ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Which compound contains -OH in their molecule	A. Alcohol B. Phenol C. Alcohol and phenol D. Ether
2	pKb value of NH_4OH is 4.74. If the concentration of NH_4OH is 1 molar containing 0.1 molar NH_4Cl, then pH of this buffer will be	A. 3.74 B. 10.26 C. 4.74 D. 9.26
3	Replacement of hydrogen by NO_2group is called	A. Sulphonatioin B. Hydration C. Nitration D. Cracking
4	The catalytic activity of Pt is much higher when	A. It is mixed with asbestos B. It is mixed with Pd C. It is mixed with arsenic D. In is made colloidal platinum
5	During nitration of benzene. the active nitrating agent is	A. NO₃⁻¹ B. NO₂⁺ C. NO₂⁻¹ D. HNO₃
6	The oxidation number of H is -1 in the compound	A. H₂O B. H₃BO₃ C. NaOH D. NaH
7	Ethyl bromide on treatment with alcoholic KOH gives	A. Ethylene B. Ethanol C. Acetic Acid D. Ethane
8	Protein are classified into	A. Simple protein B. Complex protein C. Derived proteins D. All of these
9	The phenomenon of isotropy was first discovered by	A. Soddy B. Rutherford C. Bohr D. Dalton
10	Question Image	A. Measuring pH B. Measuring density C. Titration against standard NaOH D. Titration against standard KMnO₄solution
11	In a experiment 0.10 of gas found to occupy 83.1 cm3 Measured at standard pressure (1.0 x 105 pa) and 26 degree. The relative molecular mass is.	A. (0.10)(8.31)(27)/(1.0x10³)(83.3x10⁻³) B. (0.10)(8.31)(300)/(1.0x10³)(83.3x10⁻⁶) C. (0.10)(8.31)(27)/(1.0x10³)(83.3) D. (0.10)(8.31)(300)/(1.0x10³)(83.3)
12	In the reaction 6 NaOH +3Cl ---------- 5NaCl +H2O + NaClO3, Chlorine is.	A. Oxidized B. Both C. Reduced D. None
13	Li has the lowest reduction potential while the element with highest reduction potential is	A. H B. F C. O D. N
14	Acyiation of benzene to produce aliphatic aromatic ketones is known as	A. Friedel Craft's reaction B. benzenecondensation C. hydroformylation D. Clemmensen reduction
	Carboxylic acids on complete	A. Esters

15	reduction in the presence of Hi and red phosphorus gives:	B. Alcohols C. Alkanes D. Aldehydes
16	The oxidation state of an element is zero when	A. It forms an oxide B. It forms hydride C. It is in free state D. Only for noble gases
17	Which one of the following has been hydroxyl and carboxylic acid groups	A. Phenols B. Picric acid C. Phthalic acid D. Salicylic acid
18	In the presence of copper electrodes the electrolysis of aqueous $CuSO_4$produces at cathode	A. H₂gas B. O₂gas C. SO₂gas D. Cu metal
19	Carbolic acid is the other name for	A. Methanol B. Ethanol C. Propanol D. Phenol
20	First of all, idea of groups and periods was introduced by:	A. Al-Razi B. Dobriener C. Newland D. Mendeleev
21	Plastics are a pollution problem because many plastics	A. Are made from petroleum B. Are very inflammable C. Burn to produce toxic fumes D. Decompose to produce toxic products
22	Chief source of water and soil pollution is	A. Mining B. Thermal power plant C. Agro-industry D. All the above
23	The example of a photo chemical reaction is photosynthesis has order of reaction :	A. 1 B. 2 C. 0 D. 3
24	In exothermic reaction decrease in potential energy of the products will result in	A. Decreases in kinetic energy of the particles B. Increases in kinetic energy of the particles C. No change in kinetic energy D. Decreases in activation energy
25	The negatively charged particles are called	A. Cation B. Radical C. Anion D. Positron
26	HCOOH reacts with conc. $H_2SO_4$to produce	A. CO B. CO₂ C. NO D. NO₂
27	A phtotographic plate is coated with an emulsion of silver nitrate and	A. AgCl B. AgI C. AgBr D. NaNO₃
28	Molecular orbitals are filled with the available electrons according to:	A. Hund's of rule. B. Pauli's exclusion principle. C. Aufbau principle. D. All of above.
29	At room temperature, the mole fraction of a solution in 0.25 and the vapour pressure of the solvent is 0.80 atm. Then the lowering of vapour pressure is	A. 0.75 B. 0.512 C. 0.80 D. 0.0512
30	Acid rains are produced by	A. Excess NO₂and SO₂from burining fossil fuels B. Excess production of NH₃by industry and coal gas C. Excess release of carbon monoxide by incomplete combustion D. Excess formation of CO₂by combustion and animal respiration
31	p-block elements belong to group	A. I-A & II-A B. III-A to VIII-A C. I-B to X-B D. Lanthanides
32	Formic acid is given names from Latin word a "formic"	A. Red out B. Vinegar

	which means:	C. butter D. Milk
33	$[Co(NH_3)_6]^{3+}$will form _____ structure	A. Square planar B. Tetrahedral C. Octahedral D. Trigonal bipyamidal
34	Which is not a steroid	A. Cholesterol B. Ergosterol C. Phospholipids D. None of these
35	Main cause of reducing map is:	A. Combustion of coal B. NO and NO₂ C. Un-Burnt Hydrocarbons D. All of these
36	Question Image	A. Q and R Q and R B. R only Q and R C. Q and R R only D. Q only R only
37	Question Image	A. 0 B. 1 C. 2 D. 3
38	Which of the following statement about electron affinity of two elements is correct	A. Carbon has greater than oxygen B. Sulphur has less than oxygen C. Iodine has greater than bromine D. Bromine has less than chlorine
39	Which halogen has lustrous shining?	A. F₂ B. Cl₂ C. Br₂ D. I₂
40	Sulphuric acid generates nitronium ion by reacting with	A. Nitric acid B. Nitrogen gas C. Nitrous acid D. Potassium nitrate
41	Any property which depends upon the T.P and V is said to be	A. Property due to k.E. B. Property due to PE C. Both a and b D. Thermodynamic state
42	When chloroform is boiled with NaOH, it gives	A. Formic acid B. Trihydroxymethane C. Acetylene D. Sodium formate
43	Phosphine is not obtained by the reaction when	A. White P is heated with NaOH B. Red P is heated with NaOH C. Ca₂P₂reacts with water D. PH₄I is boiled with water
44	Which have better penetrating power	A. Alpha rays B. Beta rays C. Gamma rays D. X-rays
45	The solubility of a gas in water depends upon	A. Nature of the gas B. Temperature C. Pressure of the gas D. All of the above
46	What is the nature of SO_2	A. Basic B. Strongly acidic C. Weakly acidic D. Amphoteric
47	Li, Be, B, C, O, Fl Ne are elements of	A. Second period B. First period C. Third period D. Fourth period
48	Which shows maximum catenation property?	A. S B. Se C. Te D. O
49	Doberiner arranged the similar elements into	A. Pairs B. Triads C. Triplets D. Rows
		A. Automobile exhausts

50	Atmosphere of big/metropolitan cities is polluted most by	A. Automobile exhausts B. Pesticide residue C. Household waste D. Radio-active fall out
51	The chloride of element Q is hydrolysed by water to form an acidic solution and its oxide reacts with acid to form a salt. What cold be the element Q	A. Magnesium B. Aluminium C. Silicon D. Phosphorus
52	Which one of the following is a water soluble vitamin	A. D B. K C. A D. Ascorbic acid (Vic C)
53	The region of earth capable of supporting life is	A. Hydrosphere B. Lithosphere C. Biosphere D. Atmosphere
54	In the manufacture of iron from haematitie,limestone is added to act as	A. Flux B. A reducing agent C. Slag D. An oxidizing agent
55	Water shows maximum density at	A. 4°C B. 0°C C. 100°C D. -4°C
56	Mosley gave his periodic law in the year:	A. 1829 B. 1864 C. 1871 D. 1913
57	Which one of the following substances is used to decolourizing agent	A. Abestos B. Animal charcoal C. conc. H2SO4 D. Silica gel
58	Which of the following is a tetrabasic acid?	A. ORthophosphoric acid B. Hyposphosphorus acid C. Metaphosphoric D. Pyrophosphoric acid
59	Bakelite is obtained from phenol by reacting with	A. Acetaldehyde B. Acetal C. Formaldehyde D. Chlorobenzene
60	Spectrum of white light is continuous becuase	A. Colors separated by dark spaces B. There are no boundary lines between the colours C. The radiations are in infrared region D. The radiatins fall in ultraviolet region
61	The number of moles of NH_4Cl dissolved in 500 cm^3 of its 15%, W/N solution is	A. 1 mole B. 1.4 mole C. 2.0 mole D. 2.4 mole
62	Glacial acetic acid freezes to ice like solid it.	A. 07 B. 17 C. 27 D. 37
63	The mass of Al_2S_3 formed when 20 grams Al reacts completely with S is	A. 60 g B. 50 g C. 50.55 g D. 55.55 g
64	The geometry of $[Co(NH_3)_6]^{3+}$ is	A. Tetrahedral B. Square planar C. Octahedral D. None of these
65	The organic compounds which derivative of hydrocarbons due to oxygen is:	A. Phenol B. Alcohol C. Alkyl halide D. Either
66	The state of equilibrium refers to	A. State of rest B. Dynamic state C. Stationary state D. State of inertness

67	In molecules kinetic and potential energies are:	A. Definite B. Moderate C. Indefinite D. None of above
68	When a bond breaks	A. Heat is evolved B. Heat is absorbs C. No change in heat contents takes place D. Temperature increases
69	Question Image	A. 2-bromonitrobenzene B. 2-nitrobromobenzene C. 1-bromonitrobenzene D. 1-nitrobromobenzene
70	When electric current is used to carry out non-spontaneous redox, the process is called	A. Hydrolysis B. Electrolysis C. Decomposition D. Neutralization
71	Sterols, vitamin D and terpenese belong to	A. Simple lipids B. Complex lipids C. Derived lipids D. None
72	Unit of ozone is:	A. Debye B. Dobson C. Esu D. Coulumb
73	The IUPAC name fo $CH_3COCH(CH_3)_2$is	A. 4-Methylisopropyl ketone B. 3-Methyl-2 butanone C. Isopropylmethyl ketone D. 2 - Methyl- 2 butanone
74	Solutions with same osmotic pressures are called	A. Hypertonic B. Hypotonic C. Isotonic D. Normal
75	Sodium phenoxide reacts with CO_2at 400 K and 4.7 atm pressure to give	A. Sodium salicylate B. Salicyl aldehyde C. Catechol D. Benzoic acid
76	Which of the following alcohols cannot be produced by treatment of aldehydes or ketones with $NaBh_4$or $LiAH_4$?	A. 1-Propanol B. 2-Propanol C. 2-Methyl2-Proponal D. Ethanol
77	Which of the following elements is most metallic?	A. P B. As C. Sb D. Bi
78	Which of the following elements does not show variable oxidation states?	A. Copper B. Iron C. Zinc D. Titanium
79	Enzymes are catalysts which contain other than carbon and hydrogen one other element	A. Oxygen B. Sulphur C. Phosphorus D. Iodine
80	Composition of clay in cement is	A. 25% B. 50% C. 75% D. 80%
81	A beaker contains 9 grams of water. The number of H atoms is	A. 6.02 x 10²³ B. 3.01 x 10²³ C. 6.02 x 10²⁴ D. 3.01 x 10²⁴
82	At sea level and at 100^0C the vapour pressure of water in an open system is	A. 1000 mm Hg B. 760 mm Hg C. 730 mm Hg D. 670 mm Hg
83	An azeotropic mixture of two liquids boils at a lower temperature than either of them when :	A. It is saturated. B. It shows positive deviation from Raoult's law. C. It show negative deviation from Raoult's law. D. It is metastable.
84	The chemist who synthesized urea from ammonium cyanate was	A. Berzelius B. Kolbe C. Wholer D. Lavoisier

85	Which is aqua regia?	A. HCL : NO B. HCl : HNO₃ C. HCl : H₂SO₄ D. H₂SO₄: HNO₃
86	Interstitial compounds have	A. Half formula B. Fixed formula C. Indefinite formula D. None
87	The destructive distillation of coal gives three products. What is not the product of destructive distillation of coal	A. Coal gas B. Carbon dioxide C. Coal tar D. Coke
88	If we remove one hydrogen atom from an alkane we obtain a group called	A. Acetyle group B. Formyle group C. Alkyle group D. Ketyle group
89	Which is a protein?	A. Nylon B. Rayon C. Natural silk D. Terylene
90	Hybridized in carbon is:	A. sp B. sp² C. sp³ D. d²sp
91	Smallest charge of electricity that has been measured so far is	A. Charge on a-rays B. Charge on electron (1.602 x 10⁻¹⁹C) C. Charge on x-rays D. Charge on gamma rays
92	Mg becomes isoelectronic with neon when it	A. Loses two electrons B. Gains two electrons C. Loses 1 electron D. Gains 1 electron
93	Phenol was discovered by:	A. Hofmann B. Runge C. Henderson D. Bakelite
94	Setting time of cement is controlled by adding:	A. Epsom B. Gypsom C. CaCO₃ D. CaCl₂
95	Ionic radius, in a period from left to right	A. Increases B. Decreases C. Decreases then increases D. Increases and decreases
96	The elements like boron, chlorine, cobalt, copper etc are added in small amounts to the soil. They are called	A. Macrountrients B. Trace elemetns C. Micronutrients D. Additives
97	Which of the following species participate in sulphonation of benzene ring?	A. H2SO4 B. HSO4 C. SO3 D. SO⁻₂
98	Which is not the form of silica?	A. Amethyst quatz B. Rose quatz C. Smoky D. None of these
99	Reaction of HNO, with very dilute Zinc and at low temperature gives	A. H₂ B. NO C. NO₂ D. NH₄
100	Platinum (IV) chloride combines with ammonia to form compounds in which the coordination number of the platinum is 6. A formula unit on one of the compound contains a cation and only two chloride ions. What is the formula of this compound	A. Pt(NH₃)₆Cl₄ B. Pt(NH₃)₅Cl₄ C. Pt(NH₃)₄Cl₄ D. Pt(NH₃)₃Cl₄
101	Acetic acid is manufactured by the fermentation of	A. Ethanol B. Methanol C. Ethanal

		D. Methanal
102	CH_3CH_2COOH is also named as:	A. Propionic acid B. Propanoic acid C. Acetic Acid D. Both (a) and (b)
103	The chemical formula of Epson salt is	A. MgSO₄ B. MgCl₂ C. MgSO₄. 7H₂O D. MgCl₂. 7H₂O
104	The unit of rate constant K is$mole^{-1}$ $dm^3$for a chemical reaction, the order of reaction is :	A. Order of reaction can determined by an experiment B. Order of reaction can determined from a balance equation only. C. Order of reaction can determined increases by increasing temperate. D. Order of reaction must be in whole number and not in fraction.
105	If Grignard reagent is allowed to react with another alkyl halide the main product is	A. An alkane B. Cyclo alkane C. Alkyne D. An alkene
106	When a carboxylic acid reacts with alcohol, it produces a new class of compounds	A. Ethers B. Esters C. Anhydride D. Amides
107	Propanone is the product obtained by dehydrogenation of	A. 2-Propanol B. 1-Propanol C. Isobutyl alcohol D. Propanethoil
108	In which reaction, aromatic aldehyde is treated with acid anhydride in the presence of corresponding salt of the acid to give unsaturated aromatic acid?	A. Friedel-Crafts reaction B. Perkin's reaction C. Wurtz reaction D. None of these
109	Group VI-B of transition elements contains:	A. Zn, Cd, Hg B. Fe ,Ru ,Os C. Cr, Mo ,W D. Mn, Te, Re
110	Biodegradable pollutant is	A. Plastic B. Asbestos C. Sewage D. Mercury
111	Which one is used as a fuel for internal combustion engines in many European countries and Brazil	A. C₂H₅OH B. CH₃OH C. CH₃COOH D. C₂H₂
112	A compound R has all of the following properties. It is neutral; It gives an orange precipitate with 2,4-dinitrophenythydrazine; it evolves hydrogen chloride when treated with PCl_5in the cold What could R be	
113	Carbonates of alkali metals dissolves freely in water to form	A. Acidic solutions B. Neutral solution C. Alkaline solution D. None of these
114	Simplest aromatic compound is	A. bezene B. toluene C. aniline D. phenol
115	The order of the rate of diffusion of gases NH_3,SO_2, CL_2, and CO_2 IS :	A. NH_{3 >}SO_{2 >}CL_{2 >}CO₂ B. NH_{3 >}CO_{2 >}SO_{2 >}CL₂ C. CL_{2 >}SO_{2 >}CO_{2 >}NH₃ D. NH_{3 >}CO₂_>CL_{2 >}SO₂
116	Which of the statements given below concerning properties of solution, describe a colligative effect?	A. Boiling point of pure water decreases by the addition of ethanol B. Vapour pressure of pure water decreases by the addition of nitric acid C. Vapour pressure of pure benzene decreases by the addition of naphthalene D. Boiling point of pure benzene increases by the addition of toluene
117	Calcium acetate when dry distilled gives	A. Formaldehyde B. Acetaldehyde C. Acetone D. Acetic anhydride

118	The valency, ionization energy and electrongativity of elements are related to its	A. Atomic number B. Properties C. Atomic weight D. Family group
119	Ammonium nitrate fertilizers is not used for which crop?	A. Cotton B. Wheat C. Sugar-cane D. Paddy rice
120	Alcohols react with carboxylic acid to produce the class of compounds known as	A. Grignard's reagent B. Esters C. Amides D. None of these
121	The common name of propanoic acid is	A. Acetic acid B. Formic acid C. Propionic acid D. Butyric acid
122	H_2S is a gas while H_2O is a liquid at room temperature. It is due to:	A. Less inter-molecular forces in water. B. Covalent bonding H-O in water molecule. C. Hydrogen bonding in water molecules D. Ionic character in water molecules
123	A pollutant affects	A. Human health B. Quality of life C. Functioning of ecosystem D. All of these
124	Plastics are pollution problem because many plastics:	A. Are made from petroleleum B. Are very inflammable C. Burn to produce toxic funes D. Decompose to produce toxic products
125	Which of the sub-atomic particles is not charged	A. Electron B. Proton C. Neutron D. All of them
126	Ultraviolet radiation from sun causes a reaction that produces	A. Fluorides B. Carbon monoxide C. Sulphur dioxide D. Ozone
127	Which has soapy touch?	A. Na2B4O7 B. H3BO3 C. Ca2B6O11 D. HBO2
128	Electrons arranged in orbitals according to the increasing order of their n + l values, this rule is named as	A. Hund's rule B. Heisenberg's principle C. Paulit exclusion principle D. Auf bau principle
129	Solubility of a substance in water decreases with rise in temperature except	A. CaCl₂. 6H₂O B. Pb(NO₃)₂ C. K₂Cr₂O₇ D. Ce₂(SO₄)₃
130	A molecular ion is formed by	A. Passing a high energy electron beam through gaseous molecule B. Dissolving a salt i dilute acid C. Passing electric current through molten salt D. Passing electricity through aqueous solutions
131	Mark the correct statement:	A. All lanthanides are present in the same period. B. all halogens are present in he same period. C. All the alkali metals are present in the same group. D. All the noble gases are present in the same period.
132	The inter-molecular forces in liquids are:	A. Negligible B. Very weak C. Very strong D. Reasonably strong
133	In Boyle's law which of the following pair is variable :	A. Temperature and quantity of a gas. B. Pressure and volume C. Volume and quantity of a gas. D. Pressure and quantity of a gas.
134	Question Image	A. -110.7 KJ/mole B. +110.7 KH mole⁻¹ C. 676.7 KJ mole⁻¹ D. +393.7 KH mole⁻¹
135	A solution having pH = 4 its OH^- ion concentration in mole	A. 1.0 x 10⁻⁴ B. 1.0 x 10⁻¹⁰ C. 1.0 x 10⁻¹⁴

	$dm^{-3}s$	D. 1 x 10⁰
136	The temperature in the incineration process has a range:	A. 900°Cto 1000°C B. 650 to 1100°C C. 950°C to 1300°C D. 500°C to 900°C
137	Factors affecting quality of water:	A. D.O B. BOD C. COD D. All of these
138	A single chlorine free radical can destroy how many ozone molecules	A. 100 B. 100000 C. 10000 D. 10
139	The chemical formula of gypsum is	A. CaSO₄. 5H₂O B. CaSO₄. 4H₂O C. CaSO₄. 2H₂O D. None of these
140	Reduction of alkyl halides give	A. Alkanes B. Alkenes C. Ketones D. Ether
141	Ethyl alcohol may be identified by	A. Ring test B. Iodoform test C. Tollen's test D. Bazeyer's test
142	d-block elements belong to groups	A. I-A & II-A B. III-A to VIII-A C. I-B to X-B D. Lanthanides
143	The electrode through which the electrons enter the electrolytic solution is electrolytic solution is	A. Anode B. Cathode C. May be anode or cathode D. None of these
144	During electrolysis, electrons are :	A. Lost by anions and gained by cations B. Gained by anions and lost by cations C. Gained only D. Lost only
145	NO_2forms acidic solution:	A. Red B. Blue C. Green D. Brown
146	The depression of freezing point is directly proportional to	A. Mole fraction of the solution B. Molarity of the solution C. Molality of the solution D. Molarity of the solvent
147	Which one o the following does not belong to alkaline earth metals?	A. Be B. Re C. Ba D. Rn
148	In the ground state, an element has 13 electrons in its M shell. The element is	A. Copper B. Chromium C. Nickel D. Iron
149	Ammonium carbonate when heated to 200°C gives a mixture of $NH_3$and CO_2vapour with a density of 13.0. What is the degree of dissociation of ammonia carbonate?	A. 3/2 B. 1/2 C. 2 D. 1
150	Which of these polymers is an addition polymer	A. Nylon 6,6 B. Polystyrene C. Terylene D. Epoxy resin
151	The filtration process is used to separate solid from:	A. Liquid B. Gas C. Solid D. All of above

		D. All of above
152	1-butene an 2-butene are an example of	A. Chian isomerism B. Positional isomerism C. Metamerism D. Functional group isomerism
153	The correct arrangement of increasing order of atomic radius among Na, K, Mg, Rb is	A. Mg < K < Na < Rb B. Mg < Na < K < Rb C. Mg < Na < Rb < K D. Na < K < Rb < Mg
154	Boyle's law doesn't fail even :	A. Temperature is extremely high B. Pressure is extremely high C. Mixture of gas is taken D. All of above
155	Drained sewage has B.O.D	A. More than that of water B. Less than that of water C. Equal to that of water D. None of the above
156	Dobriener's was a scientist:	A. Russian B. German C. English D. French
157	Question Image	A. Ethanol in the presence of concentrated sulphuric acid B. Potassium hydroxide C. Sodium D. Sodium carbonate
158	Alkyle halides can be prepared by treating halogen acids with	A. Ethane B. Ethanol C. Ethene and ethanol D. Aldehyde
159	White phosphorus is	A. A mono atomic gas B. P₄, a tetrahedral solid C. P₈, a crown D. A linear diatomic molecule
160	The number of moles of solute dissolved per dm^3 of the solution is called :	A. Normality. B. Molarity. C. Molarity. D. None of above.
161	The largest item which is recycled is	A. Newspaper B. Plastic C. Aluminium D. Oil
162	pH of 0.1 molar HCl solution is	A. 1 B. zero C. 13 D. 14
163	Which of the following undergoes uncleophilic substitution exclusively by S_N1 mechanism?	A. Benzyl chloride B. Ethyl chloride C. Chlorobenzene D. Isopropyl choride
164	When a system absorbs energy, the sign of delta E is	A. Neither positive nor negative B. Negative C. Positive D. None of above
165	Ammonium nitrate fertilizer is not used for which crop?	A. Cotton B. Wheat C. Sugar-cane D. Paddy rice
166	Which structure shows a primary alcohol	
167	Corrosion is basically a	A. Altered reaction in presence of H₂O B. Electrochemical phenomenon C. Interaction D. Union between two light metals and a heavy metal
168	When fused $PbBr_2$ is electrolyzed	A. Bromine appears at he cathode B. Lead is deposited at the cathode C. Lead appears at the anode D. None of these happens
169	Metallic conduction is also called as :	A. Ionic conduction. B. Protonic conduction. C. Electronic conduction

		D. Super conduction
170	Most transition elements show	A. Diamagnetic behavior B. Ferromagnetic behavior C. Paramagnetic behavior D. None of these
171	The protection of steel by chrome plating is due to	A. Cathodic protection B. Anodic protection C. Covering of steel surface D. Formation of alloy with iron
172	To determine the rate of reaction chemically a graphical method is applied. A graph is plotted between the amount or reactant decomposed or product formed against the time. The rate d_x/d_t at any time is equal to	A. k B. Tangentθ C. 1/a, a is initial conc. D. 1/a²
173	The radiations with wavelength shorter than violet light are called	A. Ultraviolet B. Infrared C. Microwave D. Radio frequency
174	Which salt is used for the treatment of hyperacidity in stomach	A. NaCl B. KCl C. NaHCO₃ D. Na₂CO₃
175	Which has sweetish taste?	A. N₂O B. NH₃ C. Cl₂ D. CO₂
176	Which compound does not show hydrogen bonding with water	A. CH₃OH B. C₂H₅OH C. CH₃- O - CH₃ D. C₆H₅OH
177	Question Image	A. Addition Elimination B. Addition Reduction C. Elimination Reduction D. Substitution Elimination
178	At certain temperature, 50% of HI is dissociated into H_2 and I_2 the equilibrium constant is	A. 1.0 B. 3.0 C. 0.5 D. 0.25
179	When acetylene is passed through a copper tube at 300°C, it polymerizes to	A. Polyacetylene B. polyethylene C. Benzene D. None of these
180	In a lime kiln, to get higher yield of CO_2, the measure that can be taken is	A. To main high temperature B. To pump out CO₂ C. To remove Cao D. To add more CaCO₃
181	Which halogen occurs naturally in a positive oxidation state?	A. Fluorine B. Chlorine C. Bromine D. Iodine
182	Aldol condensation is actually	A. Electrophilic addition of carbonation B. Electrophilic addition of carbonium ion C. Nucleophilic addition of carbonation D. Nuclephilic addition of carbonium ion
183	Which one of the following gases is used for artificial ripening of fruits	A. Ethane B. Ethyne C. Methane D. Propane
184	Oxidation state of fluorine is:	A. +1 B. +2 C. -1 D. -2
185	Which of the following is commonly called polyamide	A. Nylon B. Rayon C. Terylene D. Oridon
		A. mole dm⁻³ B. mole Kg⁻¹

186	The unit of rate of reaction is	C. moles dm⁻³sec⁻¹ D. grams dm⁻³
187	During the formation of a chemical bond the potential energy of the system	A. Decreases B. Increases C. Does not change D. None of these
188	An electrolyte	A. Forms complex ions solution B. Gives ions only when electricity is passed C. Possesses ions even in solid state D. Gives ions only when dissolved in water
189	The total number of d-bock transition element is	A. 10 B. 14 C. 40 D. 30
190	As the nuclear charge increases, the pull on the electrons is increased and size of an atom:	A. Decreases. B. Remain same. C. Increases. D. Is negligible.
191	Cellulose does:	A. Satisfy human appetite B. Stimulates intestinal peristalsis C. Gives fibre and bulk to the food D. All of these
192	Gases of air, always remain in random motion and do not settle due to	A. Difference in molecular masses of air gases B. Difference in partial pressure of gas molecules C. Unequal number of different gas molecules D. Elastic collision of gas molecules
193	The principle quantum number describes	A. The distance form the nucleus B. The shape of the orbital C. The orientation of the orbital D. The spin of the electron
194	Question Image	A. High temperature and low pressure B. Low temperature and low pressure C. Low temperature and high pressure D. High temperature and high pressure
195	With amino acids ninhydrin solution gives	A. Blue B. Violet C. Bluish violet D. White
196	The most reactive compound for electrophilic nitration will be	A. Benzyl chloride B. Benzoic acid C. Nitrobenzene D. Chlorobenzene
197	The total number of orbitals possible for the quantum number n is	A. n B. n² C. 2n D. 2n²
198	Chromic acid used to oxidize	A. Aldehyde B. Ketone C. Both a and b D. None of these
199	The rate of a chemical reaction is directly;y proportional to product of molar concentration of reaction substance it is called :	A. Low of conservation of energy. B. Law of mass action. C. Rate law . D. Active mass rule.
200	To prepare ethanol by fernentation the optimum temp. is	A. 10 - 20°C B. 25 - 30°C C. 20°C D. 35°C
201	According to Le-Chatelier's principal, adding heat to a solid and liquid in equilibrium will cause the	A. Amount of solid to decrease B. Amount of liquid to decrease C. Temperature to rise D. Temperature to fall
202	K_{sp}value for $PbSO_4$= 1.8 x $10^{-8}mole^2dm^{-6}$. The maximum concentration of Pb^{++}ions is	A. 1.34 x 10⁻⁴mole dm⁻³ B. 1.8 x 10⁻⁴ C. 3.6 x 10⁻¹⁶mole dm⁻³ D. 1.0 x 10⁻⁸mole dm⁻³
	The benzene molecule	A. Three double bond B. Two double bond C. One double bond

203	The benzene molecule contains:	D. Delocalized<span style="font-size:12.0pt;line-height:107%; font-family:"Plantagenet Cherokee","serif";mso-fareast-font-family:Calibri; mso-fareast-theme-font:minor-latin;mso-bidi-font-family:"Times New Roman"; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">␣ electron charge
204	The number of groups in the periodic table is	A. 6 B. 7 C. 8 D. 9
205	Newland said, every eight element repeats properties of element:	A. 1st B. 2nd C. 3rd D. 4th
206	which of the following has smaller size:	A. Fe+^{3<o:p></o:p>} B. Fe+^{2<o:p></o:p>} C. Fe+^{1<o:p></o:p>} D. Fe^{<o:p></o:p>}
207	An organic acdi having molecular formula $C_2H_4O_2$is	A. Formic acid B. Acetic acid C. Oxalic acid D. Propionic acid
208	Cannizzaro's reaction in not given by	A. Formaldehyde B. Acetaldehyde C. Benzaldyhyde D. Trimethylacetaldehyde
209	Evaporation of water is possible at:	A. Above 100<span style="font-size: 11pt; line-height: 107%; font-family: Arial, sans-serif; color: rgb(34, 34, 34); background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°C B. 0<span style="font-size: 11pt; line-height: 107%; font-family: Arial, sans-serif; color: rgb(34, 34, 34); background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°C C. 100<span style="font-size: 11pt; line-height: 107%; font-family: Arial, sans-serif; color: rgb(34, 34, 34); background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°C D. At all temperature
210	Amino acids are bifunctional organic compounds what are the two function groups	A. Carboxylic acid and alcohol B. Alcohol and aldehyde C. Carboxylic acids and ketone D. Amino group and carboxylic acid
211	Gradual addition of electronic shells in the nobel gases causes a decrease in their	A. Ionization energy B. Atomic radius C. Boiling point D. Density
212	The study of heat changes accompanying a chemical reaction is known as :	A. Thermochemistry. B. Biochemistry. C. Physical chemistry. D. Analytical chemistry.
213	What happens when isotonic solution of A (mol.wt.342) and B (mol.wt 60) are put in to communication through semipermeable membrane?	A. Transference of solvent from solution A to that of B take place B. Transference of solvent from solution B to that of A takes place C. No transference of solvent from solution A to that of B takes place D. Change in temperature of solutions takes place
214	Question Image	A. Zero B. 1 C. 2 D. 1.5
215	Property of transition element is :	A. Low m.p and b.p B. Parramagnetism C. Oxidation state D. Low binding energies
216	General formula of aliphatic carboxylic acids:	A. R---OH B. R----COH C. R----CO---R D. RCOOH
217	The correct order of 2nd I.P. 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
218	What are the products electrolysis of aqueous sodium chloride at two electrodes	A. Chlorine at anode and oxygen at cathode. B. Hydrogen at anode and chlorine at cathode. C. Chlorine at anode and hydrogen at cathode. D. Chlorine at anode and sodium at cathode.
		A. alkali metal

219	d-block elements are also called :	A. alkali metal B. Alkaline earth metals C. Transition elements D. Electron deficient elements
220	Question Image	A. Rate = k[FeCl₃] [Kl]² B. Rate = k[Fe⁺³][Cl⁻¹] [Kl] C. Rate = k[Fe⁺³] [Cl⁻¹][K;] D. Rate = k[Kl]³[FeCl₃]°
221	Soil salinity can be measured by	A. Calorimeter B. Potometer C. Porometer D. Conducitvity meter
222	Positive particle in discharged tube is produced by ionization of gas molecules, which is caused by	A. Gas molecules collide with anode B. Gas molecules are at high temperature C. Gas molecules produce X-rays D. Cathode rays remove electrons from gas molecules
223	When nitrogen is 5.6 grams in NO_2. then number of moles of $NO_2$is	A. 0.5 B. 0.4 C. 0.04 D. 0.05
224	Structure of P_4 is	A. Trigonal B. Tetragonal C. Hexagonal D. Monoclinic
225	Question Image	A. KC = KP B. Kp = KcRT C. Kp = kc(RT)⁻² D. Kp = Kc(RT)⁻¹
226	Which of the following organic compounds exhibits positive Fehling test as well as iodoform test?	A. Methanal B. Ethanol C. Propanone D. Ethanal
227	1 mol of N_2O_4 was decomposed according to given equation in $1dm_3$ container. At equilibrium x mole of N_2O_4 have dissociated. What is the value of K_C:	A. 2x/(1-x)^{2<o:p></o:p>} B. 4x²/(1-x)<o:p></o:p> C. 4x/(1-x)<o:p></o:p> D. 2x/(1-x)<o:p></o:p>
228	Question Image	A. N₂O₄is limiting reactant B. N₂H₄is the limiting reactant C. Reactants are completely converted to the products D. Reactions is reversible
229	A solution is a homogeneous mixture of two or more kinds different :	A. Molecular. B. Covalent substance C. Ionic Substances D. Both (a) and (c)
230	Which is an amorphous solid.	A. NaCl B. NaOH C. Diamond D. Rubber
231	The function of salt bridge in galvanic cell is	A. To prevent accumulation of ions in two half B. To add salt ions in two half C. To block flow of ions between two half D. None of these
232	The compound prepared by a substitution reaction of benzene is	A. Acetophenone B. Glyoxal C. Cyclohexame D. Hexabromo cyclohexane
233	Depletion of ozone layer is due to	A. Oxides of nitrogen B. Oxides of carbon C. Oxides of sulphur D. None of the above
234	Alkyl halides on treatment with metallic Na give	A. Alkynes B. Alkenes C. Alkanes D. Alcohols
	$N_23H_2 \rightleftharpoons 2NH_3$	A. By adding NH_{3.}

235	Which of the following change will favorthe formation of moreNH_3at equilibrium in above reaction :	B. By removing<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">H_{2.} C. By decreasing pressure. D. By increasing pressure.
236	Which of the following is a polyamide?	A. Nylon B. Orlon C. Teflon D. Terylene
237	Which of the following is a nucleophile	A. OH B. CH(CH₃)₃ C. CH₃⁺ D. CH₃CH₂CH₃
238	The reaction of aromatic acyl chloride and phenol in the presence of a base NaOH or pyridine is called	A. Kolbe's reaction B. Perkin's reaction C. Sandmeyer's reaction D. Schotten Baumann reaction
239	The acid showing salt like character in aqueous solution is	A. Acetic acid B. Benzoic acid C. Formic acid D. α - Aminoacetic acid
240	Which of the following is a thermosetting plastic	A. PVC B. Polyethylene C. Polystyrene D. Melamines
241	An element in +3 oxidation state has the electronic configuration (Ar) $3d^3$. Its atomic number is	A. 24 B. 23 C. 22 D. 21
242	Question Image	A. Br_{2(aq)} B. 2, 4-dinitrophenylhydrazine C. NaBH D. Tollen's reagent
243	The electrophile in aromatic sulphonation Is	A. H₂SO₄ B. HSO₄⁻ C. SO₃ D. SO₃⁺
244	The element caesium bears resemblance with	A. Ca B. Cr C. Rubidium D. None of the above
245	Which statement in not correct about alcohol?	A. Ethyl alcohol is heavier than water B. Ethyl alcohol ecaporates more quickly C. Alcohol with less number of carbon atoms is more soluble in water than alcohol with more number of carbons atoms D. Alcohol produces H₂by reaction with sodium metal
246	Which is laughing gas?	A. NO B. N₂O C. NO₂ D. NO₃
247	The majority of reactions which give stable products are:	A. Exothermic. B. Isothermal. C. Endothermic. D. Both (b) and (c).
248	Mixture of alcohol and water can be separated by	A. Solvent extraction techniques B. Crystallization C. Precipitation and filtration D. Fractional distillation
249	The oxidation number of Mn is $KMnO_4$is	A. +2 B. +4 C. +6 D. +7
250	The tip of funnel should be 1 or 2cm larger than the circle of the	A. Beaker B. Solid C. Filter paper D. Liquid
251	The classify the elements, Newland gave the idea of	A. Octaves B. Triads C. Atomic volume D. Atomic mass

		D. Atomic mass
252	Which of the following hydrogen halide is the weakest acid in solution	A. HF B. HBr C. HI D. HCl
253	The most stable phosphorus allotrope is	A. White B. Red C. Black D. All
254	Alcohol can be denaturated by adding:	A. Acetone B. Methanol C. Pyridine D. All
255	The common reagent used in oxidation of Alcohols is.	A. K2Cr2O7 B. K2CrO4+H2SO4 C. H2SO4 D. K2Cr2O7+ H2SO4
256	A compound X has all of the following properties: It is a liquid at room temperature and atmospheric pressure; It does not mix completely with water; It does not decolorise acidified potassium manganate What could X be	A. Ethane B. Ethanoic acid C. Ethanol D. Ethyl ethanoate
257	The total number of transition elements is:	A. 10 B. 14 C. 40 D. 50
258	Wacker method involves the conversion of alkene using $PdCl_2$into corresponding	A. Alcohol B. Ketone C. Aldehyde D. Ether
259	Acetone reacts with HCN to form a cyanohydrin. It is an example of	A. Electrophilic addition B. Electrophilic substitution C. Nucleophilic addition D. Nucleophilic substitution
260	Analytical chemistry is the science of :	A. Chemical Characterization. B. Physical Characterization. C. Biological Characterization. D. Biochemical Characterization.
261	Question Image	A. Iodine can oxidise iron B. Bromine can oxidise iron C. Iodine can oxidise bromine D. Iron can oxidise bromine
262	Lattice energy of NaCl	A. +5000 KJ B. -344 KJ C. -776 KJ D. -411 KJ
263	Question Image	A. Rate is independent of concentration of water since it is in excess B. Rate is independent of concentration of ester since it is in exces C. Rate depends upon the concentration of acid catalyst added D. Rate = k[CH₃COOC₂H₅]^{1/2}[H₂O]^{1/2}
264	In ter-butyl alcohol, the tertiary carbon is bonded to	A. Two hydrogen atoms B. Three hydrogen atoms C. One hydrogen atoms D. No hydrogen atom
265	Which statement is incorrect about standard hydrogen electrode	A. Its oxidation and reduction potential is zero B. It consists of Pt wire dipped on 1 molar HCl solution C. The electrolyte is 1 molar NaOH solution D. H₂gas is passes in it at 1 atmospheric pressure
266	Which is the longest period of the periodic table	A. 5th B. 7th C. 6th D. 2nd
267	Nitrogen in $NH_3$is sp^3hybridized but the bond angle in $NH_3$is 107° and not 109.5° due to	A. sp³orbital planar B. sp³orbital trigonal C. Repulsion between lone pair and bonded pairs D. None of them

268	By applying Hess's law, we can calculate	A. ΔH B. ΔS C. ΔF D. K
269	Question Image	A. Small change in concentration of product B. Small time internal C. Co-efficient of the reactant D. Co-efficient of the product
270	Question Image	A. 2, 2, 4-trimethylpentane B. 2, 4, 4-trimethylpentane C. 2, 4, 4-methyepentane D. 2, 2, 4-methylpentane
271	Phenol gives ---------- Colour with neutral $FeCl_3$solution	A. Violet B. Green C. Red D. Blue
272	Ethanol can be converted into ethanoic acid by	A. Hydrogenation B. Hydration C. oxidation D. Frmentation
273	Elevation of boiling point is measured by	A. Beckmann's apparatus B. Lands Berger's method C. Antifreeze apparatus D. None of these above
274	Specific gravity of HNO_3 is	A. 1.35 B. 1.53 C. 1.39 D. 1.93
275	In the atmosphere, $O_2$is about	A. 10% B. 15% C. 21% D. 25%
276	Nylon, 6,6 is a condensation polymer of	A. Adipic acid and glycol B. Phthalic acid and glycol C. Adipic acid and hexaethylene diamine D. Pthalic acid and hexaethylene diamine
277	The value of $K_p$is greater than $K_c$for a gaseous reaction when	A. Number of molecules of products is greater than the reactants B. Number of molecules of reactants is greater than those of products C. Number of molecules of reactants and products equal D. Catalyst is added
278	Which of the following sulphates is not soluble in water?	A. Sodium sulphate B. Potassium sulphate C. Zinc sulphate D. Barium sulphate
279	Product of concentration of ions raised to the power equal to the co-efficient of ions in balanced equation for saturated solution of a salt is called	A. Ionic product B. Equilibrium constant K_c C. K_w D. Solubility product (K_{sp})
280	What is the total number of different chloroethanes, formula $C_2H_{6-n}Cl_n$, where n can be any integer from 1 to 4	A. 4 B. 6 C. 7 D. 8
281	_____ are called biocatalysts	A. Organic acids B. Organic bases C. Enzymes D. All
282	When an alcohol reacts with $SOCl_2$an alkyl halide is formed. What are two other products	A. SO₂and HCl B. Sl₂and H₂O C. HCl and H₂O D. H₂S and HCl
283	Elimination bimolecular reactions involve:	A. First order Kinetics B. Third order kinetics C. Zero order kinetics
284	With the reference of w/m ratio of anode rays, the e/m ratio of cathode rays s:	A. Greater. B. same. C. Smaller. D. Not fixed.
		A. 1° - RX

285	Both $E_1$and E_2mechanism can be shown by	B. 2° - RX C. 3° - RX D. None of these
286	empirical formula mass of benzene is time lesser than moleculer formula mass:	A. four B. five C. six D. seven
287	In the chemical combination of sodium and hydrogen to form NaH:	A. Hydrogen atom gains an electron. B. Sodium atom gains an electron. C. Both the atoms share the electron.
288	Which period starts from $_{11}Sc$ to $_{30}Zn$?	A. First Period B. Second Period C. Third Period D. 4th Period
289	Which of the following is the simplest form of matter?	A. Gaseous state B. Liquid state C. Solid state D. All of above
290	75% plant nutrients are present in the fertilizer	A. urea B. NH₄NO₃ C. NH₃ D. (NH₄)₂HPO₄
291	Which of the following reagent cannot be used for preparing alkyl chloride from alcohol?	A. HCl + anhyd. Zncl₂ B. NaCl C. PCl₅ D. SOCl₂
292	Given data (i) heat of formation of $CO_2$is -393.7 KJ $mole^{-1}$ (ii) heat of formation of H_2O is -285.8 KH $mole^{-1}$ (iii) heat of combustion of CH_4 is -890.00 KJ $mole^{-1}$ Enthalpy of formation of methane from C and $H_2$is calculated by Hess's law by	A. Adding i + ii + iii B. Adding 2(i) and ii and subtracting iii C. adding i + iii and subtracting ii D. Adding i + 2(ii) and subtracting iii
293	ΔH is equal to	A. E + PV B. E + PΔV C. ΔE + P D. ΔE + PΔV
294	Which of the following is an ortho-para directing group	
295	The electron in an atom	A. moves randomly around the nucleus B. has fixed space around the nucleus C. is stationary in various energy levels D. moves around its nucleus in definite energy levels
296	Which polymerization is free radical machanism based	A. Addition B. Condensation C. Both a and b D. None
297	Sp^3hybird orbitals are oriented at an angle of	A. 107.5° B. 108.5° C. 109.5° D. 103.5°
298	Oxidation of 2-propanol gives	A. Propanone B. Butanone C. Pentanone D. None of these
299	In an exothermic reaction, a 10° rise in temperature will	A. Decrease the value of equilibrium constant B. Double the value of K_c C. Not produce any change in K_c D. Produce some increase in K_c
300	Carboxylic acids are reduced to in presence of $NaAlH_4$	A. Esters B. Acetyl chloride C. alcohol D. Aldehydes
	The organic compound, alcohols are much closer to	A. Water B. Oxidizes of lithium oxides

301	alcohols are much closer to, in structure and hence is also called its derivative:	B. Oxidizes of lithium oxides C. Oxidizes of magnesium D. Oxidizes of aluminium
302	Which one of the following statements of glucose and sucrose is incorrect?	A. Both are soluble in water B. Both are naturally occuring C. Both are carbohydrates D. Both are disaccharides
303	Calculate the amount of charge flowing in 2 minute in a wire of resistance 10Ω when a potential difference of 20 V is applied	A. 120 C B. 240 C C. 20 C D. 4 C
304	Aldehydes can be distinguished from ketones by using	A. Schiff's reagent B. Conc. H₂SO₄ C. Anhy. ZnCl₂ D. Resorcinol
305	Number of isomers of butane are:	A. One B. Two C. Three D. Four
306	Question Image	A. Electronphilic substitution B. Electrophilic addition C. Free radical substitution D. Nuclephilic substitution
307	Question Image	A. 0.073 B. 0.147 C. 0.05 D. 0.026
308	What is the name of the comlex $[Ni(CO)_4]$	A. Tetracarbonylnickel (o) B. Tetracabonylnickel C. Tetracabonylnickel (II) D. Tetracabonylnickel (IV)
309	Benzene gives reactions generally:	A. Electropholic subsitution B. addition C. synthesis D. addition and electropholic subsitution
310	The addition of unsymmetrical reagent to an unsymmetrical alkene is in accordance with	A. Hund's rule B. Markownikov's rule C. Pauli's Exclusion principle D. Auf ban principle
311	Benzene is obtained by fractional distillation of	A. Heavy oil B. Anthracene oil C. Middle oil D. Light oil
312	N_2 and O_2 are present in air but they don't react chemically at ordinary conditions of temperature and pressure because it is a	A. Spontaneous reaction B. Reversible reaction C. Exothermic reaction D. Non-spontaneous reaction
313	When a colourless gas is passed through bromine water only decolourisation takes place the gas is	A. SO₂ B. HBR C. HCl D. H₂S
314	Electronic configuration of Cu^{+2} is	A. 4S², 3d⁹ B. 4s⁻¹, 3d¹⁰ C. 4S⁰, 3d⁹ D. None of these
315	The hydrocarbon which is used as an illuminating agent	A. Methane B. Methene C. Methyne D. B & C
316	Sulphuric acid reacts with PCl_5 to give	A. Thionyl chloride B. Sulphur monochloride C. Sulphuryl chloride D. Sulphur tetrachloride
317	The number of paper industries in Pakistan are	A. 30 B. 25 C. 35 D. 20
318	Question Image	A. HF is stable and does not decompose even at 2000°C B. HF is stable and slowly decomposes at 2000°C

318	Question Image	C. HF is strong acid D. HF produces equal moles of hydrogen and fluorine
319	Which one of the following substances is a synthetic polyester	A. Cotton B. Nylon C. Rayon D. Terylene
320	Exposure to CO results in	A. Headache B. Fatigue C. Unconsciousness D. All of these
321	The strongest forces are	A. Debye forces B. London dispersion forces C. Dipole-dipole attraction D. Hydrogen
322	In CCL4 solvent I3 shows:	A. Blue Color B. Brown Color C. Purple Color D. Pink Color
323	Question Image	A. Electrophilic addition B. Electrophilic substitution C. Free radical substitution D. Nuclophilic addition
324	Plastics are a pollution problem because many plastics:	A. Are made from petroleum B. Are very inflammable C. Burn to produce toxic fumes D. Decompose to produce toxic products
325	Environmental pollution affects	A. Biotic components B. Plants only C. Man only D. Biotic and abiotic components of environment
326	Sp^3 hybridization occurs when carbon is bound to	A. Four other atoms B. Three other atoms C. Two other atoms D. One other atoms
327	Nitration of phenol gives	A. o-nitrophenol B. p-nitrophenol C. m-nitrophenol D. Both o and p-nitrophenol
328	Which is an inert gas?	A. Nitrogen B. Oxygen C. Hydrogen D. CO
329	The melting point is lowest for	A. Be B. Mg C. Ca D. Sr
330	Pick out the wrong statement. In electrochemical cell	A. Electrons are released at anode B. Cathode is regarded as negative electrode C. Chemical energy is converted into electrical energy D. Salt bridge maintains the electrical neutrality of the solution
331	Which has the largest radius?	A. CO³⁺ B. Mn³⁺ C. Fe³⁺ D. Cr³⁺
332	Sodium forms largely	A. Normal oxides B. Per-oxides C. Superoxides D. None of these
333	The cell which generates electricity as a result of spontaneous oxidation-reduction reaction is called	A. Electrolytic cell B. Nelson's cell C. Galvanic cell D. Down's cell
334	Acetic acid is obtained when	A. Methyl alcohol is oxidized with potassium permanganate B. Calcium acetate is distilled in the presence of calcium formate C. Acetaldehyde is oxidized with potassium dichromate and sulphuric acid D. Glycerol is heated with sulphuric acid
335	The characteristic reactions of alkanes are	A. Addition reactions B. Substitution reactions C. Condensation reactions D. Polymerization reactions
		A. Copolymers

336	Teflon, styron and neoprene are all	A. Copolymers B. Condensation polymers C. Homopolymers D. Monomers
337	A special application of the Hess's law to binary ionic compounds of M^+X^- type in calculation of their lattice energies is	A. Enthalpy of reaction B. Born-haber cycle C. First law of thermodynamics D. Enthalpy of combustion
338	Solution may have units	A. Molarity B. Molality C. Mole fraction D. All of them
339	Diaphragm cell is used to prepare	A. sodium B. sodium hydroxide C. calcium D. magnesium
340	Aromatic carboxylic acids have carboxyl group attached to group :	A. Alkyl group B. Aryl group C. Phenyl group D. Benzyl group
341	The strongest acid is	A. HF B. HCl C. HBr D. HI
342	Allotropic forms of sulpher are	A. Two B. Three C. Four D. Five
343	The next homologue of $C_{10}H_{22}$ will be	A. C₉H₂₀ B. C₁₂H₂₆ C. C₁₁H₂₄ D. C₁₃H₂₈
344	What is the packet of energy called?	A. Electron B. Photon C. Positron D. Proton
345	Variable valency is characteristic of	A. Halogen B. Transition elements C. Alkali metals D. Noble gas
346	With the progressive of the reaction the slope of the curve between concentration of product and time	A. Gradually becomes more steep B. Gradually becomes less steep C. No change occurs in slope D. None of these occurs
347	Which compound is more soluble in water	A. C₂H₅OH B. C₆H₅OH C. CH₃OCH₃ D. n-hexanol
348	Rate of chemical reaction depends upon :	A. The number of total collisions per second. B. Number of molecules taking part in a chemical reaction. C. Number of fruitful collisions per second D. Number of fruitless collisions per second.
349	empirical formula mass of benzene is time lesser than moleculer formula mass:	A. four B. five C. six D. seven
350	The shape of methanol, ammonia and water molecule can be explained by assuming	A. Sp³hybridization B. Sp²hybridization C. Sp hybridization D. All of these
351	Which of the following aqueous solutions have the lowest freezing point	A. 5.85% NaCl B. 6% urea C. 34.2 sucrose D. All of them have same freezing points
352	Polysaccharides are also called	A. Crystals B. Sugars C. Liquids D. None sugars
	$H_2 + L_2$ ----2HI In the above equilibrium system, if the concentration	A. Remains Constant B. Increases

353	of reactants at 25°C is increased, the value K_C will :	C. Cecreases D. Depends upon nature of reactans
354	When phenol is distilled with zinc dust. It is reduced to	A. Benzene B. Benzaldehyde C. Toluene D. Hexanol
355	A solution containing 5.8 grams acetone (CH_3OCH_3), 4.6 gram ethyl alcohol (C_2H_5OH) and 12 grams chloroform (CHI_3) has mole fraction and mole percent of acetone	A. 0.11, 10% B. 0.33, 33% C. 0.22, 22% D. 0.11, 33%
356	The substances which are added to the soil to provide one or more nutrient elements essential for plant growth are called	A. Minerals B. Hormones C. Fertilizers D. None of these
357	Benzene is stable to:	A. Oxidation B. Nitration C. KMnO₄ D. SULPHONATION
358	When acetic acid and ethanol react together an ester is formed which is called	A. Ethyl ester B. Ethanoic acid C. Ethanoic acid D. Ethyl acetate
359	SN_2 reaction has order of reaction :	A. First B. Second C. Third D. Zero
360	The rules which describe the distribution of electron in atomic energy levels are Auf-ban principle, Pauli's exclusion principle. Hunds rule. The pauli exclusion principle refers to the	A. Orientation of orbital in space B. Fact that two electrons in the same orbital should have opposite spins C. Energy of the orbital D. Spin of the electron
361	Glacial Acetic acid is	A. Pure acetic acid at 100°C B. Acetic acid mixed with methanol C. Pure acetic acid at 0°C D. Pure acetic acid above 16.6°C
362	In which of the following pairs, the numbers of electrons in the outermost shell are different?	A. As,Sb B. Ge,Sn C. In,pt D. Se,Te
363	Which reaction is too vigorous to control	A. Chlorination B. Bromination C. Iodination D. Fluorination
364	Cyclohexane can be converted not benzene in the presence of	A. Pt at 100°C B. Pt at 250°C C. Pd at room temperature D. Pt at room temperature
365	Which acid is used in the manufacture of synthetic fibre?	A. Formic acid B. Oxalic acid C. Carbonic acid D. Acetic acid
366	Question Image	A. Pressure change B. Temperature change C. Concentration change D. Catalyst
367	$N_2 + O_2 \rightleftharpoons 2NO$ The unit of K_c for tis	A. <o:p></o:p> No unit<o:p></o:p> B. <o:p></o:p> <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">mol⁻² dm⁻³<o:p></o:p> C. <o:p></o:p> <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin:

	reaction will be:	initial; background-clip: initial;">mol⁻¹ dm⁻³<o:p></o:p> D. <o:p></o:p> <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">mol⁻² dm⁺³<o:p></o:p>
368	Ricket is caused due to the deficiency of vitamin	A. A B. D C. B D. E
369	Benzene is obtained from benzene sulphonic acid by treating with	A. HCl B. NaOH C. H₂O D. NaHCO₃
370	Among the lanthandes the one obtained by synthetic method is	A. Lu B. Pm C. Pr D. Gd
371	Which will have the maximum value of heat of hydration	A. Na⁺ B. Cs⁺ C. Ba⁺² D. Mg⁺²
372	Phenol is used in the preparation of	A. Bakelite B. Phenatherene C. Cellulose D. All of these
373	A system undergoes a change to attain the state of	A. High energy B. Low energy C. Moderate energy D. None of these
374	Alkaline earth metals are usually	A. Reducing agent B. Oxidizing agent C. Amphoteric D. Acidic
375	the element not known till Mandleev tabulated his periodic table:	A. Carbon B. Hydrogen C. Aluminum D. Germanium
376	If the rate of decay of radioactive isotope decreases from 200 cpm to 25 cpm after 24 hours, what is its half life :	A. 8 hours B. 6 hours C. 4 hours D. 3 hours
377	Elements in the same family have	A. Same atomic number B. Molecular wt same C. Same chemical properties D. Same electronic configuration
378	Which of the following is obtained by condensation polymerization?	A. Polyethene B. Teflon C. Phenol formaldehyde resin D. Nitrile rubber
379	Debye forces are present in on of the following pairs:	A. Na+ion and water B. Argon and water C. Argon and Na+ion D. Ne and water
380	Termochemistry is the study of chemical reaction accompanying	A. Heat change B. Rate change C. Mass change D. Volume change
381	Question Image	A. 2-chlorobutanal B. alfa-chlorobutanal C. 2-chlorobutyraldehyde D. alfa- chlorobutyraldehyde
382	When copper is allowed to react with HNO_3, the reaction is slow in the beginning, finally becomes very fast. It is due to the formation of an auto catalyst which is	A. Cu(NO₃)₂ B. CuO C. O₂ D. HNO₂
383	The method in which alkanes prepared by alkyle halides in the presence of palladium - charcoal is	A. Hydrolysis B. Electrolysis C. Hydrogenation D. Hydrogenolysis

384	The nitrogen present in some fertilizers helps plants to:	A. Fight against diseases B. Produce fat C. Undergo photosynthesis D. Produce protein
385	The arrangement of subshells in the ascending order of their energy on complete filing of 4f subshell the entering electrons goes to	A. 5s B. 5p C. 5d D. 5f
386	Which of the following statements about acetic, anhydride is not correct	A. It is immiscible with water but is hydrolysed to give acetic acid B. It is prepared by the action of actyl chloride on the sodium salt of acetic acid C. it reacts with ammonia to give acetamide D. it is a strong acid
387	General formula of aromatic carboxyl acids	A. R----------OH B. RCOOH C. RCOR D. ARCOOH
388	Orlon is a polymer of	A. Tetrafluoroethylene B. Acrylonitrile C. Ethanoic acid D. Benzene
389	The electropositive elements from	A. Acidic oxides B. Basic oxides C. Neutral oxides D. None
390	Which is not a bidentate ligand	A.
391	Which of the following is hypnotic?	A. Acetaldehyde B. Metaldehyde C. Paraldehyde D. None
392	Terylen fibre is made by reaction of terephthalic acid with	A. Ethylene B. Ethylene glycol C. Glycol D. Terylene
393	Cyanoform is _____ acid in nature than the chloroform. The missing word is	A. Stronger B. Weaker C. Amphoteric D. Neutral
394	Borax is hydrated:	A. Penta B. Deca C. Hepta D. Octa
395	A compound of the formula $C_4H_{10}O$ reacts with sodium and undergoes oxidation to give a carbonyl compound which does not reduce Tollen's reagent, the original compound is	A. Diethyl ether B. n-Butyl alcohol C. Isobutyl alcohol D. sec-Butyl alcohol
396	Lactic acid on heating with dil. H_2SO_4 gives	A. Acetic acid B. Propionic acid C. Acrylic acid D. Formic acid
397	Organic synthetic or man made polymers are plastics, rubber and fibre. Which is not a synthetic polymer	A. Silk B. Polyester C. Polyvinyl chloride D. Nylon
398	Sodium belongs to block of periodic table:	A. S-Block B. p- block C. d- block D. f- bloci
399	Water is purified by the process:	A. Aeration B. Coagulation C. Chlorination D. All of these
400	If the rate equation of a reaction 2A+B--------->Products is , Rate = K[A] [B], and A is present in large excess, then order of reaction is :	A. 1 B. 2 C. 3 D. Above

401	The percentage of nitrogen in ammonium nitrate is	A. 32 - 33.5% B. 34 - 36% C. 40 - 45% D. None of these
402	For the representative elements from left to right across a period in the periodic table, the electron effinity of the atom generally	A. Increases B. Remains constant C. Decreases D. Not clear
403	Units of Kw are	A. Mole dm⁻³ B. Mole²dm⁻³ C. Mole²dm⁻⁶ D. Mole²dm⁻³
404	$[Zn(NH_3)_4]^{3+}$possess geometry	A. Square plannar B. Hexagonal C. Tetrahedral D. None of these
405	The mass of one mole of proton is	A. 1.008 g B. 0.184 g C. 1.673 g D. 1.008 mg
406	The Zwitter ion is also called	A. International salt B. Internal salt C. No salt D. None of these
407	Without proper suction,filtration is:	A. Rapid process B. Fague process C. Slow process D. Useless process
408	The valence orbital configuration of an element with atomic number 23 is	A. 3d⁵ B. 3d³, 4s² C. 3d³, 4s¹, 4p¹ D. 3d²,4s²,4p¹
409	Question Image	
410	The correct set of quantum numbers (n,l and m) respectively of the unpaired electron of chlorine atom is	A. 2,1,0 B. 2,1,1 C. 3,1,1 D. 3,2,1
411	Effective magnetic moment of Sc^{3+}ion is	A. 1.73 B. 0 C. 5.92 D. 2.83
412	One of the followings is not type of polymer	A. Homopolymer B. Copolymer C. Heteropolymer D. Terpolymer
413	A fibre which is made from acrylonitrile as monomer	A. PVC B. Rayon fibre C. Acrylic fibre D. Polyester fibre
414	Neutron was discovered by:	A. Chadwick. B. Bohr. C. Rutherford. D. Plank.
415	Gooch crucible is made of:	A. Brass B. Porcelain C. Bronze D. .Gold
416	Bond angle in benzene is	A. 109.5° B. 180° C. 120° D. 107.20
417	A complete chemical characterization of a compound must include	A. Qualitative analysis B. Chemical analysis C. Quantitative analysis D. Both a and c
418	Incomplete oxidation of alkanes yields	A. CO₂& carbon black B. CO₂+ heat C. CO and carbon black D. CO + heat

419	The relative atomic mass of chlorine is 35.5. What is the mass of 2 mol of chlorine gas	A. 142 g B. 71 g C. 35.5 g D. 18.75 g
420	For every reaction occurring in the body three is at least one type of	A. Enzyme B. Vitamin C. Protein D. Amino acid
421	Toluene can be oxidized to benzoic acid by	A. KMnO₄(alk) B. K₂Cr₂O₇(acidic) C. Both D. None
422	Which one of the following is (m-xylene)	A. 1,2 dimethyl benzene B. 1,3 dimethyl benzene C. 1,5 dimethyl benzene D. 1,4 dimethyl benzene
423	Question Image	A. Initial concentration of acetic acid B. Initial concentration of ethyl acetate C. Equilibrium concentration of acetic acid D. Equilibrium concentration of ethyl acetate
424	Which behaves as insulator for animals body?	A. Carbohydrates B. Proteins C. Fats D. Skin
425	In endothermic reactions, the heat contents of the surrounding air	A. Remains constant B. Decreases C. Increases D. Fluctuates rapidly
426	Aldehydes which do not haveα-hydrogen undergo	A. Aldol combination B. Cannizzaro's reaction C. Substitution D. Elimination
427	Alkanes are gases :	A. C₁-C₄ B. C₅-C₁₀ C. C₁₁-C₁₅ D. C₁₀-C₂₀
428	The osmotic pressure of 1 m solution at 27°C is	A. 2.46 atm B. 24.6 atm C. 1.21 atm D. 12.1 atm
429	Question Image	A. 32 B. 64 C. 16 D. 4
430	Ifα us the degree of dissociation of $Na_2SO_4$the vant Hoff's factor (1) used for calculating the molecular mass is	A. 1 +α B. 1 -α C. 1 + 2α D. 1 - 2α
431	Which has complete valence shell?	A. C B. N C. O D. Ne
432	A polymer may be	A. Homopolemer B. Co-polymer C. Terpolymer D. All of these
433	Use of glycol as anti freeze in the automobile is an important application of	A. Colligative property B. Raoult's law C. Fractional crystallization D. Prrhenivs law
434	Which is used in navigational equipments?	A. B B. Be C. Mg D. Al
435	The elements with atomic numbers 9, 17, 35, 53, 85 an all	A. Noble gases B. Halogens C. Heavy metals D. Light metals
	The atomic number of an element is 35 what is the total number of electrons present	A. 6 B. 11

436	in all the p-orbitals of the ground state atom of that element?	C. 17 D. 23
437	Consider the ground state of Cr atom (Z=24). The numbers of electrons with the azimuthal quantum numbers l = 1 and l = 2 are respectively	A. 12 and 4 B. 16 and 5 C. 16 and 4 D. 12 and 5
438	The rate determining step is the :	A. Slowest step. B. Fastest step. C. Moderate step. D. Both (a) and (b).
439	The reaction in which ketone is reduced to the alkane is called	A. Kolb B. Clemmensen C. Cannizzaro D. None
440	When acetamide is hydrolysed by boiling with acid the product obtained is	A. Ethyl amine B. Ethyl alcohol C. Acetic acid D. Acetaldehyde
441	Which of the following sets of atomic numbers belong to that of the alkali metals?	A. 1,12,30,4,62 B. 37,19,3,55 C. 9,17,35,53 D. 12,20,56,88
442	The most reactive elements are	A. Group IV-A B. Group V-A C. Group VI-A D. Group VII-A
443	The fiber which is made from acrylonitrile as monomer:	A. PVC B. Rayon Fiber C. Acrylic fiber D. Polyester fiber
444	A six membered ring containing one double bond called	A. Cyclohexene B. Cyclohexane C. Cyclohexadiene D. None
445	Which has maximum protein content?	A. Ground nut B. Cow milk C. Egg D. Wheat
446	In a reversible reaction, two substances are in equilibrium. If the concentration of each one is reduced to half, the equilibrium constant will be	A. Reduced to half of its original value B. Doubled C. Same D. Reduced to one fourth its original value
447	Keeping the temperature constant, if the gas is expanded	A. kinetic energy of molecules will increase B. Number of gas molecules increases C. Temperature will increases D. Pressure will decrease
448	Rosenmund's reduction of an acyl chloride gives	A. An aldehydes B. An alcohol C. An ester D. A hydrocarbon
449	Which of the following will have the highest boiling point?	A. Methanal B. Ethanal C. Propanal D. 2-Hexanone
450	In the reaction of oxalic acid with $KMnO_4$and $H_2SO_4$is slow at the beginning but after sometimes the reaction becomes faster due to	A. Formation of MnSO₄which acts as 'Auto catalyst B. Formation of CO₂which acts as 'Auto catalyst C. Formation of K₂SO₄which acts as 'Auto catalyst D. Evolution of O₂gas which acts as 'Auto catalyst
451	Zeotropic mixture	A. Obey Henry's law B. Obey Raoult's law C. Does not obey Raoult's law D. Obey Dalton's law
452	Question Image	A. Shift reaction toward forward direction B. Shift reaction backward C. Lower the value of K_c D. No change in reaction
		A. Alkanes B. Alkenes

453	Which is more active ?	B. Alkenes C. Alkynes D. Benzene
454	Caroxyl group has functional in it.	A. one B. two C. three D. four
455	At Murree hills water will boil at about.	A. 102^oC B. 98 ^oC C. 69 ^oC D. 100 ^oC
456	Acetic acid is manufactured by:	A. Distillation B. Fermentation C. Ozonolysis D. Esterification
457	Simple sugars are :	A. Monosacchrides B. Disaccharides C. Oligo saccharides D. Trisaccharides
458	To calculate volume of the solvent, we need to know, the :	A. Density of solute B. Normality of solute C. Mass of solute D. Molarity of solute
459	Absolute temperature of a gas is proportional to	A. Rotational kinetic energy B. Translational kinetic energy C. Vibrational kinetic energy D. Potential energy
460	The wave length of visible light is 500 nm. In S.I. unit this value is	A. 5 x 10⁻⁸m B. 5 x 10⁻⁹m C. 500 x 10⁻⁷m D. 500 x 10⁻⁹m
461	One mole of ethanol and one mole of ethane have an equal	A. Mass B. Number of atoms C. Number of electrons D. Number of molecules
462	An organic compound 'X' on treatment with acidified $K_2Cr_2O_7$gives a compound 'Y' which reacts with $I_2$and sodium carbonate to form Triodomethane. The compound 'X' is	A. CH₃OH B. CH₃CHO C. CH₃CH(OH)CH₃ D. CH₃COCH₃
463	Alkyl benzenes are readily oxidized by axidfied	A. KMnO₄ B. K₂CO₃ C. MnO₄ D. H₂SO₄
464	For a 3P subshell the set of principle and azimuthal quantum number is	A. n = 1 , l = 2 B. n = 3, l = 0 C. n = 3, l = 1 D. n = 1, l = 3
465	Question Image	A. 3 B. 4 C. 5 D. 2
466	Calcium carbonates contains oxygen in it:	A. 48% B. 50% C. 53% D. 60%
467	A fat or oil is characterised for extent of unsaturation by one of the following number, which one	A. Rancidity number B. Acid number C. Iodine number D. Saponicfication number
468	pH and pKa of the buffer are related by Henderson equation which is	
469	Which one of the following properties is not correct for ozone?	A. It oxidizes lead sulphides B. It oxidizes potassium iodide C. It oxidizes mercury D. It cannot act as a bleaching agent
470	Alkyl halides are considered to be very reactive compounds towards	A. They have an electrophilic carbon B. They have an electrophilic carbon and good living gorup C. They have an electrophilic carbon and bad living group

	nucleophiles, because:	D. They have an nucleophilic carbon and good living gorup
471	Calcium carbonate contains oxygen in it	A. 48% B. 50% C. 53% D. 60%
472	Glycogen is stored in	A. Animals B. Plants C. Soil D. None of these
473	A solution of sodium sulphate was electrolysed using some insert electrodes. The products at the electrodes are	A. O₂, H₂ B. O₂, Na C. O₂, SO₂ D. O₂, S₂O₈²
474	Isotopes differ in the	A. Number of neutrons B. Number of protons C. Number of electrons D. Number of atoms
475	Ammonia is injected tinder the soil surface	A. 1 feet B. 6 inches C. 6 feet D. inches
476	Reason of pollution are:	A. Population and Urbanization B. Transportation C. Urbanization industrialization D. All of these
477	**BOD** is the oxygen demand with in days(s):	A. Four B. Two C. Three D. Five
478	Rate of evaporation and rate of condensation at equilibrium:	A. Become very low B. Become very high C. Become equal D. Can never be equal.
479	In the reaction $K_2Cr_2O_7$+ HCl + $CrCl_3$+ Cl_2+ H_2O the element which is reduced is	A. K B. Cl C. Cr D. H
480	Question Image	A. 1-bromobutane B. 2-bromobutane C. 1-bromo-2-methyl propane D. 2-bromo-2-methyl propane
481	Which of the following statement is incorrect about SHE(Standard hydrogen electrode):	A. Reduction potential of Cu⁺² is smaller than H⁺ions whenit is coupled with copper electrode. B. gas is passed in it at 1 atm pressure. C. Its oxidation potential and reduction potential is zero. D. It is made of platinum wire dipped in HCl solution
482	Reation of which with Grignard's reagent gives primary alcohol:	A. Formaldehyde B. Aldehyde C. Ketones D. Acetone
483	The fourteen elements following actinium are known as	A. Lanthanones B. Lanthanides C. Rare earths D. Actinides
484	Which is not a component of environment	A. Biosphere B. Lithospahre C. Hydrosphere D. None of these
485	The oxyacids of phosphorus in which phosphorus has the lowest oxidiation state is	A. Hypophosphorus acid B. Orthophosphorus acid C. Pyrophosphorus acid D. Metaphosphorus acid
486	Alcohol fermentation is brought about by the action of	A. CO₂ B. O₂ C. Invertase D. Yeast
487	The highest temperature at which a substance can exist as a liquid is called its	A. Critical temperature B. Zero temperature C. Absolute temperature D. None of above
		A. K

488	The alkali metal which is liquid at 15°C is	B. Cs C. Na D. None
489	$C_{18}$and onward hydrocarbons are normally	A. Gases B. Liquids C. Solids D. Plasma
490	Aluminium oxide is:	A. Acidic oxide B. Basic oxide C. Amphoteric oxided D. None of these
491	Out of all the elements of group V1-A the highest melting and boiling points is shown by the element	A. Te B. Se C. S D. Pb
492	The reaction of zinc with the copper sulfate solution is an example of.	A. Oxidation reduction reaction. B. Spontaneous reaction. C. Spontaneous redox reaction. D. Non-spontaneous reaction.
493	Red P can be obtained form white P by	A. Heating it with a catalyst in an inert atmosphere B. Distilling it in an inert atmosphere C. Dissolving it in CS₂and crysllizing D. Melting it ad pouring the liquid into water
494	Solvay process is used in the manufacture of	A. Na₂CO₃ B. NaHCO₃ C. CaCl₂ D. All
495	The bond angles in methane $CH_4$are equal to	A. 109.5° B. 107.5° C. 104.5° D. 120°
496	When elements of group I react with the elements of group VIA theory form	A. Ionic bond B. Covalent bond C. Polar bond D. None
497	Astatine belongs to group	A. I-A B. II-A C. III-A D. VII-A
498	Which of the following molecules have multiple bonds	A. CH₄ B. C₂H₄ C. C₂H₆ D. CCl₄
499	I a chemical reaction equilibrium is said to have been established when :	A. Rate of opposing reactions are equal. B. Rate constants of opposing reactions are equal. C. Opposing reactions stop. D. Concentration of reactants and products are equal
500	Ionization energy of sodium is (Kj/mol)	A. 503 B. 523 C. 513 D. 524
501	In Bohr model of hydrogen atom the distance between adjacent orbits increases away from the nucleus, the energy difference between the orbits	A. Increases B. Decreases C. Reaming same D. Orbits coincide
502	Ketones are prepared by the oxidation of	A. Primary alcohol B. Secondary alcohol C. Tertiary alcohol D. None of these
503	Which substances are mixed to form a buffer solution?	A. A strong acid and its salt of a strong base B. Strong acid and its salt of weak base C. Weak acid and its salt of strong base D. Weak acid and its salt of weak base
504	The oxides of electronegative elements are	A. Basic B. neutral C. Acidic D. Amphoteric
505	Transition metals form complexes due to the participation of partially filled	A. f-orbitals B. d-orbitals C. s-orbitals

	participation of partially filled	D. p-orbitals
506	If k_c of a reaction productis verylarge, it indicates that equilibrium occurs :	A. With the help of a catalyst. B. With no forward reaction. C. At a low product concentration. D. At a high product concentration.
507	If carbon dioxide is bubbled through solution of Grignard's reagent in ether and the resultant product is reacted with hydrochloric acid, it gives	A. An alkane B. Al alcohol C. A carboxylic acid D. An aldehyde
508	The quantum number which determines the shape of the orbital is	A. principal B. azimuthal C. magnetic D. spin
509	A colloidal gel is:	A. 3Ca, Al₂O₃ B. CaSO_{2.}2H₂O C. 3CaAl₂O₃.3CaSO₄.2H₂O D. 3Ca.Al₂O₃.6H₂O
510	After chlorination, the pulp is washed at:	A. 20°C B. 30°C C. 40°C D. 60°C
511	What is the structure of the ester formed from propanoic acid and ethanol	
512	The heat contents of all the elements in their standard states are taken to be	A. 1 B. 2 C. 0 D. None
513	The major reaction occurring in the engines of automobiles is	A. Oxidation B. Reducing C. Combustion D. Decomposition
514	Bohr model of atom is contradicted by:	A. Planck's quantum theory B. Pauli's exclusion theory C. Heisenberg's uncertainty principle. D. All of above.
515	Methanol is prepared from CO and H_2 using catalyst:	A. ZnO B. Cr₂O₃ C. Pt D. Ni
516	By reaction Grignard's reagent with the HCHO we get	A. 1° - alcohol B. 2° - alcohol C. 3° - alcohol D. All of these
517	Which if the following has the highest freezing point at one atmosphere	A. 0.1 M NaCl B. 0.1 M sugar solution C. 0.1 M BaCl₂ D. 0.1 M FeCl₂solution
518	Acetylene when treated with 10% H_2SO_4 in the presence of $HgSO_4$ adds one molecule of water to form	A. Aldehydes B. Esters C. Alcohols D. Acids
519	What is the nature of Al_2O_3	A. Acidic B. Basic C. Amphoteric D. Neutral
520	Escape of high energy molecules from the surface of liquid is called:	A. Sublimation. B. Distillation. C. Condensation. D. Evaporation.
521	How many alcohol (including both structural isomers and stereoisomers) can have the molecular formula $C_4H_{10}O$	A. 3 B. 4 C. 5 D. 6
522	Oxidation of ter-alcohol gives:	A. Aldehyde B. Formaldehyde C. Ketone D. Alkens
		A. Toluene

523	Amongst the following, the compound that can be most readily sulphonated is:	A. Toluene B. Benzene C. nitrobenzene D. chlorobenzene
524	What element is not essential the growth of plants and is not required in the fertilizers	A. Nitrogen B. Potassium C. Phosphorus D. Barium
525	A real gas obeying van der Waals' equation will resemble ideal gas if :	A. both 'a' and 'b' are large B. both 'a' and 'b' are small C. 'a' is small and 'b' is large D. 'a' is large and 'b' is small
526	In a heterollytic bond fission reaction	A. A molecule of H₂O is formed B. A molecule of H₂O is eliminated C. A free radical is formed D. A positive and a negative ion is formed
527	The formula of secondary alcohol is	A. R - OH B. R - CH₂OH C. R₂CHOH D. R₃COH
528	The deviation of a gas from ideal behavior is maximum at :	A. -10<span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:"Times New Roman";mso-bidi-theme-font:minor-bidi; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">°C and 5.0 atm B. -10°C and 2.0 atm C. 100°C and 2.0 atm D. 0°C and 2.0 atm
529	A carbon atom carrying a postitive charge and attached to three other atoms of groups is called	A. Caronium ion B. Carbanion C. Oconium ion D. Carba ion
530	Silver oxide battery has a voltage of	A. 2.0 V B. 1.5 V C. 2.5 V D. 1.0 V
531	The rate of diffusion of a gas is :	A. Inversely proportional to its density B. Inversely proportional to square root of its molecular mass C. Directly proportional to molecular mass D. Directly proportional to its density
532	Organic compounds are soluble in all except	A. Benzene B. Petroleum C. Ether D. Water
533	Which gas is produced by treating $CaC_2$with water	A. Methane B. Ethane C. Acetylene D. HCl
534	The substances which soften the polymer are called	A. Stabilizers B. Plasticizers C. Retarders D. Pigments
535	Which oxide of nitrogen is obtained on heating ammonium nitrate at 250° C?	A. Nitric oxide B. Nitrous oxide C. Nitrogen dioxide D. Dinitrogen tetraoxide
536	In lead accumulator the electrolyte is H_2SO_4solution is	A. 30% H₂SO₄ B. 60% H₂SO₄ C. 80% H₂SO₄ D. 90% H₂SO₄
537	An azeotropic mixture of two liquids boils at a lower temperature than either of them when lower temperature	A. It is saturated B. it shows positive deviation from Raoult's law C. It shows negative deviation form Raoult's law D. It is metastable
538	Which of the following is not a sub-atomic particle	A. Electron B. Proton C. Neutron D. Deuteron
		A. Primary alcohol

539	Ketones are prepared by the oxidation of:	B. Secondary alcohol C. Tertiary alcohol D. None of these
540	The mass of sulphur which combines with 24 grams oxygen to form SO_2	A. 32 gram B. 24 gram C. 8 gram D. 12 gram
541	Which can be prepared from HNO_3?	A. T.N.T B. Fertilizers C. Picric acid D. All of these
542	Polymer formation from monomers starts by	A. Condensation reaction between monomers B. Coordination reaction between monomers C. Conversion of monomer to monomer ions by protons D. Hydrolysis of monomers
543	Which of the following is not a hydrocarbon	A. Butane B. Methyl benezene C. Acetylene D. Glucose
544	Across the lanthanide series, the basicity of the lanthanide hydroxides	A. Increases B. Decreases C. First increases and then decreases D. First decreases and then increases
545	Tungsten and uranium are turned to an reaction with HNO_3	A. Oxides B. Chlorides C. Nitrides D. Nitrates
546	The boiling point of $NH_3$is maximum among the hydrides of group V elements due to	A. Enhanced electronegative character of Nitrogen B. Pyramidal structure of NH₃ C. Very small size of Nitrogen D. Enhanced electropositive character of Nitrogen
547	Among the alkaline earth metals the element forming predominantly covalent compounds is	A. Be B. Mg C. Sr D. calcium
548	Which reagent is used to reduce a carboxylic group to an alcohol	A. H₂/Ni B. H₂/Pt C. NaBH₄ D. LiAlH₄
549	Which of the following ion has the highest value of ionic radius?	A. Li⁺ B. F⁻ C. O²⁻ D. B³⁺
550	Cotton is _____% cellulose	A. 90 B. 100 C. 99 D. 30
551	Aromatic compounds burn with sooty flame cause	A. They have high percentage of hydrogen B. They have a ring structure C. They have high percentage of carbon D. They resist reaction with air
552	Milk of lime is	A. MgO B. CaO C. Ca(OH)₂ D. Mg(OH)₂
553	Chlorophyll contains in it:	A. Li B. Na C. Mg D. Ca
554	Which element belong to 5d series	A. V B. Nb C. Pd D. Hf
555	Who gave the concept of atomic number	A. Newton B. Mosley C. Dalton D. Newland
556	The protein which only yield amino acids and their derivatives	A. Simple proteins B. Complex proteins C. Derived protein D. All of these

557	Which of the following metals is sometimes found in native state in nature?	A. Al B. Cu C. Fe D. Mg
558	A beaker contains 9 grams of water. The number of H-atoms is	A. 6.02 x 1023 B. 3.01 x 1023 C. 6.02 x 1024 D. 3.01 x 1024
559	Which catalyst is used in contact process?	A. Fe₂O₃ B. V₂O₅ C. SO₃ D. Ag₂O
560	Which of the following form normal oxide	A. K B. Li C. Na D. None
561	When alkyl halide is heated with aqueous solution of ammonia at 100°C the major product is	A. Primary amine B. Secondary amine C. Tertiary amine D. Mixture of amines and salt
562	Which compound of noble gas xenon can be prepared?	A. Oxides B. Fluoride C. Oxyfluorides D. All of these
563	Vitamin A is present in	A. Liver B. Milk C. Green vegetables D. All
564	Compared to a 1.0M aqueous solution of calcium chloride will have	A. The same freezing and boiling point B. A lower freezing point and lower boiling point C. A lower freezing point and higher boiling point D. A higher freezing point and higher boiling point
565	Aniline reacts with which of these to form Schiff base?	A. Acetic acid B. Bezaldehyde C. Acetone D. NH₃
566	A compound contains one atom of oxygen and % of O 34.78, then molecular mass of compound is	A. 46 B. 78 C. 110 D. 180
567	The maximum number of electrons in a subshell for which l = 3 is	A. 14 B. 10 C. 8 D. 4
568	A reaction will also be called a spontaneous if :	A. It does no need energy to start with. B. It needs energy to carry the whole process. C. It needs energy at the end of reaction. D. It needs energy to stat with.
569	Which woody raw material is used for the manufacture of paper pulp?	A. cotton B. Bagasse C. Popular D. Rice straw
570	Three sp^2hybrid are co-planar at an angle of	A. 104.5° B. 109.5° C. 107° D. 120°
571	Amino acids are buildng blocks of:	A. protein B. Carbohydrates C. Lipids D. fats
572	Which element is deposited at the cathode during the electrolysis of brine in Nelson's cell?	A. H₂ B. Na C. Cl₂ D. O₂
573	The element caesium bears resemblance with:	A. Ca B. Cr C. Both of the above D. None of these
574	Which of the following is not charged particle	A. Proton B. Electron C. Neutron D. Hydrogen nucleus

		D. Hydrogen nucleus
575	The atom other than C in a hetrocyclic compound is called as	A. Hetroatom B. Hetroion C. Hetromolecule D. Hetroelement
576	The change in enthalpy of reaction NaOH ----------NaCl + H2O is	A. Heat of reaction B. Heat of neutralization heat of combustion C. Heat of fusion D. Heat of combustion
577	Ethyl acetate reacts with CH_3MgBr to form	A. Secondary alcohol B. Tertiary alcohol C. Primary alcohol and acid D. Acid
578	Which is used to identify Cu^{2+} ions	A. Nitric acid B. Sulfuric acid C. NaOH D. HCl
579	Which of the following statement is correct for a chemical reaction to occur molecules of substances must	A. Collide with each other B. Collide with energy more than activation energy C. Collide with energy less than activation energy D. Collide with high frequency
580	With the increase in carbon no. the solubility of carboxylic acids	A. Increases B. Decreases C. Remains same D. None of these
581	The reduction potential to copper electrode is +0.34 V and that of Zn electrode is -0.76 V. when these two are coupled the e.m.f. of the cell is	A. -0.42 V B. +0.42 C. -1.10 V D. +1.10 V
582	Colour of Iodine is	A. Pale yellow B. Greenish yellow C. Red brown D. Greyish black
583	Cement is a combination of mainly	A. calcarious B. argillaceous C. calcarious and argillaceous D. Al₂O₃
584	Which of the following is used as disinfectant	A. K₂Cr₂O₇ B. KMnO₄ C. K₂MnO₄ D. K₂CrO₄
585	The carbon, carbon bond length in benzene is	A. 1.54A° B. 1.34A° C. 1.20A° D. 1.39A°
586	Which group elements are the least metallic in nature?	A. IV-A B. V-A C. VI-A D. VII-A
587	Hydrogen bonding is present in one of the following pairs:	A. NH₃ B. H₂O C. HF D. All of above
588	Out of all the elements of group V-A , the highest ionization energy is possessed by:	A. N B. P C. Sb D. Bi
589	According to Raoult's law	A. Relative lowering of V.P. is equal to mole fraction of solute B. The lowering of V.P. is directly proportional to mole fraction of solute C. V.P. of solvent above solution is equal to product of V.P. of pure solvent and mole fraction of solvent ins solution D. All of the above
590	When sodium benzoate is treated with soda lime (NaOH) benzene is formed. What is the other product	A. Na₂CO₃ B. NaHCO₃ C. Ca(OH)₂ D. CaCO₃
591	A white precipitate ofsilver chlorideimmediately formed on additionof :	A. Silver nitrate solution to sodium chloride solution. B. Silver chloride solution to sodium nitrate solution. C. Silver nitrate solution to potassium chloride solution D. Silver nitrate solution to hydrogen chloride solution

		D. Silver nitrate solution to hydrogen chloride solution.
592	Corrundam is ore of:	A. Li B. Be C. B D. Al
593	Linear shape is associated with which set of hybrid orbitals	A. sp B. sp² C. sp³ D. dsp²
594	The molecule of ethane possess which hybrization	A. sp³ B. sp² C. sp D. sp²d
595	Which of the following has magnesium?	A. Carbonic anhydrase B. Haemocyanin C. chlorophyll D. Vitamin B₁₂
596	The charge over mass ratio of electron is:	A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">1.6 x 10⁻¹ C Kg⁻¹<o:p></o:p> B. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">9.1 x 10⁻³¹ C Kg⁻¹<o:p></o:p> C. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">1.7588 x 10¹¹ C Kg⁻¹<o:p></o:p> D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">6.62 x 10⁻³⁴ C Kg⁻¹<o:p></o:p>
597	2.5 faradays of electricity is passed through solution of $CuSO_4$. The number of gram equivalents of copper deposited on the cathode would be	A. 1 B. 2 C. 2.5 D. 1.25
598	LiOH _____ soluble than NaOH	A. More soluble B. Less soluble C. Equally soluble D. None
599	Some Non-spontaneous process can be made to take place by supplying energy to the system from :	A. Internal source. B. Any source. C. External source. D. All of above.
600	Raney - nickel is the alloy of Ni with	A. Pt B. Al C. Cu D. Pd
601	50 mL of 10 N H_2SO_4. 25mL of 12 N Hcl and 40 mL of 5N $HNO_3$are mixed and the volume of the mixture is made 100 mL by adding water. The normality of resulting will be	A. 1 N B. 2 N C. 3 N D. 9 N
602	Which one of the following reaction rate is effected by the light	
603	Which of the following will have the same number of molecules at STP ?	A. 280 CM³ of CO² and 280 CM³ of N₂O<o:p></o:p> B. 11.2 dm3 of O₂ and 32 g of O₂<o:p></o:p> C. 44 g of CO₂ and 11.2 dm³ of CO<o:p></o:p> D. 28 g of N2 and 5.6 dm³ of oxygen<o:p></o:p>
604	The open chain compounds are also called	A. Aliphatic B. Alicylic C. Aromatic D. Both a and b
605	Methanol and ethanol can be distinguished by	A. Iodoform test B. lucas test C. Dichromate/H₂SO₄oxidation test D. Flame test

606	Phosphorus helps the growth of :	A. Root B. Leave C. Stem D. Seed
607	An organic compound will decolorise dill acidified (aq) $KMnO_4$on warming, but will not decolorise bromine water. What is the compound	A. KMnO₄ B. Ethanol C. Ethane D. CH₃CH₂Cl
608	When $SO_2$is passed through acidified $K_2Cr_2O_7$solution	A. The solution turns blue B. The solution is decolourised C. SO₂is reduced D. Green Cr₂(SO₄)₃is formed
609	Which species represented by the following formula has the largest radius	A. P³⁻ B. Cl⁻ C. A_r D. K⁺
610	Sodium metal is obtained by the electrolysis of fused NaCl in cell is called	A. Nelson's cell B. Down's cell C. Daniell cell D. Voltaic cell
611	The stroids of fungi and yeast and yeast are called:	A. Vitamin D B. Vitamin D₂ C. Ergostrol D. Cholestrol
612	Urea has concentration when prepared before prilling	A. 46% B. 82% C. 99.7% D. 100%
613	A single chloride free radical can destroy bow many ozone molecules?	A. 100 B. 100000 C. 10000 D. 10
614	Which one of the following is a colligative property?	A. Surface tension B. Osmotic pressure C. Viscosity D. Refractive index
615	Dilatometer method is useful for the reaction that involve :	A. Small volume changes in solutions B. Change in infractive indices C. Where reactants absorb U.V, visible or infrared radiation
616	Macromolecules are	A. organic molecules B. High molecular mass molecules C. Natural compounds D. Rarely occurring molecules
617	The correct relation b/wK_c andK_p is :	A. K_p = K_c[P/N] ^{Δn<o:p></o:p>} B. K_{c =}K_p(RT) ^{Δn}<o:p></o:p> C. K_{p =}K_c(RT) ^{Δn}<o:p></o:p> D. K_{p =}K_c(RT) ^{Δn}<o:p></o:p>
618	Fluorine molecule is formed by	A. The axial p-p overlap B. The sidewise p-p overlap C. The axial s-p overlap D. The overlap of two sp²hybrid orbitals
619	The only alcohol that can be prepared by the indirect hydration of alkene is	A. ethyl alcohol B. propyl alcohol C. isobutyl alcohol D. methyl alcohol
620	Chemical reactivity of elements depends upon their characteristic:	A. Shape. B. Color. C. Electronic configuration. D. Sizes
621	Which of the following has linear shape?	A. SP B. SP² C. SP³ D. None of the above
622	An organic compound has the following properties ; It gives a positive tri-iodomethane test; it gives a yellow ppt, with 2, 4-DNP regent; it does not react with Tollen's reagent . Which compound would give these results	A. CH₃CHO B. CH₃CH₂OH C. CH₃CH₂COCH₃ D. CH₃CH₂CH₂CHO

623	The electron affinity of chlorine may be represented by the equation	
624	denaturing of alcohol is done by adding methanol in ethanol:	A. 10% B. 20% C. 30% D. 40%
625	Either, an organic compound has close resemblance in structure and thus a derivative of:	A. Water B. Oxides of lithium C. Oxides of magnisium D. Oxides of aluminium
626	Which of the following in incorrect?	A. FeICl₃is used in the detection of phenols B. Fehling solution is used in the detection of glucose C. Tollen's reagent is used in detection of unsaturation D. NaHSO₃is used in the detection of carbonyl compounds
627	Best medhod of preparation of alkyl halide from alcohals is by its reaction with:	A. HX B. SOCl₂ C. Px₅ and PX₃ D. All
628	Boyle's law is represented as :	A. P∞ 1/T<o:p></o:p> B. V and 1/P C. P∞P D. P∞1/P
629	Which of the following is not a property of cathode rays	A. They can produce x-rays when they strike a heavy metal anode B. They can cause reduction reaction C. They produce fluorescence in rare earth and minerals D. They comprise neutral particles
630	3 moles of ethanol react with one mole of phosphorus tribromide to from 3 moles of bromoethane and on mole of X. Which of the following is X?	A. H₃PO₄ B. H₃PO₂ C. HPO₃ D. H₃PO₃
631	Precipitation will occur until the ionic product becomes	A. Equal to K_{sp} B. Lesser than K_{sp} C. Greater than K_{sp} D. None of these
632	Amides on treatment with $Br_2$and KOH are converted into amines, the reaction is known as	A. Hoffmann's bromamide reaction B. Hoffmann's methylation C. Gabriel phthalimide reaction D. H.V.Z reaction
633	The electrophile in aromatic sulphonation is	A. H₂SO₄ B. HSO₄ C. SO₃ D. SO₃⁺
634	The empirical formula of a compound is CH_2O. What may be the compound	A. C₂H₅OH B. C₆H₅OH C. HCOOH
635	All reactions occur in :	A. A single step. B. A series of steps C. Two steps. D. Both (a) and (b)
636	Due to the bacterial action on wood it is converted into	A. Peat B. Lignite C. Bituminous coal D. Anthracite
637	Common names of carboxylic acids are given by then:	A. Source B. Person discovered C. place D. habit
638	Buffers having pH less than 7 are made	A. Mixture of weak acid + salt of it with strong base B. Mixture of weak acid + salt of it with weak base C. Mixture of weak base + salt of it with strong acid D. Mixture of weak base + salt of it with weak base
639	Acetic acids react with PCl5 giving:	A. Acetamide B. Acetyl chloride C. Alcohol D. Ether
640	Ethanol containing some methanol is called	A. Absolute spirit B. Rectified spirit C. Power alcohol

	methanol is called	C. Power alcohol D. Methylated spirit
641	In Antarctica ozone depletion is due to the formation of following compound	A. Acrolein B. Peroxy acetyl nitrate C. SO₂and SO₃ D. Chlorine nitrate
642	Depletion of ozone is more during the month:	A. Jan - March B. April - Ju8n C. July - Aug D. Sept - Nov
643	For the carbylamine reaction we need hot alc.KOH and	A. Any amin and chloroform B. Chloroform and Ag powder C. A primary amine and chloroform D. A mono alkyl amine and trichlorom-ethane
644	Hydrocarbon which is liquid at room temperature is	A. Pentane B. Butane C. Propane D. Ethane
645	18 g glucose is dissolved in 90 g of water. The relative lowering vapor pressure is equal to :	A. 1/5 B. 5.1 C. 1/51 D. 6
646	Alkaline earth metals posses two electrons in their outermost	A. F-orbital B. D-orbital C. S-orbital D. P-orbital
647	If a salt bridge is removed between the two half cells, the voltage	A. Drops to zero B. Does not change C. Increases gradually D. Increases rapidly
648	Number of sigma bonds in $P_4O_{10}$is	A. 6 B. 7 C. 17 D. 16
649	The order of reactivity of halogen acids for reaction with C_2H_5OH is	A. HCl > HBr > HI B. HI > HBr > HCl C. HBr > HI > HCl D. HBr > HCl > HI
650	Fluted filter paper is used to :	A. Decrease rate of filtration. B. Increase rate of filtration. C. Maintain rate of filtration. D. None of above.
651	The paper is derived from the name of which seedy plant?	A. Rose B. Sun flower C. Papyrus D. Water Hyacinth
652	The order of dehydration of alcohol	A. 10> 20> 30 B. 10> 30> 20 C. 20> 30> 10 D. 30> 20> 10
653	Among group V-A elements, the most electronegative element is	A. Sb B. N C. P D. As
654	During dehydration of alcohols to alkenes by heating with conc. H_2SO_4, the initial step is	A. Formation of an ester B. Protonation of alcohol molecule C. Formation of carbocation D. Elimination of water
655	On passing ethane into concentrated suphuric acid the intermediate compound formed on hydrolysis with boiling water gives	A. Methyl alcohol B. Ethyl alcohol C. Ethyl hydrogen sulphate D. Methyl hydrogen sulphate
656	Which one of the following statements is not correct	A. A molecule is the smallest particle of an element which can exist independently B. He is a molecule of helium C. S₈is a molecule of sulphur D. O₃is a molecule of oxygen
657	The ionic bonds are	A. Unidirectional B. Bi-directional C. Non-directional D. Multi-directional

658	An electron with n = 3 , l = 2 will be in the sub-shell	A. 3p B. 3d C. 3f D. 3s
659	Selection of filter paper depends upon sizes of particles to be :	A. Tested. B. Filtered. C. Checked. D. All of above.
660	Maximum number of active hydrogens are present in	A. Acetic acid B. Glycerol C. Methane D. Methanol
661	Picric acid is	A. 2, 4, 6-Trinitrotoluene B. 2, 4, 6-Tribomoethanol C. 2, 4,6-Trinitrophenol D. Para-Nitrophenol
662	The measurement of degree of disorder is	A. Internal energy B. Enthalpy C. Entropy D. None
663	There are 20α-amino acids found in protein 19 have -- NH_2as the amino group. Only one of theα-amino acids has a secondary amino group which one is this	A. Glycine B. Lysine C. Proline D. Cystein
664	UV radiations bring about	A. Skin cancer B. Mouth cancer C. Lung cancer D. Liver cancer
665	The acid used in lead storage cells is	A. Phosphoric acid B. Nitric acid C. Sulphuric acid D. Hydrochloric acid
666	Question Image	A. Zero B. 253 sec C. 150 sec D. 500 sec
667	The function of salt bridge in the galvanic or voltaic cell is to	A. Carry out oxidation at anode B. To carry out reduction at cathode C. Carry out electrolysis D. To prevent the net charge accumulation in either of the half cells
668	To purify water which has mud dissolved in it, A substance which coagulates the suspended particles is used. The coagulant may be	A. Ag⁺ B. Cu²⁺ C. Al³⁺ D. Si⁴⁺
669	When two hydrogen atoms approach to form a chemical bond	A. The repulsive forces dominate the attractive forces B. The attractive forces, dominate the repulsive forces C. The energy of atoms increases D. The two atoms start ionization
670	10g of NaOH has been dissolved per kg of solvent. The molality of solution is :	A. .25 m B. 1.5 m C. .5 m D. 2.5 m
671	The boiling point of NH_3 is maximum among the hydrides of group V elementsdue to:	A. Enhanced electronegative character of Nitrogen B. Pyramidal structure of NH3 C. Very small size of Nitrogen. D. Enhanced electropositive character of Nitrogen
672	Which is not nitrogeneous fertilizers?	A. (NH₄)₂HPO₄ B. NH₄NO₃ C. urea D. Calcium phosphate
673	Aldehydes is distinguished from ketones by using	A. Tollen's reagent B. Benedict reagent C. Fehling solution D. All of the above
	In thermal decomposition of N_2O the half life period for two different initial concentrations of N_2O are	A. Zero order

674	(i) 255 second for initial N_2O 290 mm Hg (ii) 212 second for initial N_2O 360 mm Hg then it is	B. First order C. Second order D. Third order
675	Question Image	A. Le-chatlier's principle B. Only adding catalyst C. Decreasing pressure D. Decreasing temperature
676	The formula of esters is	
677	Two solutions of NaCl and KCl are prepared separately by dissolving 0.1 M of the solute in water. Which of the following statements is not true for these solution	A. KCl solution will have higher boiling point than NaCl solution B. Both the solutions have same boiling C. KCl and NaCl solution possess same vapour pressure D. KCl solution possess same freezing point at NaCl solution
678	Which of the following particles has longest wavelength, if they have same speed:	A. Proton. B. Neutron. C. Electron. D. Positron.
679	Lower carboxylic acids are soluble in water due to	A. Low molecular weight B. Hydrogen bonding C. Dissociation into ions D. Easy hydrolysis
680	Question Image	A. With H₂/Ni CH₃(CH₂)₅CH₂OH B. With H₂/Ni CH₃(CH₂)₅CH₃ C. With NaBH₄ CH₃(CH₂)₅CH₂OH D. With NaBH₄ CH₃(CH₂)₅CHO
681	A chemical inert and heat resistant plastic, that is made form tetrafluoroethlene, is called	A. Teflon B. PVC C. Bakelite D. Polyamide
682	Which of the following is a non-typical transition elements	A. Cr B. Mn C. Zn D. Fe
683	Carbon monoxide is pollutant as it	A. Inactivates nerves B. Inhibits glycolysis C. Combines with oxygen D. Combines with hemoglobin
684	The rate of reaction :	A. Remain same as reaction proceeds. B. May decrease or increase as reaction proceeds . C. Increase as reaction proceeds. D. Decreases as reaction proceeds.
685	In macromolecules DP stands for	A. Dissociation parameter B. Dissociation polymer C. Degree of polymerization D. None of these
686	Neutrons was discovered by	A. Mosely B. Milliken C. Chadwick D. Ruherford
687	Turnbull's blue is a compound called?	A. Ferricyanide B. Ferrous ferricyanide C. Ferrous cyanide D. Ferri - Ferro cyanide
688	Which one of the following mixture shows positive deviation form Rault's law and forms an azetrope with minimum boiling point	A. Methanol + CCl₄ B. Methanol + acetone C. Ether + HCl D. Acetone + chloroform
689	CFCs destroy ozone layer. How many ozone molecule a chlorine free radical can destroy	A. 10,000 B. 20,000 C. 100,000 D. 50,000
690	The method used only for the production of symmetrical alkanes	A. Kolb's method B. Clemmenen C. Cannizzaro D. Wolf kishner
	Ethylene can be prepared in	A. HCl B. Phenol

691	the laboratory by heating together ethyl alcohol and	B. Phenol C. HF D. H₂SO₄
692	Give IUPAC name fo Acetone	A. Ethanal B. Propanone C. Butanone D. Propanal
693	The detection of functional group is called	A. Numerical analysis B. Qualitative analysis C. Combustion analysis D. Quantitative analysis
694	Ionization energy does not increase?	A. With small atomic radius of atom B. If increase in no of electronic shells C. By increase in proton no of atom D. None of these
695	Quantum number value for 2p orbitals are:	A. n=2 ,l=1 B. n=1 ,l=2 C. n= ,l=0 D. n=2 ,l=0
696	The strongest acid among the following aromatic compound is	A. Ortho-nitrophenol B. Para-chlorophenol C. Para-nitrophenol D. Meta-nitrophenol
697	Compounds having the same molecular formula, but different functional groups show	A. Metamerism B. Position isomerism C. Chain isomerism D. Functional group isomerism
698	The molarity of the solution containing x grams $(NH_4)_2SO_4$ in 500 cm^3 of the solution is 0.6 what is x	A. 39.6 B. 45.1 C. 40.5 D. 42.7
699	The product of pressure and volume remains constant when temperature and quantity of gas is	A. zero B. variable C. kept constant D. None of these
700	Who one mole of each of the following is completely burned in oxygen, which gives the largest mass of carbon dioxide?	A. Carbon monoxide B. Diamond C. Ethane D. Methane
701	Which heavy metals do not have any safe limits	A. As B. Hg C. Cr D. All of these
702	The strongest hydrogen bond is in	A. HF B. HCl C. HBr D. HI
703	The amount of Si in the lithosphere is about	A. 27.72% B. 30.35% C. 35.30% D. 40.21%
704	Elements in which f-orbitals are in the process of completion are called	A. Outer transition element B. Inner transition elements C. Non-tranistion elements D. Radioactive elements
705	Which is independent of temperature	A. Molarity B. Molality C. Normality D. Mole fraction
706	The reaction CH3Br+OH------ --- CH3OH+Br is best described by.	A. Electrophilic substitution B. Nucleophile substitution bimolecular C. Nucleophile substitution unimolecular D. Addition reaction
707	Which on of the following compounds does not exist?	A. NCl₅ B. AsF₅ C. SbCl₅ D. PF₅
708	The sample being analyzed is called :	A. Electrolyte. B. Substance. C. Analyte. D. All of above

		D. All of above.
709	$SO_2$and NO_2produce pollution by increasing	A. Alkalinity B. Acidity C. Neutrality D. Buffer action
710	The state of hybridization of carbon atom in methane is	A. sp³ B. sp² C. sp D. dsp²
711	Question Image	
712	London dispersion forces are alos called:	A. Hydrogen bonding. B. Debye forces C. Van der Waal's forces D. Instantaneous dipole-induced dipole forces.
713	The factor which effect the rate of reaction	A. Nature of reactants B. Surface area C. Light D. All of the above
714	The relation between Kc and Kp is	
715	Setting time of cement is controlled by adding	A. Epsom B. Gypsom C. CaCO₃ D. CaCl₂
716	According to modern theory of chemical bonding atoms form bonds as it leads to a:	A. First decrease then increase in energy. B. Decrease in energy. C. No energy change. D. Increase in energy.
717	The only forces are London dispersion forces among the	A. Atoms of He in gaseous state at high temperature B. Molecules of water in liquid state C. Molecules of solid I₂ D. Molecular of hydrochloric acid gas
718	Which one of the following correctly describes the acid properties of phenol	A. Stronger than HCl B. Stronger than carboxylic acid C. An acid stronger than carbonic acid D. An acid weaker than carboxylic acid
719	The only non-metal in liquid form is	A. S B. Cl C. Br D. P
720	Solvent extraction is an unstable,Process and it is controlled by:	A. Alcohol extraction B. Petrol extraction C. Phenol extraction D. Ether extraction
721	Which is the used as test for the presence of alkenes	A. Reaction of cold dilute alkaline KMnO₄ B. Combustion C. Polymerization D. Catalytic hydrogenation
722	Which compound would undergo nucleophilic addition	A. Ethene, C₂H₄ B. Bromoethane, C₂H₅Br C. Ethanal, CH₃CHO D. Ethane, C₂H₆
723	The other name of cross linked polymers is	A. Linear polymer B. Branched polymer C. Inter connected polymers D. None of these
724	Question Image	A. [A] = [B] B. [A] < [B] C. [B] = [C] D. [A] > [B]
725	Functional group of ketones is:	A. ---CHO B. ---CO--- C. ---C≡ N D. ---COOH
726	Which of the following method is most appropriate for the manufacture of methane?	A. By reduction of CH2CL2 B. Wurtz reaction C. Liquification of natural gas D. None of these
727	Bell metal is an alloy of	A. Cu, Zn, and Sn B. Cu, Zn and Ni

727	Bell metal is an alloy of	C. Cu and Zn D. Cu and Sn
728	Question Image	
729	Which of the following is not a synthetic polymer?	A. Polyethylene B. PVC C. Nylon D. Cellophane
730	Dehydration of an alcohol at 180°	A. Alkene B. Ether C. Ester D. An hydride
731	Freezing point depression is measured by	A. Beckmann's apparatus B. Lands Berger's method C. Antifreeze apparatus D. All of the above
732	Which one of the following elements is not present in all proteins?	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur
733	Misch mental is	A. An alloy of Aluminium B. A mixture of chromium and lead chromate C. An alloy of lanthanoid metals D. An alloy of copper
734	Reaction of ethylamine with chloroform in alcoholic KOH produces	A. CH₃OH B. CH₃NC C. C₂H₅NC D. C₂H₅CN
735	Question Image	A. Primary alkyl halide B. Secondary alkyl halide C. Tertiary alkyl halide D. None of these
736	In purification of potable water the coagulant used is	A. Nickle sulpahte B. Copper sulpahte C. Barium sulpahte D. Alum
737	The acid present in the stings of bees and wasps in	A. Acetic acid B. Formic acid C. Formalin D. Formaldehyde
738	The ore $CaSO_4 2H_2O$ has the general name	A. Gypsum B. Dolomite C. Calcite D. Epsom salt
739	Permonosulphuric acid is known as	A. Marshall's acid B. Carlo's acid C. Sulphuric acid D. None of these
740	Which of the following statement regarding CATHODE RAY is correct.	A. Cathode rays can ionize gas B. Cathode rays cannot cause chemical changes C. Cathode rays can possess momentum D. All of these
741	Out of 110 known elements, transition elements are	A. 40 B. 60 C. 50 D. 80
742	The fibre which is made from acrylonitrile as monomer:	A. PVC B. Rayon fibre C. Acrylic fibre D. Polyester fibre
743	Aspirin is	A. Acetyl salicylic acid B. Phenyl salicylic acid C. Salicylic acid D. Benzoic acid
744	Which of the following pairs are chemically dissimilar?	A. Na and K B. Ba and Sr C. Zr and Hf D. Ca and Zn
745	Azimuthal quantum number of last electron of $_{11}Na$ is	A. 1 B. 2 C. 3

		D. 0
746	Preparation of vegetable ghee involves	A. Halogenations B. Hydrogenations C. Hydroxylation D. Dehydrogenations
747	Carboxylic acids are more acidic than pehnol and alcohol because of	A. Intermolecular hydrogen bonding B. Formation of dimmers C. Highly acidic hydrogen D. Resonance stabilization of their conjugate base
748	In formadaldehyde and KOH are heated then we get	A. Acetylene B. Methane C. Methyl alcohol D. Ethyl formate
749	A state function of the system which describes together the internal energy and the work done is called	A. Enthaply B. Internal energy C. Work D. Free energy
750	Smell of halogen is	A. Fruity B. Sweet C. Irritating D. Rotten egg
751	In an alkaline battery the anode, the cathode and electrolyte are respectively.	A. Manganese dioxide, Zinc, sodium hydroxide B. Zinc, Manganese dioxide, Sodium hydroxide C. Zinc, manganese dioxide, potassium hydroxide D. Manganese dioxide, zinc, potassium hydroxide
752	Which halogen has maximum Van-der Waal's forces?	A. F₂ B. Cl₂ C. Br₂ D. I₂
753	Hydration energy depends upon:	A. Change of Ion B. Size of Ion C. Charge to size ratio D. Heat changes
754	Question Image	A. 4 mole per dm³ B. 2 mole per dm³ C. 0.33 mole per dm³ D. 0.67 mole per dm³
755	C_2H_5CHO and $(CH_3)_2CO$ can be distunguished by testing with	A. Phenyl hydrazine B. Hydroxylamine C. Fehling solution D. Sodium bisulphate
756	Boyle's law does not fall even	A. Temperature is extremely high B. Pressure is extremely high C. Mixture of gases is taken D. all of above
757	Objects of the size of an atom can be observed in	A. An electron microscope B. An x-ray spectrum C. Atomic absorption spectrum D. A visible spectrum
758	Acetylene had a characteristic ethereal smell resembling that of	A. Ginger B. Vinegar C. Garlic D. Onion
759	On the basis of VSEPR theory $SO_2$is a	A. Liner molecule B. A bent molecule C. A strong molecule D. A gaseous molecule
760	Which of the following ions has more electrons than protons and more protons than neutrons.	A. D- B. D2O+ C. He+ D. OH-
761	A liquid on evaporation causes	A. Heating effect B. Cooling effect C. Suffication D. All of above
762	Electronegativity values of the elements F, Cl and Br vary	A. F > Cl > Br B. Br > Cl > F C. Cl > Br > F D. Cl > F > Br
763	High purity copper metal is	A. Carbon reduction B. Hydrogen reduction

763	obtained by	C. Electrolytic reduction D. Thermite reduction
764	Chemical equilibrium involving reactants and products in more than one phase is called	A. Static B. Dynamic C. Homogeneous D. Heterogeneous
765	Phosphorus helps the growth of	A. Root B. Leave C. Stem D. Seed
766	Which is not the condition for the formation of smog	A. There must be sufficient NO gas B. There must be sunlight to help photo chemical reaction to take place C. Air must be blowing swiftly D. There must be SO₂in the air
767	Reaction of Griganard's reagent with CO_2gives:	A. Aldehyde B. Pri-alcohol C. Sec-alcohal D. Carboxylic acid
768	Tertiary alkyl halides are practically inert to substitution by S_N2 mechanism because of	A. Onsolubility B. Instability C. Inductive effect D. Steric hindrance
769	The geometry of acetylene is	A. Angular B. Bent C. Trigonal D. Linear
770	Most metals are conductors of electricity because of the :	A. Light weight. B. Immobility of the electrons. C. Lustrous surfaces D. Relatively free movement of their electrons
771	Plaster of paris is mixed with water, the expansion in volume is:	A. 1% B. 2% C. 3% D. 4%
772	Which is used as cooling medium in nuclear reactors?	A. He B. Ne C. Ar D. Kr
773	CaC_2on hydrolysis form	A. CH₄ B. C₂H₄ C. C₂H₂ D. C₆H₆
774	B-B'-dichloroethyl sulphide is commonly known as	A. Mustard gas B. Laughing gas C. Phosgene gas D. Bio gas
775	When electrically is passed through molten Al_2O_3+ $Na_3AlF_6$and 13.5 gms of Al are deposited, the number of farady must be	A. 0.5 B. 1.0 C. 1.5 D. 2.0
776	Grignard reagent is prepared by the reaction of magnesium metal with alkyl halide in the presence of	A. Alcohol B. Water C. Suephuric acid D. Dry ether
777	Sodium is never found free in nature because of its	A. Chemical reactivity B. Small ionic size C. Small atomic volume D. None of these
778	Which of the followings is not a nulceophile	A. OH⁻ B. NH₃ C. C₂H₅O⁻ D. Br₂
779	Non-formation of menisus by Hg in presence of $O_3$is due to the formation of	A. Mercuric oxide B. Mercurous oxide C. Mercuric chloride D. Mercurous chloride
780	Which of the following derivative cannot be prepared directly from acetic acid?	A. Acetamide B. Acetyl chloride C. Ethyl acetate D. Acetic acid

781	The bond angle depends upon the	A. Types of bonds B. Number of bonds C. Non-bonding electron pairs D. All of the above
782	The ratio of the ionization energy of H and $Be^{3+}$is	A. 1 : 1 B. 1 : 3 C. 1 : 9 D. 1 : 16
783	The apex angle of the folded filter paper is slightly greater is termed as:	A. 60 degree B. 30 degree C. 45 degree D. 90 degree
784	Who rejected the vital force theory	A. Wholer B. Fisher C. Newton D. Lewis
785	On passing HCl gas through a saturated solution of commercial sodium chloride, pure crystals of NaCl are precipitated due to	A. Increase in pH of the solution B. Decrease in pH of the solution C. Common ion effect D. Increase in ionization of NaCl
786	The rate of reaction determined at a given time is called	A. Average rate B. Instantaneous rate C. Specific rate D. Overall rate
787	If the radius of first Bohr orbit be a_o, then the radius of third Bohr orbit would be	A. 3 x a_o B. 6 x a_o C. 9 x a_o D. 1/2 x a_o
788	The ionic strength of a solution containing 0.1 mole/kg of KCl and 0.2 mole/kg of $CuSO_4$is	A. 0.3 B. 0.6 C. 0.9 D. 0.2
789	The element with highest electron affinity among the halogen is	A. F B. Cl C. Br D. I
790	In microwave own , the wave energy produced in absorbed by certain polar molecule, On which molecule out of the given molecules would maximum energy?	A. SiO2 B. NaCl C. C2H5OH D. None of these
791	A fuel has the same knocking property as a mixture of 70 isooctane (2, 2, 4- trimethyl pentane) and 30% n-heptane by volume the octane number of the fuel is	A. 100 B. 70 C. 50 D. 40
792	The tendency of an atom to attract shared electron pair towards itself is called	A. Covelent bond B. Electronegativity C. Ionization potential D. Electronic affinity
793	Which property is not present in lipids?	A. Liquid B. Solid or semi solid C. Soluble in water D. Form emulsion
794	Rate law of an equation is obtained :	A. From a balance equation. B. Can be calculated theoretically as well as determined experimentally. C. It is only calculated theoretically. D. Experimentally.
795	Allotropic forms of phosphorus are	A. three B. four C. five D. six
796	Dipole moment of CO molecule is:	A. 0.0 B. 1.112 D C. 0.112 D D. 2.112 D
797	A cell constant is generally found by measuring the conductivity of aqueous	A. BaCl₂ B. KCl C. NaCl

	conductivity of aqueous solution of	C. NaCl D. $MgCl_2$
798	How does the ionization energy of 1st group elements vary?	A. Increases down the group B. Decreases down the group C. Remains unchanged D. Variation is not regular
799	A compound containing carboxyl group in them are called:	A. Ketone B. Ether C. Carboxylic acids D. Polycarboxylic acid
800	Question Image	A. $RCH(CH_3)CO_2H + CH_3OH$ B. $RCH(CH_3)CO_2H + HCO_2H$ C. $RCH(CH_3)OH + CO_2$ D. $RCH(CH_3)OH + HCO_2H$
801	Steel is manufactured by open Hearth process from.	A. Wrought iron B. Cast iron C. Steel scrap D. All of the above
802	The formula of lime stone is	A. $CaCl_2$ B. $MgCO_3$ C. Na_2CO_3 D. $CaCO_3$
803	The empirical formula of benzene is determined by	A. IR spectra B. U.V C. Elemental analysis D. NMR spectra
804	During electrolysis of KNO_3, $H_2$is evolved	A. Anode B. Cathode C. Both a and b D. None
805	The molecules of CO_2in dry ice from the	A. Ionic crystalls B. Covalent crystals C. Molecular crystals D. Any type of crystal
806	Which reagent will distinguish a ketone from an aldehyde	A. Br_2 B. 2, 4-dinitrophenylhydrazine C. $NaBH_4$ D. Tollen's reagent
807	0.5 M of $H_2SO_4$is diluted from 1 litre to 10 litre, normality of resulting solution is	A. 1 N B. 0.1 N C. 10 N D. 11 N
808	Vinegar made form cane sugar, now a days synthetically contains	A. Citric acid B. Lactic acid C. Acetic acid D. Palmitic acid
809	Which one is the most toxic?	A. Carbon B. CO C. CO_2 D. SO_2
810	1.1 mol of A is mixed with 2.2 mol of B and the mixture is kept in on litre flask till the equilibrium is reached. At equilibrium, 0.2 mol of C is formed. If the equilibrium reaction is A+2B 2C+D, the value of equilibrium constant is	A. 0.002 B. 0.004 C. 0.001 D. 0.003
811	From the difference between expected bond energies for the normal covalent bond and experimentally determined values Pauling calculated the values of	A. Ionization potential of elements B. Electron affinity of elements C. Electronegativity of elements D. Bond length
812	The tendency of atoms to attain a maximum of eight electrons in the valence shell is known as:	A. Duplet rule. B. Triad rule. C. Octet rule. D. Tetrade rule.
813	The reaction rate is expressed in the units of	A. Mol $dm^{-3}S^{-}$ B. Mol dm^{-3} C. Mol $dm^{-3}N^{-}$ D. $dm^{-3}S^{-}$

814	Negatively charged particle nature of cathode rays was first demonstrated in 1895 by:	A. Millikan. B. J. Perrin. C. Hittrof D. J.J. Thomson.
815	Volcanoes produce SO_2:	A. 47% B. 57% C. 67% D. 77%
816	The valency of noble gases, in general, is	A. Zero B. One C. Three D. Two
817	The volume of a gas at 0^oC is 100 m3, what will be the volume of the same gas 546 ^oC, assuming that pressure remains constant.	A. 5460 cm3 B. 300 cm3 C. 200 cm3 D. 546 cm3
818	In Boyle's law which of the following pair remains constant :	A. Temperature and quality of a gas. B. Pressure and quality of a gas. C. Temperature and pressure D. Temperature and quantity of a gas.
819	Among the elements given below, the one with highest electropositivity is	A. Cu B. Cs C. Cr D. Ba
820	Aromatic hydrocarbons are the derivatives of	A. Normal series of paraffins B. Alkene C. Benzene D. Cyclohexane
821	The energy units in which heat changes usually expressed in SI-system are	A. Joule B. Calorie C. Kilo Joule D. Both a and c
822	The oxidation state of Fe in $[Fe(CN)_6]^{3-}$is	A. +2 B. +3 C. +4 D. -3
823	A compound X contains 50% sulphur and 50% oxygen by mass. What is the empirical formula of compound X?	A. SO B. SO₂ C. SO₃ D. SO₄
824	The prosthetic group in glycoprotein is	A. Carbohydrate B. Fat C. Vitamin D. Nucleic acid
825	A double bond consists of:	A. Two sigma bonds B. One sigma and one pi bonds C. One sigma and two pi bonds D. Two pi bonds
826	Energy of electron in the infinite Bohr orbit of H-atom is	A. 0 KJ/mole B. 1 KJ/mole C. -1 KJ/mole D. -1313.32 KJ/mole
827	The range of UV-B is:	A. 320 to 400 nm B. 200 to 280 nm C. 280 to 320 nm D. 50 to 400 nm
828	n + l value for 4f will	A. 2 B. 5 C. 7 D. 9
829	Hemoglobin is 68000 times heavier than:	A. Oxygen atom B. Nitrogen atom C. Carbon atom D. Hydrogen atom
830	As compared to molar solution, in the molal solution the quantity of solvent is :	A. Comparatively lesser B. More or less equal C. Comparatively greater D. Very large
		A. J.J. Thomson

831	The charge of an electron is determined by	B. Crooks C. Perrin D. R.A.Millikan
832	The actual number of atoms or molecules taking part in rate determining step is	A. Rate of reaction B. Velocity of reaction C. Order of reaction D. Molecularly
833	The vapour pressure of two liquids 'p' and 'Q' are 80 and 60 torr respectively. The total vapour pressure of solution obtained by mixing 3 mole of P and 2 mol of Q would be	A. 140 torr B. 20 torr C. 68 torr D. 72 torr
834	Group I-A elements react with water fastly than the reaction of group II-A elements because	A. I_Aelements are more soft then II_A B. I_Aelements are non-metals C. I_Aelements have 1 electron in their outermost s-orbital and are strongly electropositive D. I_Aelements make ionic bond
835	Ethyl chloride on treatment with aqueous alkali gives	A. Ethane B. Ethene C. Ethanal D. Ethanol
836	Compounds containing cyanide group (.....C=H) are called:	A. Nitrides B. Nitrites C. Nitriles D. Cyanides
837	Hydrocarbon molecule with large chain lengths experience:	A. Weaker attractive forces B. Stronger attractive forces C. Repulsive forces D. No attractive forces
838	Hybridization in alkanes is:	A. sp B. sp² C. sp³ D. dsp²
839	The open chain compounds are also called	A. Aliphatic B. Alicylic C. Aromatic D. Both a and b
840	Which of the following does not react with phenyl hydrazine?	A. Ethanol B. Ethanal C. Acetone D. Acetophenone
841	Reaction of Grignard's reagent with ketones gives: Reaction of Grignard's reagent with formaldehyde gives:	A. Pri-alcohol B. Sec-Alcohol C. Ter-alcohol D. Carboxylic
842	Which of the following may affect the rate constant (k) fro a reaction :	A. Change in concentration. B. Change in pressure. C. Change in pH. D. Change in temperature.
843	Th IUPAC name of the compound having formula (CH3) 3 C - CH = CH2 is	A. 1, 1-Dimethyl-3-butene B. 1,1,1-Trimethyl-3-propene C. 3,3,-Dimenthyl-1-butene D. 3,3,3,-Trimethyl-1-propene
844	Which of these always applies to a nucleophile	A. It attacks a double bond B. It has a lone pair of electrons C. It is single atom D. It is negatively charged
845	Which of the following gases is used for illuminating purpose?	A. Methane B. Ethane C. Propane D. Butane
846	Mass of simple electron is:	A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">9.1 x 10⁻³¹ kg<o:p></o:p> B. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">9.1 x 10⁻³⁰ kg<o:p></o:p> C. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">1.66 x 10⁻³¹ kg<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-

		serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"><o:p></o:p> D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">9.1 x 10⁻³¹ kg<o:p></o:p>
847	An electrophile may be	A. Positive B. Negative C. Neutral D. Both c and a
848	Alkanes may be prepared by the reaction of alkyl halides with	A. Alcohol B. Carboxylic acid C. Grignard reagents D. None of these
849	Chromium (VI) is highly toxic and can cause	A. Blindness B. Cancer C. Liver problems D. Blood problems
850	During redox reaction an oxidizing agent	A. Gains electrons B. Is oxidized C. Loses electrons D. Hydrolysed
851	Catenation is a process in which carbon shows the properties of making	A. Multiple bonds B. Hybridization C. Long chains or rings of carbon atom D. Showing isomerism
852	Which of the following is a molecular diseases?	A. Allergy B. Cancer C. German measles D. Sickle cell anemia
853	Plastics are a pollution problem because many plastics	A. Are made from petroleum B. Are very inflammable C. Burn to produce toxic fumes D. Decompose to produce toxic products
854	If the value of principal quantum number is 3. the total possible values for magnetic quantum number will be	A. 1 B. 4 C. 9 D. 12
855	Evaporation of water is possible at	A. Above 100⁰ B. 0⁰ C. 100⁰ D. At all temperature
856	Question Image	A. Treatment with HCN followed by acid hydrolysis B. Oxidation of acetaldehyde followed by basic hydrolysis C. Treatment with HCN followed by reduction D. Treatment with HCN followed by oxidation
857	By simply reacting Grignand's reagent with water we get	A. An alkane B. Higher alkane C. An alkene D. An alkyne
858	The color of ppts formed by Benedirct's test is	A. Brick red B. Wine red C. Yellow D. Orange
859	Question Image	A. Step 1 Step 2 HCl HCN B. HcN,NaCH H₂SO₄ C. H₂SO₄ K₂Cr₂O₇/H₂SO₄ D. KCN HCl
860	Which of the following statements is correct?	A. Phenol is less acidic than ethyl alcohol B. Phenol is more acidic than ethanol C. Phenol is more acidic than carbonic acid D. Phenol is more acidic than CH₃COOH
861	Tetraethyle lead causes disease:	A. Typhoid B. Respiratory C. Stomach D. Muscular
862	How many mole of acidfied $FeSO_4$solution can be completely oxidized by one mole of $KMNO_4$?	A. 10 B. 5 C. 6 D. 2

863	Most reactive halide towards S_N1 reaction is	A. n-Butyl chloride B. sec-Butyl chloride C. tert-Butyl choride D. Allyl chloride
864	A filtration process could be very time consuming if it were not aided by a gentle suction which is developed:	A. If the paper covers the funnel up to its circumstances B. If the paper has got small sized pores in C. If the stem of funnel is large so that it dips in to filtrate D. If the paper fits tightly.
865	Indicate the correct statement	A. All lanthanidees are present in the same group B. All halogens are present in the same period C. All the alkali metals are present in the same group D. All the noble gases are present int he same period
866	Cathode rays drive a small paddle wheel placed in their path. This observation shows that	A. Cathode rays travel in straight lines B. Cathode rays are negatively charged C. Cathode rays produce x-rays D. Cathode rays are material particles having momentum
867	The benzene molecule contains	A. Three double bond B. Two double bond C. One double bond D. Delocalized pie electron charge
868	When n-hexane is heated in the presence of Pt at 500°C, it cyclists to give	A. Benzene B. Cyclohexene C. Benzene D. Toluene
869	Ionization energies increase from left to right along the period due to	A. Increase in nuclear charge B. Repulsion of electron increases C. Repulsion of protons increase D. Atomic size increase along the period
870	XeF_4has shape of	A. Sphere B. Trigonal bipyramidal C. Tetrahedral D. Square planar
871	Which compound will not dissolve in H_2O	A. C₆H₆ B. C₂H₅OH C. CH₃CH₂CH₂OH D. CH₃- OH
872	When 0.1 g of magnesium is treated with an excess of hydrochloric acid, what volume of gas at room temperature and pressure will be produced	A. 10 cm³ B. 25 cm³ C. 48 cm³ D. 100 cm³
873	Cracking done at low pressure and with a catalyst is called _____ cracking	A. Thermal B. Catalytic C. Steam D. None of them
874	Grignard reagent is reactive due to :	A. The presence of halogen atom B. The presence of Mg atom C. The polarity of C - Mg bond D. None of them
875	A pseudo uni-molecular reaction has order of reaction :	A. 3 B. 2 C. 1 D. 0
876	Which molecule out of given molecules will not form hydrogen bond with another of the given molecules.	A. NH3 B. CH3OH C. CH2NH3 D. CH2CHO
877	Which reaction produces a free radical	A. SN reaction B. Homelytic fission reaction C. Heterolytic fission reaction D. Addition reaction
878	Question Image	A. s B. p C. d D. f
879	The film forming components of paints are	A. Resins B. Thinners C. Pigments D. Driers

880	Which Statement about gases is not correct?	A. They spread throughout the vessel B. Pressure is due to collision C. There are larger spaces between the molecules D. Molecules are arranged regularly
881	To differentiate isomers we use	A. n- B. iso- C. neo D. All of them
882	Most common reactions of benzene and its derivatives are	A. electrophilic addition reactions B. electrophilic substitution reactions C. Nucleophilic addition reactions D. Nucleophilic subtitution reactions
883	Tetrabromoethane on treatment with alcoholic zinc gives	A. Ethylbromide B. Ethane C. Ethene D. Ethyne
884	Alkali and alkaline earth metals are basic oxides except:	A. Li B. Be C. Fr D. Ba
885	Which is not the enzyme involved in the preparation of ethyl alcohol by fermentation of starch	A. Diastase B. Maltase C. Zymase D. Invertase
886	Pakistan in the beginning was a country	A. industrial B. chemical C. agrarian D. technological
887	The process of osmosis was first discovered by	A. Nollet B. Pfeffer C. Traube D. Dutrochet
888	The atom of an element is	A. The smallest particle B. The fundamental particle C. The independent particle D. The charged particle
889	The size of electronic shell is described by	A. Azimuthal Q. no B. Magnetic Q.No C. Spin Q. No D. Principle Q. No
890	Ammonia contains nitrogen in it:	A. 46% B. 50% C. 80% D. 82%
891	The value of activation energy Ea of a reaction can be determined from the value of slope of the straight line obtained by plotting a graph between 1/T and log k. the value of Ea is equal to	A. Slope B. 1/Slope C. Slope x R D. Slope x 2.303 R
892	Thre rate of S_N2 reaction depends upon the	A. Concentration of alkyl halides B. Concentration of nucleophile C. Concentration of alkyl halides and nucleophile D. None of the above
893	The number of atoms present in molecule determines its:	A. Molecularity B. Atomicity C. Basicity D. Acidity
894	Which fills the space between needles in cement setting?	A. Ca(OH)₂ B. Al(OH)₃ C. CaCO₃ D. MgSO₄
895	Which acid is used in the manufacture of synthetic fibre	A. Formic acid B. Phthalic acid C. Carbonic acid D. Acetic acid
896	Which of the following element is responsible for oxidation of water to O_2in biological process?	A. Fe B. Mn C. Cu D. Mo

897	Butanenitrile is formed by reaction of KCN with	A. Propyl alcohol B. Butyl chloride C. Butyl alcohol D. Propyl Chloride
898	Which three elements are needed for the healthy growth of plants?	A. N,S,P B. N,Ca, P C. N,P,K D. N,K,C
899	In the ground state of an atom, the electron is present	A. In the nucleus B. In the second shell C. Nearest to the nucleus D. Farthest from the nucleus
900	Formation of a cation is:	A. Exothermic process B. Non-endothermic process C. Endothermic process D. None of above
901	For preparing an alkane, a concentrated aqueous solution of sodium or potassium salt of saturated carboxylic acid is subjected to	A. Hydrolysis B. Oxidation C. Hydrogenation D. Electrolysis
902	Partial pressure of a solution component is directly proportional to its mole fraction. This statement is known as	A. Henry's law B. Raoult's law C. Distribution law D. Ostwald's dilution law
903	Maximum hydrogen bonds in water are	A. 4 B. 3 C. 2 D. 8
904	The energy absorbed when an electron is added to a gaseous atom to form a gaseous ion is called	A. Electron affinity B. Ionization energy C. Both of these D. None of these
905	Gases exert pressure on walls of container because the gas molecules :	A. Obey gas laws. B. Have definite volume. C. Collide with the walls of container. D. Collide with each other.
906	Proton was discovered by:	A. Chadwick B. J.J. Rhomson C. Millikan. D. Goldstein.
907	Which phosphorus is the most poisonous?	A. White B. Red C. Black D. All
908	Which of the following is halo form	A. CHBr₃ B. CHCl₃ C. CHI₃ D. All of these
909	Which statement is incorrect for and ideal solution	A. The forces of attractions between solute and solvent molecules are same B. There is no evolution or absorption of heat C. Volume of the solution is less than sum of volumes of individual components D. Vapour pressure of solution is directly proportional to the mole fraction of solvent
910	Selection of filter paper depends upon sizes of particles to be:	A. Tested B. ^{Filtered} C. Checked D. All of above
911	Eutrophication causes reduction in	A. Dissolved hydrogen B. Dissolved oxygen C. Dissolved salts D. All the above
912	Alkene general formula :	A. C_nH_{2n+2} B. C_nH_{2n} C. C_nH_{2n-2} D. C_nH_{2n+1}
913	In which type of following solutions the total volume of solutions may not be necessarily equal to sum of volumes of solute and solvent ?	A. Percentage volume/volume B. Percentage volume/weight C. Percentage weight/volume D. Percentage weight/weight

914	Borax is a common mineral of alkali metal sodium. Its formula is	A. Na₂B₄O₇ B. Na₂,B₄O₇. 10H₂O C. Na₂B₃O₆. 10H₂O D. Na₂B₄O₇- 5H₂O
915	Carboxylic acids functional group is:	A. ----COOH B. ----CO--- C. ----OH D. -----COH
916	Primary and secondary alcohols on action of red hot copper give	A. Aldehydes and ketones respectilvely B. ketones and aldehydes respectively C. Only aldehydes D. Only ketones
917	Which of the following phenomena will occur when two atoms of the elements having same spin of electron approach for bonding?	A. Orbital overlap will not occur B. Bonding will not occur C. Both (A) and (B) are correct D. None of the above are correct
918	All elements of group VI-A non-metal except	A. Te B. S C. Se D. Po
919	Solvent extraction is an equilibrium process and it is controlled by :	A. law of mass action. B. the amount of solvent used. C. distribution law. D. the amount of solute.
920	The movement of solvent molecules through a semipermeable membrane is called	A. Electrolysis B. Electrophoresis C. Osmosis D. Cataphoresis
921	Which of the following will have the highest boiling point at 1 atm pressure?	A. 0.1 M NaCl B. 0.1 M Sucrose C. 0.1 M BaCl₂ D. 0.1 M Glucose
922	Active metals react with carboxylic acid releasing gas:	A. CO B. CO₂ C. H₂O as steam D. H₂
923	When an aqueous solution of potassium salt of monocarboxylic acid is subjected to electrolysis, corresponding alkane is formed. This reation is known as	A. Cannizaro reaction B. Sabatier-secderens reaction C. Alkylation D. Kolbe's reaction
924	Which of the following brings about the conversion of starch into maltose	A. Maltase B. Zymase C. Diatase D. Invertase
925	When benzene is burnt in free supply of air, it is completely oxidized to	A. CO B. CO₂₊H₂O C. H₂CO₃ D. None
926	Ecology is a science of environment and deals specially with	A. Stratosphere B. Biosphere C. Lithosphere D. Hydrosphere
927	Ethyl acetate is obtained when methyl magnesium iodide reacts with	A. Ethyl formate B. Ethyl choroformate C. Acetyl chloride D. carbondioxide
928	What is the most common catalyst used in hydrogenation of oils	A. Cobalt B. Nickel C. Tungsten D. Copper
929	A solution can be	A. Dilute and concentrated B. Saturated and dilute C. Saturated and unsaturated D. Supersaturated and saturated
930	Gypsum is applied to the soil to provide calcium and	A. Oxygen B. Nitrogen C. Phosphorous D. Sulphur

		D. Sulphur
931	Which is a component of macronutrient?	A. Zn B. N C. Mo D. Cl
932	The reference electrode is made by using	A. ZnCl₂ B. CuSO₄ C. HgCl₂ D. Hg₂Cl₂
933	The amount of solute present in the given amount of solvent is called	A. Molarity B. Molality C. Concentration D. Solubility
934	The order of decreasing ease of reaction with ammonia is	A. Anhydrides, esters, ethers B. Anhydrides, ethers, esters C. Ethers, anhydrides, esters D. Esters, ethers, anhydrides
935	When electrons revolve in stationary orbits	A. There is no change in energy level B. They vecome stationary C. They are gaining kinetic energy D. There is increase in energy
936	Glacial acetic acid freezes to ice like solid at (°C)	A. 07 B. 17 C. 27 D. 37
937	For which system does the equilibrium constant, kc has units of (concentration) ?	A. N₂+3H₂₋₋-----2NH₃<o:p></o:p> B. H₂+L₂---------2HL<o:p></o:p> C. 2NO₂----------N₂O₄<o:p></o:p> D. 2HF--------H2+F₂<o:p></o:p>
938	]Which of the following is a pseudo solid?	A. Atoms of He is gaseous stat at high temperate. B. Molecules of water in liquid state. C. Molecules of solid I₂ D. Molecular of hydrochloric acid gas
939	A 4f orbital has	A. one node B. two node C. three node D. four nodes
940	Poly hydroxyl compounds of aldehyde and ketones are:	A. Carbohydrates B. Proteins C. Fats D. Lipids
941	The number of atoms or molecules whose concentrations determine the rate of the reaction is called	A. Molecularity B. Order C. Rate of reaction D. Rate constant
942	Question Image	A. 0.60 B. 1.67 C. 0.66 D. 2.6
943	Which orbital is in the process of completion in case of transition elements	A. p-orbital B. f-orbital C. d-orbital D. s-orbital
944	In exothermic reversible reaction increase in temperature shift the equilibrium to :	A. Remains unchanged. B. Product side. C. Reactant side. D. None of above.
945	Question Image	A. 450°C B. 250°C C. 850°C D. 1000°C
946	An artificial smell of banana is produced in many articles y using esters which of the following is that	A. Amyl acetate B. Isoamyl valerate C. Octyl acetate D. Methyl butyrate
947	The most acidic of the following compounds is	A. P₂O₃ B. Sb₂O₃ C. B₂O₃ D. As₂O₃
948	95% ethanol is called :	A. Rectified ether. B. Diesel. C. Rectified spirit

		C. Rectified spirit. D. Petrol.
949	Question Image	A. 2 B. 3 C. 4 D. 9
950	The elements of sub-group A are called	A. Transition elements B. Main elements C. Typical elements D. Rare earth elements
951	White P when boiled with strong solution of caustic soda produces	A. Phosphine B. Posh acid C. Phosphorous acid D. None
952	Hydrogen bonding is present between the molecules of	A. NH₃ B. H₂O C. HF D. All of above
953	Which is in differnet phase form other metals	A. Ni B. Hg C. Cd D. Na
954	Essential amino acids are those amino acids which	A. Body can not synthesize B. Body can synthesize C. α-amino acids D. β-amino acids
955	Metal tend to lose electrons, becoming:	A. Metals<o:p></o:p> B. Positively charged<o:p></o:p> C. Negatively charged<o:p></o:p> D. (a) <!--[endif]-->And (c)<o:p></o:p>
956	Formula of chloroform is:	A. CH₃Cl B. CCl₄ C. CH₂Cl₂ D. CHCl₃
957	Acetic Acid reacts with PCl_5 giving:	A. Acetamid B. Acetyl chloride C. Alcohol D. ether
958	When no work is done by the system	A. The volume of system decreases B. The volume of system increases C. The volume of system does not change D. None of above
959	For which mechanisms, the first step involved is the same:	A. E₁ and E₂ B. E₂and SN₂ C. E₂ and E₁ D. E1 and SN₁
960	When phenol is reduced in the presence of Zn dust, we get	A. Cyclohexene B. Cyclohexane C. Benzene D. Benzyne
961	Which of the following is directly related with entropy	A. Pressure B. Degree of freedom C. Temperature D. Both b and c
962	Benzene is prepared from n-hexane in the presence of catalyst	A. Cr₂O₃ B. Al₂O₃ C. SiO₂ D. All above
963	In a compound an atom has negative oxidation state because	A. Atom is negatively charged B. Atom acts as cathode C. Atom is more electronegative D. Atom has lowest ionization energy
964	What is not true about DNA	A. It preserve genetic information B. To relicates C. Synthesized protein D. It has a linear structure

965	Which of the following hydrides has the lowest boiling point?	A. H₂O B. H₂S C. H₂S3 D. H₂Te
966	A cell in which spontaneous redox reaction generates an electric current is called	A. Electrolytic cell B. Electrochemical cell C. Voltaic or Galvanic cell D. Biological cell
967	NaH is	A. Ionic hydride B. Complex hydride C. Covalent hydride D. Interstitial hydride
968	Sintered glass is a porous material use for :	A. Absorpton B. Decoration. C. Filtration. D. All of above.
969	The reaction between primary amine-chloroform and alcoholic caustic potash is called	A. Wurtz reaction B. Frankland reaction C. Cannizzaro's reaction D. Carbylamine reaction
970	What will react differently with the two isomeric pentols, $(CH_3)_3CCH_2OH$ and $(CH_3)_2CH\ CH_2CH_2OH$	A. Acidified (aq) KMnO₄ B. Concentrated H₂SO₄ C. PCl D. Sodium
971	Second most element in the universe is	A. He B. Ne C. Ar D. Kr
972	Which gas is used for welding purposes	A. Butane B. Nitrogen C. Methane D. Acetylene
973	Vinyl acetylene combines with HCl to form:	A. Polyacetylene B. Benzene C. Chloroprene D. Divinyl acetylene
974	Enthalpy of neutralization of all the strong acids and strong bases has the same value because	A. Neutralization leads to the formation of salt and water B. Strong acids and bases are ionic substances C. Acid always give rise to H⁺ions and bases always furnish OH⁻ions D. The net chemical change involve the combination of H⁺and OH⁻ions to form water
975	Nobel gases are placed group:	A. Group IV-A B. Group V-A C. Group VI-A D. Group VII-A
976	In the periodic table, the element with atomic number 16 will be placed in the group	A. Fourteen B. Sixteen C. Thirteen D. Fifteen
977	Alkali metals have electrons in s-orbital:	A. one B. two C. three D. Four
978	$N_2O_4 \rightleftharpoons 2NO_2$ For the above reaction, which of the Following expression of K_c correct :	A. <o:p></o:p> Kc = [N₂O₄]/[NO₂]²<o:p></o:p> B. Kc = [N₂O₄]/ [NO₂]<o:p></o:p> C. Kc = [N₂O]²/[N₂O₄]<o:p></o:p> D. Kc = [N₂O₄]/[N O₂]<o:p></o:p>
979	Identify the incorrect statement with respect to ozone	A. Ozone is formed in the upper atmosphere by a photochemical reaction involving dioxygen B. Ozone is more reactive than diaoxygen C. Ozone is diamagnetic whereas dioxygen is paramagnetic D. Ozone protects the earth's inhabitants by absorbing gamma-radiations
980	Which of the following represents elements in order of increasing atomic size?	A. I, Br, Cl B. Na, Mg, C C. C, N, O D. Li, Na, K
	When during electrolysis of a solution of $AgNO_3$, 9650 coulombs of charge pass	A. 1.08 g B. 10.8 g

981	through the electroplating bath, the mass of silver deposited on the cathode will be	B. 10.8 g C. 21.6 g D. 108 g
982	Benzene was discovered by Michael Faraday's in	A. 1824 B. 1825 C. 1826 D. 1827
983	In a Galvanic cell	A. Chemical energy is converted into electricity B. Chemical energy is converted into heat C. Electrical energy is converted into heat D. Electrical energy is converted into chemical energy
984	How many isomers are possible for C2H2Cl3	A. 3 B. 1 C. 2 D. 4
985	Which of the following is the most suitable method for removing the traces of water from ethanol?	A. Reacting with Na metal B. Passing dry HCl through it C. Distilling it D. Reacting with Mg
986	When methane reacts with Cl_2in the presence of diffused light the products obtained are	A. Chloroform only B. Carbon tetrachloride only C. Chloromethane and dichloromethane D. Mixture of a, b, c
987	In t-butyl alcohol, the tertiary carbon is bonded to:	A. Two hydrogen atom B. Three hydrogen atoms C. One hydrogen atoms D. No hydrogen atoms
988	Liquids are less common than :	A. Solids B. Plasmas C. Gases D. All of above
989	Which one of the following enzymes brings about the hydrolysis of fats?	A. Urease B. Maltase C. Zymase D. Lypase
990	The reaction-method that does not give an alkane is	A. Catalytic hydrogenation of alkanes B. Wurtz reaction C. Hydrolysis of alkyl magnesium bromide D. Dehydrohalogenation of an alkyl halide
991	The rate equation for a reaction is Rate =k[A]. what are unit of K ?	A. Mole-1 dm³ S⁻¹<o:p></o:p> B. Mole dm³ S⁻¹<o:p></o:p> C. Moledm³<o:p></o:p> D. S⁻¹<o:p></o:p>
992	Which is not nitrogeneous fertilizers?	A. (NH₄)₂HPO₄ B. NH₄NO₃ C. Urea D. Calcium phosphate
993	Question Image	A. Condensation B. Electrophilic substitution C. Free radical substitution D. Nucleophilic substitution
994	The conductivity of strong electrolyte	A. Increases on dilution slightly B. Does not change on dilution C. Decreases on dilution D. Depends on density of electrolyte it self
995	Replacement of hydrogen atom by - SO_3H group in benzene is called	A. Nitration B. Alkylation C. Sulphonation D. Acylation
996	A solution consisting of 92 grams ethyl alcohol (C_2H_5OH) 96 grams methyl alcohol (CH_3OH) 90 grams water the mole fraction and mole percent of methyl alcohol is	A. 0.3. 30% B. 0.2, 30% C. 0.5, 30% D. 0.2, 20%
997	Which of the following has highest dipole moment?	A. NH₃ B. PH₃ C. AsH₃ D. SbH₃
		A. Formaldehyde

998	Cannizzzaro's reaction is not given by:	B. Acetaldehyde C. Benzaldehyde D. Trimethyl
999	Group VIB of transition elements contains	A. Zn, Cd, Hg B. Fe, Ru, Os C. Cr, Mo, W D. Mn, Te, Re
1000	Which of the following is not an air	A. N₂ B. N₂O C. NO D. CO
1001	The quantum number which describes the shape of the orbital is	A. Principle quantum number B. Spin quantum number C. Azimathal quantum number D. Magnetic quantum number
1002	Phosphorus pentoxide finds use as	A. An oxidizing agent B. A reducing agent C. A bleaching agent D. A dehydrating agent
1003	The most distinctive character among the elements is their division into	A. Metals and non-metals B. Solids, liquids and gases C. Atoms and molecules D. Active and inactive elements
1004	Oxidation state of an element in free state is:	A. Its numebr of elemtrons lost B. Its number of electrons gained C. zero D. Its number of electrons shared
1005	Reactions that proceed on both sides and never go to completion are called	A. Irreversible reactions B. Reversible reactions C. Opposing reactions D. Spontaneous reactions
1006	The unit of the rate constant is the same as that of rate of reaction in :	A. Third order reaction B. Second order reaction C. First order reaction D. Zero order reaction
1007	The pH range of the acid rain is:	A. 7 - 6.5 B. 6.5 - 6 C. 6 - 5.6 D. Less than 5
1008	Molecular orbitals are filled with the available:	A. Hund's of rule. B. Pauli's exclusion principle. C. Aufbau principle. D. All of above.
1009	Inter molecular forces in solid hydrogen are	A. Covalent forces B. Van der Waal forces or London dispersion forces C. Hydrogen bonds D. All of these
1010	Mendeleev was a scientist:	A. Russioan B. German C. English D. French
1011	From $_{39}Y$ to $_{48}Cd$ are called	A. Transition elements B. Outer transition elements C. Inner transition elements D. 2nd transition series
1012	Which of the following is a member of -block	A. Zn B. Al C. B D. Br
1013	The polymers which can be re-softened again and again are caled	A. Thermoplastic B. Thermosetting C. Both a and b D. None
1014	Each vertical column of the periodic table includes elements with chemical characteristics that are in general	A. Identical B. Similar C. Different D. Similar as well as different
1015	Which of the following compounds gives a ketone with Grignard's reagent?	A. Formaldehyde B. Ethanenitrile C. Ethyl alcohol D. Methyl iodide

1016	Their e/m, ratio resembles with that of electrons	A. Alpha rays B. Beta rays C. Gamma rays D. X-rays
1017	acidic soils are neutralized by adding	A. plaster of paris B. brine C. lime D. milk of magnesia
1018	Ionization energy depends upon	A. Nuclear charge B. Atomic size C. Shielding effect D. All of the above
1019	Which one of the following has highest density	A. Zn B. Os C. Ni D. Cu
1020	Sulphuric acid is used	A. As fertilizers B. As dehydrating agent C. As oxidizing agent D. All above
1021	The oxide of beryllium is	A. Acidic B. Amphoteric C. Superoxide D. Basic
1022	How many cm^3 of 1 M H_2SO_4 required to neutralize 10 cm^3 of 1 M NaOH	A. 2 cm³ B. 2.5 cm³ C. 5 cm³ D. 10 cm³
1023	Which of the following is the strongest acid?	A. CF₃COOH B. CBr₃COOH C. CH₃COOH D. CCl₃COOH
1024	Hydrogenation of bezoyl chloride in presence of Pd on $BaSO_4$ gives	A. Benzyl alcohol B. Benzaldehyde C. Benzoic acid D. Phenol
1025	Gypsum added in the cement is :	A. 5% B. 10% C. 15% D. 20%
1026	The C-C bond angles in benzene ring are	A. 119° B. 120° C. 121° D. None
1027	Time required to deposit one millimole of aluminium metal by the passage of 9.65 amperes through molten electrolyte containing aluminium ion is	A. 30 s B. 10 s C. 30,000 s D. 10,000 s
1028	l-Phenylethanol can be prepared by reaction of benzaldehyde with	A. Methyl iodide an Magnesium B. Methyl bromide C. Methyl bromide and AlBr₃ D. C₂H₅l and Mg
1029	Optical rotation method is sued when	A. Reaction involve ions B. Change of refractive indices C. Reactions involving change of optical activity D. None of the above
1030	Which of the following forms a toxic substance in blood by combing with hemoglobin?	A. Carbon dioxide B. Carbon monoxide C. Oxygen D. Methane
1031	The addition of HCN to carbonyl compounds is an example of	A. Nucleopihlic substituion B. Electrophilic addition C. Nueleophilic addition D. Electrophilic substitution
1032	Acid rain is due to increase in atmospheric concentration of	A. Ozone and dust B. CO₂and CO C. SO₃and CO D. SO₂and NO₂

1033	Baukelite is a polymer obtained from two monomers	A. Phenol and ethanol B. Phenol and methanol C. Phenol and methanal D. Phenol and acetone
1034	The vant Hoff factor (1) accounts for	A. Degree of solubilisation of solute B. The extent of dissolution of solute C. The extent of dissolution of solute D. The degree of decomposition of solution
1035	Alkyle magnesium halides are known as	A. Simon-smith reagent B. Tollen's reagent C. Grignard's reagent D. Barford's reagent
1036	The sum of mole fractions (X) of components of solution is equal to	A. 100 B. 200 C. One D. Zero
1037	The amino acids which human body can synthesize are called _____ amino acid	A. Essential B. Non essential C. Acidic D. Basic
1038	The solutions of NaCl and KCl are prepared separately by dissolving same amount of solute in water, which of the following statements is true fro these solutions ?	A. KCl solution will have higher boiling point than NaCl solution. B. Both the solutions have same boiling points. C. KCl and NaCl solutions possess same vapour pressure. D. KCl solution possesses lower freezing point than NaCl solution.
1039	Which of the following species has unpaired electrons in ant-bonding molecular orbitals?	A. O2⁺²<o:p></o:p> B. N2⁻²<o:p></o:p> C. B₂<o:p></o:p> D. F₂<o:p></o:p>
1040	Polymer found by the combining of three different monomers is called:	A. Homopolymer B. Copolymer C. Ter polymer D. Thermoplastic polymer
1041	Which following derivative cannot be prepared directly from acetic acid?	A. Acetamide B. Acetyl chloride C. Acetic anhdride D. Ethyl acetate
1042	$BiCl_3$on hydrolysis forms a white precipitate of	A. Bismuthio acid B. Bismuth oxychloride C. Bismuth pentachloride D. Bismuth hydroxide
1043	Sulphur dioxide affects	A. Cell wall B. Plasmodesmata C. All membrane systems D. Nucleus
1044	Which of these reactions is shown by buranone, $CH_3COCH_2CH_3$	A. On warming with acidified potassium dichromative (IV) the solution turns green B. On heating with Fehling's reagent a red precipitate is formed C. With 2,4-dinitrophenlhydrazine reagent an orange precipitate is formed D. With hydrogen cyanide an aldehyde is formed
1045	Common names of aldehydes are given by corresponding:	A. Ketone B. Alcohol C. Carboxylic acid D. ester
1046	Neutralization of a strong acid with a strong base is	A. Natural acid base reaction B. Artificial acid base reaction C. Spontaneous acid base reaction D. both a and c
1047	The rate constant k of a reaction activation energy Ea and temperature are related by Arrhenius in the form of an equation which is	
1048	Which of the following pair contains isomers of each other	A. Propanoic acid and propanone B. Acetone and acetaldehyde C. Ethyl alcohol and diethyl ether D. Methyl alcohol and dimethyl ether
1049	Select from the following the one which alcohol	
1050	Which of the following reactions occur at moderate	A. Rusting of iron B. Chemical weathering of stone work of buildings by acidic gases in atmosphere. C. Hydrolysis of an ester

	rate :	C. Hydrolysis of an ester D. Fermentation of sugars
1051	Peat before conversion to bituminous coal is converted to	A. Lignite B. Anthracite C. Asphalt D. None
1052	The solubility product of AgCl is 2.0 x 10^{-10}mole $^{2}dm^{-6}$. The maximum concentration of Ag^{+}ions in the solution is	A. 2.0 x 10⁻¹⁰mole dm⁻³ B. 1.41 x 10⁻⁵mole dm⁻³ C. 1.0 x 10⁻¹⁰ D. 4.0 x 10⁻²⁰mole dm⁻³
1053	Every sample of matter with uniform properties and a fixed composition is called a :	A. Solid B. Liquid. C. Phase. D. Gas.
1054	The alkynides are used for the ---------- of alkynes	A. Pxperation B. Purification C. Seperation D. All of above
1055	Ionic solids are characterized by :	A. Low meeting points B. Good conductivity in solid state C. High vapor pressure D. Solubility in polar solvents
1056	The substance which contains the water of crystallization is called	A. Hydrated B. Solvated C. Crystal D. None
1057	Amiino acids are building blocks of:	A. Protein B. Carbohydrates C. Lipids D. Fats
1058	Which element forms an iron with charge *3*+?	A. Berylium B. Aluminium C. Carbon D. Silicon
1059	The mineral $CaSO_4.2H_2O$ has the general name	A. gypsum B. dolomite C. calcite D. epsom salt
1060	S-block elements consist of	A. Alkali metals B. Alkaline earth metals C. Alkali and alkaline earth metals D. None of these
1061	Lime, calcium oxide, is used in agriculture for	A. Adding ca metal in soil B. Making soil acidic C. Neutralizing acidic soil D. Adding oxygen to soil
1062	Which alcohol gives only one oxidation product when wormed with dil acidified $K_2Cr_2O_7$	A. Butan-1-ol B. Butan-2-ol C. 2-methyl propan-1-ol D. 2-methyl propan-2-ol
1063	What is the cause of water pollution	A. Chemical and bacterial contents in live stock B. The spilled oil in rivers and ponds C. Wide spread use of pesticides D. All of the above
1064	Which of these polymers is an addition polymer?	A. Nylon-6,6 B. Polystyrene C. Terylene D. Epoxy resin
1065	Gases exert pressure on walls of container because the gas molecules	A. Obey gas laws B. Have definite volume C. Collide with the walls of container D. Collide with each other
1066	The toxic organic compounds and heavy metals and metalloids results in contamination of	A. Surface water B. Ground water C. Both surface and ground water D. Neither surface nor ground waters
1067	The ratio of volume to temperature on Kelvin scale is constant according to	A. Charle's law B. Newton's law C. Coulomb's law D. Boyle's law
		A. Factor [A] called Arrhenius constant depends upon collision frequency of reactants

1068	Which statement about Arrhenius equation is incorrect	A. Factor 'A' called Arrhenius constant depends upon collision frequency of reactants B. Rate of reaction increase by increasing temperature C. Rate constant k is increased D. Activation energy Ea is decreased by rise in temperature
1069	The value of charge on electron is	A. 1.602 x 10⁻¹⁹coulombs B. 1.602 x 10⁻¹⁸coulombs C. 1.602 x 10⁻¹⁷coulombs D. 1.602 x 10⁻¹⁶coulombs
1070	Orbitals having same energy are called	A. Hybrid orbitals B. Valence orbitals C. Degenerate orbitals D. D-orbitals
1071	Rutherford's experiment led to the discovery of	A. Nucleus B. Electron C. Proton D. alpha particle
1072	Which of the following is weakly acidic in nature	A. Alcohol B. Phenol C. Aidehyde D. Amide
1073	Hydrolytic reaction of fats by causic soda is known as	A. Acetylation B. Carboxylation C. Esterification D. Saponification
1074	HF has exceptionally low acidic strengths due to	A. Smaller size of fluorine B. Strong polar bond between H and F C. Electronegativity of fluorine D. Strong hydrogen bonding
1075	Mottling of teeth is due to presence of an element in drinking water	A. Mercury B. Fluorine C. Boron D. Chlorine
1076	Organic acid without a carboxylic acid group is	A. Ascorbic acid B. Vinegar C. Oxalic acid D. Picric acid
1077	If an endothermic reaction is allowed to take place very rapidly in the air, the temperature of the surrounding air	A. remains constant B. increases C. decreases D. remain unchanged
1078	Which of the following species has unpaired electrons in antibonding molecular orbitals	
1079	Alcohols are named by replacing 'e' of alkane with:	A. al B. ene C. ol D. one
1080	Determination of atomic masses and invention of system of writing symbols was made by:	A. J. Berzelius B. Democritus C. Dalton D. None of above
1081	The period table contains elements in vertical column. these vertical column are called	A. Groups B. Periods C. Blocks D. Sub group
1082	Preparation of vegetable ghee involves:	A. Halogenation B. Hydrogenation C. Hydroxylation D. Dehydrogenation
1083	How many g of dibasic acid (mol. wt. 200) should be present in 100 ml of the aqueous solution to give 0.1 Normality?	A. 1 g B. 2 g C. 10 g D. 20 g
1084	The rate of E_1reaction depends upon	A. The concentration of substrate B. The concentration of nucleophile C. THe concentration of substrate as well as nucleophile D. None of the above
1085	Pro stand for	A. Valine B. Alamine C. Glycine D. Proline

		D. Proline
1086	In a group the atomic size increase downward due to	A. Addition of electronic shells B. Increase in the proton number C. Repulsion of electrons D. All of the above
1087	Preparation of ethylbenzene by the reaction of bromobenzene, ethylbromide and sodium is called	A. Wurtz reaction B. Fitting reaction C. Wurtz fitting reaction D. None of these
1088	Hydrogen gas and iodine vapours combine to form HI at 425°C, the same composition of mixture is present if we start with decomposition of HI. It suggests	A. A static equilibrium B. Law of mass action C. A dynamic equlibrium D. Irreversible reaction
1089	The solubility product of AgCl is 2.0 x 10^{-3} mol^2 dm^{-6} , The maximum concentration of Ag ion in the solution is :	A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"><o:p></o:p> <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">2.0 x 10⁻¹⁰ mol dm⁻³<o:p></o:p> B. 1.41 <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">x 10⁻¹⁰ mol dm^{-3<o:p></o:p>} C. 1.0^{<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">}<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">x 10⁻¹⁰ mol dm^{-3<o:p></o:p>} D. 4.0^{<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">}<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">x 10⁻¹⁰ mol dm⁻³<o:p></o:p>
1090	Which of the following does give violet colour with neutral ferric chloride?	A. Acetic acid B. Salicaylic acid C. Formine acid D. Benzoic acid
1091	Nitrogen in the atmosphere is:	A. 78% B. 21% C. 0.9% D. 0.03%
1092	Which of the following cannot conduct electricity :	A. NaCl fused. B. NaCl(aq) _{<o:p></o:p>} C. NaCl(Solid) _{<o:p></o:p>} <o:p></o:p> D. Both (b) and (c)
1093	Neutralization of a strong acid with a strong abase is:	A. Natural acid base reaction. B. Artificial acid base reaction. C. Spontaneous acid base reaction. D. Both (a) and (c).
1094	Question Image	A. 8 g B. 16 g C. 32 g D. 24 g
1095	pH of water is 7, if 0.01 M NaOH is added, than its pH is	A. 12 B. 14 C. zero D. 10
1096	How many are the zones through which the charge passes in a rotary kiln?	A. 4 B. 3 C. 2 D. 5
1097	The oxidation number of free element is always taken to be	A. 0 B. 1 C. 2 D. -1
	In the modern long form of the periodic table elements are	A. Atomic mass B. Atomic number

1098	periodic table elements are arranged in the increasing order of	B. Atomic number C. Mass number D. Isotopic number
1099	Which of the following is a carbonate are?	A. Pyrolusite B. Malchite C. Diaspore D. cassiterite
1100	In which molecule carbon atom is sp^2hybridized	A. CH₄ B. C₂H₄ C. C₂H₂ D. None of the above
1101	Which of the following will affect the rate :	A. First step of reaction. B. Last step of reaction. C. Rate determining step. D. Fastest step.
1102	The electrolysis of $CuSO_4$aqueous solution using copper as cathode as well an anode the substance which deposits at cathode is	A. H₂SO₄ B. Oxygen C. Copper D. Hydrogen
1103	The atomic radius increases as we move down a group because	A. Effective nuclear charge increases B. Atomic mass increases C. Additive electrons are accommodated in new electron level D. Atomic number increases
1104	Benzoic acid can be prepared from the oxidation of	A. benzene B. ethyl benzene C. benzoic acid D. toluene
1105	Alkyl halides on treatment with Zn and HCl gives	A. Alkanes B. Alkenes C. Alkynes D. Alcohols
1106	Which bond is most stable	A. C - Cl B. C - F C. C - Br D. C - I
1107	Which is the transition element among the following	A. B B. Al C. Cu D. Cs
1108	Which is the derived lipid?	A. Common fats B. Vitamin-D C. Common oils D. Spinolipids
1109	At 25°C, the highest osmotic pressure is exhibited by 0.1 M solution of	A. CaCl₂ B. KCl C. Glucose D. Urea
1110	Micro-nutrients are required in quantity ranging from	A. 4g-40g B. 6g-200g C. 6Kg-200Kg D. 4Kg-40Kg
1111	Identify the hydrocarbon formed, when ethyl bromide reacts with, alcoholic KOH at 100°	A. Methane B. Ethane C. Ethene D. Ethyne
1112	Dust particles in smoke is a solution of the type	A. Liquid is solute and solid is solvent B. Solid is solute and liquid is solvent C. Solid is solute and gas is solvent D. Gas is solute and solid is solvent
1113	Shahi Qilla may be destroyed by	A. Flood in Ravi B. Temperature mediated spoilage of marble C. Air pollutants from Lahore chemical industries D. All the above
1114	When a nitrogeneous base combine with a sugar it is called	A. Ribose B. Nucleotides C. Nucleoside D. None
1115	Which of the following is not an ortho-para directing group	
	ph of the buffer CH_3COOh +	

1116	ph of this buffer. CH_3COONa is 3.76. If the mixture contains 1 molar acetic acid and 0.1 molar sodium acetate, then pKa of this buffer is	A. 3.76 B. 4.76 C. 5.76 D. 6.76
1117	Which inorganic precipitate acts as semipermeable membrane?	A. Calcium sulphate B. Barium oxalate C. Nickel phosphate D. Copper ferrocyanide
1118	Which of the following does not turn Schiff's reagent to pink?	A. Formaldehyde B. Bezaldehyde C. Aceton D. Methyl chloride
1119	Which of the following contains single bonds	A. Benzene B. Alkyne C. Alkene D. Alkane
1120	Laughing gas is chemically	A. NO B. N_{2O} C. NO₂ D. N₂O₄
1121	Contamination of Hg comes into surface water from chlor industrial wastes. Why is Hg toxic	A. It attaches to sulphur of the disulphide link B. Hg is a heavy metal C. Hg is liquid at room temperature D. Hg is non reactive chemically
1122	Rates of organic reactions are	A. Fast B. Very fast C. Slow D. Non-reactive
1123	The self linking of carbon atoms is called	A. Chelation B. Isomerism C. Catenation D. None of the above
1124	Which carbohydrates is an essential constituent of plant cells?	A. Starch B. Cellulose C. Sucrose D. Vitamins
1125	Which of the following is non-typical transition element?	A. Cr B. Mn C. Zn D. Fe
1126	Question Image	
1127	Which carbon is more electronegative?	A. sp³- hybridized carbon B. sp-hybridized carbon C. sp²-hybridized carbon D. always same irrespective of its hybrid state
1128	Which of the following compounds will react with reagent ?	A. CH₃ CO H B. CH₃ CO CH₃ C. CH_{3 COOH} D. CH₃CO CH₂CH₃
1129	Which is not the affect of polluted air on environment	A. Acid rain B. Smog C. Ozone D. Global warming
1130	Which of the following (1 M) conducts more electricity?	A. Sulphuric acid B. Boric acid C. Nitric acid D. Phosphorus acid
1131	The number of unpaired electrons in $Mn^{2+}$is	A. 5 B. 4 C. 3 D. 2
1132	If half life period of a reaction is independent of the concentration of the reactants, then the reaction is	A. Zero order B. First order C. Second order D. Order is in fraction
1133	Which of the following is an electrophile	A. Bromine B. KBr C. NH₃ D. Benzene

1134	Which one of the following has no units of its $K_c$value	
1135	The number of moles of solute in 1000g (1 Kg) of the solvent is called :	A. Molarity B. Molarity C. Normality D. Mole fraction
1136	Alcohols, phenols and ethers may be considered as derivative of	A. Hydrocarbons B. Benzene C. Carboxylic acid D. Water
1137	Which one is alkaline earth metal?	A. Sodium B. Beryllium C. Potassium D. Lithium
1138	Bond angle in benzene is :	A. 109..5^o B. 180^o C. 120^o D. 107.2^o
1139	The nature of the positive rays depend on	A. The nature of the electrode B. The nature of the discharge tube C. The nature of the residual gas D. All of the above
1140	The standard EMF of Daniel cell is 1.10 volt. The maximum electrical work obtained from the Daniel cell is	A. 212.3 kJ B. 175.4 kJ C. 106.15 kJ D. 53.07 kJ
1141	The base used in Cannizzaro's reaction is	A. NaOH B. KOH C. CHI₃ D. All of these
1142	Which of the substances Na, Hg, S Pt and graphite can be used as electrodes in electrolytic cells having aqueous solution?	A. Na, Pt and graphite B. Na and Hg C. Pt and graphite only D. Na and S only
1143	What will happen if $LiAlH_4$is added to an ester?	A. Two units of alcohol are obtained B. One unit of alcohol and one unit of acid is obtained C. Two units of acids are obtained D. None of these
1144	The configuration $1s^2 2s^2 2p^5 3s^1$shows	A. Excited state of O₂ B. Excited state of neon C. Excited state of fluorine D. Ground state of fluorine atom
1145	Chromium (VI) is highly toxic and can cause	A. Blindness B. Cancer C. Liver problems D. Blood problems
1146	In electrolysis of NaCl when Pt electrode is taken then $H_2$is liberated at cathode while with Hg cathode it forms sodium amalgam	A. Hg is more inert than Pt B. More voltage is required to deduce H⁺at Hg than Pt C. Na is dissolved in Hg while it does not dissolve in Pt D. Conc. of H⁺ions is larger when Pt electrode is taken
1147	Solvent extraction is an unstable, Process and it is called by:	A. The amount of solute B. Distribution law C. The amount of solvent used D. Law of mass action
1148	Question Image	A. 1 B. 2 C. 3 D. 4
1149	Which of these polymers is an addition polymer	A. Nylon 6,6 B. Polystyrene C. Terylene D. Epoxy resin
1150	The presence of a double bond in a compound in the sign of:	A. Saturation B. Unsaturation C. Subsitution D. None
1151	Zn + HCl are used in	A. Clemenson reduction B. Wof kishner reduction C. Kolb's electrolysis D. Wurtz reaction

		D. Wutruz reaction
1152	Pressure volume work is	
1153	Gypsom added in the cement is	A. 5% B. 10% C. 15% D. 20%
1154	Question Image	A. 0.12 B. 0.50 C. 0.25 D. 4.00
1155	Sintered glass is porous material used for:	A. Absorption B. Decoration C. Filtration D. All of above
1156	For which of the following sets of quantum numbers and electron will have the highest energy?	A. 3,2,1,1/2 B. 4,2,-1,1/2 C. 4,1,0,-1/2 D. 5,0,0,1/2
1157	Which of the following alcohols cannot be produced by treatment of aldehydes or ketones with $NaBH_4$or $LiAlH_4$?	A. 1-propanol B. 2-propanol C. 2-Methyl-2-propanol D. Ethanol
1158	The unit of specific conductivity is	A. Ohm cm⁻¹ B. Ohm cm⁻² C. Ohm⁻¹cm D. Ohm⁻¹cm⁻¹
1159	The sample being analyzed is called:	A. Electrolyte B. Residue C. Undue D. Filtrate
1160	A standard hydrogen electrode is used as standard electrode of which electrode potential is arbitrarily taken as	A. +1 B. -1 C. 0.1 D. Zero
1161	Condensation of aldeydes withα-hydrogen gives:	A. Acetal B. Ketal C. Aldol D. Cannizzaro product
1162	$P_2O_5$is heated with water to give	A. Hypophosphorus acid B. Phosphorus acid C. Hypophosphorus acid D. Orthophosphorus acid
1163	Atomic radius changes from top to bottom in a group.:	A. Increases B. Decreases C. Remains same D. Sometimes increases & Decreases
1164	Chromyl chloride and toluene react to produce	A. p-chlorotoluene B. Benzaldehyde C. Benzyl chloride D. Bezoic acid
1165	A zero order reaction is one in which :	A. Rate is not affected by changing concentration of reactants. B. concentration of reactants do not change with the passage of time. C. Reactants do not react. D. One reactants in large excess.
1166	The change in concentration of reactant or product per unit time is called :	A. Rate constant. B. Rate of reaction. C. Rate equation. D. Rate law.
1167	Benzene cannot undergo:	A. Substitutions reactions B. Addition reactions C. Oxidation reactions D. Elimination reactions
1168	Electronegativity order of alkyl halides is:	A. RI > RBr > RCl > RF B. Rbr > RCl > RF >RI C. RCl > RF >RI > RBr D. RF >Ri > RBr >RII
1169	Chile saltpetre has the chemical formule	A. NaNO₃ B. KNO₃ C. Na₂B₄O₇ D. Na₂CO₃.H₂O

1170	Question Image	A. Zn B. H C. S D. O
1171	Number of neutrons in heavy hydrogen atom is	A. 0 B. 1 C. 2 D. 3
1172	Estimation of Na in sea water is an example of :	A. Numerical analysis. B. Qualitative analysis. C. Quantitative analysis. D. None of above.
1173	Half life period of astatine is	A. 8.1 hrs B. 8.2 Hrs C. 8.3 hrs D. 8.4 hrs
1174	Bone ash contains calcium phosphate	A. 70% B. 80% C. 90% D. 100%
1175	One mole of SO_2contains	A. 6.02 x 10²³atoms of oxygen B. 18.1 x 10²³, molecules of SO₂ C. 6.02 x 10²³atoms of sulphur D. 4 gram atoms of SO₂
1176	In a period, melting points of elements	A. Increases B. Decreases C. Remain constant D. First increases then decreases
1177	Which can be used for dehydration of alcohol	A. P₄O₁₀ B. H₂SO₄ C. H₃PO₄ D. All of them
1178	The use of tetra ethyl lead in petrol as an efficient antiknock agent is being discouraged. Which reason is correct	A. It is costly B. It damages the engine C. Pb is difficult to obtain in bulk quantities D. The combustion product, lead, causes air pollutions
1179	Which gas is not a constituent of atmosphere	A. Xe B. O₃ C. H₂ D. F₂
1180	A polymeric substance that is formed in the liquid state and then hardened to a rigid solid is called a:	A. Fiber B. Plastic C. Vanish D. Polyamide resin
1181	The hydroxyl derivatives of aromatic hydrocarbons which have the -OH group directly bonded to the ring C-atom are called	A. Alcohols B. Ketones C. Esters D. Phenols
1182	Which is the correct electronic configuration of Cr - 24	A. 1s², 2s², 2p⁶, 3s², 3p⁶, 3d⁴, 4s² B. 1s², 2s², 2p⁶, 3s², 3p⁶, 3d³, 4s², 4p¹ C. 1s², 2s², 2p⁶, 3s², 3p⁶, 3d⁵, 4s¹ D. 1s², 2s², 2p⁶, 3s², 3p⁶, 3d⁵, 4p¹
1183	Easter are pleasant smelling compounds. Which ester posseses odour like pineapple	A. Amylacetate B. Amylbutyrate C. Ethylbutyrate D. Benzylacetate
1184	Question Image	A. 32 g B. 3.2 g C. 5.6 g D. 9.6 g
1185	In a group IIA from top to bottom as the atomic number increases, there is regular decreases in	A. Ionic size B. Atomic size C. Ionization potential D. None of these
1186	Hydrocarbons are organic compounds which contain	A. Hydrogen B. Carbon C. Hydrogen and carbon

	elements such as	C. Hydrogen and carbon D. Halogens
1187	In electrolytic cells, the chemical changes may be :	A. Either spontaneous or non-spontaneous B. Always spontaneous C. Always non-spontaneous D. More spontaneous and less non-spontaneous.
1188	The general formula of alkane is	A. C_nH_{2n+2} B. C_nH_n C. C_nH_{2n} D. C₂H_{2n-1}
1189	Monosaccharides and oligosacchradies are generally called as	A. Crystals B. Sugars C. Liquids D. Non-sugars
1190	Complex protein molecules which catalyses the organic reactions in the living cells are called	A. Living organisms B. Enzymes C. Viruses D. Bacteria
1191	The amount of heat required to convert one mole of solid directly into its vapour state at STP is called as	A. Molar heat of vaporization B. Standard heat of vaporization C. Heat of reaction D. Heat of neutralization
1192	The orbital in Rutherford's model is	A. Spiral B. Circular C. Both D. None
1193	Which of the following with aqueous KOH will give acetaldehyde?	A. 1, 2-Dichloroethane B. 1,1-Dichloroethane C. Chloracetic acid D. Ethyl chloride
1194	The volume of 0.1 M H_2SO_4required to neutralize completely 40 ml of 0.2 M NaOH solution is	A. 10 ml B. 40 ml C. 20 ml D. 50 ml
1195	In a primary alkyl halide, the halogen atom is attached to a carbon which is further attached to	A. Only one carbon atom B. Two carbon atoms C. Three carbon atoms D. one or no carbon atom
1196	Which of the following oxides is peroxide?	A. Na₂O₂ B. MnO₂ C. BaO D. SO₂
1197	The number of elements in the 4th periods of periodic table is	A. 8 B. 10 C. 18 D. 32
1198	The human body can synthesize _____ amino acids	A. 1 B. 10 C. 20 D. 19
1199	Ozone is not	A. An allotrope B. A powerful oxidizing agent C. Paramagnetic D. A bent molecule
1200	Amongst the following the compound that can be most readily sulphonated is	A. Toluene B. Benzene C. Nitrobenzene D. Chlorobenzene
1201	How many atoms of carbon are there in 18 g of C6H12O6?	A. 6.02 x 10²³ B. 3.6 x 10²³ C. 6.02 x 10²² D. 3.6 x 10²²
1202	Wolf-kishner reduction is used for the reduction of	A. Nitro compounds B. Carboxylic acids C. Carbonyl compounds D. Olefins
1203	A macroscopic property of a system which describes the initial and final state of the system is called	A. Physical property B. Chemical property C. Energy property D. State function
	The branch of chemistry	A. Chemical kinetic

1204	which deals with thermal energy changes in chemical reactions is called	B. Thermodynamics C. Thermochemistry D. Mechanics
1205	CO_2absorber used in breathing tanks is	A. K₂O₂ B. K₂O C. KO₂ D. Na₂O₂
1206	The theory of chemical bonding has been a major problem of:	A. Modern Physics. B. Modern Chemistry. C. Modern Biology. D. Mechanics.
1207	Cement plaster is made by mixing plaster of paris with:	A. glue or oil B. gypsom C. glycol D. alum or borax
1208	Compounds of carbon and hydrogen in which the tetra valency of carbon is fully satisfied are called,	A. Saturated B. Un-saturated C. Magnetic D. Para-magnetic
1209	Question Image	A. 0.5 B. 4.0 C. 2.5 D. 0.25
1210	The addition of unsymmetrical reagent to unsymmetrical alkene is in accordance with the rule:	A. Hund's rule B. Markownikov's rule C. Pauli's Exclusion Principle D. Auf bau Principle
1211	Which carbonate of alkali metals is insoluble in water	A. Na₂CO₃ B. K₂CO₃ C. Li₂CO₃ D. Cs₂CO₃
1212	Boric acid cannot be used:	A. An antiseptic in medicine B. For washing eyes C. In soda bottles D. For enamels and glazes
1213	Which of the following is not true for metalloids	A. They are borderline elements that exhibit both metallic and non-metallic properties to some extent B. They usually act as electron donors with non-metals and as electron acceptors with metals C. Some of these elements are boron, silicon and germanium D. They are good conductors of heat and electricity
1214	Which metal is used in the thermit process because of its activity?	A. Iron B. Copper C. Alumnium D. Zinc
1215	Which electronic configuration corresponds to an element of Group ||Z-A of the periodic table?	A. 1s, 2s², 2p⁶, 3s², 3p⁶, 4s² B. 1s², 2s² , 2p⁶, 3s², 3p¹ C. 1s², 2s², 2p⁶ D. 1s², 2s², 2p⁶, 3s², 3p³
1216	The natural fertilizers consist of	A. Plants B. Animals C. Both plants and animals D. Microorganisms
1217	Chloroform is carcinogenic:	A. Heart B. Lungs C. Liver D. Kidney
1218	The solution of which acid is used for seasoning of food	A. Formic acid B. Acetic acid C. Benzoic acid D. Butanoic acid
1219	Source of organic compounds primarily is:	A. Plants B. Animals C. Minerals D. A & B
1220	Monocarboxylic acids exist as dimer because of	A. Dipole-dipole attraction B. Hydrogen bonding C. Van der Waals forces D. Conhesive forces
1221	The amount of electricity that can deposit 108 g of silver from silver nitrate solution is	A. 1 ampere B. 1 coulomb C. 1 faraday D. 2 ampere

1222	The divisibility of atom was shown by	A. Stoney B. J.J. Thomson C. Millikan D. Rutherford
1223	The rate of which the reaction proceeds is directly proportional to the product of the active masses of the reactants is according to	A. Law of mass action B. Le Chateliers principle C. Equilibrium law D. Law of constant proportion
1224	S_N1 reaction of alkylhalides leads to	A. Retention of configuration B. Recemisation C. Inversion of configuration D. None of these
1225	Which is not an essential amino acid	A. Leucine B. Methionine C. Histidine D. Lysine
1226	The oxidation states of Boron are	A. +1,+2,+3 B. -1,-2,-3 C. +1,-1 D. +3,+1
1227	Cotton has cellulose in it:	A. 96% B. 97% C. 98% D. 99%
1228	Bleaching powder may be produced by passing chlorine over	A. Calcium carbonate B. Hydrated calcium sulphate C. Anhydrous calcium sulphate D. Calcium hydroxide
1229	Which one of the following enzymes brings about the hydrolysis of fats	A. Urease B. Maltase C. Zymase D. Lypase
1230	Enzymes are	A. Proteins B. Minerals C. Oils D. Fatty acids
1231	What happens when reaction is at equilibrium and more reactant is added :	A. Forward reaction rate is increased. B. Forward reaction rate is decreased. C. Backward reaction rate is increased. D. Equilibrium remains unchanged.
1232	Chief ore of aluminium is:	A. Na₃AlF₆ B. Al₂O₃.2H₂O C. Al₂O₃ D. Al₂O₃ .H₂O
1233	Which of the following is the repeating monomeric unit in cellulose	A. Sucrose B. Maltose C. Cellobiose D. Glucose
1234	How many moles of oxygen, O_2 are needed for the complete combustion of two moles of butane C_4H_{10}?	A. 2 B. 8 C. 10 D. 13
1235	No cathode rays are produced in the discharged tube when gas is under ordinary pressure even if voltage of 5000 to 10000 is applies. This reason is	A. Voltage is low B. Discharge tube is not coloured C. Gas does not conduct current under ordinary pressure D. Temperature low
1236	In azeotropic mixture showing negative deviation form Raoult's law show	A. Higher b.p. than either B. Lower b.p. than either C. No change in b.p. D. None of these
1237	Question Image	A. The heat released is enthalpy of neutralization B. The heat released is enthalpy of atomization C. The heat released is enthalpy of sublimation D. The heat released is enthalpy of formation
1238	Question Image	A. High temperature B. Low temperature C. Low pressure D. High pressure

1239	Which of the following is present in the stings of bees and wasps	A. Formic acid B. Citric acid C. Carbolic acid D. Formalin
1240	Monosubstituted benzene can have disubstitution at position:	A. Ortho B. meta C. para D. a, b, c
1241	The heat of formation of $SO_2(g)$ is -70.9 Kcal. The energy required for the decomposition of 1 mole of $SO_2(g)$ is	A. 35.50 Kcal B. 70.9 Kcal C. 141.8 Kcal D. -35.9 Kcal
1242	The percentage of methane in natural gas is	A. 50% B. 60% C. 85% D. 90%
1243	Which one of the following reactions is not spontaneous	
1244	Sodium is manufacture by the electrolysis of fused sodium chloride and not from an aqueous solution of sodium chloride because	A. Sodium chloride does not ionize in the water solution B. Sodium chloride is not soluble in water C. Sodium deposited at the cathode may react with water to form sodium hydroxide D. Electricity does not pass through aqueous NaCl
1245	Compounds X, Y and Z, all react with $PCl_5$to release hydrogen chloride, but only one of them reacts eith 2,4-dinitrophenylhydrazine reagent. Which one of the following combinations could be X, Y and Z	
1246	The coordination number of iron in $[Fe(H_2O)_6]^{3+}$is	A. 2 B. 3 C. 4 D. 6
1247	Which term was derived from "aroma":	A. Atom B. Hydrocarbons C. aromatic D. aliphatic
1248	Benzene gives reactions generally	A. electrophilic B. addition substitution C. synthesis D. addition and electrophilic substitution
1249	Saturated solution of NaCl on heating becomes	A. Super saturated B. Unsaturated C. Remains saturated D. None
1250	The fractions obtained from fractional distillation of petroleum are placed in increasing order of their boiling points. Which order is correct	A. Natural gas, petroleum ether, gasoline kerosene B. Petroleum ether, kerosene, natural gas, petroleum ether C. Gasoline, kerosene, natural gas, petroleum ether D. Kerosene, gasoline, petroleum ether, natural gas
1251	One of the following bonds is polar but compound is non-polar	A. H₂O B. NH₃ C. HCl D. CO₂
1252	Which is liquid among the following alkenes?	A. Ethane B. Propene C. Butene D. Pentene
1253	The attraction that an atom exerts on a pair of electrons that are being shared with another atom for forming covalent bond is referred to as its	A. Electron affinity B. Electronegativity C. Ionisation energy D. Valency
1254	In the reaction between chlorine and U.V. the propagation step is.	A. CH3+CL ---------CH3 +HCl B. CH4+Cl-------CH3Cl C. CH4+CL -------CH3CL +H D. CH+CL2----------CL +HCl

1255	Coal is used to bake bricks in lime kiln:	A. 40% B. 60% C. 80% D. None of these
1256	Ethyl alcohol is industrially prepared from ethylene by	A. permanganate oxidation B. Catalytic reduction C. Absorbing in H₂SO₄followed by hydrolysis D. Fermentation
1257	According to Lewis concept ethers behave as:	A. Acid B. Base C. Acid as well as a base D. None of them
1258	Glass calorimeter reaction is one which we measure	A. Enthalpy of combustion B. Enthalpy of reaction C. Pressure volume work D. None of above
1259	Which of the following reagent will react with both aldehyde and ketones?	A. Grinard's reagent B. Tollen's reagent C. Fehling's reagent D. Benedict's reagent
1260	Acetamide is	A. Highly acidic B. Highly basic C. Neutral D. amphoteric
1261	Question Image	A. di(4-bormophenyl) method B. Methanol C. Propan-1-ol D. Propan-2-ol
1262	The general formula of amino acids is	
1263	Bleaching powder is agent:	A. Dehydrating B. Oxidazing C. reducing D. all
1264	Angle is $OF_2$is	A. 120⁰ B. 180⁰ C. 105⁰ D. 102⁰
1265	Benzene has an extraordinarily stable molecule because of.	A. Delocalized electron cloud B. Localized electron cloud C. Regular tetrahedral structure D. Irregular hexagonal structure
1266	Basicity of orthoposphoric acid is	A. 2 B. 3 C. 4 D. 5
1267	Geographical survey of Pakistan estimates about billion tons of coal in Pakistan:	A. 182 B. 183 C. 184 D. 185
1268	$K_a$value of HF acid is 6.7 x $10^{-15}$the acid is a	A. Weak acid B. Moderately strong acid C. Strong acid D. Very weak acid
1269	Benzene does not undergo polymerization and it is also resistant to	A. Reduction B. Oxidation C. Alkylation D. Ozonolysis
1270	The bond order for He_2molecule is	A. zero B. 1/2 C. 1 D. 2
1271	Silk is an example of	A. Animal fiber B. Vegetable fibre C. Mineral fibre D. None of these
1272	Decreases om concentration of reactant is denoted by	A. dc/dt B. -dc/dt C. +dc/dt D. None

1273	Question Image	
1274	During electrolysis, the reaction that takes place at cathode is :	A. Reduction B. Both (a) and (c) C. Oxidation D. No reaction occurs
1275	The cement plants in west Pakistan at the time of creation were	A. ten B. twenty two C. four D. twenty four
1276	Which of the following is a typical transition metal?	A. Sc B. Y C. Ra D. Co
1277	1 mole of $N_2$and 2 moles of $H_2$are allowed to react in a 1 dm^3vessel. At equilibrium 0.8 mole of $NH_3$is formed. The concentration of H_2in the vessel is	A. 0.6 mole B. 0.8 mole C. 0.2 mole D. 0.4 mole
1278	The compound with cyclic hexamer is	A. HF B. HCl C. HBr D. HI
1279	Copper oxide is dedected by borax bead test with colour:	A. Blue B. Red C. Yellow D. Black
1280	The process in which orbitals of different energies and shapes mix up with each other to give equivalent is called,	A. Hybridization B. Polymerization C. Isomerisation D. Carbonization
1281	Choose the correct answer of transition elements?	A. Transition elements have low melting points B. Transition elements do not have catalytic activity C. Transition elements exhibit variable oxidation states D. Transition elements exhibit inert pair effect
1282	Atoms obey octet rule by sharing-electrons making covalent bonds according to	A. Lewis and Kossal theory B. Valance bond theory C. VSEPR theory D. Molecular orbital theory
1283	Clemensen's reduction of ketones is carried out in	A. H₂with Pd catalyst B. Glycol with KOH C. LiAlH₄in water D. Zn-Hg with conc. HCl
1284	A current of 9.65 ampere flowing for 10 minutes deposits 3.0 g of the metal which is monovalent. The atomic mass of the metal is	A. 10 B. 50 C. 30 D. 96.5
1285	The number of spherical nodes in 3p orbitals are	A. One B. Three C. Non D. Two
1286	Which one does not declourized $KMnO_4$	A. Alkenes B. Alkynes C. Bezene D. All above
1287	The proteins which are derived by conjugated proteins are called as	A. Simple protein B. Complex protein C. Derived protein D. None
1288	Ozone hole refers to	A. Hole in ozone layers B. Reduction in thickness of ozone layer in stratosphere C. Reduction of thickness of ozone in troposphere D. Increase concentration of ozone
1289	Esters have peculiar smell, which of the following is used as an essence of orange	A. Isoamyl acetate B. Iosamyl valerate C. Octyl acetate D. Methyl butyrate
1290	One calorie is equal	A. 4.132 J B. 760 J

		C. 4.184 J D. 1 J
1291	A chemical reaction is in equilibrium when	A. Formation of product is minimum B. Reactants are completely transformed into products C. Rates of forward and backward reactions are equal D. Equal amounts of reactants and products are present
1292	The number of elements in the first, second and third period are	A. 2, 8, 18 B. 8, 2, 18 C. 2, 18, 8 D. 2, 8, 8
1293	Mark the correct statement	A. Na⁺is smaller than Na atom B. Na⁺is larger than Na atom C. Cl⁻is the smaller than Cl atom D. Cl⁻(ion) and Cl (atom) are equal in size
1294	Which of the hydrogen halides has the highest percentage of character?	A. HI B. HF C. HCl D. HBr
1295	4-d series is in the period:	A. 4th B. 5th C. 6th D. 7th
1296	Lactic acid on oxidation by alkaline potassium permanganate gives	A. Tartaric acid B. Pyruvic acid C. Cinnamic acid D. Propionic acid
1297	Question Image	A. A primary alcohol B. A secondary alcohol C. An eher D. A phenol
1298	The solubility product of $Ca(OH)_2$ is 6.5×10^{-6}. The concentration of OH^- ions is	A. 1.175 x 10⁻² B. 2.35 x 10⁻² C. 3.25 x 10⁻³ D. 3.25 x 10⁻⁴
1299	Which one of the following substance is no used as drying agent in desiccators	A. Silica gel B. CaCl₂ C. Phosphorous D. NaCL(50%)
1300	The rate at which a substance reacts is directly proportional to its active mass and the rate of reaction is directly proportional to the product of the active masses of reacting substances, is called	A. Law of conservation of energy B. Le-Chateliers principle C. Law of mass action D. None of these
1301	Major component of natural gas is:	A. Ethane B. Ethene C. Propane D. Methane
1302	The periodic table gives basic framework to study the periodic.	A. Elements only B. Compounds only C. Elements and their compounds D. Elements and their inorganic
1303	The presence of a double bond in a compound is the sign of	A. Saturation B. Unsaturation C. Substitution D. None of above
1304	The geometry of 4 sp^3 hybrid orbitals on an atom is	A. Square planar B. Tetrahedral C. Trigonal planar D. Linear
1305	The process in which the solvent molecules are surrounded and interact with solute ions or molecules is called	A. Solvation B. Hydration C. Hydrogenation D. None
1306	Which one of the following gases is used for artificial ripening of fruits	A. Ethene B. Ethane C. Methane D. Propane
1307	Antibonding MO is formed by	A. Addition of atomic orbitals B. Substraction of atomic orbitals

	Antibonding MO is formed by	C. Multiplication of atomic orbitals D. None of these
1308	Which woody raw material is used for the manufacture of paper pupl	A. Cotton B. Bagasse C. Poplar D. Rice straw
1309	The value of R(General Gas Constant) is	A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">8.3134 JK⁻¹<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">mole⁻¹ ^{<o:p></o:p>} B. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">1.987 Cal K⁻¹<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Mole^{-1<o:p></o:p>} C. Both a and b D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">1.987 JK⁻¹<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">mole⁻¹<o:p></o:p>
1310	Sodium can be obtained by :	A. Electrolysis of acidified water. B. By heating NaCl and water at 100° _{<o:p></o:p>} C. Electrolysis of molten sodium chloride. D. Electrolysis of aqueous sodium chloride.
1311	Which of the following reacts with chloroform and base to form phenyl isocynaide?	A. Nitrobenzene B. Phenol C. Chlorobenzene D. Aniline
1312	Tryosine was isolated from	A. Butter B. Cheese C. Oils D. Fats
1313	Which causes water pollution?	A. Smoke/fly ash B. Automobile exhausts C. Aeroplnes D. 2,4-D and pesticides
1314	The graph between pressure and volume at constant temperature for a gas is	A. Isobaric B. Isothermal C. Isotherm D. None of above
1315	The stability of acromatic compounds decreases with ---- in the no. of its resonance structure	A. Decrease B. Increase C. Remain constant D. Partially decreases
1316	l-Chloropropane has two isomers, it is an example of	A. Chain isomerism B. Position isomerism C. Functional group isomerism D. Metamerism
1317	Which are being formed by alkali metals?	A. oxides B. nitrides C. carbides D. peroxides
1318	The colour of transition metal complexes is due to	A. d-d transitions of electrons B. Para magnetic nature of transition elements C. Ionization D. Loss of s-electrons
1319	To ensure that ethanol is not used for drinking purpose it is converted to methylated spirit by adding.	A. 10% methanol and a little acetone B. 10% petrol and little diesel C. 50% Alcohol D. Only 10% methanol
		A. 130 g

1320	What mass of NaOH is required to prepare 2.5 dm^3 of 1.5 M NaOH solution	A. 130 g B. 140 g C. 150 g D. 160 g
1321	Benzene acid can be prepared from the oxidation of:	A. benzene B. ethyl benzene C. benzonic acid D. toluene
1322	The maximum number of electrons in the outermost shall of s-black elements is	A. One B. Two C. Three D. Four
1323	Which one of the following is not a nuclelphile	A. H₂O B. H₂S C. BF₃ D. NH₃
1324	Which of the following is NOT used as fertilizer	A. Anhydrous ammonia B. Sodium hydroxide C. Calcium nitrate D. Ammonium phosphate
1325	Type of isomerism in BrCH=CHBr is:	A. Structural isomerism B. <blockquote style="margin: 0 0 0 40px; border: none; padding: 0px;">Conformational isomerism</blockquote> C. Geometrical isomerism D. Positional isomerism
1326	Question Image	A. At equilibrium there is no further change in the concentration of HI B. At equilibrium concentration of I₂remains constant C. At equilibrium concentration of H₂remains unaltered D. At equilibrium the rate of formation of HI is equal to the rate of decomposition of HI
1327	Catalyst in the reaction ROH + $SOCl_2$-------> RCL+SO_2+HCl is:	A. ZnCl₂ B. Pyridine C. H₂SO₄ D. Either
1328	Which of the following is obtained when Fe reacts with dil. HNO_3?	A. N₂O B. NO C. NO₂ D. None of these
1329	Chlorophyll contains in it	A. Li B. Na C. Mg D. Ca
1330	Refrectrometric method is used when	A. Reactions involving absorption of I.R. or U. V B. Reactions involving change of refractive index C. Reactions involving ions D. Change of optical activity
1331	The rigid rocket part of earth crust called lithosphere extends upto a depth of:	A. 10 km B. 100 km C. 1000 km D. 1500 km
1332	Toluene is also called	A. Hydroxyl benzene B. Methyl benzene C. ethyl benzene D. None
1333	A liquid on evaporation causes:	A. Heating effect. B. Cooling effect. C. Suffocation . D. All of above
1334	The active part in a molecule is called	A. Hetroatom B. Functional group C. Chemical bond D. Ion
1335	Propyne on hydrolysis in presence of $H_2SO_4$and $HgSO_4$gives	A. Acetaldehyde B. Acetone C. Formaldehyde D. None
1336	Carbon monoxide is harmful to human beings as it	A. Is carcinogenic B. Is antagonistic to CO₂ C. Has higher affinity for hemoglobin as compared to oxygen D. Is destructive to O₃
1337	The chemical method used for determination of rate of reaction is	A. Spectroscopic B. Conductiometric C. Refractometric D. Titration

		D. Titration
1338	Potassium permanganate is.	A. A powerful reducing agent B. A powerful oxidizing agent C. A redox agent D. An alkaline compound
1339	What is the shape of $Fe(CO)_5$molecule?	A. Tetrahedral B. Octahedral C. Trigonal bipyramidal D. Square pyramidal
1340	The term cryoscopy is used for	A. Depression of freezing point B. Elevation in boiling poing C. Lowering of vapour pressure D. Osmotic pressure
1341	Which is possible in ethers?	A. Reactivity high B. Oxidation and reduction C. Reactivity towards bases D. Towards acids
1342	The amount of heat evolved or absorbed by keeping reactants and products at one atmospheric pressure at room temperature is called	A. Heat of formation B. Standard heat of formation C. Standard enthaply change D. None
1343	Water which his considered to be safe for human consumption is known as	A. Distilled water B. Contaminated water C. Potable water D. Rain water
1344	In a group on going downward, polarizability generally	A. Decreases B. Increases C. Remains constant D. Negligible
1345	A compound having empirical formula C_3H_3O and its molecular mass is 110.02. Its molecular formula is	A. C₃H₃O B. C₆H₆O₂ C. C₉H₉O₃ D. C₃H₆O₂
1346	Mendeleev gave his periodic law in the year:	A. 1829 B. 1864 C. 1871 D. 1913
1347	Forms of waste products :	A. Heat B. Smoke C. Solid D. All of these
1348	Which of the molecule does not exhibit TETRAHEDRAL arrangement of electron pairs?	A. H2O B. NH3 C. SiCl2 D. None of these
1349	For a given process, the heat changes at constant pressure (q_p) and at constant volume (q_v) are related to each other as	A. q_p= q_v B. q_p< q_v C. q_p< q_v D. q_p= qv/2
1350	Aromatic compounds burn with sooty flame cause:	A. They have high percentage of hydrogan B. They have ring structure C. They have high percentage of carbon D. They resist reaction with air
1351	Boiling point of acetic acid is ^oC	A. 116 B. 117 C. 118 D. 119
1352	Ascorbic acid contains 40.92% carbon, 4.58%, hydrogen and 54.4% oxygen. The empirical formula is	A. C₃H₄O₃ B. C₂H₄O₃ C. C₃H₅O₄ D. C₂H₃O₁
1353	Nylon 6, 6 is prepared by the reaction of nexamethylene with	A. Formic acid B. Acetic acid C. Adipic acid D. None of these
1354	Heat of neutralization of weak acid and a strong base is	A. 13.7 Kcal B. Less than 13.7 Kcal C. Greater than 13.7 Kcal D. None of these

1355	Bell metal is an alloy of Sn and	A. Copper B. Iron C. Zinc D. Magnesium
1356	Which of the following fertilizers is useful for paddy rice	A. Ammonium nitrate B. Ammonium sulphate C. Urea D. Ammonium chloride
1357	Electrolysis is used for :	A. Manufacture of caustic soda B. Refining of copper C. Electroplating D. All of above
1358	Gammexane is	A. Chlorobenzene B. Benzyl chloride C. Brommobenzene D. Benzene hexachloride
1359	The reaction of sodium with ethanol gives	A. CH₃OH B. NaH C. H₂O D. H₂
1360	Burning of fossil fuels is the main source of pollution	A. Nitrogen oxide B. Nitric oxide C. Nitrous oxide D. Sulphur dioxide
1361	The brown gas formed when metal reduces $HNO_3$is	A. N₂O₅ B. N₂O₃ C. NO₂ D. NO
1362	All are ortho & Para directing except	A. X B. OH C. NR₃ D. NH₂
1363	Question Image	A. Alkyl B. Alkyl nitrile C. Cyanogens D. Amine
1364	NO_2 forms acidic solution	A. Red B. Blue C. Green D. Brown
1365	Heat of vapourization for liquids with strong dipole-dipole forces will have	A. Negligible Values B. Reasonably high values C. Very high values D. very low values
1366	Which of the following is a biodegradable polymer?	A. Cellulose B. Polyethene C. Polyvinyl chloride D. Nylon-6
1367	Besides Zn and Cu , German silver contains the metal	A. Sn B. Ag C. Ni D. Mg
1368	All the elements of oxygen family are	A. Non metals B. Metalloids C. Radioactive D. Polymorphic
1369	Which of the following is not related to transition metals	A. They have a high tensile strength B. They are ductile C. They are malleable D. They have low melting points
1370	NH_3, HCL, H_2O, HL are:	A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Diatomic molecules<o:p></o:p> B. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Poly-atomic molecules<o:p></o:p> C. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Mono-atomic molecules<o:p></o:p> D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif;

		background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Hetero atomic molecules<o:p></o:p></p>
1371	The electronegativeities of F,Cl,Br and I are 4.0,3.0,2.8,2.5 respectively.Hydrogen halide with a high percentage of ionic character is	A. HF B. HCL C. HBr D. HI
1372	The standard e.m.f. of a galvanic cell involving cell reaction with n = 2 is found to be 0.2965 V at 25°C. The equilibrium constant of the reaction would be	A. 1.0 x 10¹⁰ B. 2.0 x 10¹¹ C. 4.0 x 10¹² D. 1.0 x 10²
1373	Shielding effect intervening electrons causes	A. Decreases in atomic radii in a period from right to left B. Increase in atomic radii in a period from left to righ t C. Decrease in atomic radii down the group D. Increase in atomic radii down the group
1374	Which is the property of benzene?	A. decolourizes KMnO₄ B. straight chain structure C. only double bond is present D. triple and double bond
1375	The number of unpaired electrons in the p-subshell of oxygen atom	A. 1 B. 2 C. 3 D. 4
1376	Which compound has the maximum repulsion with water?	A. C₆H₆ B. C₂H₅OH C. CH₃CH₂CH₂OH D. CH₃----O---CH₃
1377	Phosphorous helps the growth of	A. Root B. Leave C. Stem D. Seed
1378	The chemical formula of magnesite is	A. MgCl₂ B. Mg(HCO₃)₂ C. MgCO₃ D. None of these
1379	The distillation of coal at high temperature and in absence of air is called	A. Vacuum distillation B. Normal distillation C. Fractional distillation D. Destructive distillation
1380	The element with atomic number 26 will be found in group	A. 2 B. 8 C. 6 D. 10
1381	Which of the following does not reflect the periodicity of elements?	A. Bonding behaviour B. Electronegativity C. Ionisation potential D. Neutral/proton ratio
1382	A transition metal complex can be recognized by various terms. Which is not the proper term	A. Central metal ion B. Coordination number C. Ligand D. Geometry of complex
1383	Major fertilizers with micro—nutrients are	A. Nitrogeneous B. Phosphatic C. Potash D. a,b,c
1384	If ketone reacts with Grignard's reagent, it also produces alcohol, But it will be a	A. primary alcohol B. Secondary alcohol C. Tertiary alcohol D. Aromatic alcohol
1385	Complete reduction of acids to alkanes is carried out with?	A. Hydrogen iodide B. Red phosphorous C. Lithimum ammonium hydride D. Both B and C
1386	The oxides of which of the following elements will be acidic in character	A. Mg B. Rb C. Li D. Cl
		A. Substitution reaction

1387	The formation of PVC from vinyl chloride is an example of	B. Addition polymerization C. Condensation polymerization D. Condensation reaction
1388	The nature of positive ray depend on:	A. The nature of electrode. B. The nature of discharge tube. C. The nature of residual gas. D. All of above.
1389	Which of the following was discovered first:	A. Charge to mass ratio of electrons. B. Mass of electrons. C. Charge of electrons. D. All of above at same time.
1390	Which set of hybrid orbitals has planar triangular shape	A. sp³ B. sp C. sp² D. dsp²
1391	A solution has pH = 0, its H^+ion concentration is	A. 1 x 10⁻¹⁴ B. 1 x 10¹⁴ C. 1 x 10¹ D. 1
1392	Which of the following is a not typical transition element	A. Cr B. Mn C. Zn D. Fe
1393	Corrosion reaction are	A. Spontaneous redox reaction B. Non-spontaneous acid-base reactions C. Spontaneous acid-base reactions D. None of these
1394	Number of elements present in 5th period is	A. 8 B. 18 C. 32 D. 24
1395	Although hydrogen resemble with the elements of group IA, IVA and VII but it is usually placed in	A. Group IA B. Group IV A C. Group VII D. Group VIII
1396	Question Image	A. Plank's equations B. de Broglie's equations C. Heisenburg's equation D. None
1397	Pollution is	A. Removal of top soill B. Release of toxic/undesirable materials in enevironment C. Conversation of energy D. All the above
1398	The wave number of light emitted by a certain source is 2×10^5m. The wavelength of this light will be:	A. 500 NM. B. 500 M. C. 200 NM. D. 5 x 10⁷m
1399	Which of the following charge	A. Li B. Be C. H D. He
1400	On heating acetaldehyde with ammonical silver nitrate solution, we get	A. CH₃OH B. Silver acetate C. HCHO D. Silver mirror
1401	What is the molarity of a solution containing 15.0 g urea in 500 $cm^3$of solution	A. 0.5 M B. 1 M C. 1.5 M D. 2 M
1402	$SnCl_2$have _____ shape	A. Planner B. Tetrahedral C. Angular D. None
1403	Which one of the following is the weakest intermolecular force	A. Dipole induced dipole forces B. Ionic dipole forces C. Electrostatics forces between ions D. Dipole-dipole forces
1404	How many monochlorobutanes will be possible on chlorination of n-butane?	A. 1 B. 2 C. 3 D. 5

1405	The process in which solvent particles surround solute particles is called	A. Hydrolysis B. Hydration C. Solvation D. Dissolution
1406	To meet the due need of food by increasing population we must use in agriculture	A. good seeds B. pesticides C. fertilizers D. all
1407	A carboxylic acid containing Ar group in it is called:	A. Aromatic carboxylic acid B. Allphatic carboxylic acid C. Dicarboxylic acid D. Carboxylic acid
1408	To get DDT, chlorobenzene has to react with one of the following compound in the presence of conc.H_2SO_4	A. Trichloroethane B. Dichloroacetone C. Dichloroacetaldehyde D. Trichloroacetealdehyde
1409	The final product formed by distilling ethyl alcohol with excess of Cl_2 and $Ca(OH)_2$is	A. CH₃CHO B. CCl₃CHO C. CHCl₃ D. (CH₃)₂O
1410	Cracking products are :	A. Only alkanes B. Only alkenes C. Alkanes and alkenes D. Alkynes
1411	Elements have the tendency to attain 8 electrons in their valence shell. This is known as	A. Octer rule B. Hunds rule C. Pauli exclusion principle D. Auf ban principle
1412	The elimination of hydrogen halide from adjacent carbon atoms is called	A. Dehydrogenation B. Hydrogenation C. Dehydrohalogenation D. Hydrohalogenation
1413	What is the molarity of H_2SO_4solution that has density of 1.84 gm/cc at 35°C and contains 98% by weight?	A. 4.18 M B. 8.14 M C. 18.4 M D. 18 M
1414	Optical activity is possible in	A. Oxalic acid B. Acetic acid C. Tartaric acid D. Formic acid
1415	Where energy is released during a reaction it is	A. Exothermic reaction B. Endothermic reaction C. A free radical reaction D. A bond breaking reaction
1416	Which of the following decolorized Br_2-water	A. Methane B. Ethane C. Ethene D. Propane
1417	Molecular orbital picture of N_2 indicates	A. One unpaired electron B. Two unpaired electron C. No unpaired electron D. None of these
1418	Which statement about the following equilibrium in correct? $2SO_{2\,(g)} + O_{2(g)}$---------- $2sO_{3(g)}H$= - 188.3 KJ mol-1	A. T value of K_{p falls witha rise in temperate.} B. The value of K_{p falls withincreasing pressure} <o:p></o:p> C. Adding V_{2O}₅catalyst increase the equilibrium yield of sulfur trioxide <o:p></o:p> D. The value of K_{p is equal to}K_p E. <o:p></o:p> <o:p></o:p>
1419	Which is not carboxylic acid with pungent smell?	A. Formic acid B. Acetic acid C. Ethanoic acid D. Butyric acid
1420	Which of the element is not alkali metal	A. Lithium B. Rubidium C. Francium D. Magnesium
1421	n-butane and iso butane are an example of	A. Chain isomerism B. Positional isomerism C. Meta merism

		D. Functional group isomerism
1422	The word paper is derived from the name of which reedy plany	A. Rose B. Sun flower C. Papyrus D. Water hyacinth
1423	There were seven groups in periodic table proposed by:	A. Al-Razi B. Dobrierner C. Newland D. Mendeleev
1424	Outer shells of two elements X and Y have two and six electrons respectively. If they combine, the expected formula of compound will be	A. XY B. X₂Y C. X₂Y₃ D. XY₂
1425	The colour of the transition metal compounds is due to	A. p-d transition B. d-d transition C. s-p transition D. None of these
1426	One mole of C_2H_5OH contains the number of H-atoms	A. 6.02 x 10²³ B. 3.61 x 10²⁴ C. 1.81 x 10²⁴ D. 6.02 x 10²⁴
1427	Law of mass action was given by :	A. Guldberg and Waage. B. Berkeley and Hartly. C. Ramsay and Reyleigh. D. Berthelot.
1428	Alkyl halides when reduced with nascent hydrogen in the presence of Zn + HCl, are converted to	A. Alkynes B. Alkenes C. Alkanes D. Alcohol
1429	The electrolytic cell used for the production of metallic sodium is known as	A. Down's cell B. Solvary's cell C. Haber's cell D. None of these
1430	Chlorin heptoxide reacts with water to form:	A. Hypochlorous acid B. Chloric acid C. Perchloric acid D. Chlorine and oxygen
1431	In primary alkyl halides, the halogen atom is attached to a carbon which attached to how many carbon atoms?	A. Two B. Three C. One D. Four
1432	The value of R (Rydberg's constant) is _____ m-1	A. 1.0974 x 107 B. 1.0842 x 107 C. 1.082 x 10-7 D. Both a and b
1433	Which is symmetric alkene?	A. CH=C-CH₂ B. CH≡CH C. CH₃-C≡C - CH₃ D. B and C
1434	Transition metals mostly are	A. Diamagnetic B. Paramagnetic C. Neither diamagnetic nor paramagnetic D. Both diamagnetic and paramagnetic
1435	In Tolten's best, the end product is _____ formed	A. White ppts B. Red ppts C. Yellow ppts D. Silver mirror
1436	Which property is not present in Al?	A. Reacts with acid B. Reacts with bases C. Changes litmus paper D. Changes methyle orange colour
1437	The rate of E_1reaction depends upon:	A. The concentration of substrate B. The concentration of nucleophile C. The concentration of substrate as well as nucleophile D. None of these
1438	Synthesis of rubber is made by polymerization of	A. Chloroform B. Acetylene C. Divinylacetylene D. Butene

1439	DDT is	A. Biodegradable pollutant B. Nondegradable pollutant C. Not a pollutant D. An antibiotic
1440	Distillation of calcium salts of acetic acid and formic acids gives acetaldehyde. What compound would be obtained if only calcium salt of acetic acid is distilled	A. Formaldehyde B. Butyraldehyde C. Propionaldehyde D. Acetone
1441	Which one of the following statements about glucose and sucrose is incorrect?	A. Both are soluble in water B. Both are naturally occuring C. Both are carbohydrates D. Both are disaccharides
1442	In which type of following solutions we don't know the total volume of the solutions :	A. Percentage weight/weight B. Percentage weight/volume C. Percentage volume/volume D. Percentage volume/weight
1443	When cathode rays strike the anode metal X-rays are emitted and not the positive rays because	A. Cathode rays are material particles B. Cathode rays knock out electrons from anode, which emit X-rays when outer electron take their place C. Cathode rays are absorbed by the nucleus D. Cathode rays become heated
1444	Homogenous catalysis is that in which catalyst and reactants are in same phase. Which one of the following reaction is a homogenous catalysis	
1445	Alkenes combine readily with electrophillic reagents such as halogens giving	A. Haloalkanes B. Gem-dihalides C. Vicinal dihalides D. Vinyl halides
1446	Acetic acid is also named.	A. Methanoic acid B. Ethanoic acid C. Propanic acid D. Butanoic acid
1447	A one thousand dm^3sample of water contains one gram of iron (iii) ions what is the concentration in parts per million of Fe^{3f}(eq) in parts per million	A. 0.001 B. 0.01 C. 0.1 D. 1.0
1448	BOD is	A. Biological oxygen deficit B. Biosphere oxygen demand C. Biological oxygen demand D. None of the above
1449	The best buffer is prepared when molar concentrations of the salt and acid are equal, then its pH and pKa value are related	A. pH = pKa B. pH < pKa C. pH > pKa D. pH x pKa = 14
1450	The noble gases are	A. Mono atomio B. Diatomic C. Polyatomic D. All
1451	The carbon of a carbonyl group is:	A. sp hybridized B. sp²hybridized C. sp³Hybidized D. None of these
1452	An organic compound A reacts with methyl magnesium iodide to form an addition product which on hydrolysis forms the compound B . Compound B gives blue colour salt in Victor Meyer's test.The compounds A and B are respectively	A. Acetaldehyde, tertiary butyl alcohol B. Acetaldehyde, ethyl alcohol C. Acetaldehyde, isopropyl alcohol D. Acetone, isopropyl alcohol
1453	The deviation of a gas from	A. -10<span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:"Times New Roman";mso-bidi-theme-font:minor-bidi; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">°C and 5.0 atm B. -10°C and 2.0

1453	ideal behavior is maximum at :	B. -10°C and 2.0 atm C. 100°C and 2.0 atm D. 0°C and 2.0 atm
1454	B.O.D is connected with	A. Organic matter B. Microbes C. Mircrobes and organic matter D. None of the above
1455	The pH of 10^{-3}mole $dm^{-3}$of an aqueous solution of $H_2SO_4$is	A. 3.0 B. 2.7 C. 2.0 D. 1.5
1456	Iodoethane reacts with sodium in ether, the product formed is	A. Pentene B. Propyne C. Butene D. Butane
1457	Alkyl halides react with lithium dialkyl copper reagents to give	A. Alkenes B. Alkyl copper halides C. Alkanes D. Alkenyl halides
1458	Which gasses are produced from landfills	A. NH₃ B. H₂S C. N₂ D. All of these
1459	The process in which orbitals of different energies and shapes mix with each other to give equivalent hybrid orbitals is called	A. Isomerization B. polymerization C. Hybridization D. Resonance
1460	When chlorofluoro carbon are subjected to U.V. they form	A. Cations B. Anions C. Free radicals D. None of these
1461	Question Image	A. Adding 2(ii) + 3(iii) and subtracting i B. Add i + ii + iii C. Add i - ii + iii D. Add i - ii - iii
1462	The amount of oxygen in the lithosphere is about	A. 35.50% B. 40.60% C. 56.60% D. 50.50%
1463	When two hydrogen atoms approach each other.	A. Forces of attraction operate. B. Forces of repulsion operate. C. Forces of attraction and repulsion operate simultaneously. D. Nothing happens.
1464	Which compound is more soluble in water	A. C₂H₅OH B. Benzene C. CH₃OCH₃ D. Hexane
1465	Which of the following has highest first ionization potential?	A. Carbon B. Oxygen C. Nitrogen D. Boron
1466	1.0 g pure calcium carbonate was found to require 50 ml of dilute HCl for complete reaction. The strength of HCl solution is given by	A. 4 N B. 2 N C. 0.4 N D. 0.2 N
1467	Each of the following compounds is effective as a refrigerant. The release of which one of these causes the greatest depletion of the ozone layer	A. CCl₂F₂ B. CH₃OCH₃ C. CH₃CHF₂ D. CH₃CH₂CH₃
1468	The alkali metals form	A. Ionic bond B. Covalent bond C. Co-ordinate bond D. H-bond
1469	The equation of the rate of forward reaction is.	A. Kf B. Kf(C)(D) C. Kr(A)(B) D. Kr(A)(B) / Kf(C)(D)

		D. R(P)(Q) / R(S)(Q)
1470	Density of aluminium is (g cm^{-3}):	A. B B. Al C. Si D. Ge
1471	The compounds or species in search of electrons are called	A. Elctrophiles B. Nucleophile C. Nitrities D. Bases
1472	Aqua Regia is found when HCl and NHO3 mixed in following ration.	A. 1 : 1 B. 2 : 1 C. 1 : 3 D. 3 : 1
1473	The rate of reaction :	A. Decreases as the reaction proceeds B. Increases as the reaction proceeds C. May decrease or increase reaction proceeds D. Remains same as the reaction proceeds
1474	The strength of economy of a country is measured with respect to production of	A. Medicines B. Cement C. Fertilizers D. Paper
1475	Escape of high energy molecules from the surface of a liquid is called	A. Sublimation B. Distillation C. Condensation D. Evaporation
1476	The shape of the molecule $SF_2Cl_2$is	A. Trigonal bipyradmidal B. Cubic C. Octahedral D. Tetrahedral
1477	It is noticed that energy in the from of heat is either evolved or absorbed as a result of a:	A. Physical change. B. Chemical change. C. Biological change. D. All of above.
1478	Rate of evaporation and rate of condensation at equilibrium	A. Become very low B. Become very high C. Become equal D. Can never be equal
1479	Direct conversion of solid intro vapours is called:	A. Crystallization B. Sublimation C. Obligation D. Vapourization
1480	The covalent bonds are	A. Unidirectional B. Bi-directional C. Non-directional D. Multi-directional
1481	Any substance in the environment which adversely affects the human health and natural functioning of the Ecosystem is known as	A. Environment B. Hydrosphere C. Pollutant D. Biosphere
1482	Law of octaves was given by:	A. Al-Razi B. Dobriener C. Newland D. Mendeleev
1483	For the above reaction the relationship b/w k_c and k_p will be :	A. K_p = K_cRT<o:p></o:p> B. Kp = K_c(RT)₋₁<o:p></o:p> C. K_p = K_c(RT)₋₂<o:p></o:p> D. K_c = K_p<o:p></o:p>
1484	Transition elements are called so because:	A. Form interstital sompounds B. have high m.p C. In between 's' and' 'p' block elements D. All of these
1485	Minamata disease is due to pollution of	A. Organic waste into drinking water B. Oil spill in water C. Industrial waste containing mercury into fishing water D. Arsenic into the atmosphere
1486	The solution of which acid is use for seasoning of food?	A. Formic acid B. Acetic acid C. Benzoin acid D. Butanoic acid
		A. Increases

1487	Question Image	B. Decreases C. Remains same D. Cannot be predicted
1488	The third line of the Balmer series, in the emission spectrum of the hydrogen atom,is due to the transition from the	A. Fourth Bohr orbit to the first Bohr orbit B. Fifth Bohr orbit to the second Bohr orbit C. Sixth Bohr orbit to the third Bohr orbit D. Seventh Bohr orbit to the third Bohr orbit
1489	Which three elements are needed for the healthy growth of plants	A. N, S, P B. N, Ca, P C. N, P, K D. N, K, C
1490	Alcohols are derivatives of:	A. Benzene B. Alkanes C. Alkens D. Alkynes
1491	Formation of PVC form vinyl chloride is an example of	A. Substitution reaction B. Addition polymerization C. Condensational reaction D. Aldol condensation
1492	Alkanes containing carbon C_{18}ownwards are	A. Gases B. Liquids C. Waxy solids D. Solids
1493	Which of the following acid can be used as a catalyst in Friedel craft's reaction	A. AlCl³ B. HNO₃ C. BeCl₂ D. NaCl
1494	Aldelydes are the oxidation product of	A. P-alcohols B. s-alcohols C. ter-alcohols D. carboxylic acids
1495	_____ is used in breathing equipments for mountaineers and in space craft	A. Li₂O B. BeO C. N₂ D. KO₂
1496	Substitution of halogen in the benzene ring requires catalyst	A. AlCl₃ B. FeCl₃ C. SiO₂ D. Organo - nickel
1497	The electrophile in aromatic sulphontion is:	A. H₂SO₄ B. HSO₄ C. SO₃ D. SO₃₊
1498	$2SO_2 + O_2 \rightleftharpoons 2SO_2H = 188KJ$ $mole^{-1}$ Which statement about following equilibrium is correct :	A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">The value ofK_pfalls with arise in temperature.<o:p></o:p> B. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">The value ofK_pis equal tok_{c.<o:p></o:p>} C. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">The value ofK_pfalls with the increase pressure.<o:p></o:p> D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Adding V₂<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">O₅ <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">catalyst increase the equilibrium yield of Sulphur trioxide.<o:p></o:p>
1499	Addition of iron fillings to $CuSO_4$solution caused precipitation of Cu owing to the	A. Reduction of Cu²⁺ B. Oxidation of Cu²⁺ C. Reduction of Fe D. Reduction of Fe³⁺

1500	The reference calomel electrode is made from which of the following?	A. ZnCl₂ B. CuSO₄ C. Hg₂Cl₂ D. HgCl₂
1501	Transition elements differ from s and p block elements due to their characteristic properties. What is not he characteristic property of transition elements	A. Transition elements show variable oxidation states B. Their salts are coloured C. They can be used as catalyst D. All of them are metals
1502	Ethylene reacts will 1% cold alkaline $KMnO_4$to give	A. Oxalic acid B. Acetone C. Ethylene glycol D. Formaldehyde
1503	3.01 x $10^{22}$$Ag^+$ions is present in	A. 85 grams AgNO₃ B. 0.85 g AgNO₃ C. 8.5 g AgNO₃ D. 18.5 g AgNO₃
1504	Which is not a colligative property?	A. Osmotic pressure B. Lowering of vapour pressure C. Depression of freezing point D. Elevation of boiling point
1505	The ionic product of H^+ions and OH^-in water is called ionization constant of water Kw. The value of Kw at 25°C is	A. 0.11 x 10⁻¹⁴ B. 0.30 x 10⁻¹⁴ C. 1.0 x 10⁻¹⁴ D. 3 x 10⁻¹⁴
1506	Which of the following salts mixed with ice to make the freezing mixture used in ice cream machine	A. KNO₃ B. NH₄NO₃ C. AgNO₃ D. Mg(NO₃)₂
1507	Which of the following oxides is unlikely to dissolve in aqueous hydroxide	A. Al₂O₃ B. MgO C. SO₂ D. SIO₂
1508	Formaldehyde is used to make	A. Plastics B. Medicine C. Antiseptic D. All of these
1509	Domestic waste mostly constitutes	A. Non-biodegradable pollution B. Biodegradable pollution C. Effluents D. Air pollution
1510	A single free chlorine radical can destroy ozone molecules upto:	A. 100000 B. 100 C. 1000 D. 10000
1511	Molar mass of high molecular w.f. polymers ranges form:	A. 1000 to 10000 B. 10000 to 100000 C. 100000 to 1000000 D. 1000000 to 10000000
1512	Which of the following geometry is associated with the compound in which the central atom assumes sp^3d hybridization?	A. Planar B. Pyramidal C. Angular D. Trigonal bipyramidal
1513	$N_2 + 3H_2 \rightleftharpoons 2NH_3$ The unit of K_c for tis reaction will be:	A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">mol² dm⁻⁶<o:p></o:p> B. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">mol⁻² dm⁺⁶<o:p></o:p> C. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">mol dm⁻³<o:p></o:p> D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">mol⁻¹ dm⁺³<o:p></o:p>
	Ca, Mg, Be, Ba, belong to the	A. Be > Mg> Ca > Ba

1514	same group, the order of their ionization energy values is	B. Ba > Ca > Mg > Be C. Ca > Mg > Be > Ba D. Ba > Mg > Ca > Be
1515	The color of Cr^{3+}ion is	A. Violet B. Blue C. Pink D. Green
1516	Hydroxyl amine is a derivative of::	A. Alcohol B. Aldehyde C. Ammonia D. Ketone
1517	All gases can be compressed by :	A. Keeping constant pressure B. Decreasing pressure C. Increasing pressure D. None of the above
1518	Which statement about molecule is incorrect ?	A. Molecules of a substance are similar B. Hemoglobin is a homo atomic molecules C. Oxygen molecule is a macro molecule D. It exist independently
1519	Question Image	A. Decrease in temperature favour more dissolution of the salt B. Increase in temperature favour more dissolution of the salt C. Lowering pressure favour more dissolution of the salt D. Increasing pressure favour more dissolution of the salt
1520	In the earth crust sodium is	A. 2.50% B. 2.30% C. 2.40% D. 3.50%
1521	Fossil fuels consist of :	A. Coal B. Natural gas C. Petroleum D. All of these
1522	CO+ is an example of	A. Stable molecule B. Anionic molecule ion C. Cationic molecular ion D. Free radical
1523	Which of the following element's outermost orbits last electron has magnetic quantum number m=0?	A. Na B. O C. Cl D. N
1524	Acid rain is caused when various atmospheric gases dissolve in rain water. What are the gases that cause rain water	A. SO₂ B. NO₂ C. CO D. A and b only
1525	Question Image	A. Equal volumes of N₂and H₂are reacting B. Equal masses of N₂and H₂are reacting C. The reaction has stopped D. The same amount of ammonia is formed as is decomposed into N₂and H₂
1526	Products of coal is:	A. Peat B. Lignite C. Bituminous coal D. All above
1527	Linear geometry is present in:	A. Sp³ B. Sp² C. Sp D. D²sp³
1528	Which bond shows maximum hydrogen bonding with water?	A. CH₃OH B. C₂H₅OH C. CH₃----O----CH₃ D. C₆H₅OH
1529	Major fertilizers with micro-nutrients are:	A. Nitrogeneous B. Phosphalic C. Potash D. All of these
1530	Which of the following compounds does not react with $NaHSO_3$?	A. C₆H₅CHO B. Acetophenone C. Acetone D. Acetaldehyde
1531	Stainless steel contains Cr upto	A. 12% B. 18% C. 10% D. 5%

1532	Oxidation of NO in air produces	A. N₂O B. N₂O₃ C. N₂O₄ D. N₂O₅
1533	Which property is not present in non-metals:	A. Predominantly covalent B. Poor conductor C. High E.N. Value D. High electropositivity
1534	The molarity of toluene solution in benzene is 0.22 if 5 grams of toluene dissolved, then mass of benzene is grams is	A. 267 B. 260 C. 240 D. 247
1535	Equal volumes of ethylene glycol (molar mass = 62) and water (molar mass = 18) are mixed. The depression in freezing point of water is (given K_f of water = 1.86 K mol^{-1}kg and specific gravity of ethylene glycol is 1.11)	A. 0.003 B. 3.33 C. 0.333 D. 33.3
1536	Question Image	A. Neutrons are attracted by nucleus B. Neutrons carry out nuclear reactions C. Neutrons carry no charge D. Neutrons are electromagnetic radiations
1537	Ketones are reduced to	A. Primary alcohol B. Secondary alcohol C. Tertiary alcohol D. All of these
1538	Which one of following is not monocyclic aromatic hydrocarbon	A. Benzaldehyde B. Benzoic acid C. Benzene sulfonic acid D. Biphenyl
1539	Schrodinger wave equation describes electron completely because	A. It describes a set of four quantum number B. It describes the particle nature of electron C. It measures wavelength of electron D. It describes electron moving in specific orbit
1540	Which of the following is responsible for depletion of the ozone layer in the upper strata of the atmosphere?	A. Fullerences B. Freons C. Polyhalogens D. Ferrocene
1541	The detection of functional group is called:	A. Numerical analysis B. Qualitative analysis C. Quantitative analysis D. Combustion analysis
1542	One mole of oxygen confined in a cylinder fitted with a piston is an example of	A. Surrounding B. System and surrounding C. System D. State function
1543	The difference of potential of two electrodes when concentration of solution is 1M each at 25°C and1 atm is called :	A. Cell reaction. B. Electrode potential. C. Cell voltage. D. Standard cell potential.
1544	Which of the following is a characteristic of a reversible reaction?	A. It never proceeds to completion B. It can be influenced by a catalyst C. It proceeds only in the forward direction D. Number of moles of reactants and products are equal
1545	Which of the following is produced when an aqueous solution of butan-2-ol is refluxed with dil acidified $KMnO_4$	A. Butanol B. Butanoic acid C. Butanone D. Butane
1546	2-Bromopentane is heated with potassium ethoxide in ethanol . The major product obtained is	A. 2-Ethoxypentane B. Pent-1-ene C. cis-Pent-2-ene D. trans-Pent-2-ene
1547	Among group V-A elements, the most electronegative element is:	A. Sb B. N C. P D. As

1548	Acetamide is prepared by	A. Heating ammonium acetate B. Heating methyl cyanide C. Heating ethyl acetate D. The hydrolysis of methyl cyanide
1549	In alkynes the bonds between carbon atoms are	A. All sigma bonds B. All pi(π) bonds C. One is sigma and two areπ(pi) bonds D. One isπ(pi) and two are sigma bonds
1550	Sodium should be stored in	A. Air free from moisture B. Air free form carbon dioxide C. Under water D. Under kerosene oil
1551	Which of the following solutions has the highest boiling point ?	A. 5.85% solution of sodium chloride. B. 18.0% solution of glucose. C. 6.0% solution of urea. D. All have same boiling points.
1552	If the rate of reaction is independent of the concentration of the reactant, the reaction is of	A. Zero order B. First order C. Second order D. Third order
1553	Acetic acid is 1.33% ionized, In 1000 molecules of 0.1 M acetic acid the number of H^+ions is	A. 1.33 B. 13.3 C. 1.33 D. 1
1554	Which of the following elements is/are not liquid at 30°C?	A. Ga B. Hg C. Ge D. Cs
1555	which enzyme is not involved in the fermentation of starch ?	A. Diastase B. Zymase C. Urease D. Invertase
1556	Theα-carbon of 19 out of 20α-amino acids found in protein is chiral or asymmetric. Hence they are optically active. Only one of the 20α-amino acids is not optically active which one is the	A. Proline B. Glycine C. Hitidine D. Alanine
1557	A peptide having molecular mass upto 10,000 is called a	A. Vitamin B. Protein C. Polypeptide D. Dipetide
1558	Down's cell is used to prepare:	A. Sodium carbonate B. Sodium bicarbonate C. Sodium metal D. Sodium hydroxide
1559	A substance which increases the rate of a reaction without being consumed during the reaction is called	A. An autocatalyst B. A catalyst C. A negative catalyst D. All of these
1560	During the mechanism of aldol condensation a/an _____ is formed	A. Oxide B. Alkali C. Alkoxide ion D. None of these
1561	The disaccharide present in milk is	A. Sucrose B. Maltose C. Lactose D. Cellobiose
1562	Which of the following reagents is used to distinguish between methanoic acid and ethanoic acid?	A. Amm. silver nitrate solution B. Neutral ferric chloride C. Sodium hydroxide solution D. Sodium carbonate solution
1563	A process which takes place on its own without any outside assistance and moves from a non-equilibrium stat towards an equilibrium stat is termed as:	A. Spontaneous process. B. Natural process. C. Non-Spontaneous process. D. Both (a) and (b).

as.

1564	Aldehydes and ketones are carbonyl compounds. Which of them react both with $NaBH_4$and with Tollen's reagent	A. Both aldehydes and ketones B. Aldehydes only C. Ketones only D. Neither aldehydes nor ketones
1565	The relative lowering of vapour pressure is equal to the mole fraction of the solute is statement of	A. Rault law B. Henry law C. Dalton law D. Grahms law
1566	Which of the following acid can be used as a catalyst in Friedal Craft's reactions	A. AlCl₃ B. HNO₃ C. BeCl₂ D. NaCl
1567	Which are used as essences (flowers)?	A. Aldehydes B. Ketones C. Alcohols D. Esters
1568	Analytical chemistry is the science of	A. Chemical characterization B. Physical characterization C. Biological characterization D. Biochemical characterization
1569	Which of the following salt is soluble in water	A. CaCO₃ B. CaSO₄ C. MgSO₄ D. BaSO₄
1570	The test used for the detection of ethanol in the mouth of a drunk driver is that the drunk driver is asked to blow air from mouth into a solution of $K_2Cr_2O_7$and H_2SO_4. The colour changes, if the driver is drunk	A. From orange to green B. From pink to green C. From orange to colorless D. From pink to colorless
1571	A half reaction can be defines as :	A. It always occurs at cathode. B. Involves only half of a mole of electrolyte. C. Occurs at one of the electrode. D. Goes only half way to completion.
1572	In the manufacture of $NH_3$by Haber's process catalyst used is iron its catalytic efficiency is poisoned by	A. Presence of Al₂O₃ B. Presence of Cr₂O₃ C. MnO₂ D. CO present with H₂gas
1573	Alkenes normally have _____ geometry	A. Tetrachedral B. Linear C. Planer D. None
1574	Among O, C, F, Cl, Br, the correct order of increasing radii is	A. F O C Cl Br B. F C O Cl Br C. F Cl Br O C D. C O F Cl Br
1575	Which one is the major reason for pollution in high cities?	A. Fossil fuel B. Acid rain C. Heat dispersion D. None of the above
1576	The molarity of solution containing 14.5 grams urea (N_2H_4CO) dissolved in 100 $cm^3$of the solution is	A. 1 molar B. 0.1 molar C. 0.2 molar D. 0.25 molar
1577	Which woody raw material is used for manufacture of paper pulp?	A. Cotton B. Bagasse C. Popular D. Rice straw
1578	Which of the electronic configuration of nitrogen in correct?	A. 1S²,2S²,2P¹,2P¹,2P¹ B. 1S², 2S², 2P³ C. 1S²,2S²,2P²,2P¹,2P² D. 1S²,2S²,2P⁶,3S²,3P⁶
1579	Compounds having same molecular formula but different structures are said to be	A. Monomers B. Isomers C. Metamers D. Tautomers

1580	The hydrocarbons having double bonds normally end with suffix	A. Ane B. Ene C. Yne D. Oic
1581	A compound is soluble in conc. H_2SO_4, it does not decolourise bromine in carbon tetrachloride but is oxidized by chromic anhydride in aqueous sulphuric acid within two seconds, turning orange solution to blue, green and then opaque. The original compound is	A. Primary alcohol B. Tertiary alcohol C. alkene D. ether
1582	The oxidation number of Ni in $[Ni(CO)_4]$ is	A. +1 B. 0 C. +4 D. -4
1583	Mass spectrometer measures the	A. Exact mass of an element B. Average mass of an element C. The number of elements present in a molecule D. m/e value of a positive ion
1584	The forced which holds together two or more atoms or ions to form a large variety of compounds in called:	A. A chemical bond. B. An ionic bond. C. A covalent bond. D. A coordinate bond.
1585	In which one of the following compound rings are not fused together at ortho positions	A. Phenanthrene B. Naphthalene C. Diphenyemethane D. Anthracene
1586	Which of the following metal requires radiation of highest frequency to cause emission of electrons?	A. Na B. Mg C. K D. Ca
1587	Kinetic energy of the molecules is due to	A. Transnational motion B. Rotational motion C. Vibrational motion D. All of these
1588	Which of the following compounds is explosive in nature?	A. Phosphorus trichloride B. Nitrogen trichloride C. Hyponitrous acid D. Nitrosyl chloride
1589	According to VSEPR theory, the shape of the water molecule is	A. Octahedral B. Distorted tetrahedral C. Planar triangle D. Linear
1590	$N_2 + 3H_2 \rightleftharpoons 2NH_3$ + Heat for above equation, themaximum product will be obtained at :	A. Low temperature at high pressure. B. High temperature and low pressure. C. High temperature and high pressure. D. Low temperature at low pressure.
1591	Two vitamins absorbed from intestine along with fats are	A. A, D B. A, B C. A, C D. D, B
1592	Ethyl alcohol gives ethyl chloride with the help of	A. SOCl₂ B. NaCl C. Cl₂ D. KCl
1593	A reaction will also be called a spontaneous if	A. It does not need energy to start with B. It needs energy to carry the whole process C. It needs energy at the end of reaction D. It needs energy to start with
1594	If 5.85 of NaCl are dissolved in 90g of water the mole fraction of NaCl is	A. 0.1 B. 0.01 C. 0.2 D. 0.0196
1595	Polyanion formation is maximum in	A. Nitrogen B. Oxygen C. Sulphur D. Boron

1596	The elements of group IA are called	A. Chalocogens B. Halogens C. Alkali metals D. Alkaline earth metals
1597	A standard hydrogen electrode (S.H.E) consists of a platinized platinum electrode dipped in 1 molar solution of H^+ions and hydrogen gas is passed at a pressure of	A. One pascal B. One kilo pascal C. One atmoshpere D. Then atmoshpere
1598	Major component in cement is :	A. SiO₂ B. Lime C. Al₂O₃ D. MgO
1599	Spraying of DDT produces pollution of	A. Air B. Air and water C. Air and soil D. Air, water and soil
1600	Corrosion proof parts of machinery are prepared from	A. Iron B. Copper C. Plastic D. Teflon
1601	Which of all following compound is not possible	
1602	Generally electron affinities for elements in a period from left to right	A. Decreases B. Increases C. Remain same D. Increases alternatively
1603	The number of neutrons in the element $^{9}_{4}Be$ is	A. 4 B. 5 C. 9 D. 13
1604	Formic Acid is obtained from Red out by:	A. Distillation B. Crystallization C. Filtration D. sublimation
1605	Reduction or oxidation potential of standard hydrogen electrode is :	A. 0.0 Volt B. 0.8Volt C. 1.0Volt D. 1.8Volt
1606	Organic compounds resemble to those of inorganic compounds having same	A. Ionic properties B. Carbon forming long chain or rings C. Chemical forces D. Isomerism
1607	Which compound is both chiral and acidic	
1608	Factors affecting denaturation of proteins:	A. Change in temp and pH B. Strong reducing agent C. Strong oxidizing agent D. All of these
1609	3-d series elements are present in:	A. First period B. Second Period C. Third period D. 4th period
1610	Which is volatile liquid?	A. HF B. HCl C. HBr D. HI
1611	When a piece of zinc is added to the copper sulphate solution, _____ colour of solution disappear	A. Pink B. Purple C. Blue D. Brown
1612	The wave length of electron as wave is 0.5 nm. What is the wave length in meter	A. 5 x 10⁻⁹ B. 5 x 10⁻¹² C. 5 x 10⁻⁶ D. 5 x 10⁻¹⁰
1613	Which behaves ass insulator for animals body?	A. Carbohydrates B. Protiens C. Fats D. skin

1614	Resonance energy of benzene is (in KJ mol^{-1})	A. 120 B. 150 C. 170 D. 180
1615	The valence shell electronic structure of an element is ns^2np^5. The element will along to the group of	A. Alkali metals B. Inert metals C. Noble gases D. Halogen
1616	The addition of unsymmetrical reagent to an unsymmetrical alkene is in accordance with the rule	A. Hund's rule B. Markowvikov's rule C. Pauli's exclusion principle D. Auf ban principle
1617	How much pesticides have been synthesized at present?	A. Four thousands B. Six thousands C. Eight Thousands D. Ten thousands
1618	The substance upon which an enzyme acts is known as its	A. Domain B. Field C. Substrate D. Reactant
1619	The shape of ClO^-_3according to valence shell electron pair repulsion theory will be	A. Planar triangle B. Pyramidal C. Tetrahedral D. Square planar
1620	Which of the following is a transition element	A. Sr B. Sn C. Cr D. Pb
1621	Which set of hybrid orbitals has planar triangle shape?	A. sp³ B. sp C. sp² D. dsp²
1622	When 3p orbital is complete, the entering electron goes into	A. 4s B. 3d C. 4p D. 4f
1623	The solution left after the formation of crystals is called :	A. Residue. B. Filtrate. C. Mother liquor. D. None of these.
1624	Which of the following molecules has a net dipole moments	A. CO₂ B. CS₂ C. SO₂ D. CCl₄
1625	The percentage of carbon in different types of iron products is in the order of	A. Cast iron > wrought iron > steel B. Wrought iron > steel > cast iron C. Cast iron > steel > wrought iron D. Cast iron = steel > wrought iron
1626	Halogens on treating with silver salts of acids give	A. Alcohol B. Ester C. Phenol D. Alkyl halide
1627	Self condensation of acetaldehyde in the presence of dilute alkalies gives	A. An acetal B. An aldol C. Mesitylene D. Propionaldehyde
1628	Hydrolysis of ethyl-acetate (ester) has order of reaction :	A. 3 B. 2 C. 1 D. 1
1629	Relative atomic mass of an element is the mass of the element relative to	A. 1/12 mass of carbon-12 B. 1/12 mass of carbon C. 1 mass of hydrogen atom D. 1/16 mass of oxygen
1630	The positive ion is always smaller than the neutral atom while the negative ion is always bigger than the neutral atom. The atomic and ionic radii of Na, F, Na^+, $F^-$are in ppm	A. Na F Na⁺ F⁻ 157 72 95 136 B. Na F Na⁺ F⁻ 157 95 172 136 C. Na F Na⁺ F⁻ 72 95 136 157 D. Na F Na⁺ F⁻ 157 136 95 72

1631	Four d-orbitals contain four lobes while fifth contains only two lobes the orbital is	A. dxy B. dxz C. dz² D. dx²- y²
1632	The saturated hydrocarbons usually end with suffix _____	A. Ane B. Ene C. Yne D. Oic
1633	Shape of $ClO_3$is	A. Triangular pyramidal B. Tetrahedral C. Triangular planar D. Triangular bipyramidal
1634	When fused $PbBr_2$is electrolyed then	A. Bromine appears at cathode B. Lead deposited at the cathode C. Lead appears at the anode D. None of these happens
1635	An orbital can accommodate maximum two electrons with opposite spins according to	A. Heisenberg's principle B. Aufbau principle C. Hund's srule D. Pauli exclusion principle
1636	Any other aldehyde except formaldehyde on reaction with Grignard's will produce	A. Secondary alcohol B. Primary alcohol C. Tertiary alcohol D. Aromatic alcohol
1637	HF has exceptionally low acidic strength due to:	A. Smaller size of fluorine. B. Stronger polar bond between H and F. C. Electronegativity of fluorine D. Strong hydrogen bonding
1638	How many moles of hydrogen atoms does 3.2 g of methane, CH_4, contain?	A. 0.02 B. 0.2 C. 0.4 D. 0.8
1639	Which one of the following statement is wrong regarding differences between aldehydes and ketones	A. Aldehydes undergo reduction to form primary alcohols while ketones undergo reduction to form secondary alcohols B. Aldehydes undergo oxidation to form acids having less number of carbon atoms while ketones undergo oxidation to form acids having same number of carbon atoms C. Aldehydes give positive silver mirror test while ketones give negative -mirror test D. Aldehydes can undergo polymerization while ketones cannot undergo polymerizarion
1640	A Solution containing 6.8 g of non-ionic solute in 100g of water was found to freeze at -0.93°C. If $k_f$for water is 1.86 and molecular mars of solute is	A. 13.6 B. 34 C. 68 D. 136
1641	The orbitals having n + l = 5 are	A. 2p, 3d,3s B. 3p, 3d, 5s C. 3s, 4p, 4d D. 5s, 4p, 3d
1642	The structure of complex hydrides is	A. Tetrahedal B. Trigonal C. Octahedral D. Square planar
1643	The movement of molecules from a region of high pressure to vacuum is called :	A. Evaporation B. Effusion C. Conduction D. Difusion
1644	Which of the following is a strong electrolyte?	A. Ca(NO₃)₂ B. HCN C. CH₃COOH D. NH₄OH
1645	Protein may have	A. Primary structure B. Secondary structure C. Tertiary structure D. All of these
1646	Cell potential depends upon :	A. Concentration of ions B. Nature of electrolyte C. Temperature D. All of above
1647	Monosubstituted benzene can have disubstitution at position	A. ortho B. meta C. para

		D. a, b, c
1648	In fructose the possible optical isomers are	A. 12 B. 8 C. 16 D. 4
1649	The other name for distribution law is	A. Dispersive law B. Partition law C. Avogadro's law D. separation law
1650	Which of the following is not an element?	A. Graphite B. Diamond C. 22-Carat gold D. Rhombic sulphur
1651	Which of the following hydrides ionic in nature	A. NaH B. CH4 C. NH4 D. H2S
1652	Rutherford's planetary like picture of the atomic modal was defective because	A. It did not describe the quantity of positive charge B. It did not explain the repulsion of protons within the nucleus C. No empty space between nucleus and the electrons D. Moving electron should radiate energy
1653	A polymeric substance that is formed in the liquid state and then hardened to a rigid solid is called a	A. Fibre B. Plastic C. Varnish D. Polyamide resin
1654	A single benzene ring can have _____ ortho position maximally	A. One B. Two C. Three D. Four
1655	Amorphous solids	A. Have sharp melting point B. Undergo clean cleavage when cut with knife C. Have perfect arrangement of atoms D. Can possesses small regions of orderly arrangement of atoms
1656	Amongst the following, the compound that can be most readily sulphonated is	A. toluene B. benzene C. nitrobenzene D. chlorobenzene
1657	Which of the following isoelectronic ions has the lowest ionization energy?	A. K⁺ B. Ca²⁺ C. Cl⁻ D. S²⁻
1658	The sun of all the energies of atoms, molecule, ion, within system is called	A. Enthalpy B. K.E. of the system C. Internal energy D. None
1659	Among the nitrogen containing fertilizer, the one with about 82% nitrogen content is	A. Ammonium nitrate B. Ammonia C. Ammonium phosphate D. Ammonium sulphate
1660	Calorie is equivalent to	A. 0.4184 J B. 41.84 J C. 4.184 J D. 418.4 J
1661	Which of the following species has the highest ionization potential?	A. Ne B. Al⁺ C. Mg⁺ D. Li⁺
1662	A suitable solvent should dissolve maximum amount of solute at its boiling point and minimum amount at :	A. Freezing point. B. Room temperature. C. Boiling point. D. Sea level temperature.
1663	Which of the following is not a colligative property?	A. Depression in freezing point B. Elevation of boiling point C. Osmotic pressure D. Modification of refractive index
1664	The percentage of H is the highest in	A. CH₄ B. NH₃ C. H₂SO₄ D. C₆H₁₂O₆
	Coinage metals like Au, Pt, Ag and Cu are the least reactive	A. These have very high positive values of reduction potentials B. These have very high negative values of reduction potentials

1665	metals and don't liberate H_2gas when treated with acids because	B. These have very high negative values of reduction potentials C. Their ionization potentials are lowest D. Their reduction potentials are close to SHE
1666	Chemical composition of colemnite is:	A. Ca₂B₆O₁₁.5H₂O B. CaB₄O₇ .4 H₂O C. Na₂B₇O₇. 4 H₂O D. CaNaB₅O₉.8H₂O
1667	The less reactivity of transition metal is due to	A. High heats of sublimation B. High ionization energies C. Low heats of salvation D. All these
1668	Which of the following will be good conductor of electricity	A. Pure distilled water B. Molten NaCl C. Dilute solution of glucose D. Chloroform
1669	The order of reactivity for a given halogen in Grignard's reagent is:	A. CH₃X > C₂H₅X > C₃H₄X > C₄H₄X B. C₂H₅X > C₃H₇X > C₄H₅X > CH₄X C. C₃H₇X > C₄H₇X > CH₃X > C₂H₅X D. C₄H₄X > C₃H₇X > C₂H₅X > CH₄X
1670	pH of 1 molar NaOH is	A. 7 B. zero C. 14 D. 10
1671	While balancing an equation by ion electron method, the number of oxygen atoms are balanced by	A. OH⁻ B. H₂O C. O₂ D. H⁺
1672	$C_nH_{2n}$is the general formula of	A. Alkanes B. Alkanes C. alkynes D. None of above
1673	The boiling point of heavy water is	A. 108°C B. 101.4°C C. 99°C D. 110°C
1674	The monomeric units of starch is/are	A. Glucose B. Fructose C. Glucose and fructose D. Mannose
1675	Ethylene polymerizes at 100 atm pressure and 400°C to give	A. Polybenzene B. Polyalcohol C. Polypropylene D. Polyethylene
1676	Question Image	
1677	Simple sugars are :	A. Monosacchrides B. Disaccharides C. Oligo saccharides D. Trisaccharides
1678	Which of the following is explosive?	A. Trinitrophenol B. Nitrophenol C. Nitromethane D. Nitrobenzene
1679	The cement plants in west Pakistan at the time of creation were:	A. Ten B. Twenty C. Four D. Twenty four
1680	All facts of chemistry must be in simple logical patterns because chemistry is a subject:	A. Simple B. Complex C. Un-understandable D. Easy
1681	Which one of the following statements is true about discovery of neutrons?	A. These particles were formed by the bombardment of Alpha-particles on Beryllium. B. These particles are formed by the spiting of alpha-particles. C. These particles were discovered by natural radioactivity. D. None of above.
1682	In the particular reaction for the valueK_c $1 x 10^{-25}$which statement is correct :	A. Almost forward reaction is completed. B. Amount of reactant is negligible as compared to product. C. Amount of product is negligible as compared to reactant. D. Amount of product is equal to amount of reactant

		D. Amount of product is equal to amount of reactant.
1683	Vinegar is dilute solution of:	A. Acitic acid B. Formic acid C. Butyric acid D. Propionic acid
1684	The avtive mass of 64 g of HI in a two litre flask would be	A. 2 B. 1 C. 5 D. 0.25
1685	During oxidation in $k_2Cr_2O_7$, Cr VI changes to :	A. I B. II C. III D. IV
1686	Major food factors are:	A. Fats and oils B. Carbohydrates C. Protiens D. All of these
1687	Carboxylic acid, ester, amide and amino groups are shown. Which is the correct description of these functional groups	
1688	The change in heat energy at constant temperature is called	A. Enthalpy change B. Heat of vaporisation C. Bond energy D. Internal energy change
1689	The percentage of nitrogen in ammonia is	A. 80% B. 82% C. 90% D. 50%
1690	In endothermic reaction, the heat content of the	A. Products is more than that of reactants B. Reactants is more than that of products C. Both a and b D. None of the above
1691	For effective collisions the molecules slow down before collision and their kinetic energy decreases which results in increase in their	A. Activation energy B. Average energy C. Potential energy D. Collisions frequency
1692	Acidic soils are neutralized by adding:	A. Plaster of paris B. Brine C. Lime D. Milk of magnesia
1693	Which more acidic?	A. o-cresol B. p-nitrophenol C. phenol D. m-cresol
1694	The pH range of the acid rain is	A. 8 - 7 B. 7 - 6.5 C. 6.5 - 6 D. Less than 5
1695	For which one of the following pairs of compounds can the members be distinguished by means of Tollen's test	A. HCHO and CH₃CHO B. CH₃CHO and CH₃COCH C. CH₃COCH₃and C₆H₅COCH₃ D. CH₃COOH and CH₃COOCH₃
1696	Group VA of the periodic table consists of the elements N, P, As, Sb and Bi, On passing from N to Bi, the oxides of the elements of general formula M_2O_3become	A. Stronger reducing agents B. More ionic C. More basic D. More volatile
1697	What is not a common use of methane	A. As a fuel B. For the preparation of haloaklanes C. For the preparation of methyl alcohol D. For the preparation of sulphuric acid
1698	Water H_2O is liquid while hydrogen sulphide H_2S is a gas beause	A. Water has higher molecular weight B. Hydrogen sulphide is a weak acid C. Sulphure has high electronegativity than oxyhe D. Water molecules associate through hydrogen bonding
1699	Which is the property of benzene:	A. Decolourizes KMnO₄ B. straight chain structure C. only double bond is present

	benzene.	C. only double bond is present D. triple and double bond
1700	The raw materials for the manufacture of urea fertilizer is	A. Hydrogen and ammonia B. Steam, methane, ammonia C. Methane and air D. None of these
1701	Formic acid is obtained when	A. Calcium acetate is heated with conc.H₂SO₄ B. Calcium formate is heated with calcium acetate C. Glycerol is heated with oxalic acid D. Acetaldehyde is oxidized with K₂Cr₂O₇and H₂SO₄
1702	K,Ca and Li metals may be arranged in decreasing order of their reduction potential as :	A. Li, k, Ca B. Ca, K, Li C. Li, Ca, K D. K, Ca, Li
1703	Anode is the surface on which probability of finding electron is:	A. 50% B. Less than 10%. C. More than 95%. D. Zero.
1704	DNA is a polynucleic acid. The monomer is known as a nucleotide. What is not the component of the nucleoptide	A. Phosphate group B. Deoxy ribose sugar C. Uracil base D. Adenine base
1705	Bronze is an alloy of Cu and	A. Zn B. As C. Sb D. Sn
1706	Weakest acid among the followings is	A. Acetic acid B. Phenol C. Water D. Acetylene
1707	Identify the heterocyclic compound	A. Toluene B. Pyridine C. Butanoic acid D. Propenol
1708	Ionic Solids are characterized by	A. Low melting points B. Good conductivity in solid state C. High vapour pressure D. Solubility in polar solvents
1709	Physical properties of alkanes increase with increase of all physical constants except	A. Boiling points B. Melting points C. Density D. Solubility
1710	During a chemical reaction heat may be	A. absorbed B. Evolved C. Both evolved and absorbed D. None of these
1711	Which ion will have the maximum value of heat of hydration?	A. Na⁺ B. Cs⁺ C. Ba⁺ D. Mg⁺²
1712	Hydrocarbons contain	A. C and S only B. C and H only C. C, H, and O only D. C, H, O and N only
1713	Among the following, poly cyclic compound is:	A. styrene B. cumene C. napthalene D. xylene
1714	Which of the following is not affected by light	
1715	The homologous series of aldehydes and ketones have general formula:	A. C_nH_{2n}O B. C_nH_nO C. C_nH_{2n-1}O D. C_nH_nO_n
1716	Which of the following d-block elements can show the highest oxidation number in its compounds	A. Chromium B. Copper C. Nickel D. Manganese
1717	The following functional group is present in both aldehydes	A. Carbonyl B. Hydroxyl

1717	is present in both aldehydes and ketones.	C. Oxyboron D. None
1718	Coordination number of Pt in $[PtCl(NO^2)(NH^3)^4]^{2-}$	A. 2⁻ B. 4 C. 1 D. 6
1719	B-atom in BF_3has	A. sp³hybridization B. sp²hybridization C. sp hybridization D. no hybridization
1720	Which of the following sulphates is not soluble in water	A. Sodium sulphate B. Potassium sulphate C. Zinc sulphate D. Barium sulphate
1721	Quantity of heat evolved or absorbed during the reaction is measured according to the equation	
1722	Detergents are	A. Synthetic products B. Natural products C. Both (a) and (b) D. None of these
1723	The degenerate orbitals p-sub shell are	A. 2 B. 3 C. 5 D. 7
1724	In a hydrogen-oxygen fuel cell, combustion of hydrogen occurs to	A. Generate heat B. Remove adsorbed oxygen from electrode surfaces C. Produce High purity water D. Create potential difference between two electrodes
1725	The number of de-electrons retained in Fe^{2+} (At.No. of Fe = 26) ions is	A. 3 B. 4 C. 5 D. 6
1726	Camphor is often used in molecular mass determination because	A. It is solvent for organic substances B. It is readily available C. It has a very high cryoscopic constant D. It is volatile
1727	The subject matter of first law of thermochemistry is based on:	A. First law of Themochemistry. B. First law of Thermodynamics. C. Second law of Themochemistry. D. Second law of Thermodynamics.
1728	Isotonic solutions have same	A. Molar concentration B. Molality C. Normality D. None of these
1729	The covalent radius of Cl atom is:	A. 99.4 pm. B. 176.7 pm C. 38 pm D. 76 pm.
1730	Linear shape is associated with set of hybrid orbitals?	A. sp B. sp2 C. sp3 D. dsp2
1731	Coordinate covalent bond is present in the molecules	A. H₂O B. BF₃ C. SiO₂ D. SO₂
1732	Which of the following liquids has low vapor pressure at 25°C:	A. Diethyl ether B. Acetone. C. Water. D. Ethyl alcohol.
1733	Aqua Regia has ration of conc. HCl and HNO_3.	A. 1 : 2 B. 1 : 3 C. 1 : 4 D. 2 : 3
1734	If the standard electrode potential of CU^{2+}/Cu electrode is 0.34 V, what is the electrode potential of 0.01 M concentration of Cu^{2+}? (T=298)	A. 0.399 V B. 0.281 V C. 0.222 V D. 0.176 V

(T=298)

1735	Quality of fuel is judged from its octane number. The best fuels are	A. Straight chain hydrocarbons B. Branched chain hydrocarbons C. Cyclic compounds D. Compounds containing benzene ring
1736	Coligative properties are the properties of	A. Dilute solution which behave as nearly ideal solutions B. Concentrated solutions which behave as nearly non-ideal solution C. Both (i) and (ii) D. Neither (i) and (ii)
1737	The total number of orbitals in a shell with principal quantum number 'n' is	A. 2n B. 2n² C. n² D. n + 1
1738	The lanthanides contraction is responsible for the fact that	A. Zr and Y have about the same radius B. Zr and Nb have similar oxidsation state C. Zr and Hf have about the same radius D. Zr and Zn have the same oxidation satete
1739	The weight of pure NaOH required to prepare 250 $cm^3$of 0.1 N solution is	A. 4 g B. 1 g C. 2 g D. 5 g
1740	The 95.5% mass of Lithosphone is made of 11 elements i.e. O_2, Si, Al, Fe, Ca, Na, K, Mg, Ti, $H_2$and P. which element is present in trace amount	A. Iodine B. Bromine C. Lead D. Carbon
1741	Diversity of organic compounds in millions is:	A. Four B. Five C. Six D. Seven
1742	The reactivity order of alkyl halides for a paricular alkyl group is	A. Fluoride > chloride > bromide > iodide B. Chloride > bromide > fluoride > iodide C. Iodide > bromide > chloride > fluoride D. Bromide > iodide > chloride > fluoride
1743	According to Mendleev, the physical and the chemical properties are the periodic function of their	A. Atomic number B. Atomic mass C. Atomic wt D. None
1744	Alkyl halides ae considered to be very reactive compounds towards nucleophiles because	A. They have an electrophilic carbon B. They have an electrophilic carbon and a good leaving group C. They have an electrophilic carbon and a bad leaving group D. They have a nucleophilic carbon and a good leaving group
1745	Dow's process is used for the preparation of	A. Ester B. Ethers C. Alcohols D. Phenols
1746	Primary alcohols and aldehydes are oxidized to corresponding:	A. alkanes B. alkenes C. Alkynes D. Carboxylic Acid
1747	The formation of compounds like PF_5, BCl_3, SF_6indicates that	A. These halides are ionic B. These halides are covalent C. They are Lewis acids D. Octet rule not obeyed so the rule is not universal
1748	The acid present in vinegar is	A. CH₃COOH B. HCl C. H₂SO₄ D. HCOOH
1749	Octane number is zero for	A. n-Heptane B. Isooctane C. n-Hexane D. Isoheptane
1750	Grignad reagent is reactive due to	A. The presence of halogen atom B. The presence of Mg atom C. The polarity of C - Mg bond D. None of above
1751	Which step is unnecessary for purification of water for drinking purposes	A. Aeration B. Coagulation C. Treatment with chlorine D. Treatment with iodine

1752	Between CH_3COOH and HCOOH, HCOOH will be	A. Less acidic B. Equally acidic C. More acidic D. None
1753	What is going to replace the petroleum?	A. Silica B. Silicates C. Silicones D. Silicon
1754	The substances that are added to the soil to provide nutrient or assential elements required for plant growth, are called	A. Additives B. Fertilizer C. Manures D. Posticides
1755	Acetone is oxidized with	A. Tollen's reagent B. Fehling solution C. Acidic dichromate solution D. Benedicts solution
1756	In which reaction Hydrogen behave as oxidizing agent?	A. H2+Cl2---------- 2HCl B. C2H2CHO+H2--------C2H4+H2-------CH6 C. 2Na+H2----------2NaOH D. C2H2CHO+H2----------C2H5H2OH
1757	The open chain organic compounds are called	A. Linear compounds B. Aromatic C. Aliphatic D. Both A and B
1758	Complete the reaction : $KMnO_4+FeSO_4+H_2SO_4$	A. K₂SO₄+MnSO₄+Fe₂O+H₂O B. K₂SO₄+MnSO₄+Fe₂ (SO₄)+H₂ C. K₂SO₄+MnSO₂+Fe(SO₄)+H₂O D. K₂SO₄+MnSO₄+Fe₂ (SO₄)+H₂O
1759	Which is not interstitial hydride	A. LaH B. VH C. TaH D. None
1760	Which one of the following is a buffer	A. HCl + NaCl solution B. CH₃COOH + CH₃COONH₄solution C. H₂SO₄+ CaSO₄solution D. CH₃COOH + CH₃COONa
1761	The branch of science dealing with structure, composition and changes in matter and laws and principles which govern these changes is called as	A. chesmistry B. Geology C. Physics D. Mechanics
1762	Which is the most volatile compound	A. HI B. HCl C. HBr D. HF
1763	Formation of NO from N_2 and O_2 requires temp	A. 30⁰C B. 300⁰C C. 3000⁰C D. 30000⁰C
1764	In a group form top to bottom, the hardness of alkali metals	A. Remains unchanged B. Increases C. Decreases D. None
1765	An ion bearing positive charge is called:	A. Cation B. Positron C. Anion D. None of above
1766	A state function is a	A. Microscopic property B. Macroscopic C. Unique property D. Both a and c
1767	One calorie is equal to	A. 5.184 J B. 3.184 J C. 4.184 J D. 7.184 J
1768	The sum of the exponents of the conc. terms in the rate	A. Rate of reaction B. Order of reaction

	the conc. terms in the rate equation is called	C. Specific rate constant D. Average rate
1769	Question Image	A. Favour the formation of N₂O₄ B. Favour the decomposition of N₂O₄ C. Not alter the equilibrium D. Stop the reaction
1770	Alkanes are soluble in all except	A. Benzene B. Ether C. Water D. Carbon tetra chloride
1771	Energy of electron in first orbit of H atom is	A. -45.32 KJ/mole B. -82.08 KJ/mole C. -52.53 KJ/mole D. -1313.31 KJ/mole
1772	How many are the zones through which the charge passes in a rotary kiln?	A. 4 B. 3 C. 2 D. 5
1773	Na_2O is	A. Acidic B. Basic C. Neutral D. Amphoteric
1774	Given date (i) heat of neutralization of HCl and NaOH is -57.3 KJ $mole^{-1}$ (ii) heat of neutralization of CH_3COOH with NaOH is 55.2 KJ $mole^{-1}$ The enthalpy of ionization of CH_3COOH is a determined according to Hess's law by	A. Adding i and ii B. Dividing i by ii C. Subtracting i from ii D. Subtracting ii from i
1775	The study of heat changes accompanying a chemical reaction is known as	A. Thermochemistry B. Biochemistry C. Physical chemistry D. Analytical chemistry
1776	The credit of discovering neutron goes to	A. Rutherford B. Langmuir C. Chadwick D. Austen
1777	The oxides of beryllium are	A. acidic B. basic C. amphoteric D. none of these
1778	In which of the following cases, the reaction goes farthest to completion	A. K = 10³ B. K = 10⁻² C. K = 10 D. K = 10⁰
1779	Violet colour is obtained when dilute $CuSO_4$is added in alkaline solution of protein. This test is known as	A. Biuret B. Xanthoproteic test C. Hopkins-cole D. All of these
1780	Drawback DDT as presticide is	A. I becomes ineffective after some time B. It is less effective than others C. It is not easily/rapidly degraded in nature D. Its high cost
1781	The filtration process is used to to separate solid from :	A. Liquid. B. Gas. C. Solid. D. All of above.
1782	In the chemical combination of hydrogen and fluorine to form HF:	A. Sodium atom donates major share of its electrons. B. Hydrogen atom donates the major share of its electrons. C. Both the atoms share the electrons equally. D. None of above.
1783	With increases in temperature of 10 K of the reacting gases the rate of reaction is doubled because	A. Increase in number of collisions B. Number of molecules having energy more than Ea is doubled C. Increase in order of reaction D. Increase in surface area

1784	Which one of the following is not a buffer	A. H₂CO₃+ NaHCO₃solution B. H₃PO₄+ NaH₂PO₄solution C. HI + NaI solution D. NH₄OH + NH₄Cl solution
1785	In the electronic configuration of Cr one electron from 4s sub-shell is transfered to 3d sub-shell because	A. The 3rd orbital is of lower energy than 4s B. The 4s orbital is of equal energy to 3d orbital C. The half filled d-subshell is more stable than incomplete d-sub shell D. 6 unpaired electrons make Cr more paramagnetic
1786	$2SO_2 + O_2 \rightleftharpoons 2SO_2$ H= 188KJ mole^{-1} Which statement about following equilibrium is correct :	A. The value of<span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:"Times New Roman";mso-bidi-theme-font:minor-bidi; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">K_pfalls with arise in temperature. B. The value ofK_pis equal to<span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:"Times New Roman";mso-bidi-theme-font:minor-bidi; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">k_{c.} C. The value ofK_pfalls with the increase pressure. D. Adding V₂O₅ catalyst increase the equilibrium yield of Sulphur trioxide. <o:p></o:p>
1787	The value of Plank's constant 'h' is	A. 6.625 x 10⁻³⁴ B. 6.625 x 10⁻³⁴J sec C. 6.625 x 10⁻³⁴KJ D. 6.625 x 10⁻³⁴K Cal
1788	The main structure features of proteins is	A. An ester linkage B. An ether linkage C. The peptide linkage D. All
1789	Na reacts with phenol to produce	A. H₂gas B. Benzene C. CO₂gas D. CO gas
1790	CL_2, N_2 and O_2 are:	A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Diatomic molecules<o:p></o:p> B. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Hetero atomic molecules<o:p></o:p> C. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Poly-atomic molecules<o:p></o:p> D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Mono-atomic molecules
1791	Group VII-A elements are called:	A. s-block elements B. p-block elements C. d-block elements D. f-block elements
1792	Which of the following fibres are made of polyamides?	A. Dacron B. Orlon C. Nylon D. Rayon
1793	Monosaccharides belong to the group	A. Lipids B. Fats C. Proteins D. Carbohydrates
1794	Al is the most element in earth crust:	A. O B. Si C. Al D. Pb
1795	5g of glucose is dissolved fro 100 cm of solution. Percentage of solution is :	A. 5 % v/w B. 5 % v/w C. 5 % w/v D. 5 % w/w
1796	Which of the following is fully fluorinated polymer?	A. Neoprene B. Teflon C. Thiokol D. PVC
	The number of unpaired	A. 3

1797	electrons in ferrous ion (Z - 26) is	B. 2 C. 4 D. 5
1798	Sodium thisoulophate is used in photography because of its	A. Oxidizing behaviour B. Reducing behaviour C. Complexing behaviour D. Photochemical behaviour
1799	Dilatometric method is used for rate determination when	A. Reactions involving change of optical B. Reactions involving change of optical activity C. Reactions involving small volume change D. None of above
1800	Which has garlic like odour?	A. N₂O B. NO C. NO₂ D. NH₄
1801	Which one of the following is a water soluble vitamin	A. Niacin B. Riboflavin C. Tyrosine D. Ascorbic acid
1802	The total number of rare earth elements is	A. 8 B. 32 C. 14 D. 10
1803	Phenols are derivative of:	A. Alkanes B. Alkenes C. Alkynes D. Benzene
1804	Ethyl bromide is formed by the reaction of HBr with	A. Ethane B. Ethene C. Ethyne D. Propane
1805	Which of the following yield both hydrogen and chlorine on electrolysis:	A. Electrolysis of acidified water. B. Electrolysis of molten NaCl C. Electrolysis of aqueous NaCl D. Electrolysis of saline water
1806	The liquid obtained after passing the mixture through filter paper is termed as:	A. Extract B. Residue C. Filtrate D. Sample
1807	Question Image	A. Increase in concentration of 1 B. Decrease in concentration of I₂ C. Increase in temperature D. Increase in total pressure
1808	"Each different compound should have a different name" was published by IUPAC system of nomenclature in	A. 1892 B. 1830 C. 1947 D. 1979
1809	First atomic theory was put forward by an English school teacher:	A. Maxewell B. Newton C. Sanger D. John Dalton
1810	For spontaneity of a cell, which is correct?	A. ΔG = 0,ΔE = 0 B. ΔG = -ve ,ΔE = 0 C. ΔG = +ve ,ΔE = 0 D. ΔG = -ve
1811	1-Chlorobutane on reaction with alcoholic potash gives	A. But 1-ene B. Butan-1-ol C. But-2-ene D. Butan-2-ol
1812	When formaldehyde is added to Grignard reagent we get	A. Aldehyde B. Acetone C. Primary alcohol D. Secondary alcohol
1813	The amount of heat evolved or absorbed in a chemical reaction indicated by balanced chemical equation at 25° and one atmospheric pressure is called	A. Enthalpy of formation B. Enthalpy of neutralization C. Enthaply of combustion D. Enthaply of reaction
		A. Common fats

1814	Which is the derived lipid?	B. Vitamin-D C. Common oils D. Spinolipids
1815	Question Image	A. 1st order B. 2nd order C. Zero order D. 3rd order
1816	What will be the weight of deposited silver on passing 965 coulombs of electricity in solution of $AgNO_3$?	A. 1.08 g B. 2.16 g C. 0.54 g D. 0.27 g
1817	Question Image	A. Moles⁻²dm⁺⁶ B. No units C. Mole dm⁻³ D. Mole⁻¹dm⁻³
1818	Which of the following is not a fertilizer	A. Nitrophos B. Dolomite C. Super phosphate of lime D. Urea
1819	At room temperature formaldehyde is	A. Gas B. Liquid C. Solid D. None of the above
1820	Carboxylic acids having carboxyl group one is called:	A. Mono carboxylic acid B. Di-carboboxylic acid C. Tri carboxilic acid D. Tetra carboxylic acid
1821	Gasoline is a mixture of hydrocarbons containing carbon atoms	A. 5 to 10 B. 5 to 8 C. 5 to 12 D. 5 to 11
1822	Oxalic acid oxidizes to:	A. CO B. CO₂ C. Oxalates D. None of these
1823	Hydrolysis of alkyl nitriles is done to get carboxylic acids in the presence of	A. Mineral acids B. Mineral alkalies C. Organics acids D. Minerals acids & alkalies
1824	Among the following elements which one has the highest value of first ionization potential?	A. Oxygen B. Argon C. Barium D. Cesium
1825	If liquids A and B form an ideal solution	A. The enthalpy of mixing is zero B. The entropy of mixing is zero C. The free energy of mixing is zero D. The free energy as well as the entropy of mixing are each zero
1826	Which one is alkali metal in them?	A. Rubidium B. Magnesium C. Calcium D. Barium
1827	The oxidation number of each element of group I-A is	A. 0 B. +1 C. +2 D. -1
1828	The statement that the properties of every eight elements are similar to the first is the law of	A. Dobereiner B. Newland C. Mendeleev D. L. Meyer
1829	The development of disagreeable odur in fats or oil is called	A. Fragrance B. Perfume C. Rancidity D. Smell
1830	The galvanic or voltaic cells which are rechargeable called as	A. Primary cells B. Secondary cells C. Dry cells D. Infinite cells
1831	All alkali metals react with acetylene to form acetylides except	A. Li B. Na C. K D. Rb

1832	Ozone in most of the tropical regions acts as a pollutant and causes	A. Damages to eyes B. Aggravates asthma C. Chest discomfort D. All of these
1833	Salol is prepared from	A. Salicylic acid and phenol B. Salicylic acid and methyl alcohol C. Both D. None
1834	Acetaldehyde is used to make	A. Rubbber B. Antiseptics C. Phenolic resin D. All of these
1835	Matals usually conduct electricity because	A. There are mobile electrons in the metallic structure B. Metals are decomposed by current C. Metals have high resistance D. In metals the ions are free to move
1836	The concentration units independent of temperature would be	A. Normality B. Mass-volume precent C. Molality D. Molarity
1837	Diamond is a bad conductor because	A. It has a tight structure B. It has a high density C. there is no free electron present in the crystal of diamond of conduct electicity D. Is transparent to light
1838	The hydration energy is the heat evolved when one mole of gaseous ion is dissolved in water. The hydration energy of an ion	A. Increases with increase of charge to mass ratio B. Decreases with increase of charge to mass ratio C. Depends on sign of charge +ve or -ve D. Depends upon the solvent
1839	The number of antibonding electron pairs in O^{2-} molecular ion on the basis of MOT is	A. 4 B. 3 C. 2 D. 5
1840	The conversion of n-hexane into benzene by heating in the presence of CO, is called	A. Isomerization B. Aromatization C. Dealkylation D. Rearrangement
1841	Steps in SN , reactions are:	A. One B. Two C. Three D. Four
1842	Which reaction is example of nucleophilic substitution	
1843	Which of the following is not present in nucleotide?	A. Guanine B. Cytosine C. Adenine D. Tryoxine
1844	The main source of natural fibre is	A. Animal fibres B. Vegetables fibres C. Mineral fibres D. All of the above
1845	pH of the human blood which is essentially maintained constant due to carbonates, biocarbonates, phosphates etc., is	A. 7.00 B. 7.25 C. 7.35 D. 7.47
1846	Absolute alcohol is obtained by adding rectified apirit in alcohol:	A. Water B. Na₂CO₃ C. NaOH D. CaO
1847	SO_3 is not absorbed in water directly to or H_2SO_4 because	A. the reaction does not go to completion. B. the reaction is quite slow. C. the reaction is exothermic. D. SO₃ is insoluble in water.
1848	Vegetables oil are:	A. Unsaturated fatty acids B. Glycerides of saturated fatty acids C. Essential oils obtained from plants D. None of these
1849	The Electro-negatively difference for ionic bond must be greater than	A. 1.6 B. 1.7 C. 1.8

	be greater than	D. 1.0
1850	Question Image	A. It decolourises aqueous bromine rapidly B. It is insoluble in water C. It reduces Fehling's reagent D. Two molecules react with each other in the presence of a strong acid
1851	The fibre which is made form acrylonitrile as monomer	A. PVC B. Rayon fibre C. Acrylic fibre D. Polyester fibre
1852	Cyclone collector is used for minimizing	A. Radioactive pollution B. Air pollution C. Noise pollution D. Water pollution
1853	Hydrogenation of alkenes/alkynes inthe presence of Ni as catalyst at 3000°C result in the formation of corresponding alkanes. This reaction is known as	A. Sabatier-senderens reaction B. kolbes reaction C. Cannizaro's reaction D. Haloform reaction
1854	10g Of NaOH Has Been Dissolved Per$dm^3$of solution. The morality of solution is :	A. 0.025 M B. 1.5 M C. 0.1 M D. .25 M
1855	Select from the following which one is alcohol?	A. CH₃-CH₂-OH B. CH₃-O-CH₃ C. CH₃COOH D. CH₂-CH₂-BR
1856	The cell in which a non-spontaneous redox reaction takes place as a result electricity is known as :	A. Electrolytic cell. B. Voltaic cell. C. Daniel cell. D. Dry cell.
1857	The coinage metals are	A. Ni, Pd, Pt B. Cu, Ag, Au C. Zn, Al, Pb D. Fe, Si, Sn
1858	The fibre which is made from vinylidine chloride polymer is called	A. Rayon fibre B. Azlon fibre C. Acetate fibre D. Saran fibre
1859	Factors affecting denaturation of proteins:	A. Change in temp and pH B. Strong reducing agent C. Strong oxidizing agent D. All of these
1860	Maximum shielding effect is observing in	A. Li B. Be C. Mg D. Ca
1861	The electronegativity of elements in a period from left to right	A. Decreases B. Increases C. First decreases then increases D. First increases then decreases
1862	Question Image	A. 1, 5-pentadiene B. Penta-1, 4-diene C. 1, 1-pentadiene D. 1, 4-pentene
1863	The active part in a molecule is called	A. Homologous series B. Functional group C. Chemical bonding D. Ionic complex
1864	Marsh gas was the name given to	A. Methane B. Ethane C. Propane D. Butane
1865	Which represents nucleophilic aromatic substitution reaction?	A. Reaction of benzene with Cl₂in sunlight B. Benzyl bromide hydrolysis with water C. Reaction of NaOH with dintrofluoro benzene D. Sulphonation of benzene
1866	What is the formula of	A. CaMg₃(SiO₃)₄ B. CaSiO₃

	asbestos?	C. Na₂SiO₃ D. Mg₃H₂(SiO₃)₄
1867	Isopropyl alcohol on oxidation forms	A. Acetone B. Ether C. Ethylene D. Acetaldehyde
1868	Calcium carbide reacts with water to produce	A. Acetylene B. Methane C. Ethylene D. Ethane
1869	Cane sugar is not soluble in benzene but soluble in water because	A. Cane sugar is a macro molecule B. Cane sugar is an ionic compound C. Can sugar has hydrogen bonding D. Can sugar is an organic molecule
1870	Electrochemical series is a list of element S arranged into the increasing order of their	A. Standard oxidation potential B. Standard reduction potential C. Cell voltage D. Ionization potential
1871	Fatty acids are:	A. Allphatic monocarboxylic acids B. Dicaroxylic acids C. Tricarboxylic acids D. Tetracarboxylic acids E. Poly carboxylic acids
1872	An electron has principal quantum number 3. The number of its 1 subshell and 2 orbitals would be respectively	A. 3 and 5 B. 3 and 7 C. 3 and 9 D. 2 and 5
1873	The number of coulombs required for the deposition of 107.870 g of silver is	A. 96500 B. 48250 C. 193000 D. 10000
1874	The density of water decreases, when it is freezed at $0^{o}C$ because of	A. Change of bond lengths B. Change of bond angles C. Cubic structure of ice D. Empty spaces present in the structure of Ice
1875	Amino acids contain functional groups in it:	A. --CO-- B. --OH C. ---NH₂ D. All of these
1876	Rusting of iron is catalysed by	A. Fe B. O₂ C. Zn D. H⁺
1877	Question Image	A. NH₃ HCl B. KCN in C₂H₅OH NaOH C. KCN in C₂H₅OH HCl D. HCN NaOH
1878	Of the given alkali metals, the one with smallest size is	A. Rb B. Cs C. K D. Na
1879	Energy can neither be created nor destroyed, although it can be transformed from one form to another. This is a statement of	A. Law of conservation of matter B. Law of definite proportions C. Law of conservation of energy D. None of these
1880	Mustard gas is a	A. Gas B. High boiling speed C. High melting liquid D. Steam
1881	How should condition be changed to prevent the volume of a given gas from expanding whine its mass is increased ?	A. Temperature is lowered and pressure is increased B. Temperature is increasedand pressure is lowered C. Temperature and pressure both are lowered D. Temperature and pressure both are increased
1882	Which substances have $\Delta H = \Delta E$	A. Solids B. Liquids C. Gases D. Liquids and solids

1883	Which compound was recognized the parent member of aromatic compounds	A. Aniline B. Phenol C. Benzene D. Toluene
1884	Wohler succeeded in obtaining, urea from	A. Cyanogen B. Ammonium cyanate C. Ammonium hydroxide D. None of these
1885	The ph of 10-3 mole dm-3 of an aqueous solution of H_2SO_4 is :	A. 3.0<o:p></o:p> B. 2.7<o:p></o:p> C. <span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:Arial;mso-bidi-theme-font:minor-bidi;mso-ansi-language: EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">2.0 D. 1.5<o:p></o:p>
1886	An electric current is passed through silver nitrate solution using silver electrodes.10.79 g of silver was found to be deposited on the cathode if the same amount of electricity is passed through copper sulphate solution using copper electrodes, the weight of copper deposited on the cathode is	A. 6.4 g B. 2.3 g C. 128.8 g D. 3.2 g
1887	Newland's gave law:	A. Triad's law B. Octaves law C. Period law D. Moderen periodic law
1888	If two lone pairs are present then bond angle of tetrahedral compound reduces to _____ degrees	A. 109.5° B. 107.5° C. 104.5° D. None
1889	Macro-nutrients are required in quantities ranging from	A. 5 kg - 200 kg B. 2 kg - 100 kg C. 1 kg - 50 kg D. 10 kg - 100 kg
1890	Acetamide and NaOBr/OH⁻produce	A. Ethanamine B. Methanamide C. CH₃CN D. NH₃
1891	Alkynes are colourless & odouless except	A. Acetylene B. Propyne C. Butyne D. Pentyne
1892	Which of the following acts as ligand	A. NH₃ B. NH₂-- CH₂-- CH₂-- NH₂ C. C₂O²⁻₄ D. All these
1893	The compounds which have any atom other than Carbon atom, in rings are called as	A. Monocyclic B. Heterocyclic C. Homocyclic D. None of the above
1894	Which halide among the following is used as methylating agent?	A. CH₃I B. C₂H₅Cl C. C₂H₅Br D. C₆H₅Cl
1895	Purines include	A. Adenine B. Guanine C. Both a and b D. None
1896	A reaction in which heat is given out is	A. An endothermic reaction B. An exothermic reaction C. A thermochemical reaction D. An energetic reaction
1897	Question Image	A. Positive sign B. Negative sign C. Without any sign D. None
1898	In gases and liquids, temperature is the measure of	A. Average translational kinetic energies of molecules B. Average vibrational kinetic energies of molecules C. Average rotational kinetic energies of molecules

	temperature is the measure of	C. Average rotational kinetic energies of molecules D. None of above
1899	The number of electron that are paired in oxygen molecule are	A. 16 B. 12 C. 14 D. 7
1900	As it passes into food chain, the concentration of DDT	A. Remains same B. Decreases C. Increases D. Unpredictable
1901	Two elements whose electronegativities are 1.2 and 3.0, the formed between them would be	A. Ionic B. Covalent C. Coordinate D. Metallic
1902	5-d series is in the period :	A. 4th B. 5th C. 6th D. 7th
1903	The branch of chemistry which deals with the study of compounds containing carbon as an essential elements is called	A. Physical B. Inorganic C. Nuclear D. Organic
1904	Enzymes are chemically	A. Carbohydrates B. Proteins C. Fatty acids D. Phospholipids
1905	Question Image	A. 154 pm B. 133 pm C. 120 pm D. 150 pm
1906	Ethyl alcohol on oxidation with $K_2Cr_2O_7$gives	A. Acetic acid B. Acetaldehyde C. Formaldehyde D. Formic acid
1907	The experimental relationship between a reaction rate and the concentration of reactants is called	A. Order or reaction B. Rate law C. Activated complex D. Molecularity
1908	When the rate of formation of reactants is equal to the rate of formation of products, this is known as	A. Chemical reaction B. Chemical equilibrium C. Chemical kinetics D. None
1909	The sample being analyzed is called	A. Electrolyte B. Substance C. Analyte D. All of above
1910	Alcohols of low molecular weight are	A. Soluble in water B. Soluble in water on heating C. Insoluble in water D. Insoluble in all solvents
1911	Posphorus belongs to a group	A. III-A B. IV-A C. V-A D. VI-A
1912	Which statement is correct for the fuel cells	A. These cells operate at low temperature B. These cells operate at low temperature C. No catalyst used for the formation of water D. MnO₂is used as electrolyte
1913	All 3d series elements show variable oxidation states. The one shown by all 3d elements is	A. +2 B. +3 C. +4 D. +5
1914	Which element belongs to group V-A?	A. Cs B. Ba C. Sr D. Bi
1915	If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of the gas will be	A. Remain unchanged B. Doubled C. Reduced D. Increased four times

1916	In a group on going downward, polarizability generally:	A. Decreases B. Increases C. Remain constant D. Negligible
1917	Which of the following is a polar molecules	A. Carbon dioxide B. Carbon tetrachloride C. Methanol D. Ethane
1918	If the value of azimuthal quantum number is 3, then values of m the magnetic quantum no. will be	A. 0, 1, 2, 3 B. +3, +2, +1, -1, -2, -3 C. 0, -1, -2 ,-3 D. -3, 0, +3
1919	The hydridization in benzene is	A. sp³ B. sp² C. sp⁴ D. dsp²
1920	The self linking property of carbon is called as	A. Linking polymerization B. Addition C. Catenation D. Elimination
1921	If the ionic product of a solution is less than the solubility product, the solution is	A. Supersaturated B. Unsaturated C. Ideal D. Saturated
1922	Which of the following transition metal ions will have definite value of magnetic moment?	A. Se³⁺ B. Ti³⁺ C. Cu⁺ D. Zn²⁺
1923	Which of the following is not an electrophitic substitution reaction of benzene	A. Nitration B. Sulphonation C. Fridel-Craft alkylation D. Free radical chlorination of benzene
1924	Solutions containing relatively lower concentrations of solute are called :	A. Concentrated solutions. B. Lighter solutions. C. Dilute solutions. D. None of above.
1925	Which of the following chlorocompounds is heat easily hydrolysed by hydorxide ion to give the product indicated	
1926	CsF is an ionic compound because:	A. High I.P of Cs and high E.A of F. B. High I.P of Cs and low E.A of F. C. Low I.P of Cs and high E.A of F. D. Low I.P of Cs and low E.A of F.
1927	3.6% WN solution of HCl has the molairity	A. 1.0 B. 1.15 C. 0.98 D. 1.98
1928	The specific conductance of a 0.1 N KCl solution at 23°C is 0.012 $ohm^{-1}cm^{-1}$. The resistance of cell containing the solution at the same temperature was found to be 55 ohm. The cell constant will be	A. 0.142 cm⁻¹ B. 0.66 cm⁻¹ C. 0.916 cm⁻¹ D. 1.12 cm⁻¹
1929	Which compound on reaction with hydrogen cyanide produces a compound with a chiral centre	A. Ch₃CHO B. CH₃CH₂COCH₂CH₃ C. CH₃CO₂CH₃ D. HCHO
1930	The digestion of fats in the intestines is aided by	A. Diffusion B. Protection C. Peptization D. Emulsification
1931	From the following values of dissociation constants of four acids which value represents the strongest acid?	A. 2 x 10⁻² B. 0.02 x 10⁻¹ C. 3 x 10⁻⁴ D. 2 x 10⁻⁴
1932	The reaction of Zinc with copper sulphate solution is an example of	A. Oxidation reduction reaction B. Spontaneous reaction C. Spontaneous redox reaction

	example of	D. Non-spontaneous reaction
1933	Which of the following equations represents the action of heat on $NaHCO_3$	
1934	With the increase in size of halogen atom the reactivity of an alkyl halide	A. Increases B. Decreases C. Remain constant D. None of these
1935	Photochemical smog is caused by	A. CO B. CO₂ C. O₃ D. NO₂
1936	The reaction between fat and NaOH is called:	A. Esterification B. Hydrogenolysis C. Fermentation D. Sponification
1937	Dobereiner gave his law in the year:	A. 1829 B. 1864 C. 1871 D. 1931
1938	The subject matter of first law of thermochemistry is based on	A. First law of Thermochemistry B. First law of Thermodynamics C. Second law of Thermochemistry D. Second law of Thermodynamics
1939	Which one of the following is not related to spontaneous process	A. Unidirectional B. Real C. Irreversible D. Artificial
1940	Which are metalloid?	A. Nitrogen and phosphorous B. Arsenic and phosphorous antimony C. Phosphorous and arsenic D. Antimony and bismuth
1941	1, 3-Dibromopropane reacts with metallic zinc to form	A. Propene B. Propane C. Cyclopropane D. Hexane
1942	A colloidal gel is	A. 3cA, Al₂O₃ B. CaSO₂.2H₂O C. 3CaAl₂O₃.3CaSO₄.2H₂O D. 3Ca.Al₂O₃.6H₂O
1943	Carboxyl compounds have functional group:	A. R-C-X B. R-CH=O C. RCOR D. All
1944	96500 C of electricity liberates from $CuSO_4$solution	A. 63.5 g of Cu B. 31.75 g of Cu C. 96500 g of Cu D. 100 g of Cu
1945	The human body can synthesize _____ amino acids	A. 1 B. 10 C. 20 D. 19
1946	The solution of which acid is used for seosoning of food ?	A. Formic acid B. Acetic acid C. Benzoic acid D. Butanoic acid
1947	Which of the following process is employed to convert alkyl halide into alcohol?	A. Addition B. Substitution C. Dehydrohalogenation D. Molecular rearrangement
1948	Self linkage of carbon to produce long chains	A. isomerism B. Polymorphism C. Polymerization D. Catenation
1949	When a carbon atom forms single bonds with other carbon atoms, these hybrid orbitals overlap with the orbitals of hydrogen to form four bonds which are	A. Three sigma and one P_i B. Two sigma and two P_i C. One sigma and three P_i D. sigma
		A. Alcohol

1950	Which of the following is used as anesthetics	A. Alcohol B. Diethylether C. Phenol D. Dimethyl ether
1951	Rectified spirit contains alcohol about:	A. 80% B. 85% C. 90% D. 95%
1952	Direct conversion of solid into vapors is called :	A. Crystallization B. Sublimation C. Obligation D. Vaporization.
1953	Maximum potential energy that an electron can have within the atom is:	A. Equal to zero. B. Less than zero. C. Greater than zero. D. Infinite
1954	A solution has 92 g of ethyl alcohol, 96 g of methyl alcohol and 90 g of water. Mole percentage of ethyl alcohol in the solution is	A. 10 B. 20 C. 25 D. 50
1955	acetylene can be converted into-while passing through a Cu-tube at 300°C:	A. Glyoxal B. Vinyl acetylene C. Vinyl alcohol D. Benzene
1956	The malt-sugar in the presence of yeast or invertase gives	A. Fructose B. Glucose C. Lignin D. Alcohol
1957	Formula of chloroform is	A. CH₃Cl B. CCl₄ C. CH₂Cl₂ D. CHCl₃
1958	Which of the following are electropositive in nature	A. Alkali metals B. Alkaline earth metals C. Halogens D. Alkali and alkaline earth metals
1959	Which is true about the electronegativity order of the following?	A. P > Si B. C > N C. Br > Cl D. Sr > Ca
1960	The organic compounds containing Ph-OH group are called:	A. Phenol B. aldehyde C. Keton D. Carboxylic acids
1961	Which one of the following pentafluorides cannot be formed?	A. PF₅ B. AsF₅ C. SbF₅ D. BiF₅
1962	What happens when $CCl_4$is treated with $AgNO_3$solution?	A. NO₂will be evolved B. A white ppt. of AgCl will form C. CCl₄will dissolve in AgNO₃solution D. Nothing will happen
1963	Which of the following cannot be produced by acidic dehydration of alcohols?	A. Ethers B. Aldehyde C. Alkyl Hydrogen sulphate D. Alkene
1964	Gaseous HF exists in the form of	A. Monomers B. Cyclic hexames C. As single entity D. Both (a) and (b)
1965	Question Image	A. Temperature is increased B. Pressure is increased C. HCl is added D. HCl is removed
1966	Baking powder has which one of the following formula	A. Na₂CO₃ B. Na₂SO₄ C. NaHCO₃ D. K₂CO₃
1967	The gases can be converted into liquids by:	A. Increasing the pressure only. B. Lowering temperature and increasing pressure C. Increasing pressure and bringing temperature below critical points

		D. Lowering temperature only
1968	A graph between P and 1/V at constant temperature and number moles of a gas meets the	A. y-axis B. x-axis C. origin D. none of above
1969	Which of the hydrogen halides has the highest percentage of ionic character	A. HCl B. HBr C. HF D. HI
1970	In Solids, the temperature is the measure of	A. Rotational kinetic energies B. Translational kinetic energies C. Vibrational kinetic energies D. None of above
1971	Hydrogen chloride molecule contains	A. Covalent bond B. Double bond C. Co-ordinate bond D. Electrovalent bond
1972	The quantitative relationship between the substances according to balanced equation describes	A. Reversible reactions B. Stoichiometry C. Limiting reacting D. Percentage composition
1973	Which of the following alkyl halides is used as a mathylating agent	A. CH₂H₅I B. CH₃I C. C₂H₅Pr D. C₂H₅Cl
1974	What are non-metals?	A. Sb & Bi B. P & Bi C. N & P D. As & N
1975	Atoms can be evident by use of electron microscope, field ionization microscope and:	A. x-rays B. Video camera C. Telescope D. Compound microscope
1976	Cotton is an example of	A. Animal fibre B. Mineral fibre C. Vegetable fibre D. Synthetic fibre
1977	Purification of an impure copper is made by electrolytic cell, in which impure copper is anode and pure copper is cathode, and the electrolyte used is	A. H₂SO₄ B. CuSO₄ C. ZnSO₄ D. Na₂SO₄
1978	The example of colligative property is	A. Boiling point B. Osmosis C. Freezing point D. Osmotic pressure
1979	The elements in which d or f-orbitals are incomplete are called	A. Transition elements B. Typical elements C. Actinides D. lanthanides
1980	The gasoline with high octane No. has _____	A. More knocking B. Less knocking C. No knocking D. Only knocking
1981	Alkanes normally have _____ hybridization	A. Sp B. Sp² C. Sp³ D. d sp³
1982	Octane number can be changed by	A. Isomerisation B. Alkylation C. Cyclisation D. All of these
1983	Question Image	A. 2-bromo-3-methylbutane B. 3-methyl-2-bromobutane C. 2-methyl-3-bromobutane D. All of these
1984	Which of the following is not a state function	A. Pressure B. Temperature C. Enthalpy D. Amount of substance

1985	Which term was derived from atomos?	A. atom B. hydrocarbon C. aromatic D. aliphatic
1986	Which of the following is explosive:	A. Trinitropheonal B. Nitropheonal C. Nitromethane D. Nitrobenzene
1987	In Millikan method for determination of charge on electron the air in the chamber is ionized by	A. Protons B. Electric field C. X-rays D. a - particles
1988	The difference between amount of heat actually released and that of calculated is called	A. Bonding energy B. Activation energy C. Resonance energy D. Transition energy
1989	Question Image	A. Total pressure B. Amount of A₂and B₂ C. Temperature D. Catalyst
1990	A graph between P and PV at constant temperature and number of mole is parallel to	A. y axis B. z axis C. x axis D. pressure axis
1991	Law of mass action states that rate of chemical reaction is directly proportional to the product of active masses of the reactants. The term active mass means	A. Mass in grams converted to products B. Number of moles C. Number of moles per dm³of reactants D. Total pressures of the reactants
1992	The noble gas have	A. Very low ionization energies B. High boiling points C. No electron pair interaction D. No van Der Waal's forces
1993	Which of the following is a natural polymer?	A. Terylene B. Polysaccharide C. Nylon D. Polyethene
1994	The fourth period contains elements	A. 8 B. 16 C. 18 D. 32
1995	The major components of coal gas are	A. Hydrogen and methane B. Ethane and carbon monoxide C. Nitrogen and ethane D. Ethane and carbon dioxide
1996	Which of the following groups will increase the acidity of phenol?	A. -NO₂ B. -CN C. -X (halogens) D. All
1997	One of the following statements is incorrect	A. Actual yeild is always less than the theoretical yield B. The formula of a compound is not definite C. Law of conservation of mass is applied in stoictiometry D. Boyles law is applied in stoichiometry
1998	Heat absorbed or released during the chemical reaction of physical process at constant pressure is equal to	
1999	Angle 120° is observed in molecules :	A. CH₄ B. CH₃₋CH₃ C. CH -CH D. CH_{2 =}CH₂
2000	The bond order O_2molecule is	A. 1 B. 2 C. 3 D. Zero
2001	Variable valency is generally exhibited by	A. Normal elements B. Transition elements C. Metallic elements D. None of these
	The isomers due to the	A. Functional isomers

2002	unequal distribution of carbon atoms on either side of the functional group belonging to the same homologous series are called	A. Functional isomers B. Position isomers C. Chain isomers D. Metamers
2003	According to Mendeleev, the properties of the elements are periodic function of their	A. Atomic number B. Atomic volumes C. Atomic masses D. Atomic densities
2004	SN2 reaction can be best carried out with	A. Primary alkyl halides B. Secondary alkyl halides C. Tertiary alkyl halides D. All the three
2005	Which of the following polymers is used for weather resistant paints	A. Arcylic resins B. Polyvinyl acetate C. Polystyrene D. PVC
2006	Question Image	A. 0 1 B. 0 2 C. 1 1 D. 1 2
2007	$CuSO_4$. $5H_2O$ is used to prepare	A. Transition complex B. Fehling's 'A' sol C. Fehling's 'B' sol D. Fehling's sol
2008	Which the increase in carbon number of solubility of an alcohol	A. Increases B. Decreases C. Remains unaffected D. None of these
2009	Atomic number of Al is 13. When it forms ionic bond with oxygen the number of electrons lost by 1 Al atom is	A. 1 B. 2 C. 3 D. 4
2010	Which of the following acid can be used as a catalyst in Friedel Craft's reaction?	A. AlCl₃ B. HNO₃ C. BeCl₂ D. NaCl
2011	For the reaction : NaOH + HCl----------> NaCl + H_2O the change in enthalpy is called:	A. Heat of reaction. B. Heat of formation. C. Heat of neutralization. D. Heat of combustion.
2012	Colour of fluorine gas is	A. Pale yellow B. Greenish yellow C. Red brown D. greyish black
2013	The bond order of individual C - C bond is benzene is	A. One B. Two C. Between one and two D. One and two alternately
2014	The number of bonds in nitrogen molecule is	
2015	When an electron is absorbed in an empty or partially filled orbital of an atom, the energy released is called	A. Ionization energy B. Potential energy C. Electron affinity D. Bond energy
2016	Partial reduction of acetic acid happens with	A. NH₃ B. LiAlH₄ C. P + HI D. PCl₅
2017	The general formula of saturated alicyclic hydrocarbons is:	A. C_nH_n B. C_nH_{2n} C. C_nH_{2n+2} D. C_nH_{2n-1}
2018	Question Image	A. Reaction occurs at STP B. Reaction is exothermic C. Reaction is endothermic D. Number of moles of production and reactant are same
2019	A solution of glucose is 10% The volume to which 1g mole of it dissolved will be :	A. 8.1 dm³ <o:p></o:p> <o:p></o:p> B. 1.7 dm³ <o:p></o:p> C. 1.8 dm³ <o:p></o:p> D. 6.1 dm³ <o:p></o:p>

2020	Question Image	A. Forward reaction is favoured B. Backward reaction is favoured C. No effect D. None of the above
2021	The energy required to break one mole of bonds to form neutral atoms is called	A. Bond length B. Bond strength C. Bond energy D. None of these
2022	Lime is often used as an agent	A. dehydrating B. hydrating C. oxidizing D. reducing
2023	Colour of N_2O_4 is	A. Raddish brown B. Yellow C. Colouries D. green
2024	Dehydration of glycerol give	A. Propane B. Propene C. Acrolein D. Benzene
2025	The increase in size of the anion is due to:	A. Increase in electron-electron repulsion B. Increase in valence shell electrons. C. Decrease in valence shell electrons. D. Both (a) and (b).
2026	Phenol is also known as	A. Acetic acid B. Carbolic acid C. Tararic acid D. Trichloroacetic acid
2027	Which statement about gases is not correct ?	A. The spread throughout the vessel. B. Pressure is due to collision C. There are large spaces between the molecules. D. molecules are arranged regularly.
2028	Atomospheric pollutant is	A. CO₂ B. CO C. O₂ D. N₂
2029	Cracking normally gives smaller _____	A. Alkanes B. Alkenes C. Alkynes D. Both a and b
2030	Which of the following statements is incorrect about vitamins	A. Often function as coenzymes B. Molecules contain at least one ring structure C. Are often synthesized by the body D. Are polyfunctional compounds
2031	Which of the following mixture of liquids show negative deviation form Raults law	A. Ethyl alcohol and ether B. HCl and water C. Phenol- water D. Chlorobenene-bromobenene
2032	Number of molecules in one dm^3 of water is close to :	A. 6.02/22.4<o:p></o:p> B. 12.04/22.4 *10^{23 <o:p></o:p>} C. 18/22.4*10²³ D. 55.6*6.02*10²³* 10²³
2033	Ethyl alcohol reacts with acetyl chloride to form	A. Ethyl chloride B. Acetic acid C. Methyleacetate D. Ethyleacetate
2034	Which of the following synthetic phosphorous fertilizers is marked as super phosphate	A. Calcium dihydrogen phosphate B. Appetite C. Calcium phosphate D. Wavellite
2035	Isotopes differ in	A. properties which depend upon mass B. arrangement of electrons in orbitals C. chemical properties D. the extent to which they may be affected in electric fields
2036	The solubility of $PbF_2$is 2.6 x 10^{-3}mole dm^{-3} then its solubility product is	A. 2.6 x 10⁻³ B. 6.76 x 10⁻⁶ C. 5.2 x 10⁻⁶ D. 7.0 x 10⁻⁸
		A. Galvanization

2037	Prevention of corrosion of iron by Zn coating is called	B. Cathodic protection C. Electrolysis D. Photoelectrolysis
2038	The colour of transition metal complexes is due to	A. d-d transitions of electrons B. Para magnetic nature of transition elements C. Ionization D. Loss of s-electrons
2039	By state, we mean the	A. Reaction of system B. Scope of a system C. Condition of a system D. None of above
2040	What is the maximum mass of aluminium which can be obtained from 240g of aluminium oxide Al_2O_3?	A. 26 g B. 127 g C. 51 g D. 108 g
2041	The volume occupied by 1.4 g of N_2 at S.T.P is	A. 2.24 dm³ B. 22.4 dm³ C. 1.12 dm³ D. 112 cm³
2042	Identification of a substance, determination of its structure and quantitative analysis of its composition are the aspects covered by	A. Modern analytical physics B. Mechanical chemistry C. Biochemistry D. Modern analytical chemistry
2043	A gas bulb is filled with NO_2gas and immersed in an ice bath at 0°C which becomes colourless after sometimes. This colourless gas will be	A. NO₂ B. N₂O C. N₂O₄ D. N₂O₅
2044	Which is used in arc welding and cutting?	A. He B. Ne C. Ar D. Kr
2045	Pressure remaining constant, at which temperature volume of gas will become twice of what it is at 0°C ?	A. 546<o:p></o:p> B. 200 C. 546K D. 273K
2046	Which colour is imparted by sodium	A. Yellow B. Violet C. Red D. Crimson
2047	The degree of unsaturation in fats or oils is usually measured by numbers of grams of iodine required by 100 grmas of fat, this is called	A. Oil number B. Saturation number C. Iodine number D. Un saturation number
2048	The heat of formation of graphite and P(white) is _____ KJ/mole	A. 0.00 B. -273.0 C. +8.7 D. 813.99
2049	Which of the following has highest bond order	
2050	A molecule of haemoglobin is made up if nearly	A. 10,000 atoms B. 50,000 atoms C. 2500 atoms D. 1500 atoms
2051	The wave number of the light emitted by a certain source is $2 \times 10^6 m^{-1}$. The wavelength of this light will be	A. 500 nm B. 500 m C. 200 nm D. 5 x 10⁷m
2052	Which of the following does not exhibit the periodicity in properties of the elements?	A. Ionisation energy B. N/P ratio C. Electronegativity D. Atomic radius
2053	Internal energy of a system is equal to	A. Kinetic energy of particles B. Potential energy due to binding forces between particles C. Sum of kinetic energy plus potential energy of the particles D. Heat contents

2054	the unreactivity of alkanes is based upon	A. Inertness of sigma bond B. Non-polarity of the bonds C. Both A and B D. None of above
2055	Glutamic acid, aspartic acid are _____ amino acid	A. Acidic B. Basic C. Neutral D. None of these
2056	The order of reactivity of halogen acids towards alkenes	A. HCl > HBr > HI B. HBr > HCl > HI C. HCl > HBr D. HI > HBr > HCl
2057	Dehydrohalogenation of alkyl halides give	A. Alkanes B. Alkenes C. Alkynes D. Alkdehyde
2058	Newland's was scientist:	A. Russian B. German C. English D. French
2059	Grignard's reagent on treatment with chloramine give	A. Acetamide B. Primary amice C. Secondary amice D. Urea
2060	Oxidation state of boron, aluminium and gallium is:	A. +1 B. +2 C. +3 D. +5
2061	Which is nitrous acid?	A. HNO₃ B. HNO C. HNO₂ D. H₂NO₃
2062	Gases deviate from ideal behavior at high pressure. Which of the following is correct for non-ideality ?	A. At high pressure, the gas molecules move in one direction only. B. At high pressure, the collisions between the gas molecules are increased manifold. C. At high pressure, the volume of gas becomes insignificant. D. At high pressure, the inter molecular attraction become significant.
2063	The silver bromide in hypo ($Na_2S_2O_3$) solution is	A. Soluble B. Not soluble C. Precipitated D. Not effect
2064	The term aromatic was derives from	A. Greek word B. Latin C. Russian D. English
2065	The boiling point of an a zeotropic mixture of water and ethye alcohol is less than that of water and alcohol. The mixture shows	A. That solution is highly saturated B. No deviation from Raoult's law C. Positive deviation from Raoult's law D. Negative deviation from Raoult's law
2066	For a gas obeying Boyle's law if pressure is doubled, the volume becomes :	A. Remain constant B. Double C. One half D. None of above
2067	An organic compound 'A' has the molecular formula C_3H_6O, it undergoes iodoform test. When saturated with HCl it gives 'B' of molecular formula $C_9H_{14}O$. A and B, respectively are	A. Propanal and mesitylene B. Propanone and mesityl oxide C. Propanone and 2, 6-dimethyl-2,5-heptadien-4-one D. Propanone and mesitylene oxide
2068	During the manufacturing process of cement the temperature of the decomposition zone goes up to	A. 600°C B. 800°C C. 1000°C D. 1200°C
2069	Amorphous solids:	A. Have a sharp melting point B. Undergo clean cleavage when cut with knife C. Have a perfect arrangement of atoms D. Can possesses small regions of orderly arrangement of atoms
2070	Coordination sphere may be:	A. Cationic B. Anionic

2070	Coordination sphere may be:	C. Neutral D. All above
2071	Pollutant of automobile exhausts that affects nervous system/produces mental diseases is	A. Mercury B. Lead C. Nitrogen oxide D. Sulphuric oxide
2072	If four moles of sulpur dioxide are oxidised to sulphur trioxide, how many moles of oxygen molecules are required	A. 0.5 B. 1.0 C. 1.5 D. 2.0
2073	Which of the following is not correct about transition metals?	A. Their melting and boiling points are high B. Their compounds are generally coloured C. They can form ionic or covalent compounds D. They do not exhibit variable valency
2074	The elimination of HX from adjacent carbon atoms is called	A. Halogenations B. Hydrohalogenation C. Dehydrohalogenation D. Hydration
2075	The high molecular weight materials which yield on hydrolysis the amino acids is called:	A. Carbohydrates B. Lipids C. Fatty acids D. Proteins
2076	Gypsom added in cement is:	A. 1% B. 2% C. 3% D. 4%
2077	A compound contains 75% carbon and 25% hydrogen, by mass. What is the molecular formula of the compound/	A. C₃H₈ B. CH₄ C. C₂H₄ D. C₂H₆
2078	All the elements belongs to the 2nd period are	A. Normal elements B. Transition elements C. Stable elements D. Halogens
2079	Which decolourizes the colour of Br_3	A. CH₄ B. CH₃-</sub>CH₃-</sub>CH₃ C. CH₂=</sub>CH₂ D. CH₃-</sub>CH₃
2080	In H_2O molecule the bond angle is	A. 90° B. 109.5° C. 107° D. 104.5°
2081	Plaster of pares is obtained by heating	A. Gypsum B. Epsom C. Lime stone D. Dolomite
2082	The sp^2hybird orbitals are oriented in space at one angle	A. 180° B. 109.5° C. 100° D. 120°
2083	Formalin is:	A. 10% solution of formaldehyde in water B. 20% solution of formaldehyde in water C. 40% solution of formaldehyde in water D. 60% solution of formaldehyde in water
2084	DNA has deoxyribose, a base and the third component is	A. Phosphoric acid B. Ribose C. Adenine D. Thymine
2085	Question Image	A. 0.02 B. 0.2 C. 50 D. 25
2086	Oleum is	A. Castor oil B. Oil of vitriol C. Fuming of H₂SO₄ D. None of them
2087	When the electron jumps form second third, fourth orbit to the fist orbit, the transitions are known as	A. Balmer series B. Lyman series C. Pfund series D. Brackett series

2088	Strong reducing agents gave	A. Greater positive value of standard reduction potential B. Greater negative value of standard reduction potential C. Lesser positive value of standard reaction potential D. None of these
2089	A common industrial solvent is a mixture of propanone; CH_3COCH_3, and pentyl ethanoate $CH_3CO_2(CH_2)_4CH_3$. Which reagent would have no effect on this solvent	A. Na_(s) B. NaBH₄ C. NaOH_(aq) D. 2,4-dinitrophenylhydrazine reagent
2090	The colour of transition metal complexes is due to:	A. d-d transitions of electorns B. Paramagnetic nature of transition C. Ionization D. Loss of s-electrons
2091	Closed chain compound can be classified into	A. Homocyclic B. Hetrocyclic C. Aliphatic D. Both a and b
2092	Which element form group 15 gives most basic compound with hydrogen?	A. Nitrogen B. Bismuth C. Arsenic D. Phosphorus
2093	Which of the following derivative can not be prepared directly from acetic acid	A. Acetamide B. Acetyl chloride C. Acetic anhydride D. Ethyl acetate
2094	The number of bonds in nitrogen molecule is	A. Oneφ and one π<o:p></o:p> <o:p></o:p> B. Oneφ and two π<o:p></o:p> C. three sigma only D. Two φ and one π<o:p></o:p>
2095	Acetylene gives	A. White ppt. with ammonical AgNO3 and red ppt. with ammonical Cu(NO3)2 B. White ppt. with ammonical AgNO3 and red ppt. with ammonical Cu2C12 C. White ppt. with both D. Red ppt. with both
2096	Cement plaster is made by mixing plaster of paris with	A. glue or oil B. gypson C. glycol D. alum or borax
2097	The amount of Ni in stainless steel is	A. 3% B. 4% C. 5% D. 8%
2098	Which one is a nitrogen fertilizer	A. Urea B. Calcium sulphate C. Potassium phospahte D. Magnesium carbonate
2099	Which reaction is of condensation or addition elimination reaction?	A. Ketol B. Aldol C. Cannizzaro D. All of these
2100	Alkali metals in each period have	A. Smallest size B. Lowest IE C. Highest IE D. Highest electronegativity
2101	Gases shows uniform behavior toward their :	A. Internal conditions B. External conditions C. Internal and external conditions D. None of above
2102	Alcohol reacts with halogen acid to produce	A. Alkyl halides B. Aldelydes C. Ketones D. Alkanes
2103	Without proper suction filtration is	A. Rapid process. B. Fague process. C. Slow process. D. Useless process.
2104	Crystalline form of sulphur stable at room temperature is	A. Rhombic sulphur B. Monoclinic sulphur C. Plastic sulphur D. Prismatic sulphur

		D. Prismatic sulphur
2105	In Boyle's law which of the following pair remains constant	A. Temperature and quality of a gas B. Pressure and quality of a gas C. Temperature and pressure D. Temperature and quantity of a gas
2106	Electron affinity of sulphur is	A. More than O and Se B. More than O but less than Se C. Less than O but more than Se D. Equal to O and Se
2107	The equation for the first ionization energy of hydrogen is	
2108	Which of the following is not fatty acid?	A. Propanoic acid B. Acetic acid C. Phthalic acid D. Butanoic acid
2109	In a Galvanic cell, the electrons flow from	A. A node to cathode through the solution B. Cathode to anode through the external circuit C. Cathode to anode through the external circuit D. Anode to cathode through the external circuit
2110	Alkyl halides in which a halogen atom is bonded to that carbon atom which directly bonded with one hydrogen atom is called	A. Primary alkyl halides B. Secondary alkyl halides C. Tertiary alkyl halides D. Quaternary alkyl halides
2111	Question Image	A. Proton donar B. Dehydrating agent C. Catalyst D. Electrophile
2112	During nitration of benzene, the active nitrating agent is	A. NO3 B. NO2+ C. NO2- D. HNO3
2113	Which of these polymers is a synthetic polymer?	A. Animal fat B. Starch C. Cellulose D. Polyester
2114	When vapours of isopropyl alcohol are passed over heated copper, the major product obtained is	A. Propane B. Propylene C. Acetaldehyde D. Acetone
2115	I-A group elements are called:	A. Alkali-metal B. alkaline earth metals C. Halogens D. Chalocogens
2116	In an experiment the concentration of a reactant 'A' is doubled the rate increases four times. If concentration in tripled, then rate increases nint times. Thus the rate is proportional to _____ of concentration of 'A'	A. Square root B. Square C. Twice D. Cube
2117	The fibre which contains polymers of vinylidine chloride as fibre forming substance is known as	A. Saran fibre B. Nylon C. Polyester D. Acetate fibre
2118	The freezing mixture used in ice cream machine consists of ice and	A. NaCl B. KCl C. MgCl₂ D. NaNO₃
2119	Ecosystem is a smaller unit of	A. Hydrosphere B. Lithosphere C. Biosphere D. Atmosphere
2120	Question Image	A. Homogeneous B. Heterogeneous C. Isogeneous D. None
2121	Bleaching powder is prepared by the reaction of Cl_2 with.	A. Lime stone B. Lime water C. slaked lime D. Lime

		D. Lime
2122	Arabic word "alkali" means:	A. The ashes B. the sour C. The fragrant D. Caustic
2123	Which are being formed by alakli metals?	A. oxides B. nitrides C. carbides D. peroxides
2124	When a weak acid is dissolved in water or a weak base dissolved in water, then in both cases the conjugate acid base pair is produced. The ionization constants $K_a$and $K_b$of a pair are related with each other as	A. K_a= K_b B. K_a. K_b= K_w C. K_a. K_w= K_b D. K_b. K_w= K_a
2125	The formula of calcium superphosphate is	A. CaHPO₄ B. CaH₂PO₄ C. Ca(H₂PO₄)₂ D. None of these
2126	Normal by product of cracking is	A. Ethane B. Butane C. Benzene D. All of them
2127	Lead accumulator contains	A. 30% NaCl solution as electrolyte B. 30% HCl solution as electrolyte C. 30% H₂SO₄solution as electrolyte D. 30% NaOH solution as electrolyte
2128	Which is not a method for solid waste management	A. Landfill B. Incinerating C. Recycling D. None of these
2129	Gypsum is a common mineral of	A. Magnesium B. Strontium C. Calcium D. Barium
2130	f-Block elements are also called	A. Non typical transition elements B. Outer transition elements C. Normal transition elements D. Inner transition elements
2131	Water pollution is mainly due to	A. Sulphure dioxide B. Carbon dioxide C. Oxygen D. Industrial discharges
2132	Peptide bond is a key feature in	A. Polysaccharide B. Proteins C. Nucleotide D. Vitamins
2133	Bond angle is minimum for	A. H₂O B. H₂S C. H₂Se D. H₂Te
2134	Organic compounds containing halogen atom are called:	A. R---OH B. R----X C. R----NH₂ D. R----COH
2135	Aldehydes are oxidizes are to give:	A. Primary alcohol B. Sec-alcohol C. Ter-alcohol D. Carboxylic acid
2136	Which is the strongest acid?	A. HClO B. HClO₂ C. HClO₃ D. HClO₄
2137	Ionic hydrides are generally	A. Liquid at room temperature B. Good electrical conductors C. Good reducing agents D. Easily reduced
2138	Iodoform test is given by:	A. Formaldehyde and Higher ketones B. Formaldehyde

		C. Acetaldehyde and methyl ketones D. Acetaldehyde
2139	When methane reacts with Cl_2in the presence of diffused light the products obtained are?	A. Chloroform only B. Carbon tetrachloride only C. Chloromethane and dichloromethane D. Mixture of a,b,c
2140	The symbol of the element whose atoms have the outer most electronic configuration $2s^2 2p^3$is	A. N B. Li C. P D. Na
2141	Which metal is used for catalytic hydrogenation of oils	A. Cu B. Pt C. Ni D. Pd
2142	Phenol is a weak acid. The correct order of acid strength of carboxylic acid, phenol and alcohol is	A. Carboxylic acid > phenol > alcohol B. Carboxylic acid > alcohol > phenol C. Phenol > carboxylic acid > alcohol D. Alcohol > phenol > carboxylic acid
2143	Which compound is the most reactvie one:	A. benzene B. ethene C. ethane D. ethyne
2144	1 erg of energy corresponds to	A. 6.02 x 10²³J/mol B. 6.02 x 10¹⁶J/mol C. 1 erg/mol D. 10⁻⁷J/mol
2145	Which of the following is known as wood spirit	A. Ethyl alcohol B. Propyl alcohol C. Methyl alcohol D. Butyl alcohol
2146	Hypo is used in photography for	A. Developing picture B. Picture printed C. The colour of picture D. The fixation of picture
2147	Under what condition of temperature and pressure the formation of atomic hydrogen from molecular hydrogen will be favourd	A. High temperature and high pressure B. Low temperature and low pressure C. High temperature and low pressure D. :Low temperature and high pressure
2148	The total number of possible values of magnetic quantum number for the value of l=3 is	A. 3 B. 1 C. 5 D. 7
2149	Which of the following molecules has zero dipole moment?	A. NH₃ B. CHCl₃ C. H₂O D. BF₃
2150	The driving force for making a bond is	A. To attain noble gas electronic configuration B. To make soled compounds C. To make different compounds D. To make gaseous substances
2151	Which one of the following elements occurs free in nature?	A. N B. P C. As D. Sb
2152	All alkali metals react with acetylene to form acetylides except:	A. Li B. Na C. K D. Rb
2153	Reaction of Grignard's reagent with formaldehyde gives:	A. pri-alcohol B. sec-alcohol C. ter-alcohol D. carboxylic
2154	The number of moles of CO2which contain 8.0 g of oxygen	A. 0.25 B. 0.50 C. 1.0 D. 1.50
2155	$SO_2$is not absorbed in water directly to or H_2SO_4because:	A. The reaction does not go to completion B. the reaction is quite slow C. the reaction is exothemic D. SO₃is insolublein water

2156	Which of these polymers is a synthetic polymer	A. Animal fat B. Starch C. Cellulose D. Polyester
2157	The majority of reactions which give stable products are	A. Exothermic B. Isothermal C. Endothermic D. Both a and c
2158	Which oxide is insouluble	A. Li₂O B. Na₂O C. K₂O D. BaO
2159	Which statement is true about a free radical	A. An atom with a positive charge B. An atom with a negative charge C. An atom with a lone pair of electrons D. An atom with unpaired electron
2160	Hemoglobin contains nearly:	A. 10,000 atoms B. 100 atoms C. 1000 atoms D. 1 atom
2161	Chloroflurocarbon releases a chemical harmful to ozone	A. Fluorine B. Chlorine C. Nitrogen peroxide D. Sulphure dioxdie
2162	The movement of gas molecules from a region of high pressure to vacuum is called	A. Evaportation B. Effusion C. Conduction D. Diffusion
2163	HNO_2acts as an/a	A. Acid B. Oxidizing agent C. Reducing agent D. All the three
2164	In 1000 molecules of 0.001 M acetic acid the number of H^+ions is 12.6, then its percentage of ionization is	A. 1.33% B. 1.26% C. 12.6 D. 1%
2165	It rate law of an equation is written as$dx/dt=K[A][B]$?	A. Reaction is independent of the concentration of A and B. B. Product is decreasing with passage of time. C. Reactant in increasing with passage of time. D. Reactant is increasing with passage of time.
2166	When alkyl halides are heated with aqueous solution of ammonia at about 100°C, amines are formed. This reaction is known as	A. Williamsons synthesis B. GHoffmans reaction C. Wurtz reaction D. Clemensen reaction
2167	The ionization constant of an acid is expressed in term of the following constant	A. Kw B. Kn C. Ka D. Kb
2168	Electrons in degenerate orbitals are placed in separate orbitals with same spin according to	A. Hund's rule B. Pauli exclusion principle C. Aufbau principle D. Mosley's law
2169	Number of moles of solute dissolved in 1 Kg of solvent is knowns as	A. Molarity B. Formality C. Molality D. Mole fraction
2170	Reduction with aluminium isopropoxide in excess of Isopropyl alcohol is called Meerwein Ponndroff-Verley reduction (MPV). What will be the final product when cyclohex-2-enone is selectively reduces in MPV reaction?	A. Cyclohexanol B. Cyclohex-2-enol C. Cyclohexanone D. Benzene
2171	The wave number of the line emitted is 109.678 x $10^5 m^{-1}$in the Lyman series when electron transition occurs	
		A. Alkali metal B. Alkakline earth metals

2172	f-block elements are called :	D. Alkaline earth metals C. Transition elements D. Electron deficient elements
2173	A colourless liquid, at room temperature reacts with soda lime to form sodium salt of carboxylic acid and ammonia gas. The liquids is	A. Propanamide B. Propanoic acid C. Formamide D. Methyl Ethanoate
2174	Which one of the following solution will have higher vapour pressure than that of water	A. Aqueous solution of methanol B. Aqueous solution of HCl C. Aqueous solution of glucose D. Aqueous solution of urea
2175	A limiting reactant is the one which	A. Is taken in lesser quantity in grams as compared to other reactants B. Is taken in lesser quantity in volume as compared to other reactants C. Gives the maximum amount of the product which is required D. Gives the minimum amount of the product under consideration
2176	Which is plaster of paris?	A. CaSO₄.H₂O B. (CaSO₄)₂.H₂O C. CaSO₄.2H₂O D. CaSO₄.3H₂O
2177	Steel may be manufacture by two processes which two are correct	A. Open hearth process and besemer process B. Open hearth process and Haber process C. Bassemer process and Haber process D. Contact process and Haber process
2178	Aldehydes give reactions :	A. Oxidation and reduction B. Base-catalysed nucleophilic C. Acid catalysed nucleophilic D. All of these
2179	Which metal of Group-II A of the periodic Table, will form the least ionic chloride	A. Be B. Mg C. Ca D. Sr
2180	Zwitter ion is _____ ion an amino acid	A. Polar B. Monopular C. Dipolar D. Non polar
2181	German silver does not contain	A. Cu B. Zn C. Ni D. Mn
2182	Question Image	A. Introduction of an inert gas at constant volume B. Introduction of PCl₃(g) at constant C. Introduction of PCl₅(g) at constant volume D. Introduction of Cl₂at constant volume
2183	Balmer's series is in _____ region	A. Visible B. U V C. I. R. D. None
2184	Substituted phenyl groups are called	A. acyl groups B. phenyl groups C. Aryl groups D. Alkyle groups
2185	Unpleasant smell of carbylamine is obtained when chloroform and alcoholic KOH are heated with	A. Any aromatic amine B. Any primary amine C. Any amine D. Any aliphatic amine
2186	Which statement is incorrect for NICAD battery	A. The electrolyte is alkali B. Cd acts as anode C. MnO₂acts as electrolyte D. NiO₂acts as cathode
2187	Metals which are above SHE in electrochemical series	A. Can liberate H₂from acid B. Cannot liberate H₂from acid C. Cannot always liberate H₂from acid D. None of these
2188	The element like nitrogen, phosphorus, calcium, are added in large amounts to the soils and are called	A. Nutrents elemets B. Basic elements C. Basic elements D. Additives
2189	Hydrolytic coversion of sucrose into glucose and fructose is known as	A. Induction B. Inversion C. Insertion D. Inhibition

2190	The conversion of n-hexane into benzene by heating in the presence of Cr_2O_3 is called:	A. Isomerization B. Aromatization C. Dealkylation D. Rearrangment
2191	The reaction is galvanic cell is	A. Spontaneous B. Non-spontaneous C. Acid-base D. None of these
2192	Ozone layer of stratosphere requires protection from indiscriminate use of	A. Fungicides, insecticides, bactericides and medicines B. Aerosols and high flying jets C. Atomic explosions and industrial wastes D. Baloons and turbo-prop aeroplanes
2193	Astatine belongs to group:	A. I-A B. II-A C. III-A D. VII-A
2194	F_2, Cl_2, $Br_2$and I_2lie below SHE is the Electro chemical series that is why these	A. Undergo reduction B. Undergo oxidation C. Liberate H₂gas with steam D. None of these
2195	Benzene is an example of	A. Aromatic compound B. Cyclic compound C. Aliphatic compound D. A cyclic compound
2196	Which isomers of $C_5H_{11}OH$ gives, on dehydration, the greatest number of different alkenes	
2197	ΔH for an endothermic reaction carries	A. Positive sign B. Negative sign C. Both sign D. None of these
2198	Silver mirror test is applied for	A. Aldehydes B. Alcohols C. Acids D. Esters
2199	Which of the following is a colligative property?	A. Melting point B. Osmotic pressure C. Freezing point D. Sublimation temperature
2200	Alkanes are generally not reactive towards acids, alkalis, oxidation or reuducing agents. They however undergo some reactions, which one is the reaction undergone by alkanes	A. Elemination B. Addition C. Free radical substitution D. Nucleophilic substation
2201	Which one of the following is not related to spontaneous process.	A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Unidirectional.^{<o:p></o:p>} B. Real. C. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Irreversible.<o:p></o:p> D. Artificial.
2202	Which is not a calcarious material?	A. Lime B. Clay C. Marble D. Marine shell
2203	The quantum number which describe the orientation of the orbitals is	A. Spin quantum number B. Principle quantum number C. Azimathal quantum number D. Magnetic quantum number
2204	On adding sodium nitroprusside ketones give	A. Red B. Wine red C. White D. Orange
2205	Cell in which an electric current drives a non-spontaneous reaction is	A. Electrolytic cell B. Voltaic cell C. Biological cell

	called	D. Electrochemical cell
2206	Force of attraction between atoms of He is	A. London dispersion forces B. Hydrogen bondign C. Coordinate covalent bond D. Covalent bond
2207	Which one of the following reacts immediately with conc. HCl in the presence of $ZnCl_2$	A. Primary alcohol B. Secondary alcohol C. Tertiary alcohol D. Ether
2208	A compound A has a molecular formula C_2Cl_3OH. It reduces Fehling solution and on oxidation produces a monocarboxylic acid B.A can also be obtained by the action of Cl_2on Ethanol. A is	A. Chloral hydrate B. CHCl₃ C. CH₃Cl D. Chloroacetic acid
2209	Question Image	A. Diastase B. Lipase C. Inverters D. Zymase
2210	Pauli's principle is applicable to	A. Degenerate orbits B. Two electrons in the same orbital C. One electron D. None
2211	Characterstics of aromaic are:	A. how hydrogen carbon ratio than alkanes B. characterstics oudour C. a &B D. Characterstics properties
2212	Given below are some statements concerning formic acid, which of them is true?	A. It is a weaker acid than acetic acid B. It is a reducing agent C. When its calcium salt is heated, it forms a ketone D. It is an oxidizing agent
2213	Benzene has a -------- structure	A. Pentagonal B. Hexagonal C. Heptagonal D. Tetragonal
2214	For a given process, the heat change at constant pressure (p) and constant volume (v) are related to each other as	
2215	Which of the following compounds will form a hydrocarbon on reaction with Grignard reagent	A. A ketone B. An aldehyde C. An ether D. Water
2216	Chloroform and acetone are soluble in each other due to:	A. Instantaneous dipole interactions. B. Dipole-dipole interactions. C. Inter molecular hydrogen bonding. D. All of above
2217	Which one of the following dissolves more rapidly in blood hemoglobin than oxygen?	A. Ozone B. Nitrous oxide C. Sulphure dioxide D. Carbon monoxide
2218	Solvent extraction method is a particularly useful technique of separation when the product to be separated is:	A. non-volatile or thermally unstable. B. volatile or thermally stable. C. non-volatile or thermally stable. D. volatile or thermally unstable.
2219	When a carboxylic acid reacts with a metal _____ gas is evolved	A. H₂ B. CO₂ C. Cl₂ D. None of these
2220	Which of the statement is contrary to the first law of thermodynamics	A. Energy can neither be created nor destroyed B. One form of energy can be transferred into an equivalent amount of other kinds of energy C. In an adiabatic process the work done is independent of its path D. Continuous production of mechanical work without supplying an equivalent amount of heat is possible
2221	In the expression rate = K $[A]^a[B]^b$K is	A. The order of reaction B. The speed of reaction C. The specific rate constant D. The overall order of reaction
2222	The alkyl halide molecule on which a nucleophile attacks is	A. Substrate B. Subsituent C. Substituted

	called	C. Substituted D. All of these
2223	Extent to $H_2 + L_2 \rightarrow 2HI$ can be increased by :	A. Increasing temperature.<o:p></o:p> B. Increasing product. <o:p></o:p> C. Increasing pressure. <o:p></o:p> D. Adding a catalyst.<o:p></o:p>
2224	Which terms was derived from " aroma"?	A. atom B. hydrocarbons C. aromatic D. aliphatic
2225	What is the volume in $cm^3$of 3.01×10^{23}molecules of O_2gas at S.T.P	A. 1000 cm³ B. 11000 cm³ C. 1120 cm³ D. 11200 cm³
2226	Treatment of a secondary alcohol with a suitable oxidizing agent ($K_2Cr_2O_7$) results in the formation of	A. Ketone B. Aidehyde C. Ether D. Alkyl halide
2227	Terylene is madeby polymerization of terephthalic acid with	A. Ethylene glycol B. Phenol C. Ethanol D. Catechol
2228	Which of the following liquids has low vapour pressure at 25^0C	A. Diethyl ether B. Acetone C. Water D. Ethyl alochol
2229	Which is a component of micro nutrient?	A. N B. Zn C. P D. K
2230	A certain current liberate 0.5 g of hydrogen in 2 h. How many grams of copper can be liberated by the same time in a copper sulphate solution?	A. 12.7 gm B. 15.9 gm C. 31.8 gm D. 63.5 gm
2231	Which of the element is not an alkaline earth metal	A. Beryllium B. Strontium C. Barium D. Caesium
2232	Hybridzation explain the ---------- of orbitals	A. Type of bonding B. Shapes C. Shape and type of bonding D. None of above
2233	The colour of a transition metal complex is due to d-d transition The colour of the complex is the complementary of the colour absorbed. Thus $[Ti(H_2O_6]^{3+}$abosrbs yellow light and transmits blue and red colours therefore the solution of titanium complex appears	A. Blue B. Red C. Yellow D. Mixture of blue and red or violet
2234	Which of the following compounds contains the highest percentage by mass of nitrogen?	A. Ammonia, NH₃ B. Ammonium carbamate, NH₂CO₂NH₄ C. Ammonium carbonate, (NH₄)₂CO₃ D. Hydrazine, N₂H₄
2235	A polymeric substance that is formed in the liquid state and then hardened to a rigid solid is called:	A. Fibre B. Plastic C. Vanish D. Polyamide resin
2236	During the manufacturing process of cement the temperature of the decomposition zone goes up:	A. 600°C B. 8000°C C. 1000°C D. 1200°C
2237	The unit of rate constant is the same as that of the rate of reaction in :	A. First order reaction. B. Second order reaction. C. Zero order reaction. D. Third order reaction.
2238	The filtration process is used to separate solid from	A. Liquid B. Gas C. Solid D. All of above

		D. All of above
2239	Corrosion may be prevented by	A. Allcying B. Paints C. Metallic coatings D. All
2240	The reaction between fat and NaOH is called:	A. Esterification B. Hydrogenolysis C. Fermentation D. Sponification
2241	Halogens are called	A. Salt former B. Light bearing C. Copper forming D. none of these
2242	Which fills the space between needles in cement setting?	A. Ca(OH)₂ B. Al(OH)₃ C. CaCO₃ D. MgSO₄
2243	Cellulose does:	A. Satisfy human appetite B. Stimulates intestinal peristalsis C. Gives fibre and bulk to the food D. All of these
2244	Question Image	A. 84.84 % B. 89.89% C. 81.81% D. 90.90%
2245	Which is used for the reduction of aldehydes and ketones	A. NaBH₄ B. Pt/Pd C. Ni D. All of these
2246	On heating glycerol with conc. Sulphuric acid a compound with unpleasant odour is obtained. The compound is	A. Methyl alcohol B. Formic acid C. Prop-2-enal D. Glycerol sulphate
2247	A solution containing maximum amount of solute dissolved at a given temperature is called	A. Saturated solution B. Unsaturated solution C. Supersaturated solution D. Impure solution
2248	For a gas obeying Boyle's law if pressure is doubled, the volume becomes	A. Remains constant B. Double C. One half D. None of above
2249	Where lime is not used	A. In refining or metals B. In paper industry C. In glass industry D. In the preparation of NaOH
2250	Natural fertilizers are materials derived from	A. Plants only B. Animals only C. Both plants and animals D. None of these
2251	In zero order reaction, the rate is independent of :	A. Temperature of reaction B. Concentration ofreactants C. Concentration of products D. None of these.
2252	Some non-spontaneous processes can be made to take place by supplying energy to the system from	A. Internal source B. Any source C. External source D. All of above
2253	Potable water is considered to be	A. Safe for human consumption B. Not safe for human consumption C. The surface water D. The ground water
2254	strength of an acid can be determined by	A. P^{ka} B. P^{kp} C. P^{oH} D. P^{kw}
2255	Rusting can be avoided by :	A. Making alloys B. Tin or Zinc plating C. Use of enamel D. All of these
	Which enzyme is not involved	A. Diastase B. Zymase

2256	Which enzyme is not involved in fermentation of strach	C. Urease D. Invertase
2257	Which of the following is not isoelectronic?	A. Na⁺ B. Mg²⁺ C. O²⁻ D. Cl⁻
2258	The ratio of moles of a particular component of solution to total moles of all components of solution is :	A. Mole fraction. B. Molality. C. Molarity. D. Normality.
2259	Question Image	A. Moles per dm³ B. Partial pressures C. Number of moles D. Mole fractions
2260	In a solution of $CuSO_4$how much time will be required to precipitate 2g copper by 0.5 ampere current?	A. 12157.48 sec B. 102 sec C. 510 sec D. 642 sec
2261	The tip of the funnel should touch the side of the beaker in order to avoid :	A. Splashing. B. Leakage. C. Mixing. D. Contamination.
2262	An oil or fat with no double bond have iodine number:	A. Zero B. 100% C. 50% D. Minimum
2263	Acetic acid is miscible in:	A. Water B. Alcohol C. Either D. All of these
2264	Which of the following reagents is used to distinguish acetone and acetophenone	A. NaHSO₃ B. Grinard reagent C. Na₂SO₄ D. NH₄Cl
2265	Which of the following is lighter	A. Li B. k C. Na D. Ca
2266	Which one of these is weakest?	A. lonest bond B. Covalent bond C. Metallic bond D. Van der Waal's forces
2267	Which of the following solution has the highest boiling point	A. 5.85% solution of sodium chloride B. 18.0% solution of glucose C. 6.0% solution of urea D. All have the same boiling point
2268	In carboxyl group the bond between C and oxygen is:	A. Sigma bond B. Single bond C. Double Bond D. Triple bond
2269	Oxidation state of fluorine is	A. +1 B. +2 C. -1 D. -2
2270	The three dimensional folding and twisting of a polypeptide chain give rise to	A. Primary structure B. Secondary structure C. Tertiary structure D. All of these tertiary
2271	Scientist(s) made contributions in the field designing a periodic table	A. Newland B. Dobriener C. Mendeleev & Mosley D. All of these
2272	Matter is defined as any thing which occupies space and:	A. Molecules B. Mass C. Compound D. Molecules
2273	The addition of HBr is easiest with	A. CH2 = CHCl B. ClCH = CHCl C. CH3 - CH = CH2 D. (CH3)2 C = CH2

2274	NO and NO_2gases in atmosphere are represented by	A. NO B. NO₄ C. NO_x D. N_xO_y
2275	The bond angle between hydrogen atoms and carbon in alkane is	A. 104.5° B. 107.5° C. 109.5° D. 120.5°
2276	Hydrolysis of sucrose is called	A. Inhibition B. Saponification C. Inversion D. Hydration
2277	Ammonia contains nitrogen in it	A. 46% B. 50% C. 80% D. 82%
2278	Which of the following compound is obtained on passing ethanol vapours on heated Al_2O_3?	A. Ethylether B. Acetone C. Ethane D. Ethanol
2279	Noble gases in the atmosphere are	A. 4% B. 3% C. 2% D. 1%
2280	Which of the following is complex?	A. CaSO₄. 0.5H₂O B. (C₆H₁₀O₅)_n C. C₆H₁₂O₆ D. CH₄
2281	Which one of the following is not air pollutant gas	A. CO B. CO₂ C. NO D. SO₂
2282	Chlorine heptoxide (Cl2O7) reacts with water to form	A. Hypochlorous acid B. chloric acid C. Perchloric acid D. Chlorine and Oxygen
2283	The relationships between volume of a given amount of gas and the prevailing conditions of temperature and pressure are	A. Charle's Law B. Graham's Law C. Boyle's Law D. Gas Laws
2284	Which structure shows a tertiary alcohol	A. CH₃CH₂OH B. (CH₃)₂CHOH C. (CH₃)₃COH D. CH₂OH
2285	In endothermic reactions, the heat contents of the:	A. Products equal to the reactants. B. Reactants more than that of products. C. Products more than that of reactants D. Both (b) and (c)
2286	In physical and chemical properties, transition elements show	A. Similarities B. Dissimilarities C. Both of these D. Somestimes similarities, sometimes dissimilarities
2287	Which of the followingα-Amino acids has basic R-group	A. Proline B. Glutamic acid C. Histidine D. Valine
2288	Covalent compounds are soluble in	A. Polar solvents B. Non-polar solvents C. Concentrated acids D. All solvents
2289	Which one of the following reagents will distinguish between C_6H_5CHO and $C_6H_5COCH_3$	A. Aqueous bromine B. Phosphorus pentachloride C. 2, 4 DNPH D. Tollen's reagent
2290	Standard reduction of Zn = -0.76 V and that of Ni is -0.25 V. On coupling them by a salt bridge which of these will act as anode	A. Salt bridge will act as anode B. Zn will act as anode C. Ni will act as anode D. None of these
	The electron releasing effect	A. Electrophilic

2291	The electron releasing effect of methyl group is significant and it makes ring a good	B. Nucleophilic C. Nucleophobic D. Hydrophobic
2292	By comparing both initial and final states of the system, we can describe the change taking place in the	A. Surrounding B. Both a and c C. System D. None of above
2293	How many secondary alcoholic groups are present in the structure of glucose OHC CHOH CHOHCH OH CHOH CH_2OH	A. 1 B. 2 C. 3 D. 4
2294	Which of the following compounds on boiling with $KMnO_4$(alk) and subsequent acidification will not give benzoic acid?	A. Benzyl alcohol B. Acetophenone C. Anisole D. Toluene
2295	The degree of polarity of molecule is known as its	A. Dipole moment B. Moment arm C. Bond energy D. Ionic character
2296	A pair of elements in the same family in the periodic classification is	A. Cl and C B. Ca and Al C. N and Ne D. Na and K
2297	A nucleophilic reagent will readily Attack	A. Ethylene B. Ethanal C. Ethanol D. Ethylamine
2298	Which is the formula of tetra-ammine chloronitro platinum (VI) sulphate?	A. [Pt(NH₃)₄(NO₂)]SO₄ B. [PtNO₂Cl(NH₃)₄]SO₄ C. [PtCl(NO₂)(NH₃)₄]SO₄ D. [Pt(NH₃)₄(NO₂)Cl]SO₄
2299	Which of the following is a typical transition metal	A. Sc B. Y C. Ra D. Co
2300	Polyester resins have special use in:	A. Clothing B. Paints C. Emulsion D. Floor covering
2301	Same amount of electric current is passed through solutions of $AgNO_3$and HCl. If 1.08 g of silver is obtained in the first case, the amount of hydrogen liberated as S.T.P in the second case is	A. 112 cm³ B. 22400 cm³ C. 224 cm³ D. 1.008 g
2302	When ethylene glycol is heated with acidified potassium permanganate, the main organic compound obtained is	A. Oxalic acid B. Glyoxal C. Formic acid D. Ethanol
2303	The rate of reaction :	A. Increase as the reaction proceeds. B. Decreases as the reaction proceeds. C. Remains the same as the reaction proceed. D. May decrease or increase as the reaction proceeds.
2304	The substance which is present in large quantity is called a :	A. Solute B. Solvent C. solutiion D. None of Above
2305	In its reaction with Na, 1 mol of X gives 1 mol of $H_{2(g)}$. What is X	A. CH₃CH₂CH₂CH₂OH B. (CH₃)₃COH C. CH₃CH₂CH₂CO₂H D. CH₃CH(OH)CO₂H
2306	The total values of magnetic quantum number of subshell are five, the subshell is	A. S-subshell B. P-subshell C. D-subshell D. F-subshell
2307	An oxidixing agent	A. K₂Cr₂O₇ B. H₂SO₄ C. FeSO₄

		D. K₂SO₄
2308	The statement regarding effect of catalyst on reversible reaction is.	A. To increase equilibrium constant for forward reaction B. To increase yield of product in equilibrium C. To increase the rate constant for both reactions D. To increase the rate of only for ward reaction
2309	Quantum number values for 2p orbitals are	A. n = 2, l = 1 B. n = 1, l = 2 C. n = 1, l = 0 D. n = 2, l = 0
2310	Alkanes are least reactive towards:	A. Acids and bases B. Reducing agents C. Oxidizing agents D. All of these
2311	The reaction of 4-bromobenzyl chloride with NaCN in ethanol leads to	A. 4-Bromobenzyl cyanide B. 4-Cyanobenzyl chloride C. 4-Cyanobenzyle cyanide D. 4-Bromo 2-cyanobenzyl chloride
2312	Which of the following is a method of converting a unsaturated ketone into unsaturated hydrocarbon?	A. Aldol condensation B. Reimer Tiemann reaction C. Cannizaaor's reaction D. Wolf-kishner reduction
2313	Which of the following does not give iodoform test?	A. Ethanol B. Ethanal C. Acetophenone D. Bezophenone
2314	Question Image	A. 0 dm³ B. 3 dm³ C. 2 dm³ D. 3 dm³
2315	Metal used in the preparation of Grignard's reagent is:	A. Ca B. Na C. Mg D. Zn
2316	Which of the following elements have the largest radius	A. F B. Cl C. Br D. I
2317	Which nitrogen fertilizer is favoured in tropical regions because of its-hygroscopic nature	A. Ammonium sulphate B. Ammonium nitrate C. Ammonium chloride D. Ammonium phosphate
2318	Which of the following statements is most appropriate about effective nuclear charge? It depends upon	A. The shielding constant B. The atomic number C. The charge on the nucleus D. Both the nuclear charge and the shielding constant
2319	A combination of glucose and fructose is called:	A. Sucrose B. Table sugar C. a and b D. Lactose
2320	The osmotic pressure of solution increases if	A. Temperature is decreased B. Solution constant is increased C. Number of solute molecules are increased D. Volume is increased
2321	Question Image	
2322	The molecules of CO_2 in dry ice from the :	A. Ionic crystals B. Coverlet crystals C. Molecular crystals D. Any type of crystals
2323	Aldehyde and small methyl ketones form crystalline _____ ppts with saturated sodium bisulphate solution	A. White B. Red C. Yellow D. None of these
2324	The bibre which is composed of at least 85% by weight of acrylonitrile is known as	A. Royan fibre B. Azlon fibre C. Saran binre D. Acrylic fibre
2325	Which of the following posses linear geometry	A. Alkane B. Alkene C. Alkyne D. Benzene

		D. Benzene
2326	Dehydration of ethyl alcohol yields	A. Aldehyde B. Ketone C. Acid D. Alkene
2327	Cyanohydrin of which of the following forms lactic acid	A. HCHO B. CH₃COCH₃ C. CH₃CHO D. CH₃CH₂CH₂CHO
2328	A carboxylic acid with one caboxyl group:	A. Monocarboxylic acid B. Dicarboxylic acid C. Tricarboxylic acid D. Polycarboxylic acid
2329	The net heat in a chemical reaction is same, whether it is brought about in two or more different ways in one or several steps. It is known as	A. Henry's law B. Joule's princile C. Hess's law D. law of conservation of energy
2330	When $H_2$and $I_2$are mixed and equilibrium is attained, then	A. Amount of HI formed is equal to the amount of H₂dissociated B. HI dissociation stops C. The reaction stops completely D. None of these
2331	In which of the following theories the hybridizationis considered	A. Vsepr B. Lewis C. Molecule orbital D. Valence bond
2332	The equilibrium constant in a reversible chemical reaction at a given temperature	A. Depends on the initial concentration of the reactants B. Depends on the concentration of one of the products at equilibrium C. Does not depend on the initial concentration of rectants D. It is characteristic of the reaction
2333	Question Image	A. -1.10 V B. +1.10 V C. -0.42 V D. +0.42 V
2334	It is noticed that energy in the form of heat is either evolved or absorbed as a result of a	A. Physical change B. Chemical change C. Biological change D. All of above
2335	The relative abundance of the ions with a definite m/e value is measured by	A. High pressure of vapours B. Strength of electric current measured C. Quantity of fast moving electrons D. Electron gas
2336	After chlorination, the pulp is washed at	A. 20°C B. 30°C C. 40°C D. 60°C
2337	The energy of the system and surrounding is conserved. This is a statement of	A. Law of mass action B. Law of definite proportion C. Law of conservation of energy D. Second law of thermodynamics
2338	Burning of coal and hydrocarbon in air are examples of :	A. Non-spontaneous reaction. B. Spontaneous reaction. C. Natural reaction D. Both (a) and (C)
2339	In sp^2type hybridization the three equivalent sp^2orbitals lie in the same plane and at angle of	A. 0° B. 60° C. 120° D. 180°
2340	0.1 molar glucose ($C_6H_{12}O_6$) solution has the % W/N	A. 1.8% B. 18% C. 0.18% D. 2.8%
2341	Question Image	A. Adding H₂O and H⁺ions B. Adding OH⁻ions C. Adding O²molecules D. Adding O atoms
2342	Synthetic polymer prepared from caprolactum is known is	A. Nylon 610 B. Teflon C. Terylene D. Nylon-6

2343	Reaction takes place at anode is	A. Ionization B. Reduction C. Oxidation D. Hydrolysis
2344	Acetamides are formed by the reaction of carboxylic acids with	A. Acids B. Bases C. Salts D. NH₃
2345	Palmitic acid & steanic acid ae obtained from process of fats & oils:	A. Reduction B. Neutralization C. oxidation D. hydrolysis
2346	Which of the following has zero depole-moment?	A. ClF B. PCl₃ C. SiF₄ D. CFCl₄
2347	At constant temperature when pressure of a gas is plotted against volume, the curve is	A. Slanting straight line B. Parabolic C. Staight line, parallel to pressure axis D. OF neither type
2348	Coagulent used in water treatment	A. Gypsum B. Dolomite C. Asbestos D. Alum
2349	When electricity is passed through molten electrolyte consisting of alumina and cryolite, 13.5 g of Al are deposited. The number of faradays of electricity passed must be	A. 2.0 B. 1.5 C. 1.0 D. 0.5
2350	The catalytic prmoter used for the industrial preparation of acetaldehyde is	A. PdCl₂ B. CuCl₂ C. Pd + CaCl₂ D. None of these
2351	Which has highest 1st I.E.	A. Br B. Cl C. F D. I
2352	Which of the following is an inert gas?	A. H₂ B. O₂ C. N₂ D. Argon
2353	The three alternate single and double bonds in the benzene ring are called	A. Conjugate bonds B. Resonating bonds C. Both A and B D. None of above
2354	Which of the following statements is no correct regarding bonding molecular orbitals?	A. Bonding molecular orbitals possess ls energy than atomic orbitals from which they are formed. B. Bonding molecular orbitals have low electron density between the two nuclei. C. Every electron in bonding molecular orbitals contributes to the attraction b.w atoms. D. Bonding molecular orbitals are formed when the electron waves undergo constructive interference.
2355	The correct order of reactivity of halogens with alkanes is	A. I₂> Br₂> Cl₂> F₂ B. I₂> Cl₂> F₂> Br₂ C. F₂> Cl₂> I₂> Br₂ D. F₂> Cl₂> Br₂> I₂
2356	Concentration of rectified spirit is:	A. 12% B. 14% C. 90% D. 95%
2357	All C - H bond lengths of benzene ring is	A. 1.07A° B. 1.09A° C. 1.08A° D. None
2358	Components of environment are:	A. Atmosphere B. Hydrosphere C. Lithosphere D. All of these
2359	Hydrolysis of potassium acetate produces	A. Acidic solution B. Neutral solution C. Basic solution D. None of these
	All the following decompose	A. Lead nitrate

2360	All the following decompose easily on heating to give oxygen except	B. Potassium chlorate C. Mercuric oxide D. Manganese dioxide
2361	In electronic watches or electronic calculators the tiny batteries used are	A. Alkaline battery B. NICAD battery C. Fuel cell D. Silver oxide battery
2362	Decomposition of carbonate of alkaline earth metals produce gas	A. N₂ B. Oxide C. CO₂ D. CO
2363	Which of the following nitrogen fertilizer contains more nitrogen	A. NaNO₃ B. KNO₃ C. NH₄NO₃ D. Urea
2364	The temperature at which the vapour pressure of a liquid becomes equal to external pressure is	A. Melting point B. Sublimation point C. Inversion point D. Boiling point
2365	The acids obtained by the hydrolysis of fats and oils are called	A. Active compound B. Fatty acids C. Functional group D. None
2366	e/m of cathode rays is same but for positive rays e/m changes by changing gas in the discharge tube because	A. Cathode rays are small sized particles B. Cathode rays have same charge C. Nature of cathode rays same for all gasses, but masses of nuclei are different for different gases D. Temperature of cathode rays higher
2367	Allotropic forms of oxygen Te, Se are	A. Two B. Three C. Four D. Five
2368	Which of the following molecules have sp^3hybridized carbon	A. CH₄ B. C₂H₄ C. C₂H₂ D. CO₂
2369	In the atomic emission spectrum the lines which appear bright, appear dark in absorption spectrum because	A. The radiations emitted in emission spectrum are absorbed in absorption spectrum B. Atomic emission spectrum is continuous C. Atomic absorption spectrum is continuous D. Distance between the lines increases
2370	Complete combustion of alkane yields	A. CO₂+ H₂O B. CO₂+ heat C. CO + H₂O heat D. CO₂+ H₂O + heat
2371	Splitting of spectral lines when atoms are subjected to strong electron field is called	A. Zeeman effect B. Stark effect C. Photoelectric effect D. Compton effect
2372	Which has greater number of moles	A. 0.1 g sodium B. 6.02 x 10²⁰atoms of magnesium C. 20 cm³0.1mole per dm³of NaOH D. 12.2 dm³of nitrogen at standard [A_rNa = 23, Mg = 24, O = 16]
2373	Alcohol can be prepared from Grignard's reagent with an aldehyde: If we start with formaldehyde the product alcohol with be	A. Primary B. Secondary C. Territory D. Aromatic
2374	Cooling happens under the Joule Thomson Effect due to sudden	A. Contraction B. Absorption C. Expansion D. All of above
2375	Any substance under going physical or chemical change is said to be	A. Surrounding B. System C. Losphere D. Lithosphere
2376	Hydrides are:	A. Ionic B. Covalent C. Intermediate D. All above
2377	Which alkaline earth metal makes peroxide?	A. Be B. Mg C. Ca

		D. Ba
2378	Which is not true with respect to cathode rays?	A. A stream of electrons B. Charged particles C. Move with speed as that of light D. Can be deflected by magnetic fields
2379	Kolb's method of alkanes production, is actually	A. Hydrolysis B. Catalysis C. Electrolysis D. Hydrogenation
2380	Vegetable oils are	A. Unsaturated fatty acids B. Glycerides of unsaturated fatty acids C. Glyccerides of saturated fatty acids D. Essential oils obtained from plants
2381	Which of the following substances is used as an antiknock compound?	A. Tetraethyl lead B. Lead tetrachloride C. Lead acetate D. Ethyle acetate
2382	When metallic sodium in ether is heated with ethyl chloride, which alkane is formed	A. Propane B. Ethane C. Iso-butane D. N-butane
2383	The experimental evidences for the existence of atomic nucleus comes from:	A. Line spectrum of hydrogen. B. Magnetic bonding of cathode rays. C. Millikan oil drop experiment. D. Scattering of alpha particles by thin metal foil.
2384	The ionization potential is lowest for the	A. Halogens B. Inert gases C. Alkaline earth metals D. Alkali metals
2385	Which of the following is an aromatic compound	A. Propanol B. Cyclohexane C. Acetone D. Benezene
2386	Ethanal may be converted into a three-carbon acid in a two-step process. Which compound is the intermediate	A. CH₃CO₂H B. CH₃CN C. CH₃CH₂CN D. CH₃CH(OH)CN
2387	Which element should have the greatest value for electronegativity when combined with hydrogen	A. Na B. Si C. S D. Cl
2388	The radius of first orbit of hydrogen atom	A. 0.329 A° B. 0.429 A° C. 0.529 A° D. 0.229 A°
2389	The nature of positive rays depend on:	A. Nature of discharge tube. B. Nature of resident gas. C. Nature of electrode. D. All of above.
2390	Content is a combination of mainly:	A. Calcarious B. Argillaceous C. Calcarious and argillaceous D. Al₂O₃
2391	Out of all the elements of group VI-A the highest melting and boiling points is shown by the elements:	A. Te B. Se C. S D. Pb
2392	The concentration of reactants is increased by x, then equilibrium constant K becomes	A. ln K/x B. K/x C. K + x D. K
2393	Which functional group is present in glycerol tristearate	A. Carboxylic acid B. Alcohol C. Aldehyde D. Ester
2394	A sequence of how many nucleotides in massenger RNA makes a codon for an amino acid	A. Three B. Four C. One D. Two

2395	A reaction is reversible because :	A. Products are stable. B. Reactants are reactive. C. Products are reactive. D. Reactants re stable.
2396	The unit rate of constan K is$mole^{-1}$ $dm^3S^{-1}$for a chemical reaction, the order of reaction is :	A. 3 B. 2 C. 1 D. 0
2397	The order of reactivity of halogens in aliphatic substitution reactions is	A. Br2 > C12 > F2 B. C12 > Br2 > F2 C. C12 C12 > Br2 D. F2 > Br2 > C12
2398	Which three elements are needed for the healthy growth of plants?	A. N, S, P B. N, Ca, P C. N, P, K D. N, K, C
2399	Ratio of carbon to hydrogen in aromatic compounds is	A. Low than alkanes B. High than alkanes C. Low than alkenes not high than alkanes D. High than high than alkenes
2400	The function of salt bridge is :	A. To increase movement onions. B. To increase the emf of cell. C. To decrease the temperate D. To maintain electrical neutrality
2401	Chloroform and acetone are soluble in each other due to	A. Instantaneous dipole interactions B. Dipole-dipole interactions C. Intermolecular hydrogen bonding D. All of above
2402	A limiting reactant is one which according to the stoichiometric equation	A. Has excess mass B. Has least mass C. Has excess number of moles D. Has least number of moles
2403	On warming with silver powder,chloroform is converted into	A. Acetylene B. Hexachloroethane C. 1,1,2,2-tetrachloroethane D. ethylene
2404	Which is an essential constituent of chlorophyll	A. Be B. Fe C. Mg D. Ca
2405	An alcohol with molecular formula $C_nH_{2n+1}OH$ has a chiral carbon atom but does not react with MnO^-_4/H^+what is the least number of carbon atoms such an alcohol could possess	A. 5 B. 6 C. 7 D. 8
2406	A compound used as eye wash:	A. Borax B. Boric acid C. Metabolic acid D. Pyroboric acid
2407	In purification of potable water the coagulant used is:	A. Nickel Sulphate B. Copper Sulphate C. Barium Sulphate D. Aluminium Sulphate
2408	The solubility of $KClO_3$salt in water is decreased by adding	A. NaClO₃ B. NaCl C. KClO₄ D. KCl
2409	The process in which one s and two p orbitals mix up with each other is called	A. Sp-hybridization B. Sp²-hybridization C. Sp³-hybridization D. Dsp²-hybridization
2410	Cathode rays emitted from cathode are	A. Canal rays B. Protons C. Electrons D. Positrons
2411	Which of the following species is paramagnetic?	A. CO₂ B. NO C. O²⁻ D. CN

2412	Benzene does not undergo	A. Substitution reaction B. Addition reaction C. Oxidation reaction D. Elimination reaction
2413	the anhydride of $HClO_4$is	A. ClO₃ B. ClO₂ C. Cl₂O₅ D. Cl₂O₇
2414	Which of the following statements is contrary to the first law of themodynamics	A. Energy can neither be created nor destroyed B. One form of energy can be transferred into an equivalent amount of other kinds of energy C. In an adiabatic process, the work done is independent of its path D. Continuous production of mechanical work without supplying and equivalent amount of heat is possible
2415	Value of chemical oxygen demand (COD) is a measure of chemically oxidizable matter in water. Which value of COD will indicate more polluted water	A. Low value B. Higher value C. Both values D. None of these
2416	The hydrocarbon used for polymerization is	A. Alkanes B. Alkenes C. Alkynes D. All of above
2417	The radius of first orbit of H-atom is	A. 4.75 A° B. 3.84 A° C. 8.4 A° D. 0.529 A°
2418	Units of molarity are	A. gm/lit B. mol/lit C. kg/lit D. None of these
2419	The largest number of molecules are present in	A. 3.6 g of H₂O B. 4.8 g of C₂H₅OH C. 2.8 g of CO D. 5.4 g of N₂O₅
2420	Identification of a substance, determination of its structure an quantitative analysis of its composition are the aspects covered by:	A. Modern analytical physics. B. Mechanical chemistry. C. Biochemistry. D. Modern analytical chemistry.
2421	Formalin is an aqueous solution of	A. Furfural B. Fluorescein C. Formaldehyde D. Formic acid
2422	Question Image	A. Acidic amino acid B. Basic amino acid C. Neutral amino acid D. None of these
2423	Find the magnetic moment of a divalent ion in aqueous solution if its atomic number is 25	A. 3.0 BM B. 4.9 BM C. 5.9 BM D. 6.9 BM
2424	Cuprous ore among the following is	A. Chalcopyites B. Azurite C. Cuprite D. Malachitre
2425	On hydrolysis of starch, we finally get	A. Glucose B. Fructose C. Both D. Sucrose
2426	Substances that tend to decrease the activity of enzymes are called	A. Coenzyme B. Activators C. Inhibitors D. Apoenzyme
2427	Which of the following oxides is amopheric in character?	A. CaO B. CO₂ C. SiO₂ D. SnO₂
2428	A buffer of a 0.09 molar acetic acid and 0.11 molar sodium acetate has pH = 4.83. If 0.01	A. 4.74 B. 4.92

	mole NaOH in 1 dm^3 of the buffer solution is added, then pH of the buffer becomes	C. 5.0 D. 4.0
2429	By using graphite electrode the electrolysis of aqueous solution of NaCl produces at anode	A. H₂gas B. Cl₂gas C. NaOH D. No metal
2430	Splitting of spectral lines of the hydrogen atom under the influence or magnetic field is called	A. Stark effect B. Zeeman effect C. Compton effect D. Photoelectric effect
2431	Increasing skin cancer and high mutation rate are due to	A. Acid rain B. Ozone depletion C. CO pollution D. CO₂Pollution
2432	Which of the following is a pseudo solid	A. CaF₂ B. Glass C. NaCl D. All
2433	Which of the following statement is correct.	A. Formaldehyde is used in silvering of mirror B. Propanol and propanone behave similarly in Tollen's seagent C. Acetone on reduction gives primary alcohols D. Ketones gives brick red color with Fehling's solution
2434	Chromatography is derived from Greek word 'Khromatos' means:	A. Type writting B. Printing C. Color writing D. Writing
2435	The raw material to form nylon is	A. Adipic acid B. Butadiene C. Isoprene D. Ethylene
2436	Polymerization of ethane take place at pressure of 100 atm and a temperature of	A. 200°C B. 400°C C. 600°C D. 800°C
2437	During the manufacturing process of cement the temperature of the decomposition zone goes up to	A. 600^oC B. 8000^oC C. 1000^oC D. 1200^oC
2438	Naturally occurring lipids are called	A. Fats B. protein C. Steroids D. None
2439	The empirical formula of a liquid compound is known to be C_2H_4O. What other information is needed to work out its molecular formula?	A. The percentage composition of the compound B. The relative molecular mass of the compound C. The density of the compound D. The volume occupied by one mole of the compound
2440	Which of the following species has the maximum number of unpaired electrons?	A. O₂ B. O₂⁺ C. O₂⁻ D. O₂⁻²
2441	The correct order of electron affinity among the following is	A. F > Cl > Br B. Br > Cl > F C. Cl > F > Br D. F > Br > Cl
2442	Resonance energy of benzene is (in KJ mol^{-1}):	A. 120 B. 150 C. 170 D. 180
2443	Action of Zn with alkyl halides in the presence of an inert solvent forms higher alkanes. This reaction is known as	A. Wurtz reaction B. Frankland's reaction C. Cannizaro reaction D. Kalobe's reaction
2444	The boiling point of glycerol is more than propanal because of	A. Hybridisation B. H-bonding C. Resonance D. All these factors
2445	Most common oxidation states shownby cerium are	A. +2, +4 B. +3, +4 C. +3, +5

		D. +2, +3
2446	E_2has molecularity :	A. One B. Two C. Three D. Half
2447	Corrosion of iron can be prevented by coating the surface with	A. Zn B. Sn C. Ni D. Any of the above
2448	Among the following the most reactive towards alcoholic KOH is	A. CH₂= CHBr B. CH₃COCH₂CH₂Br C. CH₃CH₂Br D. CH₃CH₂CH₂Br
2449	Equal masses of methane and oxygen are mixed in an empty container at 25°CThe fraction of total pressure exerted by oxygen is :	A. 1/2 B. 8/9 C. 1/9 D. 16/17
2450	Periodic law was given by:	A. Al-Razi B. Dobriener C. Newland D. Mendeleev
2451	When alcohol reacts with concentreated H_2SO_4intermediate compound formed as	A. carbonium ion B. alkoxy ion C. alkyl hydrogen sulphate D. non of these
2452	When we perform the same reaction by taking two different initial concentrations of a reactant for a second order reaction then	A. Reaction becomes exothermic B. Energy of activation is different C. Mechanism of reaction is changed D. Half life period is changed
2453	Reductive ozonolysis of benzene produces	A. Acetone B. Maleic anhydride C. Phthalic acid D. Glyoxal
2454	When hydrogen cyanide is added to an Aldehyde in the presence of ammonia it is called	A. Strecker synthesis B. Cory house synthesis C. Williamson;s synthesis D. None of these
2455	Which of the following will have the highest boiling point	A. Methanol B. Ethanol C. Propanal D. 2-hexanone
2456	When propanamide reacts with $Br_2$and NaOH then which of the following compounds is formed?	A. Ethyl alcohol B. Propyl alcohol C. Propyl amine D. Ethylamine
2457	The mass of the neutron is of the order of	A. 10⁻²³kg B. 10⁻²⁴kg C. 10⁻²⁶kg D. 10⁻²⁷kg
2458	Question Image	
2459	Two or more similar monomers combine to form:	A. Homopolymer B. Copolymer C. Ter Polymer D. Thermoplastic polymers
2460	Phosphide ion has the electronic structure similar to that of	A. Nitride ion B. Fluoride ion C. Sodium ion D. Chloride ion
2461	Composition of clay in cement is:	A. 25% B. 50% C. 75% D. 80%
2462	Which element has highest oxidation potential	A. Li B. Be C. Ba D. Ra
2463	During the process of crystallization, the hot	A. is cooled very slowly to get large size crystals B. is cooled at a moderate rate to get medium sized crystals of the product

2463	crystallization, the hot saturated solution:	C. is evaporated to get the crystals of the products D. is mixed with an immiscible liquid to get the pure crystals of the product.
2464	Which is mild oxidizing agent ?	A. Tollen's reagent B. KMnO₄ / H₂SO₄ C. K₂Cr₂O₇ / H₂SO₄ D. HNO₃
2465	The polymers which can not be re-softened again and again are called	A. Thermoplastic B. Thermosetting C. Both a and b D. None
2466	Which of the following enzymes brings about the hydrolysis of fats?	A. Urease B. Maltase C. Zymase D. Lypase
2467	Vegetable oils are	A. Unsaturated fatty acids B. Glycerides of unsaturated fatty acids C. Glycerides of saturated fatty acids D. Essential oils obtained from plants
2468	Alkynes normally have _____ hybridization	A. Sp B. Sp² C. SP³ D. d sp³
2469	Phenol is heated with $CCl_4$and alkaline KOH when salicylic acid is produced.The reaction is known as	A. Frledel-Craft reaction B. Riemer-Tiemann's reaction C. Rosenmund's reaction D. Sommelet reaction
2470	Benzene reacts with Cl, in sunlight to give the end product	A. C₆H₆Cl₆ B. C₆H₆Cl C. O - C₆H₄Cl₂ D. P-C₆H₄Cl₂
2471	Molar mass of high molecular w.f. polymers ranges from:	A. 1000 to 10000 B. 10000 to 100000 C. 100000 to 1000000 D. 1000 to 100000000
2472	Which of the following statement about fluorine is not correct?	A. Electron affinity of chlorine is greater than that of fluorine B. Bond energy of fluorine is less than that of chlorine C. Fluorine cannot be prepared by electrolysis of fused metal fluorides D. Fluorine does not form oxoacid
2473	If an endothermic reaction is allowed to take place very rapidly in the air, the temperature of the surrounding air:	A. Remains constant. B. Increase. C. Decreases. D. Remain unchanged.
2474	In liquids, inter molecular force are.	A. Very weak B. Very strong C. Reasonable strong D. Rubber
2475	Benzophenone can be converted into benzene using	A. Fused alkali B. Anhydrous AlCl₃ C. Sodium amalgam in water D. Acidfied dichromate
2476	Which statement is not correct	A. Enzymes catalyst a specific reaction B. Enzymes show catalytic activity at a specific temperature C. The catalytic activity of enzymes is stopped if optimum pH is changed D. The catalytic activity is poisoned by a co-enzymes
2477	The oxidation number of chromium in $K_2Cr_2O_7$is	A. 14 B. 12 C. 6 D. None of these
2478	When initial concentration of reactants an order of reaction is given, then its half life period can be calculated by the equation	
2479	The order of distance between the various Bohr orbits is	A. r₂- r₁> r₃- r₂> r₄- r₃> ..... B. r₁> r₂> r₂- r₃> r₄- r₃> ..... C. r₂-r₁= r₃- r₂= r₄- r₃> ..... D. r₂- r₁> r₃- r₂< r₄- r₃< ....

2480	A double bond consists of	A. Two sigma bonds B. One sigma and one Pi bond C. One sigma and two Pi bonds D. Two Pi bonds
2481	The reaction rate is expressed in the units of	A. mol dm⁻³S⁻ B. mol dm⁻³ C. mol dm⁻³N⁻ D. dm⁻³S⁻
2482	Which one of the following is not an alkali metal?	A. Francium B. Caesium C. Rubidium D. Radium
2483	Out of all the elements of group V-A, the highest ionization energy is possessed by	A. N B. P C. Sb D. Bi
2484	The temp. used for the hydrogenation of alkenes using Ni is	A. 2000°C B. 400°C C. 200-- 300°C D. 1000°C
2485	Heat,. work and internal energy of the system and surroundings are related into an equation which is called	A. First law of thermodynamics B. Hess's law C. Henry's law D. Born-haber cycle
2486	DDT is a:	A. Fungicide B. Insecticide C. Herbicide D. All
2487	The number of amino acids found in proteins that a human body can synthesize is	A. 20 B. 10 C. 5 D. 14
2488	Which is not a nucleophile	A. Benzene B. Chlorine C. Ethene D. Ethanol
2489	A cell in which electric current is produced as a result spontaneous redox reaction is called :	A. Dry cell B. Electrolytic cell C. Galvanic cell D. Standard cell
2490	If the salt bridge is not used between two half cells, then the voltage	A. Decrease rapidly B. Decrease slowly C. Does not change D. Drops to zero
2491	Carboxyl group has functional group in it:	A. One B. Two C. Three D. Four
2492	A transition element is defined as an element of 3d series	A. Which is metal B. Which has one stable ion C. Which has two stable ions D. Which has at least one stable ion with incomplete d-orbital
2493	Catalytic oxidation of alkanes is used for the preparation of	A. Adehydes B. Ketones C. Fatty acid D. Carbonyylic acids
2494	Which of the following statements is not correct regarding bonding molecular orbitals?	A. Bonding molecular orbitals possess less energy than atomic orbitals from which they are formed B. Bonding molecular orbitals have low electron density between the two nuclei C. Every electron in the bonding molecular orbitals contributes to the attraction between atoms D. Bonding molecular orbitals are formed when the electron waves undergo constructive interference
2495	Potassium chromate has formula	A. KClO₃ B. K₂CO₃ C. K₂CrO₄ D. K₂Cr₂O₇
2496	The horizontal rows in the periodic table are called periods. The number of period are	A. 5 B. 6 C. 7 D. 8
2497	Proteins and amino acid can be separated by:	A. Filtration B. ^{Sublimation} C. Chromatography

	be separated by:	C. Chromatography D. Suction
2498	17.1 grams sucrose ($C_{12}H_{22}O_{11}$) dissolved in 250 cm^3 of solution. This has molarity	A. 0.1 M B. 0.2 M C. 0.01 M D. 0.02 M
2499	Lead accumulator stops discharging current when	A. Lead at anode converted to PbO₂ B. PbO₂at cathode converted to Pb C. Both electrodes are completely covered with PbSO₄ D. Both electrodes are completely covered with Pb(OH)₂
2500	$Fe^{+3}$and $Mn^{2+}$are strong paramagnetic because the number of unpaired electrons in each is	A. 4 B. 5 C. 6 D. 7
2501	The order of frequency of the following radiations unltraviolet, visible, infrared and microwave is	A. Microwave > infrared > visible > ultraviolet B. Visible > ultraviolet > microwave > infrared C. Ultraviolet > visible > infrared > microwave D. Infrared > microwave > ultraviolet > visible
2502	Question Image	A. 8 B. 4 C. 9 D. 3
2503	β-β- dichloroethyle sulphide is commonly known as:	A. Mustared gas B. Laughing gas C. Phosgene gas D. Bio gas
2504	Which compound shows hydrogen bonding	A. C₂H₆ B. C₂H₅Cl C. CH₃- O - CH₃ D. C₂H₅OH
2505	Carbon atom holding halogen in aryl halides is	A. sp²-hybridesed B. sp³-hybridesed C. sp-hybridesed D. sp³d-hybridesed
2506	Wohler synthesized first of all the organic compound:	A. Carbohydrates B. Urea C. Aniline D. Toluene
2507	When a metal is dipped in 1 molar of its solution at 298 K. then potential set up is called	A. Standard electrode potential B. Electric charge C. Ionization potential D. Electroplating
2508	Which one of the following reaction takes place spontaneously	
2509	Pickle when placed in the path of current.	A. Will conduct current B. Will not conduct current C. Will become unfit to eat D. None of the above
2510	Spontaneous reaction is such in which the system decreases its _____	A. Energy B. Free energy C. Entropy D. All
2511	Charge to mass ratio of electron was discovered by:	A. Millika. B. Rutherford. C. J.J. Thomson. D. Chadwick.
2512	Which of the following compounds on oxidation gives benzoic acid?	A. Chlorophenol B. Chlorotoluene C. Chlorobenzene D. Benzyl chloride
2513	Ozonolysis of benzene gives:	A. Nitration B. sulphonation C. ozonide D. glyoxal
2514	Glycine at pH7 has the structure	A. H₂N -- CH₂-- COOH B. H₃N⁺-- CH₂-- COOH C. H₂N -- CH₂COO⁻ D. H₃N⁺-- CH₂-- COO⁻
	In KO, the oxidation state of	A. -2

2515	In $KO_2$the oxidation state of oxygen is	B. -1 C. +1/2 D. -1/2
2516	When potassium metal is exposed to violet light	A. Ejection of electrons takes place B. Ejection of some potassium atoms occurs C. There is no effect D. The absorption of electrons takes place
2517	Non sticking coating in cooking utensils is done by	A. Iron B. Cooper C. Plastic D. Teflon
2518	Lead acid batteries discharge with time because of.	A. Deposition of PbSO4, at anode B. Deposition of PbSO4 at cathode C. Both A and B D. Acid neutralizes with time
2519	In Dow's method, phenol can be made from	A. Chlorobenzene B. Benzene C. Toluene D. Benzene sulphonic acid
2520	DDT is formed from	A. Benzene and Chlorobenzene B. Chloral and Chlorobenzene C. Chloral and Benzene D. Chlorobenzene and chlorine
2521	The radius of second Bohr's orbit is	A. 0.053 nm B. 0.053/4 nm C. 0.053 x 4 nm D. 0.053 x 20 nm
2522	Newspaper can be recycled again and again by how many times?	A. 2 B. 3 C. 4 D. 5
2523	The number of subatomic particles in atoms sidcovered is more than:	A. 110 B. 100 C. 125 D. 90
2524	The three N - Hσ-bonds are made by	A. sp³- s overlap B. sp²- s overlap C. P - p overlap D. sp - overlap
2525	Arenes are also called	A. atom B. hydrocarbons C. aromatic D. benzene
2526	When ammonia is heated with cupric oxide, a molecule of ammonia will	A. Gain 3 electrons B. Lose 3 electrons C. Gain 2 electrons D. Lose 2 electrons
2527	Which of the following is an example of ketohexose?	A. Mannose B. Galactose C. Maltose D. Fructose
2528	London dispersion forces are also called	A. Hydrogen bonding B. Debye forces C. Van de Waal's forces D. Instantaneous dipole-induced dipole forces
2529	At present cement plants in Pakistan are	A. ten B. twenty two C. four D. twenty four
2530	Hydrocarbon molecules with large chain lengths experience	A. Weaker attractive forces B. Stronger attractive forces C. Repulsive forces D. No attractive forces
2531	The group linkage present in fats is	A. Peptide linkage B. Ester linkage C. Glycosidic linkage D. None of these
2532	Which responds to +ve iodoform test?	A. Butanol-1 B. Butan-1-al C. Butanol-2 D. 2-pentanone

2533	The osmotic pressure of a dilute solution is directly proportional to the	A. Diffusion rate of the solute B. Ionic concentration C. Elevation in boiling point D. Flow of solvent from a concentrated to a dilute solution
2534	In a group of periodic table, atomic radii is:	A. Remains some. B. Increases. C. First decreases then increases. D. Decreases.
2535	The detection of functional group is called :	A. Numerical analysis. B. Qualitative analysis. C. Combustion analysis. D. Quantitative analysis.
2536	Which of the following is most electronegative?	A. Carbon B. Silicon C. Lead D. Tin
2537	The nitrogen present in some fertilizers helps plant to	A. fight against diseases B. Produce fat C. Undergo photosynthesis D. produce protein
2538	Which is not state function	A. Temperature B. Enthaply C. Entropy D. Internal energy
2539	Cooling happens under the Joule Thomson Effect due to sudden :	A. Contraction B. Absortption C. Expansion D. All of above
2540	N-atom forms three covalent bonds, its electronic configuration is	
2541	Simple sugars are :	A. Monosaccharides B. Disaccharides C. Oligo saccharides D. Trisaccharides
2542	The conversion of chemical energy into electrical energy requires :	A. Electrolytic cell B. Galvanic cell C. Voltaic cell D. Both (b) and (c)
2543	The order of reactivity of an alkyl halide (R-X) for a particular alkyl group is	A. Iodide > bromide > chloride B. Chloride > bromide > iodide C. Bromide > chloride > iodide D. Bromide > iodide > chloride
2544	The higher molecular weight materials which yield on hydrolysis the amino acids is called:	A. Carbohydrates B. Lipids C. Fatty acids D. Proteins
2545	Question Image	A. 99.2% B. 99.5% C. 90.5% D. 96.2%
2546	Tungsten and Uranium are turned to an reaction with HNO_3:	A. Oxides B. chlorides C. Nitrides D. Nitrates
2547	When primary amine reacts with chloroform in ethanolic KOH, then the product is	A. An isocyanide B. An aldehyde C. A cyanide D. An alcohol
2548	Which of the following compounds will react with Tollen's reagent	
2549	The relative abundance of Pb isotopes is 1.5% Pb^{204}, 23.6% Pb^{206}, 22.6% Pb^{207}, 52.3% Pb^{208}The relative atomic mass of Pb is	A. 207.94 B. 208.24 C. 206.94 D. 207.24
2550	In which of the following reactions is the inorganic reagent acting as a nucleophile	

2551	For principle quantum number n=4, the total number of orbitals having l = 3 is	A. 3 B. 7 C. 5 D. 9
2552	The reaction between fat and NaOH is called	A. Esterification B. Hydrogenolysis C. Fermentation D. Saponification
2553	Sodium chloride imparts a yellow colour to the Bunsen flame. This can be interpreted due to the	A. low ionization energy of sodium B. sublimation of metallic sodium to give yellow vapour C. emission of excess energy absorbed as a radiation in the visible region as a radiation in the visible region D. photosenitivity
2554	Which property is not present in lipids?	A. Liquid B. Solid or semi solid C. Soluble in water D. Form emultion
2555	Acyl halide is formed by reacting $PCl_5$with	A. Alcohol B. Ester C. Amide D. Both carboxylic acids as well as esters
2556	Gases show uniform behaviour towards their	A. Internal conditions B. External conditions C. Internal and external conditions D. None of above
2557	$[Ti(H_2O)_6]^{+3}$ion absorbs colour:	A. Blue B. Yellow C. Green D. Red
2558	Which is not a calcarious material	A. lime B. clay C. marble D. marine shell
2559	The cathodic reaction in the electrolysis of dill $H_2SO_4$with Pt electrodes	A. Reduction B. Oxidation C. Both oxidation and reduction D. neither oxidation or reduction
2560	The shape of gaseous $SnCl_2$is	A. Tetrahedral B. Linear C. Angular D. T-shaped
2561	Vegetables oils are:	A. Unsaturated fatty acids B. Glycerides of unsaturated fatty acids C. Essential oils obtained form plants D. None of these
2562	The spectrum of helium is expected to be similar to that of	A. H B. Li⁺ C. Na D. He⁺
2563	An ionic compound A+B is most likely to be formed when	A. The ionization energy of A is high and electron affinity of B is low. B. The ionization energy of A is low and electron affinity of B is high. C. Both ionization energy of A and electron affinity of B are high. D. Both ionization energy of A and electron affinity of B are low.
2564	The oxidation number of each element of group ll-A is	A. 0 B. +1 C. +2 D. -1
2565	Platinum is poisoned by	A. Arsenic B. Silver C. Argon D. Zinc
2566	Question Image	A. Shift reaction toward forward direction B. Shift reaction backward C. Lower the value of K_c D. No change in reaction
2567	CFCs undergo homolytic fission by uv light in the stratosphere which radical could result from this irradiations of $CHClCF_2Cl$.	A. CHF Cl C FCl B. CH Cl CF₂Cl C. CHF CF₂Cl D. C FCl CF₂Cl

2568	The bond length b/w atoms of hydrogen in the hydrogen molecules is:	A. 7.54 nm. B. 0.0754 nm. C. 0.754 nm. D. 0.00754 nm.
2569	Gypsom added in cement is	A. 1% B. 2% C. 3% D. 4%
2570	The density of a gas is directly proportional to pressure, inversely proportional to temperature and directly proportional to	A. Viscosity B. Molar mass C. Momentum D. All of above
2571	The most reactive elements are:	A. Group IV-A B. Group V-A C. Group VI-A D. Group VII -A
2572	Which of the following is not a fatty acid?	A. Propanoic acid B. Acetic acid C. Phthalic acid D. Butanoic acid
2573	Alkyne is :	A. CH₃₋CH₃ B. CH₄ C. CH₂₌CH₂ D. C₂H₂
2574	Benzene is not prepared from	A. Acetylene B. Phenol C. Benzoic acid D. Bromo benzene
2575	In the atmosphere, $CO_2$is about	A. 0.01% B. 0.03% C. 0.05% D. 0.09%
2576	Which alcohol may be oxidised to a product which react with 2,4-dinitorphenylhydrazine reagent but not with Fehling's reagent	A. Butan-1-ol B. Butan-2-ol C. 2-methylpropan-1-ol D. 2-methylpropan-2-ol
2577	Heating a mixture of sodium benzoate and soda lime gives	A. Methane B. Benzene C. Sodium bezoate D. Calcium benzoate
2578	Which of the following compounds gives trichoromethane on distilling with bleaching power?	A. Methanal B. Phenol C. Ethanol D. methanol
2579	The real or imaginary surface separating the system from the surrounding is called	A. Imaginary line B. Boundary C. Real line D. All of above
2580	The Total coal resources of Pakistan are estimated to be	A. 184 billion B. 184 million tones C. 1.84 billion tounes D. 1.84 million tonnes
2581	Colligative properties are the properties of :	A. Dilute solutions which behave as nearly ideal solutions. B. Concentrated solutions which behave as nearly non-ideal solutions. C. Both(i) and (ii) D. Neither (i) nor (ii)
2582	Which of the following metal exhibits more than one oxidation?	A. Na B. Mg C. Fe D. Al
2583	Generally the bond formed by metals with non-metals is	A. Ionic B. Covalent C. Polar D. Non- polar
2584	An element that has a high ionization energy and tends to be chemically inactive would most likely to be	A. an alkali metal B. a transition element C. a noble gas D. a halogen
		A. Hydrogenation

2585	Ethanol can be converted into ethanoic acid :	B. Hydration C. Oxidation D. Fermentation
2586	Which is a reagent for Lucas test	A. ZnCl₂+ Conc. HCl B. Zn C. Na D. Br
2587	If 18 g glucose ($C_6H_{12}C_6$) is present in 1000 g of an aqueous of glucose it is said to be	A. 1 molal B. 1.1 molal C. 0.5 molal D. 0.1 molal
2588	Which of the following liquids has low vapour pressure at 25°C:	A. Diethyl ether B. Acetone. C. Water. D. Ethyl alcohol.
2589	Question Image	A. Non polar R group B. Polar R group C. Acidic R group D. Metallic R group
2590	Nitrogen is present in atmosphere by weight:	A. 75% B. 76% C. 77% D. 78%
2591	Which is not a calcareous material	A. Lime B. Clay C. Marble D. Marine shell
2592	Commercial common salt becomes slight damp on storing because	A. Common salt is hygroscope B. Common salt contains some impurity, which is hygroscopic C. Salt in efflorescent D. Salt is crystalline
2593	Which of the following electronic configurations represents an element that forms a simple ion with a charge of +3	A. 1s²,2s²,2p⁶,3s²,2p¹ B. 1s²,2s²,2p⁶,3s²,3p³,3d¹ C. 1s²,2s²,2p²,2p¹,2p² D. 1s²,2s²,2p⁶,3s²,3p⁶
2594	In an exothermic reaction	A. Enthalpy of reactants is lesser than that of products B. Enthalpy of reactants is greater than that of products C. Heat is transferred form surrounding into the system D. Enthalpy of reactants and products same
2595	Which salt is used for preserving food	A. BaCl₂ B. CaCl₂ C. NaCl D. Na₂SO₄
2596	The benzene molecule contains	A. Three double bonds B. Two double bonds C. One double bonds D. Delocalizedπ-electron charge
2597	A catalyst is a substance which increase the rate of a chemical reaction, but remains unchanged at the end of reaction, nut remains unchanged at the end of reaction, because	A. It increases the temperature B. It increase the surface area C. It increases the rate constant D. It decrease the energy energy of activation
2598	Iodine value of an oil or fat may be defined as	A. The number of grams of iodine taken up by 1 g of the oil or fat B. The number of grams of iodine taken by 10 g of the oil or fat C. The number of grams of iodine taken by 100 g of the oil or fat D. None of the above
2599	Base buffer solution can be prepared by mixing	A. Weak acid and its salt B. Strong acid and its salt with weak base C. Weak base and its salt with strong acid D. Strong base and its salt with weak acid
2600	Splitting of spectral lines when atoms are subjected to strong electric field is called:	A. Zeeman effect. B. Stark effect C. Photoelectric effect. D. Compton effect.
2601	Carboxylic acid can generally be prepared by various methods. Which of the following methods is not suitable for making carboxylic acids	A. By the oxidation of primary alcohols B. By the hydrolysis of nitriles C. By the carbonation of Grignard, reagent D. By the hydrolysis of p-amines

2602	The alkyl halide is converted into an alcohol by	A. Addition B. Substitution C. Dehydrohalogenation D. Elimination
2603	The amino group in 19α-amino acids is primary; only oneα-amino acid has secondary amino group which one is that	A. Alanine B. Glutamic acid C. Glycine D. Proline
2604	Tetrahedral lead added to petrol act as	A. Auto catalyst B. Inhibitor C. Activator D. All of these
2605	During the preparation of alkynes the active metals that react with tetra halo-alkanes are	A. Zn B. Mg C. Both a and b D. None
2606	Almost forward reaction is complete when value of k_c :	A. Neither larger nor very small. B. Very small. C. Very large. D. Negligible.
2607	Electrochemistry is concerned with the conversion of electrical energy into chemical energy in :	A. Galvanic cell B. Electrolytic cell C. Voltaic cell D. Both (a) and (c)
2608	The organic compounds which are derivative of hydrocarbons of oxygen are:	A. Carbohydrates B. Phenols C. Alcohals D. All of these
2609	10 ml of 1.5 M NaOH solution is neutralized by 20 ml of a-M HCl solution. The value of 'a' will be	A. 1.0 B. 0.75 C. 0.5 D. 0.25
2610	The product of addition polymerization reaction is	A. PVC B. Nylon C. Terylene D. Polyamide
2611	E.N. Value of fluorine is:	A. 2.1 B. 2.5 C. 3.5 D. 4.0
2612	A condensation polymer among the following is	A. Dacron B. PVC C. Polysterene D. Teflon
2613	An element of the third period (Na to S) is heated in chlorine. The product is purified and then added to water. The resulting solution is found to be neutral. What is the element	A. Sodium B. Aluminium C. Silicon D. Phosphorus
2614	The IA elements are called	A. Alkaline earth metal B. Alkaline metals C. The halogens D. The inert gases
2615	The rate of diffusion of a gas in	A. Inversely proportional to its density B. Inversely proportional to square root of its molecular mass C. Directly proportional to molecular mass D. Directly proportional to its density
2616	For what value ofK_c almost forward reaction is complete :	A. K_{c =}10³⁰<o:p></o:p> B. <o:p></o:p> K_{c =}10⁻³⁰<o:p></o:p> C. <o:p></o:p> K_{c =}0<o:p></o:p> D. K_{c =}1<o:p></o:p>
2617	The structure of $ICl_2$is	A. Trigonal B. Trigonal bipyramidal C. Octahedral D. Square planar
	Which isomer of $C_5H_{11}OH$	

2618	gives, one dehydration, the greastest number of different alkenes	
2619	General formula of alkyl halide is:	A. R----X B. R----OH C. R------COH D. R------COOH
2620	Which one gives acidic reactions?	A. CH₃----C≡C-------CH₃ B. CH₃-----CH₂-----HC=CH----CH₂ C. CH₃----CH=CH₂ D. CH₃-----C≡CH
2621	Hydrolysis of Grignard's reagent yields	A. Alcohol B. Aldyhyde C. Ester D. Alkane
2622	The art of electroplating was given by	A. Faraday B. Edison C. Thomas Gradam D. Brugan
2623	A solution sucrose is 34.2%. The volume of solution containing one mole of solute :	A. 342cm³ <o:p></o:p> B. 1000cm³ <o:p></o:p> C. 500cm³ D. 242cm³
2624	Which of the following statement is not related to Solvay's process of Na_2CO_3	A. Cheap materials B. Pure product C. Continuous process D. Harmful by-products
2625	Hydrolysis of alkyl nitriles gives:	A. alkane B. alkyl halide C. alkyl nitride D. carboxylic acids
2626	Question Image	A. The ionization energy of A is high and electron affinity of B is low B. The ionization energy of A is low and electron affinity of B is high C. Both the ionization energy of A and electron off affinity of B are high D. Both the ionization energy of A and electron affinity of B are low
2627	Aromatic aldehydes undergo disproportionation in presence of sodium or potassium hydroxide to give corresponding alcohol and acid. The reaction is known as	A. Wurtz reaction B. Cannizzaro reaction C. Friedel Craft reaction D. Claisen reaction
2628	$Cu^{2+}$with d^9electronic configuration appears	A. Yellow B. Pink C. Blue D. Green
2629	The most commonly and widely used nitrogen fertilizer in Pakistan is	A. Urea B. Ammonium nitrate C. Ammonium sulphate D. Ammonium chloride
2630	The liquid obtained after passing the mixture through filter paper is termed as :	A. Extract. B. Residue. C. Filtrate. D. Sample.
2631	The alkaline earth elements have in their s-orbital	A. One electron B. Two electron C. No electron D. Three electron
2632	Alcohals can be distinguished using test:	A. Lucas B. Tollen's C. Koib's D. William's
2633	Noble gases have the electronic configuration with their valance shell ns^2np^6except one	A. He B. Ne C. Kr D. Xe
	For a given process the heat change at constant pressure	A. q_p= q_v

2634	$q_p$is related to the heat change at constant volume (q_V) according to	B. q_p< q_v C. q_p> q_v D. q_p= qv/2
2635	Nitrogen is present in atmosphere	A. 36% B. 78% C. 89% D. 21%
2636	Which is non typical transition element :	A. Ni B. Co C. Y D. Fe
2637	Element with higher oxidation state form oxides:	A. Acidic B. Basic C. Ampholetic D. Peroxides
2638	Content of carbon in steel is:	A. 0.12 to 0.25% B. 0.25% to 2.5% C. 3.0 to 3.5% D. 4.0 to 4.5%
2639	Heavy water is obtained by	A. Prolonged electrolysis of water B. Dissolving heavy salt in water C. Simple distillation of water D. Removing impurities of calcium and magnesium form water
2640	Activation energy is the difference of energy between the energy of the reactant and	A. The product B. The activated complex C. Both a and b D. None of these
2641	Alcohols reacts with Grignard reagent to form	A. Alkanes B. Alkenes C. Alkynes D. All
2642	The iron obtained from blast furnace is	A. Pig iron B. Wrought ion C. Soft ion D. Steel
2643	If initial concentration of the reactants and half life period of the reaction is known, then we can determine	A. Average rate of reaction B. Order of reaction C. Rate constant k D. Instantaneous rate
2644	When an electric current is passed through discharge tube at low pressure, cathode rays are emitted from cathode these rays consist of:	A. Alpha rays. B. Negative particles. C. Electromagnetic rays. D. Positive particles.
2645	Hydrogenation of vegetable oils is accelerated by Ni catalyst. The catalytic activity of Bi is increased by a promoter of activator which is	A. Na and K B. Na and Hg C. Hg and Zn D. Cu and Te
2646	Formula of acetone is:	A. HCHO B. CH₃CHO C. CH₃OCH₃ D. CH₃OC₂H₅
2647	Aromatic hydrocarbons are derivatives of	A. normal series of paraffins B. alkene C. benzene D. cyclohexane
2648	Amylacetate flavour is present in:	A. Banana B. Apple C. Jasmine D. Orange
2649	The coinage metals are	A. Ni, Pd, Pt B. Cu, Ag, Au C. Zn, Al, Pb D. Fe, Si, Sn
2650	The structure of benzene is	A. Hexagonal B. Pyramidal C. Square planer D. Tetrahedral
2651	which one of the following is	A. H₂O B. H₂S

2651	not a nucleophile?	C. BF₃ D. NH₃
2652	At present the number of fertilizers plants in Pakistan are	A. 10 B. 12 C. 14 D. 20
2653	Which one of the following is a product of the reaction between $C_6H_5CH_2OH$ and CH_3COCl	A. C₆H₅OCOCH₃ B. C₆H₅CH₂Cl C. C₆H₅CH₂OCOCH₃ D. C₆H₅CH₂COCl
2654	It is common observation that rates of chemical reactions differ :	A. Greatly. B. A little bit. C. Moderately.
2655	Chlorobenzene on heating with aqueous NH_3under pressure in the presence of cuprous chloride gives	A. Benzamide B. Nitrobenzene C. Aniline D. Chloroaminobenzene
2656	An ionic compound $M_2S_3$is formed by the metal M,, the metal is	A. Ca B. Ba C. K D. Al
2657	Which of the following phosphorus is most reactive?	A. Red phosphorus B. White phosphorus C. Scrlet phosphorus D. Violet phosphorous
2658	Organic compounds generally react at _____ rates	A. Slow B. Fast C. Moderate D. None of them
2659	The Mn^{3+}has _____ color	A. Violet B. Green C. Red/brown D. No color
2660	In aldol condensation reaction, a double bond is formed between _____ and _____ carbon atoms	A. αandβ B. αandα C. αand Y D. None of these
2661	Soil remediation means	A. To make it suitable for cultivation of crops B. To make it acidic C. To make it alkeline D. To add manure into it
2662	Methyl alcohol is not used:	A. As a subsitution for petrol B. As an anti-freezing agent C. For denating of ethyle alcohal D. As a solvent
2663	Which one of the following equations represent the reaction that occurs when calcium nitrate is heated strongly	
2664	Which of the following orbitals have a dumb bell shape?	A. s B. p C. d D. f
2665	Addition of solid $NaHCO_3$in water causes ionization of $NaCHO_3$its $K_a = 4.7 \times 10^{-1}$. Then this solution has character	A. Acidic B. Very weakly basic C. Alkaline D. Neutral
2666	Transition elements form which type of bond	A. Ionic bonds only B. Covalent bonds only C. Ionic and covalent bonds D. Polar bonds
2667	Generally ionization energy of	A. Decreases in atomic size B. Increase in atomic size

2667	atoms decreases by	C. Increase in nuclear charge D. None of these
2668	Aldehydes can be distinguished from ketones by	A. 2,4-DNPH test B. NaHSO₃test C. N₂H₄test D. Tollen's test
2669	Polythene is a polymer of	A. Ethane B. Ethene C. Acetone D. Propylene
2670	Which one of the following substance is use as decolonizing agent	A. Asbestos B. Animal charcoal C. conc, H₂SO₄ D. Silica gel
2671	If a reactant or product of a reaction absorbs radiation, then physical method for determining the rate of reaction is	A. Spectrometry B. Refractometry C. Conductivity measurement D. Optical method
2672	The hybirdization in benzene is:	A. sp³ B. sp² C. sp² D. dsp²
2673	The word paper is derived from the name of which seedy plant?	A. Rose B. Sun flower C. Papyrus D. Water Hyacinth
2674	$K_b$for NH_4OH is 1.81 x 10^{-5}, then $K_a$value of its conjugate base is	A. 1.81 x 10⁺⁵ B. 1.81 x 10⁻⁹ C. 5.5 x 10⁻⁹ D. 5.5 x 10⁻¹⁰
2675	As a fixing agent in photography, sodium thisoulphate is used for	A. Dissolving out unreacted silver bromide B. Converting silver C. Reducing solubility of AgBr D. Preventing overdeveloping and fogging
2676	Which compound is more soluble in water?	A. C₂H₅OH B. C₅H₅OH C. CH₃OCH₃ D. n-Hexanol
2677	Which is litharge or massicot?	A. PbO B. Pb₂O C. Pb₃O₄ D. PbO₂
2678	Which statement about an atom is true ?	A. The number of neutrons is not equal to number of electrons B. Mass number is less than atomic number C. All the elements have only one mass number D. Mass number can be equal to atomic number
2679	Series starting from57La,42Hf -80Hg is in the period:	A. 4th B. 5th C. 6th D. 7th
2680	When sulphur is boiled with Na_2SO_3solution, the compound formed is	A. Sodium sulphides B. Sodiums sulphates C. Sodium persulphate D. Sodium thiosulphate
2681	H_2S is a gas which H_2O is liquid at room temperature. it is due to	A. Less intermolecular forces in water B. Covalent bond in H-O in water molecule C. Hydrogen bonding in water molecules D. Ionic characters in water molecules
2682	In the presence of high temperature and pressure peat is converted to:	A. Lignite B. Polymorphism C. Polymerization D. Catenation
2683	A food chemist wants to create the odour of pineapples for a product. An ester with this odour has the formula $C_3H_7COOC_2H_5$.Which pair of reagents would produce this ester	A. C₂H₅Cl and C₃H₇COOH B. C₂H₅OH and C₃H₇CONH₂ C. C₂H₅OH and C₃H₇COOH D. C₃H₇OH and C₂H₅COCl
		A. Primary alcohols

2684	Reduction of aldehydes with HI and P gives	A. Primary alcohols B. Secondary alcohols C. Alkanes D. Tertiary alcohols
2685	Each molecule of haemoglobin is 68000 times heavier than one atom of	A. C B. H C. N D. O
2686	Which of the following is a water soluble vetamin?	A. Niacin B. Riboflavin C. Trypsin D. Ascorbic acid
2687	The catalyst,. which is used as specialist for cracking, are	A. Aluminates B. Alumlnosilicates C. Aluminium slats D. All can be used
2688	Hydrolysis of an ester gives a carboxylic acid which on Kolbe's electrolysis yields ethane. the easter is	A. Ethyl methonoate B. Methyl ethanoate C. Propylamine D. Ethylamine
2689	With increases of 10°C temperature the rate of reactiondoubles. This increase in rate of reactionis due to :	A. Decrease in activation energy or reaction. B. Decrease in number of collisions between reactant molecules. C. Increase in activation energy of reactants. D. Increase in number of effective collisions
2690	Grignard's reagent on treatment with carbonyl compounds yield	A. Pheonol B. Alcohol C. Alkane D. None of these
2691	Ionization is the process in which ionic compounds when fused or dissolved in water split up into charged particles called :	A. Atoms. B. Electrons. C. Protons . D. Ions
2692	The M.P. of carboxylic acids containing even number of carbon atoms is _____ than the next	A. Higher B. Low C. Equal D. None
2693	Hydrocarbans, SO_2, CO, NH_3, nitrogen oxides and compounds of fluorine are called	A. Primary pollutant B. Secondary pollutant C. Tertiary pollutant D. None of these
2694	Which is the most reactive?	A. White phosphorus B. Red Phosphorus C. Graphite D. Plastic sulphur
2695	A balloon contains 0.02 gram of H_2gas, it contains H_2molecules	A. 6.02 x 10²³ B. 3.01 x 10²² C. 6.02 x 10²¹ D. 3.01 x 10²¹
2696	Strong oxidizing agents have	A. Greater positive value of standard reduction potential B. Lesser positive value of standard C. Greater negative value of standard D. None of these
2697	Oceans cove _____ percent of the surface of the earth	A. 60 B. 70 C. 80 D. 97
2698	Alkali metals react violently with halogens to form	A. Hydrides B. Halides C. Anyhydrides D. None of these
2699	Hydrocarbons contain :	A. Carbon only carbon B. Hydrogen only C. Carbon & hydrogen D. Carbon , hydrogen & halogen
2700	Sometimes a yellow turbidity appears while passing H_2S gas even in the absence of II group radicals. This is because	A. Sulphur is present in the mixture as impurity B. IV group radicals are precipitated as sulphides C. Of the oxidation of H₂S gas by some acid radicals D. III group radicals are precipitated as hydroxides

2701	The % of $CO_2$is the atmosphere is	A. 3.0% B. 0.03% C. 0.3% D. 0.5%
2702	Two different hydrocarbon each contain the same percentage by mass of hydrogen. It follows that they have the same	A. Empirical formula B. Number of atoms in a molecules C. Number of isomers D. Relative molecular mass
2703	What is the molarity of the solution that contains 20 grams of NaOH in 500 ml of solution [Na = 23, O = 16, H = 1]	A. 0.25 B. 0.5 C. 1 D. 20
2704	The acid which has a peroxy linkage is	A. Sulphurous acid B. Pyrosulphuric acid C. Dithionic acid D. Caro's acid
2705	In which of these processes are smell organic molecules made into macromolecules?	A. The cracking of petroleum fractions B. The fractional distillation of crude oil C. The polymerization of ethane D. The hydrolysis of proteins
2706	With increasing principle quantum number, the energy difference between adjacent energy levels in H atom	A. Decreases B. Increases C. Remains constant D. Decreases for low value of Z and increase for higher value of Z
2707	Air pollution is not caused by	A. Pollen grains B. Hydroelectric power C. Industries D. Automobiles
2708	Ring testis given by ions.	A. Nitrides B. Nitrates C. Cyanates D. Nitriles
2709	Which one of the following is used as antifreeze in the radiator	A. Methanol B. Ethanol C. Ethylene glycol D. Glycerin
2710	Caustic soda is obtained by electrolysis of conc. aqueous solution of NaCl in a cell called	A. Daniell's cell B. Nelson's cell C. Down's cell D. Voltaic cell
2711	Equal volumes of 0.1 M $AgNO_3$and 0.2 M NaCl are mixed. The concentration of NO^-_3 ions in the mixture will be	A. 0.1 M B. 0.05 M C. 0.2 M D. 0.15 M
2712	Question Image	A. Condensation B. Dehydration C. Dehydrogenation D. Hydrogenation
2713	When electron jumps from n_2= 2,3,4,5,.... orbit to n_1= 1 orbit in the hydrogen atom, the radiations emitted give the spectral lines	A. Lyman series B. Blamer series C. Paschen series D. Brackett series
2714	In the extraction of iron, slag is produced which is	A. CO B. FeSiO₃ C. MgSiO₃ D. CaSiO₃
2715	When carbon dioxide is passed through the R - Mg - X is produced	A. Any carboxylic acid B. Propanoic acid C. Propanedioic acid D. None of these
2716	Pure water does not conduct electricity because it	A. Has low boiling point B. Is almost unionized C. Is neutral D. Is readily decomposed
2717	Which of the following is correct?	A. Reduction of any aldehyde gives secondary alcohol B. Reaction of vegetable oil with H₂SO₄gives glycerine C. Alcoholic iodine with NaOH gives iodoform D. Sucrose on reaction with NaCl gives invert sugar

2718	C- X bond is strong in	A. CH₃Cl B. CH₃Br C. CH₃F D. CH₃I
2719	Natural rubber is a polymer of	A. Butadiene B. Ethyne C. Styrene D. Isoprene
2720	Question Image	A. The value of K_pfalls with a rise in temperature B. The value of K_pfalls with increasing pressure C. Adding V₂O₅catalyst increase the equilibrium yield of sulphur trioxide equilibrium yield of sulphur trioxide D. The value of K_pis equal to K_c
2721	The gasoline having octane No. 100 has _____	A. More knocking B. Less knocking C. No knocking D. Only knocking
2722	When aluminium electrode is coupled with copper electrode in a galvanic cell :	A. Reduction takes place at aluminium electrode. B. Oxidation takes place at copper electrode. C. Reduction takes place at copper electrode. D. Both (a) and (c)
2723	$(CH_2O)_n$is general formula for	A. Monosaccharides B. Oiligosaccharides C. Polysaccharides D. None of these
2724	Which of the following molecules has zero dipole moment>	A. H₂O B. CHCl₃ C. BF₃ D. NH₃
2725	$NaHCO_3$is prepared by	A. Down's process B. Solvay's process C. Nelson's process D. None of these
2726	A buffer solution of 0.1 molar HCOOH and 0.1 molar HCCONa has pH = 3.78 To is 0.01 molar HCl is added, then pH of the buffer solution becomes	A. 2.78 B. 4.78 C. 3.78 D. 3.70
2727	Nitrogen is present in atmosphere	A. 21% B. 36% C. 89% D. 78%
2728	The energy of the first electron is helium will be	A. -13.6 eV B. -54.4 eV C. -5.44 eV D. zero
2729	Question Image	A. 1 B. 10 C. 5 D. 0.33
2730	Which of the following is not a fatty acid	A. Propanoic acid B. Acetic acid C. Phthalic acid D. Butanoic acid
2731	$C_6H_{12}O_6$and $C_{12}H_{22}O_{11}$ are:	A. Mono-atomic molecules B. Diatomic molecules C. Poly-atomic molecules D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Hetero atomic molecules<o:p></o:p>
2732	Ozone hole is maximum over	A. Europe B. Antarctica C. Asia D. Africa
2733	Ammonia is injected under the soil surface:	A. 1 Feet B. 6 inches C. 6 Feet D. 9 inches
2734	The sum of mole percent of all the components of solution	A. Less than 100 B. One C. 100

	is always equal to :	D. 10
2735	The best electrode used in salt bridge is KCl. Which other electrolyte an also be used for the purpose :	A. NaCl B. NH₄NO₃<o:p></o:p> C. KNO₃<o:p></o:p> D. NaNO₃<o:p></o:p>
2736	Rare earth elements are	A. s-block elements B. p-block elements C. d-block elements D. f-block elements
2737	Which of the following are thermoplastic materials	A. PVC B. Polystyrenes C. Polyethylene D. All these
2738	The process of electrical coating of one metal on another to protect, decorate or to have greater resistance to corrosion is called	A. Electroplating B. Electrolysis C. Conduction D. Induction
2739	Azeotropic mixture of HCl and water has	A. 48% HCl B. 22.2% HCl C. 36% HCl D. 20.2% HCl
2740	Coal heated in the absence of air of about 500 - 1000°C is converted to	A. Coke B. Coal gas C. Coal tar D. All above
2741	Which one of the following is a water soluble vitamin?	A. Naacin B. Riboflavin C. Trypsin D. Ascorbic acid
2742	The limiting line of Blamer series in hydrogen spectrum lies in	A. Visible regions B. Ultraviolet region C. Infrared region D. x-rays region
2743	Which of the following has unchanged valency?	A. H B. Na C. Fe D. Oxygen
2744	Which one of the following has continuous solubility curve	A. NH₄NO₃ B. CaCl C. CaCl₂. 6H₂O D. Na₂SO₄. 10H₂O
2745	Which of the following elements is not present abundantly in earth's crust?	A. Silicon B. Aluminium C. Sodium D. Oxygen
2746	The value of SHE is cathode and anode is always taken to be	A. One B. Zero C. Different D. Same
2747	The reaction of acetaldehyde with HCN followed by hydrolysis gives a product which exhibits	A. Metamerism B. Tautomerism C. Enatiomerism D. Geometrical isomerism
2748	Group VI-A elements are called:	A. Halogens B. Electron deficient C. alkaline earth metal D. Chalcogens
2749	The de-Brogile wavelength of a particle with mass 1g and velocity 100 m/s is	A. 6.63 x 10⁻³³m B. 6.63 x 10⁻³⁴m C. 6.63 x 10⁻³⁵m D. 6.65 x 10⁻³⁵m
2750	Polypeptide chains are coiled about one another into a spiral by:	A. Ionic bonds B. Covalent bonds C. Van der Waal's forces D. Hydrogen bonds
		A. STP B. 127<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"><span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-

2751	The molar value of CO_2 is maximum at :	latin;mso-bidi-font-family:"Times New Roman";mso-bidi-theme-font:minor-bidi; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">°C and 1 atm C. <span style="line-height: 14.98px; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">0°C and 2 atm D. 273°C and 2 atm
2752	Micro-nutrients are required in quantity ranging form:	A. 4g-40g B. 6g-200g C. 6kg- 200 kg D. 4kg- 40kg
2753	Atmosphere thickness is (in km) around the earth:	A. 10 km B. 100 km C. 1000 km D. 1500 km
2754	$C_6H_6Cl_6$can be obtained from	A. HCl and Benzene B. Cl₂and Benzene and AlCl₃ C. Cl₂and Benzene in diffused light D. NaOCl and Benzene
2755	A polymer may be	A. Linear B. Branched C. Cross linked D. All of these
2756	For a given process, the heat changes at constant volume (q_v)are related to other as:	A. q_p= q_v<o:p></o:p> B. q_p<q_v<o:p></o:p> C. q_p>q_v<o:p></o:p> D. q_p=q_{v/2}<o:p></o:p>
2757	Newland gave his law in the year:	A. 1829 B. 1864 C. 1871 D. 1913
2758	Down's cell is used to prepare	A. Sodium carbonate B. Sodium bicarbonate C. Sodium metal D. Sodium hydroxide
2759	The strong alkaline solution in water is of metal:	A. Potassium B. Sodium C. Lithium D. Magnesium
2760	Chief air pollutant which is likely to deplete ozone layer	A. Sulphure dioxide B. Carbon dioxide C. Nitrogen oxides and chloro fluorocarbons
2761	Acetone is prepared by	A. Oxidation of n-propyl alcohol B. Oxidation of acetaldehyde C. Pyrolysis of calcium acetate D. Pyrolysis of calcium acetate as well as acetic acid
2762	Aldehydes are reduced to :	A. Pri-alcohol B. Sec-alcohol C. Ter-alcohol D. All of these
2763	Transition elements have valence electrons in	A. s-orbital B. p-orbital C. d-orbital D. f-orbital
2764	Reaction of ethanes with $KMnO_4$ gives:	A. Ozonide B. Glyoxal C. Glycol D. Oxalic acid
2765	Question Image	A. 300 cm³ B. 200 cm³ C. 150 cm³ D. 100 cm³
2766	When water freezes, is occupies.	A. 9% more space B. 9% less space C. Same amount of space D. None of the abvoe
2767	Series starting form $_{39}Y$ to $_{48}CD$ is in period:	A. 4th B. 5th C. 6th

		D. 7th
2768	Radioactive element in halogens is	A. Astatine B. bromine C. Iodine D. Fluorine
2769	Which reaction sequence would be best to prepare 3-chloro-aniline from benzene?	A. Chlorination, nitration, reducing B. Nitration, chlorination, reducition C. Nitration, reduction,chlorination D. Nitration, reduction, acylation, chlorination, hydrolysis
2770	Scientific study of fermentation was first made by	A. Buchner B. Liebig C. Biot D. Pasteur
2771	The geometrical shape of a transition complexion is related to the state of hybridizing of the central atom. What is trigonal bipyramidal	A. sp³ B. dsp² C. dsp³ D. d²sp³
2772	Question Image	
2773	A process which takes place on its own without any outside assistance and moves from a non-equilibrium state towards an equilibrium state is termed as	A. Spontaneous process B. Natural process C. Non-spontaneous process D. Both a and b
2774	Used in tooth pastes is	A. Fluorides B. Iodides C. halides D. nitrides
2775	Which one is a polymer compound?	A. SO₂ B. CO₂ C. CH₄ D. PVC
2776	Which of the following compounds will not react with sodium metal to release hydrogen	A. CH₃CH₂CH₃ B. CH₃CH₂OH C. C₆H₅OH D. C₆H₅CH₂OH
2777	Surfactants are organic compounds, used in detergents which reduce the	A. Viscosity of water B. Surface tension of water C. Boiling point of water D. Wetting ability of water
2778	Metals like Fe, Mg, Al, Cr, Zn have more negative reduction potentials that is whey	A. These don't react with steam B. These react very slowly with steam to liberate H₂gas C. These react rapidly with steam to produce the metallic oxides and liberate H₂gas D. These react with cold water violently
2779	Aldehydes are produce in atmosphere by	A. Oxidation of secondary alcohols B. Reduction of alkenes C. Reaction of oxygen atoms with hydrocarbons D. Reaction of oxygen atoms with ozone
2780	The total number of transition elements is	A. 10 B. 14 C. 40 D. 50
2781	The organic compounds containing Ph--OH group are called:	A. Phenol B. Aldehyde C. Ketones D. Carboxylic acids
2782	The general formula for alkenes is	A. C_nH_{2n+1} B. C_nH_{2n+2} C. C_nH_{2n} D. C_nH_{2n-2}
2783	When 6d orbital is complete, the entering electron goes into:	A. 7f. B. 7s. C. 7p. D. 7d.
2784	Which statement is true about order of reaction :	A. Order of reaction can only be determined by an experiment. B. Order of reaction can be determined from a balance equation only. C. Order of reaction increase by increasing temperature. D. Order of reaction must be in whole number and not in fraction.

2785	Which element of group IV-A does not use d — orbital?	A. N B. P C. As D. Sb
2786	When acetamide reacts with $Br_2$and caustic soda, then we get	A. Acetic acid B. Bromoacetic acid C. Methyl amine D. Ethylamine
2787	Acidification of the soils due to addition of synthetic nitrogen fertilizer, is corrected by using	A. Gypsum B. Sodium nitrate C. Limestone D. Potassium nitrate
2788	Which of the following fluorides does not exists?	A. NF₅ B. PF₅ C. AsF₅ D. SbF₅
2789	Inn which of these processes are small organic molecules made into macromolecules?	A. The cracking of petroleum fractions B. The fractional distilation of crude oil C. the polymerization of ethane D. The hydrolysis of proteins
2790	Charge to mass ratio (e/m) of the electron is determined by	A. R. A. Millikan B. J. J. Thompson C. G. J, Stoney D. None of these
2791	In endothermic reactions, the heat content of the:	A. Products is more than that of reactants. B. Reactants is more than than to products. C. Both (a) and (b). D. Reactants and products are equal.
2792	Smallest particle of an element which may or may not have independent existence is known as:	A. A molecule B. An ion C. An atom D. An electron
2793	Liquids are less common than	A. Solids B. Plasmas C. Gases D. All of above
2794	Etherification is catalyzed by	A. Acids B. Gases C. Salts D. None of the these
2795	Rearrangement of an oxime to an amide in the presence of strong acid is called	A. Curtius rearrangement B. Fries rearrangement C. Beckman rearrangement D. Aldol condensation
2796	Which factor is helping to reduce the environmental pollution	A. Rapid growth of population B. Urbanization C. Industrialization D. Increase of plantation
2797	Hydrolysis of trichloromethane with aqueous KOH gives	A. Potassium formate B. Acetylene C. Chloral D. Methanol
2798	Coupling of Pb with its Pb^{++}/Pb = -0.13 V and Ag with Ag^{+}/ Ag = +0.80 V, the cell reaction	
2799	When the electron jumps form third, fourth, fifth orbits to the second orbit, the transitions are known as	A. Paschen B. Pfund C. Balmer D. Brackett
2800	The formula of curprite is	A. Cu₂S B. Cus C. Cu₂O D. CuCO₃
2801	The percentage by weight of NaCl, if 6.0 g of NaCl is dissolved in 120 g of water is	A. 10.5 % B. 5% C. 8.02% D. 11.5%
2802	Two moles of acetic acid are heated with $P_2O_5$the product formed is	A. 2 moles of ethyl alcohol B. Formic anhydride C. Acetic anhydride

	formed is	C. Acetic anhydride D. 2 moles of methyl cyanide
2803	Heaviest particle is	A. Meson B. Neutron C. Proton D. Electron
2804	An aqueous solution is neutral when its	A. pH = 14 B. pH = zero C. pH = 7 D. Kw = 10⁻⁷
2805	Chemistry related to the study of environment affected by the chemicals and pollutants is called:	A. Biochemistry B. Physical chemistry C. Pharmaceutical chemistry D. Environmental chemistry
2806	The metal present in blood is	A. Al B. Hg C. Cu D. Fe
2807	Statement enthalpy of combustion of $H_2$is -285.8 KJ mole^{-1}then which is the standard enthalpy of formation of water	A. +285.8 KH mole⁻¹ B. -285.5 KJ mole⁻¹ C. Zero D. -218 KJ mole⁻¹
2808	In a reversible chemical reaction having two reactants in equilibrium, if the concentration of the reactants are doubled then the equilibrium constant will	A. Also be doubled B. Be halved C. Becomes one fourth D. Remains the same
2809	When $CO_2$is made to react with ethyl magnesium iodide, followed by acid hydrolysis, the product formed is	A. Propane B. Propanoic acid C. Propanal D. Propanol
2810	Which of the following react with NaOH to produce an acid and an alcohol?	A. NCHO B. CH₃COOH C. CH₃CH₂COOH D. C₆H₅COOH
2811	Which compound shows hydrogen bonding	A. C₂H₆ B. C₂H₅Cl C. CH₃-O-CH₃ D. C₂H₅OH
2812	The reagents like $KMnO_4$ and HCL cannot be filtered through Gooch crucible if its base is covered with :	A. Butterfly paper. B. Ordinay paper. C. Flying paper. D. Filter paper.
2813	From left to right, atomic radii of transition elements	A. Increases B. Decreases C. Remain same D. None of the above
2814	Orbital having same energy is called:	A. Hybrid orbital. B. Valence orbital. C. Degenerate orbital. D. D-orbital.
2815	When 6s orbital is complete then next electron goes to	A. 6p B. 6d C. 5d D. 4f
2816	When the degree of freedom increase the entropy _____	A. Decreases B. Increases C. Remains same D. All
2817	Which of the following element has the maximum electron affinity?	A. F B. S C. I D. Cl
2818	Odour of alkene is:	A. Fruity B. Odourless C. Zarlic like D. Irritating
2819	Rutherford's atomic model	A. Atom B. Nucleus

2819	suggests the existence of	C. alpha particle D. Measons
2820	Ozone depletion in stratosphere shall result in	A. Forest fires B. Increased incidence of skin cancer C. Global warming D. None of the above
2821	The reagent which forms crystalline osazone derivative when treated with glucose is	A. Fehling solution B. Phenyl hydrazine C. Benedict solution D. Hydroxyl amine
2822	Which one of the following compounds does not have the empirical formula CH_2O?	A. Ethanoic acid, CH₃CO₂H B. Ethanol, CH₃CH₂OH C. Glucose, C₆H₁₂O₆ D. Methanal, HCHO
2823	Phosphate pollution is caused by	A. Weathering of phosphate rocks only B. Agricultural fertilizers C. Phosphate rocks and sewage D. Sewage and agricultural fertilizers
2824	The chemical reactivity of glass is reduced by the use of	A. Fluxes B. Formers C. Stabilizers D. None of these
2825	Halogens are called.	A. salt former B. Light bearing C. copper forming D. None of these
2826	Which of the following is not an example of addition polymer?	A. Polyethene B. Polystyrene C. Neoprene D. Terylene
2827	Chlorofluorocarbon, CF_2Cl_2, plays an effective role in removing O_3(ozone) in the stratosphere. Which reaction does not cause the depletion of ozone	
2828	Molarity of pure water is :	A. 33.3 B. 55.5 C. 44.4 D. 66.6
2829	Benzene cannot undergo	A. substitution reactions B. addition reactions C. oxidation reactions D. elimination reactions
2830	Which of the following elements is not present in all proteins?	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur
2831	E.D.T.A is	A. Mono-dentate B. Bi-dentate C. Polydentate D. Having three lone pairs of electrons
2832	Question Image	A. Reversible reaction B. Irreversible reaction C. Spontaneous reaction D. None of these
2833	Methyl alcohol is not used	A. As a solvent B. A an anti-freezing agent C. As a substitute for petrol D. For denaturing of ethyl alcohol
2834	Oxidation reduction is done by	A. Oxidoreductase B. Lipases C. Lyase D. None of these
2835	The color of ppts formed by Fehling's test is	A. Brick red B. Red C. Yellow D. Orange
2836	Which of the following is not present in RNA?	A. Uracil B. Thymine C. Ribose D. Phosphate

		D. Phosphate
2837	Which one of the following is not an alkali metal	A. Francium B. Caesium C. Rubidium D. Radium
2838	Which is a component of macronutrient?	A. Zn B. N C. Mo D. Cl
2839	The most suitable method of the separation of a mixture of ortho and para-nitrophenol mixed in the ratio of 1: 1 is	A. Distrillation B. Crystallization C. Vapourisation D. Colour spectrum
2840	The colour of ppts formed by Fehling's test is	A. Brick red B. Red C. Yellow D. Orange
2841	Which of the following is not aromatic hydrogencarbon	A. Benzene B. Naphthalene C. Toluene D. Cyclohexene
2842	Which class of compound is more reactive	A. Alkane B. Alkene C. Alkyne D. None
2843	Ethyl alcohol prepared during fermentation is pure:	A. 20% B. 10% C. 11% D. 12%
2844	If an electrophile attacks then _____ bond breaks first	A. C - H B. O - H C. C - O D. None of these
2845	Ionization potential increases in moving from left to right in a period	A. Because nuclear charge increase B. Because atomic size decrease C. Both (a) and (b) D. Because atomic size increases
2846	Estimation of Na in sea water is an example of	A. Numerical analysis B. Qualitative analysis C. Quantitative analysis D. None of above
2847	An alkynes having Carbon count of 20 is	A. gas B. liquid C. Solid D. None
2848	Coal is obtained from dead remains of	A. Plants B. Animals C. Both a and b D. None
2849	Isotopes of an element differ in	A. Number of protons B. Number of electrons C. Number of neutrons D. Number of electrons and protons
2850	Those amino acids which contain two carboxylic groups are called _____ amino acids	A. Acidic B. Basic C. Neutral D. None of these
2851	The number of electrons in the M shell of the element with atomic number 24 is	A. 24 B. 12 C. 13 D. 8
2852	Which of the following has the maximum number of unpaired d-electrons?	A. Zn B. Fe²⁺ C. Ni³⁺ D. Cu⁺
2853	Nitrogen is present in atmosphere by weight	A. 75% B. 76% C. 77% D. 78%
2854	Soft drinks and baby feeding bottles are generally made up	A. Polyester B. Polyurethane C. Polyurea

	of	C. Polyurea D. Polystyrene
2855	Compound X has molecular formula $C_{10}H_{14}O$ and is unreactive towards mild oxidising agents. What is the structure of the compound formed by dehydration of X	
2856	Which of the following factors will favour the reverse reaction in a chemical equilibrium?	A. Increase in concentration of one of the reactants B. Increase in concentration of one of the products C. Removal of one of the products regularly D. None of these
2857	The strongest forces are:	A. Debye froces B. London dispersion C. Dipole-dipole attraction D. Hydrogen bonding
2858	Benzene reacts with ozone and gives	A. Glycerin B. Glyoxal C. Maleic anhydride D. Benzoic acid
2859	The nitration of benzene takes place when it is heated with a mixture of conc.$HNO_3$and conc. H_2SO_4at 50°C in ratio of	A. 1 : 2 B. 1 : 1 C. 1 : 3 D. 2 : 1
2860	Aromatic hydrocarbons are the derivatives of:	A. Normal series of parrafins B. Alkene C. Benzene D. Cyclohexane
2861	Which of the following synthetic fertilizer do not make soil acidic	A. Urea B. Thin urea C. Ammonium phosphate D. Potassium nitrate
2862	The two half cells of a galvanic cell are connected by	A. Ammeter B. Salt bridge C. Hydrogen electrode D. Copper electrode
2863	Gases of air always remain in random motion and do not settle due to :	A. Difference in molecular masses of air gases. B. Difference in partial pressure of gas molecules. C. Unequal number of different gas molecules. D. Elastic collision of gas molecules.
2864	In the ground state of an atom, the electron is present:	A. In the nucleus. B. In the second shell. C. Nearest to the nucleus. D. farthest from the nucleus.
2865	Maximum variable oxidation state is of:	A. Mn⁺² B. Fe⁺³ C. Cr⁺¹ D. a and b
2866	Reactivity of alkyl halides with magnisium is of the order:	A. RI > RBr> RCl > RF B. RBr > RCl >RF > RI C. RCL > RF > RI > RBr D. RF >RI >RBr > RII
2867	Which gas is heavier than air?	A. CO₂ B. NH₃ C. Cl₂ D. CO₂
2868	What is wrong about transition metals?	A. Diamagnetic B. Paramagnetic C. Form complexes D. Shows variable oxidation state
2869	The trade name of polytetrafluoroethylene (PTFE) is	A. Teflon B. PVC C. Terelene D. Polyester
2870	Keeping in view the size of atoms, which order is the correct one	A. Mg > Sr B. Ba > Mg C. Lu > Ce D. Cl > I
2871	In a chemical change, the energy in the from of heat will either be evolved or absorbed	A. Endothermic. B. Heat of products. C. Exothermic reaction

	either be evolved or absorbed and this is called:	C. Exothermic reaction. D. Heat of reaction.
2872	Copolymer is	A. Nylon-6 B. Nylon 66 C. PMMA D. Polyethene
2873	Which of the following waste material is not recycled for use again	A. Paper B. Plastic C. Hides of animals D. Glass
2874	Vant Hoff's factor of $Ca(NO_3)_2$is	A. 1 B. 2 C. 3 D. 4
2875	What are alloys	A. A homogenous mixture of two or more elements B. A homohenous mixture of metal and a non-metal C. A homogenous mixture of two or more metals D. None of the above
2876	Surface and ground water sources are contaminated by various human activities. Which of the followings is not a human activity that causes contamination in fresh water	A. Live stock waste B. Oil leaks and spills C. Disposal of industrial effluents D. Rain
2877	Ethanol can be converted into ethanoic acid by	A. Hydrogenation B. Hydration C. Oxidation D. Fermentation
2878	Iron, once dipped in concentrated H_2SO_4, does not displace copper from copper sulphates solution, because	A. It less reactive than copper B. A layer of sulphates is deposited on it C. An inert layer of iron oxide is deposited on it D. All valence electrons of iron are consumed
2879	Which of the following will not give iodoform test?	A. Ethanol B. Ethanal C. Isopropyl alcohol D. Benzyl alcohol
2880	The net heat change in a chemical reaction is same, whether it is brought about in two or more different ways in one or several steps. It is known as:	A. Henry's law. B. Joule's principle. C. Hess's law. D. Law of conservation of energy.
2881	An oil or fat with no double bond have iodine number:	A. Zero B. 100% C. 50% D. minimum
2882	Which is insoluble carbonate?	A. KCO₃ B. CaCO₃ C. Na₂CO₃ D. K₂CO₃
2883	Which of the following is acidic?	A. SO₃ B. N₂O C. BeO D. HgO
2884	Law of triads was given by:	A. Al-Razi B. Dobriener C. Newland D. Mendeleev
2885	How is the secondary structure of protein stabilized	A. Through hydrogen bonding B. Through ionic bonding C. Through van der wall forces D. Through covalent bonding
2886	What is the total number of different chloroethanes of formula $C_2H_{6-n}Cl_n$possible (n may be 1 to 6)	A. 6 B. 8 C. 9 D. 10
2887	Francium is an element at the bottom of Group I in the Periodic Table. Which one of the following predication is likely to be correct?	A. It will react with water to liberate oxygen B. Its hydroxide will be a strong alkali in water C. Its carbonate will decompose on heating to give carbon dioxide D. Its nitrate on heating will give nitrogen dioxide and oxygen

2888	All covalent bonds formed between the two atoms are non-polar when	A. Covalent bond between two non-metal atoms B. Covalent bond between metal and non-metal C. Covalent bond between two atoms of same element D. Covalent bond between metal atoms
2889	Polyester resins have special use in:	A. Clothing B. Paints C. Emulsion D. Floor covering
2890	The OH group present in acids may be replaced by Cl atom on treatment with	A. PCl₅ B. SOCl₂ C. Both of them D. None of the above
2891	By the use of catalysis the energy of activation is	A. Decreased B. Increased C. Not affected D. None
2892	In Millikan method the oil droplet falls under the force of gravity but it moves upward due to	A. Electric field B. Magnetic field C. Incident light D. X-rays
2893	In endothermic reactions, the heat content of the	A. Products is more than that of reactants B. Reactants is more than that of products C. Both a and b D. None of the above
2894	Question Image	A. First order B. Pseudo first order C. Second order D. Zero order
2895	According to the SI-system heat contents are measured in units of	A. Calorie B. Joules C. Ergs D. Watts
2896	The change in heat energy of a chemical reaction at constant temperature and pressure is called	A. entahlpy change B. heat of sublimation C. bond energy D. internal energy change
2897	A smuggler could not carry gold by chemically depositing iron on the gold surface since	A. Gold is denser B. Iron rusts C. Gold has higher reduction potential then iron D. Gold has lower reduction potential then iron
2898	0.1 MHCl has pH = 1.0, it is about 100 times stronger than acetic acid. Then pH of acetic acid will be	A. 0.1 B. 2.0 C. 1.3 D. 3.0
2899	Ascorbic acid is a chemical name of	A. Vitamin D B. Vitamin A C. Vitamin C D. Vitamin B₆
2900	Carboxylic acids on complete reduction in the presence of HI and red Phosphours gives:	A. esters B. alcohols C. alkanes D. aldehydes
2901	Benzene was discovered by first of all:	A. Micheal Faraday B. Hofmann C. Ainderson D. Sorenbon
2902	Which compound is the most reactive one?	A. benzene B. ethene C. ethane D. ethyne
2903	Atoms and molecules can either gain or lose electrons, forming charge particles called:	A. Positrons<o:p></o:p> B. Photons<o:p></o:p> C. Ions<o:p></o:p> D. Electrons<o:p></o:p>
2904	Which is made by coordinate covalent bond	A. H₃O⁺ B. H₂O C. CH₄ D. HCl
2905	The freezing point of 1 molal NaCl solution assuming NaCl to be 100% dissociated in	A. -1.86°C B. -3.72°C C. +1.86°C

	water in	D. +3.72°C
2906	Ethanol can be prepared by fermenting the following in the presence of oxygen.	A. Protein B. Oil C. Glucose D. None of these
2907	Alkanes or paraffin's are made up of.	A. Carbon, hydrogen and oxygen only B. Carbon, hydrogen and Magnesium only C. Carbon, hydrogen and nitrogen only D. Carbon and hydrogen only
2908	Benzene reacts with chlorine to form benzene hexachloride in presence of	A. Nickel B. AlCl₃ C. Bright sunlight D. Zinc
2909	The atomic radius of hydrogen is 37	A. Pecometer B. Manometer C. Angstrom D. Micrometer
2910	According to Boyle's law. which parameters give a straight line parallel to x-axis, when we plot a graph between	A. V and T B. P and V C. P and 1/V D. P and PV
2911	Which compound is called a universal solvent?	A. H₂O B. CH₃OH C. C₂H₅OH D. CH₃----O---CH₃
2912	If heat absorbed in the reaction, the process is said to be	A. Exothermic B. Isothermal C. Adiabatic D. Endothermic
2913	6-d series is in the period :	A. 4th B. 5th C. 6th D. 7th
2914	The equivalent weight of $KMnO_4$(formula weight = M) when it is used as an oxidant in neutral medium is	A. M B. M/2 C. M/3 D. M/5
2915	Of the following four reactions, formic acid and acetic acid differ in which respect?	A. Replacement of hydrogen by sodium B. Formation of ester with alcohol C. Reduction of Fehling solution D. Blue litmus reaction
2916	Born-Haber cycle is an application of	A. First of thermodynamics B. Second law of thermodynamics C. First law of thermodynamics D. Hess's law
2917	Diethyl ether is obtained by Williamsons synthesis using	A. Ethanol + Na + C₂H₅Br B. Ethanol + Mg + C₂H₅Br C. Methanol + Na + CH₃Br D. Methanol + Mg + CH₃Br
2918	How many structural acid cis-trans isomers are there for dichloroprepe, $C_3H_4Cl_2$	A. 3 B. 5 C. 6 D. 7
2919	A solution of glucose is of methanol in water has vapor pressure :	A. Equal that of water. B. Equal to that of methanol. C. More than that of water. D. Less than that f water.
2920	In the rate equation when the concentration of reactants are unity, then rate is equal to	A. Instantaneous rate B. Average rate C. Active mass of products D. Specific rate constant
2921	Question Image	A. Initial concentration of reaction B. Initial concentration of products C. Final concentration of products D. Order of the reaction
2922	Period Number 6 contains elements in it:	A. 2 B. 8 C. 18 D. 32
		A. Ethyl alcohol

2923	The functional group isomer of dimethylether is	B. Propyl alcohol C. Diethyl ether D. Butyl alcohol
2924	The specific conductance of 0.1 M NaCl solution is 1.06 x $10^{-2}ohm^{-1}mol^{-1}$. Its molar conductance in $ohm^{-1}cm^2mol^{-1}$is	A. 1.06 x 10² B. 1.06 x 10³ C. 1.06 x 10⁴ D. 53
2925	Question Image	A. Electrophilic substitution B. Free radical reduction C. Isomerisation D. Nucleophilic substitution
2926	Elimination bimolecular reactions usually obey	A. First order kinetics B. Second order kinetics C. Third order kinetics D. Zero order kinetics
2927	Energy of electron in an orbit according to Bohr theory is negative due to	A. Repulsion of electrons in the same orb B. At infinity energy is zero ad a traction towards nucleus decreases energy C. Electron has negative charge D. Product of positive nuclear charge and negative charge is negative
2928	Which of the following is formed by the action of water on sodium peroxide?	A. H₂ B. N₂ C. O₂ D. CO₂
2929	The chemist who synthesized urea form ammonia cyanate was:	A. Berzelius B. Kolbe C. Wohler D. Lavoiser
2930	In sixth period 14 of its transition elements are called	A. Lanthanides B. Actinides C. Radioactive elements D. None
2931	How many zones through which the charge passes in a rotary kiln	A. 4 B. 3 C. 2 D. 5
2932	Best way to prevent rusting of iron is by	A. Making iron cathode B. Putting it in saline water C. Both of these D. None of these
2933	In the modern periodic table the elements are placed in the ascending order of their	A. Atomic masses B. Melting points C. Boiling points D. Atomic numbers
2934	Electrolytes in the form of solution or in the fused state have the ability to conduct :	A. Light. B. Electricity. C. Ions. D. Electrons.
2935	The four bonds of carbon in methane are directed towards the corners of	A. Cube B. Pentagon C. Hexagon D. Tetrahedron
2936	Force of attraction b/w atoms of He is :	A. London dispersion forces B. Hydrogen bonding C. Coordinate covalent bond D. Covalent bond
2937	The percentage of carbon in different types of iron products is in the order of:	A. Cast iron > wrought iron > steel B. wrought iron > steel > cast rion C. Cast iron > steel > wrought iron D. Cast iron = steel > wrought iron
2938	If pH of buffer of 1 mole $dm^{-3}$of HCOOH + 0.1 mole dm^{-3}HCOONa having pKa = 3.78 is	A. 1.78 B. 2.78 C. 3.78 D. 4.78
2939	Cotton has cellulose in it:	A. 96% B. 97% C. 98% D. 99%
2940	Which of the following elements is not stable:	A. Xe B. Ar. C. Kr

	elements is not stable.	C. KI D. Li.
2941	At present oil refineries in Pakistan are:	A. One B. Two C. Three D. Four
2942	Which of the following compounds will not give iodoform test on treatment with I_2/ NaOH?	A. Acetaldehyde B. Acetone C. Butane D. 3-pentanone
2943	The rotation of two carbon atoms joined by double bond would happened only if	A. Pi bond is broken B. Sigma bond is broken C. Both bonds are broken D. None of above
2944	Smell of halogens is:	A. Fruity B. Sweet C. Irritating D. Rotten egg
2945	Which is not nitrogeneous fertilizers?	A. (NH₄)₂HPO₄ B. NH₄NO₃ C. Urea D. Calcium phosphate
2946	Elements combine together due to inherent tendency to stabilize themselves by:	A. Losing electron. B. Sharing electrons. C. Gain in electrons. D. All of above.
2947	Industrial alcohol may be denaturated by the addition of	A. Methyl alcohol B. Acetone C. Pyridine D. Any of the above reagent
2948	Aryl halides are less reactive towards nucleophilic substitution reactions as compared to alkyl halides due to	A. The formation of less stable carbonium ion B. Resonance stabilization C. Larger carbon-halogen bond D. The inductive effect
2949	Which is used as a coagulant:	A. Ferric Salts B. Potash alum C. a and b both D. Chlorine
2950	Industrial effuents have toxic synthetic organic compounds as well as heavy metals like	A. Pb B. Cr C. Hg D. All of these
2951	Identify the compound formed, when ethylene combines with water in the presence of 10% sulphuric acid and $HgSO_4$as catalyst	A. Carbinol B. Methanol C. Ethanol D. Glycol
2952	The percentage of which element in the organic compound is determined by the difference method	A. Carbon B. Hydrogen C. Nitrogen D. Oxygen
2953	Solubility cure of $Na_2SO_410H_2$shows	A. Constant increase of solubility B. Constant decreases of solubility C. Discontinuously solubility wit temperature D. None of above
2954	Saponification of ethyl benzoate with caustic soda	A. Benzyl alcohol,ethanoic acid B. Sodium benzoate, ethanol C. Benzoic acid, sodium ethoxide D. Phenol, ethanoic acid
2955	Which of the following consists of atoms and molecules and are held together by WAHDERWADD forces.	A. H2O B. CO2 C. Cu D. MgO
2956	SO_2Makes _____ acid rains	A. Carbonic acid B. Sulfuric C. Nitric acid D. All of these
2957	Question Image	A. Pent -1-ene-3-yne B. 2-pentyne-4-ene

		C. 1-pentene-3-yne D. Pent-2-yen-4-ene
2958	A ring contains 3 gram diamond. The number of C-atoms which a ring contains is	A. 3.01 x 10²³ B. 1.5 x 10²³ C. 6.02 x 10²⁴ D. 3.01 x 10²⁴
2959	Wholer prepared urea from	A. Ammonia B. NH₄CNO C. NH₃ D. Uric acid
2960	The reaction of alcohol with $SOCl_2$ in the presence of pyridine as catalyst gives	A. Acids B. Acid chloride C. Alkyl halide D. Benzene
2961	The pH of 10^{-3} mole dm^{-3} of an aqueous solution of H_2SO_4 is	A. 3.0 B. 2.7 C. 2.0 D. 1.5
2962	Which of the following hydrogen halide is the weakest acid in solution?	A. HF B. HBr C. HI D. HCl
2963	The essential component of organic compound is	A. O B. C C. P D. N
2964	Half life of most stable isotope of astatine is	A. 8.0 hrs B. 8.1 hrs C. 8.2 hrs D. 8.3 hrs
2965	Which halogen will react spontaneously with Au(s) to produce Au3++	A. Br2 B. F2 C. I2 D. Cl2
2966	Which of the following compounds gives red precipitate with $AgNO_3$?	A. KI B. K₂CrO₄ C. NaBr D. NaNO₃
2967	IIB elements (Zn, Cd, Hg) and III B elements (Sc, Y and La) are	A. Non typical transition element B. Typical transition element C. Normal elements D. Inner transition element
2968	Which reagent could be used to distinguish between $CH_3CH(OH)CH_2CHO$ and $CH_3COCH_2CH_2OH$	A. Acidified potassium dichromate B. Dilute sulphuric acid C. 2,4-dinitrophenylydrazine D. Fehling's reagent
2969	Which of the following is a steroid	A. Vitamin A B. Vitamin B C. Vitamin C D. Vitamin D
2970	The method involved for electrolysis of Na or K salts of carboxylic acids	A. Sabatier's sendrens reaction B. Kolbe's method C. Clemmensen D. Wolf kishner reduction
2971	Trend of boiling point of halogens from fluorine to Iodine is that it	A. Decreases B. Is negligible C. Increases D. Remains constant
2972	Which of the following pair of atomic numbers represents s-block elements?	A. 7, 15 B. 6, 12 C. 9, 17 D. 3, 20
2973	Which element among the following belongs to Group IV-A of the periodic table?	A. Barium B. Iodine C. Lead D. Oxygen
2974	In passage of electricity through aqueous solution of $AgNO_3$ silver dissolves at anode to form Ag^+, the	A. Silver metal B. Pt metal C. Graphite D. Copper metal

	electrodes are	D. Copper metal
2975	Meta directing group decreased the ---------- of benzene ring	A. Physical activity B. Chemical reactivity C. Density D. None
2976	Question Image	A. Three times B. Six times C. Nine times D. Two times
2977	Which among the following species has the highest ionization energy?	A. Ne B. F C. Li D. B
2978	The reaction of an alkyl halide with RCOOAg produces	A. Ester B. Ether C. Aldehyde D. Ketone
2979	Formaline Contains _____% alcohol	A. 80 B. 37 C. 8 D. 52
2980	The nitrogen present in some fertilizers helps plants	A. To fight against disease B. To produce fat C. To undergo photosynthesis D. To produce protein
2981	Which of the following discoveries resulted in a version of the Mendeleefs periodic law	A. The nucleus of atom by Rutherford B. The elements polonium and radium by the Curies C. Atomic numbers by Moseley D. x-rays by Roentgen
2982	Whenever a week base is dissolved in water, it give its conjugate acid. similarly a weak acid in water produces its conjugate base. This conjugate acid-base pair concept is stated by	A. Law of mass action B. Le-charlier's principle C. Common ion effect D. Lowery Bronsted concept
2983	Benzene can be obtained by heating either benzoic acid with X or phenol with Y. X and Y are respectively	A. Zinc dust and soda lime B. Soda time and zinc dust C. Zinc dust and sodium hydroxide D. Soda lime and copper
2984	Major component in cement is	A. SiO₂ B. Lime C. Al₂O₃ D. MgO
2985	Calorie is equivalent to :	A. 0.4184 J B. 4184 J C. 4.184 J D. 418.4 J
2986	Which of the following is the use of electrolysis?	A. Eletrorefining B. Electroplating C. Both A and B D. None of the above
2987	Silicon atom is hybridized:	A. sp B. sp² C. sp³ D. dsp²
2988	Grignard reagent on reaction with a ketone forms	A. Tertiary alcohol B. Secondary alcohol C. Primary alcohol D. Carboxylic acid
2989	Potassium superoxide has a use in breathing equipment in space crafts. The balanced equation for the reaction is	
2990	The formula of ketone is	D. None of these
2991	Which one of the following elements is not present in all proteins	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur

2992	When quantity of electricity passed is one faraday then the mass deposited at the electrode is equal to	A. One gm, atomic weight B. One gm, Equivalent C. Eletrochemical equivalent D. None of the above
2993	Aledehydes ketones can be prepared form alcohols by their:	A. Reduction B. Oxidation C. Decomposition D. Synthesis
2994	Charge on electron was discovered by:	A. Millikan. B. Crook. C. Neil Bohr. D. Rutherford.
2995	When rate of forward reaction is equal to rate of backward reaction, then the equilibrium established is called	A. Chemical equilibrium B. Static equilibrium C. Dynamic equilibrium D. None of these
2996	The experimental relationship between a reaction rate and the concentration of reactants is known as	A. Order B. Molecularity C. Rate constant D. Rate law
2997	Burning of coal and hydrocarbon in air are examples of	A. Non-spontaneous reaction B. Spontaneous reaction C. Natural reaction D. Both b and c
2998	Mild oxidation of glycerol with $H_2O_2/FeSO_4$gives	A. Glyceraldehyde B. Dihydroxy acetone C. Glycerose D. None
2999	$NaBH_4$and $LialH_4$are	A. Ionic hydrides B. Covalent hydrides C. Interposal hydrides D. Complex hydrides
3000	Planar geometry of molecules is due to	A. sp³hybridization B. sp²hybridization C. sp hybridization D. P - p overlap
3001	Which of the following solution have zero pH	A. 1 M HCl B. MH₂SO₄ C. 0.1 M HNO₃ D. 1 M CH₃COOH
3002	Isopropyl alcohol on oxidation gives	A. Acetone B. Ether C. Ethylene D. Acetaldehyde
3003	The weight of pure NaOH required to prepare 250 $cm^3$of 0.1 N solution is	A. 4 g B. 1 g C. 2 g D. 5 g
3004	Which of the following is a noble gas:	A. Ne. B. Cl₂. C. H₂. D. N₂.
3005	When aqueous solution of NaOH is electrolysed useing graphite electrodes, the product obtained at anode is	A. O₂gas B. H₂gas C. Na metal D. Na₂O
3006	An excess of aqueous silver nitrate is added to aqueous barium chloride and precipitate is removed by filtration. What are the main ion in filtrate?	A. Ag⁺ and NO₃₋ only<o:p></o:p> B. Ag⁺ and Ba² and NO⁻³<o:p></o:p> C. Ba² and NO⁻³<o:p></o:p> D. Ba² and NO⁻³and Cl-<o:p></o:p>
3007	When an electron is added to a uni positive ion we get:	A. Cation B. Molecule C. Neutral atom D. Anion
3008	The rate of reaction is denoted by	A. dc/dp B. dc/ac C. dc/dT D. dc/dt

3009	Hydrolysis of Grignard's reagent gives:	A. Alcohol B. Halide C. Alkyl D. Alkane
3010	Rutherford's model of atom failed because:	A. The atom did o have a nucleus and electrons B. It did not account fro the attraction b/w protons and neutrons C. It did no account for the stability of the atom. D. There is actually no space b/w the nucleus ad the electrons.
3011	Boiling point of acetic acid is°C:	A. 116 B. 117 C. 118 D. 119
3012	Question Image	A. A strong reducing agent B. A strong oxidising agent C. Better oxidising agent than hydrogen D. Less reducing agent than hydrogen
3013	Polypeptide chains are coiled about one another into a spiral by	A. Ionic bonds B. Covalent bonds C. Van der Waal's forces D. Hydrogen bonds
3014	The amount of products obtained from the balanced chemical equation is regarded as	A. Theoretical yield B. Actual yield C. % yield D. Experimental yield
3015	For which system does the equilibrium constant. K_c has units of	
3016	Which statement explains the observation that magnesium hydroxide dissolve in aqueous ammonium chloride, but not in aqueous sodium chloride	A. The ionic radius of the NH₄⁺ion is similar to that of Mg²⁺but not that of Na⁺ B. NH₄Cl dissociates less fully than NaCl C. The ions Na⁺and Mg²⁺are isoelectronic (have the same number of electrons) D. The ion NH⁺₄acts as an acid
3017	Similarity in properties of different organic compounds give rise to the under standing of _____	A. Polymerization B. Non-polar nature C. Homologous series D. Isomerism
3018	Which property is not present in non-methals	A. Predominantly covalent B. Poor conductor C. Hig E.N. value D. High electropositivity
3019	Alkyl halides are considered to be very reactive compounds towards nucleophiles because	A. They have an electrophilic carbon B. They have an electrophilic carbon and a good leaving group C. They have an electrophilic carbon and a bad leaving group D. They have a nucleophilic carbon and a good leaving group
3020	When the solute is present in trace quantities the following expression is used	A. Gram per million B. Milligram percent C. Microgram percent D. Parts per million
3021	Which one of the following particles has amass 1/1836 time, that of hydrogen?	A. Neutron. B. Proton. C. Electron. D. Positron.
3022	Question Image	A. Low pressure B. High pressure C. High temperature D. High concentration of SO₂
3023	Question Image	A. -778.9 KJ B. 788.0 KJ C. -1.9 KJ D. +1.9 KJ
3024	Paraffins are also called	A. Alkanes B. Alkynes C. Alkenes D. None of these
3025	Mercury is the only metal which is liquid at 0°C. this is due to its	A. Very high ionization energy and weak metallic bond B. Low ionization potential C. High atomic weight D. High vapour pressure
3026	When fused PbBr2 is	A. Lead appears at anode. B. Lead appears at cathode.

	electrolyzed :	C. Bromine appears at cathode. D. Lead appears at both electrodes.
3027	What is formed when propanone is refluxed with an anhydrous solution of $NaBH_4$	A. Propanal B. Propan-1-ol C. Propan-2-ol D. Propane
3028	Benzene was discovered by first of all	A. Michael Faraday B. Hofmann C. Ainderson D. Sorenbon
3029	The condition for standard enthalpy change is	A. 1 atm 30°C B. 1 atm 50°C C. 1 atm 25°C D. 760 atm 25°C
3030	Which technique is used to determine the absorption of radiations?	A. Dilatometer method<o:p></o:p> B. Optical rotation method<o:p></o:p> C. Spectrometry<o:p></o:p> D. Refractometric method<o:p></o:p>
3031	Simple aromatic compound is:	A. benzene B. toluene C. aniline D. phenol
3032	At present cement plants in Pakistan are:	A. Ten B. Twenty Two C. Four D. Twenty Four
3033	Question Image	A. There is no change in temperature B. No change in volume C. Heat is absorbed D. Heat is released
3034	The number of electron pairs shared in carbon tetrachloride molecule is	A. 2 B. 3 C. 4 D. 1
3035	The spectrum of He is expected to be similar to that of	A. H B. Na C. He⁺ D. Li⁺
3036	Osmotic pressure of a solution increases by	A. Decreasing the temperature B. Increasing the volume C. Increasing the number of molecules of the solute D. None of the above
3037	Among the following polymers, the strongest molecular forces are present in	A. Elastomers B. Fibres C. Thermoplactics D. Thermosetting polymers
3038	Glyptal polymer is obtained from glycerol on reacting with	A. Malonic acid B. Phthalic acid C. Maleic acid D. Acetic acid
3039	A chemical reaction A----------->B is said to be in equilibrium when :	A. Rate of transformation of A to B is equal to B to A. B. 50% reactant has been changed to B. C. Conversion of A to B is 50% complete D. Complete conversion of A to B has taken place.
3040	Ground and surface waters are contaminated and become polluted due to the human activity. Which human activity will bot cause water pollution	A. Live stock waste B. Agricultural pesticides C. Oil breaks and spills D. All of the above
3041	The equivalent conductivity of 0.1 M week acid is 100 times less than at infinite dilution. The degree of dissociation is	A. 100 B. 10 C. 0.01 D. 0.001
3042	The element which has a simple cubic lattice in solid state is	A. Se B. Te C. Po D. None of these
3043	In Lucas test primary alcohol make as oily layer	A. Immediately B. In 10 mins C. On heating

		D. Not
3044	The amount of energy required to remove an electron from an atom of an element in the gaseous state is called	A. Electron affinity B. Electronegatively C. Ionization energy D. None of these
3045	Monosaccharides are	A. Aldoses B. Ketoses C. Either a and b D. None of these
3046	The clotting time of blood is increased due to the deficiency of	A. Vitamin A B. Vitamin K C. Vitamin D D. Vitamin C
3047	Which of the following compounds could be prepared by reacting bromoethane with KCN and then reducing the product	A. CH₃CH₃ B. CH₃CH₂NH₂ C. CH₃CH₂CH₂NH₂ D. CH₃CH₂CH₃
3048	In Friedal-Craft's alkylation besides AlCl3 the other reactants are	A. C6H6 + NH3 B. C6H6 + NH4 C. C6H6 + CH3Cl D. C6H6 + CH3COCl
3049	Which of the following compounds contains a triple bond?	A. Alkane B. Alkene C. Alkyne D. Benzene
3050	Kolb's method is not useful for the production of	A. Methane B. Ethane C. Propane D. Butane
3051	Fungicides are the pesticides which	A. Control the growth of fungus B. Kill insects C. Kill plants D. Kill herbs
3052	Hydrochloric acid available in the laboratory is 36% w/w. The density of HCl solution is 1.19 g cm^{-3}. The molarity of HCl solution is	A. 10.23 moles dm⁻³ B. 11.55 moles dm⁻³ C. 11.73 moles dm⁻³ D. 12.67 moles dm⁻³
3053	$I_2O_5$is used for quantitative study of	A. CO₂ B. NO₂ C. NO D. CO
3054	Which of the following statements is not true?	A. Isotopes with even atomic masses are comparatively abundant B. Isotopes with even atomic masses are comparatively abundant C. Isotopes with even atomic masses and even atomic numbers are comparatively abundant D. Isotopes with even atomic masses and odd atomic number are comparatively abundant
3055	The mathematical form of fist law of thermodynamics is	
3056	De halogenatiion of tetrahalides happens in the presence of active metal like	A. Zn B. Mg C. Both a and b D. None of them
3057	If an endothermic reaction is allowed to take place very rapidly in air, the temperature of the surrounding air :	A. Remains constant. B. Decreases. C. Increases. D. Fluctuates rapidly.
3058	_____ reacts with alkalis to give hydrogen	A. Be B. Mg C. Ca D. None
3059	The change in heat energy of a chemical reaction at constant temperature and pressure is called :	A. Enthalpy change. B. Seat of sublimation. C. Bind energy. D. Internal energy change.
3060	The nature of interparticle forces in benzene is	A. Dipole-dipole interaction B. Dispersion force C. Ion-dipole interaction D. H-bonding
		A. oxides

3061	Carbonates of alkaline earth metals decomposes to respective metal	A. oxides B. nitrates C. sulphates D. CO₂
3062	Ethylene combines with water in the presence of H_2SO_4+ $HgSO_4$and forms	A. Ethyle chloride B. Ethyle alcohol C. Carboxylic acid D. None of these
3063	The quality of petroleum is determined by	A. Decane number B. Octane number C. Nexane number D. None of these
3064	A reaction in which an atom or a group of atoms replaces an atom or a group of atoms in the molecule of a substance is known as	A. Addition reaction B. Condensation reaction C. Elimination reaction D. Substitution reaction
3065	During the preparation of alkanes the hydrogenation of alkenes or alkynes the catalyst may be	A. H₂SO₄ B. Ni C. Fe₂O₃ D. Al₂O₃
3066	When sodium metal reacts with alcohols	A. Hydrogen gas evolves B. Sodium hydroxide is obtained C. Alcohol is reduced D. Alcohol is polymerised
3067	Charge of an electron is:	A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">1.6 x 10⁻¹⁹ C<o:p></o:p> B. 9.1 x <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">10⁻³⁴ C<o:p></o:p> C. 1.7588 x <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">10¹¹ C<o:p></o:p> D. 6.62 x <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">10⁻³⁴ C<o:p></o:p>
3068	Question Image	
3069	Which has the least oxidizing power?	A. F₂ B. Cl₂ C. Br₂ D. I₂
3070	type of hybridization in CH≡CH is:	A. sp B. sp² C. sp³ D. dsp²
3071	Which of the following expressions show a heterolytic bond fission	
3072	Which of the following molecules have its central atom sp^2hybridized	A. CH₄ B. C₂H₂ C. C₂H₄ D. CCl₄
3073	Which is the polymer that has amide linkage in its structure	A. PVC B. Poly ethene C. Polyester D. Nylon
3074	Which of the following is strangest reducing agent.	A. Cl- B. K+ C. Ar D. Ca+2
3075	Which of the following sulphates has the highest solubility in water	A. BaSO₄ B. CaSO₄ C. MgSO₄ D. BeSO₄
		A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Mono-atomic molecules B. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat:

3076	He Ar and Ne are:	initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Hetero atomic molecules<o:p></o:p> C. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Poly-atomic molecules<o:p></o:p> D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Diatomic molecules<o:p></o:p>
3077	Identify the compound which has a bond angle of 109.5°	A. Ethyne B. Ethere C. Methane D. Benzene
3078	Taste of lower alcohols is:	A. Sweet B. Bitter C. Our D. Salty
3079	The structure of white phosphorus is	A. Square planar B. Pyramidal C. Tetrahedral D. Trigonal planer
3080	Classical smog occurs in palces of	A. Excess SO₂ B. Low temperature C. High temperature D. Excess NH₃
3081	Carbonates of alkaline earth metals decomposes to respectgive metal	A. Oxides B. Nitrates C. Sulphates D. CO₂
3082	Light emitted from a source has its wave length 500nm, then its wave number will be	A. 2 x 10⁶m⁻¹ B. 2 x 10⁷m⁻¹ C. 5 x 10⁸m⁻¹ D. 5 x 10⁹m⁻¹
3083	Mustard gas is a :	A. Gas B. Liquid C. Solid D. High boiling point
3084	Unsaturated hydrocarbon containing a double bond are called	A. paraffin B. Alkanes C. Olefins D. Acetylene
3085	II-A group element are called:	A. s-block elements B. p-block elements C. d-block elements D. f-block elements
3086	Which is used to remove air bubbles form metals?	A. B B. Be C. Mg D. Al
3087	Oxidation number of oxygen in $OF_2$is	A. +1 B. -1 C. +2 D. -2
3088	Question Image	A. Fe is reduced B. Fe is oxidized C. Cl₂is oxidized D. None of these
3089	Which is a component of micro nutrient?	A. N B. Zn C. P D. K
3090	The e.m value for positive rays maximum for:	A. Oxygen. B. Nitrogen. C. Helium. D. Hydrogen.
3091	Which of the following correctly describes the process occurring at the electrodes when molten NaCl is electrolyzed:	A. No reaction at anode, reduction at cathode. B. No reaction at cathode, oxidation at anode. C. Oxidation at anodes, reduction at cathode. D. Oxidation at cathode, reduction at anode.
		A. Neutrons. B. Helium nucleus

3092	Alpha rays consist of:	B. Helium nucleus. C. Protons. D. Hydrogen nucleus.
3093	Ethylene decolorizes cold dilute solution of $KMnO_4$. This test is known as	A. Colouration test B. Baeyer's test C. Silver mirror test D. Ring test
3094	Which one of the following is not an example of chain growth polymer?	A. Neoprene B. Bunna-S C. PMMA D. Glyptal
3095	Two moles of HI was heated in a sealed tube at 440°C till the equilibrium was reached. HI was found to be 22% decomposed. The equilibrium constant for dissociation is	A. 0.282 B. 0.0796 C. 0.0199 D. 1.99
3096	The intramolecular forces in gases are	A. Weak B. Normal C. Very weak D. Strong
3097	Two H-atom combine to form a strong H_2molecule due to	A. Increase in potential energy B. Decrease in potential energy C. Energy remains unchanged D. Distance is increased
3098	At present the number of cement factories is Pakistan are	A. 20 B. 22 C. 25 D. 30
3099	Bakelite is a product formed form	A. Reaction of formaldehyde with phenol B. Reaction of polyethylene with phenol C. Reaction of polypropylene with acid D. It is a natural product
3100	Hybridized in oxygen is:	A. sp B. sp² C. sp³ D. dsp³
3101	The relative lowering of vapour pressure is equal to the mole fraction of the solute, This law is called	A. Henry's law B. Raoult's law C. Ostwald's law D. Arrhenius law
3102	The bond angle H - O - H in ice ins closest to	A. 120° , 28['] B. 60° C. 90° D. 109°
3103	Which is a good nucleophile?	A. F⁻¹ B. Cl⁻¹ C. Be⁻¹ D. I⁻¹
3104	Aroma meas:	A. Fragrant B. Invisible C. latest affinityt D. benzene
3105	The potassium fertilizers are preferred for horticulture, tobacco and potatones, which of the following is popular potassium fertilizer	A. Potassium oxide B. Potassium chloride C. Potassium sulphate D. Potassium nitrate
3106	Saturated solution of a solid is prepared at a constant temperature. 100 $cm^3$of this saturated solution is evaporated in a china dish. The mass of the residue is called	A. Azetropic mixture B. Solubility C. Solubility product D. Equilibrium constant
3107	Question Image	A. Aqueous bromine B. Dilute HNO₃ C. Dilute HCl D. CH₃COCl
3108	Which of the following reactions is used for detecting presence of carbonyl group?	A. Reaction with hydroxylamine B. Reaction with hydrazine C. Reaction with phenyl hydrazine D. All

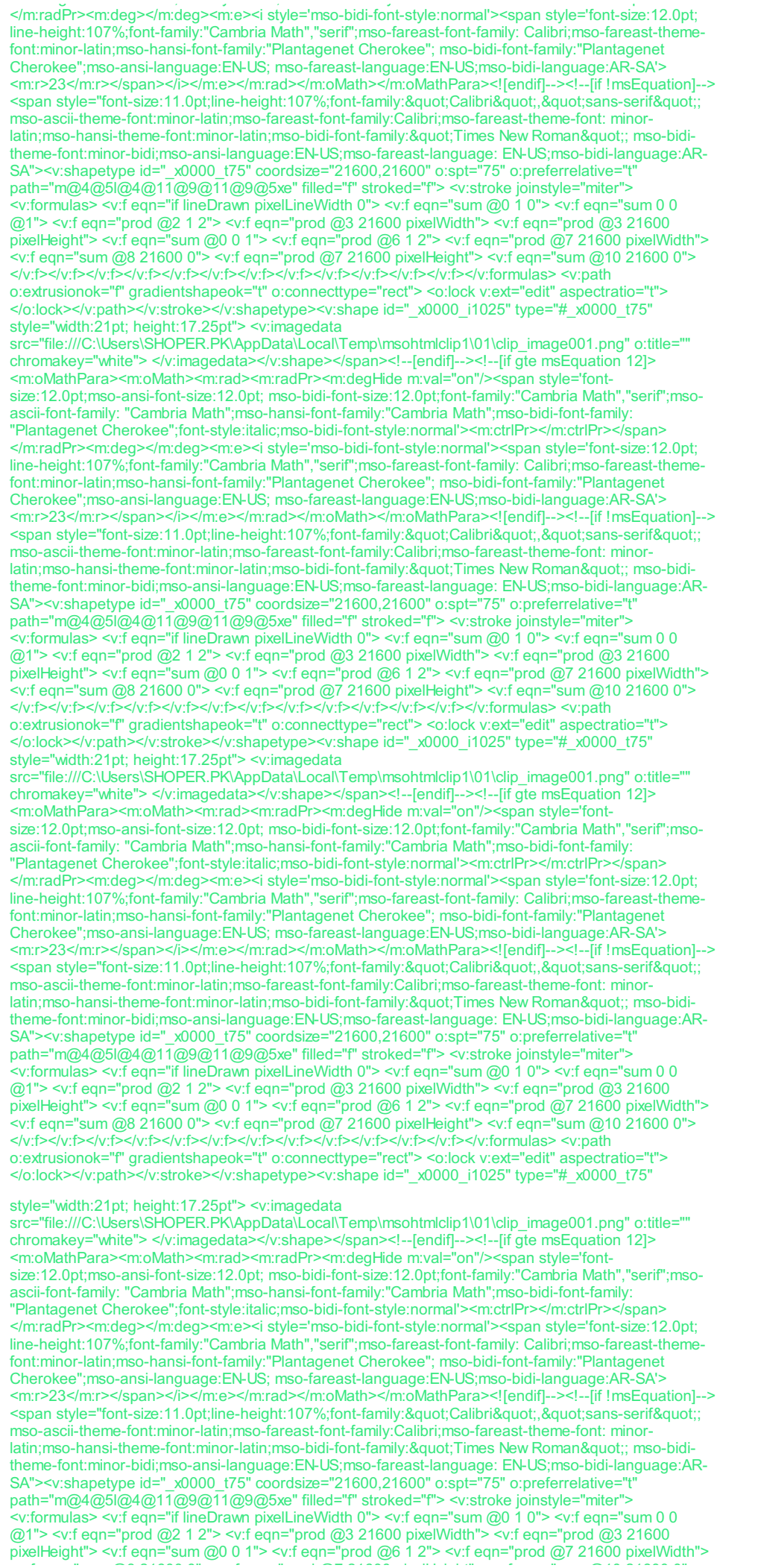
		D. All
3109	The development of industries was a direct result of which major factor	A. Population B. Living standards C. Depletion of resources D. All of these
3110	How many molecules of chlorine adds in benzene in the presence of sunlight	A. One B. Two C. Three D. Four
3111	Potassium ferrocyanide is a	A. Mixed salt B. Double salt C. Complex salt D. Normal salt
3112	Colour of bromine is	A. Pale yellow B. Greenish yellow C. Red brown D. Greyish black
3113	The valence shell of hydrogen is half filled like those of	A. IV - A B. VIA C. V - A D. VIIA
3114	Acetylene is used in the manufacture of	A. Rubber B. Plastic C. Ethyle alcohol D. All of these
3115	Which is not an enzyme	A. Transverses B. Lipase C. Lyase D. None of these
3116	When alkyl is treated with chlorine in the presence of sunlight	A. 1,3 dichloroproduct is formed B. 1,4 dichloro product is formed C. 1,3,5 trichloro product is formed D. Only alkyl group is substituted
3117	The treatment of benzene with isobutene in the presence of sulphuric acid give	A. isobutyl benzene B. tert-Butyl benzene C. n- Butyl benzene D. no reaction
3118	Chile saltpetre has the chemical formula	A. NaNO₃ B. KNO₃ C. Na₂B₄O₇ D. Na₂CO₃H₂O
3119	Question Image	A. Cu B. H C. N D. O
3120	Boiling point of n-butane is:	A. -102°C B. -75°C C. -55°C D. 55°C
3121	Types of cracking are:	A. Thermal B. Catalytic C. Steam D. All a, b ,c
3122	Which of these polymers is an addition polymer?	A. Nylon-6,6 B. Polystrene C. Terylene D. Epoxy resin
3123	In a chemical change, the energy in the form of heat will either be evolved or absorbed and this is called	A. Endothermic B. Heat of products C. Exothermic reaction D. Heat of reaction
3124	Which of the following equation represents reaction when lithium nitrate is heated.	A. 2LiNo4------- Li2O + NO2 B. 4Li NO3 ------- 4LiO2 + 4NO2 +O2 C. LiNO3---------Li2O + 4NO2 D. 2LiNO4------- Li2O + NO2+O2
3125	The main pollutant of leather tanneries in the waste is due to the salt of:	A. lead B. Chromium (VI) C. Copper D. Chromium (III)
	Maximum freezing point falls	A. Camphor B. Naphthalene

3126	Maximum freezing point falls in	B. Naphthalene C. Benzene D. Water
3127	Question Image	A. K_p> K_c B. K_c> K_p C. K_p= K_c D. None of these
3128	Acetone reacts with HCN to form a cyanohydrin. It is an example of:	A. Nucleophilic substitution B. Nucleophilic addition C. Electrophilic addition D. Electrophilic substitution
3129	Which one of the following will have the maximum dipole moment	A. CH₃F B. CH₃Cl C. CH₃Br D. CH₃I
3130	Which is not the poplar reaction	
3131	The amount of heat evolved or absorbed in a process in the same whether the process takes place in one or several steps is the statement of	A. First law of thermodynamics B. Hess's law C. Coulomb's law D. Phase law
3132	Which one of the following gases is used for artificial ripening of fruits ?	A. Ethane B. Ethyne C. Methane D. Propane
3133	Which one of the following is an ideal solution that obeys Rault's law	A. Ethanol + water B. Benzene + toluene C. HCl + water D. Acetone + chloroform
3134	Some of the elements of a period show similar behavior with the elements of next group in next period this is called	A. Vertical relationship B. Oblique relationship C. Diagonal relationship D. None
3135	The normal amount of overhead ozone is about	A. 250 Du B. 300 DU C. 350 DU D. 400 DU
3136	Acidic hydrolysis of acetamide gives	A. Acetaldehyde B. Acetic acid C. Methyl amine D. Formic acid
3137	Metallic conduction is due to the	A. Movement of electrons B. Movement of ions C. Both a and b D. None of these
3138	If the difference of pKa values of the two acids is 2, then	A. Acid with smaller pKa is 10 times stronger acid B. Acid with greater pKa is 10 times stronger acid C. Acid with smaller pKa is 100 times stronger acid D. Acid with greater pKa is 100 times stronger acid
3139	Benzene gives reactions generally:	A. Electropholic subsitution B. addition C. synthesis D. addition and electropholic subsitution
3140	AgCl is soluble is	A. Aqua regia B. H₂SO₄ C. HCl D. NH₃
3141	Naphthalene, iodine and NH_4 can :	A. Sublime. B. Both (a) and (c). C. Crystallize. D. None of above.
3142	Which gasoline is better?	A. Of low boiling point B. Of low molecular mass C. Of high octane D. All of these
3143	Denaturation of protein means the structure of protein is disrupted, indicate which factor foes not denature protein	A. Heating protein B. pH changes C. Oxidising agent D. Keeping pH 7.35

protein

3144	How much of NaOH is required to neutralize 1500 $cm^3$of 0.1 N HCl?	A. 60 g B. 6 g C. 4 g D. 40 g
3145	Poly hydroxyl compounds of aldehyde ketones are:	A. Carbohydrates B. Protiens C. Fats D. Lipids
3146	The density of water decreases, When it is freezed at 0°C	A. Change of bond length B. Change of bond angles C. Cubic structure of ice D. Empty spaces present in the structure of ice
3147	Which of the following is not the reactions of lithium	
3148	If ionic product of a solution is greater than solubility product, the solution is	A. Supersaturated B. Saturated C. Unsaturated D. None of these
3149	The optimum conditions of temperature and pressure to get maximum NH_3form $N_2$and H_2gases is	A. 2000°C and 10 atmosphere B. 0°C and 1 atmosphere C. 400°C and 200-300 atmosphere D. 200°C and 100 atmosphere
3150	Which of the following compound is industrially prepared by the electrolysis of solution of NaCl	A. Na₂CO₃ B. NaHCO3 C. NaOH D. NaOCl
		A. Friedel Craft's reaction B. Benzene condensation C. Hydroformylation D. Cellemense <!--[if gte msEquation 12]><m:oMathPara><m:oMath><m:rad><m:radPr><m:degHide m:val="on"/><span style='font-size:12.0pt;mso-ansi-font-size:12.0pt; mso-bidi-font-size:12.0pt;font-family:"Cambria Math","serif";mso-ascii-font-family: "Cambria Math";mso-hansi-font-family:"Cambria Math";mso-bidi-font-family: "Times New Roman";font-style:italic;mso-bidi-font-style:normal'><m:ctrlPr></m:ctrlPr></m:radPr><m:deg></m:deg><m:e></m:e></m:rad></m:oMath></m:oMathPara><![endif]--><!--[if !msEquation]--><span style="font-size:11.0pt;line-height:107%;font-family:"Calibri","sans-serif"; mso-ascii-theme-font:minor-latin;mso-fareast-font-family:Calibri;mso-fareast-theme-font: minor-latin;mso-hansi-theme-font:minor-latin;mso-bidi-font-family:"Times New Roman"; mso-bidi-theme-font:minor-bidi;mso-ansi-language:EN-US;mso-fareast-language: EN-US;mso-bidi-language:AR-SA"><v:shapetype id="_x0000_t75" coordsize="21600,21600" o:spt="75" o:preferrelative="t" path="m@4@5l@4@11@9@11@9@5xe" filled="f" stroked="f"> <v:stroke joinstyle="miter"> <v:formulas> <v:f eqn="if lineDrawn pixelLineWidth 0"> <v:f eqn="sum @0 1 0"> <v:f eqn="sum 0 0 @1"> <v:f eqn="prod @2 1 2"> <v:f eqn="prod @3 21600 pixelWidth"> <v:f eqn="prod @3 21600 pixelHeight"> <v:f eqn="sum @0 0 1"> <v:f eqn="prod @6 1 2"> <v:f eqn="prod @7 21600 pixelWidth"> <v:f eqn="sum @8 21600 0"> <v:f eqn="prod @7 21600 pixelHeight"> <v:f eqn="sum @10 21600 0"> </v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:formulas> <v:path o:extrusionok="f" gradientshapeok="t" o:connecttype="rect"> <o:lock v:ext="edit" aspectratio="t"> </o:lock></v:path></v:stroke></v:shapetype><v:shape id="_x0000_i1025" type="#_x0000_t75" style="width:20.25pt; height:19.5pt"> <v:imagedata src="file:///C:\Users\SHOPER.PK\AppData\Local\Temp\msohtmlclip1\01\clip_image001.png" o:title="" chromakey="white"> </v:imagedata></v:shape><!--[endif]--><o:p></o:p> <!--[if gte msEquation 12]><m:oMathPara><m:oMath><m:rad><m:radPr><m:degHide m:val="on"/><span style='font-size:12.0pt;mso-ansi-font-size:12.0pt; mso-bidi-font-size:12.0pt;font-family:"Cambria Math","serif";mso-ascii-font-family: "Cambria Math";mso-hansi-font-family:"Cambria Math";mso-bidi-font-family: "Plantagenet Cherokee";font-style:italic;mso-bidi-font-style:normal'><m:ctrlPr></m:ctrlPr></m:radPr><m:deg></m:deg><m:e><span style='font-size:12.0pt; line-height:107%;font-family:"Cambria Math","serif";mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-font-family:"Plantagenet Cherokee"; mso-bidi-font-family:"Plantagenet Cherokee";mso-ansi-language:EN-US; mso-fareast-language:EN-US;mso-bidi-language:AR-SA'><m:r>23</m:r></m:e></m:rad></m:oMath></m:oMathPara><![endif]--><!--[if !msEquation]--><span style="font-size:11.0pt;line-height:107%;font-family:"Calibri","sans-serif"; mso-ascii-theme-font:minor-latin;mso-fareast-font-family:Calibri;mso-fareast-theme-font: minor-latin;mso-hansi-theme-font:minor-latin;mso-bidi-font-family:"Times New Roman"; mso-bidi-theme-font:minor-bidi;mso-ansi-language:EN-US;mso-fareast-language: EN-US;mso-bidi-language:AR-SA"><v:shapetype id="_x0000_t75" coordsize="21600,21600" o:spt="75" o:preferrelative="t" path="m@4@5l@4@11@9@11@9@5xe" filled="f" stroked="f"> <v:stroke joinstyle="miter"> <v:formulas> <v:f eqn="if lineDrawn pixelLineWidth 0"> <v:f eqn="sum @0 1 0"> <v:f eqn="sum 0 0 @1"> <v:f eqn="prod @2 1 2"> <v:f eqn="prod @3 21600 pixelWidth"> <v:f eqn="prod @3 21600 pixelHeight"> <v:f eqn="sum @0 0 1"> <v:f eqn="prod @6 1 2"> <v:f eqn="prod @7 21600 pixelWidth"> <v:f eqn="sum @8 21600 0"> <v:f eqn="prod @7 21600 pixelHeight"> <v:f eqn="sum @10 21600 0"> </v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:formulas> <v:path o:extrusionok="f" gradientshapeok="t" o:connecttype="rect"> <o:lock v:ext="edit" aspectratio="t"> </o:lock></v:path></v:stroke></v:shapetype><v:shape id="_x0000_i1025" type="#_x0000_t75" style="width:21pt; height:17.25pt"> <v:imagedata src="file:///C:\Users\SHOPER.PK\AppData\Local\Temp\msohtmlclip1\01\clip_image001.png" o:title="" chromakey="white"> </v:imagedata></v:shape><!--[endif]--><!--[if gte msEquation 12]><m:oMathPara><m:oMath><m:rad><m:radPr><m:degHide m:val="on"/><span style='font-size:12.0pt;mso-ansi-font-size:12.0pt; mso-bidi-font-size:12.0pt;font-family:"Cambria Math","serif";mso-ascii-font-family: "Cambria Math";mso-hansi-font-family:"Cambria Math";mso-bidi-font-family: "Plantagenet Cherokee";font-style:italic;mso-bidi-font-style:normal'><m:ctrlPr></m:ctrlPr>

3151 Acylation of benzene to produce aliphatic aromatic ketones is known as:



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3152	In OF_2, number of bond pairs and lone paris of electrons are respectively	A. 2,6 B. 2,8 C. 2,10 D. 2,9
3153	β-D-glucose is a monomer for	A. Strach B. Cellulose C. Glycogen D. Protein
3154	Which is used in bacterial lamps	A. He B. Ne C. Ar D. Kr
3155	On alkali and alkaline earth metals down the group, there is decreasing trend in	A. m.p. B. b.p. C. Ionization potentiall D. All of these
3156	The free spaces between the metal atoms and its crystal lattice are called	A. Valance spaces B. Empty spaces C. Interstices D. None
3157	What will be the molarity of solution if 103 g $(NH_4)_2SO_4$is dissolved per 600 $cm^3$of water	A. 2.32 M B. 3.32 M C. 4.32 M D. 1.30 M
3158	The molar boiling point constant is the ration of elevation in boiling point to :	A. Molarity B. Molarity C. Mole fraction of solvent D. Mole fraction of solute.
3159	$NaHCO_3$is commonly called	A. Soda ash B. Baking soda C. Washing soda D. None of these
3160	the oxides of beryllium are:	A. acidic B. basic C. amphoteric D. None of these
3161	95% ethanol is called:	A. Rectified other B. Diesel C. Rectified spirit D. Petrol
3162	The general formula of alkyl halides is	A. C_nH_{2n}X B. C_nH_{2n-1}X C. C_nH_{2n+1}X D. C_nH_{2n-2}X
		A. bond order of 2.5

3163	According to MO Theory, the species O_2+ possesses	B. three unpaired C. diamagnetic character D. stability lower then O₂
3164	A set of compounds in which reactivity of halogen atom in the ascending order is	A. Chlorobenzene, vinyl chloride, chloroethane B. Chloroethane, chlorobenzene, vinyl chloride C. Vinyl chloride,chlorobenzene chloroethane D. Vinyl chloride, chloroethane,chlorobenzene
3165	Which reagent is used to reduce a carboxylic group to an alcohol?	A. H2/Ni B. H2/Pt C. NaBH4 D. LiAlH4
3166	If 5.85 g of NaCl are dissolved in 90 g of water, the mole fraction of NaCl is	A. 0.1 B. 0.01 C. 0.2 D. 0.0196
3167	Which among the following elements have lowest value of IE_1?	A. Pb B. Sn C. Si D. C
3168	The rate of reaction b/w two specific time intervals is called :	A. Instantaneous rate of reaction. B. Average rate of reaction. C. Rate of a reaction. D. Minimum rate of a reaction.
3169	0.5 mole of CH4and 0.5 mole of SO2gases have equal	A. Volume B. Mass in grams C. Total number of atoms D. Number of molecules
3170	Alkyl halides on treatment with aqueous KOH give	A. Phenol B. Alcohol C. Aldehyde D. Ketone
3171	The standard enthalpy change in the formation of 1 mole of a compound from its elements in their standard physical states is	A. Enthalpy of formation B. Enthalpy of atomization C. Enthalpy of neutralization D. Internal energy change
3172	In an ooctahedral crystal field splitting, the number of orbitals pushed down in energy is	A. 3 B. 2 C. 5 D. Zero
3173	Hydrogen bond is the strongest between the molecules of	A. HF B. HCl C. HBr D. HI
3174	Factor which slows down the rate of reaction is	A. Small size of the particles of the reactant B. High temperature of reaction C. More concentration of reactant D. Lowering the temperature
3175	Which statement is true for Na and Na^+	A. Both have equal sizes. B. Both have same properties. C. Size of Na is smaller than Na⁺ D. Size of Na is greater than Na⁺
3176	The intramolecular force in gases are :	A. Weak B. Normal C. Very weak D. Strong
3177	Two or more similar monomers combine to form:	A. Homopolymer B. Copolymer C. Ter polymer D. Thermoplastic polymers
3178	Which of the following compound is no formed according to octet rule:	A. KrF_{2<o:p></o:p>} B. XeF₂<o:p></o:p> C. XeO₃<o:p></o:p> D. SF₆<o:p></o:p>
3179	Colour of chlorine is	A. Pale yellow B. Greenish yellow C. Red brown D. Greyish black
3180	The process in which water molecules surround solute particles is called	A. Hydration B. Salvation C. Hydrolysis D. Dehydration

		D. Dehydration
3181	Which one of the following in mainly responsible for depletion of ozone layer?	A. Methane B. Carbon dioxide C. Water D. chloroflurocarbons
3182	Williamson's synthesis is used to prepare	A. Diethylether B. Phenolphthalein C. Hydrogenation D. Bakelite
3183	The density of a gas is directly and volume at constant temperature for a gas is	A. Isobaric B. Isothermal C. Isotherm D. None of above
3184	0.5 mole of $CH_4$and 0.5 mole of SO_2gases have equal	A. Volume B. Mass is gram C. Total number of atoms D. Number of molecules
3185	The unit of rate constant k is the same as that of the rate of reaction in	A. First order reaction B. Second order reaction C. Third order reaction D. Zero order reaction
3186	The substance having highest conductivity at room temperature among the following is	A. 0.1 N HCl B. 0.1 N NaCl C. Graphite D. Glass
3187	Tincal is a mineral of:	A. Al B. B C. Si D. C
3188	Enzymes catalyse all biological reactions occurring in the cell. What is true about an enzyme	A. Enzyme is a small molecule B. Enzyme is acidic in nature C. Enzyme is a protein D. Enzyme is a lipid
3189	Of the following which is a step growth polymer	A. Bakelite B. Polyethylene C. Teflon D. PVC
3190	Covalent compound s mostly exist in the form of:	A. Protons<o:p></o:p> B. Atoms<o:p></o:p> C. <span style="font-size:11.0pt;line-height:107%; font-family:"Calibri","sans-serif";mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:"Times New Roman";mso-bidi-theme-font:minor-bidi; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">Neutrons D. Molecules<o:p></o:p>
3191	Photons of yellow colour are _____ energetic than violet colour	A. More B. Less C. Equal D. None
3192	The energy units in which heat changes usually expressed in SI-system are:	A. Joule. B. Calorie. C. Kilo Joule. D. Both (a) and (c)
3193	The pH of the rain water in areas where acid rain is the cause of pollution may be	A. 6.5 B. 5.6 C. 4.5 D. 2.2
3194	An example of water soluble vitamin is	A. Vitamin D B. Vitamin E C. Vitamin A D. Vitamin C
3195	Colour of $PCl_5$is:	A. Red B. Yellowish White C. Grey D. Colourless
3196	Preparation of vegetable ghee involves	A. Halogenations B. Hydrogenation C. Hydroxylation D. Dehydrogenation
3197	Question Image	A. 4-methyl pentene B. 2-methyle-1-butene C. 2-methyl propane D. None of the above

		D. None of the above
3198	Which one of the followings is a heterocyclic compound	A. Cyclohexanol B. Phenol C. Pyridine D. Anthracene
3199	alkaline metal have electrons in s-orbitals:	A. One B. Two C. three D. Four
3200	According to Boyle's law, which parameters give a straight line parallel to axis-s, when we plot a graph between:	A. V and T B. P and V C. P and 1/V D. P and PV
3201	Gaseous HF exists in the form of	A. Monomers B. Cyclic hexamers C. As single entity D. Both a and b
3202	Potassium hexacyanoferrate (II) has the formula	A. K₄[Fe(CN)₆] B. K₃[Fe(CN)₆] C. K₂[Fe(CN)₆] D. K [Fe(CN)₆]
3203	When aqueous NaCl is electrolyzed, which of the following ions get discharged at anode :	A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">H⁺<o:p></o:p> B. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Na⁺<o:p></o:p> C. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">OH⁻<o:p></o:p> D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Cl⁻<o:p></o:p>
3204	Debye forces are present in one of the following pairs	A. Na⁺ion and water B. Argon and water C. Argon and Na⁺ion D. Ne and Water
3205	The following is an alcohol	A. CH3-CH2-OH B. CH3-O-CH3 C. CH3COOH D. All of these
3206	Which is not a fossil fuel	A. Petroleum B. Coal C. Natural gas D. None of them
3207	The solid remained on filter paper during the filtration is called the :	A. Substance. B. Residue. C. Undue. D. Filtrate.
3208	Which element does not belong to 4d series	A. Y B. Zr C. Mo D. Zn
3209	In sp^2hybridization bond angle is _____	A. 120° B. 180° C. 109.5° D. None
3210	Cl_2reacts with CS_2in presence of $AlCl_3$to form	A. CHCl₃ B. CCl₄ C. C₂H₅Cl D. C₂H₆
3211	From which of the following tertiary butyl alcohol is obtained by the action of methyl magnesium iodide?	A. HCHO B. CH₃CHO C. CH₃COCH₃ D. CO₂
3212	The isotopes of an element	A. Possess same mass number B. Possess same number of protons C. Do not possess same chemical properties D. May or may not possess same chemical properties

3213	Macromolecules or polymers are large molecules built up from small molecules called monomers. This hypothesis put forward by	A. Schrodixger B. Standinger C. Lewis D. Newton
3214	The simplest separating unit of a polymer is called:	A. Monomer B. Dimer C. Trimmer D. Macromer
3215	The solubility product of AgCl is 2.0 x $10^{-10}mol^2dm^{-6}$The maximum concentration of Ag^+ions in the solution is	A. 2.0 x 10⁻¹⁰mol dm⁻³ B. 1.41 x 10⁻⁵mol dm⁻³ C. 1.0 x 10⁻¹⁰mol dm⁻³ D. 4.0 x 10⁻²⁰mol dm⁻³
3216	Which element does not belong to 3d transition series	A. Ti B. V C. Mn D. Te
3217	When of the following is isolelectronic with krypton	A. Ca⁺⁺ B. Al⁺⁺⁺ C. Br⁻¹ D. I⁻¹
3218	The fibre which is obtained from naturally occurring proteins is called	A. Saran B. Azlon C. Rayon D. Nylon
3219	Alkaline battery has a voltage of	A. 4.5 V B. 3.5 V C. 2.5 V D. 1.5 V
3220	The diameter of atoms is of the order:	A. 2* 10⁻⁵m B. 2* 10⁻¹⁰m^{<o:p></o:p>} C. 2* 10⁻²m D. 2* 10⁻³m
3221	Benzene hexachloride is used as	A. Dye B. Antimaterial drug C. Antibiotic D. Insecticide
3222	Grignard reagent is not prepared in aqueous medium but prepared in ether medium because	A. The reagent is highly reactive in ether B. The reagent does not react with water C. The reagent becomes inactive in water D. The reagent reacts with water
3223	A property which differs fluorine from the other halogens?	A. Direct combination with inert gases B. Uninegative C. Diatomic D. ns² , np⁵
3224	Which of the following has polar bond	A. O₂ B. N₂ C. HCl D. Cl₂
3225	Those compound which have any atom other than C as member of rings are called as	A. Monocyclic B. Hetrocyclic C. Aliphatic D. Both a and b
3226	Which of the following liquid pairs shown a positive deviation from Raoult's law	A. CH₃COOH₃+ CH₃Cl B. C₆H₆+ CH₄OH C. H₂O + HCl D. H₂O + HNO₃
3227	Urea has concentration when prepared before prlilling:	A. 46% B. 82% C. 99.7% D. 100%
3228	Urea has concentration when prepared before prlilling:	A. 100% B. 99.7% C. 82% D. 46%
3229	Which of the following is the hardest metal among following	A. Li B. Na C. Rb D. K
	Reaction of acids with	A. Esterification B. Saponification

3230	Reaction of acids with alcohols is also known as	B. Saponification C. Alkalization D. None
3231	If acetyl chloride is reducing in the presence of $BaSO_4$and Pd, then	A. CH₃CHO is formed B. CH₃CH₂OH is formed C. CH₃COOH is formed D. CH₃COCH₃is formed
3232	Which one of the following does not belong to alkaline earth metals?	A. Be B. Ra C. Ba D. Rn
3233	The state of hybridization of carbon atom in methane is:	A. sp³ B. sp² C. sp D. dsp²
3234	The transitions element	A. Are all metals B. Are good conductor of heat C. Show variable oxidation states D. All of the above
3235	Half life period of $N_2O_5$is 24 minutes and it remains same where we increase or decrease its initial concentration, then reactions	A. Zero order B. First order C. Second order D. Third order
3236	Butyric acid was named from butyrum means:	A. Red out B. Vinegar C. Butter D. Milk
3237	Number of elements in the first period of the periodic table are	A. Two B. Four C. One D. Eight
3238	Ether shows the phenomenon of	A. position isomerism B. Chain isomerism C. Metamerism D. Cir-trans isomerism
3239	Fungicides are the pesticides which:	A. Control the growth of fungus B. Kill insects C. Kills plants D. Kills herbs
3240	Molecules of High molecular weight usually greater than 10,000 are called:	A. Macro molecules B. Mega molecules C. Poly molecules D. Gega molecules
3241	Alkanes are non-polar or weakly polar compounds that are insoluble in.	A. Polar solvent B. Uni-polar solvent C. Non-polar solvent D. None of these
3242	When rain is accompanied by a thunderstorm, the collected rain water will have a pH value	A. Uninfluenced by occurrence of thuderstorm B. Which depends on the amount of dust in air C. Slightly lower than that of rain water without thunderstorm D. Slighlty higher than that when the thunderstom is not there
3243	Pakistan at the time of existence in 1947 was a country:	A. agrarian B. industrial C. nuclear D. economically strong
3244	Which alloy contains 50% copper, 25% zinc and 25% nickel	A. German silver B. Gun metal C. Bell metal D. Brass
3245	Glucose in the presence of zymase is converted into	A. Alcohol B. Acid C. Ethyl alcohol D. Ketone
3246	A graph b/w P and 1/V at constant temperature and number of moles is parallel to :	A. Y-axis B. Z-axis C. X-axis D. None of above
3247	Contamination of water of tanning industries is due to:	A. Cr(III) B. Cr(VI) C. Mn(III) D. Mn(VII)

3248	Lithium reacts with air to form	A. Peroxide B. Normal oxide C. Superoxide D. None of these
3249	The substance added in the paints for improving the mechanical properties is called	A. Pigment B. Filter C. Stabilizer D. Binder
3250	Essentialα-amino acids are those which are necessary in the diet Which one is an essentialα-amino acids	A. Alanine B. Aspartic acid C. Glycine D. Tryptophan
3251	Noble gases are placed in group	A. Group IV-A B. Group V-A C. Group VI-A D. Group VII-A
3252	The four quantum numbers of the valency electron of potassium are	A. 4,1,1,1/2 B. 4,0,0,1/2 C. 4,1,0,1/2 D. 4,4,0,1/2
3253	Which of the following molecules has unpaired electrons in anti-bonding molecular orbitals?	A. O₂ B. N₂ C. Br₂ D. F₂
3254	An organic compound, on treatment with Br2 in CC14 gives bromoderivative of an alkene. The compound will be	A. CH3 - CH = Ch2 B. CH3CH = CHCH3 C. HC = CH D. H2C = CH2
3255	When CO_2 is made to react with ethyl megnesium iodine, followed by hydrolysis, the product formed is:	A. Propane B. Propanoic acid C. Propanal D. Propanol
3256	Ozonolysis of benzene gives	A. nitration B. sulphonation C. ozonide D. glyoxal
3257	In an electrolytic cell, the electrons flow from :	A. Cathode to anode or opposite B. Cathode to anode C. Anode to cathode D. Random flow
3258	The steroids of fungi and yeast are called:	A. Vitamin D B. Vitamin D₂ C. Ergosterol D. Cholestorl
3259	Reaction of Grignard's reagent eith aldehyds other formaldehyde gives: Reaction of Grignard's reagent with formaldehyde gives:	A. Pri-alcohol B. Sec-alcohol C. Ter-alcohol D. Carboxylic
3260	Activity of the enzyme is reduced by	A. Temperature B. Concentration C. pH D. Inhibitors
3261	Acetal is produced by reacting alcohol in the presence of dry HCl with	A. Acetaldehyde B. Ketone C. Ether D. Carboxylic acid
3262	A species having positive or negative charge is called:	A. Electron B. Ion C. Proton D. Atom
3263	When a piece of zinc is added to the copper sulfate solution,_____ color of solution disappear.	A. Pink. B. Purple. C. Blue. D. Brown.
3264	SN_2reactions can be best carried out with:	A. Prl. alkyl halide B. Sec. Alkyl halide C. Ter. Alkyl halide

		D. All of three
3265	There are 20 amino acids found in protein which is not the property of these amino acids	A. They are allα-amino acids B. They are all optically active C. They have high decomposition point D. They are water soluble
3266	Ethanol is prepared in Pakistan form fermentation of:	A. Starch B. Sugar C. Glucose D. Molasses
3267	Cannizzaro's reaction is type of reaction:	A. Self oxidation-reduction reaction B. Disproportion reaction C. Addition D. A and B
3268	Which of the following represents the correct electronic configuration of the outermost energy level of an element of zero (VIIA) group in the ground state?	A. s²p² B. s²p⁴ C. s²p⁵ D. s²p⁶
3269	Heat absorbed by a system when its volume does not change is equal to	A. Internal energy of system B. Enthalpy of system C. Increase in internal energy of system D. Increase in enthalpy of system
3270	The basic difference between synthetic and natural fertilizer is in their	A. Rae material B. Crop application C. Usage D. Shapes
3271	In incinerating the waste is burnt at	A. 1000°C B. 100°C C. 2000°C D. 1500°C
3272	The effective activity of a metal catalyst is increased if it is in	A. Solid form B. Liquid state C. Gaseous state D. Finely divided form
3273	(A) is one molar NaCl solution and (b) is 1 molal NaCl solutin :	A. A and B are of same strength. B. A is more Concentrate than B. C. b is more Concentrate than A. D. None of above.
3274	The relation ships b/w volume of given amount of gas and prevailing conditions of temperature and pressure are :	A. Charles's law B. Graham's law C. Boyle's law D. Gas law
3275	A graph b/w P and 1/V at constant temperature and number of moles is parallel to :	A. None of above B. X-axis C. Z-axis D. Y-axis
3276	Ammonium nitrate fertilizer is not used for which crop	A. Cotton B. Wheat C. Sugar cane D. Paddy rice
3277	Which element has 4 unpaired electrons in 3d-orbital	A. Chromium - 24 B. Manganese - 25 C. Iron - 26 D. Cobalt - 27
3278	Hydrocarbons are divided into aliphatic, alicyclic and aromatic which structure among the following show an alicyclic hydrocarbon	
3279	The uncertainty principle was stated only	A. De Brogilie B. Heinsenberg C. Einstein D. Schrodinger
3280	Subsidiary quantum number specifies	A. size of orbital B. shape of orbital C. orientations of orbitals D. Nuclear stability
3281	General formula of alcohol is:	A. ROH B. Ar-OH

3281	General formula of alcohol is:	C. R-O-R D. Ph-OH
3282	Molecule of halogens exist as	A. Monatomic B. Diatomic C. Triatomi D. Polyatomic
3283	Number of moles of the solute dissolved per dm^3 of the solution is knows as	A. Molarity B. Formality C. %age D. None of these
3284	Hydrogen bond is the strongest between the molecules of:	A. HF B. HCl C. HBr D. HI
3285	Solution which distill without change in composition or temperature are called	A. Amorphous B. Azeotropic mixture C. Ideal D. Super saturated
3286	Peat contains about	A. 60% carbon B. 80% carbon C. 78% carbon D. 50% carbon
3287	The solid remained on filter paper during filtration is called the	A. Substance B. Residue C. Undue D. Filtrate
3288	The available chlorine is bleaching power is	A. 25-30% B. 30-35% C. 35-40% D. 40-45%
3289	Alkyl halides are reactive :	A. High B. Medium C. Less D. Least
3290	Which is not true about acetophenone?	A. Reacts to form 2,4-dintrophenyl hydrazine B. Reacts with Tollen's reagent to form silver mirror C. Reacts with I₂/NaOH to form iodoform D. On oxidation with alkaline KMnO₄followed by hydrolysis gives benzoic acid
3291	An electrochemical cell is based upon	A. Acid-base reaction B. Redox reaction C. Nuclear reaction D. None of the above
3292	Result of ozone hole is	A. Green house effect B. Global warming C. Acid rain D. UV rays reach the earth
3293	Ammonia like water also reacts with Grignard's reagent to give	A. Alkane B. Alkene C. Alkyne D. Amide
3294	Solubility of $KMnO_4$ at higher temperature is:	A. 5% B. 7% C. 15% D. 25%
3295	The molal elevation constant is the ratio of the elevation in boiling point to	A. Molarity B. Molality C. Mole fraction of solute D. Mole fraction of solvent
3296	Grignard's reagent on treatment with dry CO_2 and HCl yields	A. Ester B. Alcohol C. Carboxylic acid D. Aldehyde
3297	Empirical formula mass of benzene is times lesser than molecular formula mass	A. four B. five C. six D. seven
3298	The pressure of vapours when sent to the ionization chamber in mass spectrometer is	A. 10⁻⁵to 10⁻⁶torr B. 10⁻⁶to 10⁻⁷torr C. 10⁻⁷to 10⁻⁸torr D. 10⁻³to 10⁻⁴torr

3299	Each of the following is true of white and red phosphours except that they	A. Are both soluble in CS₂ B. Can be oxidized by heating in air C. Consist of the same kind of atoms D. Can be converted into one another
3300	Grignard's reagent was prepared in:	A. 1900 B. 1910 C. 1920 D. 1930
3301	A dry alkaline cell has porous Zn anode and MnO_2as cathode the electrolyte used is	A. Ca(OH)₂ B. NaOH C. KOH D. NH₄OH
3302	Which of the following elements is most electronegative?	A. Oxygen B. Chlorine C. Nitrogen D. Fluorine
3303	The element with atomic number 55 belongs to which block of the periodic table	A. s-block B. p-block C. d-block D. f-block
3304	A free radical reaction takes place in three steps, initiation, propagation and terminations. Which of the following expression represents a propagation step	
3305	Major food factors are:	A. Fats and oils B. Carbohydrates C. Proteins D. All of these
3306	The elements of f-block are also known as	A. Inner-transition B. Outer transition C. Normal elements D. Alkaline earth metals
3307	The apex angle of the folded filter paper is slightly greater than :	A. 60°<p class="MsoNormal" style="margin-bottom: 0.0001pt; line-height: normal; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"><o:p></o:p></p> B. 30° C. 45° D. 90°
3308	Write the name of following compound	A. 5 - methyle - 2- hexene B. 2 - methyle hexene C. 4 - ethyle - 2 - methyle hexene D. 3 - ethyle - 3 - methyl hexene
3309	The gases can be converted into liquids by	A. increasing the pressure only B. Lowering temperature and increasing pressure C. Increasing pressure and bringing temperature below critical point D. Lowering temperature only
3310	Acetic anhydride is obtained form acetyl chloride by the reaction of	A. P₂O₅ B. H₂SO₄ C. CH₃COONa D. CH₃COCH₃
3311	The intermolecular forces in liquids are	A. Negligible B. Very weak C. Very strong D. Reasonably strong
3312	Which woody raw material is used of the manufacture of paper pulp	A. Cotton B. Bagasse C. Poplar D. Rice straw
3313	10% aqueous solution of NaCl has molarity	A. 1.7 M B. 2.7 M C. 0.17 M D. 3.7 M
3314	Reaction between Zn and $CuSO_4$can be called a system under	A. Surrounding B. Observation C. system D. None of above
3315	The temp. and pressure used	A. 10°C and 10 atm B. 20°C and 20 atm

3315	for PVC polymerization is	C. 52°C and 9 atm D. 100°C and 10 atm
3316	Pick up the correct statement	A. CO which is major pollutant resulting from the combustion of fuels in automobile plays a major role in photochemical smog B. Classical smog has an oxidizing character while the phtochemical smog is reducing in character C. Photochemical smog occurs in day time whereas the classical smog occurs in early morning hours D. During formation of smog the level of ozone in the atmosphere goes down
3317	In gases and liquids, temperature is the measure of :	A. Average transnational kinetic energies of molecules. B. Average vibrational kinetic energies of molecules. C. Average rotational kinetic energies of molecules. D. None of above
3318	Acetamide is prepared by:	A. Heating ammonium acetate B. Heating methyl cyanide C. Heating ethyl acetate D. The hydrolysis of methyl cyanide
3319	Which of the following statements is contrary to the first law of thermodynamics?	A. Energy can neither be created no destroyed. B. One form of energy can be transferred into an equivalent amount of the kinds of energy. C. In a adiabatic process, the work done is independent of its path. D. Continuous production of mechanical work without supplying an equivalent amount of heat is possible.
3320	Rectified spirit contains alcohol about	A. 80% B. 85% C. 90% D. 95%
3321	According to the periodic law, the chemical properties of the elements are periodic functions of their	A. Density B. Atomic number C. Atomic mass D. Mass number
3322	In preparation medhod of carboxylic acids from alkyl halides always carboxylic acid formed which have carbon atoms:	A. One less than in R----X B. One more than in R---X C. Equal to R---X D. Double to R----X
3323	The number of unpaired electrons in Fe^{3+}(Z = 26) are	A. 5 B. 6 C. 3 D. 4
3324	The net heat change in chemical reaction is same whether it is brought in two or more different ways in one or several steps. it is known as	A. Henry's law B. Joule's principle C. Hess's law D. Law of conservation of energy
3325	Grignard's reagent is	A. Alkyl halide B. Magnesium halide C. Alkyl magnesium halide D. Ethereal solution of an alkyl halide
3326	Which of the atoms has $1s^2$, $2s^2$, $2p_x^2 2p_y^1 2p_z^1$configuration	A. Nitrogen B. Carbon C. Fluorine D. Oxygen
3327	Sulphonation of benzoic acid produces mainly	A. o-Sulphobenzoic acid B. m-sulohobenzoic acid C. p-Sulphobenzoic acid D. o-and p-Sulphobenzoic acid
3328	The atomic mass is measured in atomic mass unit (a.m.u.) which is equal to	A. 1.661 x 10^{-27- Kg} B. 1.661 x 10⁻²⁴Kg C. 1.661 x 10^{-27- g} D. 1.661 x 10⁻²⁴mg
3329	Question Image	A. +712 KJ mol⁻¹ B. +492 KJ mol⁻¹ C. -932 KJ mol⁻¹ D. -960 KJ mol⁻¹
3330	Acetic Acid is obtained from:	A. Red out B. Vinegar C. Butter D. Milk
3331	For a chemical reaction to take place the particles must have sufficient energy for the effective collisions, the energy is called	A. Average energy B. Activation energy C. Potential energy D. Collision energy
		A. Gallium and Germanium

3332	Eka-aluminium and Eka-silicon are known as	A. Gallium and Germanium B. Aluminium and silicon C. Iron and sulphur D. Proton and silicon
3333	Free radical mechanism of halogenation of alkanes follow step:	A. Initiation B. Propagation C. Termination D. All of these
3334	E = hv is the	A. Spectral equation B. Plank's equation C. de Broglie's equation D. None of these
3335	At what pH glycine shows the structure H_{3N}^{+}-- CH_2-- COOH	A. 2 B. 7 C. 10 D. 14
3336	The comparative rates at which the solutes move in paper chromatography, depend on:	A. the size of per sued. B. R_f values of solutes C. temperature of the experiment D. size of the chromatography tank used.
3337	Half life period of a first order reaction is independent of:	A. Presence of catalyst. B. Conditions of temperature C. Initial concentration of the compound D. All of above
3338	Le-chatlier's principle is applied on the reversible reaction in order to	A. Determine the rate of reaction B. Predict the direction of reaction C. Determine the extent of reaction D. Find best conditions for favorable shifting the position of equilibrium
3339	Fe can displace Cu form CuSO4solution because	A. Fe is ferromagnetic B. Fe is below Cu in electrochemical series C. Fe is above Cu in electrochemical series D. Fe exists in divalent oxidation state
3340	Allyl chloride on dehydrochlorination gives	A. Propadiene B. Propylene C. Allyl alcohol D. Acetone
3341	d-block elements closely resemble in their physical and chemical properties. Which statement is incorrect	A. They show variable valency B. Their ions and compounds are coloured C. They are good conductors of heat and electricity D. Their compounds are diamagnetic
3342	Tripple bond is present in	A. O₂ B. H₂ C. N₂ D. Cl₂
3343	The chemical formula of Trona is	A. KCl . MgCl₂. 6H₂O B. Na₂CO₃. 2NaHCO₃. 2H₂O C. Na₂CO₃. H₂O D. KCl
3344	RNA is a polymer of nucleotide which consist of three components. Which one is not the component in the nucleotide of an RNA	A. D-Ribose B. Wracil base C. Prosphate group D. Thyamine base
3345	A nuclophile must	A. Be an atom B. A group of atoms C. Have a lone pair D. Be negatively charged
3346	The range of visible spectrum is	A. 300 - 600 nm B. 600 - 900 nm C. 400 - 750 nm D. 100 - 300 nm
3347	In CH_4, all the H-C-H bond angles are	A. 120° B. 107° C. 109° D. 109.5°
3348	Synthesis rubber is made by polymerization :	A. Chloroform B. Acetylene C. Divinyl acetylene D. Butene
3349	The chemical formula of chile salt peter is	A. Na₂CO₃ B. KNO₃ C. NaNO₃ D. NaNO₂

		D. $NaNO_2$
3350	A compound possessingα-hydrogen atom, in the presence of dilute alkali formsβ-hydroxy aldehyde. This product on heating with dilute acid forms an unsaturated crotonaldehyde. The compound is	A. CH₃CHO B. CH₃CH₂CHO C. CH₂= CH - CHO D. HC = C - CHO
3351	Which is present as a result of radioactive decay on earth?	A. He B. Ne C. Ar D. Kr
3352	The chloroform reacts with NaOH to give	A. CH₃COONa B. Sodium oxalate C. CH₃OH D. HCOONa
3353	Fluted filter paper is used to:	A. Decrease rate of filtration B. Increase rate of filtration C. Maintain rate of filtration D. None of above
3354	The major portion of natural gas is	A. Ethane B. Propane C. Butane D. Methane
3355	Which of the following order is incorrect w.r.t property indicated?	A. Formic acid > Acetic acid > Propionic acid (ACID STRENGTH) B. Cyclohexanol < Phenol < Benzoic acid (ACID STRENGTH) C. Benzamide < Aniline < Cyclohexylamine (ACID STRENGTH) D. FCH₂COOH > ClCH₂COOH > BrCH₂COOH (ACID STRENGTH)
3356	Which statement is incorrect for balancing of redox reactions by ion-electron method	A. The reaction is splitted into two half reactions B. H₂O and H⁺ions are added for acidic or neutral reaction to balance O and H atoms C. To balance H, HCi, is added D. To balance O and H in the alkaline reaction OH⁻added
3357	Kekule structures contributed towards actual structure of benzene	A. 60% B. 70% C. 80% D. 90%
3358	Which is not property in ether:	A. Very weak hydogen bonding B. High b.p C. Slightly soluble D. Inflammable
3359	An alkane is produced when an alkyle halide reacts with zinc in the presence of	A. HCl B. CH₃COOH C. Both a & b D. None
3360	Aliphatic carboxylic acids have carboxyl group attached to:	A. Alkyl group B. Aryl group C. Phenyl group D. Benzyl lgroup
3361	Aqua Regia has ratio of conc. HCl and HNO_3	A. 1 : 2 B. 1 : 3 C. 1 : 4 D. 2 : 3
3362	Which reaction yields Bakelite?	A. Urea with HCHO B. Tetramethyl glycol with Hezamethylene diisocyanate C. Phenol and HCHO D. Ethylene glycol and Dimethylterephthalate
3363	The rate of reaction between two specific time intervals is called	A. Instantaneous rate B. Average rate C. Specific rate D. Ordinary rate
3364	An azeotropic mixture showing it's positive deviation from Raoult's law, the volume of the mixture is :	A. Slightly more than the total volume of the components. B. Slightly less than the total volume of the components. C. Equal to the total volume of the components. D. None of these.
3365	All gases can be compressed by	A. Keeping constant pressure B. Decreasing pressure C. Increasing pressure D. None of above
3366	Question Image	A. High temperature and low pressure B. Low temperature and high pressure

3366	Question Image	C. Low temperature and low pressure D. High temperature and high pressure
3367	An electric current is passed through silver voltameter connected to a water voltmeter. The cathode of the silver voltameter is 0.108 g more at the end of the electrolysis. The volume of oxygen evolved at STP is	A. 56 cm³ B. 550 cm³ C. 5.6 cm³ D. 11.2 cm³
3368	Which of the following has highest oxidation potential	A. Be B. Li C. Na D. Ca
3369	Question Image	A. Acidified AgNO_{3(aq)} B. Fehling's solution C. Na D. Na₂XO_{3(aq)}
3370	When the 6d orbital is completed the entering electron goes into	A. 7f B. 7 s C. 7 p D. 7 d
3371	75% plant nutrients are present in the fertilizer:	A. Urea B. NH₄NO₃ C. NH₃ D. (NH₄)₂HPO₄
3372	Enthalpy of neutralization of all the strong acids and strong bases has the same value because:	A. Neutralization leads to the formation of salt and water. B. Strong acids and bases are ionic substances. C. Acids always give rise to H⁺ions and bases always furnish OH⁻ions. D. The net chemical change involve the combination of H⁺ and OH⁻ions to form water.
3373	Hydrolysis of protein by 6M HCl gives peptides and then α-amino acids. How many α-amino acids molecules are obtained on the hydrolysis of a tetrapeptide	A. 2 B. 3 C. 4 D. 5
3374	Which one is primary alcohol?	A. Buten-2-ol B. Propan-2-ol C. Butaon-1-ol D. 2,3-Dimethylhexane-4-ol
3375	Which of the following is a constituent of nylon?	A. Adipic acid B. Styrene C. Teflon D. None of these
3376	Which are used as essences(flowers)?	A. aldehydes B. Ketones C. alcohols D. esters
3377	Electron affinity depends on	A. Atomic size B. Nuclear charge C. Atomic number D. Atomic size and nuclear charge both
3378	Which one of the following step is not involved in determination of empirical formula	A. Determination % of each element B. Determination of gram atom of each element C. Determination of isotopes of each element D. Determination of atomic ratio of element
3379	$C_6H_{12}O_6$ is molecualr formula of:	A. Glucose B. Dextrose C. Fructose D. All of these
3380	Use of ethanol as:	A. Drink B. Solvent and fuel C. In beverage D. All of these
3381	Which quantum number is sufficient to describe the electron is hydrogen atom?	A. l B. n C. m D. s
	Which of the following	A. Chlorobenzene

3382	Which of the following possesses the highest melting point?	B. 0-Dichlorobenzene C. m-Dichlorobenzene D. p-Dichlorobenzene
3383	α-Amino acids are found in protein. Which of the following is anα-amino acid	
3384	If a large number of amino acids (hundreds to thousands) are joined by peptide bonds, the resulting product is called	A. Dipeptide B. Tripeptide C. Polypeptide D. None of these
3385	Enzymes, in the living systems	A. Provide energy B. Provide immunity C. Transport oxygen D. Catalyze biochemical processes
3386	Binary compounds of hydrogens are called:	A. Halides B. Hydrides C. Oxides D. Nitrides
3387	Bronze is an alloy which contains	A. 60% cu B. 70% cu C. 80% cu D. 99% cu
3388	In cold countries ethylene glycol is added to water in radiators of cars during winter. It results in	A. Lowering in b.pt B. Reducing viscosity C. Reducing specific heat D. Lowering in freezing pt
3389	Which property depends on the state of system	A. Enthaply B. Free energy C. Entropy D. All these
3390	How many isomeric disubtituted products are obtained by the introducing of second group in the ring	A. Two B. Three C. Four D. None
3391	The simplest and the parent members of aromatic hydrocarbon is	A. Benzene B. Toluene C. Biphenyis D. Naphthalene
3392	Primary carbon attaches with other hydrogen atoms directly:	A. One B. Two C. Three D. At least one or more than it
3393	In solids, the temperature of is the measure of	A. Rotational kinetic energies B. <span style="font-family: Arial, sans-serif; font-size: 10.5pt; line-height: 14.98px; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">transnational kineticenergies C. <span style="font-family: Arial, sans-serif; font-size: 10.5pt; line-height: 14.98px; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"><span style="font-family: Arial, sans-serif; font-size: 10.5pt; line-height: 14.98px; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Vibrationalkineticenergies D. None of the above
3394	Which of the following favours the reverse reaction in chemical equilibrium?	A. Increasing the concentration of the reactant B. Removal of the least one of the products at regular intervals C. Increasing the concentration of one or more of the products D. None of these
3395	During nitration of benzene, the active nitrating agent is:	A. NO₃⁻¹ B. NO₂₊ C. NO₂⁻¹ D. HNO₃
3396	Which one of the following is the most abundant organic substance found in nature	A. Fructose B. Starch C. Glucose D. Cellulose
3397	Phenol is more readily soluble in	A. Dil. HCl B. Both NaOH and HCl C. NaOH sol D. Sodium bicarbonate solution

3398	In the hydrolysis of $CH_3COOC_2H_5$the acid produced is	A. Inhibitor B. Catalyst C. Auto catalyst D. None of above
3399	Orthophosphoric acid is	A. Monobasic B. Dibasic C. Tribasic D. Tetrabasic
3400	The electronic configuration of an atom/ion can be defined by the following	A. Aufbau principle B. Pauli's exclusion principle C. Hund's Rule D. All the above
3401	Synthetic rubber is made by polymerization of	A. Chloroform B. Acetylene C. Divinlacetylene D. Butene
3402	The entropy of the universe	A. Constant B. Is equal to zero C. Decreasing D. Increasing
3403	The velocity of photon is:	A. Independent of its wavelength. B. Depends on its wavelength. C. Equal to square of its amplitude D. Depends on its source.
3404	Sulphuric acid has great affinity for water because	A. It hydrolyses the acid B. It decomposes the acid C. Acid forms hydrates with water D. Acid decomposes water
3405	Question Image	A. Elimination Esterification B. Elimination Isomerisation C. Oxidation Exterification D. Oxidation Oxidation
3406	An excess of aqueous silver nitrate is added to aqueous barium chloride and precipitate is removed by filtration. What are the main ions in the filtrate	
3407	In Boyle's law which of the following pair is variable	A. Temperature and quantity of a gas B. Pressure and Volume C. Volume and quantity of a gas D. Pressure and quantity of a gas
3408	Which of the following is the simplest form of matter?	A. Gaseous state B. Liquid State C. Solid State D. All of above
3409	Homologues differ from each other by an integral number of	A. CH₂groups B. CH₃groups C. CH groups D. CH₄groups
3410	Which Amino acid can be synthesized by over body.	A. Basic amino acids B. Acidic amino acids C. Essential amino acids D. Non-essential amino acids
3411	Water is often treated with chlorine to	A. Increase oxygen content B. Kill germs C. Remove hardness D. Remove suspended particles
3412	Which one of the following metal ions is colourless?	A. V²⁺ B. Cr³⁺ C. Zn²⁺ D. Ti³⁺
3413	Which one of the following does not belong to alkaline earth metals	A. Be B. Ra C. Ba D. Rn
3414	Increased asthmatic attacks in certain seasons are related to	A. Inhalation of seasonal pollen B. Eating of seasonal vegetables C. Low temperature D. Wet and dry environment
	A molecule in which sp^2hybrid orbitals are used by the	A. He₂ B. SO₂

3415	orbitals are used by the central atom in forming covalent bonds in	C. PCl₅ D. N₂
3416	A nucleoside may be	A. Ribonuleoside B. Deoxyribonucleoside C. Both a and b D. None
3417	Which of the following is an isomer of ethanol	A. CH₃OCH₃ B. C₂H₅OC₂H₅ C. CH₃OH D. C₂H₅OH
3418	Which one of the following is not a nucleophile	A. H₂O B. H₂S C. BF₃ D. NH₃
3419	Bessemer converter is used in the manufacture of	A. Pig iron B. Steel C. Wrought iron D. Cast iron
3420	Which of the following elements should be the least metallic in character	A. Rb B. In C. Te D. I
3421	If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of gas will :	A. remain unchanged B. increase four times C. reduce to 1/4 D. be doubled
3422	The reactivity order of alkyl halides for a particular alkyl group is:	A. F >Cl>Br>I B. Cl>Br>F>I C. I>Br>Cl>F D. Br>I>Cl>F
3423	Value of rate constant k is specific for a reaction, and varies from reaction to reaction. The value of k of a reaction changes with	A. Time B. Temperature C. Concentration of reactants D. Order of reaction
3424	At sea level and at 100°C the vapor pressure of water in an open system is:	A. 1000 mm Hg B. 760 mm Hg C. 730 mm Hg D. 670 mm Hg
3425	An element that has a high ionization energy and tends to be chemically inactive would most likely to be:	A. an alkali metal B. a transition element C. a noble gas D. a halogen
3426	The amount of heat evolved or absorbed in a chemical reaction, when the molar quantities of products and reactants being the same as represented in chemical equation. is called	A. Heat of reaction B. Free energy of reaction C. Entropy of reaction D. None of these
3427	What is chrome yellow?	A. Pbo B. Pb₂O C. PbCrO₄ D. Pb₃O₄
3428	The heat energy change during a chemical reaction at constant pressure and at a given temperature is called	A. Change in internal energy B. Enthaply change C. Temperature change D. Work done by the system
3429	Ketons are prepared by the oxidation of	A. Primary alcohol B. Secondary alcohol C. Tertiary alcohol D. None of these
3430	When the rate of reaction is entirely independent of the conc. of reaction molecules then order of reaction is	A. Zero B. First C. Second D. Third
3431	Which for the following has no dipole moment	A. HCl B. H₂S C. H₂O D. CO₂

3432	Which of the following human activities are contaminating surface and ground waters	A. Pesticides B. Septic tanks C. Petroleum and natural gas production D. All of these
3433	A large value of $K_c$means that at equilibrium :	A. Less reactant and more products. B. Reactants and product in same amounts. C. More reactants and less products. D. None of above.
3434	Which one of the following is weakest inter molecular force?	A. Dipole induced dipole forces B. Ionic dipole forces C. Electrostatic forces b/w ions D. Dipole dipole forces
3435	Zn does not displace Mg from $MgSO_4$solution because	A. Zn is more electropositive than Mg B. Zn is below Mg in electropositive series C. Zn is above Mg in electrochemical series D. Zn is trivalent Mg is divalent
3436	Diamond is a bad conductor because:	A. Ithas tight structure B. It has a high density C. There is no free electron present in the crystal of diamond of conduct electricity is transparent to light
3437	Dehydration of allcohol gives:	A. Alkane B. Alkene C. Aldehyde D. ketone
3438	Perchloric acid can be stored in solution form	A. 47% B. 57% C. 67% D. 77%
3439	Alkanes have functional group :	A. ----X B. --OH C. ----COH D. No functional group
3440	Carbon monoxide, emitted by automobiles, prevents transport of oxygen in body due	A. Combining with oxygen to form carbon dioxide B. Destruction of hemoglobin C. Preventing reaction between oxygen and hemoglobin D. Forming stable compound with hemoglobin
3441	For which system does the equilibrium constant, KC has units of concentration	
3442	Which noble gas is used in mixture used for breathing by divers?	A. Cl₂ B. NH₃ C. CO₂ D. He
3443	The rate of forward reaction is two times that of the reverse reaction at a given temperature and identical concentration, K equilibrium is	A. 0.5 B. 1.5 C. 2.5 D. 2.0
3444	Kolb's method has limited synthetic applications due to	A. Expensive catalysis B. Slow reaction C. Number of side products produced D. Salts used are very expensive
3445	Pb has inert pair of electrons:	A. One B. Two C. Three D. Four
3446	In water the most important oxidizing agent is dissolved molecular oxygen which ranges from	A. 2 - 4 ppm B. 4 - 6 ppm C. 2 - 5 ppm D. 4 - 8 ppm
3447	General formula of carbocyclic acids is:	A. RCOH B. RCOR C. RCOOR D. R-OH
3448	Which one of the following has discontinuous solubility curve	A. CaCl₂6H₂O B. NaCl C. KCl D. NaNO₃
3449	Most hazardous metal pollutant of automobile exhaust is	A. Mercury B. Lead C. Cadmium D. Copper

3450	The compound which gives oxygen on moderate heating is	A. Zinc oxide B. Mercuric oxide C. Aluminium oxide D. Ferric oxide
3451	Specific conductivity of a solution	A. Increases with dilution B. Decreases with dilution C. Remains unchanged with dilution D. Depends on mass of electrolyte
3452	Swage water is purified by	A. Microorganisms B. Light C. Fishes D. Aquatic plants
3453	What is formed when oxalic acid is dehydrated by conc. H_2SO_4?	A. C + CO₂ B. CO C. CO₂ D. CO + CO₂
3454	C_2H_5OH can be differentiated from CH_3OH by	A. Reaction with HCl B. Reaction with NH₃ C. Iodoform test D. Solubility in water
3455	Question Image	A. The value of K_pfalls with rise in temperature B. The value of K_pfalls with increasing pressure C. Addition of V₂O₅catalyst increase the concentration of SO₃ D. The value of K_pis equal to K_c
3456	Which of these polymers is a synthetic polymer?	A. Animal fat B. Starch C. Cellulose D. Polyester
3457	The product of the reaction between propanone and HCN is hydrolysed under acidic conditions. What is the formula of the final product	A. CH₃CH(OH)COOH B. CH₃CH₂CH(OH)COOH C. (CH₃)₂C(OH)COOH D. CH₃CH₂CH₂COOH
3458	A homogeneous mixture of two or more than two chemical substances is called	A. Solute B. Solution C. Solvent D. Salvation
3459	Write the name of following alkene CH_2= CH - CH = CH_2	A. 1,3 butadiene B. Butra -1, 3-diene C. Both a & b D. None
3460	Tollen's reagent is	A. Ammonical cuprous chloride B. Ammonical cuprous oxide C. Ammonical silver bromide D. Ammonical silver nitrate
3461	$K_b$value of NH_4OH is 1.81 x $10^{-5}$and its conjugate acid has K_a= 5.7 x 10^{-10}pKb of the base is 4.74, pKa of its conjugate acid is	A. -4.74 B. 4.74 C. 10 D. 9.26
3462	Ether show the phenomenon of :	A. Position isomerism B. Functional group isomerism C. Metamerism D. Cis-trans isomerism
3463	Nitroalkane are used in	A. Fuel B. Solvents C. Organic synthesis D. All of them
3464	Question Image	A. 2, 3-dimethylbutane B. 2, 3-methylbutane C. 2-dimethylbutane D. Dimethylbutane
3465	Which statement is not true. A solution is a homogeneous mixture of	A. Two ionic substance like NaCl and HCl B. Two molecular substances sugar and water C. A solute and a solvent 1% NaHCO₃in water D. NaCl and sand
3466	Which of the following gives iodoform on heating with a solution of I_2containing Na_2CO_3?	A. Ethyl alcohol B. Acetone C. Ethyl alcohol as well as acetone D. Methyl alcohol

3467	Properties of metal are:	A. Malleable and ductile B. Form basic oxides C. Tamish in air D. All are true
3468	Gradation in properties in the periods of periodic tables are due to change in	A. Atomic weight B. The number of electrons C. Number of protons D. Electronic configuration
3469	s-block elements belong to groups	A. I-A & II-A B. III-A to VIII-A C. I-B to X-B D. Lanthanides
3470	Replacement of Cl of Chlorobenzene to give phenol requires drastic conditions but chlorine of 2, 4-Dinitrochlorobenzene is readily replaced because	A. NO₂makes the electron rich ring at ortho and para positions B. NO₂withdraws electrons at metaposition C. NO₂donate electrons at m-position D. NO₂withdraws electrons at ortho and para position
3471	A solution of two component is called	A. Binary solution B. Dilute solution C. Original solution D. Standard solution
3472	Which of the following has more unpaired d-electrons?	A. Zn⁺ B. Fe²⁺ C. Ni³⁺ D. Cu⁺
3473	In the presence of Aluminium ethoxide, aldehydes get converted into esters. The reaction is known as	A. Schmidt reaction B. Aldol condensation C. Beckmann's rearrangement reaction D. Tischenko reaction
3474	The total number of inner transition elements in the periodic table is	A. 10 B. 14 C. 28 D. 30
3475	1.12 $dm^3$of N_2gas at S.T.P. has mass of N_2gas	A. 2.8 g B. 2.4 g C. 1.4 g D. 14 g
3476	A carboxylic acid contains:	A. A hydroxyl group B. A carboxyl group C. A hydroxyle & carboxyl group D. A carboxyl &aldehyde group
3477	The voltaic or galvanic cells which cannot be recharged are called	A. Primary cells B. Secondary cells C. Infinite cells D. Fuel cells
3478	Which is the formula of tetra-ammine chloro-nitro platinum (IV) sulphate	A. [Pt(NH₃)₄(NO₂)] SO₄ B. [Pt NO₂Cl(NH₃)₄] SO₄ C. [Pt Cl(NO₂) (NH₃)₄] SO₄ D. [Pt (NH₃)₄(NO₂) Cl] SO₄
3479	which one of the following is a heteroheneous catalysis	
3480	Which of the following has ester linkage?	A. Nylon B. Bakelite C. Terylene D. PVC
3481	$[Cu[NH_3)_4]^{+2}$will form _____ structure	A. Square planar B. Tetrahedral C. Octahedral D. Trigonal bipyramidal
3482	E_1mechanism is generally shown by	A. 1° - RX B. 2° - RX C. 3° - RX D. None of these
3483	In a group, the ionization energy	A. Increase B. Decreases C. Remain constant D. First increases then decreases
3484	Coordination number of Pt in $[PtCl(NO_2)\ (NH_3)_4]^{2+}$is	A. 2- B. 4 C. 1 D. 6

3485	Derivative of water is:	A. Alcohals B. Phenols C. Either D. Phenol
3486	Ratio of carbon to hydrogen in aromatic compounds is:	A. Low than alkanes B. High than alkanes C. Low than alkanes not high than alkanes D. High than alkanes
3487	A bond between two atoms may be obtained by sharing of electrons such a bond is called	A. An ionic bond B. A coordinate bond C. A dative bond D. A covalent bond
3488	Size of an anion is increased as compared to its atom because of the	A. Addition of new shell B. Repulsion of electrons in the valence shell C. Decrease in nuclear charge D. Increase in the unclear charge
3489	In public urinals, we observe some nascent smell. This smell is due to	A. Hydrolysis of urea of urine by urease of atmosphere into NH₃and CO₂ B. Formation of sulphonic acid by urea of urine C. Reaction of CO₂of atmosphere with urea monoitrate in urine D. Hydrogen present in air reacts with nitrogen forming NH₃
3490	Marble is chemically	A. CaCl₂ B. CaCO₃ C. Na₂CO₃ D. NaHCO₃
3491	The decrease in radius in large for:	A. Monovalent ions. B. Trivalent ions. C. Divalent ions. D. Atoms.
3492	In Lucas test teriary alcohol make an oily layer	A. Immediately B. In 10 mins C. On heating D. Not
3493	Which of the following half molar solutions will have lowest freezing point	A. Solution of non-volatile, none electrolyte B. Solution of non volatile, weak electrolyte C. Solution of non volatile strong electrolyte D. Solution of volatile, non electrolyte
3494	The bond order in No is 2.5 while that in $NO^+$is 3.Which of the following statements is true for these two species?	A. Bond length in NO⁺is greater than in NO B. Bond length in unpredictable C. Bond length in NO⁺is equal to that in NO D. Bond length in NO is greater than in NO⁺
3495	The boiling points of alcohols are higher than the corresponding alkanes, This is because	A. Of hydrogen bonding existing between molecules of alcohols B. Alkanes are dipolar compounds C. Alcohols are sweet in taste D. Alcohols are soluble in water
3496	Question Image	A. -76 KJ B. -57 KJ C. -171 KJ D. -114 KJ
3497	Which is a mixture of low boiling hydrocarbon	A. Natural gas B. Petroleum C. Wood D. Graphite
3498	Which of the following factors does not influenced the rate of reaction	A. Concentration of the reaction B. Nature of the reactants C. Molecularity of the reaction D. Temperature
3499	Hybridization of each carbon atom in benzene ring is	A. sp hybridized B. sp²hybridized C. sp³ D. dsp²
3500	The widely used nitrogen fertilizer that contains about 46% nitrogen is	A. Ammonia B. Ammonium nitrate C. Ammonium sulphate D. Urea
3501	Question Image	A. Forward B. Backward C. Already in equilibrium D. K_cis never less
	Which formula represents the organic compound formed by the reaction of propanoic acid	A. CH₃CH₂COCH₃ B. CH₃CH₂CO₂CH₃

3502	the reaction of propanoic acid with methanol in the presence of concentrated sulphuric acid as a catalyst	B. CH₃CH₂CO₂CH₂CH₃ C. CH₃CO₂CH₂CH₂CH₃ D. CH₃CH₂CH₂CH₂CO₂CH₃
3503	During reaction of $O_2$and alkenes, a product:	A. Glycol B. Epxide C. Halohydrin D. Ethylene glycol
3504	The simplest separating unit of a polymer is called:	A. Monomer B. Dimer C. Trimmer D. Macromer
3505	Which is a weak nucleophile	A. OH⁻ B. Br⁻ C. NH₃ D. Cl⁻
3506	The next homologue of $C_{10}H_{22}$will be	A. C₉H₂₀ B. C₁₂H₂₆ C. C₁₁H₂₄ D. C₁₃H₂₈
3507	Peroxyacetylnitrate (PAN) is an irritant to human beings and it affects:	A. Eyes B. Ears C. Stomach D. Nose
3508	Which is used as an antifreeze?	A. Glycol B. Ethyl alcohol C. Water D. Methanol
3509	Which of the following has greatest tendency to lose electron?	A. F B. Fr C. S D. Be
3510	Cannizzaro reaction is not given by	A. Trimethyl acetaldehyde B. Acetaldehyde C. Benzaldehyde D. Formaldehyde
3511	Standard reduction electrode potential of three metals A, B and C are erespectively + 0.05 V, -3.0 and -1.2V. The reducting power of	A. B > C > A B. A > B > C C. C > B > A D. A > C > B
3512	Carboxylic acids react with acids releasing gas from it:	A. H2O as steam B. CO C. CO2 D. O2
3513	The term ebullioscopy is used for	A. Depression of freezing point B. Elevation in boiling point C. Lower of vapour pressure D. None of the above
3514	In the electrolysis of fused bauxite ($Al_2O_32H_2O$) with fused Cryolite (Na_3AlF_6) using carbon rods as anode. The product obtained at cathode is	A. Na metal B. F₂gas C. Al metal D. O₂gas
3515	Coordination number of Pt in $[Pt\ Cl(NO_2)\ (NH_3)]^{2-}$is	A. 2- B. 4 C. 1 D. 6
3516	Question Image	A. Hear of reaction B. Heat of formation C. Heat of neutralization D. Heat of combustion
3517	50 $cm^3$of 0.05 molar nrea (N_2H_4CO) solution has % W/N concentration	A. 6% B. 3% C. 0.3 % D. 0.6 %
3518	Substances that render enzymes catalytically inactive are called	A. Conenzymes B. Substrates C. Inhibitors D. Apoezymes
		A. Al Peri

3519	The periodic function of properties of elements is their atomic number	A. Al-Razi B. Mosley C. Newland D. Mendeleev
3520	Vital force theory was rejected by	A. Berzellius B. Kolbe C. Wholer D. Lavoiser
3521	Question Image	A. Excitantion of an electron from 2s to 2p-orbital B. Transfer of three electrons from B to the other atoms C. Excitation of two electrons form 2s orbital to 2p orbital D. Formation of molecular ion
3522	96500 C electricity is passed through $CuSO_4$. The amount of copper precipitated is	A. 0.25 mole B. 0.5 mole C. 1.0 mole D. 2.00 mole
3523	Which one is not a pollutant normally?	A. Hydrocarbons B. Carbon dioxide C. Carbon monoxide D. Sulphur dioxide
3524	In chromatography, the point at which solvent maximum rises called:	A. Solvent front B. Base line C. Element D. Chromatogram
3525	Which of the following reaction is characteristic of benzene	A. Electrophilic substitution reaction B. Reduction C. Oxidation D. Ozonolysis
3526	Which of the following in an example of reversible reaction	
3527	Purine derivative among the following bases is	A. Thymine B. Uracil C. Guanine D. Cytosine
3528	$Al^{3+}$is a symbol for aluminium	A. Atom B. Ion C. Cation D. Anion
3529	Among the following, poly cyclic compound is	A. styrene B. cumene C. naphthalene D. xylene
3530	The rate of reaction determined at a given time is called	A. Average rate B. Instantaneous rate C. Specific rate D. Overall rate
3531	Which compound shows more hydrogen bonding?	A. C₂H₆ B. C₂H₅Cl C. CH₃----O----CH₃ D. C₂H₅OH
3532	The metal with highest electrical resistance at room temperature is	A. Pb B. Te C. Po D. Fe
3533	Alkyl halides react with Mg in dry ether to form	A. Magnesium halide B. Grignard's reagent C. Alkene D. Alkyne
3534	Half life period of a reaction is inversely proportion to the initial concentration of the reactant, then order of reaction is	A. Third order B. Second order C. Fist order D. Zero order
3535	Which of the following is a product of destructive distillation of coal	A. Ammonia B. Coke C. Cyanides D. Kerosene
3536	Which of the following salt is used as purgative	A. CaSO₄ B. MgSO₄ C. BeSO₄ D. NaCl

3537	One kilocalrie is equal to	A. 4.184 x 10³J B. 4.184 x 10⁴J C. 4.184 x 10²J D. None of these
3538	Modern Periodic table is based upon periodic function:	A. Atomic mass B. Mass number C. Nuclide Number D. Atomic number
3539	_____ gives peroxide	A. Li B. Ba C. Sr D. Be
3540	Pakistan in the beginning was a country :	A. Industrial B. Chemical C. Agrarian D. Technologies
3541	The carbon atom of a carbonyl group is	A. Sp hybridized B. Sp²hybridized C. Sp³hybridized D. None of these
3542	Out of Cu, Ag, Fe and Zn the metal which can displace all others from theri salt solution is	A. Ag B. Cu C. Zn D. Fe
3543	Carboxylic acids generally exists in cyclic	A. Monomers B. Dimers C. Trimers D. Tetrameter
3544	In the ground state of an atom the electron is present	A. In the nucleus B. In the second shell C. Nearest to the nucleus D. Farthest from the nucleus
3545	95% alcohol is called	A. Rectified spirit B. Spirit of wine C. Spirit D. Methylated
3546	The addition of a catalyst to a reaction changes the	A. Enthalpy B. Entropy C. Nature of reactants D. Energy of activation
3547	Sodium hexametaphophate is known as	A. Calgon B. Permutite C. Natalite D. Nitrolim
3548	When a compound X is passed through a dilute alkaline solution of $KMnO_4$the pink colour of solution is discharged. The compound X is possbibly	A. Methane B. Ethane C. Ethene D. Benzene
3549	A solution contains 1.2046 x 10^{24}hydrochloric acid molecules in one $dm^3$of the solution. The strength of the solution is	A. 6 N B. 2 N C. 4 N D. 8 N
3550	A solutiion of 0.5 mole camphor in 100 grmas chloroform (K_b= 0.322) has rise in boiling point than that of chloroform by	A. 0.81°C B. 1.61°C C. 1.81°C D. 0.61°C
3551	Introduction of a second methyl group in methylbenzene will give how many isomeric dimethyllenzenes	A. 2 B. 1 C. 3 D. 4
3552	The energy of ionization of an atom is the energy difference between orbital	
3553	When ethyl iodide and n-propyl iodide are allowed to react with sodium metal in ether, the number of alkanes that could be produced is	A. Only one B. Two alkanes C. Three alkanes D. Four alkanes

	that could be produced is	
3554	Which of the following is a pseudo solid?	A. CaF₂ <o:p></o:p> B. Glass<o:p></o:p> C. NaCL<o:p></o:p> D. All<o:p></o:p>
3555	Kekule structures contributed towards actual structure of benzene	A. 60% B. 70% C. 80% D. 90%
3556	One of the environmental problem is the formation of oil slicks when oil is spilled from tankers in sea water. Which treatment is suitable to remove oil slicks	A. Blow air B. Add Na₂CO₃ C. Use a specially made sorbent having flouring trapped in it D. Use a sorbent having Al₂O₃trapped in it
3557	X-ray work has shown that the diameters of atom are of the order of	A. 8 x 10⁻¹⁰m B. 2 x 10⁻¹⁰m C. 8 x 10⁻⁸m D. 2 x 10⁻⁸m
3558	Vinyl acetylene combines with HCl to form	A. Poly acetylene B. Benzene C. Chloroprene D. Divinylacetylene
3559	Transition elements belong to	A. I-A & II-A B. III-A to VIII-A C. I-B to X-B D. Lanthanides
3560	A salt producing hydrocarbon among these compounds is	A. Ehyne B. Ethene C. Methane D. Ethane
3561	What causes nitrogen to be chemically inert?	A. Multiple bond formation in the molecule B. Absence of bond distance C. Short internuclear distance D. High bond energy
3562	Work is a	A. State function B. Only function C. Non-state function D. State
3563	If an endothermic reaction is allowed to take place very rapidly in air, the temperature of the surrounding air	A. Remains constant B. Decreases C. Increases D. Fluctuates rapidly
3564	The overlapping of two partially filled atomic orbital is in such a way that the probability of finding the electron pair is maximum along the axis joining the two nuclei, the bond is	A. Sigma bond B. Pi bond C. Ionic bond D. Non-polar bond
3565	Eletronegativity difference in C-C bond in alkanes is:	A. Zero B. Double C. Half D. 4.0
3566	The molal depression constant depends upon	A. Nature of solute B. Nature of solvent C. Δ H_{solution} D. Vapour pressure of solution
3567	Which of the following element is most reactive	A. Li B. Na C. K D. Cs
3568	Which is the chain isomer of n-pentane	A. Isopentane B. Neopentene C. N-pentene D. Isopentene
3569	_____ is called milk of magnesia	A. NaOH B. KOH C. LiOH D. None
		A. Electrophilic addition

3570	Acetone reacts with HCN to form a cyanohydrin. It is an example of	A. Electrophilic addition B. Electrophilic substitution C. Nucleophilic addition D. Nucleophilic substitution
3571	In the hydrolysis of $CH_3COOC_2H_5$the acid produced is	A. Inhibitor B. Catalyst C. Auto catalyst D. None of above
3572	Lysine is _____ amino acid	A. Acidic B. Basic C. Natural D. None of these
3573	Question Image	A. Complete conversion of A to B has taken place B. Conversion of A to B is only 50% complete C. Only 10% conversion of A to B has taken place D. The rate of transformation of A to B is just equal to rate of transformation of B to A in the system
3574	Which teat is not given by both glucose and fructose	A. Give yellow ppt of CHI₃with alkaline aqueous iodine B. With 2, 4-DNPH give yellow ppt of hydrazone C. Evolve H₂gas with Na metal D. Oxidised with [Ag(NH₃)₂]⁺i.e. Tollen's reagent
3575	A white precipitate ofsilver chlorideimmediately formed on additionof :	A. Silver nitrate solution to sodium chloride solution. B. Silver chloride solution to sodium nitrate solution. C. Silver nitrate solution to potassium chloride solution D. Silver nitrate solution to hydrogen chloride solution.
3576	The functional group of acid amide is	
3577	Aqueous solution of glucose $C_6H_{12}O_6$, boils at 100.052°C. The solution contains	A. 180 grams glucose in 1 kg water B. 18 grams glucose in 1 kg water C. 1.8 grams glucose in 1 kg water D. 3.6 grams glucose in 1 kg
3578	Which of the following compound is known as oil of winter green?	A. Phenyl benzoate B. Phenyl salicylate C. Phenyl acetate D. Methyl salicylate
3579	The force which holds the atoms together to form a compound is called	A. A chemical bond B. Van der waal's force C. Dispersion force D. London force
3580	Dehydrohalogenation of alkyl halides produces	A. Alcohol B. Alkane C. Alkene D. Alkyne
3581	The tip of the funnel should touch the side of the beaker in order to avoid	A. Splashing B. Leakage C. Mixing D. Contamination
3582	H-bonding is not present in	A. Glycerine B. Water C. Hydrogen sulphide D. Hydrogen fluride
3583	In 1903 Arthur Lapeworth became the first chemist to investigate a reaction mechanism. The reaction he investigated was that of hydrogen cyanide with propanone. What do we now call the mechanism of this reaction	A. Electrophilic addition B. Electrophilic substitution C. Nucleophilic addition D. Nucleophilic substitution
3584	The substance which increases rate of reaction but remains unchanged at the end of reaction is called :	A. Catalyst. B. Indicator. C. Promoter. D. Activator.
3585	Polycyolic aromatic hydrocarbons are taught to be	A. Disinfectant B. Carcinogenic C. Helpful D. Reactive
3586	A complete chemical Characterization of a compound must include:	A. Qualitative analysis B. Chemical analysis C. Quantitative analysis D. None of above

3587	Lime is often used as an agent:	A. dehydrating B. hydrating C. oxidizing D. reducing
3588	Oxidation of methyl alcohol gives	A. Formaldehyde B. Acetone C. Ester D. Acid
3589	Coal contains sulphur in it :	A. 1 - 3% B. 1 - 6% C. 1 - 9 % D. 1 - 12%
3590	Which compound out the following is used in berthing equipment as it absorbs CO2 and gives out O at the same time.	A. Na2O2 B. KO2 C. MgO D. BaO
3591	The temp. and pressure used for PVC polymerization is	A. 10°C and 10 atm B. 20°C and 20 atm C. 52°C and 9 atm D. 100°C and 10 atm
3592	The number of isotopes of gold is	A. 3 B. 1 C. 2 D. 4
3593	Titanium is used as a catalyst in	A. Hydrogenation B. Dehydrogenation C. Polymerization of P.E. D. Oxidation of ammonia
3594	If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of gas will :	A. remain unchanged B. increase four times C. reduce to 1/4 D. be doubled
3595	The radius of ion while considering it to be spherical in shape is called:	A. Covalent radii. B. Atomic radii. C. Ionic radii. D. Both (a) and (C).
3596	Which element of group IV-A does not use d-orbital?	A. N B. P C. As D. Sb
3597	A solution of NaOH has pH = 13, then concentration of NaOH is	A. 10⁻¹³M B. 10¹³M C. 10⁻¹M D. 10⁺¹M
3598	Which of the following statements is true about Galvanic cell	A. Anode is negatively charged B. Reduction occurs at anode C. Cathode is positively charge D. Reduction occurs at cathode
3599	Electron affinity value from higher to heavier element:	A. Increase B. Decreases C. remains same D. Not effect
3600	In the electrolysis of aqueous solution of sodium nitrate, the ions which are reduced at the cathode are	A. H₃O⁺ B. Na⁺ C. OH⁻ D. NO³⁻
3601	Stainless steel contains ion and carbon along with	A. Ni and Cr B. Cr and Co C. Co and Mn D. Mn and Ni
3602	London dispersion forces are also called:	A. Hydrogen bonding. B. Debye forces C. Van der Waal's forces D. Instantaneous dipole-induced dipole forces.