua-regia is
a. 3 parts of conc. HNO_3+ 1 part of conc.HCl
b. 1 parts of conc. HNO_3+3 part conc. HCl
c. 3 parts conc.HNO_3+2 part conc. HCl
d. 2 parts conc. HNO_3+3 part conc. HCl

723. When Zn reacts with cold and dilute nitric acid it produces
a. NO b. NH_4NO_3 b. NO_2 c. H2

724. Fertility of acidic soil can be increased by treating with
a. Lime b. ammonium phosphate
c. Urea d. Calcium super phosphate

725. Nitrogen molecule and cyanide ion are isoelectronic, but N_2 is comparatively less reactive due to
a. presence of longer bonding electron
b. Absence of bond polarity
c. Both a and b
d. None of the above

726. The most important property of Nitrous oxide is

a. It is highly soluble in cold water
b. It is highly soluble in hot water
c. It is acidic in nature
d. it supports the combustion of burning sulphur

727. The bonds present in N_2O_5 are
a. Only ionic
b. only covalent
c. Covalent and ionic
d. Covalent and coordinate

728. Catalytic hydration of NH_3 gives
a. NO b. NO_2
c. N_2O d. N_2O_2

729. Which is false?
a. Red P with NaOH gives PH_3
b. In safety match white P is used
c. Red P is more active than white P
d. PH_3 may be prepared by heating dil. Acid with phosphate

730. A nitrate salt on heating with Aluminium powder and NaOH gives which of the follwing
a. N_2O b. NO
c. NH_3 d. NO_2

731. Which of the following leaves on residue on heating?
a. $AgNO_3$ b. NH_4Cl
c. NH_4NO_3 d.Ag_2O

732. When Cu reacts with conc.HNO_3 then the brown gas evolved is
a. N_2O b. NO
c. NO_2 d. NO_3

733. NH_3 is prepared in
a. High temperature and high pressure
b. Low temperature and high pressure
c. High temperature and low pressure
d. Low temperature and low pressure

734. Which of the following doesn't form pentahalide
a. P b. N
c. Sb d. As

735. The reaction P+ conc. HNO_3 would yield
a. P_2O_5 b. H_3PO_3
c. H_3PO_4 d. $H_4P_2O_7$

736. Of the following the most acidic is
a. As_2O_3 b. P_2O_3
c. SbO_3 d. Bi_2O_3

737. Which of the following sulphides is black in colour?
a. As_2S_3 b. Sb_2S_3
c. Bi_2S_3 d. SnS_2

738. Which of the following compound is not known?
a. NCl_3 b. NI_3
c. NCl5 d. SbCl3

739. Which of the following fluorides does not exist?
a. NF_5 b. PF_5
c. AsF_5 d. SbF_5

740. Which one electron deficient?
a. NCl_3 b. BCl_3
c. PCl_3 d. PCl_5

741. Anomalous behavior nitrogen is due to
a. small size and high electro negativity
b. lack of d-orbital in valence shell
c. tendency to form multiple bond
d. all of the above

742. Which gives nitrogen on heating?
a. $NaNO_2$ b. $AgNO_2$
c. $Ba(NO_2)_2$ d. NH_4NO_2

743. A solution containing NH_4Cl and $NaNO_2$ on boiling

produces
a. nitrous oxide b. nitrogen
c. nitrogen dioxide d. ammonia

744. Nitrogen is produced by heating
a. HNO_3 b. NH_4Cl
c. NH_4NO_3 d. $NH_4Cl+NaNO_2$

745. Pure N_2 gas is obtained from
a. NH_3+NaNO_2 b. $NH_4Cl+NaNO_2$
c. N_2O+Cu d. $(NH_4)_2Cr_2O_7$

746. Nirogen can be prepared by heating
a. ammonium nitrate
b. ammonium sulphides
c. ammonium dichromate
d. ammonium chloride

747. Pure N_2 can be prepared from
a. NH_4OH b. Ca_3NO_2
c. NH_4NO_2 d. $Ba(NO_3)_2$

748. When ammonia is passed over heated CuO, it is oxidized to
a. N_2 b. NO_2
c. N_2O d. HNO_3

749. By warming a paste of bleaching powder with a solution of ammonia we get
a. hydrogen b. nitrogen
c. chlorine d. oxygen

750. The cyanide ion, CN^- and N_2 are isoelectric. But in contrast to CN, N_2 is chemically inert because of
a. low bond energy
b. absence of bond polarity
c. unsymmetrical electron distribution
d. presence of more number of electrons in bonding orbitals

751. Man dies when nitrous oxide inhaled in large quantity because
a. it is poisonous
b. it cause laughing hysteria
c. deactivates haemoglobin
d. none

752. Nitrogen is used to fill electric bulbs because it
a. is lighter than air
b. makes the bulb give more light
c. does not support combustion
d. is non toxic

753. Conc.HNO_3 stains skin yellow because
a. the proteins are converted into xanthoprotein
b. the water is removed by the acid
c. the skin is burnt by the acid
d. nitrocellulose is formed

754. Reb P is less reactive than yellow because
a. its colour is red
b. it is highly polymerized
c. it is hard
d. it is insoluble ib C_2H_5OH

755. Ammonium chloride is used to clean metal surface because
a. it is volatile chloride
b. it forms soluble complex with metal
c. it dissociates into NH3 and HCl
d. none of above

756. H_2 is evolved by the action of cold and dil.HNO_3 on
a. Fe b. Cu
c. Mn d. Al

757. A hydride of nitrogen which is acidic

a. NH_3 b. N_2H_4
c. N_2H_2 d. N_3H

758. Ammonia can be dried by
a. conc. H_2SO_4 b. P_4O_{10}
c. CaO d. Anhyd. $CaCl_2$

759. Pick out the correct statement?
a. sulphur is laboratory reducing agent
b. O_2 has highest electronegativity
c. H_2 is fire extinguisher gas
d. Cl_2 bleaches by oxidation and SO_2 by reduction

760. When SO_2 is passed through acidified KMnO4 solution
a. $KMnO_4$ is oxidized
b. $KMNO_4$ solution is turned green
c. SO_2 is reduced
d. $KMNO_4$ is reduced

761. Which of the following act both as oxidizing and reducing agent
a. H_2S b. $H2SO_4$
c. HNO_3 d. H_2SO_3

762. A solution of SO_2 in water reacts with H_2S precipitating sulphur. Here SO_2 acts as
a. an oxidizing agent b. a reducing agent
c. an acid d. a catalyst

763. What happens when sulphur reacts with HNO_3?
a. Oxidation b. Reduction
c. Sublimation d. Crystalization

764. Mercuy looses its mensiscus in contact with ozone which is due to the formation of
a. mercury oxide b. Mercury Polyoxide
c. Mercurous oxide d. Mercury suboxide

765. Oleum of
a. 50% of H_2SO_4
b. an intermediate product during hydrogenation of oil
c. Pyro sulphuric acid ($H_2S_2O_7$)
d. $HCl+HNO_3$

766. A solution of sulfur dioxide in water reacts with H_2S precipitating sulphur. Here sulphur dioxide acts as
a. An oxidizing agent b. A reducing agent
c. An acid d. A catalyst

767. When SO_2 is passed through acidified $K_2Cr_2O_7$ solution
a. $KMnO_4$ is reduced
b. The solution is decolorized
c. SO_2 is reduced
d. Green $Cr_2(SO_4)_3$ is formed

768. When SO_2 is passed through acidified $K_2Cr_2O_7$ solution
a. The solution turns blue
b. the solution is decolorized
c. SO_2 is reduced
d. Green $Cr_2(SO_4)$ is formed

769. When SO_2 is passed through cupric chlorine solution
a. A white precipitate is obtained
b. the solution becomes colourless
c. the solution becomes colourless and a white precipitating of CuC_{l2} obtainded
d. no visible change takes place

770. Which of the following is oxidized by SO_2?
a. Mg b. $K_2Cr_2O_7$ c. $KMnO_4$ d. All

771. SO_2 is incombustible and non supporter of combustion but strongly burning potassium or magnesium continues to burn in a jar of the gas because
a. Magnesium has high molecular energy

b. The heat of the reaction is enough to dissociate the gas into S and free oxygen
c. Mg has low ignition point
d. Mg has great affinity for SO_2

772. Sulfur dioxide reduces
a. Mg b. H_2S
c. $KMnO_4$ d. All

773. Sulfur dioxide can be used as
a. Bleaching agent b. Antichlor
c. Disfinfectant d. All

774. Bleaching action of SO_2 is due to
a. Reduction b. Oxidation
c. Hydrolysis d. Its acidic nature

775. When moist colored flowers are put into a gas jar of SO_2, the flowers are decolorized because
a. SO_2 gives colorless oxidized product
b. SO_2 absorbs coloring matter
c. SO_2 oxidizes the vegetable coloring matter
d. SO_2 reduces the vegetable coloring matter

776. Which of the following is acidic?
a. SO_3 b. N_2O
c. BeO d. HgO

777. Sulfuric acid is manufactured by lead chamber process, the catalyst used is
a. Platinum b. ferric acid
c. Vanadium pentoxide d. all

778. About H_2SO_4 which is incorrect ?
a. Reducing agent b. Dehydrating agent
c. Suiphonating agent d. highly viscous

779. Concentrated sulfuric acid is not
a. Efflorescent b. Hygroscopic
c. Oxidizing agent d. Sulphonating agent

780. Low volatility of H_2SO_4 is due to
a. Hydrogen bonding b. Strong bonds
b. Van der Waal's force d. None

781. The reason why conc. H_2SO_4 is used extensively to prepare other acids is that conc. H_2SO_4
a. has a high boiling point
b. has a high specific gravity
c. is an excellent dehydrating agent
d. highly ionized

782. Sulfuric acid has great affinity for water because it
a. Decomposes water
b. forms hydrate with water
c. Decomposes the acid
d. hydrolyses

783. If conc. H_2SO_4 is treated with caustic potash it finally give the compound
a. K_2SO_3 b. K_2SO_4
c. $KHSO_4$ d. K_2HO_4

784. In the reaction $2Ag + H_2SO_4 \longrightarrow Ag_2SO_4 + 2H_2O + SO_2H_2SO_4$ acts as
a. Reducing agent b. oxidizing agent
c. Catalytic agent d. dehydrating agent

785. The reaction between copper and hot conc. H_2SO_4 produces
a. SO_3 b. SO_2
c. Cu+ d. H_2

786. Potassium Ferrocyanide on heating with conc. H2SO4 forms
a. CO b. SO_2
c. SO_3 d. HCN

787. Which of the following liberates hydrogen gas from dil . H_2SO_4 ?

a. Cu b. Al
c. ZnO d. HCN

788. Which of the following reactions depicts the reducing property of SO_2 ?
a. $CaO+SO_2 \longrightarrow CaSO_3$
b. $2H_2S+SO_2 \longrightarrow 3S+2H_2O$
c. $Cl2 +SO_2 \longrightarrow SO_2Cl_2$
d. $Cr_2O7^{2-} +2H^+ +3SO_2 \longrightarrow SO_4^{2-} +H_2O+2Cr^{3+}$

789. Charring of carbohydrate by sulphuric acid is due to its
a. Oxidising property b. dehydrating property
c. acidic property d. all of these

790. Hypo is used in photography because of its
a. reducing property b. oxidizing property
c. complex forming property d. reaction with light

791. Carbogen is
a. pure form of carbon
b. $COCl_2$
c. mixture of CO and CO_2
d. mixture of O_2 and CO_2

792. Oxygen has a positive oxidation state in
a. H_2O_2 b. ClO_2
c. F_2O d. NaOCl

793. Charring of sugar by conc. H2SO4 is its
a. oxidizing action
b. reducing action
c. dehydrating action
d. dehydrogenation action

794. Which of the following halogens has the maximum value of electron affinity?
a. F b. Cl
c. Br d. I

795. Which of the following is the strongest acid?
a. HF b. HCl
c. HBr d. HI

796. Pick out the correct statement
a. No is acidic oxide
b. Phenol is alcohol
c. CO_2 is dried by passing through lime water
d. the highest oxidation state of halogen (except fluorine) has oxidation state +7

797. Which is the most reactive halogen?
a. F b. Cl
c. Br d. I

798. Which one is more stable?
a. HF b. HCl
c. HBr d. HI

799. HCl is gas where HF is liquid due to
a. H-F bond being strong
b. H-F being weak bond
c. H – bonding in HF being strong
d. None of the above

800. Which of these is pseudo- halide?
a. PO_4 b. CN^-
c. HF d. $CuCl_3$

801. German silver does not contain
a. Ni b. Cu c. Zn d. Ag

802. Bronze is the alloy of
a. Zn and Al b. Cu and Sn
c. Cu and Zn d. Cu and Cr

803. One of the following compound gave effervescence with HCl. When it is heated, residue was obtained which turned yellow on standing and white on cooling the compound is
a. $CaCo_3$ b. ZnO c. $ZnCl_2$ d. ZnC

804. Iron gets rusted by action of

a. H_2O and Co2 b. H_2O only
c. CO_2 only d. $ZnCo_3$

805. Gold is found in electrolyte refining of copper
a. At anode b. In anode mud
c. In electrolyte d. In cathode mud

806. Metal used for galvanizing iron sheets is
a. Zn b. Cu c. Cr d. W

807. Spiegeleisen is an alloy of
a. Fe, Mg, Si b. Mg,C,Cu
c. Fe, C, Mn d. Si, C, Cu

808. Purest form of iron is
a. Steel b. wrought c. Cast d. Pig

809. Iron is rendered passive by the treatment with
a. HCl b. H2SO4 c. HNO3 d. NaOH

810. Which of the following is not an alloy?
a. Amalgam
b. Steel
c. Homogeneous mixture of metal
d. Homogeneous mixture of non metal

811. Stainless steel is
a. Fe, Cr, Ni, C b. Ni, Ca
c. Fe, Mn d. Mg, Ca

812. Which is an element?
a. Sand b. Gun powder
c. Brass d. Hydragynim

813. German silver is an alloy of
a. Ag & Zn b. Cu, Zn, M
c. Ag & Cu d. Cu, Zn & Ag

814. The common element in the alloy of brass, bronze and gun metal is
a. Cu b. Zn c. Sn d. Al

815. Which one is paramagnetic?
a. H_2O b. K_2O c. Na_2O_2 d. ZnO

816. Which has maximum ferromagnetic character?
a. Fe b. Co c. Ni d. All

817. Copper sulphate is commercially made form copper craps by
a. Dissolving in hot concentration H_2SO_4
b. The action of dilute H_2SO_4
c. Heating with Na_2SO_4
d. Heating with sulphur

818. The electronic configuration of Cu^{2+} is
a. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^8$
b. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^0 3d^9$
c. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^7$
d. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 3d^{10}$

819. The core of electromagnets are prepared from
a. Pig iron b. steel
c. Stainless steel d. wrought iron

820. Copper is extracted mainly from:
a. Dolomite b. Malachite
c. Haematite d. Cinnabar

821. Which has maximum unpaired electrons?
a. Ag b. Mo c. Cd d. Sn

822. Element can form +3 ion
a. Y b. Sr c. In d. Ru

823. Isomerism is not possible for the complex of CN less than
a. 1 b. 2 c. 3 d. 4

824. Vitamin B12 contains
a. Co2+ b. Mg2+ c. Fe2+ d. Co3+

825. Mohr's salt is
a. simple salt b. Normal salt
c. Complex salt d. Double salt

826. The pH indicators are
a. salts of strong acids and strong bases
b. salts of weak acids and weak bases
c. Either weak acids or weak base
d. Either strong acids or strong base

827. Simple distillation is a process in which
a. Dissolution and crystallization occur side by side
b. Vaporization and condensation occur side by side
c. Vaporization and crystallization occur side by side
d. condensation and crystallization occur side by side

828. Which of the following substances can be purified by sublimation?
a. Urea b. Benzoic acid
c. Ammonium cynate d. All of these

829. The first organic compound synthesized in laboratory from its element is
a. Urea b. acetic acid
c. Methane d. Benzene

830. Vital theory was given by
a. Lemery b. Kolbe
c. Berzelius d. Lavoisier

831. The first organic compound synthesized in laboratory from its element is
a. Urea b. CH_4
c. CH_3COOH d. H_2H_2

832. Carbon forms a large number of compounds because
a. of high electrons affinity
b. it is non metal and its valency is four
c. it forms compound
d. of catenation

833. The first organic compound was synthesized in laboratory by
a. Kekule b. Wohler
c. Liebig d. Lavoiser

834. Main source of organic compounds is
a. Coat- tar b. petroleum
c. Both coal- tar and petroleum d. None of these

835. First systematic classification of naturally occurring compounds was given by
a. Bergmann b. Lemery
c. Leibig d. Lavoisier

836. Organic chemistry is the chemistry of
a. Compounds derieved from living organisms
b. compounds derived from non living organisms
c. compounds of organic origin
d. Carbon compounds

837. According to lavoisier's analysis is the essential constituents of organic compounds are
a. C and O b. C and H
c. C and N d. C and Cl

838. The empirical formula of a compound is CH2, one mole of this compound has mass 42 gms, its molecular formula is
a. CH_2 b. C_2H_2
c. C_3H_6 d. C_2H_4N

839. The percentage composition of a compound is C = 90%, H = 10% its molecular formula will be
a. C_7H_{15} b. C_8H_{10}
c. $C_{15}H_{20}$ d. $C_{15}H_{10}$

840. A process in which a solid vaporizes directly without melting is known as
a. Evaporation b. Sublimation
c. Distillation d. Vaporization

841. Organic compounds are studied separately from organic compounds because

a. Formation of organic compound is not based on laws of chemical combination
b. Organic compounds occur in living organism
c. Organic compounds are covalent and inorganic compounds are electrovalent
d. of their specific characteristic of form large number of compounds by catenation

842. There are several criteria of purity of organic compounds, which of the following is considered the best?
a. Melting point b. Microscopic examination
c. Mixed melting point d. colour

843. Vital force theory was failed after the
a. Discovery of stereo isomerism
b. Synthesis of CH_3COOH by Kolbe
c. Synthesis or urea by Wohler
d. Formation of alcohol by fermentation

844. Boiling point of glycerol is 290^0C with slight decomposition. Impure glycerol can be purified by
a. Distillation b. Steam distillation
c. Vacuum distillation d. solvent extraction method

845. A bottle contains two immiscible liquids which may be separated by
a. Using a fractionation column
b. Fractional Distillation
c. A separating funnels
d. Steam distillation

846. The purify of a solid organic substance can be checked by its
a. Boiling point b. Melting point
c. Specific gravity d. crystalline nature

847. Kjeldahl's method is used for quantities estimation of
a. N b. S c. Halogens d. P

848. Acetone (b.p. 56^0C) and methonal (b.p. 65^0C) can be separated by
a. Distillation b. Steam distillation
c. Fractional distillation d. Vacuum distillation

849. Which of the following methods is used for preparation of pure H_2O from a solution of salt in water?
a. Filtration b. Distillation
c. Chromatography d. Steam distillation

850. IN steam distillation on liquid distills at a temperature
a. Equal to its boiling point
b. Lower than its normal boiling point
c. Higher than its normal boiling point
d. Between freezing and boiling point

851. Mixture of benzene (b.p. = 80^0C) and toluene (b.p.. 110^0 can separated by
a. Distillation b. Fractional distillation
c. Vauum distillation d. Vaporization

852. The IUPAC name of the compound having structure $H_3C.CH.(CH_3).CH_2.CH(OH).CH_2Cl$ is
a. 1- chloro- 4 methyl hexan- 2 –ol
b. 1 – chloro – 4 – ethyl- 2- pentanol
c. 1- chloro- 4- methyl pentanol – 2
d. 1 – chloro-2-hydroxy-4-methyl hexane

853. The compounds CH_3NH_2 and $CH_3CH_2NH_2$ are
a. isomers b. isobars
c. homologus d. allotropes

854. Optical isomerism is shown by
a. Butanol- 1 b. Butanol – 2
c. Butene – 2 d. Pentanol – 3

855. The IUPAC name CH_3-CH_2-$C(CH_2)H$-NH_2 is
a. 1-methyl-1-amino propane b. 2-amino butane
c. 3-methly-1-1-amino propane d. none of these

856. An isomer of ethanol is

a. methanol b. dimethyl ether
c. diethyl ether d. acetaldehyde

857. Number of isomers represented by molecular formula $C_4H_{10}O$ is
a. 3 b. 5 c. 7 d. 4

858. IUPAC name of the compound of formula $(CH_3)_3C\text{-}CH{=}CH_2$
a. 3,3,30-trimethyl propane – 1
b. 1,1,1-trimethyl propane -2
c. 3,3-dimethyl but -1-ene
d. 1,1-dimethyl butane – 1

859. Isomers have similar
a. structular formulae b. chemical properties
c. molecular formula d. none of these

860. AC name of $(CH3)_2$ CHCH = $CHCH_3$
a. 2- methyl pentene -3 b. 4- methyl pentene -2
c. 1,2 – isopropyl propene d. 3 isopropyl propene -2

861 In IUPAC system of naming organic compounds , which of the following will be considered as principal functional group in a polyfunctional compound
a. –OH b. –CHO
c. –COOH d. –CN

862. Two compound have same empirical formula but different molecular formulae, these must have
a. same viscosity
b. vapor density
c. different percentage composition
d. different molecular weight

863 IUPAC name of $CH_3\text{-}O\text{-}C_2H_5$ is
a. ethoxyl methane b. methoxy ethance
c. methlyl ethyl eather d. ethyl methyl ether

864. The compound corresponding to the formula C_4H_8 are
a. only chain and position isomers.
b. chain and position isomers .
c. chain , position and geometrical isomers
d. only optical isomers

865. IUPAC name of the compound,
a. 2- phenyl butane b. 3- phenyl butane
c. 2- cyclohexl butane d. 3- chyclohexyl butane

867. Which of the following is electrophilic reagent
a. NH_3 b. HOH
c. BF_3 d. ROH

868 The IUPAC name of the compound $CH_3 –CH_2 –CH(CH_3) – CH(OH)- CH(C_2H_5)- CH_2\text{-}CH_3$
a. 3- ethyl, 5-methyl heptanol-4
b. 5- ethyl, 3-methyl heptanol-4
c. 1,1-diethyl, 3- methyl pentanol-2
d. 4- hydroxyl 3- ethyl, 5- methyl heptane

869. The least number of carbon atoms in an alkene , which forms isomer, is
a. 1 b. 2 c. 3 d. 4.

870. Glucose and Fructose are
a. Chain isomers
b. Position isomers
c. Functional isomers
d. optical isomers

871. All member of a homologous serious posses same
a. molecular formula
b. physical properties
c. alkyl group
d. chemical properties

872. Dehydration of ethyl alcohol proceeds via formation of
a. carbonium ion
b. carbanion
c. ehylium

d. free redicals

873. Which of the following is an isomer of diethyl ether ?
a. $(C_2H_5)_2CHOH$
b. $(CH_3)_2CHOH$
c. $(CH_3)_3COH$
d. None

874. The correct IUPAC name of the compound: $CH_2=CH-C=CH_2$ is
a. bul-13-diene
b. Hex-3-yne-ene,1,5
c. 1,5yne-3-hexene
d. none

875. Two consecutive member of a homologous serious differ from each other by
a. $-C_2H_5$ group
b. $-CH_2$ group
c. $-CH_3$ group
d. –CH group

876. Which of the following is not a nucelophile?
a. CN^-
b. OH^-
c. NH_3
d. BF_3

877. What of the following compounds is capable of H-bonding?
a. $C_6H_5CH_3$
b. $C_6H_5NO_2$
c. C_2H_5OH
d. C_6H_5CI

878. An organic ion with a pair of available electron and negative charge on the central atom is called a
a. Free radical
b. carbonium ion
c. carrbonion ion
d. carbene

879. The IUPAC name of $(CH_3)_3$ C- CH= CH_2 is :
a. 2, 2-dimethyl but -3-ene
b. 3,3-dimethyl but – 1- ene
c. 2, 2- dimetyl pent-4-ene
d. Hex-1-ene

880. IUPAC name of Ch_2 = CH – CH $(CH_3)_2$ is
a. 3-methyl 1-butene
b. 2,2-dimethyl 2 butene
c. 3,3-dimthy 1 propene
d. 2,2-dimethyl 2 butane

881. Simple distillation is a process is which
a. dissolution and crystallization occur side by side.
b. vaporization and condensation occur side by side
c. vaporization and crystallization occure side by side
d. condensation and crystallization side by side

882. Which of the following substance can be purified by sublimation
a. urea
b. benzoic acid
c. Ammonium cyanate
d. none

883. The first organic compound prepared in laboratory was
a. Urea
b. Acetic acid
c. Methane
d. Benzene

884. Vital force theory was given by
a. lemery
b. Kolbe

c. berzelius
d. lavoisier

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885. The first organic compound synthesized in laboratory from its element is
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886. Carbon form a large number of compound because
a. of high electron affinity
b. it is non metal and its valency is four
c. it froms compound
d. Of catenation

887. The frist organic compound was synthesized in laboratory by
a. kekule
b. wohler
c. liebig
d. berzelius

888. Main source of organic compound is
a. coat-tar
b. petroleum
c. both coal –tar and petroleum
d. none

889. First systematic classification of naturally occurring compounds given by
a. Bergmann
b. lemery
c. leibig
d. lavoiser

890. Organic chemistry is the chemistry of
a. compound derived from living organisms
b. compound derived from nonliving organisms
c. compounds of organic origin
d. carbon compounds

891. According to lavoisier's analysis constitutes of organic compound are
a. C and O
b. C and H
c. C and N
d. C and CI

892. A process in which a solid vaporize directly without melting is know as
a. Evaporation
b. Sublimation
c. Distillation
d. Vaporization

893. There are several criteria of purity of organic compound, which of the following is
a. melting Point
b. Microscopic examination
c. Mixed melting point
d. Colour

894. Empirical formula of a compound is C_2H_5O, its Molecular weight is 90. The molecular formula of compound s
a. C_2H_5O
b. $C2H_{10}O_2$
c. $C_4H_{10}O_2$
d. $C_3H_6O_3$

895. Vital force theory was faild after the

a. Discovery of stereo isomerism
b. Synthesis of CH_3 COOH by Kolbe
c. Synthesis of Urea by Wohler
d. Formation of alcohol by fermentation

896. Boiling point of glycerol is 290^o C with slight decomposition . Impure glycerol can be purified by
a. Distillation b. Steam distillation
c. Vacuum distillation d. Formational Distillation

897. A bottle contain two immiscible liquids , which may be separated by.
a. Using a fractionating Column
b. Fractional distillation
c. A separating
d. Steam distillation

898. The purity of a solid organic substance can be checked by its
a. boiling point
b. melting point
c. specific gravity
d. crystalline nature

899. Kjeldahl's methods is used for quantitative estimation of
a. N
b. S
c. Halogens
d. P

900. Acetone (b.p 56^{o}C) and methanol (b.p.65^{o}C) can be seprated by
a. Distillation
b. Steam distillation
c. Fractional distillation
d. Vacuum distillation

901.Which of the following methods is used for preparation of pure H_2O from a solution of salt in water
a. Filtration
b. Distillation
c. Chromatography
d. Stream distillation

902. In steam distillation a liquid distills at a temperature.
a. equal to its boiling point
b. lower then its normal boiling point
c. higher then its normal boiling point
d. between freezing and boiling points

903. Aniline is generally purified by
a. simply distillation
b. stem distillation
c. distillation under reduction pressure
d. between freezing and boiling point

904. In paper chromatography
a. mobile phase is liquid and stat nary phase is solid
b. mobile phase is solid and stat nary phase is solid
c. both phase are liquid
d. both phase are solid

905. The most satisfactory method to separate mixture of sugar is
a. fractional crystallization
b. sublimation
c. chromatography
d. benedict's reagent

906. Chromatography technique is used for the separate mixture of sugar is
a. small samples of mixture
b. plant pigments
c. dystuffs
d. all

907. Elution is the process for
a. crystallization of compound

b. extraction of compound
c. separation of compound
d. distillation of compound

908. Silica gel is used for keeping away the moisture because it
a. absorbs water
b. adsorbs water
c. reacts with water
d. none

909. Elutent is
a. mobile pahse
b. ststionary pahse
c. adsorbent
d. absorbent

910. A compound which does not give positive test for nitrogen is
a. urea
b. azobenzene
c. glycine
d. phenylhydrazine

911. Chromatography was discovered by
a. kekule
b. pauling
c. Rutherford
d. Tswett

912. Terpentine oil can be purified by
a. vaccum distillation
b. steam distillation
c. fractional distillation
d. heating

913. Stream distillation is used for the extraction of.
a. essential oil
b. fatty acids
c. heavy oils
d. mineral oils

914. Acetylene molecule contains
a. 5 sigma bonds
b. 3 sigma and 2 pi bond
c. 4 sigma and 1 pi bond
d. 2 sigma and 3 pi bond

915. In C_2H_6 the $\angle HCH$ is about
a. 90^o b. 120^o
c. 109.5^o d. 180^o

916. Alkynes are generally
a. more reactive than alkenes towards electrophilic reagent
b. less reactive than alkenes towards electrophilic reagent
c. less reactive than alkenes
d. more reactive than alkenes towards nucleophilic reagent

917. Mixture of methane, ethane, ethylene and acetylene is passed through ammonical silver nitrate and then through cone. H_2SO_4, the unabsorbed gases contain
a. methane only
b. methane and ethane
c. methane, ethane & ethylene
d. methane, ethane, ethylene & acetylene

918. Which of the following gives both methane and ethane in one step?
a. CH_3Br b. C_2H_2Br c. $C_2H_4Br_2$ d. CH_3COOH

919. Potassium acetate solution on electrolysis gives
a. CH_4 b. C_2H_6
c. C_3H_8 d. C_4H_{10}

920. Which of the following contains acidic H atom?
a. Ethylene b. Ethyne
c. Ethane d. Butylene

921. Which of the following reagents can distinguish alkyne from alkene?

a. Ammonical silver nitrate
b. Fehling's solution
c. Bayer's reagent
d. Luca's reagent

922. Product obtained by heating sodium acetate with sodalime is
a. CH_4 b. C_2H_6
c. C_2H_4 d. C_2H_2

923. Which of the following possesses highest boiling point?
a. $CH_3CH_2CH_2CH_2CH_3$
b.CH_3 --- $C(CH_3)H$ ---CH_2 --- CH_3
c. $(CH_3)_4C$
d. CH_4

924. Which of the following is used for artificial ripening of green fruits
a. CH_4 b. C_2H_4
c.C_2H_6 d. CCl_4

925. Methane mixed with oxygen when passed through copper tubes at 200^oC and 100 atmosphere pressure, which of the following is formed?
a. HCHO b. CH_3CHO
c. CH_3OH d. HCOOH

926. Mixture of methane and steam when passed over heated nickel, the product formed is
a. Water gas b. CH_3OH
c. HCHO d. mixture of CO and hydrogen

927. Orlon is a polymer of
a. syrene b. tetrafluore ethylene
c. vinyl chloride d. acrylonitrile

928. Ehylene reacts with alkaline $KMnO_4$ solution (1%) to give
a. ethane b. ethyl alcohol
c. ethylene glycol d. acetic acid

929. Marsh gas mainly contains
a. C_2H_2 b. CH_4
c. H_2S d. $CHCl_3$

930. General formula of alkene is
a. C_nH_{2n+2} b. C_nH_{2n}
c. C_nH_{2n-2} d. C_nH_n

931. Which of the following reacts with water to produce methane?
a. Silicon carbide b. Calcium carbide
c. Aluminium carbide d. Iron carbide

932. Methane on chlorination produces.
a. methyl chloride
b. chloroform
c. carbon tetra chloride
d. mixture of chlorinated methane

933. Mixture of methyl and ethyl bromide when heated with sodium in dry ether, which of the following is formed?
a. Ethane b. Propane
c. Butane d. All of the above

934. Which of the following dihalide when heated with zinc gives alkene?
a. $BrCH_2CH_2CH_2CH_2Br$
b. $CH_3CHBrCH_2CH_2Br$
c. $CH_3CH_2CHBrCH_2Br$
d. $BrCH_2CH_2CH_2Br$

935. Main product obtained by treating 2-bromo butane with alcoholic KOH is
a. butene-1 b. butene-2
c. ethene d. ethyne

936. General formula of alkynes is
a. C_nH_{2n+2} b. C_nH_{2n}
c. C_nH_{2n-2} d. C_nH_n

937. Which of the following is expected to have highest boiling

point?
a. iso-octane
b. n-octane
c. 2, 2, 3, 3 – tetra methylbutane
d. n- butane

938. Alkanes are generally resistant towards oxidizing agents but which one of the following alkane is oxidized by $KMnO_4$?
a. CH_4
b. $CH_3CH_2CH_2CH_2CH_3$
c. CH_3 --- $C(CH_3)H$ ---CH_2 --- CH_3
d. $C(CH_3)4$

939. Acetylene reacts with HBr to give
a. methyl bromide b. ethyl bromide
c. ethylene bromide d. ethylidene bromide

940. Acetylene when treated dilute H_2SO_4 in presence of H_gSO_4, the product formed is
a. C_2H_5OH b. CH_3COCH_3
c. CH_3CHO d. mercuric carbide

941. Ethylene is obtained by dehydration of
a. CH_3OH b. C_2H_5OH
c. C_3H_7OH d. CH_3COOH

942. $C_2H_4 \xrightarrow{O_3} B \xrightarrow{\text{boiled with } H_2O} C$. Compound C will be
a. HCHO b. CH_3CHO
c. HCOOH d. CH_2OH
$|$
CH_2OH

943. Molecule in which the distance between the adjacent carbon atoms is largest is
a. Ethane b. Ethene
c. Ethyne d. Benzene

944. Pure acetylene has sweet ethereal smell while impure smells like garlic due to presence of
a. NH_3 b. PH_3
c. AsH_3 d. H_2S

945. Polythene is addition polymer of
a. ethylene b. acetylene
c. methane d. ethane

946. Ethylene readily undergoes
a. addition reactions
b. substitution reactions
c. elimination reactions
d. rearrangement

947. Acetylene is prepared in laboratory by action of
a. water on aluminium carbide
b. H_2SO_4 on ethyl alcohol
c. water on calcium carbide
d. water on sodium maleate

948. Natural rubber is polymer of
a. butadiene b. ethylene
c. isoprene d. propylene

949. Natural silk is
a. polyamide b. polyester
c. polyisoprene d. polysaccharide

950. Terylene is
a. polyamide b. polyester
c. poly acid d. polypeptide

951. Reactivity of hydrogen atom is maximum when it is attached with
a. primary carbon atom
b. secondary carbon atom
c. tertiary carbon atom
d. neo carbon atom

952. An aqueous solution of a substance, on electrolysis, gives

ethane. The substance is
a. Acetic acid
b. Acetamide
c. Potassium succinate
d. Sodium Acetate

953. Raw material used in preparation of nylon is
a. butadiene b. adipic acid
c. ethylene b. methyl methanoate

954. The component of blood which maintain osmotic pressure is
a. mineral salt b. globulin
c. red blood cells d. blood platelet

955. Cane sugar when heated with cons. H2SO4, it gives
a. carbon b. glucose
c. oxalic acid d. glucoside

956. Which of the following has maximum protein?
a. ground nut b. egg
c. wheat d. cow milk

957. Which of the following in a disaccharide?
a. glucose b. fructose
c. sucrose d. cellulose

958. Disaccharide present in milk
a. glucose b. lactose
c. maltose d. raffinose

959. Starch on hydrolysis finally gives
a. glucose b. fructose
c. glucose and fructose d. sucrose

960. Sucrose on hydrolysis yields glucose and fructose, this process is known as
a. Mutarotation b. inversion
c. inhibition d. esterfication

961. Glucose is
a. a aldose b. a ketose
c. a disaccharide d. a polysaccharide

962. Chemical name of vitamin C is
a. Thiamine b. Riboflavin
c. Ascorbic acid d. Calciferol

963. Starch is a polymer of
a. glucose b. fructose
c. both glucose and fructose d. none of these

964. Which of the following carbohydrate is used for silvering of mirrors?
a. glucose b. starch
c. sucrose d. cellulose

965. Deficiency of vitamin A causes
a. Beriberi b. Scurvy
c. Rickets d. Night blindness

966. Molecular formula of simple disaccharide is
a. $C_{10}H_{18}O$ b. $C_{10}H_{20}O$
c. $C_{12}H_{22}O_{11}$ d. $C_{18}H_{32}O_{16}$

967. Starch is converted into disaccharide in presence of
a. Zymase b. Maltase
c. Diastase d. Invertase

968. Glucose is
a. an oxidizing sugar
b. a reducing sugar
c. both oxidizing and reducing sugar
d. neither oxidizing nor reducing sugar

969. Which of the following is an essential constituent of our food?
a. Glucose b. Carbohydrate
c. Amino acid d. Vitamins

970. Which of following monosaccharide is a pentose?
a. Glucose b. Fructose
c. Arabinose d. Cellobiose

971. Gun cotton is
a. Nitroglycerine b. Nitroglucose
c. Nitrocellulose d. Picric acid
972. Which of the following is known as antisterlity vitamin?
a. vitamin A b. vitamin C
c. vitamin E d. Vitamin K
973. Which of the following gives blue color with iodine solution?
a. Glucose b. Fructose
c. Sucrose d. Starch
974. Lipids are
a. proteins occurring is living organisms
b. naturally occurring carbohydrates
c. oils and fats and their derivatives occurring in living organisms
d. structural units of glycogen
975. Deficiency of iodine causes
a. Beriberi b. Goitre
c. scurvy d. night blindness
976. Which of the following vitamins are generally present in citrus fruits?
a. A b. K c. C d. E
977. Proteins are hydrolysed by enzymes into
a. hydroxy acids b. aminoacids
c. aromatic acids d. dicarboxylic acids
978. Ascorbic acid is
a. an enzyme b. a vitamin
c. a protein d. a harmone
979. Which of the following vitamin contains metal atom
a. Vitamin A b. Vitamin B6
c. Vitamin B12 d. riboflavin
980. The structural units of proteins are
a. monosaccharides b. hydroxy acids
c. amino acids d. fatty acids
981. Chemically digestion is mainly
a. hydrolysis b. bacterial change
c. hydrogenation d. dehydrogenation
982. Proteins are
a. acidic b. alkaline
c. amphoteric d. none of these
983. Deficiency of vitamin D causes
a. Rickets b. Sterlity
c. Beriberi d. Nervous disorder
984. Which of the following is natural polymer
a. Polythene b. P.V.C
c. Acetic acid d. protein
985. Water soluble vitamins are
a. A.D,E and K b. A and b
c. B and C d. C and D
986. Which of the following contains cobalt?
a. Chlorophyll b. Haemoglobin
c. Vitamin C d. Vitamin 12
987. In our body carbohydrates
a. provide energy
b. act as shock absorbing pads
c. build new cells
d. vitamin 12
988. Invert sugar is
a. mixture of glucose and sucrose
b. mixture of glucose and fructose
c. optically active form cane sugar
d. maltose
989. Deficiency of which of the following causes diabetes?
a. calciferol b. insulin

c. thiamine d. amino acids

990. Fatty acids which must be obtained from diet are called
a. essential fatty acids b. non essential fatty acids
c. saturated fatty acids d. unsaturated fatty acid

991. Alkaline hydrolysis of esters is c/a
a. esterification b. dehydration
c. alkalination d. saponification

992. the enzyme pepsin hydrolysises
a. proteins to amino acids
b. fats to fatly acid
c. starch to glucose
d. Nucleotide to nitrogen bases

993. Which of the following is a measure of organic pollution of water?
a. DO b. BOD
c. COD d. MOD

994. Which one is naturally occurring polymer?
a. Polyethene b. PVC
c. Telfon d. protein

995. An example of a natural bio-polymer is
a. telfon b. rubber
c. nylon-66 d. DNA

996. Which one is present in Teflon?
a. I b. Cl
c. Br d. F

997. Orlon is a polymer of
a. styrene b. Tetrafluoroethlyene
c. Vinyl chloride d. Acrylonitrile

998. Polymer of choloroprene is
a. isoprene b. neoprene
c. both d. none

999. Bakelite is made from phenol and formaldehyde. The initial reaction between the two compound is an example
a. aromatic electrophilic substitution
b. aromatic nucleophillic substitution
c. free radical reaction
d. aldol reaction

1000. Plexiglass (PMMA) is a polymer of
a. acrylic acid b. methyl acrylate
c. methyl methacrylate d. none of these

1001. Which is an example of thermosetting polymer?
a. Polyethene b. Neoprene
c. PVC d. Bakelite

1002. Dyes are used in
a. photography b. volumetric analysis
c. dyeing fabrics d. all

1003. Which of the following is not antipyretic?
a. Asprin b. paracetamol
c. salol d. pheriacetin

1004. The one that can be used bothe as analgesic and antipyretic is
a. Analgin b. Asprin
c. paracetamol d. All

1005. Acetyl salicyclic acid is an
a. antibiotic b. analgesic
c. insecticide d. anaesthetic

1006. Salol is
a.antiseptic b. antipyretic
c. both d. none

1007. Moth ball contain
a. camphor b. benzoic acid
c. naphthalene d. cinnamic acid

1008. ‘Placedo’ is often given to patients, it is
a. an antidepressant b. a sugar pill

c. a broad spectrum antibiotic d. a tonic

1009. Amoxicilllin in semi- synthetic modification of
a. penicillin b. streptomycin
c. tetracycline d. chloramphenicol

1010. DDT is prepared by reacting chlorobenezene with
a. CCl4 b. CCl3.CHO
c. CHCl3 d. ethane

1011. 1 % solution of phenol is used as
a. an antiseptic b. a disinfectant
c. an insecticide d. a styptic

1012. Alizarin is
a. direct dye b. mordant
c. vat dye d. acid dye

1013. Gammexane is
a. DDT b. BHC
c. Chlorobenezene d. none of these

1014. Which of the following is an insecticide?
a. Bakelite b. TNT
c. BHC d. Asprin

1015. Penicillin was first discovered by
a. Fleming b. S.A. Wakne
c. Lipasteur d. Thompson

1016. Chloramphenicol is used as an
a. analgesic b. antipyretic
c. antibiotic c. antiseptic

1017. Propellents may be
a. solid b. liquid c. both a & b d. gas

1018. Dynamite contains
a. Nitroglycerine mixed with saw dust
b. Nitroglycerine mixed with H_2SO_4
c. Both of these
d. None of these

1019. Which of the following is used as a fuel in propellants?
a. Natural rubber b. Petrol
c. synthetic rubber d. all

1020. Which one is azodyes?
a. methyl orange b. Phenolphthalein
c. malachite green d. methylene blue

1021. Which can act as propellant?
a. Liquid hydrogen
b. Liquid oxygen
c. liquid H_2 + liquid O_2
d. Liquid nitrogen = liquid O_2

1022. Nylons are:
a. Polythene b. polyesters
c. Polyamides d. polyninyl chlorides

1023. Dettol consists of
a. xylenol + tripineol b. carboxylenal + tripineol

1024. Which of the following fibres are made of polyamides?
a. Dacron b. Orlon
c. Nylon d. Rayon

1025. Soft drinks and bab 7 feedings bottles are generally made up of
a. Polyster b. Polyethene
c. Polyurea d. Polyamide 40

1026. Orlon is polymer of
a. Styrene b. Tetrafluoroethylene
c. Vinyl chloride d. Acrylonitrile

1027. Bakelite is obtained by the condensation of
a. Formaldehyde and phenol
b. acetaldehyde and phenol
c. formaldehyde and acetone
d. acetone and phenol

1028. Oils and fats are

a. acids b. alcohols
c. esters d. hydrocarbons

1029. A detergent is a
a. drug b. soap
c. cleansing agent d. catalyst

1030. Alkaline hydrolysis of oils and fats is known as
a. neutralization b. esterification
c. saponification d. polymerization

1031. Waxes possess
a. acid group b. ester group
c. ketonic group d. alcoholic group

1032. Paraffin was
a. an ester
b. mixture of higher alkanes
c. higher monohydric alcohol
d. higher monohydric alcohol

1033. Which of the following is not a glyceride?
a. fat b. Oil
c. Phospholipid d. soap

1034. Bees wax is chemically
a. mixture of higher alkanes b. mericyl palmitate
c. cetly palmitate d. mericyl cerotate

1035. Which of the following enzyme hydrolyses triglycerides to fatty acids and glycerol?
a. Amylase b. Pepsin
c. Lipase d. Maltase

1036. Oils can be converted into fat
a. saponitication b. hydrogenation
c. hydrolysis d. hydrogenolysis

1037. The reaction between fat and NaOH is known as
a. esterification b. saponification
c. hydrolysis d. hydrogenolysis

1038. A vegetable oil is
a. essential oil derived from plant
b. unsaturated fatty acid
c. glyceride of saturated fatty acids
d. glyceride of unsaturated fatty acids

1039. Fat is a
a. protein b. lipid
c. carbohydrate d. vitamin

1040. Kerosene oil is
a. animal oil b. vegetable oil
c. essential oil d. mineral oil

1041. Candles are generally made up of
a. paraffin wax and stearic acid
b. bees wax
c. spermacetic wax
d. bees wax and palmitic acid

1042. Soaps are
a. esters of higher fatty acids with monohydric alcohol
b. higher fatty acid
c. sodium and potassium salts of higher fatty acids
d. higher alcohols

1043. Which of the following represents a detergent?
a. RCOONa b. RONa
c. $RC_6H_4SO_3ONa$ d. RSNa

1044. Laundary soap is obtained by saponification of which of the following oil by alkali?
a. Paraffin oil b. kerosene oil
c. Groundnut oil d. Rose oil

1045. Toilet soaps are
a. sodium salt of higher fatty acids
b. potassium salts of higher fatty acids
c. salts of metals other than sodium or potassium

d. detergents

1046. Higher fatty acids (like stearic or palmitic acids) are mixed with wax in preparation of candles
   a. for acidity
   b. to give strength to candles
   b. to produce colour to candles
   d. to remove the initial colour of wax

1047. Oils and fats are on storage in contact with air and moisture develop unpleasant smell and bad taste this process is known as
   a. Hydrogenolysis b. Rancification
   c. Hydrolysis d. Hardening

1048. Oils on hydrogenation yield vegetable ghee in this process
   a. hydrogen dissolved in oil
   b. hydrogen interacts with oxygen present in oil
   c. glycerides of unsaturated fatty acids are converted into glycerides of saturated fatty acids
   d. glycerides of saturated fatty acids are decomposed

1049. Oils and fats when treated with hydrogen under pressure in presence of Cu-Cr catalyst, glycerol and higher monohydric alcohols are formed, this process is known as
   a. Hydrogenation b. Hydrogenolysis
   c. Hydrolysis d. Rancifacation

1050. In precipitation of soap which can be used in place of NaCL
   a. NaOH b. NA
   c. Sodium silicate d. Sodium acetate

1051. Degree of unsaturation of an oil is measured by
   a. Iodine value b. Saponification
   c. Acid value d. R/M value

1052. Petroleum is mixture of
   a. alkane and alkenes b. cycloalkanes
   c. aromatic hydrocarbons d. all above

1053. The process by which less volatile alkanes are converted in to much volatile alkanes are coverted into much volatile hydrocarbons by application of heat only is known as
   a. thermal decomposition b. pyrolysis
   c. cracking d. isomerisation

1054. Gasoline is a mixture of alkane having carbon atoms
   a. $C_3 \rightarrow C_5$ b. $C_5 \rightarrow C_6$
   c. $C_6 \rightarrow C_8$ d. $C_7 \rightarrow C_{10}$

1055. Which of the following is extensively used in antiknock compound?
   a. Lead bromide b. tetra ethyl lead
   c. Lead oxide d. Ethyl carbonate

1056. Paraffin's are soluble in
   a. distilled water b. salted water
   c. benzene d. all above

1057. Kerosene oil is mixture of
   a. alkanes b. aromatic compounds
   c. alcohol d. carboxylic acids

1058. A liquid hydrocarbon can be converted into gaseous hydrocarbons by
   a. cracking
   b. hydrolysis
   c. oxidation
   d. distillation under reduced pressure

1059. Thermal decomposition of organic compounds is known as
   a. Cracking b. Pyrolysis
   c. Isomerisation d. Rearrangement

1060. Isooctane is added to petrol to
   a. precipitate the inorganic substances
   b. Increase the boiling point of petrol
   c. prevent the freezing of petrol
   d. prevent the knocking

1061. A hydrocarbon cyclohexane floats over water , because

a. it is immiscible in water
b. its density is less than water
c. it is nonpolar
d. it is immiscible and lighter than water

1062. According of modern theory petroleum is believed to be produced by
a. decomposition of marine animals
b. action of steam on metallic carbides
c. decomposition of vegetable organisms
d. decomposition of animals and vegetable

1063. A sample of petrol has same knocking power as the mixture containing 75% isooctane and 25% n-heptane. The octane number of petrol is
a. 25 b. 50 c. 75 d. 100

1064. Knocking is produced in an engine when fuel
a. burns slowly b. burns rapidly
c. contains water d. is mixed with machine oil

1065. The octane number of a fuel can be increased by
a. isomerisation b. burns rapidly
c. contains water d. is mixed with machine oil

1066. In fractional distillation of anhyd. $AlCl_3$ and conc. HCl at 175 degree and 35 atmosphere pressure converted into isobutene, this process is known as
a. aromatization b. alkylation
c. reformation d. isomerisation

1067. The quality of a diesel fuel is expressed in terms of
a. octane number b. cetane number
c. gold number d. rubin number

1068. The cooking gas in cylinders generally contains
a. methane and ethane
b. ethylene and acetylene
c. acetylene, propane and butane
d. propane and butane

1069. The minimum temperature at which an oil gives sufficient vapours to from an explosive mixture with air is known as
a. isoelectric point b. flash point
c. boiling point d. none of these

1070. BTX can be used as
a. fire extinguisher b. antiseptic
c. antiknock compound d. insecticide

1071. Diagonal relationship is shown by
a. elements 1^{st} period b. elements of 2^{nd} period
c. element of 3^{rd} period d. none

1072. The electonegativity of Be is same as
a. Al b. Mg c. Na d. Li

1073. For azimuthal quantum no l = 3, the maximum no. of electrons is the subshell will be
a. 10 b. 2 c. 6 d. 14

1074. Wolframite is……ore
a. sand and earthly impurities
b. magnetic impurities
c. Non magnetic
d. an element

1075. Ioden contains
a. Methyl salicytate b. Magnetic salicytate
c. salicylicacid d. Benzyl salicylate

1076. Marshall's acid is
a. H_2SO_3 b. H_2SO_5
c. $H_2S_2O_8$ d. H_2SO_4

1077. Most active metal known as
a. Na b. Li c. Fe d. Cs

1078. Which of the following is a covalent solid?
a. CCl_4 b. CO_2 c. SiC d. I_2

1079. Which element is used in burns?
a. Au b. Ag c. Na d. Mg

1080. Limonite is the ore of
a. fe b. Cu c. Zn d. Pb

1081. Haemoglobin contains the metal
a. Fe b. Cu c. Cn d. Mn

1082. Which of the following is used as a hypnotic?
a. Paraldehyde b. Metaldehyde
c. paraformaldehyde d. Acetaldehyde

1083. pH of 10^{-9} N NaOH will be
a. 9 b. 7 c. 5 d. none

1084. Which of the following will not displace hydrogen
a. Ba b. Pb c. Hg d. Sn

1085. The set of quantum numbers which is allowed as
a. 3, 2 1, 0 b. 2,0,-1,-1/2
c. 1,0, -1/2 d. 4,3,2,1/2

1086. The V.V rays can be checked by
a. Flint glass b. Crooke's glass
c. Soda glass d. Pyrex glass

1087. In which of the following oxidation number of oxygen is +2?
a. Na_2O b. Na_2O_2
c. F_2O d. Cl_2O

1088. The oxidation state of Fe in Hb is
a. +2 b. +6
c. +3 d. +4

1089. Producer gas consists of:
a. $CO+N_2$ b. CO_2+N_2
c. CO+N2 d. CO_2+H_2O

1090. The component of water goes is
a. Water vapour b. $CO+H_2$
c. $CO+N_2$ d. $CO_2+C_2H_4$

1091. Which of the following reagents is used as a purgative?
a. $MgSO_4$ b. $CaSO_4$
c. $(NH_4)SO_4$ d. $FeSO_4$

1092. Anaqueous solution whose pH is zero is
a. acidic b. neutral
c. basic d. amphoteric

1093. Substance used to reduce fever are:
a. antibiotics b. pyretics
c. antipyretics d. analgesics

1094. Molecular formula of Calomel is
a. Hgo b. Hg_2Cl_2
c. $HgCl_2$ d. $K_2(HgI_4)$

1095. Oxidation no. of Fe in the $Fe(CO)_5$ is
a. 0 b. +5 c. +1 d. -5

1096. The maximum no. of electron in an orbital is governed by
a. Aufbau principle
b. Pauli's exclusion principle
c. Hund's rule
d. De Broglie's rule

1097. The radius of an atom is of the order of:
a. 10^{-10} Cm b. 10^{-13} cm
c. 10^{15} cm d. 10^{-8} cm

1098. What is tincture of iodine?
a. $I_2 + H_2o + C_2H_5$ b. KI+C_2H_5OH
c. $I_2 + C_2H_5OH$ d. $I_2 + C_2H_5OH + KI$

1099. Elements is a
a. pure substance b. mixture
c. compound d. none

1100. The process of converting solid to vapour and vapour back to solid by cooling is

a. Evaporation b. Distillation
c. Sublimation d. Filtration

1101. Pure crystals of CuSO4 can be obtained from impure ores by:
a. Distillation b. Fermentation
c. Crystallization d. Evaporation

1102. In paper, chromatography, a strip of paper acts as a
a. mobile phase b. stationary phase
c. gas phase d. none

1103. Conversion of water into ice is
a. Physical change b. chemical change
c. organic change d. none

1104. Physical change is
a. temporary b. Permanent
c. both a and b d. none

1105. In physical change the mass of the new substance
a. is smaller b. greater
c. equal d. none

1106. NH3 is synthesized by:
a. Haber process b. Harver process
c. Harper process d. Hooligans' process

1107. A+B = AB is a
a. decomposition reaction
b. simple displacement reaction
c. complex displacement reaction
d. combination reaction

1108. $2KClO_3 = 2KCl+3O_2$ is a:
a. decomposition reaction
b. simple displacement reaction
c. both a and b
d. none

1109. $CaCO_3$=CaO+…….
a. O_2 b. CO c. CO_2 d. $CO+CO_2$

1110. $2H_2O$……2H2↑O2↑
a. H b. H2 c. ZnH2 d. Zn2H

1111. 2HgO = 2Hg+……..?
a. O2 b. O c. Hg2O d. HgO

1112. Zn + H2SO4 → ZnSO4+……?
a. H b. H2 c. ZnH2 d. Zn2H

1113. $Fe+CuSO_4 = FeSO_4+CU$ is an example of
a. simple displacement reaction
b. double displacement reaction
c. decomposition reaction
d. None

1114. ……..+AgNO3=NaNO3+AgCl↓
a. Na b. NaCl c. C_2 d. AgNa

1115. In the above reaction the down arrow represents
a. flotation b. Precipitation
c. Bubbling d. none

1116. HCl+NaOH → $NaCl+H_2O$ is and example of
a. double displacement b. neutralization reaction
c. both a and b d. none

1117. ……..?+FeCl3=3NH4Cl+Fe(OH)3↓
a. $3NH_3$ b. $3NH_4OH$
c. $3NH_4Cl$ d. $4NH_4Cl$

1118. $NH_4CNO=CO(NH_2)_2$ is a……..
a. synthesis reaction
b. polymerization reaction
c. simple displacement reaction
d. rearrangement reaction

1119. Na2CO3+2H2O → 2NaOH+H2CO3 is a
a. rearrangement reaction
b. polymerization reaction

c. hydrolysis reaction
d. none

1120. Which of the following cant displace H2 from acid?
a. K b. Ca
c. Cu d. Na

1121. Which of the following doesn't react with water?
a. K b. fe
c. Au d. Na

1122. $2K+2H_2O=2KOH+$……
a. K b. H_2
c. KOH d. K_2O

1123. $3Fe+4H_2O=$……$+4H_2$
a. Fe_2O_3 b. FeO
c. Fe_2O_4 d. none

1124. $Zn+$…….$= ZnSO_4 + Cu$
a. SO_4^- b. CuS
c. $CuSO_4$ d. SO_2

1125. $Zn=Zn^{2+}+2e^-$, Here Zn is
a. oxidized b. reduced
c. both a and b d. none

1126. $Zn+Cu^{2+} = Zn^{2+} + Cu$, here cu is
a. oxidized b. reduced
c. both a and b d. none

1127. Aurum is the Latin name for
a. sodium b. gold
c. silver d. diamond

1128. Stannum is the latin name for
a. tin b. Sodium
c. gold d. Mercury

1129. Natrium is the latin name for
a. Tin b. Sodium
c. gold d. Mercury

1130. Plumbum is the latin name of
a. gold b. silver
c. sodium d. lead

1131. Cd is the symbol for
a. carbon b. compound
c. cadmium d. copper

1132. Cs is the symbol for:
a. carbon b. cadmium
c. chlorine d. cesium

1133. The symbol for uranium is:
a. U b. Ur
c. Un d. Um

1134. The symbol of Neon is
a. N b. Nn
c. No d. Ne

1135. The symbol Palladium is
a. Pl b. pd c. Pa d. P

1136. The symbol for silicon is
a. S b. Si c. Sc d. So

1137. The symbol for Titanium is
a. Ti b. T c. Tt d. Tn

1138. The symbol for manganese is
a. M b. Mn c. Mg d. Me

1139. The symbol for tungsten is:
a. U b. W c. T d. Tu

1140. Acetic acid is
a. CH_3CO b. CH_3COO
c. CH_3COOH d. CH_3COH

1141. The symbol for Vanadium is
a. Va b. V c. Vd d. Vu

1142. Sand is
a.Si b. SiO c. SiO_2 d. SiO_3

1143. Washing soda is
a. $NaCo_3$ b. $CaCO_3$
c. Na_2CO_3 d. NaC

1144. Lime is
a. Ca b. O_2 c. Cao d. Ca_2O

1145. Marble is
a. CuO b. $CaCo_3$ c. Ca_2Na d. CaH_2

1146. Caustic soda is
a. Nao b. NaOH c. Na d. KOH

1147. Hydrogen monoxide is
a. H_2O b. OH_2 c. H_2O_3 d. H_2O_2

1148. Copper sulphate is
a. CoS b. $CuSO_4$ c. CU_2S d. $Cu_2(SO)_3$

1149. Ammonium sulphate is
a. NH_4SO_4 b. $(NH_3)_2SO_4$
c. $(NH_4)_2SO_4$ d. NH_3SO_4

1150. Calcium chloride is
a. $CaCl_2$ b. CaCl
c. $(CaCl)_2$ d. Ca_2Cl_2

1151. Silver nitrate is
a. AgNo2 b. $AgNO_3$
c. $Ag(NO3)_3$ d. $AgNO_4$

1152. Aluminium nitrate is
a. $AlNO_3$ b. $Al_2(NO_3)_3$
c. $Al(NO_3)_3$ d. $Al(NO_3)_2$

1153. Copper has valency
a. 1 b. 2
c. both a and b d. none

1154. Ca has valency
a. 1 b. 2
c. 3 d. both a and c

1155. Fe has valency
a. 1 b. 2
c. 3 d. both b and c

1156. Mercury has valency
a. 1 b. 2
c. both a and b d. 3

1157. Gold has valency
a. 1 b. 2
c. 3 d. both a and c

1158. Cl^- is a…….
a. molecule b. radical
c. compound d. element

1159. NH_4^+ is a
a. atom b. molecule
c. radical d. element

1160. Compound radical is
a. Co_2 b. NH_4+
c. NH_3 d. CO

1161. Ferrous radical is
a. Fe+ b. Fe2
c. Fe3+ d. Fe4+

1162. Cupric radical is
a. Cu+ b. Cu2+
c. Cu3+ d. Cu4+

1163. Mercurous radical is
a. Hg+ b. Hg2+
c. Hg3+ d. Hg4+

1164. Sulphate is
a. So_4^- b. So_4^{2-}
c. SO_4^{3-} d. SO_4^{4-}

1165. Carbonate is

a. CO_3^{2-} b. CO_3^{-}
c. CO_2- d. CO_2^{3-}

1166. Nitrate is
a. NO_2- b. NO_3
c. NO_3^{-} d. NO_2

1167. Permagnate is
a. MnO_4- b. MnO_4+
c. MnO_4 d. MnO_2

1168. Stannous ion is
a. Sn+ b. Sn^{2+}
c. Sn3+ d. Sn^{4+}

1169. Nitrate is
a. NO_3+ b. NO_2-
c. NO_2 d. NO_2+

1170. Ammonium carbonate is
a. NH_4CO_3 b. $(NH_4)_2CO_3$
c. NH_3CO_3 d. $(NH_4)_3CO_3$

1171. Ferric phosphate is
a. $FePO_4$ b. $Fe(PO_4)_3$
c. $Fe_3(PO_4)_2$ d. $Fe(PO_4)_4$

1172. Cupric chloride is
a $CuCl_2$ b. CaCl
c. $CoCl_2$ d. Co_2Cl_2

1173. Zinc nitrate is
a. $ZnNO_2$ b. $Zn(NO_3)_3$
c. $Zn2NO_3$ d. $Zn(NO_3)_2$

1174. $N_2+3H_2 \xrightarrow[600\ atm,\ 450^0C]{Fe/.....?} 2NH_3$

a. Me b. Mo
c. Mn d. Mg

1175. $CaCO_3+2HCl \longrightarrow CaCl_2+H_2O$.....?
a. CO b. CH_4
c. Cl_2 d. CO_2

1176. $(NH_4)_2SO_2+NaOH \rightarrow Na2SO4+H_2O+$.....?
a. N_2 b. NH_3
c. Na d. SO_2

1177. $KClO3 \rightarrow KCl+$.....?
a. K_2O b. O
c. O_3 d. O_2

1178. Who proposed the atomic theory?
a. Rutherford b. Darwin
c. Dalton d. Landolt

1179. Atoms of the same element are:
a. alike b. all different
c. mixed d. not sure

1180. Law of conservation of mass was proposed by
a. Dalton b. Darwin
c. Landolt d. Lomonosov

1181. In the formula $E=mc^2$, E= energy in erg, m = mass in gram and c = velocity is
a. m/s b. Km/s
c. mile/hour d. cm/s

1182. Amu is
a. atomic meter unit b. Average mass unit
c. atomic mass unit d. Average meter unit

1183. 1 amu is the 1/12 the mass of……..
a. C^{13} b. $C^{12..5}$
c. C^{12} d. C^{15}

1184. Atomic weight of hydrogen is
a. 1 amu b. 0.06 amu
c. 1.01 amu d. 1.008 amu

1185. Molecular weight of CO2 is

a. 100 b. 64
c. 44 d. 54

1186. 1 mole contains……atoms in C12 isotope
a. 100 b. 64
c. 44 d. 54

1187. 1 gram molecule of oxygen is
a. 8 grams b. 16 grams
c. 32 grams d. 64 grams

1188. 1 mole contains… atoms in C^{12} istopes
a. 6.022×10^{24} b. 6.022×10^{22}
c. 6.022×10^{23} d. 6.022×10^{25}

1189. In solid state, the particles are
a. loosely packed
b. closely packed
c. very far away from each other
d. none of above

1190. Solids are
a. compressible
b. Incompressible
c. sometimes compressible sometime not
d. none of the above

1191. Liquids have
a. definite shape b. indefinite shape
c. acquire the shape of the vessel they are kept in
d. none of the above

1192. Boyle's law says
a. P1V1=P2V2 b. $\frac{P_1}{V_1}=\frac{P_2}{V_2}$
c. T1V1=T2V2 d. $\frac{T_1}{V_1}=\frac{T_2}{V_2}$

1193. Charle's law says
a. $\frac{V_1}{T_1}=\frac{V_2}{T_2}$ b. V1T1=V2T2
c. $\frac{V_1}{P_1}=\frac{V_2}{P_2}$ d. V1P1=V2P2

1194. Combined gas equation is
a. PV=nRT b. PR=VnT
c. PT=Vrt d. VT=Prn

1195. In the equation PV=nRT, R is
a. earthly constant b. solar constant
c. universal gas constant d. none of the above

1196. Standard pressure is
a. O degree C b. 273 K
c. both a and b d. 0 degree F

1197. Standard pressure is
a. 750mm of Hg b. 755 mm of Hg
c 770 mm of Hg d. 760 mm of Hg

1198. Unit of 'R' is
a. $\text{litre}\times atmk^{-1}mol^{-1}$ b. $\text{erg}k^{-1}mol^{-1}$
c. $\text{Joule}K^{-1}mol^{-1}$ d. all of the above

1199. Graham's law of diffusion says
a. $\frac{r_1}{r_2}=\sqrt{\frac{d_1}{d_2}}$ b. $\frac{r_1}{r_2}=\sqrt{\frac{d_2}{d_1}}$
c. $\frac{r_1}{r_2}=\frac{d_1}{d_2}$ d. $\frac{r_1}{r_2}=\frac{d_1}{d_2}$

1200. Kinetic energy gases explains that all gases are made up of minute particles called
a. atoms b. compounds
c. elements d. molecules

1201. Molecular collisions as started by kinetic theory of gases is

a. elastic b. plastic
c. both d. same

1202. Kinetic theory of gases states that the force of attraction between molecules is
a. strong b. negligible
c. very strong d. not sure

1203. A solution is a……mixture of 2 or more substances
a. hetergenous b. homogenous
c. mixed d. none

1204. Molarity of a solution means the number of moles of solute per……of solution
a. Kg b. mole
c. litre d. milliliter

1205. Molality means number of moles of solute per…….of solution
a. Kg b. mole
c. litre d. milliliter

1206. Mole fraction is the ratio of moles of solute to the total moles of
a. solute b. solute and solvent
c. solvent d. None

1207. Normality means the no. of……..the solute dissolved in a liter of solution
a. moles b. gram
c. gram equivalent d. none

1208. Solution can be
a. saturated b. Unsaturated
c. supersaturated d. all of the above

1209. A solution which can dissolve more of the solute at the same temperature is
a. saturated b. unsaturated
c. supersaturated d. none

1210. A solution which cannot dissolve any more solute at a particular temperature is
a. saturated b. unsaturated
c. supersaturated d. none

1211. A solution which holds more solute than that is possible for a saturated solution at that temperature
a. saturated b. unsaturated
c. supersaturated d. none

1212. A Salt was found to have solubilities of follows

Temp	**Solubilities**
60 degree C	132
30 degree C	95

Calculate the weight of crystals, formed on cooling 80 gm of saturated solution form 60^oC to 30^oC
a. 7.12 gm b. 12.7 gm
c. 13.8 gm d. 8 gm

1213. How much sodium iodide will saturate 60gm of water at 20 degree C if its solubility is 178 at that temperature
a. 100 gm b. 300 gm
c. 105.9 gm d. 106.8 gm

1214. Which is not crystal
a. diamond b. quartz
c. calcite d. none

1215. Blue vitriole is
a. $CUSO_4.2H_2O$ b. $CuSO_4.3H_2O$
c. $CUSO_44H_2O$ d.$CUSO_4.5H_2O$

1216. Green vitriol is
a. $FeSO_4$ b. $FeSO_47H_2O$
c. $FeSO_4.8H_2O$ d. $FeSO_4.10H_2O$

1217. Gypsum salt is
a. $MgSO_4$ b. $MgSO_4.2H_2$
c. $CaSO_4$ d. $CaSO_4.2H_2O$

1218. Washing soda crystal is
a. $Na_2.CO_3.10H_2O$ b. Na_2CO_3
c. $CaCO_3$ d. $CaCO_3.10H_2O$

1219. 20 gms of a saturated solution of a salt or being evaporated gave 4.5 gms of the day salt. Calculate the solubility of the salt
a. 20 b. 25.03
c. 29.03 d. 30.03

1220. Pecentage by volume is weight o f solute in gram per
a. ml of solution b. 100 ml of solution
c. mg of solution d. 100 mg of solution

1221. Calculate the weight of $CuSO_4$ contained in 400 ml of a 5% solution of CuSO4 (% by volume)
a. 10 gm b. 30 gm
c. 15 gm d. 20 gm

1222. Calculat the molarity of a solution that contains 3.56 gm of pure HCl in 10 litres of solution
a. 1M b. 0.01m
c. 0.001 M d. 2M

1223. Calculate the weight of K_2SO_4 required to prepare 500 ml of 0.05M solution of K_2SO_4.
a. 4.355 gm b. 3.355 gm
c. 2 gm d. 3.1 gm

1224. The solubility of a salt at O^oC is 12. How much salt will 50 gm of its saturated solution contain at that temperature?
a. 5.357 gm b. 6.234 gm
c. 2.123 gm d. 4.547 gm

1225. How much NaI will saturate 60 gm of water at 60^oC, if its solubility be 178?
a. 106 b. 106.1
c. 106.2 d. 106.3

1226. The solubility of $KClO_3$ at 20^oC is 7.10 gm of $KClO_3$ is dissolved in 50 gm of hot water & slowly cooled to 20^oC. What amount of $KClO_3$ will separate out?
a. 6 gm b. 5.5 gm
c. 6.5gm d. 7.5 gm

1227. 20 gm of a solution saturated with a salt at 80^oC is cooled to 30^oC. How much of the salt will crystallize out o fthe solution. If its solubilities at 80^oC & 30^oC are 100 & 25 respectively?
a. 6.5 gm b. 5.5 gm
c. 7.5 gm d. 8.5 gm

1228. A gas occupies 10 liters under a pressure of 1.5 atm. What would be its volume be if the pressure were increased to 4 atm? Assume that temperature remains constant.
a. 2.15 l b. 3.25 l
c. 3.75 l d. 2.225 l

1229. A gas occupies a certain volume under a pressure of 100 t or r. What pressure will be required to compress the volume to 1/3 rd , temperature remainng constant?
a. 1000 torr b. 3000 torr
c. 200 torr d. 3000 torr

1230. The volume of gas is 720 m/at 20 degree celcius. At what temperature will its volume be 960 ml.
(pressure remaining constant)
a. 111.7 degree celcius b. 1112.7 degree celcius
b. 115.2 degree celcius d. 117.7 degree celcius

1231.A sample of nitrogen occupies 100 cc at 27 degree celcius. At what temperature will its volume be double, if the pressure doesnot change?
a. 127^oC b. 227^oC
c. 327^oC d. 300^oC

1232. A 350 ml sample of O_2 gas exerts a pressure of 830 mm Hg at 22^oC. At what temperature will it exert a pressure of 600

mm Hg in a volume of 500ml.

a. 32°C b. 42°C
c. 30°C d. 40°C

1233. A given mass of moist H_2 occupies 75 ml at 20°C & 750 mm pressure, what volume does it occupy at NTP?

a. 71.2 ml b. 67.33 ml
c. 59.2 ml d. 23 ml

1234. Convert 0°C to Kelvin scale.

a. 173 K b. -173 K
c. 0 K d. 273 K

1235. Convert -63°C to Kelvin scale.

a. 210 K b. 110 K
c. -63 K d. 0 K

1236. Convert 547°C to Kelvin scale.

a. 280 K b. 820 K
c. 440 K d. 0 K

1237. Convert 0 K to Celsius scale.

a. 2 °C b. -273°C
c. 273 °C d. 373°C

1238. Convert 450 K to Celsius scale.

a. 177 °C b. 277°C
c. 0°C d. 129°C

1239. Three volumes of oxygen & 2 volumes of chlorine are mixed. What will the partial pressure of each be when the barometer stands 760 mm?

a. 450 & 300 mm b. 444 & 326 mm
c. 432 & 464 mm d. 456 & 304 mm

1240. 100 ml of a gas are enclosed in a cylinder under a pressure of 760 mm. What would be the volume at pressure of 1520 mm?

a. 5 ml b. 50 ml
c. 100 ml d. 200 ml

1241. A gas occupies 12.3 litres at a pressure of 40 cm of Hg. What is the volume in ml when pressure is increased to 600 mm?

a. 800 ml b. 8000 ml
c. 80 ml d. 8200 ml

1242. 200 cc of Nitrogen at 27°C are cooled to -20°C. Find the new volume?

a. 166 cc b. 168.66 cc
c. 166.22 cc d. 164.22 cc

1243. Given 600 ml of a gas at standard conditions. If the pressure is trebled & temperature is raised to 546°C, what volume will the gas then occupy?

a. 500 ml b. 600 ml
c. 700 ml d. 550 ml

1244. Hydrogen diffuses five times as fast as another gas A. Find the molecular weight of A.

a. 20 b. 30
c. 40 d. 50

1245. The density of Hz is 0.0899 gm/lit, & the density of chlorine is 3.21 gm/lit. Compare the ratio of diffusion of these gases, i.e. $r_4 : r_{cl}$

a. 5 : 1 b. 5.975 : 1
c. 5.22 : 1 d. 4.23 : 1

1246. Atomic number of Potassium is

a. 2 b. 8 c. 11 d. 19

1247. Atomic number of Uranium is

a. 5 b. 50 c. 69 d. 92

1248. Atomic number of Zn is

a.20 b. 25 c. 30 d. 35

1249. Atomic weight of Phosphorus is

a.15 b. 30 c. 31 d. 32

1250. Atomic weight of Argon is

a. 18 b. 40 c. 36 d. 22

1251. Atomic weight of Al is
a. 13 b. 27 c. 26 d. 30

1252. Atomic weight of Carbon is
a. 12 b. 13 c. 12.5 d. 13.5

1253. Fluorine is a
a. metal b. halogen
c. alkali metal d. alkali earth metal

1254. Magnesium has atomic weight
a. 12 b. 24 c. 25 d. 26

1255. Sodium has atomic weight
a. 11 b. 22 c. 23 d. 24

1256. Sulphur has atomic weight
a. 8 b. 16 c. 32 d. 33

1257. Oxygen has atomic weight
a. 8 b. 16 c. 32 d. 64

1258. Oxygen has molecular weight
a. 8 b. 16
c. 32 d. 64

1259. Isotopes are atoms of same element but with different
a. atomic weight b. atomic number
c. mass number d. none

1260. Isobars are atoms of different elements having same mass number but different
a. atomic weight b. atomic number
c. mass number d. none

1261. Isotopes of hydrogen is
a. Protium b. Deuterium
c. Tritium d. All of the above

1262. Who arranged elements in the form of triads?
a. Joseph Proust b. Mendeelev
c. John Newland d. None

1263. Law of Octave was given by
a. Joseph Proust b. John Dalton
c. Dobereiner d. John Newland

1264. Who plotted atomic volume against atomic weight?
a. Joseph Proust b. Lothermeyer
c. Mendeelev d. John Newland

1265. The most important contribution in the field of Periodic table is by
a. John Newland b. Mendeelev
c. Proust d. Lothermeyer

1266. Mendeelev's Periodic Law states: The chemical & physical properties of elements are periodic functions of their atomic
a. weights b. numbers
c. both a & b d. none

1267. Mendeelev predicted 3 elements would be discovered which is not the element of those three.
a. Scandium b. Uranium
c. Gallium d. Germanium

1268. The horizontal rows in the periodic table are
a. columns b. rows
c. periods d. lines

1269. The vertical columns in the periodic table are
a. groups b. columns
c. rows d. vertical lines

1270. Which one is not a group 1 element?
a. H b. Li
c. Si d. Fr

1271. Na is a _____ group element
a. 1^{st} b. 2^{nd}
c. 3^{rd} d. 4^{th}

1272. Ve falls under group _____ .

a. 1 b. 8
c. 18 d. 4

1273. Which is not a group 18 element?
a. He b. Be
c. Ve d. Ne

1274. Iron falls under group
a. 1 b. 4
c. 8 d. 16

1275. Atomic number of Fe is
a. 17 b. 27
c. 26 d. 47

1276. Co falls under group
a. 7 b. 8
c. 9 d. 10

1277. 1st group is also called group of:
a. transition elements b. alkali metals
c. alkaline earth metals d. none

1278. Group 18 is also called
a.0 b. 8 c.16 d. 10

1279. Modern periodic law is based on
a. atomic number b. atomic mass
c. molecular mass d. molecular number

1280. Ba is under group
a. 1 b. 2 c. 3 d. 4

1281. Which is not a group of two element?
a. Be b. Mg c. Ca d. Br

1282. N falls group
a.. 1 b. 12 c. 13 d. 15

1283. Which of the following are not in same period?
a. Li b. Be c. Al d. B

1284. Zn lies in the _____ period.
a. 1st b. 2nd c. 3rd d. 4th

1285. Na, Mg, & Av lie in the period
a. 1 b. 2 c. 3 d. 4

1286. Ni lies in the group
a. 5 b. 10 c. 15 d. 18

1287. Group 13 element is
a. B b. Al
c. Ga d. All the above

1288. Hg lies in the same group as
a. Fe b. Ni c. Co d. Zn

1289. Ti lies in the period
a. 1 b. 2 c. 3 d. 4

1290. Alkaline earth metal includes
a. group 1 elements b. group 2 elements
c. group 3 elements d. group 4 elements

1291. Noble gases are in the group……..
a. a. 1 b. 10 c. 15 d. 18

1292. V lies in the group
a. 1 b. 3
c. 5 d.7

1293. Ba is a _____ group element.
a. 1st b. 2nd
c. 3rd d. 4th

1294. Cs is a _____ group element.
a. 1st b. 2nd
c. 3rd d. 4th

1295. Hydrogen resembles
a. alkali metals b. holohgens
c. both a & b d. none

1296. Lanthanides include atomic numbers
a. 57 – 70 b. 58 – 70
c. 58 – 71 d. 59 -72

1297. Achnodes include atomic numbers

a. 90 – 103 b. 99 – 109
c. 91 – 102 d. 92 – 103

1298. Rare earth elements are :
a. lanthanides b. actinides
c. both a & b d. none

1299. The elements constituting subgroup A are
a. bridge elements b. transitional elements
c. representative elements d. all of the above

1300. Group VIII contains _____ columns.
a. 1 b. 2
c. 3 d. 4

1301.The M.F. of calamite lotion
a. $ZnCO_3$ b. Zns
c. Zncl2 d. None

1302. Bakelite plastic is example of……..
a. Thermoplastic b. Themosetting
c. a and b d. None

1303. The subatomic particle of an atom, which has no charge, is known as
a. proton b. Neutron
c. electon d. None

1304. From the given mixture of sand + iodine, Iodine is separated by……..
a. Distillation b. sublimation
c. Crystallization d. None

1305. Black ink is separated into
a. sublimation b. chromatography
c. Distillation d. none

1306. The water which contain calcium bicarbonate and calcium chloride is……..
a. Temporary b. Permanent
c. a and b respectively d. None

1307. Peptic ulser paitent is treated with
a. Al(OH)3 b. Mg(OH)2
c. a and b d. None

1308. If honey bee bites, we use
a. calamine lotion b. vinegar
c. caustic soda d. none

1309. If wasp bites, we use generally ……
a. Vinegar b. calamine lotion
c. Hydrochloroic acid d. None

1310. If we go from left to right in the periodic table the acidic character of the element…..
a. increase b. decreases
c. No any change d. None

1311. If we go form top to bottom in the same group, the electronegativity of the element…..
a. increases b. decreases
c. No any change d. None

1312. If we go form left to right in the same period, the a tomic radius of the element
a. increases b. decreases
c. No any change d. None

1313. The example of group vth of the periodic table is……..
a. sodium b. Aluminium
c. oxygen d. nitrogen

1314. Give the example of one covalent compound formed in between Gr-I and Gr-IV
a. NaCl b. CH_4
c. Na_2O d. HCl

1315. Give the example of electrovalent compound formed in between gr-I and Gr-VII is……..
a. Na_2O b. KCl
c. $CaCl_2$ d. None

1316. Valency of phosphate is…….
a. 1 b. 2
c. 3 d. none
1317. If water contains calcium sulphate compound, hardness is separated by
a. lime water b. boiling
c. washing soda d. None
1318. If slaked lime is heated with salammoniac, we get gas like
a. NH_3 b. N_2
c. O_2 d. None
1319. If sodium nitrite is heated with ammonium chloride, we get gas like …….
a. NH_3 b. N_2
c. O_2 d. None
1320. If sodium peroxide is reacted with water, we get a gas like
a. H_2 b. O_2
c. CO_2 d. None
1321. The molecular formula of galena is…….
a. ZnS b. HgS
c. PbS d. None
1322. The molecular formula of baking soda is……
a. $Na2CO_3$ b. $CaCO_3$
c. $NaHCO_3$ d. None
1323. When sodium metal is reacted with water, we get a gas, which is absorbed by palladium metal is
a. O_2 b. CO_2
c. H_2 d. None
1324. When potassium nitrate is heated, we get a gas, which is absorbed by alkaline pyrogallate solution is
a. H_2 b. NH_3
c. O_2 d. none
1325. The molecular formula of rust is…….
a. FeO b. Fe_3O_4
c. $Fe_2O_3.XH_2O$ d. none
1326. The chemical formula of pyrex glass is……..
a. Aluminium silicate b. Aluminium boron silicate
c. Boron silicate d. None
1327. Thickening of window glass after sometime is known as……..
a. Hydration b. Higroscopic
c. Supercooled d. None
1328. Lunar eclipse takes place
a. every moon day b. Moon day
c. new moon day d. None
1329. Hottest part of the earth is……..
a. Crust b. Mantle
c. inner core d. none
1330. Diamond is a example of……
a. Sedimentary b. Igneous
c. metamorphic d. None
1331. Protein is the example of ……..
a. Natural polymer b. Artificial
c. Man made d. None
1332. Blood is example of…….
a. Colloidal solution b. true solution
c. Suspension d. none
1333. Particle size of solute in true solution is…….
a. 100-100A degree b. 1-10 A degree
c. 4000-7000 A degree d. None
1334. If the solubility of compound at 25 is 30%, find the salt deposited from 50 gram of its saturated solution at 30degree celcius is
a. 100 b. 10
c. 15 d. 150

1335. Solubility curve of sodium chloride in water with rise of temperature…….
a. increased rapidly
b. Slightly increase
c. no any change in solubility
d. none

1336. The gas which is neither supporter of combustion nor combustible in nature is……
a. N_2 b. O_2
c. H_2 d. none

1337. The aqueous solution of gas which turns red to blue litmus paper is…….
a. CO_2 b. O_2
c. H2 d. None

1338. The gas is collected in gas jar by down ward displacement of water is known as…….
a. CO_2 b. N_2
c. CO d. both b & c

1339. The gas which is collected in gas jar by upward displacement of air is……..
a. NH_3 b. CO_2
c. Co d. None

1340. % of silica is in ordinary glass
a. 15% b. 25%
c. 50% d. none

1341. Formaline is used as…….
a. Insecticides b. pesticide
c. Antiseptic d. none

1342. B.H.C. is used as……
a. antiseptic b. disinfectant
c. insecticide d. None

1343. PVC is example of…….
a. Natural polymer b. Synthetic polymer
c. a and b d. None

1344. The smallest particle of matter which, generally participates in chemical reaction but has no free of existence is known as……
a. atom b. molecule
c. element d. none

1345. The chemical properties of the element are determined by…….
a. atomic number b. atomic mass
c. neutron d. None

1346. The father of chemistryof…….
a. Dalton b. Lavosier
c. Rutherford d. none

1347.The nucleus of atom is discovered by……
a. Avogardo b. Rutherford
c. Dalton d. none

1348. The molecule term is given by…….
a. Dalton b. Ruther ford
c. Avogardo d. None

1349. Match the following pairs:

1. Quick lime	a. CaO
2. Lime water	b. $FeSO_4.7H_2O$
3. Blue vitriol	c. $(CaSO_4)\ 2H_2O$
4. Green vitriol	d. H_2SO_4
5. Plaster of paris	e. $ZnCO_3$
6. Bleaching powder	f. Fe_2O_3
7. Oil of vitriol	g. C_6H_5OH
8. Milk of Magnesia	h. H_2CO_3
9. Vinegar	i. CH_3COOH
10. Carbolic Acid	j. $Mg(OH)_2$
11. Carbonic Acid	k. $CaOCl_2$

12. Calamine lotion l. $AgNO_3$
13. Zinc blende m. $CuSO_4.5H_2O$
14. Lunar Caustic n. $Ca(OH)_2$
15. Hematite o. ZnS

1350. Which is the following compound is not organic compound?
a. CO_2 b. CO
c. CH_4 d. Both a and b

1351. What is general formula of alkane ?
a. CnH_2n b. ChH_2n
c. CnH_2n+1 d. CnH_2n+2

1352. Which of the following gas in biogas ?
a. C_2H_6 b. CH_4
c. CO_2 d. CO

1353. What happens when sodium acetate is treated with sodium hydroxide in presence of calcium oxide ?
a. Ethane gas is formed . b. Propane gas is formed .
c. Methane gas is formed . d. All of the above

1354. Which of the following compound is used as anesthesia
a. CCl_4 b. $CHCl_3$
c. CH_3CL d. $CH2Cl_2$

1355. What is the general formula of alkyl group?
a. $CnH_2n + 1$ b. $CnH_2n + 2$
c. CnH_2n d. $CnH_2n - 2$

1356. What is the M.F of acetylene?
a. C_2H_4 b. C_2H_2
c. C_2H_6 d. None of above

1357. What is the M.F of ethanol ?
a. Ch_3OH b. C_2H_5OH
c. C_3H_7OH d. C_4H_9OH

1358. Which of the following compound is called glycol?
a. $CH_2OHCHOHCH_2OH$ b. CH_2OHCH_2OH
c. C_2H_5OH d. C_4H_9OH

1359. What is boiling point of alcohol?
a. 78.6^{oC} b. 99^{oC}
c. 80^{oC} d. 81^{oC}

1360. Which of the following compound is soluble in water?
a. Ethane b. propane
c. Alcohol d. Ether

1361. What is the functional group of ether?
a. –OH b. –O-
c. $–NH_2$ d. –CO

1362. Which of the following compound is used in thermometer?
a. Ether b. Alcohol
c. potassium chloride d. Sodium hydroxide

1363. Which of the following compound is iodo form ?
a. CHI_3 b. $CHBr_3$
c. C_3H_8 d. C_2H_4

1364. Which of the following compound is unsaturated compound?
a. CH_4 b. C_2H_6
c. C_3H_8 d. C_2H_4

1365. What is the general formula of alkyne ?
a. CnH_2N-_2 b. CnH_2n+2
c. CnH_2n d. CnH_2n+1

1366. Which of the following bond are found in alcohol ?
a. Electrovalent bond
b. Covalent bond
c. Hydrogen bond
d. both b and c

1367. What is the M.F of dim ethyl ether ?
a. $C_2H_5OC_2H_5$ b. $CH_3OC_2H_5$
c. CH_3OCH_3 d. None of the above

1368. What is the boiling point ether?
a. 38^{oC} b. 35^{oC}
c. 37^{oC} d. 36^{oC}

1369. How many blocks are there in a periodic table ?
a. 1 b. 2
c. 5 d. 4

1370. Who introduced the modern periodic table ?
a. John Newland b. Hochar Meyer
c. Henery Moseley d. John Dalton

1371. How many elements are there in a Lanthanides series?
a. 13 b. 14
c. 15 d. 16

1372. In which block of the periodic table should aluminum be place?
a. s b. p
c. d d. f

1373. How many elements are there in actinides series ?
a. 14 b. 15
c. 16 d. None of above

1374. In which Group of the periodic table should calcium be placed ?
a. I-A b. III-A
c. II-A d. IV-A

1375. How many valance electrons are there in an argon atom ?
a. 7 b.8
c. 9 d. 10

1376. According to duplet rule , how many electrons are there in the valance shell ?
a. 3 b. 4
c. 5 d. 2

1378. Which of the periodic table should actinides group be placed ?
a. s b. p
c. d d. f

1379 Which of the following metal is called alkaline earth metal
a. Li b. Na
c. Ca d. Al

1380. In which group of the periodic table should halogen group be placed
a. I-A b. VI-A
c. III-A d. VII-A

1381. Which of the following element is also called electropositive element?
a. 16 b. 17
c. 18 d. 20

1382. How many electrons are there in Ca^{++} ion ?
a. 13 b. 20
c. 11 d. 18

1383. Which of the following gas is also called noble gas ?
a. O_2 b. Ne
c. Ar d. Both b& c

1384. What is the other name of lanthanides and actinides series ?
a. Alkalina meatal
b. Alkalina earth
c. Rare- earth element
d. None of the above

1385. Which of the following chemical reaction is an example of decomposition reaction?
a. $2Na + Cl_2 \longrightarrow 2NaCl$
b. $N_2 + 3H_2 \longrightarrow 2NH_3$
c. $2AgBr \longrightarrow 2Ag + Br_2$
d. Both a & b

1386. What is the gram molecular weight of oxygen molecule ?
a. 30 gram b. 32 gram

c. 34 gram d. 40 gram

1387. How many molecules are there in 1 mole of carbon dioxide gas ?
a. $6.02x10^{23}$ molecules
b. $6.02x10^{27}$ molecules
c. $6.02x10^{30}$ molecules
d. $6.02x10^{-32}$ molecules

1388. Which of the following chemical reaction is not balanced?
a. $C+O_2 \longrightarrow CO_2$
b. $Cu+O_2 \longrightarrow CuO$
c. $Zn+H2SO_4 \longrightarrow ZnSO_4+H_2$
d. $CaCO_3 \longrightarrow CaO+CO_2$

1389. Which of the following number is Avogadro's number ?
a. $6.02x10^{24}$ b. $6.023x10^{23}$
c. $6.02x10^{25}$ d. $6.02x10^{-23}$

1390. Which of the following chemical reaction is an example of acid- base reaction?
a. $H_2SO_4+ CaO \longrightarrow CaSO_4 + H_2O$
b. $2Zn+O_2 \longrightarrow 2ZnO$
c. $2KClO_3 \longrightarrow 2KCl + 3O_2$
d. $CaCO_3 \longrightarrow CaO + CO_2$

1391. Which of the following catalyst is used for the manufacturing of ammonia gas ?
a. Ni b. Fe/Mo c. Cu d. Sn

1392. Which of the following gas is monatomic gas ?
a. Cl2 b. F2 c. N2 d. Xe

1393. In the given mixture of sand + camphor, camphor is separated by……
a. distillation process b. sublimation process
c. evaporation process d. decantation process

1394. Tooth paste is the example of …….
a. colloids b. solution
c. suspension d. all of the above

1395. Which of the following is the formula of solubility?

a. Solubility = $\frac{\text{Wt. of solute (gram) X 100}}{\text{Wt. of solvent (gram)}}$

b. Solubility = $\frac{\text{Wt. of solution (gram)}}{\text{Wt. of solvent (gram)}} \text{ X 100}$

c. Solubility = $\frac{\text{Wt. of solvent (gram)}}{\text{Wt. of solute (gram)}} \text{ X 100}$

d. None of the above

1396. If the solubility of given compound at 30^{oC} is 40. Find the weight of solvent when of solvent when 80 gram its saturated solution is heated at 30^{oC}
a. 9.300gram b. 22.8gram
c. 500gram d. 600gram

1397. Aqueous solution containing gas is example of
a. brass b. coca cola
c. Salt + solution d. none of the above

1398. When 20 gram of saturated solution is cooled gram 60oC to 45oC , find the salt deposited .If the solubility of given salt at 60oC and 45oC are 45 and 40 respectively .
a. 3 gram b. 4gram
c. 1 gram d. 0.68 gram

1399. For the solubility of given compound amount of solvent necessary is ……
a. 250gram b. 100gram
c. 150gram d. 105gram

1400. Generally , When the saturated solution is heated it becomes …….
a. unsaturated b. saturated
c. Super saturated d. none

1401. From the given solution of NaCl + NaCl is separated by
a. filtration b. evaporation
c. sublimation d. decantation
1402. Mixture of alcohol and water is example of
a. colloid b. Solution
c. suspension d. all of the above
1403. In which block of alcohol and water is example
a. s- block b. p – block
c. f- block d. d- block
1404. Which of the following compound is called magnetic oxide of iron ?
a. Fe2O3 b. Fe3O4
c. FeCO3 d. FeO
1405. What is the M.F. of sodium meta aluminate?
a. NaAlO2 b. Na3AlO3
c. FeCO3 d. FeO
1406. Which of the following is the At . No .Of copper
a. 30. b. 29
c. 31 d. 32
1407. Which of the following is the ore of copper ?
a. $CuCl_3$ b. Cu_2S
c. $CuCl_3$ d. Both a &b
1408. What is the specific specific density of the copper ?
a. 8 b. 7.75
c. 8.85 d. None of the above
1409. Which of the following gas is evolved when copper is treated with conc. Sulphuric acid?
a. H_2S b. SO_2
c. O_2 d. N_2
1410. Which of the following metal is also called coinage metal ?
a. Na b. Li
c. Cu d. Ca

1411. What is the M.F of horn silver ?
a. Ag_2S b. $(AgCu_2)_2S$
c. AgCl d. Ag
1412. What happens when silver is treated with dil. Hydrochloric acid ?
a. Silver chloride is formed
b. Hydrogen gas is evolved
c. Oxygen gas is evolved
d. It does not react with dill. Hydrochloric acid .
1413. What is the specific density of gold ?
a. 20 gram\cm^3 b. 19.3 gram\cm^3
c. 21 gram\cm^3 d. 24.3gram\cm^3
1414. What is the atomic wt. gold?
a. 179 b. 35
c. 35.5 d. None
1415. What is the M.F of Auric chloride
a. AuCl b. $AuBr_3$
c. $AuCl_3$ d. AgBr
1416. Which of the following compound is used as a negative in a photocopy ?
a. AgCl b. AgI
c. AgBr d. $AgNO_3$
1417. % of oxygen in calcium oxide is
a. 28.4 b. 56.8
c. 60 d. None
1418. Amalgam is
a. an alloy b. slag
c. flux d. none
1419. Slag is the product of
a. Gangue b. Gangue + Flux
c. Colloidal d. None
1420. The composition of brass is

a. Cu+Sn b. Cu+ Zn
c. Cu+Hg d. None

1421. The composition of bronze is
a. Cu+ Zn b. Cu + Zn +Ni
c. Cu+Sn d. None

1422. The composition of German silver is
a. Cu+Zn b. Cu+Sn
c. Cu+Zn +Ni d. None

1423. What is the M.F . of sodium zincate ?
a. Na2S b. Na2ZnO2
c. Na2Z d. None

1424. What is the M.F .of gypsum ?
a. Al2O3. SiO2 b. CaSO4.2H2O
c. CaCO3 d. Al of the above

1425. Which of the following glass is soluble in water ?
a. Oridinary b. Hard glass
c. Borosilicate glass d. Water glass

1426. Carbolic acid and formalin is reacted to each other , we get…….
a. Polyethylene b. polyvinyl chloride
c. Bakelite plastic d. None of the above

1427. In the given example, which one is detergent ?
a. Sodium striate b. Alkyl benzene
c. Bakelite Plastic d. None of the above

1428. Molecular formula of soap is
a. $C_{17}H_{35}COONa$ b. SiO_2
c. AlC_{l3} d. $C_{17}H_{35}COOLi$

1429. P.V.C is the example of
a. Thermoplastics
b. Thermoplastics plastics
c. Both thermoplastics and thermosetting plastics
d. None of the above

1430. Other name of hard glass is
a. Pyrex glass b. Ordinary glass
c. Potashlime glass d. Soft glass

1431. In the given example , which is whole number
a. Atomn mass b. Atomic number
c. Equivalent d. None

1432. Molecular formula of urea fertilizer is
a. $(NH_4)_2\ SO_4$ b. $CO(NH_2)_2$
c. NH_4NO_3 d. KCl

1433. Vital force theory was given by
a. Dalton b. Lanosver
c. Berzelius d. None

1434. Blood is the example of the
a. True solution b. Colloidal
c. Suspension d. None

1435. Example of good conductor is
a. Diamond b. Coal
c. Graphite d. None

1436. Example of Metalloid is
a. Be b. Ge
c. As d. All of them

1437. Example of transition elements is
a. K b. Cu
c. Fe d. None

1438. Example of transitional elements is
a. Ca b. Na
c. Cu d. None

1439. Phosphoric acid is used with hydrogen peroxide acts as
a. – Ve catalyst b. +ve catalyst
c. Autocatalyst d. None

1440. MnO_2 is used in the prepration of oxygen gas as

a. + Ve catalyst b. – ve catalyst
c. Autocatalyst d. None

1441. Atoms of the same element, which have same atomic number but different atomic mass are known as
a. isobars b. isotones
c. isotopes d. none

1442. Total number of groups in morden long periodic table are
a. 14 b. 16
c. 18 d. 20

1443. Maximum number of electrons in given . orbital is
a. 1 b. 2
c. 3 d. 4

1444. The number of orbital in " d" subs be is
a. 3 b. 4
c. 5 d. 7

1445. Total number of electron in oxide ion is
a. 8 b. 10
c. 12 d. None

1446. In modern periodic table, elements are arranged on the basis of their increasing
a. atomic mass b. atomic number
c. mass number d. none

1447. Symbol of quick silver is ……..
a. Ag b. Hg
c. Au d. none

1448. Total number of electrons in ferric ion are …….
a. 26 b. 23
c. 24 d. none

1449. Generally, ionic radius of cation decrease, due to……..
a. decrease effective nuclear charge
b. increased effective nuclear charge
c. increased atomic number
d. none of the above

1450. The amount of energy required to remove an electron from an gaseous atom is known as …….
a. ionization potential b. electron affinity
c. electro negativity d. none

1451. The word organic means
a. death b. life c. birth d. oil like

1452. Which of the following is inorganic?
a. fat b. oil c. sugar d. none

1453. Vital force theory was given by
a. Rutherford b. Berzelius
c. Dalton d. None

1454. Vital force theory says
a. every organic matter is made of carbon
b. every organic matter can be created
c. no organic compounds can be prepared in the lab
d. none

1455. The first organic compound prepared in the lab is
a. Ammonic b. CH_4
c. C_2H_2 d. Urea

1456. Carbon has special property of combining with themselves & with other elements to form long chains. This is called
a. Catenation b. Oxidation
c. Reduction d. Animation

1457. Organic compounds are
a. Combustible b. Incombustible
c. Both a and b d. none

1458. Organic compounds are
a. Electric b. Co-ordinate
c. Covalent d. None

1459. Which of the following is not used as a method of purification of organic compounds?

a. Crystallization b. Sublimation
c. Distillation d. None

1460. Ethyl alcohol is
a. C_2H_{10} b. CH_3OH
c. C_2H_5OH d. C_2H_6

1461. Pentane is
a. C_5H_{10} b. C_5H_{12}
c. C_5H_{14} d. C_6H_6

1462. Lassigne's test is used for the detection of compounds containing:
a. S b. O
c. N d. both a & c

1463. Open chained compounds are
a. aliphatic b. Aromatic
c. Allycyclic d. Polycyclic

1464. Benzene is
a. aliphatic b. Aromatic
c. Allycyclic d. Polycyclic

1465. Aldehyde is
a. –OH b. CHO
c. – COOH d. $-NH_2$

1466. Amino is
a. $-NH_3$ b. – COOH
c. – CHO d. $-NH_2$

1467. C_8H_{18} is
a. heptane b. henane
c. nunane d. octane

1468. $C_{11}H_{24}$ is
a. Decane b. Undecane
c. Nonane d. Tridecane

1469. $C_{20}H_{42}$ is
a. Eicosane b. Ocatadecane
c. Eicosane d. Triacontane

1470. $C_{40}H_{82}$ is
a. Eicosane b. Triacontane
c. Tetracontane d. Heptacontane

1471. $CH_3\,CH_2\,CH_2\,CH_3 \rightarrow$ IUPAC name is
a. Pentane b. Methane
c. Hexane d. Butane

1472. $CH_3 - \underset{\displaystyle CH_3}{\overset{\displaystyle CH_3}{\overset{|}{C}}} - CH_3 \rightarrow$ common name is
a. Dimethyl hexane b. Tetra methane
c. Neo pentane d. Di-methyl propane

1473. When a lead battery is discharged
a. SO_2 dissolved b. $PbSO_4$ consumed
c. Lead formed d. H_2SO_4 consumed

1474. $CH_3 - CH_2 - \underset{\displaystyle CH_3}{\overset{|}{CH}} - CH_2 - CH_3 \rightarrow$ IUPAC name is
a. 3 – methyl pentane b. 3 – methyl hexane
c. Hexane d. n – hexane

1475. $CH_3 - \underset{\displaystyle CH_3}{\overset{|}{CH}} - \underset{\displaystyle CH_3}{\overset{|}{CH}} - CH_3 \rightarrow$ IUPAC name is
a. 2, 2 – dimethyl butane b. 2, 3 – dipropyl hexane
c. 2, 3 – dimethyl pentane d. Hexane

1476. $CH_3 - CH_2 - \underset{\displaystyle CH_3}{\overset{\displaystyle CH_3}{\overset{|}{\underset{|}{C}}}} - CH_3 \rightarrow$ IUPAC name is

a. 2, 2 – dimethyl butane b. Neo – hexane
c. 2, 2 dipropyl propane d. hexane

1477. The general formula for alkenes is

a. C_nH_{2n} b. C_nH_{2n-2}
c. C_nH_{2n+2} d. none

1479. The general formula for alkenes is

a. C_nH_{2n} b. C_nH_{2n-2}
c. C_nH_{2n+2} d. C_nH_{2n+4}

1480. C_3H_4 is

a. Propane b. Propene
c. Butane d. Propyne

1481. Acetylene is

a. $C_{2H}4$ b. C_2H_6
c. C_2H_2 d. C_3H_4

1482. IUPAC name of $CH_3CH_2CH = CH_2$ is

a. 1 – butene b. 1 – propane
c. 1 – propene d. 1 – butane

1483. $CH_3 - C \equiv C - C\ H_3$ is

a. Butene – 2 b. Butyne – 2
c. Butyne – 1 d. Butane

1484. The precious stone originating from Beryllium is

a. Granite b. Garnet
c. Salinanite d. Shale

1485. Alkenes are also called

a. Paraffins b. Olefines
c. Acetylenes d. All of the above

1487. $2RX + 2Na \xrightarrow{\geq} RR + 2\ NaX$ is

a. Kolbe's b. Sabatier reaction
c. Wurtz reaction d. None

1488. Kolbe's electrolysis causes production of

a. Alkanes b. Alkenes
c. Alkynes d. All

1489. In hydrogenation reaction, the catalyst used is

a. Fe b. Co c. Ni d. Cu

1490. $CH_3COONa + NaOH \xrightarrow{\geq} \ldots\ldots + Na_2CO_3$

a. CH_3 b. C_2H_2
c. C_2H_4 d. CH_4

1491. $Al_4C_3 + l_2\,H_2O \xrightarrow{\geq} \ldots\ldots + 4\ Al(OH)_3$

a. CH_3 b. CH_4
c. C_2H_4 d. C_2H_6

1492. The melting point & boiling point of alkanes _____ with increase in molecular weight.

a. increases b. decreases
c. not certain d. no change

1493. Alkanes are also called

a. Paraffins b. Olefines
c. Acetylenes d. none

1494. $C_6H_{14} + HNO_3 \longrightarrow \ldots\ldots + H_2O$

a. $C_6H_{14}\ NO_3$ b. $C_6H_{13}\ NO_2$
c. $C_6H_{12}\ NO_3$ d. None

1495. $C_2H_6 + O_2 \longrightarrow \ldots\ldots + H_2O + heat$

a. CH_4 b. CO
c. CO_2 d. C_2H_6

1496. $CH_3CH_2CH_3 \xrightarrow[> 500^oC]{\Delta} \ldots\ldots + CH_4$

a. CH_4 b. $CH_2 = CH_2$
c. C_2H_6 d. C_3H_8

600^oC

1497. n – hexane $\xrightarrow[Cr_2O_3/Al_2O_3]{}$ ……. + H_2

a. alkane b. alkene
c. benzene d. propanol

1498. $C_2H_5OH \xrightarrow[170^oC]{Conc.H_2SO_4}$ …….. + CH_4

a. C_2H_4 b. C_2H_6
c. CH_4 d. C_3H_8

1499. $CH_3CH_2OH \xrightarrow[350^oC]{Al_2O_3}$ …… + H_2O

a. C_2H_4 b. C_2H_6
c. CH_4 d. C_3H_8

1500. CH_2Br + Zn ⟶ ……. + $ZnBr_2$
|
CH_2Br

a. C_2H_2 b. C_2H_4
c. C_2H_6 d. CH_4

1501. Ozone is

a. O b. O_2 c. O_3 d. O_4

1502. Hole in Ozone is mainly due to

a. CO_2 b. CH_4 c. CFC d. CO

1503. Ozone is

a. Oxidant b. Reductant
c. Both a and b d. None

1504. Ozone is used as

a. germicide b. disinfectant
c. steritizing agent d. all of the above

1505. The allotrope of oxygen is

a. hydrogen b. nitrogen
c. ozone d. ammonia

1506. Water has maximum density at

a. 0^oC b. 2^oC c. 4^oC d. 6^oC

1507. The density of water is _____ than that of ice.

a. higher b. equal to
c. lower d. all the above

1508. Density of water at 4^oC is

a. 0.5 gm/ml b.2 gm/ml
c. 1 gm/ml d. 0.02 gm/ml

1509. Specific heat of water is

a. 4.18 J/gm/K b. 4.18 J/Kg/K
c. 2.18 J/Kg/K d. None

1510. The bond angle of HoH in water is

a. 100^o b. 104.5^o
c. 105.2^o d. 106^o

1511. Water acts as

a. acid b. base
c. both a & b d. none

1512. Water is a _____ electrolyte.

a. strong
b. weak
c. sometimes weak & sometimes strong
d. all of the above

1513. The compound which is insoluble in water is

a. AgCl b. $BaSO_4$
c. CaF_2 d. All of the above

1514. Organic compound which is soluble in water is

a. alcohol b. sugar
c. carboxylic acid d. all of the above

1515. Rain water is

a. Hard water b. Soft water
c. mined d. none

1516. Temporary hardness of water is caused by
a. Bicarbonates b. Sulphates
c. Phosphates d. Chlorides

1517. Temporary hardness can be removed by
a. Boiling b. Clark's process
c. Both a & b d. None

1518. Clarke's process of removing hardness includes addition of
a. Lime b. Slaked lime
c. Stone d. Salt

1519. Permanent hardness of water is caused by
a. Chlorides b. Sulphates
c. Both a & b d. None

1520. Permanent hardness can be removed by
a. Washing soda b. Ion exchange process
c. Deionization water d. All of the above

1521. Oxygen was discovered by
a. Rutherford b. Dalton
c. Joseph Priestly d. None

1522. $HgO \xrightarrow[\Delta]{} Hg + \ldots\ldots\ldots\ldots$
a. Hg_2O_2 b. O_2
c. O d. All of the above

1523. $Pb_3O_4 \longrightarrow PbO + \ldots\ldots\ldots\ldots..$
a. Pb_2O_2 b. O_2
c. O d. None

1524. $KM_nO_4 \longrightarrow \ldots\ldots\ldots + M_nO_2 + O_2$
a. KM_n b. K_2M_n
c. $K_2M_nO_4$ d. $K_2M_nO_2$

1525. $Pb(NO_3)_2 \longrightarrow 2PbO + \ldots\ldots\ldots + O_2$
a. N_2 b. NH_3
c. NO_3 d. NO_2
…….?

1526. $2KClO_3 \xrightarrow[200\text{- }300^oC]{} 2KCl + 3O_2$
a. M_n b. Co
c. Ni d. M_nO_2

1527. $Na_2O_2 + H_2O \longrightarrow NaOH + \ldots\ldots\ldots\ldots..$
a. H_2 b. H_2O
c. O_2 d. All the above

1528. Oxygen is
a. Colorless b. odourless
c. Heavier than air d. All the above

1529. $CH_4 + 2O_2 \longrightarrow \ldots\ldots.. + H_2O + heat$
a. CO b. CO_2
c. CH_4 d. None

1530. $Na + O_2 \longrightarrow \ldots\ldots\ldots\ldots$ (room temp)
a. $Na_2O + O_2$ b. Na_2O
c. Na_2O_2 d. $O_2 + Na_2O_2$

1531. $Fe + O_2 \longrightarrow \ldots\ldots\ldots$
a. FeO b. Fe_3O_4
c. Fe_2O_3 d. All of the above

1532. $C + O_2 \longrightarrow \ldots\ldots\ldots..$
a. CO b. CO_2
c. Both a & b d. None

1533. $N_2 + O_2 \xrightarrow[3000^oC]{\text{electric arc}} \ldots\ldots\ldots\ldots..$
a. NO_2 b. NO
c. NO_3 d. NH_3

1534. NaOH is a
a. Basic oxide b. Acidic oxide
c. Mixed oxide d. All of the above

1535. $CO_2 + H_2O \longrightarrow \ldots\ldots\ldots\ldots$
a. HCO_3 b. H_2CO_2

c. H_2CO_3 d. None

1536. Amphoteric oxide is
a. Al_2O_3 b. ZnO
c. Both a & b d. None

1537. Oxygen is used in
a. Steel manufacture b. Rocket fuel
c. Oxidizing agent d. All of the above

1538. Oxygen is absorbed by
a. Hydrogen
b. Pallidium
c. Copper oxide
d. Alkaline pyrogallate solution

1539. Selenium lies in the same group as:
a. O_2 b. S
c. Both a & b d. None

1540. H_2 was discovered by
a. Joseph Lister b. Dalton
c. Henryr Cavendish d. Mendeelev

1541. Atomic mass of Hydrogen is
a. 1 amu b. 1.002 amu
c. 1.004 amu d. 1.008 amu

1542. Hydrogen & alkali metals are similar
a. of outer electronic configuration
b. univalent
c. to form similar compounds
d. all of the above

1543. Hydrogen is
a. reducing agent b. oxidizing agent
c. both a and b d. None

1544. $Na + H_2O \longrightarrow NaOH + \ldots\ldots$
a. H_2 b. NaOH
c. NH_3 d. NO_2

1545. $Ca + H2O \longrightarrow \ldots\ldots\ldots$
a. CaO b. $Cu(oH)_2$
c. $Ca(OH)_2$ d. None

1546. $Mg + H_2O \longrightarrow \ldots\ldots\ldots$
a. Mg(OH)2 b. MgO
c. Mgo d. None

1547. $LiH + H_2O \longrightarrow \ldots\ldots\ldots\ldots$
a. $LiO + H_2O$ b. $LiOH + H_2$
c. H_2 d. $LiO + H_2O$

1548. $Fe + HCl \longrightarrow \ldots\ldots\ldots$
a. $Fe_2Cl_3 + H2$ b. $FeCl_3 + H_2$
c. $FeCl_2 + H2$ d. None

1549. $Zn + H_2SO_4 \longrightarrow \ldots\ldots\ldots$
a. $ZnSO_4 + H_2$ b. $ZnO + SO_2$
c. Both a and B d. None

1550. $C + H_2O \longrightarrow \ldots\ldots\ldots\ldots$
a. $CO_2 + O_2$ b. $C + H_2O$
c. $CO_2 + H_2O$ d. $CO + H_2O$

1551. $H_2 + CO + H_2O \longrightarrow \ldots\ldots\ldots$
a. $CO + H_2$ b. $CO_2 + H_2O$
c. $CO_2 + H_2$ d. $CO + H_2O$

1552. $CH_4 + H_2O \xrightarrow[\Delta]{Ni} \ldots\ldots\ldots$
a. $CO + H_2$ b. $CO_2 + H_2O$
c. $CO + H_2$ d. All of the above

1553. Hydrogen is
a. Colorless b. Odourless
c. Insoluble water d. All of the above

1554. Lightest gas is
a. H_2 b. O_2
c. He d. Xe

1555. $PbO + H_2 \longrightarrow$
a. $PbO + H_2O$ b. $Pb + H_2O$
c. $Pb + H_2$ d. None
1556. NH_3 is manufactured by using
a. High pressure b. High temperature
c. Catalyst d. All the above
1557. Haber's process is for the manufacture of
a. NH_3 b. NO_2
c. NO d. Nz
1558. Isotope of hydrogen is
a. Protium b. Deuterium
c. Tritium d. All of the above
1559. Deuterium has …… proton & …….. neutron.
a. 1 & 1 b. 1 & 2
c. 0 & 1 d. 1 & 0
1560. Tritium has ……neutron and …….proton.
a. 0 and 1 b. 1 and 0
c. 2 and 1 d. 1 and 2
1561. Molecular weight of hydrogen is:
a. 1.008 b. 2.016
c. 3.012 d. 4.032
1562. Nitrogen was discovered by:
a. Rutherford b. Henry Cavendish
c. Loyher Hayer d. none
1563. N_2 makes……. % by volume of atmosphere.
a. 70% b. 71%
c. 72% d. 78%
1564. N_2 lies in the group:
a. |VA b. |VB
c. VA d. VB
1565. Anitomy lies in the group:
a. O_2 b. H_2
c. N_2 d. Xe
1566. As we go down the group, the non-metallic character
a. decreases b. increases
c. both d. constant
1567. In Nitrogen family, there are……..electrons in the outershell.
a. 3 b. 2
c. 4 d. 5
1568. In Nitrogen family, electro negatively…….. down the group.
a. increases b. decreases
c. both d. constant
1569. Oxidation state of Nitrogen in NH_3
a. 0 b. 1
c. -3 d. +3
1570. Oxidation state of Nitrogen in NO
a. O b. +1
c. +2 d. -2
1571. Oxidation state of Nitrogen in N_2O
a. 0 b. +1
c. +2 d. -1
1572. $NH3+Cl2 \longrightarrow$ ……..
a. $NCl_3 + HCl$ b. N_2+HCl
c. both a and b d. none
1573. $(NH_4)_2Cr_2O_7 \rightarrow$.....$+Cr_2O_3+H_2O+$……..
a. NH_3 b. O_2
c. N_2O d. N_2
1574. $NaNO_2+NH_4Cl \rightarrow$…….$NaCl+H_2O+$……..
a. NH_3 b. O_2
c. N_2O d. N_2
1575. Nitrogen is slightly

a. lighter than air
b. heavier than air
c. sometimes light and sometimes heavy
d. none

1576. N_2 is
a. colourless b. odourless
c. slightly soluble in water d. all of the above

1577. $N_2+O_2 \xrightarrow[300^oC]{\text{electric arc}}$ ……..
a. N_2O b. NO
c. NO_2 d. N_2O_3

1578. $Al+N_2 \rightarrow$…….
a. AlN b. Al_2N_3
c. Al_5N_3 d. Al_3N_5

1579. The gas used in bulbs is:
a. H_2 b. O_2
c. NH_3 d. N_2

1580. N_2 can be fixed by
a. air b. water
c. bacteria d. viruses

1581. Root nodules of leguminuous plants contain:
a. proteins b. O_2
c. N_2 fixing bacteria d. all of the above

1582. In lab preparation:
$NH_4Cl+Ca(OH)_2 \rightarrow CaCl_2+$…….$H_2O$
a. N_2 b. O_2
c. H_2 d. NH_3

1583. NH3 can be dried by using
a. H_2SO_4 b. quicklime
c. both a and b d. none

1584. In Haber's process for synthesis of NH_3:hgher yield will be obtained if there is:
a. high pressure
b. low temperature
c. high concentration of reactants
d. all of the above

1585. Ammonia is:
a. no smell b. sweet smell
c. pungent smell d. rotten egg smell

1586. Ammonia is
a. no smell b. sweet smell
c. pungent smell d. rotten egg smell

1587. NH_3 is
a. Soluble in water
b. Not soluble in water
c. Sometimes soluble & sometimes not
d. None

1588. Fountain experiment is for
a. O_2 b. H_2
c. N_2 d. NH_3

1589. The subatomic particle is
a. Proton b. Neutron
c. Electron d. All of the above

1590. Electron was discovered by
a. Rutherford b. Dalton
c. J. J. Thomson d. John Ray

1591. 1 e =
a. 1.76×10^{-9} coulomb b. 1.6×10^{-19} coulomb
c. 9.09×10^{-28} coulomb d. None of the above

1592. Proton was discovered by
a. Rutherford b. J.J. Thomson
c. Dalton d. Goldstein

1593. Neutron was discovered by

a. Goldstein b. Rutherford
c. Chadwick d. Mendeelev

1594. Neutron is a
a. Positively charged particle
b. Negatively charged particle
c. Neutral particle
d. All of the above

1595. 'Water melon model' was given by
a. Rutherford b. Thomson
c. Both a & b d. None

1596. X-ray scattering experiment was done by
a. Rutherford b. Thomson
c. Chadwick d. Goldstein

1597. Mass number is
a. Number of protons
b. Number of electrons
c. Total numbers of protons & neutrons
d. None

1598. Cathodic protection against corrosion of iron is done by
a. Mg b. Zn
c. Al d. All of the above

1599. Van der Waal's force of attraction is
a. Weak b. Strong
c. Weak & strong d. None

1600. Hydrogen bond is formed when hydrogen is linked with…….
a. Fluorine b. Oxygen
c. Nitrogen d. All of the above

Best of Luck

Answer Sheet

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
1	D	27	D	53	B	79	A
2	C	28	C	54	A	80	D
3	C	29	C	55	B	81	A
4	A	30	B	56	B	82	B
5	B	31	C	57	A	83	b
6	B	32	C	58	B	84	B
7	B	33	B	59	B	85	A
8	C	34	D	60	B	86	A
9	A	35	C	61	C	87	D
10	B	36	A	62	D	88	A
11	D	37	A	63	C	89	D
12	C	38	B	64	D	90	A
13	C	39	A	65	A	91	A
14	B	40	C	66	D	92	D
15	B	41	A	67	C	93	A
16	D	42	C	68	A	94	C
17	D	43	C	69	B	95	C
18	C	44	A	70	C	96	B
19	A	45	A	71	D	97	B
20	C	46	C	72	B	98	B
21	B	47	D	73	B	99	A
22	D	48	C	74	C	100	D
23	B	49	D	75	B	101	D
24	C	50	A	76	B	102	D
25	D	51	B	77	A	103	A
26	C	52	a	78	c	104	A

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
105	C	131	A	157	D	186	A
106	D	132	C	158	B	187	A
107	A	133	A	159	B	188	D
108	A	134	B	160	A	189	B
109	A	135	C	161	B	190	A
110	B	136	B	162	B	191	B
111	A	137	A	163	B	192	B
112	D	138	B	164	B	193	C
113	B	139	B	165	D	194	C
114	B	140	A	166	C	195	D
115	C	141	A	167	A	196	C
116	B	142	c	168	B	197	C
117	C	143	D	169	B	198	B
118	C	144	B	170	B	199	A
119	A	145	A	172	B	200	D
120	B	146	C	173	B	201	D
121	A	147	B	174	A	202	B
122	D	148	A	175	D	203	C
123	B	149	B	176	C	204	C
				177	C		
124	A	150	C	178	C	205	A
125	B	151	C	179	B	206	A
126	D	152	C	180	B	207	D
127	D	153	a	182	C	208	B
128	A	154	B	183	B	209	C
129	A	155	D	184	D	210	C
130	d	156	c	185	c	211	A

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
212	C	238	A	264	A	290	D
213	C	239	A	265	D	291	A
214	A	240	B	266	C	292	B
215	D	241	B	267	A	293	C
216	B	242	C	268	C	294	B
217	B	243	A	269	A	295	B
218	A	244	B	270	C	296	A
219	C	245	D	271	C	297	B
220	C	246	D	272	C	298	A
221	A	247	C	273	B	299	B
222	B	248	A	274	A	300	A
223	C	249	C	275	B	301	D
224	C	250	C	276	C	302	B
225	B	251	B	277	B	303	A
226	C	252	B	278	B	304	B
227	C	253	B	279	B	305	C
228	B	254	C	280	B	306	B
229	B	255	D	281	B	307	B
230	A	256	B	282	B	308	D
231	A	257	C	283	D	309	C
232	A	258	C	284	C	310	A
233	C	259	D	285	C	311	C
234	C	260	A	286	C	312	B
235	A	261	A	287	C	313	D
236	A	262	A	288	C	314	A
237	A	263	B	289	A	315	A

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
316	A	342	C	368	C	394	C
317	A	343	C	369	C	395	B
318	C	344	B	370	C	396	A
319	C	345	D	371	C	397	B
320	C	346	A	372	B	398	B
321	C	347	A	373	B	399	A
322	B	348	D	374	A	400	D
323	B	349	D	375	D	401	C
324	C	350	D	376	C	402	C
325	B	351	B	377	B	403	A
326	A	352	C	378	A	404	D
327	B	353	C	379	C	405	A
328	B	354	B	380	C	406	A
329	D	355	B	381	B	407	D
330	C	356	C	382	B	408	A
331	A	357	B	383	D	409	B
332	D	358	C	384	D	410	C
333	D	359	B	385	B	411	D
334	B	360	B	386	B	412	C
335	C	361	A	387	D	413	D
336	D	362	D	388	C	414	A
337	B	363	C	389	C	415	A
338	A	364	B	390	D	416	C
339	C	365	C	391	C	417	B
340	D	366	A	392	B	418	A
341	B	367	A	393	B	419	D

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
420	C	446	D	472	A	498	D
421	C	447	C	473	D	499	A
422	C	448	D	474	D	500	D
423	C	449	A	475	B	501	C
424	A	450	C	476	C	502	A
425	A	451	D	477	A	503	B
426	B	452	B	478	C	504	C
427	A	453	C	479	A	505	C
428	A	454	D	480	B	506	A
429	A	455	A	481	C	507	C
430	A	456	C	482	A	508	C
431	A	457	B	483	C	509	C
432	B	458	D	484	A	510	A
433	C	459	C	485	B	511	A
434	A	460	C	486	A	512	A
435	A	461	A	487	C	513	B
436	A	462	B	488	B	514	C
437	A	463	B	489	A	515	B
438	A	464	C	490	B	516	C
439	C	465	C	491	A	517	B
440	A	466	A	492	D	518	D
441	D	467	A	493	C	519	D
442	D	468	B	494	D	520	A
443	B	469	C	495	D	521	A
444	A	470	C	496	B	522	C
445	c	471	b	497	a	523	b

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
524	A	550	A	576	A	602	B
525	B	551	C	577	C	603	A
526	A	552	D	578	A	604	D
527	B	553	C	579	C	605	B
528	A	554	A	580	D	606	A
529	A	555	A	581	D	607	B
530	B	556	A	582	C	608	B
531	D	557	C	583	A	609	A
532	C	558	B	584	B	610	C
533	A	559	C	585	A	611	D
534	D	560	D	586	D	612	B
535	A	561	C	587	C	613	B
536	B	562	C	588	B	614	B
537	A	563	D	589	C	615	C
538	C	564	D	590	D	616	B
539	A	565	A	591	C	617	B
540	B	566	D	592	A	618	A
541	C	567	C	593	B	619	B
542	D	568	A	594	A	620	B
543	A	569	A	595	A	621	A
544	C	570	C	596	B	622	A
545	B	571	A	597	A	623	C
546	A	572	B	598	A	624	A
547	A	573	D	599	B	625	B
548	A	574	C	600	A	626	C
549	A	575	C	601	d	627	B

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
628	C	654	B	680	B	706	B
629	A	655	C	681	C	707	A
630	A	656	A	682	D	708	B
631	B	657	A	683	B	709	C
632	A	658	C	684	D	710	D
633	A	659	D	685	C	711	D
634	B	660	C	686	A	712	D
635	B	661	A	687	C	713	A
636	A	662	D	688	B	714	C
637	B	663	C	689	B	715	B
638	B	664	B	690	B	716	B
639	D	665	B	691	A	717	A
640	A	666	D	692	D	718	D
641	A	667	B	693	D	719	A
642	C	668	B	694	B	720	B
643	D	669	D	695	A	721	A
644	B	670	C	696	D	722	B
645	B	671	D	697	B	723	B
646	C	672	D	698	D	724	A
647	C	673	D	699	B	725	B
648	C	674	B	700	A	726	A
649	C	675	A	701	B	727	D
650	A	676	D	702	D	728	A
651	D	677	B	703	B	729	B
652	B	678	D	704	D	730	C
653	d	679	a	705	D	731	C

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
732	C	758	A	785	B	811	A
733	B	759	D	786	A	812	D
734	B	760	D	787	B	813	B
735	C	761	D	788	D	814	A
736	B	762	A	789	B	815	D
737	C	763	A	790	C	816	A
738	C	764	C	791	D	817	B
739	A	765	C	792	C	818	B
740	B	766	A	793	C	819	D
741	D	767	D	794	B	820	B
742	D	768	D	795	D	821	B
743	B	769	C	796	D	822	C
744	D	770	A	797	A	823	C
745	B	771	B	798	A	824	A
746	C	772	A	799	C	825	D
747	C	773	D	800	B	826	C
748	A	774	A	801	D	827	B
749	B	775	D	802	B	828	D
750	B	776	A	803	B	829	B
751	B	778	A	804	A	830	C
752	C	779	A	805	B	831	C
753	A	780	A	806	A	832	D
754	B	781	A	807	C	833	B
755	C	782	B	808	B	834	C
756	C	783	B	809	C	835	B
757	d	784	B	810	D	836	D

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
837	B	863	B	889	B	915	C
838	C	864	C	890	D	916	B
839	C	865	A	891	B	917	B
840	B	866	C	892	B	918	A
841	D	867	C	893	C	919	B
842	C	868	D	894	C	920	B
843	C	869	D	895	C	921	A
844	C	870	C	896	C	922	A
845	C	871	D	897	C	923	A
846	B	872	C	898	B	924	B
847	A	873	C	899	B	925	C
848	C	874	A	900	C	926	D
849	B	875	B	901	B	927	D
850	B	876	D	902	B	928	C
851	B	877	C	903	B	929	B
852	C	878	C	904	A	930	B
853	C	879	B	905	C	931	C
854	B	880	A	906	D	932	D
855	B	881	B	907	C	933	D
856	B	882	B	908	B	934	C
857	C	883	A	909	A	935	B
858	C	884	C	910	C	936	C
859	C	885	C	911	D	937	B
860	B	886	D	912	B	938	B
861	C	887	D	913	A	939	D
862	B	888	C	914	B	940	C

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
941	B	967	C	993	B	1019	C
942	C	968	B	994	D	1020	A
943	A	969	B	995	B	1021	C
944	B	970	C	996	D	1022	C
945	A	971	C	997	D	1023	B
946	A	972	C	998	A	1024	C
947	C	973	D	999	A	1025	B
948	C	974	C	1000	C	1026	D
949	A	975	B	1001	D	1027	A
950	B	976	C	1002	D	1028	C
951	C	977	B	1003	C	1029	C
952	D	978	B	1004	D	1030	C
953	B	979	C	1005	B	1031	B
954	B	980	C	1006	A	1032	B
955	A	981	A	1007	C	1033	D
956	A	982	C	1008	B	1034	B
957	C	983	A	1009	A	1035	C
958	B	984	A	1010	B	1036	B
959	A	985	C	1011	B	1037	B
960	B	986	D	1012	B	1038	D
961	A	987	A	1013	B	1039	B
962	C	988	B	1014	C	1040	D
963	A	989	B	1015	A	1041	D
964	A	990	A	1016	C	1042	C
965	D	991	D	1017	C	1043	C
966	C	992	A	1018	A	1044	A

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
1045	B	1071	B	1097	D	1124	C
1046	B	1072	A	1098	D	1125	A
1047	B	1073	D	1099	A	1126	A
1048	C	1074	B	1100	C	1127	B
1049	B	1075	A	1101	C	1128	A
1050	A	1076	C	1102	B	1129	B
1051	A	1077	D	1103	A	1130	D
1052	D	1078	C	1104	A	1131	C
						1132	D
1053	C	1079	B	1105	C	1133	A
1054	C	1080	A	1106	A	1134	D
1055	B	1081	A	1107	D	1135	B
1056	C	1082	A	1108	A	1136	B
1057	A	1083	D	1109	C	1137	A
1058	A	1084	C	1110	A	1138	B
1059	B	1085	D	1112	B	1139	B
1060	D	1086	B	1113	A	1140	C
1061	D	1087	C	1114	B	1141	C
1062	D	1088	A	1115	B	1142	C
1063	C	1089	A	1116	C	1143	C
1064	B	1090	B	1117	B	1144	C
1065	D	1091	A	1118	D	1145	B
1066	A	1092	A	1119	C	1146	B
1067	B	1093	C	1120	C	1147	A
1068	D	1094	B	1121	C	1148	B
1069	B	1095	A	1122	B	1149	C
1070	C	1096	A	1123	C	1150	A

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
1151	B	1177	D	1203	B	1229	B
1152	C	1178	C	1204	C	1230	
1153	C	1179	A	1205	A	1231	C
1154	B	1180	D	1206	B	1232	A
1155	D	1181	D	1207	B	1233	B
1156	C	1182	C	1208	D	1234	D
1157	D	1183	C	1209	B	1235	A
1158	B	1184	D	1210	A	1236	B
1159	C	1185	C	1211	C	1237	B
1160	B	1186	A	1212	B	1238	A
1161	B	1187	C	1213	D	1239	D
1162	B	1188	C	1214	D	1240	B
1163	A	1189	B	1215	D	1241	D
1164	B	1190	B	1216	B	1242	B
1165	A	1191	C	1217	D	1243	B
1166	C	1192	A	1218	A	1244	D
1167	A	1193	A	1219	C		
1168	B	1194	A	1220	B		
1169	B	1195	C	1221	D		
1170	B	1196	C	1222	B		
1171	A	1197	D	1223	A		
1172	A	1198	D	1224	A		
1173	D	1199	A	1225	D		
1174	B	1200	D	1226	C		
1175	D	1201	A	1227	C		
1176	B	1202	B	1228	C		

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
1245	B	1271	A	1297	A	1323	C
1246	D	1272	C	1298	A	1324	C
1247	D	1273	B	1299	C	1325	C
1248	C	1274	C	1300	C	1326	B
1249	C	1275	C	1301	A	1327	C
1250	B	1276	C	1302	B	1328	B
1251	B	1277	B	1303	B	1329	C
1252	A	1278	A	1304	B	1330	B
1253	B	1279	A	1305	B	1331	A
1254	B	1280	B	1306	C	1332	A
1255	C	1281	D	1307	C	1333	B
1256	C	1282	C	1308	A	1334	B
1257	B	1283	C	1309	A	1335	B
1258	C	1284	D	1310	A	1336	A
1259	A	1285	C	1311	B	1337	D
1260	A	1286	B	1312	B	1338	D
1261	D	1287	D	1313	D	1339	B
1262	C	1288	D	1314	B	1340	C
1263	C	1289	D	1315	B	1341	C
1264	B	1290	B	1316	C	1342	C
1265	B	1291	D	1317	C	1343	B
1266	A	1292	C	1318	A	1344	A
1267	B	1293	B	1319	B	1345	A
1268	C	1294	A	1320	B	1346	B
1269	A	1295	C	1321	C	1347	B
1270	C	1296	C	1322	C	1348	C

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
1349	-	1375	B	1401	B	1427	D
1350	D	1376	D	1402	B	1428	A
1351	D	1377	C	1403	D	1429	A
1352	B	1378	D	1404	A	1430	A
1353	C	1379	C	1405	A	1431	B
1354	B	1380	D	1406	B	1432	B
1355	A	1381	D	1407	B	1433	C
1356	B	1382	D	1408	C	1434	B
1357	B	1383	D	1409	B	1435	C
1358	B	1384	C	1410	C	1436	B
1359	A	1385	C	1411	C	1437	B
1360	C	1386	B	1412	D	1438	C
1361	B	1387	A	1413	B	1439	A
1362	B	1388	B	1414	A	1440	A
1363	A	1389	B	1415	C	1441	C
1364	D	1390	A	1416	C	1442	C
1365	A	1391	B	1417	A	1443	B
1366	D	1392	B	1418	A	1444	C
1367	C	1393	B	1419	B	1445	B
1368	B	1394	D	1420	B	1446	B
1369	D	1395	A	1421	C	1447	B
1370	C	1396	B	1422	C	1448	B
1371	B	1397	B	1423	B	1449	B
1372	B	1398	D	1424	B	1450	A
1373	A	1399	B	1425	D	1451	B
1374	C	1400	A	1426	C	1452	D

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
1453	B	1479	A	1505	C	1531	D
1454	C	1480	D	1506	C	1532	C
1455	D	1481	C	1507	A	1533	B
1456	A	1482	A	1508	C	1534	A
1457	A	1483	B	1509	A	1535	C
1458	C	1484	B	1510	B	1536	C
1459	D	1485	B	1511	C	1537	D
1460	C			1512	B	1538	D
1461	B	1487	C	1513	D	1539	C
1462	D	1488	A	1514	D	1540	C
1463	A	1489	C	1515	B	1541	D
1464	B	1490	D	1516	A	1542	D
1465	B	1491	B	1517	C	1543	A
1466	D	1492	A	1518	B	1544	A
1467	D	1493	A	1519	C	1545	C
1468	B	1494	B	1520	D	1546	C
1469	A	1495	C	1521	C	1547	B
1470	A	1496	B	1522	B	1548	C
1471	D	1497	C	1523	B	1549	A
1472	C	1498	A	1524	C	1550	D
1473	D	1499	A	1525	D	1551	C
1474	A	1500	B	1526	D	1552	C
1475	C	1501	C	1527	C	1553	D
1476	A	1502	C	1528	D	1554	A
1477	A	1503	C	1529	B	1555	B
		1504	d	1530	B	1556	A

S.n.	Ans	S.n.	Ans	S.n.	Ans	S.n.	Ans
1557	A	1583	B				
1558	D	1584	D				
1559	A	1585	A				
1560	C	1586	A				
1561	B	1587	A				
1562	A	1588	D				
1563	D	1589	D				
1564	C	1590	C				
1565	C	1591	B				
1566	A	1592	D				
1567	D	1593	C				
1568	B	1594	D				
1569	C	1595	B				
1570	C	1596	A				
1571	B	1597	C				
1572	B	1598	D				
1573	D	1599	A				
1574	D	1600	D				
1575	A						
1576	D						
1577	B						
1578	A						
1579	D						
1580	C						
1581	C						
1582	D						