MDCAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Which of the following is not a secondary pollutant	A. Ozone B. Carbonic acid C. Sulphuric acid D. Carbon dioxide
2	By the electrolysis of CuCl2 using inert electrodes of platinum which species is deposited at cathode	A. H2 B. O2 C. Cu D. Cl
3	Hydration of ethene is an example of	A. Electrophilic addition B. Electrophilic substitution C. Nucleophilic addition D. Nucleophilic substitution
4	The lattice energy of NaCl is	A. 787 j/ mole B. 790 kj/mol C. 780 kJ/ mol D. -787 kl / mole
5	NO and NO_2gases in atmosphere are represented by	A. NO B. NO₄ C. NO_x D. N_xO_y
6	Which one of the following is not true relationship	
7	Which of these polymers is a synthetic polymer?	A. animal fat B. starch C. cellulose D. polyester
8	Based on the physico-chemical properties, proteins may be classified into the following types	A. Simple proteins B. Compound proteins C. Derived proteins D. All of the above
9	Fungicides re the pesticides which:	A. kill plants B. kill herbs C. kill insects D. control the growth of fungus
10	Which one of the following elements is not present in all protens	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur
11	Which of the following salts would give the same products irrespective of whether its molten form or concentrated aqueous solution is electrolysed?	A. Magnesium bromide B. Magnesium sulphate C. Copper sulphate D. Copper chloride
12	In which of the following molecules strongest hydrogen bond is shown	A. water B. ammonia C. hydrogen fluoride D. hydrogen sulphide
13	Active sulphonating agent during sulphonation of benzene is	A. SO2 B. SO3 C. SO3H D. SO3+
14	CFCs destroy ozone layer. How many ozone molecule a chlorine free radical can destory	A. 50,000 B. 10,000 C. 20,000 D. None of these
15	Which one of the following is an organic compound?	A. Calcium carbide B. Calcium cyanide C. Carbon disulphide D. None of these
16	Which one the following is the structure of Teflon?	A. (-CH2-CH2-)n B. (-CF2-CH2-)n C. (-CF2-CF2-)n D. (-CF2-CCl2-)n
17	Two substances that have the same crystal structure	A. isomorphous B. anisotropic C. isotropic

	are said to be	C. isotropic D. polymorphous
18	Hydrolysis of alkyl nitriles gives:	A. Alkane B. Alkyl halide C. Alkyl nitride D. Minerals acids & Alkalies
19	Alkanes do not show geometrical isomerism due to	A. Hyperconjugation B. Resonance C. Rotation around single hond D. Restricted rotation around doubled bond
20	Which one of the following is used as coagulant for purification potable water:	A. copper sulphate B. alum C. barium D. nicket sulphate
21	The elements like calcium nitrogen and phosphorus added into the soil in large amounts are called:	A. basic elements B. trace elements C. additives D. nutrient element
22	All 3d series elements show an oxidation state of oxidation state	A. +1 B. +2 C. +3 D. Zero
23	By increasing pressure two times and decreasing temp. two times the volume of gas	A. Volume increases 4 times B. Volume decreases 4 times C. Volume increases 2 times D. Volume decreases 2 times
24	There are _____ types of solids	A. 1 B. 2 C. 3 D. 4
25	Acording to the kinetic theory of gases	A. The pressure exerted by a gas is proportional to mean square velocity of the molecules B. The pressure exerted by the gas is proportional to the root mean square velocity of the molecules C. The root mean square velocity is inversely proportional to the temperature D. The mean translational KE of the molecule is directly proportional to the absolute temperature
26	Glucose is converted into ethanol by the enzyme present in the yeast	A. Urease B. Zymase C. Invertase D. Sucrase
27	Which compound shows the highest melting point	A. water B. Propanoic acid C. Methanoic acid D. Ethanoic acid
28	Calculate the grams of H2O formed when 8 g of CH3 burns in excess of oxygen.	A. 21 grams B. 19 grams C. 18 grams D. 15 grams
29	Which forms metallic cyrstals	A. Cu B. NaCl C. Diamond D. None
30	Surface and ground water sources are contaminated by various human activities. Which of the following is not a human activity that cause contamination of fresh water?	A. Rain B. Oil leaks-& spills C. Livestock waste D. Disposal of industrial effluents
31	A molecule which contains two lone pairs and two bond pairs of electrons in valence shell of central atom, geometrical shape of molecules will be	A. Tetrahedral B. Trigonal pyramidal C. Angular D. Linear
32	The molarity of 2% W/V NaOH solution is	A. 2 B. 0.25 C. 0.05 D. 0.5
33	If empirical formula of a compound is CH2 and its molecular mass is 56amu. What will beits molecular formula	A. CH2 B. C3H6 C. C2H4 D. C4H8
34	A single chloride free radical of CFCs can destroy upto ozone molecules:	A. 10 B. 100 C. 1000 D. 100000
35	Which is not a calcareous material?	A. line B. clay C. marble D. marine shell

		D. marine shell
36	The long chains of amino acids are coiled around one another into a spiral by	A. ionic bond B. Van der Waal's forces C. hydrogen bonding D. overlapping of orbitals
37	.The number of moles in 2.24 dm3 of H2 gas at STP is:	A. 1 B. 0.1 C. 10 D. 0.01
38	Casenogen is	A. Chromoprotein B. Phosphoprotein C. Glycoprotein D. Lipoprotein
39	Choose a point which is not included in the components of environment:	A. stratosphere B. hydrosphere C. lithosphere D. biosphere
40	Areal gas obeying Van der Waal's equation will resemble ideal gas ilf the:	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
41	Incineration is a process in which solid waste is burned at high temperature ranging from	A. 500 to 600°C B. 900 to 1000°C C. 1000 to 1100°C D. 600 to 700°C
42	what is it difficult to cook food at high as compared to at sea level? Choose the correct reason.	A. H-bonding in H₂O changes with height B. temperature at the top of mountain is low C. density of water decreases at the mountain D. boiling point of water decreases at the mountain
43	The polymers which can be re-softened again and again are called	A. Thermoplastic B. Thermosetting C. Both a and b D. None
44	Considering the physical properties of the gases, which of the following statements about particles of gas is not true. The particles	A. orderly arranged B. randomly moving C. having wide spaces D. causing pressure
45	A complete food contains at least:	A. three nutrients B. ten nutrients C. six nutrients D. eight nutrients
46	Down the group acid base behavior of metallic oxides of group 2 elements changes to .	A. More basic B. No change C. Less basic D. More acidic
47	Example of non-protein amino acid	A. Alanine B. Citrulline C. Phenylalanine D. Leucine
48	In a closed vessel a gas is heated from 300 K to 600K The kinetic energy becomes remains	A. Double B. Same C. Half D. Four times
49	London forces are	A. stronger than dipole-dipole interactions B. weaker than dipole-dipole interactions C. equal to dipole-dipole interactions D. sometimes stronger and sometimes weaker than dipole-dipole interactions
50	During esterifcation, the alcobol molecule acts as:	A. Oxidizing agent B. Electrophile C. Reducing agent D. Nucleophile
51	An example of neutral amino acid is	A. Gylcine B. Lysine C. Aspartic acid D. Glutamic acid
52	The maximum hydrogen bonding is in:	A. diethyl ether B. ethanol C. water D. benzene
53	When 2-bromobutane reacts with alcoholic KOH, the reaction is called	A. Chlorination B. Halogenation C. Dehydrohalogenation D. Hydrogenation
54	The gas which is mainly produced in landfills from the waste is.	A. CH4 B. CO2 C. SO2 D. Cl2

		D. Cl2
55	In an electrochemical series, elements are arranged on the basis of	A. pH scale B. pKa scale C. pOH scale D. Hydrogen scale
56	What is the formula of silica?	A. Si2O3 B. SiO2 C. Si3O4 D. SiO-
57	The energy from ultraviolet light is sufficient to break the_____ bonds in CCl,F	A. Cl-Cl B. C-Cl C. Cl-F D. C-F
58	If internal energy of the system is increased	A. Change in state of the system may occur B. Temperature of the system may rise C. Chemical reaction may take place D. All of these
59	In an elimination reaction a more substituted alkene is formed due to the stability associated with	A. Free radical B. transition state C. Activated complex D. Carbocation
60	Vegetable oils are:	A. Unsaturated fatty acids B. Glycerides of unsaturated fatty acids C. Essential oils obtained from plants
61	CH_3CH_2COOH is also named as:	A. Propionic acid B. Propanoic acid C. Acetic acid D. Both (a) & (b)
62	Which one of the following is a water soluble vitamin?	A. niacin B. riboflavin C. tyrosine D. ascorbic acid
63	What will be the pH of 1.0 mol dm -3 of H2X, which is only 50% dissociated	A. 1 B. 0 C. 2 D. Less than 0
64	Among the following the polycyclic aromatic compound is	A. Styrene B. Naphthalene C. Toluene D. Acetophenone
65	The destructive distillation of coal gives three products. which of following is not the product of destructive distillation of coal?	A. Coal tar B. CO₂ C. Coal gas D. Coke
66	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 1000000
67	One mole of SO2 contains	A. 6.022 x 10(23) atoms of oxygen B. 6.022x 10 ê23 atoms of sulfur C. 18.1x 10 (23) molecules of SO2 D. 4 g molecule of SO2
68	Which of the following reagents is used to distinguish between aldehydes and ketones.?	A. 2,4 NDPH B. Bromine C. Alkaline Iodine D. Tollen's reagent
69	The smallest unit of a crystal that shows all the characteristic properties of its pattern is called	A. cell B. electrolyte C. unit cell D. crystal
70	To cook the food at a high mountain is difficult as compared to at sea level. The reason is that:	A. the temperature at the top of the mountain is low B. the density of water decreases at the mountains C. the boiling point of water decreases at the mountain D. the hydrogen bonding in water changes with the change of height
71	A pollutant affects	A. Human affects B. Quality of life C. Functioning of ecosystem D. All of these
72	Which of the following statement is not correct for glycogen	A. It is main storage of carbohydrates B. It structure does not resemble Amylopectin C. It has 1 → 4 and 1 → 6 glycosidic linkage D. On hydrolysis it yields glucose units
73	Cholestryl benzoate turns into milky liquid at	A. 140°C B. 145°C C. 148C° D. 149°C

74	Smaller unit of biosphere is:	A. specie B. ecosystem C. plankton D. troposphere
75	Aspartic acid is a (an)	A. Monoamino dicarboxylic acid B. Diamino Monocarboxylic acid C. Aromatic amino acid D. Imino acid
76	How many esters are possible for C2H8O2	A. 3 B. 2 C. 4 D. 5
77	The concentration of product is increasing from 30 mole/dm3 to 40mol/dm3 in 0.5 sec then rate of reaction will be------ moledm-3sec-1	A. 0 B. 20 C. 15 D. 25
78	Which of these polymers is a synthetic polymer?	A. starch B. animal fat C. polyester in an addition polymer D. cellulose
79	The no. of lp's on oxygen in CO are	A. 1 B. 3 C. 4 D. 2
80	The carbon atom of an alkyl group attached with halogen atom is called	A. Electrophile B. Free redical C. Nucleophile D. Nucleophilic centre
81	Formalin is used as:	A. Fungicide B. Germicide C. Sterilizing of surgical instruments D. All three
82	Chloroform (CHCl3) is?	A. Primary alkyl halide B. Secondary alkyl halide C. Tertiary alkyl halide D. a liquid
83	Which of the following air pollutant is called quiet killer	A. PAN B. CO C. NO₃ D. SO₃
84	Ozone is 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
85	The number of moles of CO2 which contain 16g of oxygen	A. 0.25 B. 1.00 C. 1.50 D. 0.50
86	The deviation of a gas from ideal behavior is maximum at:	A. -10◦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
87	Which of following factor affect vapour pressure of a liquid?	A. temperature B. inter molecules forces C. size of the molecules D. all of these
88	Reactivity of carbonyl compounds is due to	A. Electrophilic carbon B. Less stearic hindrance C. Unsaturation of Co D. Polarity of bond
89	In which of these processes are smell organic molecules changed into macromolecules	A. The fractional distillation of crude oil B. The cracking of petroleum fraction C. The hydrolysis of proteins D. The polymerization
90	The partial pressure of $CH_4$and $O_2$are 500 torr and 100 torr repectively in a 10 dm^3vessel at 0°C. The ratio of number of molecules of CH_4: $O_2$is	A. 1: 2 B. 5 : 1 C. 5 : 2 D. 2 : 1
91	At 100 atm, CH_4 develops:	A. Ideal attitude B. Non-ideal attitude C. Serious attitude D. Laughing attitude
	Compounds having -CH	A. Cyano compounds B. Nitro compounds

92	Compounds having -CH group are called as	B. Nitro compounds C. Carbon nitrogen compounds D. Nitriles
93	LiF is a crystalline substance and has	A. ionic crystal B. metallic crystal C. covalent crystal D. molecular crystal
94	Which gases are produced from landfills?	A. NH₃ B. H₂S C. N₂ D. All of these
95	The typical range of the H-bonding is:	A. 1-2 kj/mol of bonds B. 5-25 kj/mol of bonds C. 5-25 kj/mol of bonds D. 500 kj/mol of bonds
96	In metallic crystals the atomic orbitals combine to produce a large number of closely bands of energy according to	A. electron pool theory B. molecular orbital theory C. valence bond theory D. electrostatic force of attraction
97	The electrochemical reactions occurring at both the electrodes along with the electrolytic conduction constitute	A. Oxidation B. reduction C. Redox reaction D. electrolysis
98	The type of structural isomerism which arises due to the difference in nature of carbon chains or carbon skeleton is.	A. Chain Isomerism B. Position Isomerism C. Sis-Trans Isomerism D. Optical Isomerism
99	The B.P of glycerine at 760 torr pressure is	A. 200°C B. 290C° C. 250C° D. 262C°
100	2-propanol on oxidation yield	A. Propionaldehyde B. Propanone C. Propanal D. Butanal
101	The mass of 8.5 $dm^3$of oxygen gas at 0.0821 atm and -1°C is	A. 100 g B. 10 g C. 1 g D. 0.1 g
102	In incinerating the waste is burnt at	A. 1000°C B. 100°C C. 2000°C D. 1500°C
103	Water is purified by:	A. Filtration B. aeration C. coagualation D. All of these
104	Nitrogen in the atmosphere is:	A. 78% B. 21% C. 0.9% D. 0.03%
105	$NaNO_3$and $CaCO_3$crystals are Rhombohedral isomrophism is due to	A. both soluble in water B. their cations belong to S block element C. same shape of NO₃⁻¹and CO₃⁻²ions which is triangular planar D. same number of O atoms
106	A mixture of H_2, H2 and CH_4has total number of 0.51 mole and total pressure of 1 atmosphere. If the mass of $H_2$is 0.8 gram, then its partial pressure is	A. 0.4 atm B. 0.6 atm C. 0.776 atm D. 0.667 atm
107	During oxidation process, oxidation number of an element	A. Decreases B. Increases C. Remains constant D. Both a and b
108	A solid has a sharp melting point slightly above room temperature and is a poor thermal and electrical conductor, its crystal classification by bond type is	A. Ionic B. Metallic C. Molecular D. Covalent
109	Which of the following is more reactive where 0-H bonds break	A. P°alcohol B. T° alcohol C. S°alcohol D. Cannot be predicated

110	In dilatometric method is directly proportional to extent of reaction	A. Change in concentration B. Change in pressure C. Chang in volume D. Change in temperature
111	The word polymer is derived from words poly mean many and mer means unit.	A. Latin B. Greek C. English D. French
112	Exhaust fumes of cars contain which poisonous gas	A. CH₄ B. C₂H₆ C. CO D. All of these
113	The Kw. of water at 25 C° is given by	A. 10(-7) B. 10(-10) C. 10(-12) D. 10(-14)
114	The substance upon which an enzyme acts is known as its	A. domain B. field C. substrate D. reactant
115	Which of the following species is used to formation of glycerol fatty acid from triglyceride	A. NaOH B. Ni C. Lipase D. All
116	Consider the following reaction R-CHO + 2Ag(NH3)2OH + R-COONH+ +2Ag+2NH3+H2OThis reaction represents	A. Fehling test B. Ninhydrin test C. Benedict lest D. Tollen's test
117	An organic compound made from oxidation of ethanol is	A. Formic acid B. Acetic acid C. Malonic acid D. Citric acid
118	Halogen is a halo derivative of	A. Ethanol B. Methane C. Methanol D. Ethane
119	Type of polymer formed by teh polymerization of single type of monomer is:	A. Homopolymer B. Copolymer C. terpolymer D. All of these
120	Ionic crystals are brittle because	A. they have cubic geometry B. they are bad conductors of electricity C. coordination number of cations and anions is same D. cations and anions are arranged in alternate positions in layers
121	Increased awareness of environmental issues has led chemists to develop products and processes that do not impact on the environment in terms of pollution or depletion of sources. To help chemist to achieve this aim, some principles are drawn. Which one is not the guiding principle	A. Avoid waste production B. Use no solvent C. Use a catalyst D. Devise a multistep procedure for synthesis of new compounds
122	All the following have crystals except:	A. potassium bromide B. diamond C. cadmium sulphide D. sodium chloride
123	The element which has greatest value of Reduction potential is used as	A. Strongest reducing agent B. Weak oxidizing and strong reducing agent C. Strongest oxidizing agent D. None of these
124	Which is the polymer that has amide linkage in its structure	A. PVC B. Poly ethene C. Polyester D. Nylon
125	An example of bydrolase is	A. Amylase B. Lipase C. Fumarase D. A,C
126	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

127	Which one of the following statements about glucose and sucrose is incorrect:	A. both are soluble in water B. both are naturally occurring C. both are carbohydrates D. both are disacharides
128	Which heavy metals do not have any safe limits	A. As B. Hg C. Cr D. All of these
129	Which liquid is more volatile?	A. water B. mercury C. benzene D. honey
130	Solid waster of the city is disposed off by dumping in a landfill. Which of the following gas is produced in the landfill	A. Oxygen B. Chlorine C. Hydrogen sulphide D. Hydrogen chloride gas
131	Aniline is the derivative of the benzene containing the	A. Hydroxyl group B. Amino group C. Amido group D. Imido group
132	A polymer may be	A. Linear B. Branched C. Cross linked D. All of these
133	Substances that tend to decrease the activity of enzymes are called:	A. coenzymes B. activators C. inhibitors D. apoenzyme
134	Which of the following is the unit for pressure of a gas in system international	A. Nm⁻² B. mm of Hg C. atmosphere D. torrr
135	Which of the following compound is least reactive	A. HCHO B. CH3CHO C. CH3COCH3 D. C6H5CHO
136	Which one of the following is used as coagulant for purification potable water	A. Copper sulphate B. Alum C. Barium sulphate D. Nickel sulphate
137	In which system hydrogen bonding is not present	A. solution of ethanol in water B. linking of helix in protein molecule C. structure of ice D. solution of NaCl in benzene
138	Which of spectral lines when atoms are subjected to strong electric field is called:	A. Compton effect B. Stark effect C. Zeeman effect D. Photoelectric effect
139	Monosacharide belong to the group	A. Fats B. Carbohydrates C. Lipids D. Proteins
140	The conversion of molecules of A to B follows a second order kineties. Doubling the concentration of A will inerease the rate of formation of B by a factor of	A. 2 B. 4 C. 1/2 D. 1/4
141	Corrundam is ore of which element?	A. Al B. Th C. In D. Mg
142	The crystal of diamond is	A. ionic B. molecular C. covalent D. metallic
143	In a group, the atomic radii from top to bottom	A. increase B. decrease C. don't change D. show variable trend
144	Fine powder gypsum is mixed with clinker up to:	A. 4% B. 6% C. 5% D. 7%
145	For a chemical reaction in which one of the reactant also act as solvent, the order will be	A. First order B. Third order C. Second order D. pseudo first order

	order will be	D. pseudo-first order
146	Monohalo derivatives of alkanes are called:	A. two glucose molecules B. alkyl halide C. alkenes D. imide
147	The Sl mechanism for the hydrolysis of an alkyl halide to an alcohol involves the formation of	A. Carbocation B. Carbanion C. Pentavalent carbon in the transition state D. Free radical
148	One of the environment 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 fluorine trapped in it D. Use a sorbent having Al₂O₃trapped in it
149	The deviation of a real gas from ideal behaviour is maximum at	A. -10.0°C and 50 atm B. -10°C and 2 atm C. 100°C and 2.0 atm D. 0°C and 2 atm
150	Identify the linear polymer out of following	A. Amylose B. Amylopectin C. Starch D. Glycogen
151	CFCs are mainly used in industries due to	A. Low cost B. Gaseous nature C. High reactivity D. Un stability
152	How much quantity of water is in the domestic use	A. 0.08% B. 16% C. 24% D. 90%
153	The boiling point of radon (211k)id higher than boiling point of helium (4.4k). This is due to the reason that:	A. the atomic mass Rn is larger than that of He B. the atomic mass Rn is larger than that of He C. the dispersion forces between Rn atoms are more prominent than between he atoms D. rn atomic number of Rn is larger than that of He
154	Which of these polymers is a synthetic polymer?	A. Animal fat B. Starch C. Cellulose D. Polyester
155	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
156	Ionic solids don't conduct the electrical current because	A. ion do not have translatory motion B. free electrons are less C. the coordination number of the ion is very high D. strong covalent bonds are present in their structure
157	When benzene reacts with acetyl chloride in the presence of AlCl acetophenone is formed.The electrophile in this reaction will be.	A. CH3 C+O B. AlCl3 C. C+H2 D. CH3 COCl
158	In the reaction A2 (g) + 4B2 (g) <----------> 2AB4 (g) such that ΔH < 0, the formation of AB4(g) will be favoured at	A. Low temperature and high pressure B. Low temperature and low pressure C. High temperature and low pressure D. High temperature and high pressure
159	Which of the following reactants will be required to form ethene from ethyl chloride	A. _{Alcoholic KOH} B. Alkaline KMnO4 C. Aqucous KOH D. Aqucous NaOH
160	According to Lowery Bronsted concept, which of the following is considered as an acid?	A. BF3 B. OH- C. H3O+ D. Cl-
161	Which one of the following is not true of metallic bonding?	A. it gives rise to excellent electrical conductivity B. electrons are following to move throughout the structure C. the strength of metallic bonds increases down a group D. the strength of metallic bonding affects the boiling point of metals
162	Sponification is the hydrolysis of fast or fats or4 oils with an/a:	A. acid B. alkali C. enzyme D. metallic ion
163	The kinetic energy of 4 moles of nitrogen gas at 127°C is? cals.(R = 2 cal	A. 4400 B. 3200 C. 4800

	mol^{-1} K^{-1})	D. 1524
164	The change in enthalpy when one mole of a substance is dissolved in a specified quantity of solvent at a given temperature is called	A. Heat of reaction B. Heat of solvation C. Heat of combustion D. Heat of solvent
165	What is the co-ordination number of face centered cubic structure?	A. 12 B. 8 C. 6 D. 10
166	The Complete oxidation of ethanol produces first Ethanal than	A. Ethanal B. Propanone C. Ethanoic acid D. Benzoic acid
167	The study of which one of the followings guides to the mechanism of the reaction	A. Order of reaction B. Rate of reaction C. Half-life period of reaction D. Rate determining step
168	Air pollution causes	A. Acid rain B. O₃ depletion C. Green House Effect D. All
169	Benzene has pi electron	A. 2 B. 4 C. 6 D. 8
170	The number of NaCl molecules in unit cell of its crystal is	A. 2 B. 4 C. 6 D. 8
171	Ammonia gas used directly as a fertilizer injected into the soil at a depth of about:	A. two inches B. three inches C. five inches D. six inches
172	Malt sugar is converted into glucose by an enzyme invertase present in yeast. The process is known as:	A. dehydration B. condensation C. fermentation D. oxidation
173	Which of the following gases shows more ideal behaviour at $0^{o}C$	A. H₂ B. CH₄ C. He D. NH₃
174	Polymerization process was classified in	A. 1926 B. 1927 C. 1929 D. 1931
175	Which of the following gases diffuse quickly:	A. N₂ B. NH₃ C. CO₂ D. Cl₂
176	The system in which two out of three axes are of equal length and angles are all 90°	A. cubic system B. hexagonal system C. trigonal system D. tetragonal system
177	If v is the volume of one molecule of a gas under given conditions, then Van der Waals constant b is ($N_A$is Avogadro number)	
178	Mathematically, Boyle's law is indicated as:	A. VT = K B. PT = K C. PV = K D. None of these
179	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
180	RNA is a polymer of a 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
181	Which will not react with phenol	A. NaOH B. Br2 C. KMn04/OH- D. Na

182	Ozone layer is	A. 25 - 28 km high B. 26 - 29 km high C. 24 - 27 km high D. 20 - 28 km high
183	Dissolved impurities of potable water can be separated by the process of	A. reduction B. Aeration C. Electrolysis D. Co-angulation
184	The structure of protein helps protein to	A. be in proper shape B. attach substrate C. perform is function D. All of these
185	Identify the compound, which give iodoform test	A. Methanol B. 3- Hexanol C. Methyl ketone D. Propionaldehyde
186	The amount of heat absorbed when one mole of a liquid is changed into vapours at its boiling point is called	A. Heat of sublimation B. Heat of vaporization C. Heat of fusion D. Enthalpy change
187	SiO_2 is an example of:	A. metallic crystals B. Ionic crystals C. a crystal whose structure depending upon the temperature D. covalent crystals
188	Potency and turn over are terms related to:	A. enzymes B. proteins C. fats D. oils
189	D-block elements are also called	A. Non-typical transition element B. Outer transition elements C. Abnormal transition elements D. Inner transition
190	What does no happen when an ideal gas is heated?	A. an increase in the average energy of the gas particles B. an expansion in the range of kinetic energies possessed by particles C. an increase in the number of molecules with lower energies D. a drop in the number of molecules with lower energies
191	When stress is applied to the metals, the metals are malleable and ductile because	A. their layers slip pass each other B. atoms lose electrons C. mobility of electrons increased D. none of the above
192	Which of the following statement about the order of reaction is true?	A. The order of reaction can only be determined by experiment B. a second order reaction is also bimolecular C. The order of reaction is always non-zero D. The order of reaction increases with increasing temperature
193	The starting substance for the preparation of iodoform is any of the following, except	A. CH3CH(OH)CH3 B. CH3CH2OH C. HCH2OH D. CH3COCH3
194	Ornithine is	A. A basic amino acid B. An essential amino acid C. Present in protein structure D. All of these
195	The most suitable temperature for preparing ammonia gas is	A. 250°C B. 450°C C. 350°C D. 550°C
196	Which substances do not react immediately with bromine water	A. Wthane B. Benzene C. Ethene D. Phenol
197	First order of protein structure refers to	A. Bending of protein chain B. Number and sequence of amino acids C. Three dimensional structure of protein D. Site of disulfide bonds
198	Which is not mineral of Al?	A. Diaspore B. Corrundam C. Bauxite D. Galena
199	In the reaction A2 (g) + 4B2 (g) <----------> 2AB4 (g) such that $\Delta H < 0$, the formation of AB4(g) will be favoured at	A. Low temperature and high pressure B. Low temperature and low pressure C. High temperature and low pressure D. High temperature and high pressure
200	Detergents are:	A. synthetic products B. natural product C. both a and b D. none of the above

201	Which is not an enzyme	A. Transverses B. Lipase C. Lyase D. None of these
202	In Case of elements the polymorphism is called	A. Isotopic form B. Allotropy C. Isomorphism D. Crystalline forms
203	Which of the following is not a property of enzymes?	A. extraordinary speciffcity B. reversibility of reactions C. high efficiency D. minimum activity at optimum T
204	Which of the following is the element not present in all proteins?	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur
205	At constant volume, for a fixed number of moles of a gas the pressure of the gas increases with size of temperature due to	A. increase in average molecular speed B. increase in number of moles C. increase in molecular attraction D. decrease in the distance between the molecules
206	Which of the following polymer has application in paper industry	A. Starch B. Glycogen C. Protein D. All
207	Which of the following is precursor of T3 and T4	A. Gaba B. Dopa C. B-Alanine D. Di-iodotyrosine
208	Which of the following is a thermosetting plastic?	A. PVC B. polyethylene C. polystyrene D. melamines
209	Which of the following is electrophile for alkylation?	A. NO+2 B. SO3 C. R+ D. Both a & b
210	Site of land for landfill is selected based upon.	A. topography B. location of ground C. water table D. All of these
211	Which one of the following is not air pollutant gas	A. CO B. CO₂ C. NO D. SO₂
212	Which of the following is not a correct postulate of the kinetic theory of gases	A. the gas molecules are in random motion B. the collision between the molecules are perfectly elastic C. the average kinetic energies of different gases are equal at a particular temperature D. the pressure exerted on the walls of the container is due to intermolecular forces
213	At different temperature, the vapour pressure of water is	A. different B. same C. low D. high
214	Sponification is the hydrolysis of fats or oil with an/a:	A. enzyme B. me5tallic ion C. acid D. alkali
215	Relationship between volume of a gas and prevailing conditions of temperature and pressure are called	A. Gas laws B. Equilibrium laws C. Rate laws D. None of these
216	A term to express the partial pressure of water vapours in a gas is known as	A. vapour pressure B. aqueous tension C. partial pressure D. moisture
217	What is the formula of magnesite?	A. PbS B. MgSO4. 7H2O C. MgCO3 D. CaCO3
218	Steroids belong to the class	A. Waxes B. Glycosides C. Phospholipids D. Lipids
219	The nature of I_2crystals are	A. Metallic B. Covalent C. Ionic D. Molecular

220	The density of neon will be highest at	A. STP B. 0°C, 2 atm C. 273°C, 1 atm D. 273°C, 2 atm
221	Crystal lattice with alternate +ve and -ve ions has radius ratio of 0.524.Its coordination number is	A. 4 B. 3 C. 6 D. 12
222	London forces are more affective at:	A. high temperature B. low temperature C. low pressure D. high pressure
223	Which one of the following test is given by both aldehyde and ketone?	A. Silver mirror test B. Fehling's solution test C. 2,4 DNPH test D. Benedict's solution test
224	The volume of a gas that is occupied by its one mole at STP is called	A. total volume B. normal volume C. molar volume D. atomic volume
225	Augus smith discovered in the mid of seventeenth century:	A. acid B. Base C. Acid rain D. Fertilizer
226	The shape of $[Co(NH_3)_6]^{3+}$ complex is.	A. Linear B. Octahedral C. T Tetrahedral D. Square planer
227	Ozone is usually produced in the	A. South polar region B. North pole region C. Tropical region D. Thermosphere zone
228	Chemistry related to the study of environment affected by the chemicals and pollutants is called:	A. Biochemistry B. Physically chemistry C. Pharmaceutical chemistry D. Environmental chemistry
229	Atoms having same mass number but different atomic numbers are called.	A. Isotopes B. isobars C. Isotones D. isomers
230	The synthesis of ethene from ethyl alcohol is a reaction	A. Dehydration B. Polymerization C. Addition D. Substitution
231	London forces are more affective at	A. low temperature B. high temperature C. low pressure D. low temperature and high pressure
232	The attractive forces between molecules of a gas and their sizes can be ignored at	A. high pressure B. low temperature C. low temperature and high pressure D. low pressure and high temperature
233	The gases H_2, O_2, H_2S and SO_2diffuse in the order	A. SO₂H₂S_{2>}O₂ B. H₂S₂SO₂O₂H₂ C. O₂SO₂H₂H₂S D. H₂O₂H₂S<sub>SO₂
234	The respiration process taking place in animals depends on a difference in	A. Partial pressure B. Osomotic pressure C. Vapour pressure D. Atomospheric pressure
235	At constant temperature when pressure of a gas is plotted against volume, the curve is:	A. Slanting straight line. B. Parabolic. C. Straight line, parallel to pressure axis. D. Of neither type.
236	Which one of the following is water soluble vitamin?	A. Niacin B. Riboflavin C. Trypsin D. Ascorbic acid
237	Which of the following alcohol cannot be produced by treatment of aldehydes or ketones with NaBH4	A. I-propanol B. 2-Methyl-2-propanol C. 2-propanol D. Ethanol
238	When the concentration of reactants is taken as unity the rate of reaction is equal to	A. average rate B. concentratian of reactant C. instantaneous rate D. specific rate constant

239	Which of the following is addition polymerization	A. PVA B. Polystyrene C. Both D. None
240	Ecosystem is a smaller unit of	A. Hydrosphere B. Lithosphere C. Biosphere D. Atmosphere
241	Which of the following statements is false?	A. Avogadro number = 6.02 x 10²¹ B. The relationship between average velocity (v) and root mean square velocity (u) is v = 0.9213 u C. The mean kinetic energy of an ideal gas is independent of the pressure of the gas D. The root mean square velocity of the gas can be calculated by the formula (3RT/M)^{1/2}
242	Which one of the following statements about diamond is not true?	A. the coordination number of carbon atoms is 4 B. diamond is an isotpe of graphite C. diamond has a high melting point D. diamond has a rigid tetrahedral, structure
243	Which one of the following amino acids is basic in nature?	A. Glycine B. Alanine C. Lysine D. Glutamic acid
244	Polymer formed by the combining of three different monomers is called:	A. Homopolymer B. Copolymer C. Ter polymer D. Thermoplastic polymers
245	Tertiary alcohols have alpha bydrogens	A. 1 B. Zero C. 2 D. 3
246	Choose the correct option regarding number of particles associated with one mole of a substance.	A. 6.03 x 10²⁴ B. 6.01 x 10¹⁹ C. 6.02 x 10²¹ D. 6.02 x 10²³
247	Which of the following contains maximum of number of molecules?	A. 100 cc of CO₂ at STP B. 150 cc of N₂at STP C. 50 cc of SO₂ at STP D. 200 cc of NH₃ at STP
248	Water in swimming pools is purified by adding	A. Sodium B. Chlorine C. Phosphorus D. Potassium
249	A protein rich in proline and hydroxy proline is	A. Globin B. Collagen C. Casein D. Histone
250	Which order of vapour pressure in the following liquids is correct	A. water > ethanol > acetone > ether B. ether > acetone > ethanol > water C. ether > ethanol > acetone > water D. water > ether > acetone > ethanol
251	The film forming components of paints are	A. resins B. thinners C. pigments D. driers
252	Polar ice caps and glaciers consists total earth water:	A. 1% B. 2% C. 3% D. 4%
253	Thermoplastic polymer can be softened and hardened when cool repeatredly, Which one is not a thermoplastic among he following?	A. epoxy resin B. PVC C. Plastic toys D. none of all
254	Vegetable oils are	A. Unsaturated fatty acids B. Glycosides of unsaturated fatty acids C. Glycosides of saturated fatty acids D. None
255	Methyl cyanide, on boiling with mineral acids yield	A. Acetic acid B. Formic acid C. Propanoie acid D. Butanoic acid
256	In esterification, the OH of carboxylic acid is replaced by	A. OR+ B. R+ C. OR D. R
257	London dispersion forces are the only force present among the:	A. molecules of water in liquid state B. atoms of helium in gaseous state at high temperature C. molecules of solid iodine D. molecules of hydrogen chloride gas

258	Decomposition of H_2O is	A. Endothermic reaction B. Nuclear reaction C. Exothermic reaction D. Zero nuclear reaction
259	The density of ice is $1.00gcm^{-3}$. What the volume of steam produced when 1.00-3 of ice is heated to $323^{\circ}C$ (596K) at a pressure of one atmosphere (101kPa)? [1 mol a gas occupies $24.0dm^3$ at $25a^{\circ}C$(295K)and one atmosphere.]	A. 0.267 dm³ B. 1.33 dm³ C. 2.67 dm³ D. 48.0 dm³
260	A doubly bonded carbon is	A. cannot be sp2 hybridized B. can be sp hybridized C. can attach with three carbons D. can attach with three hydrogens
261	Which of the following statement about graphite is not true?	A. The coordination number of carbon atoms is 4. B. the carbon atoms are arranged layers. C. the layers in graphite are attracted to each other weak forces. D. the corbon atoms use only three of their four outer electrons for covalent bonding.
262	All the metal shine when they are freshly cut The reason is	A. the conductivity of the metal is increased B. the process of cutting gives energy to the metal atoms C. the electrons become less delocalized according to valance bond theory D. the electrons are excited at higher energy levels and emit the photons when they fall back
263	Select the name of reedy plant from which word paper is derived:	A. Sunflower B. Water hyacinth C. Papyrus D. Rose
264	Which of the following is not heterocyclic compound?	A. Naphthalene B. Furan C. Pyridine D. Pyrrole
265	What is true for a molecule with standard geometry	A. It lacks a lp B. It can't be a donor C. It can be an acceptor D. All
266	In the reaction ? represents which one of the following products.	A. Ketone B. Aldehyde C. Formic acid D. Ether
267	Which one is correct about conjugate acid-base concept?	A. Conjugate base of a very weak acid is relatively very strong B. Conjugate base of a very weak acid is relatively very weak C. Conjugate base of a very strong acid is relatively very weak D. Both A and C
268	Most animals can not digest:	A. starch B. cellulose C. proteins D. glucose
269	The chemical reactivity of glass is reduced by the use of	A. fluxes B. formers C. stabilizers D. none of the above
270	Number of electrons involved in d-d transition of $[Ti(H_2O)6]+3$	A. 1 B. 3 C. 2 D. 4
271	Thrombin is locally used to stop	A. Heart disease B. Bleeding C. Blood D. None of these
272	The ratio of close packed atoms to tetrahedral holes in cubic close packing is	A. 1 : 1 B. 1 : 2 C. 1 : 3 D. 2 : 1
273	Sugar crystals belong to the system	A. cubic B. monoclinic C. triclinic D. orthorhombic
274	For incineration temperature range is (in ^{o}C)	A. 700-800 B. 800-900 C. 900-1000 D. 1000-1100
	The phenoxide ion is more	A. Lone pair oxygen atoms overlap with the delocalized bonding system in benzene B. Oxygen atom is directly bonded with benzene ring in the phnoxide ion

275	stable than ethoxide ion as	B. Oxygen atom is directly bonded with benzene ring in the phenoxide ion C. The negative charge is localized on oxygen atom of phenoxide ion D. The negative charge is deloclized on oxygen atom of othoxide ion
276	$AgNO_3$ is a polymorphic having two different crystalline forms which are	A. cubic, tetragonal B. monoclinic, hexagonal C. cubic, orthorhombic D. orthorhombic, rhombohedral
277	Insoluble ferric oxide is produced in the pH range:	A. 1 to 8 B. 6 to 9 C. 3 to 13 D. 8 to 13
278	If V_1= 5 litters, P_1= 2 atm, T_1= 273°C, T_2= 0°C and V_2= ? When P_2= 1 atm.	A. 5 lit B. 10 lit C. 2.5 lit D. 12.5 lit
279	In NO3 the oxidation number of N is.	A. +5 B. +2 C. +3 D. -3
280	The transition temperature of KNO3, is	A. 13.2°C B. 95.5°C C. 128°C D. 32.02°C
281	Optimum PH for enzyme pepsin is	A. 01 B. 2 C. 05 D. 6.5
282	The product of the molecular mass of repeating units and the D.P is called of polymer:	A. Molecular formula B. Empirical formula C. Molecular mass D. Empirical mass
283	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 reactive chemically
284	Which noble gas is alpha emitter?	A. Xenon B. Radon C. Krypton D. Argon
285	The products of electrolysis of which of the followings are known	A. Fused electrolyte B. Aqueous solution of eleetrolyte C. Solid electrolyte D. Solid metal
286	$C_6H_{12}O_6$is molecular formula of:	A. Glucose B. Dextrose C. Fructose D. All of these
287	Which is not a calcareous material:	A. Lime B. Marble C. Clay D. Marine shel
288	What is the reason of ionic solids for not conducting electricity?	A. free electrons are less B. ions don't have translatory mention. C. ions don't have translatory mention D. the coordination number of the ion is very high.
289	An ideal gas cannot be liquefied because:	A. It solidify before becoming a liquid B. Its critical temperature is always above 0^oC C. It is molecule are relatively smaller in size. D. Forces operative between its molecules are negligible
290	Glycogen is stored in	A. Animals B. Plants C. Soil D. None of these
291	Ozone is present in layer around earth:	A. atmosphere B. tropospher C. stratosphere D. thermosphere
292	Which one of the following is not associated with SN2 mechanism	A. 100 % inversion of configuration B. Tertiar alkyl halides C. 2nd order kinetics D. Change of hy bridization from sp^3 to sp^2 in transition state
293	Hardness which can be removed by boiling is called	A. Permanent hardness B. Temporary hardness C. Stiffness D. Toughness
294	Storage form of iron	A. Transferrin B. Ferritin C. Myosin

		D. Actin
295	Which substance among the following used in points to improve the mechanical properties?	A. filter B. binder C. pigment D. stablizer
296	TiCl4 is used as catalyst for manufacture of	A. Sulphuric acid B. Plastics C. Ethanol D. Tetraethyl lead
297	Which of the following is correct for epoxy resin	A. Coating material for thermal power stations B. It give chemical resistance C. Epichlorohydrin is monomer D. All of these
298	Ethanoic acid reacts with all of these to produce water except	A. Ethanol B. Sodium C. Caustic soda D. Sodium hydrogen carbonate
299	According to charles law there will be a change in the volume of a given mass of a gas by 1/273 of its original volume at 0°**C if the temperature of the gas is changed by**	A. 10° B. 1°C C. 100°C D. 2°C
300	Primar structure of proteins refers to	A. Coling and folding in form of specilie structure B. 3d structure C. Number of amino acids in a chain D. Alpha and Beta sheets
301	Polumerization process was classified by	A. W.H. Garold B. William Hackel C. W.H. Carothers D. H. Carothers
302	Butane molecule can have max no of isomers.	A. 4 B. 5 C. 3 D. 2
303	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
304	The vapour density of a gas is 11.2.The volume occupied by 11.2 g of this gas at N.T.P is	A. 22.4 litres B. 11.2 litres C. 1 litre D. 2.24 litres
305	Molecular ions are produced in mass spectrometer. Which type of molecular ion formed more abundantly.	A. Negatively charged B. H^+ ions C. Positively charged D. equal positive and negative ions
306	Which of the following alkyl halides undergoes SN1 reaction fastest	A. Methyl chloride B. Isobutyl chlorido C. Ethy l chloride D. Tertiary butyl chloride
307	How magnesium reacts with water?	A. In frozen ice water B. With cold water C. In with steam D. In hot state
308	The development of disagreeable odour in fats or oil is called	A. fragrance B. perfume C. rancidity D. smell
309	The word paper is derived form the name of which reedy plant:	A. rose B. sun flower C. papyrus D. water hyacinth
310	The isomerism in which the compounds differ with respect to functional group but have same molecular formula is called	A. Metamerism B. Functional group isomerism C. Position isomerism D. Chain isomerism
311	Question Image	
312	The mono atomic gas molecules are _____ gas molecules	A. Halogen B. Zero C. Noble D. Both b and c
313	Ammonium nitrate fertilizer is not used for which crop:	A. cotton B. wheat C. sugar cane

	is not used for which crop:	C. sugar cane D. paddy rice
314	Which thermometer will have its reading 273 degrees greater than that of thermometer C?	A. A B. B C. B has 273 degrees greater than A D. C has greater reading than all other thermometers
315	The actual volume of gas molecules is considered negligible at following pressures	A. 2atm B. 4atm C. 6 atm D. 8 atm
316	CO_2gas is dissolved in water due	A. dipole-dipole interactions B. higher molecular mass of CO₂ C. ion dipole attractive forces D. hydrogen bonding
317	Air at sea level is dense.This is a practical application of	A. Boyle's law B. Charle's law C. Avogadro's law D. Dalton's law
318	Example of basic essential amino acids	A. Arginine B. Histidine C. Lysine D. All of the above
319	Which of the following reagents reaet in same manner with HCHO, CH3CHO andCH3COCH3	A. HCN B. Cu2(OH)2/ NaOH C. Ammonical AgNO3 D. Cu(OH)2 only
320	At constant pressure, if the original volume is 546 cm^3at which temperature the volume of gas 552 cm^3	A. 1°C B. 2°C C. 3°C D. 4°C
321	Usually the % of moisture in paper is:	A. 1---3% B. 6---8% C. 4---6% D. 5%
322	Three elements needed for the healthy growth of plants are	A. N P K B. N K C C. N S P D. N Ca P
323	Which of the following equations represents the 2nd ionization energy of Na?	A. Na(g) ---> Na²⁺ (g) + 2e⁻ B. Na(s) ---> Na²⁺ (g) + 2e⁻ C. Na⁺(s) ---> Na²⁺ (g) + e⁻ D. Na⁺(g) ---> Na²⁺ (g) + e⁻
324	Which one of the following elements is most electropositive out of group I -A and II-A group?	A. K B. Mg C. Na D. Ca
325	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
326	Which of the following molecules has angel of 120°	A. BeCl2 B. BF3 C. CH4 D. NH3
327	Test of incomplete combustion of petrol in the presence of	A. CO₂ B. SO₂ C. NO₂ D. Co
328	By the mid of 1980s depletion of total overhead ozone in antarctic region is	A. 20% B. 30% C. 40% D. 50%
329	The enzymes that catalyse the addition or removal of ammonia are:	A. Lyases B. Ligases C. Transferases D. Kinses
330	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
331	Which one of the following organic acids is made from methanol	A. Propanoic acid B. Butanoic acid C. Formic acid D. Acetic acid
332	The unit of pressure _____ is commonly used	A. mm of Hg B. Kilopascal C. Millibar

	by meteorologists	D. Pound per square inch
333	Ethene $C_2H_4$and N_2gases diffuse at the same rate at room temperature. it is due to the reason	A. these are non polar gases B. their molecular masses are same C. both are covalent molecules D. both have multiple bonds
334	H-bonding is maximum in:	A. ethanol B. benzene C. diethyl ether D. water
335	Which of the following is soluble in water?	A. CH3OH B. CCL4 C. CHCl3 D. CS2
336	BOD is the oxygen demand with in day(s):	A. Four B. Two C. Three D. Five
337	Equal volume of all gases at same temperature and pressure contain number of molecules	A. different B. multiples C. equal D. in fractions
338	Under which condition CO has the maximum molar volume.	A. high T and P B. Low T and High p C. high T and low pressure D. Low T and low P
339	Potable water is considered to be	A. Safe for human consumption B. The ground water C. The surface water D. Now safe for human consumption
340	Reason for the rancidity of fat is	A. Low sponification B. High reactivity of fat C. Oxidation of fat D. All
341	which one of the following statements bout negative ions is incorrect?	A. they are also know as anions B. they are formed when atoms gain electrons C. they are large than the atom from which they were formed D. they are smaller than the atom from which they were formed
342	Hydrocarbons, SO_2, CO, NH_3nitrogen oxides and compounds of fluorine are called	A. Primary pollutant B. Secondary pollutant C. Tertiary pollutant D. None of these
343	Freshly cut metals have a shining surface because	A. electrons excited, then excited electrons release energy as light B. metals have brittle nature C. metals conductivity increases D. metals are malleable and ductile
344	Lanthanides an actinides belong to following group of periodic table:	A. IB B. VIIIB C. IIB D. IIIB
345	The normal amount of overhead ozone is about	A. 250 Du B. 300 DU C. 350 DU D. 400 DU
346	The highest temperature at which gas can be liquefied and above which liquefaction is impossible is called	A. Boiling temperature B. Upper consulate temperature C. Transition temperature D. Critical temperature
347	Carboxylic acid having three carboxyl groups are:	A. Mono carboxylic acid B. Di-carboxylic acid C. Tri-carboxylic acid D. Tetra carboxylic acid
348	Total heat content of a system is called	A. Internal energy B. Entropy C. Enthalpy D. All of these
349	Carboxylic acids having carboxyl group one is called:	A. Mono carboxylic acid B. Di-carboxylic acid C. Teri-carboxylic acid D. Tetra carboxylic acid
350	The ratio of diffusion of equal volume of He and $SO_2$is (molecular mass He = 4, SO_2 = 64):	A. 1:4 B. 16:1 C. 1:16 D. 4:1
351	When 1-butene reacts with bromine, the product formed will be	A. 1, 3-dihydroxy butane B. But-1, 2-diol C. 1, 3-dihydroxy butan-diol

	formed will be	D. 1,2-dibromo butane
352	For the reaction H2(g) +I2 (g) <---------> 2HI(g). The equilibrium constant changes with	A. Total pressure B. Catalyst C. Concentration of H2 and I2 D. Temperature
353	Which of the following would react with ozone in the atmosphere?	A. F B. Cl C. O2 D. O
354	When equal proportion of DH3_ I and C2H5 ___ I are treated with Na metal in preasence4 of dry ether, the number of possible hydrocarbons obtained will be:	A. 5 B. 4 C. 3 D. 2
355	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 if 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
356	All of the following are aliphatic amino acids except	A. Glycine B. Alanine C. Proline D. Lysine
357	All of the following are non covalent except	A. Hydrophobic interactions B. Disulphide bond C. Hydrogen bond D. Electrostatic bond
358	Intermolecular forces are _____ than binding forces	A. stronger B. Equal C. Weaker D. None
359	Boiling point of H_2O is higher than that of HF although F is more electronegative than O. It is due to	A. stronger dipole dipole forces in H₂O B. H₂O is neutral HF is acidic C. H₂O is angular, but HF is linear D. number of hydrogen bonds more in H₂Othan in HF
360	Iodine number of an oil indicates its:	A. molecular weight B. purity C. degree of unsaturation D. acidic strength
361	The reaction that generates an ionic bond is	A. Halogenation of ethene B. polymerization of ethene C. Hydrogenation of ethyne D. Reaction of ethyne withs sodamide
362	The bonding which occurs among polar covalent molecules containing H and one of the small electronegative element such as O, F or N is called	A. bridge bonding B. metallic bonding C. hydrogen bonding D. Ionic bonding
363	Acidification of soil can leach metal:	A. Al B. Hg C. Pb D. Ca
364	Urea is the most widely used nitrogen fertilizers in Pakistan. Its composition is	A. NH₂CO B. N₂H₅CO₂ C. N₂H₄CO₂ D. N₂H₄CO
365	Requirement of macronutrient per acre of the land is	A. 5 to 200 kg B. 20-200 kg C. 200-400 kg D. 30-400 kg
366	The intramolecular forces in gases are:	A. Weak. B. Normal. C. Very weak. D. Strong.
367	A chemist says that glass must be a super cooled liquid. the reason that he might have in his mind is that glass has:	A. Definite shape B. Definite volume C. Crystalline structure D. No crystalline structure
368	which of the following is not a symmetrical ketone	A. 4-heptanone B. Butanone C. Propanone D. 3-pentanone
369	In a period the atomic radii	A. increase B. decrease C. remain same D. first increase, then decreased

		D. first increase, then decreased
370	The process of effusion is best understood by law	A. Grahams B. Boyle s C. Charles s D. Avogadro s
371	The pH range of the acid rain is:	A. 6.5 __ 6 B. Less than 5 C. 8 __ 7.5 D. 7 __ 6.5
372	Reason of pollution are:	A. Population and urbanization B. Transportation C. Industrialization D. All of these
373	Polysaccharides are also called	A. Crystals B. Sugars C. Liquids D. Non Sugars
374	The reaction of bromine with benzene in the presence of FeBr3 follows the mechanism of	A. Electrophilic addition B. Nucleophilic substution C. Electrophilic substitution D. Nucleophilic addition
375	Poly hydroxyl compounds of aldehyde and ketones are?	A. Carbohydrates B. Proteins C. Fats D. Lipids
376	To distinguish aldehyde from ketone which solution is used	A. Alkaline solution B. Fehling's solution C. A solution containing K2Cr2O7 D. A solution containing acid only
377	Which one of following property is not true about alkali metals?	A. Strongest bases due to their hydrides B. Low ionization energy C. Oxidation number more than +1 D. Form acidic oxides
378	In a crystal the atoms are locate at the position of:	A. infinite potential energy B. minimum potential energy C. Zero potential energy D. maximum potential
379	The formation of acetic anhydride from acetic acid follows the mechanism	A. SN B. AN C. SE D. AE
380	In elimination reaction , alcoholic KOH is used - OH in this case will act as.	A. Electrphile B. Base C. Leaving group D. Acid
381	Why a C - Cl bond breaks by uv light	A. Cl is most electronegative B. Cl is volatile C. C - Cl bond energy is smaller than that of C - H bond energy D. Uv light provides energy which is sufficient to break C - Cl bond and not C - H bond
382	Cotton is an example of	A. animal fibre B. mineral fibre C. vegetable fibre D. synthetic fibre
383	Which one of the following is an appropriate indication of positive iodoform test?	A. Formation of H2O B. Brick red precipitate C. Release of H2 gas D. Yellow precipitate
384	Which is biopolymer?	A. Plastic B. Rubber C. synthetic fiber D. Lipid
385	Which one of the following is a powerful electrophile used to attack on the electrons of benzene ring?	A. FeCl2 B. Cl+ C. FeCl-4 D. Cl2
386	The instrument that is used to measure the pressure of a gas is called	A. viscometer B. photometer C. barometer D. stalagmometer
387	Which of the following gives positive haloform test and positive Fehling solution	A. Acetone B. Echanol C. Acetaldehyde D. Formaldehyde
388	Succinic thiokinase is an enzyme of the type	A. mutase B. peroxidase C. ligase D. lyase

389	Empirical formula of monosaccharide is	A. (CHO)_n B. CH_nO_{n+1} C. C_nH₂O D. (CH₂O)_n
390	Which of the following does not obey general formulas of monosaccharide	A. Mannose B. Fructose C. Glucose D. Deoxyribose
391	consider the physical properties of the gases. Which of the following statements about particles of gases is incorrect? The particles are:	A. causing pressure B. having wide spaces C. orderly arranged D. randomly moving
392	Pressure remain constant at which temperature the volume of gas becomes twice of what it is at 0°C	A. 546 °C B. 546K C. 200°C D. 273K
393	Reaction of alkyl halides with potassium cyanide in the presence of alcohols give:	A. Carboxylic acids B. Aldehydess C. Alkyl nitriles D. Acid amides
394	Alcohol is less acidie than phenol due to	A. higher ka value B. Instability of alkoxide ion C. stability of carbocation D. Stability of phenol
395	In purification of potable water the coagulant used is:	A. Nickel sulphate B. Copper sulphate C. Barium sulphate D. Aluminium sulphate
396	Meniscus is the shape of the surface of a liquid in a cylindrical container:	A. meniscus may be convex B. meniscus is concave C. meniscus may be convex or concave depending upon the nature of metal D. meniscus is plane
397	Butyric acid was named from butyrum means:	A. Red out B. Vinegar C. Butter D. Milk
398	An ideal gas obeying kinetic gas equation can be liquefied if	A. Its temperature is more than critical temperature B. Its pressure is more than critical pressure C. Its pressure is more than critical pressure but temperature is less than critical temperature D. It cannot be liquefied at any value of P and T
399	Biological oxygen demand (BOD) is associated with	A. Organic matter B. Micro organisms C. Both a and b D. None
400	Which is correct?	A. 1 mm Hg = 1 torr = 1 atm B. 1 mm Hg = 760 torr = 1 atm C. 760 mm Hg = 760 torr = 1 atm D. 760 mm Hg = 1 torr = 1 atm
401	An alcohol is converted to an aldehyde with same number of carbon atoms as that of alcohol in the presence of K2Cr2O7/H2S04 the alcohol is	A. CH3C(CH3)2OH B. (CH3)3COH C. CH3CH2CH2OH D. (CH3)2CHOH
402	The active group of glutathione is	A. Amino group B. Sulfhydryl group C. Carboxylic group D. Imino group
403	The concentration of dissolved molecular oxygen in water which acts as the most important oxidizing agent ranges form:	A. 2ppm - 6ppm B. 2ppm - 4ppm C. 4ppm - 8ppm D. 2ppm - 3ppm
404	Most complex structure of protein is	A. Primary protein B. Secondary protein C. Tertiary protein D. Quaternary protein
405	Which gas produces air pollution?	A. oxides of sulphur B. oxides of carbon C. all of these
406	If the reaction "P+Q→R+S' is deseribed as being of zero order with respect to P, it means that	A. P is catalyst in this reaction B. P molecules do not possess sufficient energy to react C. The concentration of P does not change during the reaction D. The rate of reaction is independent of the concentration of P
407	In SO_4^{-2} the oxidation	A. -8 B. -6

407	number of sulphur is	C. +8 D. +6
408	BOD means	A. Boron oxygen deuterium B. Biochemical oxygen demand C. Biochemical oxygen dissolved D. Biochemical oxygen death
409	Biochemical oxygen demand is the capacity of organic matter in natural water to consume oxygen	A. 2 days B. 5 days C. 6 days D. 7 days
410	Which of the following protein has application is food industry	A. Globulin B. Gelatin C. Casein D. All
411	Starch is a polymer of	A. Sucrose B. Fructose C. α-D-Glucose D. Lactose
412	A covalent bond may be	A. 100% covalent B. Partial ionic C. 100% ionic D. Both a and b
413	Which one of the following is an example of co-polymer?	A. Polyamide B. Polystyrene C. Polyvinyl acetate D. Polyvinyl chloride
414	d-d transition cannot be observed in	A. Cr B. Cu C. Mn D. Zn
415	All of the following substances are crystalline except:	A. carbon B. ice C. plastic D. sucrose
416	S.I units for measurements of pressure	A. Pascal B. mm of Hg C. atm D. Torr
417	The % age of nitrogen in ammonia is:	A. 80% B. 92% C. 90% D. 50%
418	What is the pressure of 2 mole of NH_3 at 27°C when its volume is 5 lit.in Van der Waals equation?(a = 0,17,b = 0.03711)	A. 10.33 atm B. 9.333 atm C. 9.74 atm D. 9.2 atm
419	Molar mass of repeating unit of PVC monomer is:	A. 43 B. 53 C. 63 D. 73
420	Substances that render enzymes catalytically inactive are called	A. coenzymes B. substrates C. inhibitors D. apoezymes
421	Which of the elements has seven electrons in d-subshell?	A. Zn B. Co C. Cu D. Fe
422	Transformation is a cyclic process in which used plactic is	A. Remelted and styrene is added B. Converted into low quality substance C. Converted back into original components D. None of these
423	The words smog is a combination of smoke and:	A. fog B. foke C. fork D. fizzy
424	When light is exposed to a typical transition element, then electrons jumps from low orbitals to higher orbitals in	A. f-orbitals B. s-orbitals C. p-orbitals D. d-orbitals
425	Which of the following does not give flame test?	A. Li B. Ba C. Mg D. Sr
	The most complex	A. 1° structure

426	The most complex strueture a single polypetide can assume is	B. 2°structure C. 3° structure D. 4° structure
427	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 above
428	The rate diffusion of $H_2$is 4 times than the of an unknown gas at same temperature and pressure, the molecular mass of unknown gas is	A. 32 B. 16 C. 4 D. 64
429	A polymeric substance that is formed in the liquid state and then hardened to a liquid solid us called as:	A. Fibre B. Plastic C. Varnish D. Polyamide resin
430	A molecule oilgosacharide on hydrolysis produces _____ molecules of monosacharide:	A. 1 B. 2 C. 4 D. 6
431	What change in plants indicates toxic effect of SO_2	A. Weathering of leaves B. Darkening of leaves C. Falling of leaves D. Bleaching of leaves
432	Which one of the following metals can replace the Copper from aqueous solution of its salt more easily?	A. Cd B. Fe C. Zn D. Na
433	Contaminated soil can be cleaned by various methods. Which method is not used to clean the soil	A. diffusion B. convection C. electrophoresis D. chromatography
434	Electrons in 5d energy level are filled up in case of	A. Lanthanides B. Transition metals C. Actinides D. Rare gases
435	Boiling point of water is higher (100°C) than that of ethanol (78.5°C) although both have hydrogen bonding. This is because	A. water molecules are closely packed B. water is more acidic than ethanol C. ethanol is an organic liquid D. number of hydrogen bonds are more in H₂O
436	Reaction of acetic acid with LiAlH4 gives	A. Ethanol B. Ethanal C. Ethane D. Ethyl acetate
437	Most of the universe consists of the matter in :	A. Gaseous state B. Liquid state C. Plazma state D. Solid state
438	Real gases deviate from the ideal behaviour at very	A. high pressure B. low temperature C. low pressure D. both a and b
439	Cellulose does:	A. Satisfy human appetite B. Stimulates intestinal peristalsis C. Fives fibre and bulk to the food D. All of these
440	Starch is a polymer is of:	A. sucrose B. fructose C. α-D-Glucose D. lactose
441	Naturally occurring isotopes of silver are	A. ,Two B. , Four C. , Forty seven D. , sixteen
442	Van der Waals equation explains the behaviour of	A. Real gases B. Mixture of gases C. Ideal gas D. Diatomic gases
443	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
444	What are the conditions under which the relation between volume (V) and	A. constant P and T B. constant P and V

	number of moles (n) of gas is plotted? (Pressure; T-temperature)	C. constant T and V D. constant n and v
445	$Cl_2$is a gas while iodine is a solid due to	A. stronger London forces with high polarizability B. greater electro negativity of Cl than iodine C. stronger dipole dipole forces D. iodine is colored while chlorine is colourless
446	How much pesticides have been synthesized at present?	A. Four thousand B. Six thousand C. Eight thousand D. Ten thousand
447	Which is not an essential amino acid	A. Leucine B. Methionine C. Histidine D. Lysine
448	Which of the following is used as coagulant for purification potable water?	A. Copper sulphate B. Barium sulphate C. Alum D. Nickel sulphate
449	Which one of the following is used as a typical catalyst for catalytic cracking.	A. C Mixture of SiO2 and Ni B. Mixture of Pt and Cu C. Mixture of Fe and MgO D. Mixture of SIO2 and Al2O3
450	Reaction of alcohol with hydrogen chloride, in the presence of Zinc chloride yields	A. Ketone B. Carboxylic C. Alkyl halide D. Ester
451	Electrical conductivity of graphite is greater in one direction that in other due to	A. Isomorphism B. Cleavage plane C. Anisotropy D. Symmetry
452	Which of the following solids has a simple molecular lattice?	A. magnesium oxide B. sodium C. silicon(IV) oxide D. sulphur
453	For a gas the isotherm is the graph between	A. V and T B. T and P C. n and T D. P and V
454	The unit of peptides is	A. Moiety B. Residue C. Polypeptide D. Both A and B
455	Liquefaction of gas can only be carried out if the:	A. without caring for the value critical volume at critical stage B. the temperature is more than critical and pressure is 1000 atm C. the temperature is below the critical and pressure is very high D. temperature is above the critical temperature and pressure can have any value
456	The diffusion of gasses at absolute zero will be:	A. Slightly decrease B. unchanged C. Slightly increased D. Zero
457	The radioactive disintegration of 238U92 is	A. First order B. Second order C. Third order D. Zero order
458	SN2-reactions can be usually observed in	A. Primary alkyl halide B. secondary alkyl halide C. Tertiary alkyl halide D. Both A. and B
459	Which of the following is not molecular crystal	A. Sugar B. Iodine C. Ice D. Graphite
460	Sulphate aerosols cause severe respiratory problems particularly among	A. Infants B. Women C. Young people D. Old people
461	The partial pressure of 0_2in the lungus is	A. 116 torr B. 159 torr C. 560 torr D. 760 torr
462	The densities of two gases are in the ratio of 1 : 16.The ration of their rates of diffusion is	A. 16 : 1 B. 4 : 1 C. 1 : 4 D. 1 : 16
463	Major cause of SO2 on global scale is	A. Volcanoes B. Electric sparks C. Combustion D. All

		D. <span style= color: rgb(0, 0, 0); font-family: Verdana, Tahoma; font-size: 12px; >All
464	Primary pollutants are:	A. oxides of sulphur B. oxides of carbon C. oxides of nitrogen D. All of these
465	Monosacharides belong to the group:	A. fats B. lipids C. carbhohydrates D. proteins
466	Poisoning of CO can be reveresed by giving oxygen at pressure:	A. low B. least C. medium D. High
467	Carboxylic acid having more than one carboxyl group are called:	A. Mono-carboxylic acid B. Di-carboxylic acid C. Tri-carboxylic acid D. Poly carboxylic acid
468	Globulin is	A. A basic protein B. A protein of low molecular weight C. Heat coagulable protein D. Easily soluble in water e.A fibrous protein
469	In which one of the following does the central atom not possess an 'octet' in its outer shell?	A. BH₃ B. CH₄ C. NH₃ D. H₂O
470	NH^3 shows a maximum boiling point among the hydrides of V-A group elements due to :	A. very small size of nitrogen B. lone pair of electrons present on nitrogen C. enhanced electronegative character of nitrogen D. pyramidal structure of NH³
471	Oxides of sulphur react in atmosphere by various reactions to form:	A. sulphates B. sulphites C. sulphides D. sulphate aerosols
472	The number of unpaired electrons present in Fe ions is	A. 1 B. 2 C. 5 D. 0
473	Which one of following elements is not present in all proteins?	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur
474	Acetic acid is obtained from:	A. Red out B. Vinegar C. Butter D. Milk
475	Which of the following statement is not true?	A. The pressure of a gas is due to collision of the gas molecules with the walls of the container. B. The molecular velocity of any gas is proportional to the square root of the absolute temperature. C. The rate of diffusion of a gas is directly proportional to the density of the gas at constant pressure. D. Kinetic energy of an ideal gas is directly proportional to the absolute temperature.
476	Which products are formed when triglyceride is hydrolysed	A. Glycerol B. Fatty acid C. Glycerin D. Both A and B
477	Why is it necessary to distill aldehyde formed from oxidation of primary alcohol through acidified potassium dichromate (VI) solution or acidified sodium dichromate (VI) solution.	A. Aldehyde formed may be oxidised further to carboxylic and concerned B. Aldehyde formed may react with primary alcohol the original reactant C. Aldehyde formed may be oxidised further to a ketone D. Aldehyde formed is unstable and decomposed back to original precuser, ie. primary alcohol
478	The average kinetic energy of an ideal gas per molecule is SI units at 25°C will be	A. 6.17 x 10⁻²¹ KJ B. 6.17 x 10⁻²¹ J C. 6.17 x 10⁻²⁰ J D. 7.16 x 10⁻²⁰ J
479	In many countries plastic waste is collected separetaly and sorted.Some of this is incinerated to provide heat for power stations. Why is pvc polyvinylchloride,removed from any waste that is to be incinerated?	A. It can be melted down and re-used B. its combustion products are harmful C. it destroys the ozone layer D. it does not burn easily
480	The semi solid wastes in landfills is called:	A. Landfill B. effluents C. Leachate D. Incineration

481	Ionic solids are characterized by which one of the following properties	A. moderately low pressure B. high vapour pressure C. good conductivity in solid state D. solubility in polar solvents
482	Among the following molecules, which one has coordinate covalent (dative) bond?	A. CCl4 B. CO2 C. CO D. CH4
483	At constant temperature, volume of given mass of gas in inversely proportional to pressure on it. This statement is according to:	A. Hook's law B. Graham's law C. Bolye's law D. Charle's law
484	Which of these polymers is a synthetic polymer	A. Animal fat B. Strach C. Cellulose D. Polyester
485	Which of following is oxidation state of oxygen in peroxides?	A. -2 B. 1/2 C. -1 D. +2
486	In which of the following molecules, strongest H-bond is shown?	A. hydrogen fluoride B. water C. hydrogen sulphide D. ammonia
487	Types of bonds between C terminal and N terminal is	A. Covalent B. Disulphide bond C. Peptide D. Ionic
488	DNA is a polynucleic acid. The monomer is known as a nucleotide. What is not the component of the nuleotide	A. Phosphate group B. Deoxy ribose sugar C. Uracil base D. Adenine base
489	The scope of environmental chemistry is to study:	A. Source of chemicals B. Transportation of chemicals C. Transportation of toxic chemical D. All of these
490	Number of moles present in 0.6 gram of silica is (Atomic mass Si = 28, O=16)	A. 0.01 mole B. 0.064 mole C. 0.044 mole D. 0.054 mole
491	The formation of ester from acetic aciad in presence of acid and ethanol is a	A. Nucleophilic substitution reaction B. Nucleophilic addition reaction C. Electrophilic substituion reaction D. Electrophilic addition reaction
492	In nucleophilie substitution bimolecular reaction the order of reaction with respect to substrate	A. 2 order B. 3 order C. 1st order D. Zero order
493	Ozone is a gas having boiling point	A. Unstable B. High C. Low D. Moderate
494	Compared with alkaline earth metals, the alkali metals exhibit.	A. lower ionization energies B. greater hardness C. high boiling point D. smaller ionic radii
495	Beryllium differs from other elements of group ll-A due to	A. high charge density B. comparatively high nuclear charge C. small radius D. all above
496	What will be the pH of 1.0 mol dm-3 of NH4OH, which is 1% dissociated	A. 2 B. 12 C. 0 D. 2.7
497	The compressibility factor of an ideal gas is	A. 0 B. 1 C. 2 D. 4
498	Which is the drived lipid?	A. Common fats B. Vitamin-D C. Common oils D. Spinolipids
499	Smell of cooking gas during leakage from gas cylinder is detected because of the property of:	A. Effusion B. Evapotration C. Diffusion D. Conduction

500	Vegetables oils are:	A. unsaturated fatty acids B. glycerides of unsaturated fatty acids C. glycerides of saturated fatty acids D. essential oils obtained from plants
501	How many moles of sodium are present in 0.1 g of sodium?	A. 4.3 x 10-1 B. 4.03 x 10-1 C. 4.01 x 10-2 D. 4.3 x 10-2
502	The 95.5% mass of Lithoshone 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
503	A solid nitrate fertilizer reacts with an alkali to produce a gas which turns damp pH paper blue:	A. NO₃ B. NHO₃ C. NH₂O D. N₂H₄O₃
504	A peptide having molecular mass of more than 10,000 is called as	A. Fat B. Vitamin C. Carbohydrate D. Proteins
505	The hydrocarbon with maximum B.P is	A. CH4 B. C6H14 C. C4H10 D. C2H6
506	Hard water can block radiators due to formation of	A. Insoluble calcium and magnesium salts B. Insoluble sodium salts C. In soluble phosphate salts D. Insoluble potassium salts
507	Many petroleum products are:	A. coloured B. colourless C. testy D. poisoinous
508	The fibre which is made form acrylonitrile as monomer	A. PVC B. rayon fibre C. acrylic fibre D. polyester fibre
509	Phenol is completely soluble in water above	A. 25°C B. 62.3ºC C. 68.5°C D. 66.50°c
510	If the energy of the activated complex lies close to energy of reactants, it means that reaction is	A. Slow B. Exothermic C. Endothermic D. Exothermic and fast
511	The word paper is derived from the name of which reedy plant	A. rose B. sun flower C. papyrus D. water hyacinth
512	In a cubic lattice a unit cell is shard equally by how many unit cells?	A. 4 B. 2 C. 6 D. 8
513	Which one of following statement about three about three states of matter is incorrect?	A. in solids the particles vibrate about fixed positions B. energy is released when a gas turns back to a liquid C. particles in gases move in a random manner D. the closer particles are together, smaller the force of attraction between them
514	A substances has M_r74.5, a melting point of 772°C and a boiling point of 1407°C. It conducts electricity only when in the liquid state.What is the bonding present in this substances?	A. covalent B. ionic C. metallic D. hydrogen bonding
515	Hydrogen bonding is involved in	A. Solubility B. Detergents C. Biological molecules D. All the above
516	Total number of valence electrons in phosphonium ion (PH4-) is	A. 8 B. 9 C. 12 D. 10
517	Freezing point will also be defined as that temperature at which its solid and liquid phases have the same.	A. Concentration B. Ratio between the particles C. Vapour pressure D. Attraction between the phases

518	Gas is enclosed in a container of 20cm3 with the moving piston. According to kinetic theory of gases, what is the effect on freely moving molecules of the gas if temperature is increased from 20°C to 100C.	A. Colliding capability of molecule will become lower B. Pressure will become one half C. Temperature has no effect on freely moving molecules D. Volume will be increased
519	Ozone in most of the tropical regions acts as a pollutant and cause	A. damages to eyes B. aggravates asthma C. chest discomfort D. all of these
520	Which of the following factors does not affect the SN1 rate is	A. Nucleophilicity of the attacking nucleophile B. Stability of the carbonium ion C. Solvent system D. The nature of leaving group
521	Mostly ionic compounds are produced between elements of group	A. IA and IIA B. IB and VIB C. IA. IIA and VII-A D. IA and IB
522	CFCs destroy ozone layer, How many ozone molecule a chlorine free radical can destroy:	A. 50,000 B. 100,00 C. 20,000 D. 10,000
523	Which of the following substance has maximum critical temperature	A. H₂O B. N₂ C. SO₂ D. Ne
524	Crystal can be classified in to .....basic crystal habits	A. 7 B. 4 C. 14 D. 3
525	Which of the following bonds is not present in NH4CL	A. Ionic bond B. Covalent bond C. Co-ordinate covalent bond D. De-localized covalent bond
526	A real gas obeying Vander Waal's 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
527	Chloroform is carcinogenic:	A. Heart B. Lungs C. Liver D. Kidney
528	Zn has	A. Zero unpaired electrons B. Three unpaired electrons C. Five unpaired electrons D. One paired electrons
529	Which one of the pollutants of automobile exhausts affects the nervous system or produces mental diseases	A. NO₂ B. SO₂ C. Hg D. Pb
530	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.
531	A semiconductor of Ge can be made p-type by adding	A. Trivalent impurity B. Tetravalent C. Pentavalent impurity D. Divalent impurity
532	Acetaldehyde cyanohydrin upon hydrolysis prodnces	A. Tartaric acid B. Malonic acid C. Formic acid D. Lactic acid
533	Which of the following is Homopolymer	A. Polyvinyl acetate B. Acrylic resin C. Polyester resins D. Both A and C
534	Which reagent is responsible for the conversion of ketone to secondar alcohul	A. NaAlH B. NaBH4 C. Al D. Red P
535	The mono atomic gases are	A. Halogens B. Noble gases C. 6h group elements D. Nitrogen and oxygen
	A fat or oil is characterized	A. acid number

536	A fat or oil is characterized for extent of unsaturation by one of the following number. Which one is:	A. acid number B. saoilucfucation umber C. rancidity number D. iodine number
537	Enthalpy of formation of one mole of ionic compound form gaseous ion under standard condition is called	A. Gibb's energy B. Gibb's energy C. Bond energy D. Lattice energy
538	Which value is designated as absolute zero or zero of the Kelvin scale?	A. -273.15°C B. -173.15°C C. 273°C D. none of these
539	Which one of the following statements about Glucose and sucrose is incorrect?	A. Both are soluble in water B. Both are naturally occurring C. Both are carbohydrates D. Both are disaccharides
540	Zwitterion is formed by	A. Lysine B. Benzoic acid C. Aniline D. Acetamide
541	The gecko a small lizard can up a smooth glass window the gecko has millions of microscopic hairs on its toes and each hair has thousand of pads at its tip the result is that the molecules in the pad are extremely close to the glass surface on which the gecko is climbing. What is the attraction between the gecko is climbing.	A. co-ordinate bonds B. covalent bonds C. ionic bonds D. van der Waals forces
542	The helical structure of protein is stabilized by	A. Peptide bond B. Covalent C. Hydrogen bond D. Glycoside bond
543	Proxy acetyl nitrate (PAN) is an irritant to human beings and it affect	A. Nose B. Stomach C. Eyes D. Ears
544	Dipole-dipole forces are present between:	A. non-polar molecules B. polar molecules C. both polar and non-polar D. none pf above
545	A polymer of polyvinyl chloride with DP 1000 has molecular or molar mass:	A. 630 B. 6300 C. 63000 D. 630000
546	All are examples of different classes of enzymes except	A. Hydrolases B. Isomerases C. Oxido-reductases D. Mutases
547	Which is inorganic polymer?	A. Plastic B. Rubber C. synthetic fiber D. Lipids
548	Which one of the following enthalpy change ins always exothermic?	A. Enthalpy of atomization B. Enthalpy of combustion C. Enthalpy of solution D. Enthalpy of formation
549	Tertiary structure of proteins involves EXCEPT	A. Domains B. Globular C. Fibrous D. Beta sheets
550	The steroids of fungi and yeast are called:	A. Vitamin D B. Vitamin D₂ C. Ergosterol D. Cholesterol
551	Men residence time of methane in atmosphere in years is:	A. 1-7 B. 2-7 C. 3-7 D. 4-7
552	Polymide is formed due to the condensation od hexane-dioic acid with	A. Hexane-1, 5- diamine B. Hexane-1, 6 -diamine C. Hexane-1, 4- diamine D. Hexane-2, 5- diamine

553	Which element exists as discrete small molecules in the solids state	A. Aluminum B. Silicon C. Iodine D. Sodium
554	A compound z' decolorizes bromine water and produces white ppt. The compound 'z'is	A. Alkane B. Alcohol C. Phenol D. Benzene
555	Which of these polymers is an addition polymer	A. Nylon 6, 6 B. Polystyrene C. Terylene D. Epoxy resin
556	which of the following is a typical transition metal?	A. Sc B. Y C. Ra D. Co
557	According to the general gas equation, density of an ideal gas depends upon	A. Pressure B. Temperature C. Molar mass of the gas D. All of the above
558	Hexamethylene reacts with _____ to prepare nylon 6,6	A. acetic acid B. adipic acid C. formic acid D. none of above
559	Which one of the following is an aromatic compound?	A. Benzene B. Thiophene C. Furan D. All of them
560	The minimum temperature recorded by Kelvin scale is:	A. 273K B. 373K C. Absolute scale is unable D. 0K to record this temperature
561	Which of the following gas cannot be liquefied by Linde s method	A. H₂O vapours B. N₂ C. H₂ D. CO₂
562	The amount of heat required to convert one mole of solid into liquid is called	A. molar heat of fusion B. heat of fusion C. heat of vaporization D. heat of liquefaction
563	If the number of gas molecules are doubled in the certain volume the pressure is:	A. Increased to four times B. Remains unchanged C. Doubeld D. Decrease to half
564	The units of ionic product of H2O is	A. Mole dm-3 B. Mole2 dm-6 C. Mole-1 dm-3 D. Mole-2 dm-6
565	The existing property of an element in to more than are crystalline state is termed as:	A. isomorphism B. polymorphism C. isotropy D. allotropy
566	Daily protein intake for normal adults should be	A. 0.2 g/kg B. 0.5 g/kg C. 0.8 g/kg D. 1.1 g/kg
567	Aromatic carboxylic acids have corboxyl group attached to group:	A. Alkyl group B. Aryl group C. Phenyl group D. Benzyl group
568	Which of the following is a strong acid	A. CH3COOH B. C2H5OH C. HCOOH D. Phenol
569	In the presence of hot alkaline potassium permanganate solution 2-butene will give	A. Formic acid +acetic acid B. Two moles ethanoic acid C. Two moles of methanoic acid D. Ethylene glycol
570	Dipole-dipole forces and London forces are collectively called	A. hydrogen bonding B. Vander Waals forces C. Covalent bonding D. Ionic bonding
571	Which of the following is basic amino acid	A. Lysine B. Histidne C. Proline D. Both a and b
572	In diamond, the carbon	A. tetrahedral manner B. hexagonal manner

	atoms are arranged in a	C. square planar manner D. octahedral manner
573	Coenzymes are the species which increase the activity of enzymes. They are chemically	A. Metal ions B. non-metals C. Organic acids D. Organic bases
574	Which of the following is not the application of plasma	A. Fluorescent light bulb B. Removal of hazardous chemical C. Neon signs D. Corrosion effective
575	General formula of aliphatic carboxylic acids:	A. R-OH B. R-COH C. R-CO-R D. RCOOH
576	The structural isomerism arises due to the difference in the	A. Number of atoms in the molecule B. Arrangements of atoms in the molecule C. Number as well as arrangement of atoms in the molecule D. Spatial arrangement of atoms
577	Identify the element that has maximum oxidation states.	A. Zinc B. Chromium C. Vanadium D. Maganese
578	Which of the following metal cannot evolve hydrogen from the acetic acid	A. Sodium B. Potassium C. Magnesium D. Copper
579	Bond will be covalent when electronegativity difference of bonded atom is	A. Equal to 1.7 B. between 0.5 to I.7 C. Greater to 1.7 D. zero
580	The boiling point of Kr is higher (-152.23°C) than that of helium (-268.6°C) due to	A. Kr forms greater number of covalent bonds B. greater polarizability of Kr than He C. Kr has lowest freezing point D. Kr is in liquid state at ordinary temperature
581	There is more deviation in the behaviour of a gas from the ideal gas equation PV = nRT	A. At high temperature and low pressure B. At low temperature and high pressure C. At high temperature and high pressure D. At low temperature and low pressure
582	The solid particles posses only _____ kinetic energy	A. Translational B. Rotational C. Viberational D. Circular
583	Suspended matter is settled in purification of water by:	A. aeration B. coagulation C. chlorination D. treatment
584	Steroids belong to the family of	A. Protein B. Enzyme C. Lipids D. Carbohydrates
585	Which among the following will show anisotropy?	A. Wood B. Glass C. Paper D. BeCl2
586	Leather tanneries use big auantities of:	A. Cr Vi salts B. Cr III salts C. Mn-salts D. Pb-salts
587	RNA regulate the synthesis of	A. Vitamis B. Carbohydrate C. Proteins D. Lipids
588	Enthalpy of neutralization (ΔH°n) per mole of H2SO4/ Ba(OH)2 is	A. +57.4 kJmol-1 B. -114.8 kJmol-1 C. -57.4 kJmol-1 D. -57.4 kJmol-1
589	If pressure is increased from a 2 atm to 4 atm on a gas then its volume will decrease from:	A. 3L to 1L B. 4L to 2L C. 6L to 4L D. 8L to 2L
590	The most important pesticides are:	A. Herbicides B. Insecticides C. Fungicides D. All
591	Which one is nitrogen fertilizer among the following:	A. calcium sulphate B. urea C. magnesium carbonate D. potassium phosphate

592	White marble buildings are effected by?	A. O₂ B. SO₂ C. Cl₂ D. CFC_s
593	The existence of a substance in more than one solid modification is known as	A. Isomorphism B. Polymorphism C. Amorphism D. None of these
594	In the electronic configuration of Cr one electron from 4s sub-shell is transferred to 3d sub-shell because	A. The 3d orbital is of lower energy than 4s B. The half-filled d-subshell is more stable than 4 electrons having d-subshell C. The 4s orbital is of equal energy to 3d orbital D. 6 unpaired electron make Cr more paramagnetic
595	Elements of II-A group are called alkaline earth metals due to the reason that	A. they occur in earth only B. they form divalent cations only C. they have ns2 electronic configuration D. their oxides and hydroxides are alkaline in nature and metals are present in earth crust
596	The nitrogen present in some fertilizer helps plants:	A. to fight against diseases B. to produce fat C. to undergo photosynthesis D. to produce protein
597	Choose the chief air pollutant among the following which depletes ozone layer:	A. carbon monoxide B. carbon dioxide C. chloroflurocarbons and nitrogen oxides D. sulphur dioxide
598	Amylose and Amylopectin are two fraction of starch which of them gives violet colour with I_2	A. Amloase only B. Amylopectin only C. Both amlose & amylpectin D. None of thses
599	The species which are produced by electrolytic bond breaking and can act as electron pair donors are known as.	A. Cations B. Anions C. Nucleophiles D. Free radical
600	Which functional group is present in glycerol tristearate	A. Carboxylic acid B. Alcohol C. Aldehyde D. Ester
601	C-H bond length in the benzene is	A. 0.99A° B. 1.09A° C. 1.12A° D. 1.34A°
602	What is the effect of polluted air on environment	A. Ozone B. Acid rain C. Global warming D. Smog
603	One Pascal is equal to	A. 1 Nm⁻² B. 1 Nm C. 1 Nm⁻¹ D. 1 Nm²
604	Why is carbon monoxide called as pollutant? The reason is that	A. It combines with oxygen B. It combines with haemoglobin C. It inactivates glycolysis D. It inactivates nerves
605	Hardness of diamond is attributed to the	A. strength of the ionic bonds in the structure B. three-dimensional network of covalent bonds C. three-dimensional network of covalent bonds D. absence of valence electrons in carbon atoms
606	Which impurity makes the shape of NaCl crystal needle like	A. MgSO4 B. urea C. glucose D. MgCO3
607	According to Boyles law, at constant temperature the product of pressure and volume of a given mass of gas is	A. whole number B. a constant C. fraction D. a multiple
608	Alcohol in which carbon atom bonded to OH group is further attached with three alkyl group is .	A. Aromatic alcohol B. Tertiary alcohol C. Primary Alcohol D. Secondary Alcohol
609	Polarizability is responsible for intermolecular forces and it	A. increases down the group B. decreases down the group C. almost remains the same D. increased along a period
610	Propanone does not undergo	A. Oxime formation B. Reduction of Fehling solution C. Hydrazone formation with hydrazine

		D. Reaction with HCN
611	Chemical equilibrium involving reactants and products in more than one phase is called:	A. Homogeneous B. Heterogeneous C. Dynamic D. Static
612	Exposure to CO results in	A. Headche B. Fatigue C. Unconsciousness D. All of these
613	Variable Oxidation state of is related to transition elements	A. empty d-subshells B. Completely filled C. Partially filled d-subshell D. d-d transition
614	Which volume of gas has minimum value	A. Apparent volume B. Actual volume C. Excluded volume D. All have equal value
615	ΔH=ΔE is true for which of the following reaction	A. K+H2O----->KOH+H2 B. N2+3H2------>2NH3 C. AlCl3+3NaOH--->Al(OH)3+3 NaCl D. 4Na + O2----->2Na2O
616	The relationship between density and molar mass of a gas is	A. Directly proportional B. ^{Inversly proportional} C. Straight line D. Stoichiometric
617	Which of the followings has electronic configuration of Ar in +3 oxidation state	A. Sc B. Mn C. Ti D. Zn
618	pH of an aqueous solution is 3.0 at 25°C. The hydrogen ion concentration in the solution would be	A. 0.001 B. 0.01 C. 0.0001 D. 10(-5)
619	Arginine, lysine and ornithine are	A. Obtained by hydrolysis of proteins B. Essential amino acids C. Basic amino acids D. Derived from butyric acid
620	CO2 and SO2 are both triatomic molecules, but heat of vaporization of SO2 is greater than that of CO2. This is due to	A. greater electronegative character of sulphur B. greater size of SO2 molecule C. SO2 is polar and CO2 is non-polar D. SO2 is more acidic in nature than CO2
621	Which one is monosacharide?	A. starch B. glucose C. maltose D. sucrose
622	In a saturated solution of AgCl, the molar concentration of Ag+ and Cl- is 1.0x10(-5)M each. What is the value of Ksp	A. 1.0x10(-5) B. 1.0x10(-15) C. 0.1x10(-5) D. 1.0x10(-10)
623	Which one is not related with evaporation	A. Continuous B. Cooling C. Exothermic D. Spontaneous
624	Relation of water with quick lime result in the rise in the temperature of the system using the concept of energy change, indicate the nature of the reaction?	A. Endothermic reaction B. Third order reaction C. Exothermic reaction D. Non spontaneous reaction
625	Which is the incorrect value of gas constant R?	A. 2.987 cal k⁻¹ mol ⁻¹ B. 3.313 Nmk⁻¹ mol⁻¹ C. 62400dm³ atm k⁻¹ mol⁻¹ D. 1.10821atm dm3k⁻¹ mol⁻¹
626	Which one will be act as a strong acid.	A. Dichloroethanoic acid B. Emanoic acid C. Chloroethanoic acid D. Trichlorothanoic acid
627	Water is purified by the process:	A. Aeration B. Coagulation C. Chlorination D. All of these
628	Ethyl alcohol reacts with PCL and produces:	A. Haloalkane B. Alkyl halide & H3PO3, C. Alkyl halide & POCl3 D. Alkyl halides &H3PO4.
	Carboxylic acids reacts	A. CO2

629	with sodium carbonate, & gas evolved in this reaction	A. CO2 B. H2 C. CO D. Both a &b
630	Acetone and chloroform are soluble in each other due to:	A. intermolecular hydrogen bonding B. dipole-dipole interaction C. instantaneous dipoles D. all of the above
631	Which of the following govern the diffusion of gases	A. Dalton's law B. Avogadro's law C. Graham's law D. Newton's law
632	Which one of the following elements is not an alkali metal?	A. Na B. Sr C. Cs D. Rb
633	Velaric acid is obtained from a herb velarian, its IUPAC name is	A. Propionic acid B. Pentanoic acid C. Butyric acid D. Caporic acid
634	Van der Waal's forces exist in	A. Polar compounds B. Non-polar C. Covalent D. All types of atoms and molecules
635	Which of the following shows group IIIB	A. Zn, Cd. Hg B. Cu. Ag. Au C. Sc. Y. La D. Ni. Pd. Pt
636	Kerosene is liquid at room temperature.This is due to:	A. organic nature B. H-bonding C. molecular size D. dipole-dipole forces
637	The disposal of domestic refuse, commercial and industrial solid wastes are studied under the title	A. Solid waste management B. Waste management C. Solid management D. Semisolid management
638	A transition element X has a configuration [Ar) 4s3dd in its +3 oxidation state. Its atomic number is	A. 25 B. 26 C. 22 D. 19
639	If similar groups are attached to the same side, of C=C of alkene then it is	A. Cis isomer B. Trans isomer C. Tautomer D. All
640	Petroleum or crude oil is a complex mixture of compounds mainly:	A. benzene B. minerals C. hydrocarbons D. phenols
641	Caseinogen is	A. Simple protein B. Derived protein C. Phosphoprotein D. Rich in sulfur containing amino acids
642	In crystal of sodium chloride, a Cl-1 ion present at the corner of cube is shared between how many cubes?	A. 8 B. 4 C. 6 D. 10
643	According to kinetic theory of gases there are	A. Intermolecular attractions B. Molecules which have considerable volume C. No intermolecular forces of attraction D. The velocity of molecules decreases for each collision.
644	Enthalpy of a reaction can be measured by	A. Glass calorimeter B. Barometer C. Manometer D. Thermometer
645	Plastic are 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 product
646	Buffer solutions are used in except	A. Clinical analysis B. Nutrition C. Soil science D. Qualitative analysis
647	The specifie substance (metabolite) that fits on the enzyme surface and is converted to products is called	A. Co-factor B. Isoenzyme C. Prosthetic group D. Substrate

648	Fresh water of total earth water is:	A. 1% B. 2% C. 3% D. 4%
649	Which process of pulp making is mostly used in Pakistan?	A. Kraft process B. Sulphite process C. Neutral sulphite semi chemical process (NSSC) D. All of these
650	Liquids evaporate at every temperature. When the temperature becomes constant for a liquid, then:	A. rate of evaporation is greater than the rate of condensation B. the rate of condensation is greater than the rate of evaporation C. The rate of condensation and evaporation become equal D. it depends upon the nature of the liquid
651	Which of the following does not contribute towards the formation of photochemical smog?	A. NO B. SO₂ C. O₃ D. Hydrocarbons
652	At higher temperature isotherm of Boyle's law moves away from both axis, is due to increase in	A. pressure B. No. of moles C. Volume D. all of these
653	Hydrogen has a = 0.245 atm. dm^3. $mole^{-2}$and b = 0.0266 dm^3. $mole^{-1}$$SO_2$gas has a = 6.170 atm. $dm^3mole^{-2}$and b = 0.0564 dm^3mole where a and b are Van der Waal's constant	A. H₂gas deviates more from ideal behaviour tha SO₂ B. SO₂gas deviates more form ideal behaviour than H₂ C. both deviate from ideal behaviour equality D. both are ideal gases
654	The substance for the separation of isotopes is firstly converted into the	A. Neutral state B. Free state C. Vapour state D. Charged state
655	The energy difference of d-orbitals varies from	A. Atom to atom B. Ion to ion C. Electron to electron D. proton to proton
656	Water which forms scum with soap is called	A. Hard water B. Soft water C. Distilled water D. Un distilled water
657	The total K.E. of one mole of an ideal gas is given by:	A. 1/2 RT B. 3/2 RT C. 1/2 KT D. 3/2 KT
658	Pressure of $1Nm^{-2}$ is equal to	A. One bar B. 1 psi C. One pascal D. One atmosphere
659	During the electrolysis of Fused NaCl, the products are	A. Na and H2 B. Na and Cl2 C. Na and O2 D. H2 and Cl2
660	Most harmful of biosphere is	A. Deforestation B. Nuclear fail out C. Salinity D. Water logging
661	Which one of the following enzymes brings about the hydrolysis of fats?	A. Urease B. Maltase C. Zymase D. Lypase
662	Factors affected denaturation of proteins:	A. Change in temp and pH B. Strong reducing agent C. Strong oxidizing agent D. All of these
663	$C_6H_{12}O_6$is molecular formula of:	A. Glucose B. Dextrose C. Fructose D. All of these
664	Ti+3 shows minimum absorption (maximum transmittance) at-------and-------wavelength	A. Yellow, Green B. Red. Yellow C. Blue. Green D. Red. Blue
665	Which of the following pair has the same no. of electrons in d- subshell	A. Sc+3,Ti+3 B. Mn+2,Fe+3 C. Ti+3,V+3 D. Cr+3.Co+2
	The rate of diffusion of	

666	hydrogen gas is three times than that of an unknown gas at same temperature and pressure than the molar mass of unknown gas is	A. 32 B. 18 C. 16 D. 27
667	The shielding effect of inner electron is responsible for	A. Having no effect on ionization energy B. Decreasing ionization energy C. Increasing ionization energy D. Increasing electronegativity
668	The main pollutant of leather tanneries in the waste water is due to:	A. Lead B. Copper C. Chromium (VI) D. Chromium (III)
669	Rusting of iron is the example of	A. Fast B. Slow C. moderate D. depends upon conditions
670	R = 0.08205:	A. atm dm³mol⁻¹k⁻¹ B. J mole⁻¹k⁻¹ C. Nm mol⁻¹k⁻¹ D. cal. mol⁻¹k⁻¹
671	Cyclone collector is used to reduce	A. Noise pollution B. Air pollution C. Water pollution D. Radioactive pollution
672	All amino acids are optically active except	A. Amino acid B. Series C. Threonine D. Tryltophan
673	The half life of N2O5 at 0 oC is 24 minutes. How long will it take for sample of N2O5 to decay to 25% of its original concentration?	A. 24 minutes B. 72 minutes C. 120 minutes D. 40 minutes
674	Solids in which atoms, ions or molecules are not regularly arranged are	A. crystalline solid B. amorphous solids C. liquid crystals D. low melting points
675	Lysine	A. Basic Only ketogenic B. Ketogenic glucogenic C. Acidic glucogenic D. Non essential
676	SO2 and NO2 cause pollution due to increase in:	A. buffer action B. basicity C. acidity D. neutrality
677	Which one of the following is not a component of environment	A. Biosphere B. Stratosphere C. Hydrosphere D. Lithosphere
678	Carbon Monoxide is:	A. colouriess B. orderless C. high toxic D. All of these
679	The trade name of polytereafluoroethylene (PTFE) is	A. Teflon B. PVC C. terelene D. polyester
680	The reduction potentials of non-metals are A =+0.54V, B=+1.08V, C=+1.36V. D= +2.87V Which non -metal can displace all other from aqucous solution of their salts	A. A B. C C. B D. D
681	Which one of the following will have the smallest radius?	A. Al⁺³ B. Si⁺⁴ C. Mg⁺² D. Na⁺²
682	The solubility of A2B3 is X mole dm-3. Its Ksp is?	A. 6X(5) B. 36X(5) C. 64X(5) D. 108X(5)
683	Which of the compounds cannot show positional isomerism?	A. Alkanes B. Alkenes C. Alkynes D. Alcohols
	Gases deviate from ideal behaviours at high	A. at high pressure the gas molecules move in one direction only

684	behaviour at high pressure.Which of the following is correct for non-ideality?	B. at high pressure the collisions between the gas molecules are increased manifold C. a high pressure the volume of the gas become insignificant D. at high pressure, the intermolecular attraction becomes significant
685	The bonds present in the primary structure of proteins are by	A. Dialysis B. Electrophoresis C. Filtration D. Alcohol precipitation
686	The weakest intermolecular forces present in a liquid may be	A. Dipole-induced dipole forces B. dipole-dipole forces C. instantaneous forces D. electrostatic forces between ions in a ionic solid
687	Molar volume of CO_2 is maximum at	A. NTP B. 0°C and 2.0 atm C. 127°C and 1 atm D. 273°C and 2.0 atm
688	Which state 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.
689	Super conductors are derived from compounds of	A. P-block elements B. Lanthanides C. Actinides D. Transition elements
690	Oxidation state of Mn' in KMnO4. K2MnO4, MnO2 and MnSO4 is in the order	A. +7.+6.+2,+4 B. +6,+7,+2,+4 C. +7. +6.+4.+2 D. +4, +6, +7,+2
691	The net heat change in a chemical reaction is the 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. Hess's law C. joule's law D. Law of conservation of energy
692	Which of the following statements about amorphous solids is incorrect?	A. They melt over a range of temperature B. They are anisotropic C. There is no orderly arrangement of particles D. They are rigid and icompressible
693	The solubility of Fe(OH)3 is 'x' mole per dm3. Its Ksp would be	A. 9X3 B. 3X4 C. 27X4 D. 9X4
694	which one of the following exhibits intermolecular hydrogen bonding?	A. HF B. HC C. HBr D. HI
695	An amine is produced in the following reaction C2H5I+2NH3------- C2H5NH2 +NH4I. What is mechanism?	A. Electrophilic addition B. Electrophilic substitution C. Nucleophilic addition D. Nucleophilic substitution
696	Elements of group IA and IIA are	A. electronegative B. neutral C. electropositive D. non-metals
697	A certain buffer solution contains equal cone. of X- and HX. Ka for HX is 10(-8). The pH of buffer is	A. 3 B. 11 C. 8 D. 14
698	In which of these processes are small organic molecules changed into macromolecules?	A. the fractional distillation of crude oil B. the cracking of petroleum fractions C. the hydrolysis of proteins D. the polymerization
699	Choose the chief air pollutant among the following which depletes ozone layer	A. Carbon monoxide B. Carbon dioxide C. Chloroflurocarbons and nitrogen oxides D. Sulphur dioxide
700	covalent network of crystals has:	A. lower melting point than molecular crystals B. higher melting point than molecular crystals C. higher melting point than molecular crystals D. H-bonding
701	Gram atoms of hydrogen in 5.5 g H2	A. 5.50 B. 2.25 C. 5.45 D. 2.20
702	The eleventh concentration of metal cause clogs of gills in fish:	A. Al B. He C. Pb D. Ca

703	What element is not essential for the growth of plants and not required in the fertilizers?	A. nitrogen B. potassium C. phosphorus D. barium
704	Monosaccharides belong to the group	A. lipids B. fats C. proteins D. carbohydrates
705	In s solution 7.8 g of benzene (C6H6) and 46g of toluene (C6H5CH3) is present. The mole fraction of toluene is	A. 1/3 B. 1/5 C. 2/3 D. 5/6
706	Ecosytem is a smaller unity of:	A. nydosphere B. biosphere C. lithosphere D. atmosphere
707	The rate of reaction for a reaction is 30 mol dm-3sec-1 if the product of concentration of 10.reactant is unity the specific rate constant is	A. 25 B. 2.5 C. 30 D. 15
708	The volume of 2.8 g of CO at 27°C and 0.0821 atm is	A. 30 dm³ B. 3 dm³ C. 0.3 dm³ D. 1.5 dm³
709	The ozone depletion in the stratophere is mainly due to the reaction of ozone with	A. Freons B. CFCs C. Both A and B D. None
710	Which one of the following is not type of polymer:	A. copolymer B. homopolymer C. terpolymer D. hereropolymer
711	The reaction takes place among the molecules when they have:	A. Activation energy B. Properly oriented C. Concentrated D. Activation energy and proper orientation
712	Density of a gas increases by	A. increasing value of R B. decreasing value of R C. increasing T D. decreasing T
713	Gases show uniform behavior towards their:	A. Internal conditions. B. External conditions. C. Internal and external conditions. D. None of above.
714	The enthalpies of all elements in their standard states are	A. Unity B. always +ve C. always -ve D. zero
715	Acetylide can give back ethyne upon treatment with	A. water B. strong base C. dil. Acid D. weak base
716	Which of the following are 3,5 (meta) directing group when second group is introduced in them. I = NH3 II= -CHO III= -COOH IV=-CH3	A. II,III and IV B. II and III C. I and IV D. I ,II and IV
717	Which woody raw material is used of the manufacture of paper pulp?	A. cotton B. bagasse C. poplar D. rice straw
718	Reaction kinetics is important to discover the---under which reaction will proceed most economically:	A. rate constant B. Conditions C. volume D. equilibrium point
719	An excellent source of energy without causing pollution is	A. Fossil fuel B. Sun C. Petroleum D. Nuclear reactor
720	Which element differs from rest of elements of its group?	A. Ba B. Mg C. Ca D. Be

721	Spectrometry method is applicable if a reactant or a product absorbs radiation	A. Ultraviolet B. Visible C. Infrared D. Any of these
722	Viscosity of a liquid is measured by	A. barometer B. thermometer C. viscometer D. manometer
723	Chemical like $Al_2(SO_4)$ or alum are used in purification of water druing step:	A. aeration B. coagulation C. chlorination D. treatment
724	Which pair of elements will have the same type of bonds between their atoms in the solid state?	A. carbon and calcium B. lithium and boron C. aluminium and phosphorus D. nitrogen and carbon
725	How can heavy metal contamination like the presence of Hg or Pb may be removed from the soil	A. by using water spray B. by blowing air C. by treating with EDTA and then flushing the heavy metal complex out of the soil D. by adding CaO
726	In which molecule. all atoms are coplanar?	A. CH4 B. BF3 C. NH3 D. PH3
727	All the following statements are incorrect except:	A. all of the gases cannot be liquefied B. increase of pressure will not decrease the inter molecular distance in a gas C. gas molecules do not attract each other at very low temperature D. actual volume of a gas is not negligible at very pressure
728	Nitrogen is present in air as a major constituent it is an inactive gas in comparison with oxygen which is the next major constituent of air Nonreactive nature of nitrogen is due to the reason.	A. There is one lone pair of electron on each nitrogen atom in its molecule B. Nitrogen have three unpaired electron i its 2p orbital which is comparatively stable elecrtonic configuration C. There is a triple covalent bond in nitrogen molecule which in very strong and molecule is polar D. There is a triple covalent bond in nitrogen molecule which is very strong and molecule is non polar
729	Covalent bonds are	A. directional B. Bidirectional C. Multidirectional D. Non directional
730	Hydrogen bonding is not present in which of following compound?	A. Ammonia B. Ethanol C. Ether D. Water
731	The general electronic configuration of group IV-A elements is	A. ns2, np6 B. ns2, np4 C. ns2, np3 D. ns2, np2
732	What s the boling point of H2O at the peak of Mount Everest?	A. 101 C° B. 69°C C. 100 C° D. 98° C
733	If a graph is plotted between temperature on x-axis and volume on Y-axis for 1 mole of gas,then we get straight line which cuts the temperature axis at	A. -300°C B. 300 K C. -273.15 K D. 273.15°C
734	Which one among the following is not a natural polymer	A. Protein B. Cellulose C. Nylon D. Nucleic acid
735	If an endothermic reaction is allowed to take place very rapidly in air, the temperature of the surrounding air will	A. Remains constant B. Increase C. Decrease D. Either increase or decrease E. One Joule is equivalent to
736	Potassium crystallizes with a	A. Orthogonal lattice B. Cubic lattice C. Triclinic D. Ortho rhombic lattice
737	Benedict solution gives a positive test with but catalyze the same reaction:	A. fructose B. glucose C. starch D. sucrose
738	Which of the following is the repeating monomeric unit in cellulose?	A. sucrose B. maltose C. cellobiose D. glucose

739	Metallic bonds have been explained by many theories. Luis Pauling has proposed a theory called	A. molecular orbital theory B. electron gas theory C. band theory D. valence bond theory
740	Which of the following has positive value of enthalpy	A. Neutralisation B. Atomization C. combustion D. All of the above
741	If rate of diffusion of A is 5 times that of B,what will be the density ratio of A and B?	A. 1/25 B. 1/5 C. 25 D. 5
742	General formula of carbohydrate is	A. C_x(H₂O)_{y+x} B. C_x(H₂O)_y C. C_x(H₂O)_{y-1} D. C_x(H₂O)_{y+1}
743	Nucleic acid fist descovered in	A. 1868 B. 1869 C. 1900 D. 1905
744	Deep sea divers take oxygen with:	A. A heavy gas B. A lighter gas C. An inert gas D. All of above
745	Molecular mass of PVC is (DP = 1200)	A. 63000 B. 75000 C. 75600 D. 80,000
746	The relationship which describes the variation of vapour pressure with temperature is called	A. Hess's law B. Arrhenius equation C. Kirchhoff's law D. Clausius-Clapeyron equation
747	Phosphorous is very useful in growth of:	A. Leave B. Root C. Stem D. Seed
748	Water cover earth surface more than:	A. 50% B. 60% C. 70% D. 80%
749	The mechanism of polymerization involves free addition Polymerization or condensation polymerization, Choose the correct statement:	A. Polyester is an addition polymer B. polythene is an addition polymer C. polyviny chloride (PVC) is a condensation polymer D. Polystyrene
750	Oxygen molecule is 16 times heavier than:	A. Helium B. Hydrogen C. Neon D. Aluminium
751	Which of the following polymers is used for weather resistant paints	A. acrylic resins B. polyvinyl acetate C. polystyrene D. PVC
752	The sun is a ball of plasma heated by nuclear fusion is	A. 1.0 million km B. 2.0 million km C. 1.5 million km D. 2.5 million km
753	Gases are good conductor of electricity at	A. Low temperature B. Low pressure C. High pressure D. Low temperature and high pressure
754	Fatty acids are:	A. Aliphatic mono-carboxylic acids B. Di-carboxylic acids C. Tri-carboxylic acids D. Tetra carboxylic acids E. Poly carboxylic acids
755	An instrument which is used to measure the pressure of a gas is called:	A. barometer B. photometer C. stalagmometer D. viscometer
756	Which one of the following statements about positive ions is incorrect?	A. they are also known as cations B. they are formed when electrons are removed from atoms C. they are larger than the atom from which hay were formed D. they are smaller than the atom from which they were formed
757	The degree of unsaturation in fats or oils is usually measured by numbers of grams of iodine required by	A. oil number B. saturation number C. iodine number

	100 grams of fat, this is called	D. un saturation number
758	On hydrolysis sucrose gives	A. Glucose and maltose B. Fructose and lactose C. Fructose and maltose D. Glucose and fructose
759	The hexagonal closed packing is associated with	A. Ag, Cu, Au B. Zn, Cd, Hg C. Li, Na, K D. NaCl, KBr
760	Sponification is the hydrolysis of fats or oil with an:	A. alkali B. base C. enzyme D. metallic ion
761	If R, T, M, V and P are gas constant, temperature, molar mass, volume and pressure then density is given by:	A. M/V B. RT/M C. PM/RT D. V/M
762	There are 20 amino acids found in protein which is not the property of these amino acids	A. They are all alpha-amino acids B. They are all optically active C. They have high decomposition point D. They are water soluble
763	The decomposition of N2O4 to NO2 is carried out at 280°C in chloroform. When quilibrium is reached. 0.2 moles of N2O4 and 0.02 mole of NO2 are present in 1:1 ratio The equilibrium constant for the reaction N2O4------> 2NO2 is	A. 0.01 B. 0.001 C. 0.02 D. 0.002
764	How many electrons have to be removed to ionize 1.0 x 10(-6) moles of Ne atoms to Ne+ ions in a neon advertising tube:	A. 6.02x10ê23/1.0x10ê-6 B. 1.0x 10ê-6 x 6.02x 10ê23 C. 1.0x10ê-6 x 6.02×10ê23/20.2 D. 1.0x10ê-6 x 6.02x10ê23/9.65x10ê-1
765	Which of the following bond is responsible for joining the amino acids in proteins?	A. Metallic Bond B. Di sulfide bond C. Peptide Bond D. Peptide Bond
766	In order to mention boiling point of water at 110◦C the external pressure should be:-	A. between 760 torar an 1200 torr B. between 200 torr and 760 torr C. 765 torr D. any value of preessure
767	Which Henderson equation is not correct?	A. pH= pKa +log [salt/acid] B. pH = pKa - log [salt/acid] C. pH= pKa - log[acid/salt] D. Pka = pH - log [salt/acid]
768	Amount of heat absorbed when one mole of a solid melts into liquid form at its melting point is called:	A. heat of vaporization B. latent heat of fusion C. molar heat of fusion D. molar heat of sublimation
769	Cellulose is formed from	A. D-galactose units B. 50% of D-glucose and 50% of L-glucose units C. L-glucose units D. D-glucose units
770	Which is the following is true about galvanic cell:	A. Reduction occurs at cathode B. Reduction occurs at anode C. Anode is negatively charged D. Chathode is positively charged
771	Which one of the followings is resistant to oxidation under normal conditions	A. Methyl alcohol B. Acetaldehyde C. Ethyl alcohol D. Acetone
772	The percentage of SO_2 produced by volcanoes is:	A. 47% B. 57% C. 67% D. 77%
773	Major food factors are?	A. Fats and oils B. Carbohydrates C. Proteins D. All of these
774	The morality of the solution containing x grams ammonium sulfate in 500cm3 of the solution is 0.6 what is x?	A. 39.6 B. 40.5 C. 42.7 D. 45.1

775	Which of the following liquid has higher boiling point?	A. HCl B. HBr C. H₂O D. Br₂
776	Which pair of the gases doesn't obey Dalton's Law of partial pressures	A. H₂and O₂ B. N₂and O₂ C. H₂S and H₂ D. NH₃and HCl
777	If volume of an ideal gas at 0C° 536cm3, what is volume at 1°C	A. 373 cm3 B. 646 cm3 C. Becomes 0cm3 D. 746 cm3
778	NH_3 shows maximum boiling among the hydrides of group V elements. The is due to:	A. pyramidal structure of NH₃ B. H-bonding between its molecules C. enhanced electronegative character D. very small size of nitrogen
779	Monosaccharides adn oligosacchardies are generally called as	A. Crystal B. Sugars C. liquids D. Non-sugars
780	According to Lowry-bronsted acid and bass concept, H2O is	A. A salt B. An acid C. A base D. An amphoteric species
781	The value of the vapour pressure of water at its boiling point at Karachi and Murree is	A. same B. different C. depends upon the environmental conditions in both cities D. greater at Murree and less at Karachi
782	The volume of a real gas	A. is constant B. increases with T decrease C. becomes zero at absolute zero D. never becomes zero
783	Which of the following contains I mole of the stated particles	A. Chlorine molecules in 35.5 g of chlorine gas B. Electrons in 1 g of hydrogen gas C. Hydrogen ions in 1 dm^3 of 1 mol dm^{-3} aqueous sulfuric acid D. Oxygen atoms in 22.4 dm^3 of oxygen gas at STP
784	Which of the following is sweetest sugar	A. Glucose B. Maltose C. Fructose D. Sucrose
785	The main pollution leather tanneries in the waste water is due to the salt of:	A. chromium B. copper C. calcium D. lead
786	H_2effuses through a porous pot at a rate of 500 cm^3per minute at 0°C.The rate of diffusion of O_2through the same vessel at 0°C per minute is	A. 500 cm³ B. 250 cm³ C. 1 dm³ D. 125 cm³
787	During sudden expansion of a gas energy is needed to overcome the intermolecular:	A. Vibrations B. Attractions C. Repulsions D. All of above
788	Calorie is equivalent to	A. 0.4184J B. 4.184J C. 418.4J D. 40.18J
789	Which of the following is primary alkyl halide	A. Isopropyl halide B. Sec-butyl halide C. Tert-buryi halide D. Neo-pentyl halide
790	If there are weak intermolecular forces in a liquid, it will be	A. more volatile B. less volatile C. more dense D. less heavy
791	The measurement of enthalpy change at standard conditions means that we should manage the measurement at	A. 24°C at 1 atm B. 25°C at 1 atm C. 0C° at 1 atm D. 100C° 1 atm
792	Energy of atom in compound is	A. Higher than individual atom B. Lower than individual atom C. equal to individual atom D. Impossible to predict
793	Which of the following pairs of not form a dative covalent bond to each other?	A. NH₃ and H⁺ B. H₂O and H⁺ C. NH₃ and BF₃ D. CH₄ and AlCl₃

794	The relative rates of diffusion of a gas (Mol.wt.=98) as compared to hydrogen will be	A. 1/7 B. 1/5 C. 1/4 D. 1
795	When water freezes at 0°C, its density decreases due to	A. cubic structure of ice B. empty spaces present in the structure of ice C. change of bond lengths D. change of bond angles
796	Which is the correct order of boiling points	A. structure of ice B. solution of ethanol in water C. solution o fNaCl in benzene D. linking of helix protein molecule
797	Polysaccharides are	A. Polyester B. Polyamides C. Poly ethers D. Polynucleotide
798	Amount of product formed increases with time, this statement is true for reactions-------with kinetics	A. 1s order B. 3rd order C. zero order D. Any order
799	Both aldehydes and ketones are planer to the neighborhoods of carbonyl (c=o) group. Which one of the following bonds is distorted towards the oxygen atoms.	A. n-bond of C and O B. Sigma bond of C and H C. Sigma bond of C and O D. Sigma bond of C and C
800	Acetic acid reacts with thionyl chloride to form acetyl chloride, which species acts as nucleophile in the reaction	A. SO3 B. SO2 C. Cl- D. No nucleophile is formed
801	One of the following is not a biopolymer. Point out that one	A. Lipid B. Starch C. Diamond D. Protein
802	5604 cm3 of H2 gas at STP contains atoms of hydrogen	A. 6.02×10 (23) B. 2.6x10(22) C. 3.01x10(23) D. 1. 50x 10(23)
803	Amino acid α-hydroxy carboxylic acid and	A. CO₂ gas B. H₂ gas C. N₂ gas D. NH₃ gas
804	Charle's law only obeys when temperature takes in _____ scale	A. Celsius B. Fahrenheit C. Kelvin D. Rickey
805	Diffusion of different species is due to difference of	A. potential energy B. temperature C. density D. all the above
806	Which statement explains why the boiling point of methane is higher than that of neon? [A_r:H.1:c,12:Ne,20]	A. A molecule of methane has a greater mass than a molecule of neon B. Molecules of methane form hydrogen bonds but those of neon do not C. Molecule of methane have strongel intermolecular forces than those of neon D. The molecule of methane is polar, but that of neon is not
807	Natural water is	A. Pure B. Impure C. Acts as solute D. Distilled
808	Nihydrin reacts with amino acid to give product of	A. Bluish color B. Violet color C. Bluish violet color D. No color
809	The reaction between fat and NaOH is called	A. Esterification B. Hydrogenolysis C. Fermentation D. Sponification
810	Two or more similar monomers combine to form:	A. Homopolymer B. Copolymer C. Ter polymer D. Thermoplastic polymer
811	The species which are produced by heterolytic bond breaking and can act as electron pair donor	A. Free radicals B. Cations C. Nucleophiles D. electrophile

812	Which of following compound is solid and room temperature?	A. Ethanal B. Phenol C. Butane D. Methanol
813	Which alkaline earth metal makes peroxide?	A. Ba B. Be C. Mg D. Ca
814	Large molecule formed by combination of smaller units these smaller units are called:	A. Polymers B. Macromolecule C. Micromolecule D. a & b
815	Ocean contains part earth's water:	A. 95% B. 96% C. 97% D. 98%
816	Structure of CrO4(-2) is'	A. triclinic B. cubic C. octahedral D. tetrahedral
817	Coinage metals Cu. Ag, and Au are the least reactive because they have	A. Negative reduction potential B. Positive reduction potential C. Negative oxidation potential D. Positive oxidation potential
818	Which of these are isomrophous to one another NaCl, NH_4Br, K_2CrO_4, K_2SO_4	A. NaCl and NH₄Br both cubic B. NH₄Br and K₂SO_{4 both tetragonal} C. K₂CrO_{4 and}K₂SO₄orthorhombic D. NaCl and K₂SO₄both rhobohedral
819	What is the weight of 10 $dm^3$of CO_2at 27°C and 2 atm?	A. 89.3 g B. 56.1 g C. 125 g D. 127 g
820	Surface and ground water sources are contaminate by various human activity. which of the following is not a human activity that causes contamination in fresh water?	A. rain B. live stock waste C. oil leaks and spills D. disposal of industrial effluents
821	Proteins have linkage between amino acids	A. imide B. amide C. ester D. ether
822	The value of Kc for H2O at 25C° is	A. 1x10 (-14)mole dm-3 B. 14 mol dm-3 C. 1.86×10(-16) mol dm-3 D. 1.0x10 (-7)moldm-3
823	The relationship between volume of a given amount of gas and prevailing conditions of temperature and pressure are:	A. Charle's law B. Graham's law C. Boyle's law D. Gas laws
824	A single chloride free redical can destroy bow many ozene molecules?	A. 100 B. 100000 C. 10000 D. 10
825	which one pair has the same oxidation state of-Fe?	A. FeSO4 and FeCl4 B. FeCl4and FeCl3 C. FeSO4 and FeCl2 D. Fe2(SO4)3 and FeSO4
826	For formation of ionic bond, electronegativity difference should be	A. Equal to zero B. Equal to 0.5 C. More then 1.7 D. Less than 1.7
827	Which of the following human activities are contaminating surface and ground waters?	A. pesticides B. septic ranks C. petroleum and natural gas production D. all of these
828	For an ideal gas,number of moles per litre in terms of its pressure P,gas constant R and temperature T is	A. PT/R B. PRT C. P/RT D. RT/P
829	Daily protein intake for normal adults should be:	A. 0.2g/kg B. 0.5g/kg C. 0.8g/kg D. 1.1g/kg
		A. Animal fat

830	Which of these polymer is synthetic polymer	B. Starch C. Cellulose D. Polyester
831	The weight of 11.2 liters of CO_2 at S.T.P would be	A. 88 g B. 44 g C. 32 g D. 22 g
832	Which of the following alkyl halides shows higher reactivity?	A. R __ F B. R __ Cl C. R __ Br D. R __ I
833	Which of the following is a non-typical transition element?	A. Cr B. Zn C. Mn D. Fe
834	The reaction C2H5Cl + aqueous KOH--------- C2H5OH+ KCl is	A. Electrophilic addition B. Nucleophilic addition C. Electrophilic substitution D. Nucleophilic substitution
835	Addition of washing soda removes	A. Softness of water B. Temporary hardness of water C. Permanent hardness of water D. Hydrogen from water
836	Critical temperature of argon's gas is low. the reason is that	A. it contains four lone pairs B. it is mono atomic gas C. it has as smell signed D. its polarizability is low
837	The oxidation state of transition elements is usually	A. Variable B. Single C. Constant D. Infinite
838	Carbohydrate that cannot be digested by human digestive system is	A. Cellulose B. Glycogen C. Starch D. All of these
839	Aluminium is in Group III, its oxide will have the formula.	A. AlO B. AlO₂ C. Al₂O₃ D. Al₃O₂
840	Which of the following is not a category of proteins based upon their function?	A. genetic B. Regulatory C. nucleo D. structural
841	Ionic bond is produced after complete transfer of	A. nucleus B. neutrons C. electrons D. protons
842	Which of the following is a reason why real gases do not behave as ideal gases do?	A. real gases have intermolecular forces between the molecules B. real gases do not have intermolecular forces between the molecules C. real gases exist as molecules D. molecules of real gases attract each other more strongly than molecules of ideal gases
843	The dehydration of ethyl alcohol with concentrated H2SO4 at 140°C gives	A. Ethene B. Alcohol C. Diethyl ether D. Carboxylic acid
844	Elements having high ionization potential values are	A. metals B. non- metal C. liquids D. solid
845	For an ideal gas, number of mole in terms of its pressure P, temperature T and gas constant is	A. PT/R B. PRT C. PV/RT D. RT/P
846	SO_2 produced by volcanoes is about	A. 75% B. 67% C. 69% D. 70%
847	Which of the following is not a property of crystalline solid	A. geometric shape B. cleavage plane C. anisotropy D. isomerism
848	Photo chemical smog contains _____ as main reactants:	A. nitrons oxide and unburnt hydrocarbons B. niliric oxide and unburnt hydrocarbons C. NO and burnt hydrocarbons D. N₂O and burnt hydrocarbons
	The volume of given mass of gas is directly proportional to absolute	A. Boyle's law B. Charles's law

849	proportional to absolute temperature when pressure is kept constant this is called	B. Charles's law C. Graham's law D. Dalton's law
850	The highest temperature in which a substance can exist as a liquid is called its	A. Absolute temperature B. Critical temperature C. Maximum temperature D. Body temperature
851	Which of the following is woody raw material used for making pulp and paper:	A. Eucalyptus B. Bagasse C. Wheat straw D. Cotton linter
852	Oceans, rivers, streams, lakes, polar ice caps, glaciers and group water reservoirs are included in:	A. atmosphere B. lithosphere C. hydrosphere D. biosphere
853	New3spapers can be recycled again and again by how many times?	A. 5 B. 3 C. 2 D. 4
854	Anline is a derivative of:	A. alkane B. alkene C. aromatic hydrocarbon D. alicyclic
855	The maximum possible number of hydrogen bonds in which a H_2O molecule can participate is:	A. 1 B. 2 C. 3 D. 4
856	Primary structure of proteins refers to	A. Coiling and folding in form of specific structure B. Number of amino acids in a chain C. 3d structure D. Alpha and Beta sheets
857	The protein which only yield amino acids and their derivatives	A. Simple proteins B. Complex proteins C. Derived protein D. All of these
858	Benzene cannot undergo the ------- directly	A. Substitution reaction B. Addition reaction C. Oxidation reaction D. Elimination reaction
859	Collagen is a fibrous protein present most abundantly in	A. heart B. nucleus C. connective tissues D. Arteries
860	The region of earth capable of supporting life is	A. Hydrosphere B. Lithosphere C. Biosphere D. Atmosphere
861	Air can be distilled fractionally because the constiltuents of the air:	A. have different densities B. can be liquefied C. are gases at room temperature D. have different boiling points
862	The alkaline hydrolysis of bromoethane shown below gives alcohol as the product: H3C-CH2-Br-------H3C-CH2-OH The reagent and the condition used in this reaction may be:	A. H20 at room temperature B. KOH in alcohol C. Ethanol. heat D. Dilute NaOH(aq) warm
863	The scale of temperature that shows the freezing point of water at 0° **is called**	A. Fahrenheit B. Kelvin C. absolute D. Celsius
864	Select the correct acidic strength order of chloro substituted acid.	A. CH3COOH >Cl2CH2COOH>Cl2 CHCOOH>CCOOH B. CH3COOH>ClCH2COOH>Cl3COOH>Cl3COOH C. ClCCOOH>Cl2CHCOOH>ClCH2COOH>CH2COOH D. CH3COOH>ClCH2COOH>Cl2CHCOOH>Cl3CCOOH
865	Alicyclic compounds are the homocyclic compounds which contain a ring of	A. 5 or more carbon atoms B. 6 or more carbon atoms C. 3 or more carbon atoms D. 4 or more carbon atoms
866	Name the compound, which shows geometric isomerism	A. l-bromo-2-chloropropene B. 2.3-dimethy lpropene C. 2-pentene D. Both A & B
		A. CaF₂

867	Which of the following is pseudosolid?	B. Glass C. NaCl D. All
868	Which of the following is thermosetting polymer	A. Synthetic varnishes B. Epoxy resins C. PVC D. Both A and B
869	Which of the following metal oxides is antiferromanetic in nature?	A. MnO₂ B. TiO₂ C. NO₂ D. CrO₂
870	Third structure of protein structure refers to	A. Number and sequence of amino acids B. Three dimensional structure of protein C. Proteins formed of more than one monomer D. Bending of protein molecule
871	The amount of energy released when gaseous ions of opposite charges combine to give one mole of a crystalline ionic compound is called	A. bond energy B. heat of formation C. lattice energy D. ionization energy
872	A teacher told his student that air is a mixture. This is due to the reason that suddenly a student raised his hand and said:	A. it has different properties from its constituents B. oxygen can be removed from it C. it is colourless D. its composition is different at different altitudes.
873	What can be deduce about two gases which have the same molecular mass:	A. They have same numbers of atoms in a molecule B. They have same rate of diffusion C. They have same boiling points D. They have equal solubility in water at room temprature
874	The exothermic process is	A. Evaporation B. Sublimation C. Respiration D. Boiling
875	In diamond, which hybridization is there?	A. sp2 B. dsp2 C. sp3 D. sp
876	At higher temperature what is true for gases	A. pressure is decreased B. volume is decreased C. number of moles are decreased D. KE is increased
877	Keratomalacia is caused due to the d3eficiency of vitamin:	A. A B. B C. K D. D
878	HOCl is a compound:	A. Polor inorganic B. organic C. Ionic D. covalant
879	The highest melting point is observed by	A. Butanoic acid B. Propanoic acid C. Pentanoie acid D. HCl
880	Which of the following acid is unsaturated carboxylie acid	A. Malonic acid B. Oxalic acid C. Succinic acid D. Maleic acid
881	In Pakistan consumption per person is:	A. 8kg B. 5kg C. 10kg D. 6kg
882	One $dm^3$of O_2at STP has mass	A. 32 g B. 16 g C. 4.4383 g D. 1.4383 g
883	If increase in temperature and volume of an ideal gas is two times, then the initial pressure P changes to	A. 4P B. P C. 2P D. 3P
884	A graph between P and PV constant temperature and number of moles is parallel to:	A. Y-axis B. X-axis C. Z-axis D. Pressure axis
885	During incineration temperature range of non-rotating chamber is	A. 900-1000C° B. 650-1100C° C. 950-1300C° D. 700-900C°

886	The compound used to distinguish the ethyne and ethene is	A. Alkaline KMnO4 B. Ammonical AgNO3 C. Bromine water D. Tollen's Reagent
887	Which is most acidic?	A. H2O B. C2H5OH C. C4H9OH D. CH3-CH2-CH2OH
888	A molecule of polysaccharide hydrolysis produces _____ molecules of:	A. 2 B. 3 C. 2-10 D. 100
889	If ionic product is equal to Ksp then the solution is	A. Unsaturatec B. Ideal C. Supersaturated D. Saturated
890	Which is not a calcareous material?	A. lime B. clay C. marble D. marine shell
891	Contamination of water of tanning industries is due to:	A. Cr(III) B. Cr(VI) C. Mn(III) D. Mn(VII)
892	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
893	The normal amount of overhead ozone is about in DU:	A. 150 B. 250 C. 350 D. 450
894	Liquid crystals are used for the early diagnosis of breast cancer by	A. injecting liquid crystals B. taking liquid crystals as diet C. painting liquid crystals on the surface of breast D. inhaling the smell of liquid crystals
895	Water may boil at 170C when external pressure is	A. 760 torr B. 170 torr C. 2115 torr D. 700 torr
896	One of the following does not give the flame test. Which is that	A. Sr B. Ba C. Be D. Na
897	An element from the given below exists as discrete small molecules in the solid state. Which is that?	A. Sodium B. Silicon C. Iodine D. Iron
898	Which of the following is not a charbohydrate	A. Nuclic acid B. Starch C. Glycoyen D. Cellulose
899	The conc.of dissolved molecular oxygen in water which act as the most important oxidizing agent ranges from:	A. 2ppm- 6ppm B. 4ppm--8ppm C. 2ppm--- 4ppm D. 2ppm --3ppm
900	The volume occupied by 1.4g of N2at STP is:	A. 2.24 dm3 B. 1.12 dm3 C. 112 cm3 D. 22.4 dm3
901	Furan is a compound	A. Acyclic B. Alicyclic C. Heterocyclic D. non-aromatic
902	Which of the following wast material is not recycled for use again?	A. glasses B. paper C. plastic toys D. hides of animals
903	3.0 mole of calcium will contained_____ g of calcium.	A. 100 gm B. 105 gm C. 80 gm D. 120 gm
904	Choose an addition polymer among the following	A. Terylone B. Nylon 6, 6 C. Polystyrene D. Epoxy resin
		A. Through hydrogen bonding

905	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
906	What will be the ratio of volume of equal masses of O_2, $H_2$and CH_4kept in same container under same conditions	A. 2 : 16 : 2 B. 1 : 16 : 2 C. 2 : 16 : 1 D. 1 : 2 : 1
907	About 25% of earth crust mass is made up of element	A. Oxygen B. Silicon C. Aluminium D. Aluminates
908	Lactic acid is buffered by	A. L. Carnosine B. Glutathione C. Casenogin D. Dopa
909	A crystal system in which all three angles and all three edges are different is called	A. triclinic B. rhombohedral C. cubic D. hexagonal
910	Residence time of methane in the atmosphere is	A. 3 - 7 days B. 2 -3 days C. 3 - 7 years D. 2 - 3 years
911	At compromise distance the forces dominating between atoms are	A. repulsive forces B. attractive forces C. Dipole induced dipole force D. H-bonding
912	Water exist in only	A. One state B. Two state C. Three states D. 4 states
913	The conversion of tertiary alcohols into alkenes in the presence of K2Cr2O7 + H2SO4 is	A. Addition reaction B. C-H bond cleavage C. Elimination reaction D. Combustion reaction
914	The yellow color present in the photo chemical smog is due to presence of the	A. Carbon dioxide B. Nitrogen dioxide C. Chlorine D. All
915	A compound X has all of the properties below. It is a liquid at 25°C it mixes completely with water it reaets with aqueous sodium hydroxide, What could X be?	A. _{Ethanoic acid} B. Ethene C. Ethanol D. Ethyl ethanoate
916	Which of the following is the simplest form of matter?	A. Gaseous state B. Liquid state C. Solid state D. All of above
917	coordination number of N^a+ in NaC is:	A. 1 B. 2 C. 4 D. 6
918	$[Ti(H_2O)_6]^{+3}$ transmits	A. Yellow and Red light B. Yellow and blue light C. Red and white light D. Red and blue light
919	Property due to which water acts as a universal solvent is	A. Polarity B. It's ability to make hydrogen bond C. Both A and B D. Strong dipole dipole interaction
920	The boiling point of higher alkanes are greater than those of lower alkanes due to reason that	A. higher alkanes have greater number of atoms B. the polarizabilities of higher alkanes are greater C. higher alkanes have greater hydrogen bonding D. higher alkanes have zig-zag structures
921	Which equation among the following is applicable to an ideal gas equation?	A. P = nRT B. P = MRT C. P = dPRT/M D. V = dRT/M
922	Coinage metals Cu, Ag and Au are the least reactive because they have	A. Negative reduction potential B. Negative oxidation potential C. Positive reduction potential D. Positive oxidation potential
923	The question vapour cause by heating a liquid is due to:	A. increase of intermolecular interactions B. increase of K.E of molecules C. decrease of surface tension D. increase in potential energy of molecules

		D. Increase in potential energy of molecules
924	Elements of group IV-A are	A. neither strongly electropositive nor strongly electronegative B. strongly electropositive C. strongly electronegative D. none of these
925	Carboxylic acid having two carboxyl group are:	A. Mono-carboxylic acid B. Di-carboxylic acid C. Tri-carboxylic acid D. Tetra carboxylic acid
926	alum or aluminium sulphate used as coagulant in alkaline medium change into precipitate of radicals of alumimium.	A. sulphates B. oxides C. hydroxides D. chlorides
927	Which one of the following substances is a synthetic polyester?	A. cotton B. nylon C. rayon D. terylene
928	In the atosphere, $CO_2$is about	A. 0.01% B. 0.03% C. 0.05% D. 0.09%
929	Which of following is NOT use the polyvinylacetate (PVA)	A. An adhesive material B. Binder for emulsion C. Used as gramophone D. None as these
930	Ozone is effectively removed by	A. TNT B. CFCs C. PVC D. CNG
931	Which one is non-reducing sugar?	A. sucrose B. glucose C. fructose D. galactose
932	.Both aldehydes and ketones are planar to the neighborhoods of carbonyl (C-0) group. Which one of the following bonds is distorted towards the oxygen atoms?	A. pi-bond of C and O B. Sigma bond of C and O C. Sigma bond of C and H D. Sigma bond of C and C
933	What is not true for NH4Cl	A. It has ionic bond B. It has covalent bond C. It has coordinate bond D. It has hydrogen bond
934	Which one of the following has the lowest pH values	A. 0.1 M HCl B. 0.01 M HCl C. 0.1 M KOH D. 0.01 M KOH
935	10.0 gram of glucose are dissolved in water to make 100 cm3 of its solution, its molarity is.	A. 0.55 B. 0.1 C. 10 D. 1
936	Which is not a component of environment?	A. Biosphere B. Lithosphere C. Hydrosphere D. None of these
937	An example of simple protein is	A. lipoprotein B. Cholesterol C. lecithin D. globulin
938	Common names of carboxylic acids are given by then:	A. Source B. Person discovered C. Place D. Habit
939	One mole of a gas refers to	A. The number of molecules in one litre of gas B. The number of molecules in one gram of gas C. The number of molecules contained in 12 grams of ¹²C isotope D. The number of molecules in 22.4 liters of a gas at S.T.P.
940	Which compound will be produced by the oxidation of ethanol by acidified K2Cr2O7?	A. Ethanone B. Ethene C. Ethanoic acid D. Ethanol
941	The best concentration unit used for K^+ ions present in potable water is	A. ppm B. Mole fraction C. Molarity D. Molality
	The fibre which is made	A. rayon fibre

942	The fibre which is made from vinylidine chloride polymer is called	B. azlon fibre C. acetate fibre D. all of the above
943	A nucleoside may be	A. Ribonucleoside B. Deoxyribonucleoside C. Both a and b D. None
944	α and β Glucose differs in orientation of hydroxyl group around	A. C₁ B. C₂ C. C₃ D. C₄
945	The total number of 3d-series transition elements is	A. 10 B. 40 C. 14 D. 58
946	2-Propenol, on rearrangement, yields	A. Propanal B. Propanone C. 2-propano D. Both A and B
947	When gaseous chemicals are transported y road or by rail they are classified as follows: flammable non-flammable poisonous which gas is poisonous:	A. butane B. non-flammable C. hydrogen D. sulphur dioxide
948	The fat soluble vitamins are:	A. A and B B. B and C C. C and D D. A and D
949	The rate of diffusion of a gas of molar mass 72 as compared to H_2will be:	A. Same B. 6 times C. 1.4 times D. 1/6 times
950	Observed pressure of gas on the walls of container is less than actual pressure due to	A. Hephazard motion B. Inter molecular attractive forces C. Elastic collision D. Repulsive forces
951	Hess's law is analogous to	A. Law of heat summation B. law of increasing entropy C. Law of heat exchange D. Ist law of thermodynamics
952	Increased concentration of enzyme alkaline phosphatase is a sign of	A. hemophilia B. heart disease C. thrombosis D. rickets
953	Slight oxidation of primary alcohol eives	A. Ketone B. Aldehyde C. -Organic acid D. An ester
954	An example of ion-dipole force is solution of	A. NaCl in water B. Glucose in water C. Bromine in benzene D. Ethanol in water
955	In addition to many pollutants present in ground water, a successful study was conducted to remove a highly Toxic chemical.What chemical is this	A. Cobalt B. Nickel C. Arsenic D. Sulphur
956	Number of H+ ions when 0.1 mole of sulfuric acid is completely ionized in water	A. 4x6.022x10ê23 B. 1×6.022x10ê23 C. 2x6.022 x10ê23 D. 2x6.022x10ê22
957	Primany aleohols sornally give us aldehyde when oxidized in the presence of acidified Na2Cr2O7, what will be the product, when the secondary alcohols are oxidized in same condition?	A. Alkenes B. Alkyl halide C. Alkynes D. Ketones
958	Biochemical oxygen demand (BOD) is the capacity of organic matter in natural water to consume oxygen with in a period of:	A. 2 days B. 5 days C. 6 days D. 7 days
[illegible]	Mercury does not wet the	A. repulsion B. weak cohesive force

959	Mercury does not wet the glass because of	B. weak cohesive force C. high viscosity D. capillary action
960	Plastic toys are	A. Copolymer B. Thermoplastic polymer C. Thermosetting polymer D. Homopolymer
961	The forces present between the ions and water molecules are called:	A. dipole-dipole forces B. dipole-induced dipole forces C. London dispersion forces D. ion-dipole forces
962	The number of Cl- ions per unit cell of NaCl are	A. 6 B. 4 C. 2 D. 8
963	A real gas most closely approaches the behaviour of an ideal gas at	A. 15 atm. and 200 K B. 1 atm. and 273 K C. 0.5 atm.and 500 K D. 15 tm, and 500 K
964	Which of the following statement is correct if the intermolecular forces in liquids A,B and C are in the order A < B < C?	A. B evaporates more readily than A B. B evaporates less readily than C C. A and B evaporates at the same rate D. A evaporates more readily than C
965	In [Ti (H2O)]3+ which colour is transmitted	A. Yellow B. Blue and red C. Blue and yellow D. red and yellow
966	Methyl mercaptan, CH_3SH, is one of the substances responsible for bad breath and is often used to impart a smell to natural gas in a pipeline. What will be formed when CH_3SH is burned in an excess of air?	A. CO CO₂ H₂S B. CO H₂O SO₃ C. CO₂ H₂O SO₂ D. CO₂ H₂O SO₃
967	Which of the following gases have lowest density at room temperature	A. CO B. N₂ C. Ne D. NH₃
968	The pH range of acid rain is:	A. 6.5 -6 B. 8-7.5 C. Less than 5 D. 7- 6.5
969	The rate of E1 reaction depends upon	A. The concentration of substrate B. The concentration of substrate as well as nucleophile C. The concentration Nucleophilic D. Nature of Catalyst
970	Octyl acetate has the flavor of	A. Orange B. Pineapple C. Banana D. Apple
971	When acid is added to an amino acid, which one of the following will act as a base.	A. NH3- B. COO- C. H+ D. R group
972	A gas has non-ideal behaviour at:	A. high temperature and high pressure B. low temperature and low pressure C. high temperature and low pressure D. low temperature and low pressure
973	A graph is plotted, P on x-axis and V on y-axis for a given mass at constant temperature, we shall get:	A. a curve with different peaks B. a curve called isotherm C. straight line parallel to x-axis D. a straight line
974	In a given system, water and ice are in equilibrium, if the pressure is applied to the above system then	A. Morc ice is formed B. Amount of ice and water will remain the same C. more ice is melted D. both A and B
975	If the temperature is inereased of following reaction, then will go in N2 +3H2 <---------> .2NH3, ΔH= -Ve	A. Forward direction B. Reverse direction C. Remain constant D. Cannot be predicted
976	Which of the following element will have strongest van der Waal force of attraction between its molecules?	A. nitrogen B. hydrogen C. oxygen D. chlorine
		A. carbon

977	Which one of the following elements is not present in all proteins?	A. carbon B. hydrogen C. nitrogen D. sulphur
978	Vapour pressure of a substance does not depend upon:	A. physical state of matter B. temperature C. intermolecular forces D. surface area
979	The nature of crystal of diamond is	A. metallic B. molecular C. covalent D. ionic
980	In FWFP the phosphate fertilizers are produced at:	A. D.I. Khan B. Haripur C. Nowshera D. Dargai
981	The addition compound obtained by reacting acetaldelyde and HCN, when lydrolyzed gives	A. Ethyl alcohol B. Methyl cyanide C. 2-Hydroxy propanoic acid D. Ethyl cyanide
982	To which of the following mixtures Dalton's law of partial pressures is not applicable?	A. CO and CO₂ B. CO₂ and N₂ C. CH₄ and C₂H₆ D. HCl and NH₃
983	In gasses and liquid, 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.
984	Which forms metallic crystals	A. Cu B. NaCl C. SO₂ D. NH₄Cl
985	Which of the following amino acid is named due to its taste	A. Alanine B. Lysine C. Valine D. Glycine
986	H_2O is liquid at room temperature whereas H_2S is a gas because	A. H₂O used as drinking water, but H₂S has rotten egg smell B. H₂O is neutral. H₂S is a weak acid C. stronger hydrogen bonding in H₂O than in H₂S D. H₂O occurs abundantly than H₂S
987	Benzene in the presence of AlCl3 produces acetophenone when reacts with	A. Acetyl chloride B. Ethyl benzene C. Acetic acid D. Ethanoic acic
988	At higher temperature isotherm moves away from both the axes because of increase in	A. Pressure B. Volume C. Number of moles D. All
989	The graph between pressure and volume at constant temperature for gas is:	A. Isobaric B. Isothermal C. Isotherm D. None of above
990	One Joule is equivalent to	A. 4.184 cal. B. 0.4184cal. C. 1/2 cal. D. 1/4.184 cal
991	Esterification of CH3COOH isreaction	A. Acid base B. Electrophilic C. Redox D. Nucleophilic
992	Allotropic forms of carbon are:	A. five B. three C. four D. two
993	Keeping in view the size of atoms, which order is correct?	A. N>C B. P > Si C. Ar > Cl D. Li > Be
994	The arrangement ABC, ABC .... is referred as	A. cubic close packing B. octahedral close packing C. hexagonal close packing D. tetrahedral close packing
995	Phenol is colourless, crystalline and solid	A. Hygroscopie B. Deliquescent C. Moistening D. Odourless
996	The standard electrode potential of hydrogen is	A. 1.00 volt B. 0.00 volt C. 10.0 volt

	arbitrarily taken at 298 K is	D. 0.10 volt
997	The cause of deviation form ideal behaviour is because	A. the actual volume of gas molecules is not negligible B. there is force of attraction between molecules of a gas C. both a and b D. none of these
998	Which is the most toxic among the given?	A. heavy metals B. non-metals C. Metals D. Metalloids
999	The polymers which can not be re-softened again and again are called	A. Thermoplastic B. Thermosetting C. Both a and b D. None
1000	The molecules of CO2, in dry ice form the	A. covalent crystals B. molecular crystals C. none of these crystals D. ionic crystals
1001	A state function which describes together the internal energy and product of pressure and volume is called	A. Enthalpy B. internal energy C. Work D. Kinetic energy
1002	The rate of diffusion of a gas is inversely proportional to:	A. Density of a gas B. Velocity of the gas C. Viscosity of the gas D. All of above
1003	A system absorbs 100 kJ heat and performs 50 kJ work on the surroundings. The increase in internal energy of the system is	A. 50kJ B. 100 kJ C. 150kJ D. 5000 kJ
1004	The main pollution of leather tanneries in the waste is due to the salt of	A. Chromium B. Copper C. Chromium D. Lead
1005	Which one of the following alcohol is indicated by formation of yellow crystals in Iodoform tesr?	A. Methanol B. Ethanol C. Butanol D. Propanol
1006	Micronutrients are required in quantity ranging from:	A. 4----40g B. 6------200kg C. 6-----200g D. 4-------40kg
1007	Plastics are amorphous solids and	A. have sharp melting points B. undergo clean cleavage when cut with knife C. do not undergo clean cleavage D. possess orderly arrangement over long distances
1008	A large hole in the ozone layer over antarctica region was discovered in:	A. 1960s B. 1970s C. 1980s D. 1990s
1009	Acetone reacts with HCN to form a cyanohydrin. It is an example of	A. Nucleophilic addition B. Electrophilic substitution C. Electrophilic addition D. Nucleophilic substitution
1010	If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of the gas will:	A. reduced to 1/4 B. be double C. increases four times D. remains unchanged
1011	Triglyceride have iodine number _____ having no double bond	A. 0 B. 2 C. 3 D. 4
1012	At present the number or cement factories in Pakistan are:	A. 20 B. 22 C. 25 D. 30
1013	Atmosphere consists of gasses:	A. N₂ B. O₂ C. Ar D. All
1014	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
	In which of the following a	A. molecules of CCL₄ B. molecules of solid iodine

1015	re dipole-dipole interaction present?	B. molecules of solid iodine C. molecules of NH₃ D. atoms of the helium gas
1016	Metals are good conductor of electricity, but their conductivity decreases by increase in temperature because	A. electrons attracted strongly by the nuclei which resists their free motion B. atoms form ionic bond and no free electrons C. electrons go to the iocalized orbital not free D. positive metal ions begin to oscillate and their motion hinders the free movement of electrons
1017	Chemicals used to kill insects are:	A. Herbicides B. Insecticides C. Pesticides D. Fungicides
1018	The boiling points of the halogens	A. increases down the group B. decreases down the group C. remains constant D. can not be predicted
1019	Sterols, vitamin D and terpenese belong to	A. Simple lipids B. Complex lipids C. Derived lipids D. None
1020	The ionization energy	A. generally increases from left to right in a period B. increases from top to bottom in a group C. does not change in a period D. does not change in a group
1021	The value of critical temperature of a gas depends upon its:	A. Size B. Intermolecular forces in it C. Shape D. All of above
1022	Why is CO called as pollutant? reason is:	A. It combines with oxygen B. It inactivates glycoblysis C. It combines with hemoglobin D. Inactivates nerves
1023	The pH of neutral water is 6.8 then the temperature of H2O is	A. 25°C B. More than 25°C C. less than 25 C° D. Not predicted
1024	In homocyclic compounds the ring consists of	A. Carbon and oxygen atoms B. Carbon and nitrogen atoms C. Only carbon atoms D. Carbon atoms with one hetero atom
1025	An ideal gas, obeying Kinetic theory of gases cannot be liquified, because	A. its critical temperature is above 0°C B. its molecules are relatively small in size C. It solidifies before becoming a liquid D. Forces acting between its molecules are negligible
1026	NO. of naturally occuring aminoacids is	A. 10 B. 20 C. 30 D. 40
1027	The fibre which is made from acrylonitrile as monomers	A. PVC B. Rayon fibre C. Acrylic fibre D. Polyester fibre
1028	Lactoglobulin is found in	A. nucleus B. nerve cells C. Plants only D. muscles and in plants
1029	Which of the following is not a macromolecule?	A. diamond B. graphite C. iodine D. silica
1030	Which of the following is obtained by the hydrolysis of starch in the presence of diastase enzyme	A. Lactose B. Maltose C. Sucrose D. All of them
1031	Which of the following configurations corresponds to alkaline earth metals?	A. [Ar] 3d10, 4s2 B. [Ne] 3d2, 3p2 C. [Ar] 4s2 D. [Ar], 3d10, 4s1
1032	In cyclic structure of glucose when the position of atoms on Carbon 1 is altered one isomer changes to other. These isomers of glucose are called	A. Annomers B. Position isomers C. Meta-mess D. Cis-trans isomers
1033	Substance that does not show the process of sublimation is	A. K2Cr2O7 B. iodine C. naphthalene D. NH4Cl

1034	Which of the following is a steroid?	A. vitamin A B. vitamin B C. vitamin C D. vitamin D
1035	The compound that reacts the slowest in Lucas test	A. 1-Pentanol B. sec-butyl alcohol C. 3-Pentanol D. ter- butyl alcoho
1036	The main pollutant of leather in the waste water is due to the salt of:	A. Lead B. Chromium (VI) C. Copper D. Chromium (III)
1037	Alkyl halides are considered to be very reactive compounds towards nucleophiles, because	A. The have an electrophilic carbon B. They have an electrophilic carbon and a bad leaving group C. They have an electrophilic carbon and a good laving group D. They have a nucleophilic carbon and a good leaving group
1038	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
1039	Enzymes catalyse all biological reactions occuring 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
1040	The specie that develops strongest hydrogen bonding with water	A. HCOOH B. B.CH3CH2COOH C. CH3COOH D. ClCH2COOH
1041	betta-D-glucose is a monomer for	A. Starch B. Cellulose C. Glycogen D. Protein
1042	Prosthetic groups are	A. helical structures in protein B. sulphur containing parts of protein C. non-protein parts in compound proteins D. sites for hydrogen bonding
1043	Which type of motion is exhibited by gases?	A. Vibrational B. Transitional C. Rotational D. All of them
1044	If the volume of 2 moles of an ideal gas at 540 K is 44.8 litre then its pressure will be	A. 1 atmosphere B. 2 atmosphere C. 3 atmosphere D. 4 atmosphere
1045	Rusting of iron metal Fe occurs when Fe gets converted into Fe2O3 What happen with Fe?	A. F'e is neutralized B. Fe is sublimed C. Fe is reduced D. Fe is oxidized
1046	Which substances do nto react immediately with bromine water:	A. ethane B. benzene C. ethene D. phenol
1047	Some of crystals are good conductors of heat and electricity, they may be	A. ionic in nature B. of metallic character C. covalent in nature D. of molecular nature
1048	At equilibrium, the concentration of reactants and products are	A. Constant B. Maximum C. Different D. Equal
1049	$(CH_2O)_n$is general formula for	A. Monosacchardies B. Oligosaccharides C. Polysaccharides D. None of these
1050	Group of element belongs to IIB group	A. Zn. Cd. Hg B. Cu. Ag. Au C. Sc. Y. La D. Ni. Pd. Pt
1051	The element which exhibits maximum catenation property is	A. C B. Pb C. Ge D. Sn
1052	Leaching of nutrients is due to	A. Drying of soil B. Combustion of soil C. Acidification of soil D. Neutralization of soil
		A. Will double the rex

1053	Doubling the pressure in a liquid phase reaction	B. Will increase the rex C. Will decrease the rex D. Will not alter the concentration of reactant
1054	The temperature at which volume of ideal gas is hypothetically zero is called	A. Absolute zero B. 0°C C. OK D. Both a and c
1055	Dichlorodifluoromethane, CC/2F2 has been used in aeroso propellants and as a refrigerant. Which statement helps to explain why dichlorodifluromethane is chemically inert ?	A. The carbon-fluorine bond energy is large B. The carbon-fluorine bond has a law polarity C. Fluorine is highly electronegative D. Fluorine compound are non-flammable
1056	Which one of the following does not show isomerism?	A. Propane B. Hexane C. Butane D. Pentane
1057	An ideal gas expands according to PV=constant. On expansion, the temperature of gas	A. will rise B. will drop C. cannot be determined because the exteral pressure is not known D. will remain same
1058	250cm of 0.2 molar potassium sulphate solution is mixed with 250cm of 0.2 molar KCl solution. The molar concentration of K ions is:	A. 0.2 molar B. 0.25 molar C. 0.3 molar D. 0.35 molar
1059	The original volume of a gas at 0° is 273 cm^3at constant pressure, its volume at 273°C becomes	A. zero cm³ B. 546 cm³ C. 446 cm³ D. 346 cm³
1060	In elimination reaction, alcoholic KOH is used -oh in this case will act as.	A. Electrophile B. Base C. Leaving group D. Acid
1061	Each of the following compounds is effective as a refrigerant. The release of which one of these cause the greatest depletion of the ozone layer?	A. CC₂/F₂ B. CH₃OCH₃ C. CH₃CHF₂ D. CH₃CH₂CH₃
1062	organic synthetic or man made polymers are plastics, rubber and fibre, Which is not a synthetic polymer	A. silk B. polyester C. polyvinyl chloride (PVC) D. nylon
1063	The cause of minamate disease is the pollution of:	A. arsenic (As) into atmosphere B. industrial waste having Hg C. organic waste in drinking H₂O D. oil spills in H₂O
1064	The rate of diffusion of a gas is proportional to	A. P /√d B. √p/d C. P/d D. √ P/d
1065	For N2: +3H2<--------> 2NH3, if Kc is 1 than value of Kp at 273K would be	A. 1/22.414 B. 1/(22.414)2 C. 22.414 D. 11.207
1066	Naturally occuring lipids are called	A. Fats B. Protein C. Steroids D. None
1067	Which compound is not formed as a result of reaction between acetic acid & HI & red phosphorous	A. Ethanol B. Water C. Iodine D. Ethane
1068	If 250 $cm^3$of hydrogen gas is cooled from 127°C to -73°C at constant pressure then new volume of gas is _____ dm^3	A. 0.25 B. 0.375 C. 0.125 D. 0.0625
1069	Acceptance of macromolecular hypothesis	A. Kekule B. Gibbs

	was due to efforts of:	C. Standiger D. anderson
1070	Which of these polymers is a synthetic polymer	A. Starch B. Animal fat C. Polyester in an addition polymer D. Cellulose
1071	Fungicides are the pesticides which:	A. Kill plants B. Kill insects C. Kill herbs D. Control the growth of fungus
1072	Instantaneous dipole-induced dipole forces are also known as:	A. dipole-dipole interactions B. hydrogen bonds C. covlent bonds D. Van der Waals forces
1073	Total number of valence electrons in CH4	A. 8 B. 9 C. 10 D. 12
1074	Equal masses of $CH_4$and $O_2$are mixed in a 10 dm^3container at 25°C. The partial pressures of $CH_4$and $O_2$are in the ratio of	A. 1 : 2 B. 2 : 1 C. 1 : 1 D. 2 : 3
1075	2,4,6-Trinitrophenol is commonly called as	A. Phthalic acid B. Tartaric acid C. Malonic acid D. Picric acid
1076	The partial pressure of gas can be calculated if we know total pressure of mixture and:	A. Number of protons B. Number of electrons C. Number of neutrons D. Mole fraction of gases
1077	Joule is a unit of energy which is defied as	A. Kgm⁻²s⁻² B. Kgm²s⁻¹ C. Kgms⁻² D. Kgm²s⁻²
1078	Phenomenon of acid rains gain importance in:	A. 1930s B. 1940s C. 1950s D. 1960s
1079	Zinc reacts with dilute acids to liberate hydrogen. This is because:	A. Zn2+ ion is a powertul osidising agent than H' ion B. H+ ion is a powerful oxidising agent than Zn ion C. Zn2+ ion is a powerful reducing agent than H' ion D. H+' ion is a powerful reducing agent than Zn- ian
1080	In all oxidation reactions, atoms of an element in a chemical species lose electrons and increases their	A. Oxidation states B. Reduction states C. Electrode D. Negative charges
1081	The transition temperature of tin is	A. 95.5 C° B. 13.2 C° C. 13.2°C D. 128.5°
1082	Plaster of Paris is obtained from	A. marble B. bauxite C. gypsum D. limestone
1083	Which of the following is derived lipid	A. Sterols B. Vit D C. Terpenes D. All
1084	Vapour pressure of a liquid	A. increasing with increase of temperature B. increases with decrease of temperature C. increases with size of container D. increases with volume of liquid
1085	Select one which is alcohol	A. CH3-CH2-OH B. CH3COOH C. CH3-O-CH3 D. CH3-CH2-Br
1086	The thickness of ozone layer is:	A. 25----50 km B. 3km only C. 25---28 km D. 1 km only
1087	In Purification of potable water the coagulant used is	A. nickel sulpahte B. copper sulpahte C. barium sulphate D. alum

		D. alum
1088	Glycine is characerized by	A. Absence of an asymmeteric carbon B. Absence of optical activity C. The shortest amino acid D. All of these
1089	Catalyst used for ammonia synthesis is	A. Cu B. Co C. Zn D. Fe
1090	The buffering property of proteins is due to the presence of	A. Acidic and basic group B. Hydrogen bonds C. Indole group D. Hyrophobic
1091	The formation of PVC from vinyl chloride is an example of	A. subtsitution reaction B. addition polymerization C. condensation polymerization D. condensation reaction
1092	On ascending the electrochemical series strength as reducing agent	A. Increases B. Decreases C. Remains same D. not determinable
1093	Unit of the rate constant depends upon the	A. Molecularity of reaction B. Order of reaction C. Concentration terms D. Number of reactants
1094	COD of water can be measured by	A. Cr₂O₃ B. Cr₂O₄⁻²ions C. Cr₂O₇⁻²ions D. None of these
1095	Octet rule is not allowed in the formation of	A. NF3 B. B.CF4 C. CCl4 D. PCl5
1096	The pH rain of acid rain is	A. 8 - 7 B. 7 - 6.5 C. 6.5 - 6 D. less than 5
1097	In the body fats are hydrolysed into:	A. fatty acid and water B. fatty acid C. glycerol and water D. acid and glycerol
1098	Keratin is	A. Protein of tendons B. Rich in sulfur C. Poor in cysteine D. Conjugated protein
1099	Which factor is helping to reduce the environment pollution	A. rapid growth population B. urbanization C. idustrialization D. increase of plantation
1100	Which one of the following reaction of carboxylic acid is reversible.	A. Esterification B. Salt formation C. Reaction with PCl5 D. Reaction with SOCl2
1101	The value of R in term of $dm^3torr\ k^{-1}mol^{-1}$	A. 62400 B. 62.4 C. 8.313 D. 0.0821
1102	Which one of the following equations represents the 1st ionization energy of Na?	A. Na(s) ---->Na⁺ (g) + e⁻ B. Na(g) --->Na⁺ (g) + e⁻ C. Na(s) --->Na⁺ (s) + e⁻ D. Na (s) + e⁻ ---> Na⁺ (g)
1103	Per hydro cyclopentanone phenantherene is the basic structural of all the.	A. Waxes B. vitamins C. proteins D. steroids
1104	Which af the following compound reacts slower than benzene in the electrophilic substitution.	A. Phenol B. Nitrobenzene C. Toluene D. Aniline
1105	Monosacharide belongs to the groups:	A. fats B. carbohydrates C. lipids D. proteins
1106	Which one of the following has zero dipole moment	A. NH3 B. CHCl3 C. H2O D. BF3
		A. Common ion effect

1107	Buffer action can be explained by except	A. Common ion effect B. Le-Chatelier's principle C. Law of mass action D. Solubility product
1108	An ideal gas cannot be liquefied because	A. Its critical temperature is always above 0°C B. Its molecules are relatively small in size C. It solidifies before becoming a liquid D. Forces operative between its molecules are negligible.
1109	The density of a gas is 1.964 g dm-3 at 273K and 76 cm Hg The gas is	A. CH₄ B. CO₂ C. C₂H₄ D. Xe
1110	An acid that exists as a cyclic dimer in benzene and shows a molar mass of 120g/mol is	A. CH3COOH B. HCOOH C. Cl2CHCOOH D. Cl3CCOOH
1111	The reaction of formaldehyde with HCN is	A. Nucleophilic substitution B. Electrophilic substitution C. Nucleophilic addition D. Free radical addition
1112	At higher temperature isotherm moves away from y-axis because of increase in	A. Pressure B. Number of moles C. Volume D. Mass
1113	Which property is not present in lipids?	A. Liquid B. Solid and semi solid C. Soluble in water D. Form emulsion
1114	Natural fertilizers are materials derived form:	A. plants B. animals only C. both plant and animals D. none of all
1115	Which of the following liquid has highest bolling point	A. HCl B. HBr C. H2O D. Br2
1116	The strength of dipole-dipole forces depends upon	A. Electro negativity difference B. Distance between atoms C. Electropositivity difference D. Both A & B
1117	Evaporation causes	A. High temperature B. High pressure C. Cooling D. Vapour
1118	Which one of the following is a water soluble vitamin?	A. niacin B. rioflavin C. trypsin D. ascorobic acid
1119	Which step is unnecessary for purification of water for drinking purposes	A. aeration B. coagulation C. treatment with chlorine D. treatment with iodine
1120	Which property is associated with ionic solids?	A. Solubility in polar solvents B. Low melting points C. Good conductivity in solid state D. High vapour pressure
1121	2-propanol shows----- isomerism with 1-propanol	A. Chain isomerism B. Positional isomerism C. Metamerism D. Geometrical isomerism
1122	Activity of the enzyme is reduced by	A. temperature B. concentration C. pH D. inhibitors
1123	Final product of hydrolysis of nitrile is	A. Ketone B. Alcohol C. Aldehyde D. Carboxylic acid
1124	Which compound is obtained by the elimination of bromopropane?	A. Propene B. Ethene C. Propane D. Butane
1125	Which of the following is not a heavy industry?	A. Iron B. Fertilize C. Paper D. None
1126	Diamond is a bad	A. it has light structure B. it has a high density

	conductor because	C. there are no free electron present in the crystal of diamond to conduct electricity D. it transparent to light
1127	Which of the following compound have empirical formula, but no molecular formula	A. H20 B. C6H6 C. H₂O₂ D. NaCl
1128	Main cause of reducing map is:	A. Combustion of coal B. NO and NO₂ C. Un-burnt hydrocarbons D. All of these
1129	Zwitter ion are	A. Basic B. Acidic C. Neutral D. Carry both -ve and +ve charges
1130	The order of reaction provides valuable information about of reaction	A. Condition B. Concentration C. Mechanism D. Parameters
1131	In the esterification, first attack is due toon carborylic acid	A. Hydrogen ion B. Alcohols C. Water D. All
1132	Which of these has at least one d electron	A. Sc+3 B. Mn+7 C. Ti+4 D. Cr+3
1133	The beaker contains slurry of ice and water, the three thermometers Fahrenheit, Kelvin and centigrade placed init. the thermometers are represented as A, B and C respectively, On which thermometer the lowest reading will be?	A. B B. A C. C D. both A and B
1134	What is the formula of talc or soapstone?	A. Na2B4O7.10H2O B. H2Mg3(SiO3)4 C. Cu2S D. NaNO3
1135	Among the following, which one is nucleophile	A. H+ B. Ca2+ C. OH- D. Na+
1136	The Catalyst used in the contact tower for the manufacture of H_2SO_4 is easily poisoned by:	A. Nitrous oxide B. Nitrogen gas C. Arsenic oxide D. Carbon dioxide
1137	Which of the following liquid has high vapour pressure?	A. H₂O B. ether C. CH₃OH D. C₂H₅OH
1138	Proteins loose their ability to work	A. by slight heating B. by change in structure C. by slight cooling D. when inside the body
1139	Which is used as a coagulant:	A. Ferric salts B. Potash alum C. a and b both D. Chlorine
1140	Ethanol react with HCN to form cyanohydrin, it is an example of.	A. Nucleophilic addition B. Electrophilic addition C. Electrophilic substitution D. Nucleophilic substitution
1141	The enthalpy of formation of a compound is	A. Positive B. Either positive or negative C. Negative D. None
1142	Which of the following has isomorphous structure with MgO	A. NaF B. S C. Sn D. N
1143	Lead pollution is mainly due to	A. Metallic pollution B. Space pollution C. Acid rain D. Cd pollution
1144	Half-lives required to convert 100% reactant to product for a first order	A. 10 B. 1000 C. 100

	reaction are	D. Infinity
1145	Which of these polymers is a synthetic polymer?	A. animal fat B. starch C. cellulose D. polyester
1146	Which is the structure of polyvinyl chloride?	A. [H2C=CH-Cl] B. -[HCCl-CH-Cl]- C. -[H2C-CH-Cl]- D. -[CCl2-CCl2]-
1147	The proteins which are derived by conjugated proteins are called as	A. Simple protein B. Complex protein C. Derived protein D. None
1148	The rigid rocky part of earth crust called lithosphere extends upto a depth of:	A. 10 km B. 100 km C. 1000 km D. 1500 km
1149	Which of the following ketone will not give iodoform test	A. Methyl isopropyl ketone B. Dimethyl ketone C. Ethyl isopropyl ketone D. 2-hexanone
1150	Condensation occurs between amino acids with the elimination of	A. H₂O B. H₂ C. O₂ D. NH₃
1151	The polarizabilities of elements mostly increase down the group due to the reason that	A. the atomic numbers increase B. number of protons increase C. number of shells increase along with increase of shielding effect D. the behaviour of the elements remain the same
1152	The highest temperature above which a gas cannot be liquified no matter how much pressure is applied, is called as	A. critical temperature B. absolute zero C. liquefaction temperature D. boiling point
1153	The temperature in the incineration of industrial and hazardons waster process had a range	A. 950 to 1300°C B. 500 to 900°C C. 250 to 500°C D. 900 to 1000°C
1154	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
1155	By increasing temperature,the transition from a gas to an ionized gas gives free electrons called:	A. UV radiation B. gas phase C. plasma D. vapour density
1156	Pressure remaining constant, at which temperature the volume of a gas will become twice of what it is at 0°**C**	A. 546°C B. 200°C C. 546 K D. 273 K
1157	Which one of the following statements about melting point of metals is true?	A. sodium has a lower melting point than potassium B. sodium has a higher melting point than magnesium C. potassium has a higher melting point rubidium D. lithium has a lower melting point than sodium
1158	Which method is used to prepare carboxylic acid?	A. Hydrolysis of Al₄C₃ B. Hydrolysis of CaC₂ C. Hydrolysis of alkyl nitrites D. Hydrolysis of alkenes
1159	The unit of R depends on	A. Mole B. Pressure volume C. Temperature D. None of these
1160	If a reaction involves only solids and liquids, which of the following is true?	A. ΔH = ΔE B. ΔH =ΔE C. ΔH>ΔE D. AH =AE +nRT
1161	Partial pressure of gases in a mixture depend upon:	A. Number of moles B. Number of protons C. Number of electrons D. Number of neutrons
1162	Which of the following is a non-crystalline solids pair	A. Diamond, wood B. Glass, table salt C. Wood, glass D. Sucrose, glass
	According to Hess's law,	A. Depends on path B. Independent of the path

1163	the enthalpy change for a reaction	B. Independent of the path C. The sum of ΔE and ΔH D. None of these
1164	The maximum oxidation state of Mn is	A. +6 B. +7 C. +5 D. +4
1165	Which of the following belongs to alkaline earth metals	A. Cu B. Zn C. Sn D. Mg
1166	Which of the following acts as a electrocphile in the electrphilic substitution of benzene.with bromine.?	A. Fe⁻³ B. Br- C. FeCl⁴⁻ D. Fe⁺²
1167	Which of the following best describes the shape and polarity of the carbon disulphide molecule?	A. Bent and polar B. Linear and non-polar C. Pyramidal and polar D. Bent and non-polar
1168	Change in enthalpy (ΔH) of a system can be calculated by	A. ΔH=ΔE - PV B. ΔH =ΔE +q C. ΔH = ΔE - q D. ΔH = ΔE + PΔV
1169	Denaturation of protein means the structure of protein is disrupted indicate which factor does not denature protein	A. oxidizing agent B. heat protein C. keeping pH 7.35 D. pH changes
1170	The volume of gas depends upon the------- moleules	A. Size of B. Space between C. Molecular weight D. both a and b
1171	If V_1= 5 litres, P_1= 2 atm, T_1= T_2= 273°C and V_2= in liter	A. 5 B. 80 C. 125 D. 10
1172	For what value of Kc almost forward reaction is complete	A. Kc.=10(-30) B. Kc.=1 C. Kc = 10(30) D. Kc,=0
1173	The number of atoms or molecules whose concentrations determines the rate of a chemical reaction is called the	A. Molecularity of the reaction B. specific activity of the reaction C. Order of the reaction D. rate constant of the reaction
1174	Troposphere extends upto km:	A. 0-15 km B. 10-15 km C. 15-40 km D. 15-40 km
1175	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.
1176	Which of the following is incorrect for glucose & sucrose	A. Both are water solube B. Natural polymers C. Source of energy D. Carbohydrate in nature
1177	Which one of the following statements about glucose and sucrose is incorrect	A. Both are soluble in water B. Both are naturally occurring C. Both are carbohydrates D. Both are disacharides
1178	Alcohol reacts slowly with Na-metal as compared to water because it has low concentration of H+ ion which suggests that it is.	A. Less acidic than water B. Less basic than phenol C. More acidic than phenol D. More acidic than water
1179	Compound X & Y give effervesce with Na2CO3, solution. X gives a white ppt with ammonical AgNO3 while Y gives sweet smell compound on heating with alcohol X &Y are	A. Formic acid & acetic acid B. Acetone & formic acid C. Acetaldehy de & acetic acid D. Acetic acid & acetone
1180	What is correct about heat of combustion	A. It is applicable to gaseous substances only B. It is always negative C. It is always positive D. It is positive in some cases while negative in other
1181	The kinetic energy of three	A. 3/2 RT B. 3 RT

	moles of gas is:	C. 1/2 RT D. 2 RT
1182	In a crystal a ≠ b ≠ c,a = y 90° and β ≠ 90° it is	A. Monoclinic B. Rhombic C. Trigonal D. Tetragonal
1183	What is true about an alcohol and phenol	A. Both are more acidic than water B. Both react with NaOH C. Both produce CO2 with Na2CO3 D. Both, produce H2 with Na
1184	If absolute temperature of a gas is doubled and pressure is reduced to one half, then the volume of the gas will	A. remains unchanged B. increases unchanged C. reduces to 1/4 D. increases 4 times
1185	Carbon-Carbon double bond length in C3H6	A. 154 pm B. 134 pm C. 120 pm D. 105 pm
1186	Inside every fluorescent lamp there is present a:	A. Gas B. Plasma C. Liquid D. Solid
1187	All of the following are essential amino acids except	A. Lysine B. Aspartate C. Tryptophan D. Hisitidine
1188	The value of oxidation number of chlorine in HClOs is	A. +7 B. +5 C. -1 D. +3
1189	Aldehydes are easily oxidized to corresponding carboxylic acids in the presence of:	A. Strong oxidizing agents B. Highly strong oxidizing agents C. Tollen's reagent D. Tollen's reagent and Fehling solution
1190	Which of the following molecules have a permanent dipole	A. CH₄ B. CHCl₃ C. CCl₄ D. CO₂
1191	Ethanoic acid reacts with PCl5, to give ethanoyl chloride. HCl and a third compound What is the third compound	A. H3PO3, B. POCl3 C. SO2 D. COCl2
1192	Primary alcohols and aldehydes are oxidized to corresponding:	A. Alkanes B. Alkenes C. Alkynes D. Carboxylic acids
1193	Amides are	A. Strongly basic B. Weakly basic C. Acidic D. Strongly
1194	The most abundant protein in the human body is	A. Collagen B. Keratin C. Myosin D. Albumin
1195	The high molecular weight materials which yield on hydrolysis the amino acids is called:	A. Carbohydrates B. Lipids C. Fatty acids D. Proteins
1196	Elastic collision involves:	A. gain of energy B. loss of energy C. no relationship between elastic D. no gain or loss of energy
1197	Strong dipole-dipole forces among the liquid molecules are responsible for	A. very high heat of vaporization B. very low heat of vaporization C. cannot be predicted D. negligible forces are these
1198	What is the morality of a solution containing 15g of urea is 500cm^3 of solution?	A. 1M B. 0.5M C. 2M D. 1.5M
1199	The attractive forces which exist between ionic compounds and water molecules are	A. dipole-dipole forces B. ion diopole forces C. istantaneous dipole-induced dipole forces D. dipole-induced dipole forces
		A. Weak acid and its salt with strong base

1200	A basic buffer solution can be prepared by mixing?	B. Weak base and its salt with strong acid C. Strong acid and its salt with weak base D. Strong base and its salt with strong acid
1201	A single chloride free radical can destroy the ozone molecules	A. 100 B. 100000 C. 10000 D. 10
1202	An amino acid exists in the form of Zwitter-ion Which has:	A. one - ve charge B. one + ve charge C. two + ve carges D. one + ve and one -ve
1203	Nylon 6 6 is prepared by the reaction of hexamethylene with	A. formic acid B. acetic acid C. adipic acid D. none of these
1204	The amount of Si in the lithosphere is about	A. 27.72% B. 30.35% C. 35.30% D. 40.21%
1205	For a chemical reaction to occur	A. The vessel shall be open B. Reacting molecules should have less energy than Ea at time of collision C. Reacting molecules must be properly oriented and energy more than or equal to Ea D. The reacting molecules must not collide with each other
1206	The reaction which is responsible for the production of electricity in the voltaic cell is	A. Hydrolysis B. Oxidation C. Reduction D. Redox
1207	Stability of Cu-metal is due to filled of d-orbital	A. Half B. Completely C. Partially D. Quarterly
1208	Which polymerization is free radical mechanism based	A. Addition B. Condensation C. Both a and b D. None
1209	Which one of the following does not act as pollutant?	A. carbon monoxide B. sulphur dioxide C. hydrocarbons D. carbon dioxide
1210	Which pair of transition elements shows abnormal electronic configuration?	A. Sc and Zn B. Cu and Sc C. Zn and Cu D. Cu and Cr
1211	Amount of cellulose produced by plants every year is _____ approximately	A. 100 billion tons B. 90billion tons C. 80 billion tons D. 70 billion tons
1212	Biochemical oxygen demand (BOD) is the capacity of organic matter in natural water to consume oxygen with in a period of:	A. 2 days B. 6 days C. 5 days D. 7 days
1213	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 reactions to take place C. air must be blowing swifty D. there must be SO₂in the air
1214	Keeping in view the charge density select the compound amoung the following having highest lattic energy:	A. LiBr B. KCl C. MgO D. NaF
1215	Elimination unimolecular reactions involve	A. Second order kinetics B. First order kinetics C. Third order kinetics D. Zero order kinetics
1216	One gram of Carbohydrate yield energy:	A. 4Kcal B. 9Kcal C. 10Kcal D. 100Kcal
1217	Helium atom is two times heavier than a hydrogen molecule. At 298 K, the average kinetic energy of a helium atom is	A. same as that of a hydrogen molecule B. half that of a hydrogen molecule C. two times that of a hydrogen molecule D. four times that of hydrogen molecule
1218	Ozone is produced in regions:	A. tropical B. Polor C. antaric D. equator
		A. Hydrosphere

1219	Heat balance of earth is maintained by sphere:	A. Hydrosphere B. atmosphers C. lithosphere D. biosphere
1220	In which of the following processes the liquids are made to boil at low temperature	A. Vacuum distillation B. Destructive distillation C. Distillation D. Vacuum destructive distillation
1221	Which of the following protein is used to make buttons	A. Gelatin B. Callogen C. Albumin D. Casein
1222	The density of methane at 2.0 atmosphere pressure at 27°C is	A. 0.13 gL⁻¹ B. 0.26 gL⁻¹ C. 1.30 gL⁻¹ D. 26.0 gL⁻¹
1223	The optimum pH value for the enzyme pepsin is	A. 10 B. 1.4 C. 8 D. 6
1224	During an exothermic or endothermic reaction which one of the following formula is used to calculate the amount of heat evolved or absorbed	A. ΔH = ΔE+PV B. ΔE= q+w C. Δp =ΔH D. q = m x s x ΔT
1225	Collagen contains high percentage of	A. Glycine B. Tryptophan C. Phenyl Alanine D. Serine
1226	At higher temperature isotherm of Boyle's law moves away from both axis, is due to increase in:	A. pressure B. No. of moles C. Volume D. All
1227	The cell which converts electrical energy to chemical energy is called	A. Electrochemical cell B. Voltaic cell C. Galvanic cell D. Down's cell
1228	What is distilled first?	A. Liquid CO₂ B. Liquid N₂ C. Liquid O₂ D. Liquid H₂
1229	Which attractive forces cause molecular solids to be formed?	A. Ionic B. Metallic C. Covalent D. van der Waals
1230	The motion imparted to the gas molecules by gravity is	A. very small B. very large C. negligible D. appreciable
1231	Phenol can be diatingushed from ethyl alcohol by all of the following reagents except	A. Iodoforrn test B. Na C. Br2 /H2O D. NaOH
1232	When does average rate become equal to instantaneous rate of reaction	A. At the start of reaction B. time interval is zero C. at the end of reactior D. time interval approaches zero
1233	Which of the following activates phosphatase enzyme	A. Ca²⁺ B. K⁺¹ C. Mg²⁺ D. Zn²⁺
1234	Increased awareness of environment issues has led chemist to develop products and processes that do not impact on the environment in terms of pollution or depletion of sources. To help chemist to achieve this aim, some principles are drawn, which one is not the guiding principle	A. avoid waste production B. use no solvent C. use a catalyst D. devise a multistep procedure for synthesis of new compounds
1235	One dm3 of H2 and O2: has different masses but no. of particles are	A. same B. H2 has greater C. different D. O2 has greater
1236	Which one the following gases is ideal at -200°C?	A. N₂ B. He C. both

		D. none
1237	Rancidification of facts and oils is due to:	A. oxidation reaction B. hydrolysis reaction C. both a and b D. hydrogenation reaction
1238	Palmitic acid & steanic acid are obtained from process of fats & oils:	A. Reducing B. Neutralization C. Oxidation D. Hydrolysis
1239	The value of van der Waal s constant a for gases CO_2, N_2, and SO_2, are 3.59 ,1.39, 1.36, and 6.17 atm dm^6 mol^{-2} respectively the gas which can be most easily liquefied is	A. CO₂ B. O₂ C. N₂ D. SO₂
1240	The graph between P ony-axis and 1/V at x-axis for a given mass of a gas at temperature T is a	A. straight line B. curved upward C. curved downward D. circular
1241	Protein are classified into	A. Simple protein B. Complex proteins C. Derived proteins D. All of these
1242	Digestion of carbohydrates begins in the:	A. large intestine B. small intestine C. duuoderium D. beccal cavity/mouth
1243	Which one of the following enzymes brings about the hydrolysis of fats?	A. urease B. maltase C. zymase D. lypase
1244	Cyclobutane structure is categorized under	A. Aromatic compounds B. Aliphatic compounds C. Alicyclic compounds D. Heterocyclic compounds
1245	A student mixed ethyl alcohol with small amount of sodium dichromate and added it to the hot solution of dilute sulphuric acid. A vigorous reaction took place. He distilled the product formed immediately. What was the product?	A. Aceton3 B. Dimethyi ether C. Acetic acid D. Acetaldehyde
1246	The strongest conjugate base is	A. OH- B. CH3O- C. C6H5O- D. CH3COO-
1247	Which of the following is not macromolecule?	A. Proteins B. Carbohydrates C. Acrylonitirle D. Lipids
1248	Diseases like dysentery, typhoid and hepatitis are caused by mixing of in water:	A. Live stock wastes B. Oil spilage C. detergents D. pesticides
1249	The other name for cross linked polymers is	A. Linear polymer B. Branched polymers C. Inter connected polymers D. None of these
1250	Optimum temperature for enzyme activity is	A. 125°C B. 37°C C. 40°C D. 100°C
1251	The amino linkage in Nylon -6,6 has the structure.	A. -NH2 B. -CO,O2 C. -NH-CO- D. -NH-O-CO-
1252	The enthalpy change for the reaction C2H2 + 5/2 O2 --------> 2CO2 + H2O is known as enthalpy of	A. Fomation of CO2 B. Fusion ofC2H4 C. Combustion of C2H4 D. Vaporization of C2H2
1253	A line parallel to x-axis is obtained when graph is drawn between	A. Volume on abscissa & pressure on ordinate B. Volume on abscissa & PV on ordinate at all conditions C. Pressure on abscissa & PV on ordinate at constant temperature D. None of these
		A. Amylase

		A. Amylose
1254	Water soluble component of starch is	B. Amylopectin C. Both D. Cellulose
1255	Oxygen and sulphur are present in VI-A group of the periodic table The hydride of oxygen i.e., H2O is liquid at room temperature but the hydride of sulphur (H2S) is a gas. This is due to	A. greater bond angle of water than Hs B. greater bond lengths in HS than H2O C. hydrogen bonding in water D. acidic character of HS
1256	Elements of group ll-A are called	A. f-block elements B. s-block elements C. p-block elements D. d-block elements
1257	When the change in concentration is 6 x 10-4 mol dm-3 and time for that change is 10 seconds the rate of reaction will be	A. 6 x 10⁻³ mol dm⁻³ sec⁻¹ B. 6 x 10⁻⁴ mol dm⁻³ se⁻¹ C. 6 x 10⁻² mol dm⁻³ sec⁻¹ D. 6 x 10⁻⁵ mol dm⁻³ sec⁻¹
1258	The pH range of the acid rain is	A. 6.5 - 6 B. Less than 5 C. 8 - 7.5 D. 7 - 6.5
1259	The material possessing superconducting properties is	A. Yb Ba₂ Cu₂ O₈ B. Hg Be₂ Ca₂ Cu₂ O₈ C. Y Ba₂ Cu₃ O₇ D. Y B₂ Cu₃ O₇
1260	Select the name of ready plant from which word "Paper" is derived:	A. sun flower B. papyrus C. water hyacinth D. rose
1261	When graph is plot between P and 1/V at constant temperature. A straight line obtains which move toward _____ when temperature increase	A. Pressure axis B. Volume axis C. 1/V axis D. 1/P axis
1262	Which of the following liquids have low vapour pressure at 25°C	A. Water B. Ethyl alcohol C. Acetone D. Diethyl ether
1263	Plastics are a pollution problem because may plastics:	A. burn to produce toxic fumes B. decompose to produce tocxic products C. are made from petroleum D. are very inflammable
1264	The major binding force of diamond,silicon and quartz is	A. Electostatic force B. Electical attraction C. Ceobalent bond force D. Non convalent bond force
1265	Which one of the following molecules show maximum hydrogen bonding?	A. H₂O B. H₂Se C. H₂S D. HF
1266	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
1267	Which woody raw material is used for the manufacture of paper pulp?	A. cotton B. bugases C. poplar D. rice straw
1268	K2SO4, and K2Cr2O4, are isomorphous solids and exist in	A. cubic form B. orthorhombic form C. trigonal form D. tetragonal
1269	The number of molecules in 22.4 dm3 of gas at 0°C and 1 atm are	A. 6.02×10(23) B. 6.02× 10(25) C. 6.02×10(22) D. 6.02×10(21)
1270	Which of the following equation is for idea gas:	A. PV = dRT B. PR = nTP C. PM = nRT D. PV = nRT
1271	The concentration of dissolved molecular oxygen in water which acts as the most important oxidizing agent ranges from	A. 2 ppm - 6 ppm B. 2 ppm - 4 ppm C. 4 ppm - 8 ppm D. 2 ppm - 3 ppm

1272	Which of the following is a limitation of balanced chemical equation	A. Conditions and rate of reactions B. Physical state and mechanism C. Reactants and products and their coefficients D. Both (a) and (b)
1273	One degree on Celsius scale is _____ time greater then Fahrenheit scale	A. 9/5 B. 5/9 C. 6/5 D. 5/6
1274	The gases suddenly if these are allowed to expand:	A. react B. cool down C. heat up D. moved randomly
1275	On adding NH3 to water	A. Ionic product will increase B. [H3O+] will inerease C. Ionic product will decrease D. [H3O+] will decrease
1276	At what temperature, would N_2molecules have the same average speed as He-molecules at 300 k?	A. 1100 K B. 2100 K C. 420 K D. None
1277	Electrolytic products of dilute aqueous solution of sodium sulphate is	A. Na. SO2 B. H2. S02 C. Na. O2 D. H2,O2
1278	Which one of the following is co-polymer	A. PVC B. PVA C. Polystyrene D. Terylene
1279	Which one of the following will behave least like an ideal gas at high temperature and low pressure?	A. hydrogen fluoride B. helium C. oxygen D. carbon dioxide
1280	$CuSO_45H_2O$ crystals belong to	A. triclinic B. cubic C. tetragonal D. orthorhombic
1281	Geometry of NH3 is	A. ^{Tetrahedral} B. Square planer C. Pyramidal D. Linear
1282	Phosphoprotein comes under the type of proteins	A. Simple protein B. Derived protein C. Conjugated D. Both A & B
1283	Ozone layer is high:	A. 20-23 km B. 22-25 km C. 23-26 km D. 25-28 km
1284	All gases can be compressed by:	A. Keeping constant pressure B. Decreasing pressure C. Increasing pressure D. None of above
1285	Which of the following brings about the conversion of starch into maltose?	A. maltase B. zymase C. diastase D. invertase
1286	What are the S.I. units of excluded volume "b" in Vander Waal's equation	A. dm³mol⁻¹ B. m³mol⁻¹ C. mol dm⁻³ D. mol m⁻³
1287	The alkaline earth metals are called so because they	A. form alkaline solution and are present in earth crust as minerals B. form alkaline solution and are found in nature states C. are present in earth crust D. are present in earth crust as their minerals
1288	Elements in lithosphere exist generally as:	A. metals B. non-metals C. metalloids D. minerals
1289	The dilute solution of _____ is called vinegar.	A. Formic acid B. Acetic acid C. Oxalic acid D. Benzoic acid
1290	Which of the following gives silver mirror with ammonicaT AgNO3	A. Benzyl alcohol B. Benzene C. Benzoic acid D. Benzaldehyde

1291	The relative rate of diffusion of a gas (molecular weight = 128) as compared to oxygen is	A. 2 times B. 1/4 C. 1/8 D. 1/2
1292	Which of the following compound shows the geometrical isomerism	A. 2-butene B. 2-butyne C. 2-butanol D. Butanol
1293	Protein may have	A. Primary structure B. Secondary structure C. Tertiary structure D. All of these
1294	In graphite crystal, carbon is	A. sp hybridized B. sp²hybridized C. sp³hybridized D. None
1295	Amylum is another name of	A. Starch B. Amylose C. Amylopectin D. Cellulose
1296	1, 3, 5-Pentanetriol has secondary carbon	A. 3 B. 1 C. 2 D. Zero
1297	Which of the following carbohydrates is used in silvering of mirrors	A. Sucrose B. Cellulose C. Fructose D. Glucose
1298	Which of the following will undergo nucleophilic addition reaction more easily?	A. Aldehyde B. Alkene C. Aldehyde and ketone equally D. Neither aldehyde nor alkenes
1299	NH_3shows a maximum boiling point among the hydrides of Vth group elements due to	A. very small size of nitrogen B. hydrogen bonding between its molecules C. enhanced electronegative character of nitrogen D. pyramidal structure of NH₃
1300	The reason of acid rain is:	A. release of CO in excess by in complete combustion B. excess release of NO₂ and SO₂ from burning of fossil fuels C. Formation of NH₃ in excess form industry and coal gas D. Formation of excess CO₂ due to combustion and respiration
1301	Absolute zero is equal to:	A. -273.15K B. -273.15^oC C. -237.15K D. -273 ^oC
1302	There are three different substances argon hydroiodic acid and hydroiodic acid. the correct sequence in which the boiling point increases is:	A. HI > Ar > HCl B. Ar < HCl < HI C. HI > HCl > Ar D. HCl < HI < Ar
1303	Ozone in stratosphere extends upto km:	A. 0-15 km B. 10-15 km C. 15-40 km D. 15-25 km
1304	Which ion has maximum number of unpaired electrons in 3d subshell and shows maximum paramagnetic behavior?	A. Cr+3 B. Ni+2 C. Co+2 D. Fe+3
1305	Lattice energy is also termed as	A. ionization B. crystal energy C. dissociation D. bond energy
1306	Rancidification of fast and oils is due to:	A. hydrolysis reaction B. oxidation reaction C. both a and b D. hydrogenation reaction
1307	Newspapers can be recycled again and again by how many times	A. 5 B. 2 C. 4 D. 3
1308	Liquids are less common than solids and gases because	A. They exist in narrow range of temperature and pressure B. They have definite volume C. Liquid molecules can slide past each other D. Molecules contain three type of motion
	The pressure of gas at	

1309	constant temperature in a container of 2dm3 is 10 atm what will be its final pressure if it is connected with 10 dm3 container	A. 2 atm B. 1.6 atm C. 5 atm D. I atm
1310	Whenever a reaction is endothermic, then it means that	A. Heat is transferred system to the surrounding B. Heat is transferred from surrounding to the system C. Heat content of the products is less than that of reactants D. Heat content of the reactants is greater than the products
1311	Which one of the following is not a component of environment:	A. biosphere B. stratosphere C. hydrosphere D. lithosphere
1312	Burning of which one of the following waste is considered as useful industrial fuel or to produce electricity.	A. Metals B. Crass C. Paper D. Plastic
1313	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
1314	Cyclonite is a powerful:	A. explosive B. antiseptic C. analgesic D. anti-inflammatory
1315	Macromolecules are classified:	A. inorganic B. organic C. biopolymer D. synthetic
1316	The force which hold the atoms together to form a compound is called:	A. Dispersion forces B. London forces C. A chemical bond D. Ven der wall's forces
1317	Helical structure of protein is stabilized by	A. Peptide bond B. Dipeptide bond C. Van der wall's forces D. Hydrogen bonding
1318	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
1319	Which of the following reactions does not involve formation of carbocation?	A. SN1 and E1 B. El and E2 C. SN1 and SN2 D. E2 and SN2
1320	Which of the following element has high m.p and b.p, it acts as a reducing agent, and can react with bases?	A. Sr B. Ca C. Be D. Mg
1321	The basic difference between synthetic and natural fertilizer is in their	A. raw material B. crop application C. usage D. shapes
1322	During combustion analysis, which one is used for absorbing carbon dioxide:	A. 50% KOH B. 5% KOH C. Mg(ClO4)2 D. Silica gel
1323	While finding the relative atomic mass, which of the following standard is used to compare the atomic mass of chlorine .	A. Carbon-12 B. Neon -20 C. Carbon -13 D. Nucleon number
1324	Units of van der Waals constant a is	A. atm dm⁶/mol² & Nm⁴/mol² B. atm dm⁴/mol² & Nm⁴/mol² C. atm dm⁴/mol² & Nm⁶/mol² D. None of these
1325	Ecology is a science of environment and deals specially with	A. stratosphere B. biosphere C. lithosphere D. hydrosphere
1326	The electrical conductivity of the metals decreases with the increasing temperature. This is because	A. the number of free electrons decrease B. the bonds of the metal atoms become weak C. the to and fro motion of the metal ions decrease D. the increase of to and fro motion of the metal ions hinders the free movement of electrons

1327	Cholesterol is a precursor of steroid hormones, Choose the class of steroid:	A. a carbohydrate B. a hydrocarbon C. a natural lipid D. a protein a hydrocarbon
1328	All of the following are primary aminoacids except	A. Cysteine B. Cystine C. Alanine D. Arginine
1329	Amino acid which has cyclic structural is	A. Proline B. Valine C. Alanine D. Glutamic acid
1330	The structure of a polymer depends upon how the monomer-repeating unit joins to make a polymer. What is not the type of structure of a polymer	A. Synthetic polymer B. Linear polymer C. Branched D. Cross linked or inter connected polymer
1331	Which one of the following is an exact composition of a carbohydrates?	A. Carbon and hydrogen B. Carbon and oxygen C. Carbon , hydrogen and oxygen D. Hydrogen and oxygen
1332	Anthracene contains number of fused benzene rings	A. 1 B. 2 C. 3 D. 4
1333	Pathogens in raw water are killed in step:	A. aeration B. coagulation C. chlorination D. treatment
1334	in diamond a unit cell is tetrahedral and averall crystai structure is	A. face centred cubic B. body centred cubic C. tetrahedral D. hexagonal
1335	Which of these polymers is an addition polymer?	A. nylon 6,6 B. Polystyrene C. terylene D. epoxy resin
1336	Amorphous solids	A. have sharp melting points B. undergo clean cleavage when cut with knife C. have perfect arrangement of atoms D. can possesses small regions of orderly arrangements of atoms
1337	Isotopes symbol of ion of sulphur-33 is ^{33}S-2 . How many no of protons 16 and neutrons are present if the number of electron are 18.	A. P=18, n = 15 B. P = 16 , n = 17 C. P = 16, n = 16 D. P= 17, n = 16
1338	Ozone gas has boiling point:	A. Low B. High C. Medium D. Highest
1339	One of the following is not type of polymer	A. homopolymer B. copolymer C. heteropolymer D. terpolymer
1340	Cement is mixture of so many compounds roasted in rotary kiln.Which substance has greater percentage:	A. Lime B. Alumina C. Silica D. Magnesia
1341	In macromolecules DP stands for	A. Dissociation parameter B. Dissociation polymer C. Degree of polymerization D. None of these
1342	In voltaic cell a saht bridge is used in order to	A. Pass the electric current B. Prevent the flow of ions C. Mix solutions of two half cells D. Allow movement of' ions between two cells
1343	As the number of carbon atoms increase the number of isomers also increase. The six carbon compound hexane has as many as:	A. 10 isomers B. 3 isomers C. 5 isomers D. 6 isomers
	The destiny of a gas is	A. Viscosity

1344	directly proportional to pressure, inversely proportional to temperature and directly proportional to:	B. Molar mass C. Momentum D. All of above
1345	Deep sea divers breath air under increased pressure, therefore they use a mixture of	A. 96% N₂and 4% O₂ B. 96% O₂and 4% N₂ C. 94% N₂and 6% O₂ D. 94% 0₂and 6% N₂
1346	The substance used in the soil to provide element.Which are essential for plant growth are known as:	A. manures B. fertilizers C. pesticides D. additive
1347	Polar ice caps can melt due to	A. Acid rain B. Green House Effect C. Smog D. Chlorofluorocarbons
1348	The most unsymmetrical one in crystal system is	A. triclinic B. Li, Na, K C. monoclinic D. hexagonal
1349	SO_2makes _____ acid rains	A. carbonic acid B. Sulfuric C. Nitric acid D. All of these
1350	Tasteless sugars are:	A. monosaccharides B. trisaccharides C. oligo saccharides D. poly saccharides
1351	Nitrogen percentage in atmosphere is:	A. 76% B. 77% C. 78% D. 79%
1352	Photochemical smog contains----as main reactants	A. Nitrous oxide & unburnt hydrocarbons B. NO & brunt hydrocarbons C. Nitric oxide & unburnt hydrocarbons D. N2O & burnt hydrocarbons
1353	For the purpose of interacts which one of the following arrangements represents the correct of increasing stability?	A. covalent < hydrogen bonding < London forces < dipole-dipole B. London forces < hydrogen bonding < dipole-dipole < covalent C. London forces < dipole-dipole < hydrogen bonding < covalent D. Dipole-dipole < London forces < hydrogen bonding < covalent
1354	Which of the following gas will have lowest rate of diffusion	A. CH₄ B. N₂ C. NH₃ D. CO₂
1355	One of the environmental problem is the formation of oil slicks when oil is spilled form 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 fluorine trapped in it D. Use a sorbent having Al₂O₃trapped in it
1356	In which of the following compounds hydrogen bonding is not present	A. water B. ethanol C. ether D. ammonia
1357	If the volume term is present in denominator of Kc expression, then which one is correct	A. Increase in pressure will shift the reaction backward B. Increase in pressure will shift the reaction forward direction C. Decrease in volume will shift the reaction forward direction D. Reaction will not effected
1358	In the atmosphere, $O_2$is about	A. 10% B. 15% C. 21% D. 25%
1359	The height of the peak in the mass spectrum shows	A. Number of isotopes B. Relative abundance C. Mass number D. Number of protons
1360	According to kinetic molecular theory, kinetic energy of molecules increases when they are:	A. melted from solid to liquid state B. frozen into a solid C. condensed into liquid D. mixed with other molecular at low temperature
1361	Density of a gas is usually expressed in	A. Kg m³ B. Kg dm³ C. g dm⁻³ D. g cm⁻³
1362	The electrolyte used in fuel cell is	A. KOH B. NaCl(aq) C. NaNO3 D. Molten NaCl

1363	Li resembles with Mg, because	A. the ratio of their charge to size is nearly the same B. both have nearly same size C. both are metallic in nature D. both are found together in nature
1364	Primary, secondary aad tertiary alcohols can be identified and distinguished by	A. Lucas test B. Iodoform test C. Baeyer's test D. Silver mirror test
1365	Acetaldchyde and ketone form addition product with	A. Phenyl hydrazine B. Hydroxylamine C. Hydrazine D. hydrogen cyanide
1366	Cellulose is the polymer of	A. α-D-glucose B. β-D-glucose C. Fructose D. None
1367	Graham s law refers to	A. Boiling point of gases B. Gas compression problems C. Gaseous diffusion D. Volume changes of gases due to change in temperature
1368	Amorphous substance show (i) Short and long range order (ii) Short range order (iii) Long range order (iv) Have no sharp melting point	A. (i) and (ii) are correct B. (ii) and (iv) are correct C. (ii) (iii) and (iv) are correct D. (i) and (iv) are correct
1369	Diamond and silicon carbide are insoluble in all solvents because	A. they have high melting and boiling points B. absence of three electrons C. they are huge giant three dimensional molecules (macromolecules) D. their unit cells have tetrahedral geometry
1370	In which of the following compounds H-binding is not present?	A. ethanol B. ether C. water D. ammonia
1371	At ordinary temperature, the most nearly ideal gases are	A. N₂ B. He C. H₂ D. all these
1372	Which of the following solids does not have a covalent bond?	A. Silica B. Copper C. Diamond D. Graphite
1373	The number of molecules in one dm^3 of water is close to:	A. 6.02/22.4 x10²³ B. 12.04/22.4 x10²³ C. 18/22.4x 10²³ D. 55.6x6.02x10²³
1374	NH_3gas is liquefied more easily than N_2Hence	A. Van der Waals constants a and b of NH₃ that of N₂ B. Van der Waals constants a and b of NH<sub>3</sub< that of N₂ C. a(NH₃) > a (N₂) but b (NH₃) < b(N₂) D. a (NH₃) < a (N₂) but b (NH₃) > b (N₂)
1375	Which element of group V-A and VII-A does not use d-orbital?	A. Nitrogen B. Sulphur C. Arsenic D. Chlorine
1376	What water freezes at 0◦ , Its density decreases dues to:	A. cubic structure of ice B. empty spaces present in the structure C. change of bond lengths D. change of bond angles
1377	Ozone is an allotropic form of:	A. Carbon B. Phosphorus C. Oxygen D. Sulfur
1378	1 gram formula refers to	A. Amount in grams equivalent to 1 mole of a atom B. Amount in grams equivalent to 1 mole of a covalent compound C. Amount in grams equivalent to 1 mole of a ionic compound D. Amount in grams equivalent to 1 mole of an ion
1379	The incineration may reduce volume of wastes upto:	A. 1/4th B. 1/2nd C. 2/3rd D. 3/4th
1380	Chemicals used to kill pests are:	A. Herbicides B. Insecticides C. Pesticides D. fungicides

1381	Which of the following alpha-Amino acids has basic R-group	A. Proline B. Glutamic acid C. Histidine D. Valine
1382	Ethane nitrile can be converted into ethanoic acid through.....intermediate	A. Ethyl alcohol B. Acetyl chloride C. Acetamide D. Methyl cyanide
1383	Covalent bond is	A. A weak bond B. A true chemical bond C. A hydrogen bond D. Responsible for secondary structure of protein
1384	Under which conditions real gases deviate from ideal behaviour	A. Low temperature and low pressure B. Low temperature and high pressure C. High temperature and high pressure D. High temperature and low pressure
1385	Two moles of an ideal gas at 1 atm are compressed to 2 atm at 273 K.The enthalpy change for the process is	A. 2 litre atm B. 1 litre atm C. Zero D. 3 litre atm
1386	Which one of the following is NOT able to denature the ethanol?	A. Methanol B. Lactic Acid C. Pyridine D. Acetone
1387	Which of the following is sulphur highly containing protein	A. Collagen B. Keratin C. Ossein D. Reticulin
1388	Butane molecule can have maximum no of isomers	A. 2 B. 5 C. 4 D. 3
1389	Rate of which reaction increases with temperature?	A. Exothermic and endothermic reactions B. Endothermic reactions C. Exothermic reactions D. None of these
1390	Vegetable oil are	A. unsaturated fatty acids B. glycerides of unsaturated fatty acids C. glycerides of saturated fatty acids D. essential oil obtained from plants
1391	According to the kinetic theory of gases,in an ideal gas,between two successive collisions a gas molecule travels	A. Ina circular path B. In a wavy path C. In a straight line path D. With an accelerated velocity
1392	$H_2$and $O_2$are enclosed in porous vessel. The effusion of these gases will take place like	A. H₂effuses 4 times the rate of effusion of O₂ B. O₂effuses into air 4 times the effusion of H₂ C. both effuse at same rate D. H₂effuses at 8 times the rate of effusion of O₂
1393	The basic distinction between solids, liquids and gases lies in difference between.	A. Strength of the bonds B. Size of molecules C. space which the molecules occupy D. All of above
1394	Saturated hydrocarbons having carbon atoms more than 20 in a molecule are solids due to	A. higher densities B. higher molar masses C. the chain, are more zig-zag D. all are correct
1395	Formation of Picric acid from phenol needs heating, one possible reason for it is	A. acidity of phenol B. e- donating nature of-OH C. acidity of picric acid D. e- with drawing effect of- NO2
1396	Addition of unsymmetrical reagent to an unsymmetrical alkene is governed by	A. Cannizzaro's Reaction B. Aldol Condensation C. Kirchhoff Rule D. Markownikov's Rule
1397	For gas obeying Boyle's law if pressure is double, the volume becomes:	A. Remains constant. B. Double. C. One half. D. None of above.
1398	By convention, the standard heat of formation of all elements is assumed to be	A. Zero B. positive C. Negative D. Infinity
		A. Banans

1399	Estyl butyrate has flavour like	A. Banana B. Jasmine C. Pineapple D. Orange
1400	With the help of spectral data given calculate the mass of Neon and encircle the best option.	A. 22.18 amu B. 21,18 amu C. 20.18 amu D. 22.20 amu
1401	Which of the following is not glyceride	A. Soap B. Phospholipids C. Oil D. Fat
1402	The molecular speed Crms of gas is	A. Independent of temperature B. Proportional to the absolute temperature C. Proportional to the square root of absolute temperature D. Proportional to the square of absolute temperature
1403	Which of the following statements is not correct about galvanic cell?	A. Anode is negatively charged B. Cathode is positively charged C. Reduction occurs at anode D. Reduction occurs at cathode
1404	Lind's ,method for liquefaction of gases is based on the principle of:	A. Graham's law of diffusion B. Joule Thomson effect C. Avogadro's hypothesis D. Dalton's law of partial pressure
1405	Soap is formed when triglyceride reacts with	A. Caustic soda B. Soda lime C. Lime D. Caustic potash
1406	Substance which is formed as well as consumed during a chemical reaction and have temporary existence.	A. Reactant B. product C. Catalyst D. Intermediate
1407	Which of the following are thermoplastic materials?	A. PVC B. polystyrenes C. polyethylene D. all these
1408	The stoichiometric calculations for a chemical reaction results in	A. Actual yield B. Percentage yield C. Theoretical yield D. Selectivity
1409	In big/metropolitan cities, atmosphere is mostly polluted due to	A. Radioactive fall out B. Household waste C. Pesticide residue D. Automobile exhausts
1410	The number of resonating structures of phenoxide ion are	A. 3 B. 5 C. 6 D. 4
1411	The correct value of the gas constant R is close to	A. 0.082 litre-atm K⁻¹ mol⁻¹ B. 0.082 litre-atm⁻¹ K mol C. 0.082 litre-atm K D. 0.082 litre-atm⁻¹ K mol⁻¹
1412	Which of the following gases have maximum root mean square velocity at 25°C:	A. SO₂ B. NH₃ C. CO₂ D. H₂S
1413	The crystals formed due to London forces of interaction are	A. ionic B. covalent C. molecular D. metallic
1414	How much quantity of total water is available as fresh water	A. 3% B. 1% C. 10% D. 21%
1415	Density of H_2gas at 0°C is 0.09 under 1 atmospheric pressure. The density of O_2gas under the same conditions of temperature and pressure is	A. 0.36 B. 1.00 C. 1.44 D. 1.18
1416	In the woody parts of trees, the % age of cellulose is.	A. 50% B. 10% C. 30% D. 100%
1417	If a polymer has mass 63000, and the molar mass of repeating unit is 63 what is its degree of polymerization is	A. 10³ B. 10² C. 10⁵ D. None of these

1418	Formula of stearic acid is:	A. C₁₁H₂₃COOH B. C₁₃H₂₇COOH C. C₁₅H₃₁COOH D. C₁₇H₃₅COOH
1419	A crystal system in which the unit cell has different all cell lengths but all angles equal to 90° it is called as	A. orthorhombic B. triclinic C. monoclinic D. cubic
1420	Order of reactivity of alkenes with hydrogen halide is.	A. HBr > HI > HCl B. HI >HBr>Hf C. Hf > HI>HCl D. HI >HBr>HCl
1421	Chromium (VI) is highly toxic and can cause	A. Blindness B. Cancer C. Liver problems D. Blood problems
1422	Which of the following compounds is not known?	A. SbCl B. NCl3 C. NI3 D. NCl5
1423	What is the sequence of electron take up and removal from 4s orbital a transition metal in 3d series?	A. Enters first, leaves after 3d electrons removal B. Enters after 3d electrons, leaves after 3d electrons C. Enters after 3d eleetrons, leaves first D. Enters first and leaves first
1424	If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of the gas will	A. remain unchanged B. increase four times C. reduce to 1/4 D. be doubled
1425	In van der Waal's equation of state of the gas law,the constant 'b' is measure of	A. Intermolecular repulsions B. Intermolecular collisions per unit volume C. Volume occupied by the molecules D. Intermolecular attraction
1426	The number of moles of CO2 which contain 8.00 gm of oxygen is.	A. 0.75 B. 1.50 C. 0.25 D. 1.00
1427	Fourth structure of protein structure refers to	A. Proteins formed of more than one monomer B. Myoglobin is an example C. Depends on covalent bonds D. None of these
1428	An example of ion-dipole force is the solution of:	A. bromine inbenzene B. ethanol is water C. NaCl in water D. glucose in water
1429	Which one of the following is a water soluble vitamin	A. Niacin B. Riboflavin C. Trypsin D. Ascobic acid
1430	Lipids are naturally occurring compounds produced in cell and are water insoluble but soluble in organic solvent one of the following is not a lipid, Select among the following:	A. nucleic acid B. atriglceride C. sterol D. vitamin D
1431	chemist was able to measure the value of lattice energy of KCl to be 690 kj/mol. From this experiment , he concluded that:	A. lattice energy of KBr is 665 kj/mol and that of Ki is 630 kj/mol B. lattice energy of KBr is 765 kj/mol and that of Kl 730 kj/mol C. lattice energy of KBr is 730 kj/mol and that of Ki 765 kj/mol D. lattice energy of KBr is 630 kj/mol and that of kL 665 KJ/mol
1432	For a particular halogen, the reactivity of alkyl halides	A. remains same with C-increase B. decreases with C-increase C. increases with C-increase D. decreases with C-decrease
1433	Chlorination of water is effective for	A. Killing pathogens B. Removing dust C. Removing hardness D. Increasing oxygen content
1434	Liquid ammonia has become an important fertilizer for direct application to soil. It contains _____ nitrogen.	A. 46% B. 82% C. 14% D. 17%
		A. Halides

1435	Alkali metals react viotlently with halogens:	B. Anhydrides C. Hydrides D. None of the above
1436	In the reaction A+B→ Products, if B is taken in excess, then it is an example of	A. Second order reaction B. zero order reaction C. Pseudo first order reaction D. first order reaction
1437	2-propanol on Oxidation gives	A. Aldehyde B. Carboxylic Acid C. Ketone D. Alcohol
1438	Formation of PVC form vinyl chloride is an example of	A. substitution reaction B. addition polymerization C. condensational reaction D. Aldol condensation
1439	Which of the following is NOT thermoplastic	A. PVC pipes B. Plastic toys C. Varnish D. Both A and B
1440	How temperature affects the electrical conductivity of metals?	A. Does not change at all B. Decreases with increasing temperature C. Increases with increasing temperature D. Decreases with decreasing temperature
1441	The energy produced by a carbohydrate is	A. 3 kcal/gm B. 2 kcal / gm C. 6kcal / gm D. 4 kcal/ gm
1442	Glucose is a:	A. ketohexose B. aldohexose C. meonosacharide D. 'b' and 'c'
1443	Bragg's law is given by equation	A. n λ = 2 θ sin θ B. nλ = 2 d sin θ C. 2nλ = d sin θ D. n λ= 1/2 d sin θ
1444	Volume of O_2gas at 0°C is 273 cm^3, then volume of O_2gas at -10°C is	A. 263 cm³ B. 163 cm³ C. 173 cm³ D. 73 cm³
1445	Cooling happens under the Joule Thomson Effect due to sudden:	A. Contraction. B. Absorption. C. Expansion. D. All of above.
1446	Detergents are surfactants and they reduce the	A. B.P. of water B. Surface tension of water C. Wetting ability of water D. None of these
1447	Acetic acid is also named:	A. Methanoic acid B. Ethanoic acid C. Propanoic acid D. Butanoic acid
1448	The aliphatic compounds are of two types	A. Straight chain and cyclic B. Branched chain and alicyclic C. Straight chain and branched D. Homocyclic and alicyclic
1449	In which of these processes are small organic molecules made into macro-molecules?	A. The cracking of petroleum fractions B. The fractional distillation of crude oil C. The polymerization of ethane D. The hydrolysis of proteins
1450	The process of coagulation can remove suspended solids in raw water about	A. 50% B. 60% C. Less than 40% D. More than 80%
1451	What is the formula of dolomite?	A. CaMg3 (SiO3)4 B. MgCO3 C. MgCO3.CaCO3, D. MgSO4
1452	Which is not an air pollutant	A. N₂ B. CO C. NO D. N₂O
1453	Question Image	A. T₁= T₂= T₃ B. T₁< T₂< T₃ C. T₁> T₂> T₃ D. T₁> T₂= T₃
1454	How many allotropic forms are present in carbon?	A. Two B. Four C. Three D. Five

		D. Five
1455	Macromolecules or polymers are large molecules built up from small molecules called monomers. This hypothesis put forward by	A. schrodixger B. standinger C. Lewsi D. newton
1456	Hydrolysis of protein by 6M HCl gives peptides and then alpha-amino acids. How many alpha-amino acids molecules are obtained on the hydrolysis of a tetrapeptide	A. 2 B. 3 C. 4 D. 5
1457	The temperature of the gas is raised from 27°C to 927°C the root mean square velocity is	A. √927/27 times the earlier value B. Same as before C. Halved D. Doubled
1458	Which molecule is least ionic"	A. NaCl B. HCL C. HF D. CsF
1459	Which one of the following is NOT a nucleophile	A. NH2+ B. BF3 C. H2O D. CH3-
1460	Amino acids are bifunctional organic compounds what are the two function groups	A. Carboxylic acid and alcohol B. Acohol and aldehyde C. Carboxylic acids and ketone D. Amino group and carboxylic acid
1461	Vapour pressure of a liquid is more if	A. the intermolecular forces between the molecules of the liquid are strong B. the intermolecular forces between the molecules of the liquid are weak C. more liquid is present in a container D. liquid has more surface area to evaporate
1462	In crystal structure of sodium chloride,the arrangement of Cl^- ions is	A. Fcc B. Both fcc and bcc C. Bcc D. None of these
1463	4.4 g of CO_2 contains how many litres of CO_2 at STP?	A. 2.4 litre B. 2.24 litre C. 44 litre D. 22.4 litre
1464	The potential difference of an electrochemical cell is measured by	A. Calorimeter B. Voltmeter C. Galvanometer D. Ammeter
1465	If Cl2 is passed through hot NaOH. NaClO3 is formed and the oxidation number of Cl changes from	A. -1 to 0 B. 0 to +5 C. 0 to-1 D. 0 to +1
1466	When wine is put in air, it becomes sour due to	A. Oxidation of C2H5OH B. Formation of C2H5NH2 C. Reduction of C2H5OH D. Dissolution of CO2
1467	During the Sn1 reactions, the fast reaction involves.	A. Breakage of covalent bond B. Formation of carbocation C. Transition state D. Atttack of nucleophile
1468	How many kinds of space lattices are possible in a crystal?	A. 23 B. 7 C. 230 D. 14
1469	Which property of liquid is measured by polarimeter	A. Conductance B. Optical activity C. Refractiye Indéx D. Change in volume
1470	Intermolecular forces exist between molecules of group 7 elements which of the following sequence represents the strength of the intermolecular forces?	A. Cl₂> Br₂> I₂ B. Br₂> Cl₂> I₂ C. Cl₂> Br₂> I₂ D. I₂> Br₂> Cl₂
1471	If 1 mole of an ideal gas is heated from 273.15 K to 283.15 K at 1 atmospheric pressure, then increase in its energy is	A. 0.082 atm.dm³ B. 0.821 atm.dm³ C. 8.21 atm.dm³ D. 40.6 kJ
	Equal masses of methane and oxygen are mixed in an empty container at 25°C	A. 1/3 B. 1/9

1472	empty container at 25° C The fraction of total pressure exerted by oxygen is	B. 1/9 C. 8/9 D. 16/17
1473	Which is not considered as pollutant	A. O₃ B. CO₂ C. NO₂ D. SO₂
1474	Which of the following solid is amorphous	A. NaCl B. diamond C. glass D. MgO
1475	If the concentration of salt is greater than the acid in buffer solution, then the	A. pH = pKa B. pH = pKb C. pH > pKa D. pH < pKb
1476	One molecule of gas is approximately Distance_____ times its own diameter from its neighbour at room temperature.	A. 30 B. 3000 C. 3 D. 300
1477	A pressure of $1Nm^{-2}$ is equal to:	A. one bar B. one pascal C. stalagmometer D. one aomosphere
1478	Which of the following formula is correct for density of any gas	A. d = RT/PM B. d = PM/RT C. d = MT/PR D. d = RM/PT
1479	Correct order for the reactivity ofalkyl halide in S, reactions	A. R-I>R-F>R-Cl B. R-F>R-Cl>R-I C. R-I>R-Cl>R-F D. R-Cl>R-I>R-F
1480	Which isomer of C4H9Br will produce 2-methyl propane-2-ol on treatment with aqueous KOH	A. n-butyl bromide B. Sec-butyl bromide C. Isobutyl halide D. Tertiary butyl chloride
1481	A molecule of polysacharide on hydrolysis produces _____ molecules of monosacharide	A. 2 - 10 B. 3 C. 10 D. 2
1482	The mechanism of polymerization involves free radical addition polymerization or condensation polymerization. Choose the correct statement	A. Polyester is an addition polymer B. Polythene is an addition polymer C. Polyvinyl chloride (PVC) is a condensation polymer D. Polystyrene
1483	The number of moles of H2 in 0.224 L of hydrogen gas at STP (273 K, 1 atm) assuming ideal gas behaviour is	A. 1 B. 0.1 C. 0.01 D. 0.001
1484	Liquids are less common than:	A. Solids. B. Plasmas. C. Gases. D. All of above.
1485	The primary building blocks of lipids are	A. Fatty acid B. Glycerol C. Sterols D. All
1486	Properties of polymeric material depends upon	A. Chemical composition B. Structure of molecule C. Boiling point D. Both A and B
1487	Equal volumes of gases at the same temperature and pressure contain equal number of particles.This statement is direct consequence of	A. Perfect gas law B. Partial law of volumes C. Charle's law D. Ideal gas equation
1488	This is known fact that the molar volumes of different gases at S.T.P. are	A. much larger than the molar volumes of liquids and solids B. little bit less than the molar volumes of solids C. about the same as the molar volumes of liquids D. little bit greeter than the molar volumes of liquids
1489	Someone is saying that glass must be a super cooled liquid. The reason that he might have in his	A. definite shape B. definite-volume C. crystalline structure D. no crystalline structure

	mind is that glass has :	D. no crystalline structure
1490	Detergents are	A. synthetic products B. natural products C. both a and b D. none of the above
1491	A polymeric substance that is formed in the liquid state and then hardened to a rigid solid is called	A. Fibre B. Plastic C. Varnish D. Polyamide resin
1492	It is very much difficult to cook food at Mount Everest, because	A. temperature of atmosphere is very low B. the boiling point of water is 69°C C. water becomes heavier D. the boiling point of water is increased
1493	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	
1494	Which one of the following statements about sodium chloride is incorrect?	A. it has a high melting point B. it conducts electricity at room temperature C. it is soluble in water D. it is brittle
1495	Amount of fresh water used by agriculture is	A. 2% B. 23% C. 69% D. 97%
1496	Relative acidic strength of alcohol, phenol, water and carboxylie acid is	A. Carboxylic acid > Alcohol > Phenol > Water B. Carboxylic acid > Phenol > Water> Alcohol C. Water > Alcohol> Phenol > Carboxylic acid D. Phenol > Carboxylic acid > Alcohol> Water
1497	Which of the following enthalpy change always have a negative value	A. ΔHf B. ΔH sol C. ΔHc D. ΔHat
1498	Separation of low molecular weight protein from high one is	A. Dialysis B. Cromotography C. Electrophoiesis D. Ultracentrifugation
1499	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
1500	Fungicides are the pesticides which:	A. Control the growth of fungus B. Kills insects C. Kills plants D. Kill herb
1501	Why a C- C bond breaks by uv light	A. Cl is most electronegative B. Cl is volatile C. C - Cl bond energy is smaller than that of C - H bond energy D. uv light provides energy which is sufficient to break C - Cl bond and not C - H bond
1502	The boiling of water may be 120°C, when the external pressure is	A. greater than 760 torr B. less than 760 torr C. equal to 760 torr D. variable
1503	For every reaction occurring in the body three is at least one type of	A. enzyme B. vitamin C. protein D. reactant
1504	Determine the number of molecule O2 in 10.6 g of NaCO3	A. 0.4 moles B. 0.3 moles C. 0.2 moles D. None of these
1505	Which of the following laws study the pressure-volume relationship of a gas at constant temperature,we get	A. a straight line B. a curve with different peaks C. straight line parallel to x-axis D. a curve called isotherm
1506	Newspaper can be recycled again and again by how many times?	A. 2 B. 3 C. 4 D. 5
1507	Calendar stock is process in paper making in which	A. Moisture is removed B. Pulp is spreaded over fabric or screen C. Paper thickness is removed D. Paper is wounded in the form of reel

1508	The collision which results in chemical reaction	A. Effective collision B. Ineffective collision C. Useless collision D. All of the above
1509	Nitrogen gas reacts under _____ conditions	A. Standard B. Normal C. Cool D. Harsh
1510	Second order of protein structure refers to	A. Number and sequence of amino acids B. Three dimensional structure of protein C. Proteins formed of more than one monomer D. Bending of protein molecule
1511	The geometry of diamonds is	A. tetragonal B. cubic C. rhombohedral D. none of these
1512	Which one of the following will react with bothethand and ethanoic acid at room temperature	A. CaCO3 B. CuO C. Na-metal D. CH3OH
1513	Albumin, globin and casein are	A. Milk proteins B. Plasma proteins C. Egg proteins D. Meat proteins
1514	Coal contains percentage of sulphur:	A. 1-9% B. 5-9% C. 6-9% D. 7-9%
1515	Which is a good nucleophile as well as a good leaving group?	A. F- B. Cl- C. Br- D. I-
1516	The biggest source of acid rain is the oxide of.	A. N B. S C. O D. C
1517	Which fiber contains 85% acrylonitrile by weight:	A. Acrylic fiber B. Azlon fiber C. Saran fiber D. Rayon fiber
1518	To measure the true pressure of a gas collected over water, the pressure due to water vapoure is:	A. added to the total pressure B. multiplied to the total pressure C. divided by the total pressure D. subtracted form the total pressure
1519	The state of matter which exist only within a relatively narrow range of temperature and pressure	A. Solid B. Gas C. Liquid D. Plasma
1520	Which one of the following is more acidic	A. Phenol B. Carboxylic acid C. Alcohols D. Amines
1521	According to Avogadros law 1 mole of gas at S.T.P has a volume of	A. 22.4 dm³ B. 24 dm³ C. 24000 cm³ D. 2m³
1522	An alkyl halide reacts with NH3 to give	A. Amide B. Cyanide C. Amine D. Aniline
1523	The reason that diamond and graphite have different physical properties is	A. density B. color C. bonding D. hardness
1524	Haemoglobin molecule is how many times heavier than helium atom	A. 68000 times B. 17000 times C. ,34000 times D. , 1700 times
1525	Which of the following is not the required condition for the formation of smog	A. Sufficient NO B. Sunlight C. Less movement of air D. Winds
1526	A graph between P and 1/V at constant temperature and number of moles of a gas meets the:	A. Y-axis B. X-axis C. Origin D. None of above
	one gram of carbohydrate	A. 10kcal B. 100kcal

1527	one gram of carbohydrate yields energy:	B. 100kcal C. 4kcal D. 9kcal
1528	The oxidation of 1 - propanol in the presence of H2SO4, +K2Cr207 produces final product	A. Acetaldehyde B. Propanal C. Acetone D. Propanoic acic
1529	The pH range of acid rain is?	A. 7-6.5 B. 6.5-6 C. 6-5.6 D. Less than 5
1530	The gases law describe the _____ Behaviour of gases	A. Variable B. Constant C. Uniform D. Best
1531	The heat of hydrogenation of most of the alkene is about	A. 120 kJ/mol B. 100 kJ/mol C. 140 kJ/mol D. 105 kJ/mol
1532	The reaction between fat and NaOH is called:	A. esterification B. hydrogenolysis C. fermentation D. sponification
1533	Water bodies are included in:	A. Atmosphere B. Hydrosphere C. Lithosphere D. All of these
1534	Which of the following is an example of aldohexose?	A. Ribose B. Sucrose C. Fructose D. Glucose
1535	Cyclone collector is used to reduce:	A. noise pollution B. air pollution C. water pollution D. radioactive pollution
1536	What is the formula of clay?	A. Asbestos B. Talc C. H2Al2(SiO4)2.H2O D. Na2SiO3
1537	Dehydrohalogenation of secondary butyl bromide will give	A. Propene B. 1-Butene C. Butene D. 2-Butene
1538	UV rays inactivate enzymes because they	A. change sequence of amino acids of enzymes B. They add prosthetic group to them C. They increase their specificity D. affect structure of enzymes
1539	For reaction of methane and chlorine light is not available then	A. Reaction will take place rapidly B. No Reaction take place C. Reaction occurs at double the rate D. May all cases occur
1540	Methyl butyrate has an smell of:	A. apple B. pine apple C. banana D. winter green
1541	Water has high boiling point which is due to:	A. high electric constant B. weak dissociation C. high specific heat D. H-bonding between its molecules
1542	which of the following d blocks element can showthe highest oxidation number is its ompound	A. Chromium B. iron C. Copper D. Manganese
1543	Ethyl and methyl groups are equidistant in a chain, the preference is given to?	A. Ethyl B. methyl C. both ethyl and methyl D. methyl mostly
1544	Consider gas is measure in bars then the units of rate of reaction is	A. Mole dm-3 sec B. Bars sec C. Mole dm-3 sec-1 D. Bars sec-1
1545	Coordination number of Zn and ZnS (Zinc blends) is	A. 4 B. 6 C. 2 D. None of these
1546	The temperature below which a gas does not exist is called its	A. Inversion temperature B. Critical temperature C. Neutral temperature D. Curie point

		B. Curie point
1547	Which of the following is an example of body centred cube?	A. Magnesium B. Zinc C. Copper D. Sodium
1548	Global warming is mainly caused by _____ radiations	A. UV B. I.R C. gama D. X-rays
1549	Lithosphere has amount of silicon	A. 35.30% B. 27.72% C. 40.01% D. 21.13%
1550	London dispersion forces are the only forces present among the	A. Molecules of H2O in liquid state B. Molecules of HCl gas C. atoms of helium in gaseous state at high temperature D. Molecules of solid chlorine
1551	Fumaric acid converted into malic acid in the presence of	A. Lyases B. Glyceomutases C. Fumarase D. Hydrolases
1552	One of the following is neutral amino acid	A. Arginine B. Lysine C. Glutamine D. Valine
1553	The total number of lattice arrangements in different crystal system is	A. 7.0 B. 3.0 C. 8.0 D. 14
1554	Carboxylic acid is more acidic than phenol because of the greater stability of	A. Carboxylic acid B. Phenoxide ion C. proton D. Carboxylate ion
1555	Elimination of molecular reactions usually obey:	A. first order kinetics B. second order kinetics C. third order kinetic D. zero order kinetic
1556	The number of Na+, ions which surround each Cl- ion in the NaCl crystal lattice is	A. 8 B. 12 C. 6 D. 10
1557	Chlorofluorocarbons and aerosols are inert in sphere:	A. troposphere B. stratosphere C. lithosphere D. hydrosphere
1558	Tertiary alcohols are the easiest to dehydrate because	A. They form stable carbocation B. They have less hydrogen C. They have bigger size D. They are polar
1559	A molecule of polysaccharide on hydrolysis produces _____ molecules of monosacharides:	A. many B. Few C. 2-10 D. 100
1560	For gases obeying Boyle's law, if pressure is quadrupled, the volume becomes	A. Double B. One half C. One fourth D. Remains constant
1561	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
1562	The surface formed by the breakage of a crystal is called _____ plane	A. Crystal B. Unit C. Cleavage D. None
1563	When two ice cubes are pressed together they unite to form one cube. which of the following forces is responsible for holding them together?	A. H-bonding B. Covalent bonding C. van der waal's forces D. dipole-dipole interaction
1564	The volume of an ideal gas is decreased to half, What will happen to the force exerted on the walls of the container by the gas particles?	A. the force is halved B. the force increases by a factor of 4 C. the force remains constant D. the force increased by a factory of 2

1565	Which one of the following enzymes brings about the hydrolysis of fats?	A. urease B. maltase C. zymase D. lypase
1566	The simplest separating unit of a polymer is called:	A. Monomer B. Dimer C. Trimer D. Macromer
1567	Image a man is sitting in a room. The room is closed from all sides, no entry no exit of any gas. If the room expands suddenly then:	A. he will be frightened B. he will feel cool C. his blood pressure will decrease D. he will feel warmth
1568	The temperature in the incineration of industrial and hazardons waster process had a range:	A. 950 to 1300°C B. 500 to 900°C C. 250 to 500°C D. 900 to 1000°C
1569	Value of gas constant R is	A. 8.314 J K⁻¹mol⁻¹ B. 0.082 J K⁻¹mol⁻¹ C. 273.15 J K⁻¹mol⁻¹ D. 101325 J K⁻¹mol⁻¹
1570	When the concentration of product is increased the instantaneous rate of reaction with reference to reactants will be	A. Positive B. Negative C. the same D. falling curve
1571	Which oxide when mixed with water, will produce the most acidic solution?	A. CO B. CO₂ C. SiO₂ D. P₂O₅
1572	Substances that tend to decrease the activity of enzymes are called	A. coenzyme B. activators C. inhibitors D. apoenzyme
1573	Adipic acid and Hexamethylenediammine polymerize to give	A. Acrylic resins B. Plastic fiber C. Nylon-6, 6 D. None
1574	The substances which soften the polymer are called	A. stabilizers B. plasticizers C. retarders D. pigments
1575	A gas is heated in such a way that its volume and absolute temperature both are doubled. the pressure of gas:	A. Becomes 4 time B. Becomes half C. Becomes 2 time D. Remains same
1576	Paramagnetic behaviour is caused by the presence of	A. Unpaired electrons B. Paired electrons C. Paired protons D. Paired electrons in an atom. molecule or ion
1577	All gases liquefly before reaching at	A. 273°K B. 373°K C. 0 K D. 73°C
1578	When enzyme fumarase is exposed to UV light, then	A. Its activity is enhanced B. It converts into Glucokinase C. It is inactivated D. None
1579	Part of fresh water consumed in domestic purpose:	A. 1% B. 2% C. 69% D. 8%
1580	The ideal gas law holds best under the conditions of	A. high pressure and high temperature B. low pressure and high temperature C. low pressure and low temperature D. high pressure and low temperature
1581	Which one of the following enzymes brings about the hydrolysis of fats	A. Urease B. Maltase C. Zymase D. Lypase
1582	In period 1 and period 3 maximum melting point shown by elements.	A. Nitrogen and phosphorous B. Carbon and silicon C. Lithium and sodium D. Neon and argan
1583	The clotting time of blood is increased due to the deficiency of	A. vitamin A B. vitamin K C. vitamin D D. vitamin C

		D. Vitamin C
1584	Carboxylic acid can be prepared from the reaction of Grigard's reagent with:	A. Aldehydes B. Ketones C. Formaldehyde D. CO₂
1585	When liquid solute is dissolved in liquid solvent, then the best unit of concentration is?	A. % W/W B. % W/V C. % V/V D. %V/W
1586	Alcohols of low molecular weight are:	A. Soluble in water B. Insoluble in water C. Soluble in water on heating D. Insoluble in all solvents
1587	Amorphous solids:	A. have sharp melting point B. undergo clean cleavage when cut with knife C. have prefect arrangement of atoms D. can possesses small regions of orderly arrangement
1588	Choose the example having hexagonal system:	A. graphite B. sugar C. sulphur D. diamond
1589	Which of the following are characteristics of oxidizing smog?	A. It is yellow brownish grey haze B. It has unpleasant odour C. Its main reactant are nitric oxide & unburnt hydrocarbon D. All of the above
1590	The compound which does not form iodoform:	A. methyl alcohol B. ethyl alcohol C. acetone D. acetaldehyde
1591	The number of paper industries in Pakistan are	A. 30 B. 25 C. 35 D. 20
1592	Unit of ozone is?	A. Debye B. Dobson C. Esu D. Coulumb
1593	Benedict solution gives a positive test with	A. Glucose B. Fructose C. Sucrose D. Starch
1594	Per hydro cyclopentano phenathrene is the basic structure of all the:	A. Proteins B. vitamins C. waxes D. amines
1595	Which one of the following is a disaccharide?	A. glucose B. sucrose C. fructose D. starch
1596	Synthetic organic pesticides formulated nowadays are more then:	A. One thousand B. Ten thousand C. Two thousands D. Twenty thousand
1597	Ether show the phenomenon of	A. Positional isomerism B. Functional group isomeris C. Meta merism D. Cis trans isomerism
1598	Lonic solids are characterized by:	A. low melting points B. _{good conductivety in solid state} C. high vapour pressures D. solubility in polar solvents
1599	Fluorine is largely used in	A. rocket fuels B. making Teflon C. making freon D. All
1600	What is the effect of polluted air on environment:	A. ozone B. acid rain C. global warming D. smog
1601	Essential alpha-amino acids are those which are necessary in the diet. Which one is an essential alpha-amino acids	A. Alanine B. Aspartic acid C. Glycine D. Tryptophan
	The pure crystalline substance on being heated	

1602	gradually first forms a turbid liquid at constant temperature and still at higher temperature turbidity completely disapp-ears.The behaviour is a characteristic of substance forming	A. Allotropic crystal B. Liquid crystals C. Isomeric crystals D. Isomorphous crystals
1603	At room temperature, the vapour pressure of water and ether will be	A. equal B. different C. zero D. almost same
1604	The pH of ideal buffer is	A. 10 B. 7 C. Less than 7 D. 0
1605	When two ice cubes are pressed together they unite to form one cube. Which of the following forces is responsibles for holding them together	A. Van der Waal's B. covalent bonding C. hydrogen bonding D. dipole-dipole interaction
1606	Which one of the following statements is wrong for gases?	A. gases do not have a definite shape and volume B. volume of the gas is equal to volume of container confining the gas C. confirmed gas exerts uniform pressure on the walls of its container in which it is enclosed D. mass of gas cannot be determined by weighing a container in which it is enclosed
1607	The simplest separating unit of a polymer is called:	A. Monomer B. Dimer C. Trimer D. Macromer
1608	Silk is the example of:	A. mineral fiber B. vegetable fiber C. animal fiber D. none of above
1609	Bonding in MgO is an example of	A. Ionic bond B. Polar bond C. Covalent bond D. Coordination covalent bond
1610	How many times a newspaper can be recycled	A. 02 B. 05 C. 08 D. 10
1611	The volume of gas depends upon the _____ molecules	A. Size of B. Molecular weight C. Space between D. Both a and b
1612	In the body, carbohydrates are broken down into	A. Glucose B. Fatty acids C. Amino acids D. Nucleic acid
1613	The emf produced by galvanic cell is called	A. Cell potential B. Oxidation potential C. Redox potential D. Reduction potential
1614	When light is exposed to transtion element, then electrons jump from lower orbitals to higher orbitals in	A. Orbitals of s-subshell B. Orbitals of d-subshell C. Orbitals of p-subshell D. between different shells
1615	Ka values of few organic acids are given. Acid Ka value CH_3COOH 1.85 x 10^{-5} CCl_2COOH 2.3 x 10^{-2} $CHCl_2$ COOH 5.0 x 10^{-3} CH_2OCOOH 1.3 x 10^{-3} The order of acid strength is.	A. CCl₂COOH > CHCl₂ COOH > CH₂COOH . CH₂COOH B. CH₃ COOH > CHCl₂ COOH > CCl₂ COOH > CH₂ClCOOH C. CHCl₂ COOH > CH₃COOH > CCl₃COOH > CH₂CLCOOH D. CCl₂COOH > CH₃COOH > CHCl₂ COOH . CH₂ClCOOH
1616	Nylon -6,6 also called	A. Polyvinyl alcohol B. Polystyren C. Polyamide D. Polyester
1617	The heat of reaction depends upon	A. Temperature of the reactants B. Physical states of the reactants and the products C. Both A) and B) D. Path of the reaction and the temperature
1618	Which of the following is exact relationship	A. °F= 5/9[°C-32] B. °C = 5/9 [°F]+32

	exact relationship between °F and C°	C. °F = 9/5°C+32 D. All
1619	Which one is a non-polar compound?	A. SnCl2 B. PH3 C. Gecl4 D. H2O
1620	Which one is more toxic?	A. Fe B. C C. Hg D. Ag
1621	The attracted forces which are created due to repulsion of electronic cloud of the molecules are:	A. ion-dipole forces B. dipole-dipole forces C. dipoles-induced dipole forces D. instantaneous dipole-induced dipole
1622	Which factor is helping to reduce the environmental pollution:	A. urbanization B. industrialization C. increases of plantation D. rapid growth of population
1623	Combustion analysis is performed for the determination of	A. Molar mass of the compound B. Empirical formula of the compound C. Structural formula of the substance D. Mass of halogens present in organic compounds
1624	Gas is enclosed in a container of 20 cm3 with the moving piston. According to kinetic theory of gases, what will be the effect on freely moving molecules of the gas if temperature is increased from 20 ^{O}C in 100 ^{O}C?	A. Volume will be increased B. Decrease rate of a reaction C. Decrease yield of a reaction D. Increase yield of product
1625	The critical temperature of CO_2_____°C at 73 atm critical pressure	A. 21.142 B. 28.892 C. 31.142 D. 35.452
1626	The element with highest E°red	A. N B. F C. O D. Cl
1627	Which of the following alcohols is least reactive with respect to 0-H bond	A. CH3OH B. CH-CH2-OH C. (CH3)2-CH-OH D. (CH3)3OH
1628	Which of the following is not an inorganic macromolecule	A. Graphite B. Sand C. Strach D. Diamond
1629	The pH range of acid rain is?	A. 7-6.5 B. 6.5-6 C. 6-5.6 D. Less than 5
1630	Choose the correct statements	A. SO₂affects the nucleus B. SO₂affects plasmodesmata C. SO₂affects cell wall D. SO₂affects all membrane systems
1631	All of the following are hydroxy containing amino acids except	A. Serine B. Threonine C. Valine D. Tyrosine
1632	Cholesterol is an important precursor in the biosynthesis of	A. Adrenal hormones B. Sex hormones C. Vitamin-D D. All of these
1633	Which of the following successive ionization energies belong to a Group II element?	A. 320,600,1110,1700,5650, B. 577,1820,2740,1160,14800, C. 428,3070,4600,5860,7990 D. 736,1451,7740,10500,13600
1634	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
1635	Total number of possible chain and positional isomers of butyl alcohol among alcohols are	A. Four B. Five C. Two D. Six
	Under which condition CO	A. high T and P B. Low T and High p

1636	has the maximum molar volume	C. high T and low P D. Low T and low P
1637	The largest item which is recycled is	A. newspaper B. plastic C. aluminium D. oil
1638	Which of the following is a simple protein	A. Albumins B. Legumin C. Callogen D. All
1639	Which one among the following is not a good leaving group	A. HSO4- B. Cl- C. OH- D. Br-
1640	Eleven elements made part of earth mass:	A. 97.5% B. 98.5% C. 99.5% D. 100%
1641	Evaporation occurs at all temperatures and is effected by	A. surface area B. temperature C. intermolecular forces D. all of these
1642	Isozymes are the enzymes which:	A. have similar chemical properties B. have similar physical properties C. have different physical and chemical properties D. have different physical and chemical properties
1643	The branch of chemistry interlinked with biology, physics, medicines, agriculture, public health and sanitary engineering etc. is:	A. Biochemistry B. Physical chemistry C. Pharmaceutical chemistry D. Environmental chemistry
1644	Which pair of following pair is metalloid?	A. Antimony and bismuth B. Phosphorous and arsenic C. Nitrogen and phosphorous D. Arsenic and antimony
1645	The cause of minamata disease is the pollution of	A. Arsenic (As) into atomosphere B. Industrial waste having Hg C. Organic waste in drinking H₂O D. Oil spills in H₂O
1646	Hydrogen bonding is extensively present in proteins which form the spiral. The hydrogen bond being produced is between	A. nitrogen and hydrogen atom B. oxygen and hydrogen atom C. carbon and hydrogen atom D. oxygen and carbon atom
1647	Hydrogen diffuses six times faster than gas A.The molar mass gas of gas A is	A. 72 B. 6 C. 24 D. 36
1648	Starch gives ________ color with iodine:	A. blue B. red C. yellow D. green
1649	Ratio of hydrogen (H) and oxygen (O) in water molecule by volume is	A. 2: 1 B. 1: 2 C. 3: 1 D. 4: 1
1650	Electron affinity of the atom is the energy released when	A. electron is removed from gaseous atom B. Covalent bond of molecule is broken C. Electron is added to gaseous atom D. Covalent bond is formed between the atom
1651	A complete food contains at least	A. Three nutrients B. Ten nutrients C. Six nutrients D. Ten nutrients
1652	Which of the substance is not going to react the sodium metal:	A. Acetic acid B. Methanol C. Di methyl ether D. Ethanol
1653	Out of these which nitrogen base is NOT present in DNA?	A. Adenine B. Guanine C. Uracil D. Thymine
1654	What will be the shape of a molecule which containstwo sigma bond pairs and one lone pair?	A. Linear B. V shape C. Tetragonal D. Triangular
		A. 10

1655	A sing chlorine free radical can destroy how many ozone molecules:	B. 100 C. 1000 D. 10000
1656	Phosphorus is very useful in the growth of:	A. leave B. stem C. seed D. root
1657	Simplest Structure of a protein that has only covalent bonding between amino acids is	A. 2° structure B. 3°structure C. 1° structure D. 4° structure
1658	Industrial effluents have toxic synthetic organic compounds as well as heavy metals like	A. Pb B. Cr C. Hg D. All of these
1659	Equal volumes of ideal gases contain equal number of molecules at:	A. Same temperature B. Same pressure C. Same environmental conditions D. Both (A) and (B)
1660	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.
1661	Ethane when completely halogenated in excess of chiorine can form	A. Hexachloroethane B. Dichloroethane C. Pentachloroethane D. 1.1.2.2-terachloroethane
1662	Ionic solids are characterized by	A. low melting points B. good conductivity in solid state C. high vapour pressure D. solubility in polar solvents
1663	Which one of the following polymer is called as Nylon 6,67	A. Polyester B. Polyvinyl chloride C. Polyemide D. Polyvinyl acetate
1664	What is component of environment?	A. Atmosphere B. Hydrosphere C. Lithosphere D. All of these
1665	Oceans, rivers, streams, leaks, polar ice caps, glaciers and group water reservoirs are included in	A. Atmosphere B. Lithosphere C. Hydrosphere D. Biosphere
1666	Nylon 6,6 is a condensation polymer of:	A. Phthalic acid and hexa ethylene diamine B. adipic acid and hexaethylene diamine C. phthalic acid and glycerol D. phthalic acid and glycerol
1667	In the cyclic structure of the glucose when the position of atoms on carbon 1 is called one isomer changes to other. These isomers of glucose are called:	A. metamers B. position isomers C. cis-trans D. annomers
1668	Keeping in view different factors which affect the melting point of a substance.the compound having melting point among the following is:	A. LiCl B. NaCl C. CsCl D. RbCl
1669	Gases are effused through a whole due to _____ motion	A. Vibration B. Rotaional C. Translational D. Chaotic
1670	The enzyme which is found in saliva, accelerates the conversion of starch into sugar is	A. Pepsin B. Thrombin C. Ptyalin D. Fumarase
1671	What is the correct relation between pH and pK?	A. pH = PKa + log [acid/base] B. pH = Pka -log [acid/base] C. pH = pKa - log [base/acid] D. pH = pka -log [base/acid]
1672	Digestion of carbohydrates begins in the	A. large intestine B. Small intestine C. Duoderium D. Buccal cavity / mouth
1673	General gas equation is combination of	A. Boyle s law B. Avogadro s law C. Charles s law

		D. All of these
1674	The volume of a gas that is occupied by its one mole at S.T.P. is known as:	A. atomic volume B. molar volume C. normal volume D. total volume
1675	Which is trigonal crystal	A. CaSO₄. 2H²O B. MgSO₄ C. NaNO₃ D. All
1676	Detergent greatly effects the	A. Aquatic life B. Modern life C. Terrestrial life D. Plants life
1677	Which of the following is synthetic thermoplastic polymer	A. PVC B. Bakelite C. Synthetic varnishes D. Both b & c
1678	Baever's reagent is misture of	A. HCl& ZnCl B. Ageous bromine C. Alkaline KMn4 D. Mix of Br2&KMnO4
1679	Coal contains sulphur in it:	A. 1-3% B. 1-6% C. 1-9% D. 1-12%
1680	The angle between the unhybridized 2pz orbital and the three sp2 hybrid orbitals in ethene is	A. 180° B. 120° C. 90° D. 60°
1681	A real gas obeying van der Waals equation will resemble ideal gas if	A. Both a and b are large B. a is large and b is small C. Both a and b are small D. a is small and b is large
1682	Stalagmometer is used to measure	A. the resistance to flow of a liquid B. capillary action of a liquid C. Meniscus of the liquid D. surface tension of the liquid
1683	Given solution contains 16.0 g of CH3O, 92.0 G OF C2H5OH and 36 g of water. Which statement about mole fraction of the components is true?	A. Mole fraction of CH3OH is highest among all components B. Mole fraction of C2H5OH and H2O is the same C. Mole fraction of CH3OH and C2H5OH is ame D. Mole fraction of H2O is the lowest among all
1684	Type of polymer formed by the polymerization of two monomers is:	A. homopolymer B. copolymer C. ter polymer D. All of these
1685	One of the following can produce greater number of moles of ethyl chloride on reacting with escess of ethanol	A. PCl5 B. PCl3 C. HCl/ZnCl2 D. SOCl2
1686	If allowed to expand, the gases suddenly	A. heat up B. move randomly C. react D. cool down
1687	which chlorine compound has bonding that can be described as ionic with some convalent character?	A. NaCl B. MgCl₂ C. AlCl₃ D. SiCl₄
1688	Stronger the oxidizing agent, higher is	A. Redox potential B. Standard reduction potential C. Reduction potential D. _{Oxidation potemial}
1689	During thunderstorms, water dissolves	A. Dust particles B. HCl C. Nitric acid D. Clouds
1690	Sugar are polyhydroxy compounds of	A. Carboxylic acid B. Ketones C. Aldehyde D. Both B and C
1691	Covalent solids are composed of	A. Ions B. Different molecules C. Neutral atoms D. Diethyl ether
1692	Glyoxal molecule has?	A. two carbonyl groups B. One aldehydic and one carbonyl group

1692	Glyoxal molecule has?	C. Two aldehydic groups D. Two carboxyl group
1693	Denaturation of protein means the structure of protein is distrupted. indicate which factor does not denature protein	A. heating protein B. pH changes C. oxidising agent D. keeping pH 7.35
1694	The %age composition of the auxiliary agent in a detergent is:	A. 10% B. 30% C. 50% D. 70%
1695	In the transition state of S2 mechanism reaction with alkyl halides, which of the following orbital hybridization is involved	A. sp^3 B. sp C. sp^2 D. dsp^3
1696	Choose the difference between natural and synthetic fertilizers:	A. shapes B. usage C. crop application D. raw material
1697	Ethanol reacts with sodium metal to liberate	A. CO2 gas B. CO gas C. H2 gas D. Steam
1698	Substituted phenyl group are called	A. Arene groups B. Alkyl groups C. Aryl groups D. Acyl groups
1699	Water is made disinfectant during purification of water to the step:	A. aeration B. coagulation C. chlorination D. treatment
1700	Polycyclic aromatic hydrocarbons are taught to be	A. Disinfectant B. Carcinogenic C. Helpful D. Reactive
1701	What is the percentage of nitrogen in NH_3NO_3?	A. 65% B. 35% C. 20% D. 58%
1702	What is the most common catalyst used in hydrogenation of oils?	A. cobalt B. nickel C. tungsten D. copper
1703	If a salt bridge is removed from two half cells the emf is	A. Increased B. Decreased C. Dropped to zero D. Electrodes will be reversed
1704	6Na+ Fe2O3 -------- 3 Na2O+2Fe For above reaction, if you are provided with 230g Na and 320g Fe2O3, then limiting reactant is	A. , Na B. Na2O C. Fe2O3 D. none of these
1705	Molar mass of formic acid in benzene comes out to be	A. 64 B. 46 C. 32 D. 92
1706	What is the cause of water pollution	A. Chemical and bacterial constants in live stock B. The spilled oil in rivers and ponds C. Wide spreads used of pesticides D. All of these
1707	Thermoplastic polymer can be softened and hardened when cool repeatedly. Which one is not a thermoplastic among the following	A. Epoxy resin B. PVC C. Plastic toys D. None of all
1708	Which pair of gases do not obey Dalton's law of partial pressures?	A. H2 and He B. NH3and HCl C. H2 and O2 D. N2 and O2
1709	How many grams of NaOH are present in 250 cm3 of its 0.2M solution	A. ,4 g B. , 0.4 g C. , 10 g D. , 2 g
1710	A molecule that has polar bonds but is overall non - polar	A. IF B. CCl4 C. PCl3

	polar	D. All
1711	Correct relationship b/w Kc and Kp can be written as	A. Kp=, Kc(R)Δn B. Kc=Kp (RT)Δn C. Kp.= Kc.(RT)Δn D. Kp=Kc (R/N)Δn
1712	Water soluble and cyrstalline carbohydrrates are:	A. monosacharides B. obiligoseacharides C. polysacharides D. a and b
1713	The boiling point of glycerin at 1 atmospheric pressure is:	A. 290°C B. 390°C C. 190C° D. 210°C
1714	The slope of the graph is steepest at the beginning of reaction showing	A. Rapid decrease in concentration of reactants B. Rapid increase in concentration of reactants C. Fast rate of reaction D. All of the above
1715	Haemoglobin is a	A. Genetic protein B. Building protein C. Transport protein D. Structural protein
1716	The maximum possible number of hydrogen bonds in which a H_2O molecule can participate is	A. 1 B. 2 C. 3 D. 4
1717	What mass of NaOH is present in 0.5 mol of sodium hydroxide?	A. 40 gm B. 2.5 gm C. 15 gm D. 20 gm
1718	Which one of the following is halothane.	A. Cl-CH2-CH2-Cl2 B. CF-CHCl-Br C. CL-CH2-CH2-CH2-Br D. Br-CH2-CH2-Br
1719	The conversion of an halide of an alkene is an example:	A. addition reaction B. substitution reaction C. elimination reaction D. oxidation reaction
1720	Diamond and graphite are	A. isomorphous B. polymorphous C. allotropes D. none of these
1721	Which of the following is the element not present in all proteins	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur
1722	Peroxyacetylnitrate (PAN) is an irritant to human beings and it affects:	A. Eyes B. Ears C. Stomach D. Nose
1723	Half of the mass of atmosphere is concentrated above earth at the hieght of	A. 40 Km B. 25-28 Km C. 5-6 Km D. 100 Km
1724	Ethylene polymerizes at 100 atm pressure and 400 °C to give	A. Polybenzene B. Polypropylene C. Polyalcohol D. Polyethylene
1725	Which one of the following pair of atoms is most likely to form an inoic bond?	A. Na and F B. C and F C. N and F D. O and F
1726	Which one of the following compounds is known as tertiary alcohol?	A. 1-Propanol B. 2-methyl-1 propanol C. 2-propanol D. 2-methyl-2-propanol
1727	Which of the following statement about ribose is incorrect	A. Poly hydroxyl compound B. It is an aldo sugar C. Contain six carbon atoms D. It exhibit optical activity
1728	A student put two eggs A and B in HCL solution, After five minutes he took them out for weighing but egg dropped in water accidentally. The student was able to take it out after 30 minutes, He weighed it, Its weight was 40.33g. Weight of egg B was also	A. equal to that of egg A B. less than that of egg A C. greater than that of egg A D. unaffected instead

	40.33g. Teacher told him that if both eggs have been dropped in water, the weight of egg B would have been:	
1729	Pressure remaining constant at which temperature the volume of a gas will become twince of what it is at 0∘C.	A. 546∘C B. 200∘C C. 546K D. 273K
1730	Real gases deviate at low temperature from ideal behaviour due to	A. there is transitional motion of molecule B. the collissions between the molecules are decreased C. volume of gas is decreased D. the inter molecular attractive forces become significant
1731	Halogens form halogen acids. HF is the weakest among all of them This is due to the reason that	A. fluorine is a very small-sized atom B. fluorine is highly electronegative atom C. there is strong hydrogen bonding in HF D. the polarity of HF bond is less
1732	SHE acts as anode when connected with Cu electrode but act as cathode with Zn electrode	A. Zn has less reduction potential than hydrogen and Cu B. Zn has high reductionl potential than hydrogen and Cu C. Zn is below electrochemical series than hydrogen and Cu D. Zn has least tendency to lose electron
1733	Which solids are called true solids	A. Crystalline B. Vitreous C. Amorphous D. Metallic
1734	Which one of the following gases is used as mixture for breathing by sea divers?	A. Oxygen and nitrogen B. Nitrogen and Helium C. Helium and oxygen D. Helium and Hydrogen
1735	The molecule of CO_2 in dry ice form are the:	A. ionic crystals B. covalent crystals C. molecular crystals D. any type of crystals
1736	The number of atoms in 0.004 g of magnesium is close to	A. 24 B. 2 x 10²⁰ C. 10²⁰ D. 6.02 x 10²³
1737	Asbestos is commonly used in making	A. wall board B. black board C. soft board D. hard board
1738	The nature of crystals formed due to London forces of interaction are	A. molecular B. metallic C. ionic D. covalent
1739	The solubility product is only applicable for those substance whose molar concentrations is	A. 0.01 B. Equal to 1 C. Less than 0.01 D. Greater than 10
1740	NH_3can form only one hydrogen bond per molecule though it has three partially positively charged hydrogens	A. nitrogen in NH₃has only one ions pair of electrons which can make one H-bond B. ammonia is a base C. ammonia is a weak acid D. it ionizes to give one H⁺
1741	At freezing point of water, the density decreases due to	A. change of bond angles B. change of bond lengths C. cubic structure of ice D. empty spaces present in the structure of ice
1742	Which of the following undergoes easy dehydration?	A. 3-Methylbutan-2-ol B. Ethanol C. 2.Methylpropan-2-ol D. Methanol
1743	Mg(s) + 2HCl(aq). ---------- MgCl2(aq)+ H2(g) Given that; Mg=21g and HCl=21g, the excess reactant is	A. Mg B. HCl C. Both are in stoichiometric amounts D. None of these
1744	Lithosphere has amount of silicon:	A. 35.30% B. 27.72% C. 40.01% D. 21.13%
1745	Highest oxidation state af the transition elements is	A. +8 B. +7 C. +5

		D. +1
1746	Which of the following does not represent a type of crystal system	A. Triclinic B. Monoclinic C. Rhombohedral D. Isotropical
1747	Which of the following factors is not used to determine the quality of water	A. COD B. BOD C. DO D. Available chlorine
1748	Greater shielding effect corresponds to ionization potential value	A. greater B. lesser C. remain same D. no effect
1749	Which of the following waster material is not recycled for use again	A. paper B. plastic C. hides of animals D. glass
1750	Carboxylic acids are rather hard to reduce, which powerful reducing agent can be used to convert them to the corresponding primary alcohol.	A. H₂SO₄/MgSO₄ B. V₂O₅ C. LiAl H₄ D. K₂Cr₂O₇/H₂SO₄
1751	The fertilizer contains 33___35%n is:	A. ammonium nitrate B. potassium nitrate C. urea D. ammonia
1752	In order to maintain the boiling point of water at 110 C°, the extemal pressure should be	A. 550 torr B. between 500 and 760 tor C. between 760 and 1500 torr D. any pressure can be maintained
1753	Acidic character of amino acid is due to:	A. -NH2 B. -N+H2 C. -COOH D. -COO-
1754	Denaturation of protein means the structure of protein is disrupted indicate which factor does not denature protein	A. Oxidizing agent B. Heat protein C. Keeping pH 7.35 D. pH changes
1755	Which is not an amino acid	A. Lysine B. Gylcine C. Alanine D. Aniline
1756	If reactants are conductor of electricity, then method is used to measure the change in concentration of reaction	A. Optical rotation B. Refractrometric C. Dilatometric D. Electrical conductivity
1757	Water may boil at 120 °C when external pressure is:	A. 100 mm of Hg B. 700 mm of Hg C. 760 mm of Hg D. 1489 mm of Hg
1758	How many zones through which charge passes in a rotary kiln.	A. 3 B. 4 C. 5 D. 6
1759	Amorphous means	A. arranged B. ordered C. shaped D. shapeles (no arrangements)
1760	The molecules of $CO_2$is dry ice form the	A. ionic crystals B. covalent crystals C. molecular crystals D. any type of crystal
1761	Charles s law is only satisfied if temperature is taken on	A. Kelvin scale (b) B. Celsius scale (°C) C. Fahrenheit scale (°F) D. All of these
1762	The molecular mass of a polymer is obtained by multiplying mass of the monomer unit the degree of polymerization. The degree of polymerization of PVC is 1000. What is molecular mass	A. 65000 B. 63000 C. 62000 D. 60000
1763	Transition compounds which occur as tripositive	A. 4s-electron B. 3p-electron

1763	which occur as tripositive ions have no	C. 3s-electron D. 2s-electron
1764	In order to determine ΔH (latt) of ionic compound which is correct relationship	A. ΔH latt. = ΔHf - ΔHx B. ΔH latt. = ΔHa + ΔHv C. ΔH latt. = ΔHf + ΔHx D. ΔH latt. = ΔHf - ΔH sol.
1765	For a chemical reaction which can never be a fractional no	A. order B. molecularity C. half-life D. rate constant
1766	Oils and fats belong to the class of	A. Alcohols B. Hydrocarbons C. Acids D. Esters
1767	Tertiary aleohols producewith acidified KMno,	A. Ketones B. Aldehydes C. Malonic acid D. Alkene
1768	Keratomalacia is caused due to the deficiency of vitamin:	A. A B. B C. C D. K
1769	The reason of acid rains is	A. Release of CO in excess by in complete combustion B. Excess release of NO₂and SO₂from buring of fossil fules C. Formation of excess CO₂due to combustion and respiration D. Formation of NH₃in excess from industry and coal gas
1770	Keeping the temperature constant, if the gas is expended:	A. Kinetic energy of molecules will increase. B. Number of gas molecules increases. C. Temperature will increase. D. Pressure will decrease.
1771	The optimum PH value fro the enzyme pepsin is:	A. 10 B. 1.4 C. 2 D. 8
1772	The layer of gases around the earth are called?	A. Atmosphere B. Hydrosphere C. Lithosphere D. All of these
1773	The structure of sodium chloride is	A. simple cube B. body centered cubic C. face centered cubic D. depends upon conditions
1774	CFCs destroy ozone layer. How many ozone molecule a chlorine free radical can destroy?	A. 50000 B. 20000 C. 100000 D. 10000
1775	Air contains 78% N_2, 21% O_2 and 1% other gases at sea level the partial pressure of O_2 is	A. 760 torr B. 159 torr C. 592 torr D. 7.6 torr
1776	Macromolecular hypothesis acceptance due to efforts of standinger came about in:	A. 1910 B. 1920 C. 1930 D. 1940
1777	Mass spectrometry is used to determine the	A. Number of isotopes of an element B. Relative abundance of isotopes C. Relative isotopic masses D. All of these
1778	Ph of unpolluted rain water is	A. 07 B. Less than 6 C. 5.6 D. Less than 5
1779	The largest number of molecules are present in	A. 3.6 g of H2O B. 4.6 g of C2H5OH C. 2.8 g of CO D. 5.4 g of N2O5
1780	Deposition of cholesterol in arteries is responsible for:	A. Heart attach B. diabetes C. hepatitis D. cancer
1781	Enzymes that catalyse the transfer of groups within the molecules are called:	A. transferases B. isomerases C. ligases D. lyases
1782	Which one of the following pairs has the same electronic configuration s	A. Na+, Cl- B. K+ ,Cl-

	possessed by neon (Ne-10)?	C. Na+, Mg2+ D. Na+, F-
1783	Which mechanism of reaction is shown by carbonyl compounds?	A. Nucleophilic addition B. Electrophilic substituion C. Free radical substitution D. Electrophilic addition
1784	Which process of ester will yield carboxylic acid?	A. Hydration B. Hydrolysis C. Oxidation D. Reduction
1785	Polyesters resins have special use in:	A. Clothing B. Paints C. Emulsion D. Floor covering
1786	Helical structure of proteins is stabilized by	A. Peptide bond B. Dipeptide bond C. Van der Wall's forces D. Hydrogen bonding
1787	Out of total amount of water available for human use is	A. 0.30% B. 0.2% C. 40% D. 50%
1788	The temperature of a gas is directly proportional to its	A. average translational kinetic energy B. enthalpy C. internal energy D. hydration energy
1789	Which is unnecessary for purification of water for drink purposes:	A. coagulation B. aeration C. treatment with Iodine D. treatment with chlorine
1790	A maltose molecule is formed by the combination of:	A. two glucose molecules B. one glucose and one fructose C. molecule D. one glucose and one galactose
1791	In NaCl cyrstal Na^{+}ion is surrounded by how many ions of Cl^{-}	A. 4 B. 6 C. 8 D. 10
1792	Sex harmones belong to a group of organic compounds called:	A. heterocyclics B. steroids C. amino acids D. amines
1793	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
1794	Rigid rocky crust earth upto a depth of 100 km is called:	A. Atmosphere B. Hydrosphere C. Lithosphere D. All of these
1795	Which one of the following reaction of carboxylic acid is reversible?	A. Esterification B. Salt formation C. Reaction with PCl5 D. Reaction with SOCl2
1796	Which of these pollutants is produced by burning of coal and causes acid rain	A. SO2 B. CO2 C. CO D. NO
1797	Heat balance of earth is maintained by	A. Atmosphere B. Hydrosphere C. Lithosphere D. Stratosphere
1798	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
1799	Ground and surface waters are contaminated and become polluted due to the human activity. Which human activity will not cause water pollution	A. live stock waste B. agricultural pesticides C. oil beaks and spills D. all of the above
1800	Splitting of spectral lines when atoms are subjected to strong electric field is called:	A. Compton effect B. Stark effect C. Zeeman effect D. Photoelectric effect
	Newspaper can be recycled	A. 5 B. 4

1801	again and again by how many times	B. 4 C. 2 D. 3
1802	Which one of the following is not an alicyclic compound?	A. Cyclohexene B. Cyclohexane C. Benzene D. Cyclopentane
1803	Albumins are separated by	A. 1/2 saturated ammonium sulfate B. Full saturated ammonium sulfate C. 20% saturated ammonium sulfate D. 60% saturated ammonium sulfate
1804	Boiling point of water remains 100°C although heat is continuous supplied. it is because	A. decomposition of water takes place B. hydrogen bonding is increased C. external atmospheric pressure is not changing D. kinetic energy of H₂O molecules is increasing
1805	N terminal of glutathione is	A. Glycine B. Cysteine C. Glutamate D. Aspartate
1806	BOD is the oxygen demand with in day(s):	A. Four B. Two C. Three D. Five
1807	Which is an intermediate in Svl	A. Ethoxide ion B. Alkene C. Alkyl halide D. Carbocation
1808	Electropositive character increases down the groups due to:	A. Increase in atomic size of the elements B. Decrease in ionization potential C. Decreases in electromagnetically of the element D. All the above
1809	Oceans cove _____ percent of the surface of the earth	A. 60 B. 70 C. 80 D. 97
1810	Which one among the following is not a natural polymer?	A. protein B. cellulose C. nylon D. nucleic acid
1811	In water the most important oxidizing agent is dissolved molecular oxygen which ranges form	A. 2 - 4 ppm B. 4 - 6 ppm C. 2 - 5 ppm D. 4 - 8 ppm
1812	One of the following compound reacts with its own oxidation product (an oxidation involves no loss of carbon) to give sweet odour liquid	A. Propanal B. Propanone C. 1-propanol D. Propanoic acid
1813	Cane sugar on hydrolysis gives	A. Glucose+Glucose B. Glucose+Fruclose C. Glucose+Galactose D. Glucose+Gacatose
1814	An organic acid 'z' reacts separately with sodium bicarbonate, sodium hydroxide and sodium carbonate. Which one of the following represent the structure of 'z'?	A. HCOOC2H5 B. CH3-CH=CH2 C. CH3CH2OH D. H3C-CH2-COOH
1815	The alternate name of Glucose is	A. Dextrose B. Grape sugar C. Blood sugar D. All
1816	Potable water is considered to be:	A. safe for human consumption B. the ground water C. the Surface water D. now water is due to the salt of:
1817	Diamond is a bad conductor of electricity because:	A. it has a tight structure B. it has a high density C. there are no free electrons D. none of the above
1818	Which one is not postulated in the kinetci molecular theory among the following?	A. molecules are in chaotic motion B. molecules of all the gases have same size and same mass C. the volume of the molecules is negligible D. all molecular collisions are elastic
1819	NaOH+HCl- NaCl+ H2O. Enthalpy change in the above reaction is called	A. Enthalpy of reaction B. Enthalpy of Neutralisation C. Enthalpy of formation D. Enthalpy of combustion

1820	In the formation of Zwitter ion which one of the following donates the proton?	A. COOH B. NH2 C. CH2COO- D. OH-
1821	Halogen are being used as fire extinguisher, mild antiseptic, CFCs and many other organic chemicals. Which of the following halogen is used to kill the bacteria in drinking water.	A. Bromine B. Fluorine C. Chlorine D. Iodine
1822	Which of the following processes has always. ΔH=-ve	A. Formation of compound B. Dilution of a solution C. Dissolution of ionic compound D. Combustion
1823	What is clinker?	A. Roasted calcareous material B. Roasted calcareous & argelarious material C. Roasted argillaceous material D. Roasted gypsum
1824	At constant temperature, volume of given mass of a gas is inversely proportional to pressure on it. This is statement of	A. Charles law B. Boyle's law C. Hooks law D. Grahams law
1825	Which one of the pollutants of automobile exhausts affects the nervous system or produces mental diseases?	A. NO₂ B. SO₂ C. Hg D. Pb
1826	The gas which obey's the gas laws at all conditions of temperature and pressure is called:	A. Perfect gas B. Super gas C. Ideal gas D. Real gas
1827	The compound that has zero dipole moment is	A. HCl B. H₂S C. NH₃ D. CH₄
1828	Which alcohol is most reactive towards sodium metal?	A. Ter Butyl alcohol B. n-Propyl alcolol C. Isopropyl alcohol D. Have same reactivity
1829	Ecosystem is a smaller unity of	A. Nydosphere B. Biosphere C. Lithosphere D. Attmosphere
1830	When a compressed gas is allowed to expand into a region of low pressure, it produce:	A. Vapours B. Cooling effect C. Heating effect D. None of above
1831	Which one of the following does not act as pollutant	A. Carbon monoxide B. Sulphur dioxide C. Hydrocarbons D. Carbon dioxide
1832	Industrial materials and thermal power stations are coated by	A. PVC B. Polyester C. Epoxy resin D. PVA
1833	H2O and HF are the hydrides of the second period. Fluorine is more electronegative than oxygen. Anyhow, the boiling point of water is greater than that of HF. This is due to:	A. water is more polar than HF B. water has a bent structure C. HF has a zig zag structure after making hydrogen bonding D. the number of hydrogen bonds produced by water are greater than that of HF
1834	Triple point of water is	A. 273 K B. 373 K C. 203 K D. 193 K
1835	Which of the following has no hydrogen-bonding	A. Diethyl ether B. Water C. Ethyl alcohol D. Phenol
1836	Low IE is a symbol of	A. high electronegativity B. small size C. High electron affinity D. Metallic character
	Rickat is caused due to the	A. A B. D

1837	Ricket is caused due to the deficiency of vitamin	B. D C. B D. E
1838	Consider the reaction PCl5 (g) <----------> PCl3 (g) +Cl2 (g) in a closed container at equilibrium. At a fixed temperature, what will be the effect of adding more PCl5 on the equilibrium constant	A. It increases B. It remains unaffected C. It decreases D. Can't be predicted without Ki
1839	At absolute zero the molecules of hydrogen gas will have	A. Only translatioral motion B. Only vibrational motion C. Only rotational motion D. All the motion are ceased
1840	Violet colour of $[Ti(H_2O)]_4$ ion is due to.	A. Central metal ion B. Complex ion C. Water molecule D. Outer anion
1841	Which of the following is an application of electrochemical series	A. Prediction of the feasibility of chemical reaction B. Calculation of the cell voltage C. Prediction of reaction of metal with dilute acid D. All of the above
1842	Which of the following molecule has zero dipole moment?	A. PCl3 B. BF3 C. NH3 D. H2O
1843	Which of the following is not the property of liquid crystal	A. anisotropic B. isotropic C. three dimensional arrangement D. fluidity
1844	The element which shows highest binding energy	A. V B. T C. So D. Cr
1845	Part of fresh water consumed in industry is:	A. 1% B. 2% C. 69% D. 23%
1846	What is not correct about ΔHF	A. It is always negative B. Its value gives an idea about the relative stability of reactants and the products. C. Its value can be greater or less than zero D. Value depends upon nature of bonds
1847	An electron with drawing group attached to e-position in phenol	A. makes it basic B. Stabilises the phenoxide ion C. decreases its basicity D. allows it to precipitate in aqueous solution
1848	A basic buffer solution can be prepared by mixing	A. Strong acid and its salt with weak base B. Weak base and its salt with strong acid C. Strong base and its salt with weak acid D. Weak acid and its salt with strong base
1849	For better or worst we are living in society:	A. wood B. food C. diseased D. plastic
1850	Which one of the following organic acids is made fork methanol?	A. propanoic acid B. butanoic acid C. formic acid D. acetic acid
1851	Which gas is not a constituent of atmosphere?	A. Xe B. O₃ C. H₂ D. F₂
1852	Which of the following is BLOOD iron carrier	A. Haemoglobin B. Albumin C. Transferrin D. Globulin
1853	Ethene can give all of the following reactions except	A. Addition B. Free radical substitution C. Hydrohalogenation D. Hydration
1854	The main source of natural fibre is	A. animal fibres B. vegetables fibres C. mineral fibres D. all of the above
1855	The oxidation of SO2 to SO3 is exothermic reaction.	A. Temperature is increased and pressure is kept constant B. Temperature is reduced and pressure is increased

	The yield of SO3 will be maximum if	C. Both temperature and pressure are increased D. Both temperature and pressure are increased
1856	Which one of the following nitrogen base is NOT present in DNA.	A. Adenine B. Guanine C. Uracil D. Cytosine
1857	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
1858	Which of the following is a molecular formula of vinyl acetate	A. C₄H₆O₂ B. C₂H₄O₂ C. C₄H₆O₃ D. None of these
1859	Diamond, graphite and sand grant molecules are belonged to:	A. Inorganic B. Organic C. biopolymer D. synthetic
1860	Which of the following are not known to form compounds in more than one oxidation state?	A. Transition metals B. Halogens C. Alkali metals D. Noble gases
1861	What types of bonds are broken when water turns into steam on heating?	A. covalent B. permanent dipole interactions C. hydrogen bonds D. induced dipole interactions
1862	Which of the following test is not given by aldehvde	A. 2. 4 DNPH test B. NaHSO3 test C. Tollen's test D. Sodium nitroprusside test
1863	Which one of the following is not type of polemer	A. Copolymer B. Homopolymer C. Terpolymer D. Heteropolymer
1864	All are dicarboxylic acids except	A. Oxalic acid B. Malonic acid C. Picric acid D. Tartaric acid
1865	Liquids have definite volume due to	A. Negligible spaces B. Intermolecular force C. Motion D. Both a and b
1866	Surface and ground water sources are contaminated by various human activities. Which of the following is not human activity that causes contamination in fresh water	A. Live stock waste B. Oil leaks and spills C. Desposal of industrial effluents D. Rain
1867	Plastics are 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
1868	Liquid hydrocarbon is	A. methane B. propane C. ethane D. hexane
1869	Nucleic acid contain elements like N,H,O,C and	A. Ca B. S C. P D. F
1870	Percentage of nitrogen by volume in air is	A. 20% B. 78% C. 98% D. 50%
1871	Plastic, rubber, synthetic fibers belong to macromolecules:	A. Inorganic B. organic C. Biopolymer D. synthetic
1872	There are four orbitals s,p,d and f , which order is correct with respect to the increasing energy of the orbitals?	A. 4s <4p<4d<4f B. 4s<4f<4p<4d C. 4p<4s<4f<4d D. 4f<4s<4d<4p
		A. the hydrogen bonding in ice is stronger than that of in water B. empty spaces are left in ice

1873	Ice floats on water because	C. ice has two-dimensional structure D. the bond length of the oxygen and hydrogen bond is different in water and ice
1874	Primary pollutant is that:	A. Waste product of an industry B. Which causes cancer C. Whose concentration cannot be controlled D. Which corrode the metal only
1875	Acetone and Chloroform are soluble in each other due to	A. intermolecular hydrogen bonding B. ion-dipole interaction C. instantaneous dipoles D. dipole-induced dipole interaction
1876	Polymorphism is shown by AgNO3. Which one of the following options is true for AgNO3?	A. Orthorhombic and rhombohedral B. Cubic and orthorhombic C. Cubic and tetragonal D. Monoclinic and hexagonal
1877	Which does not affect vapour pressure	A. Nature of liquid B. intermolecular forces C. Temp D. None of these
1878	The particles in solids are	A. widely separated and moving randomly B. widely separated not moving C. moving randomly but not separated D. close together and vibrating slightly
1879	Which one of the following is also called silver mirror test?	A. Fehlinig's solution test B. Iodoform test C. Tollen's reagent D. Benedict's solution tests
1880	Oxidation reduction is done by	A. Oxidoreductase B. Lipases C. Lyase D. None of these
1881	L-asparginase is helpful in treatment of	A. skin disease B. blood cancer C. heart failure D. obstructive jaundice
1882	Dehydrogenase is an example of	A. ligase B. oxidoreductase C. lyase D. hydrolase
1883	Which one is very weak acid	A. HF B. HCl C. H2CO3 D. H2O
1884	Silk is an example of	A. animal fiber B. vegetable fibre C. mineral fibre D. none of these
1885	The critical temperature of NH_3 is greater than CO_2 due to its:	A. Greater polarity B. Stable polarity C. Lesser polarity D. None of above
1886	Which set of elements is good loser of electrons	A. F2. Cl2, Br2 B. N, P. As C. O. S, Se D. Li, Na, K
1887	On electrophoresis for plasma proteins using buffer of pH 8.6	A. The proteins are neutral B. The proteins carry negative charge C. The proteins carry positive charge D. The proteins are easily precipitated
1888	Terylen fibre is made by reaction of terephthalic acid with	A. ethylene B. ethylene glycol C. glycol D. terylene
1889	Which method is not used in preparation of acetic acid?	A. Oxidation of ethane B. Hydrolysis of ethyl acetate C. Reaction of CO₂with CH₃MgX D. Oxidation of methane
1890	If a gas expands at constant temperature	A. The pressure decreases B. The Kinetic energy of the molecules remains the same C. The kinetic energy of the molecules decreases D. The number of molecules of the gas increase
1891	The water is considered to be polluted when the concentration of oxygen in it is	A. 6 - 9ppm B. 6 ppm C. 8 ppm D. Less than 4pm
1892	Soda lime is often employed to remove both	A. H2O and NO2 B. CO2, and NO2, C. H2O and CO2 D. H2S and CO2

		D. H2S and CO2
1893	Organic pollutants in water are measured by	A. DO B. COD C. Water logging D. PH
1894	Point out that which is not an application of liquid crystals?	A. Source of energy B. In display of electrical devices C. For skin thermography D. As temperature sensor
1895	No of unpaired electrons are maximum in	A. V+3 B. Mn+2 C. Fe+3 D. Cr+3
1896	An example of regulatory protein is	A. nucleoprotein B. hemoglobin C. lactoglobulin D. thyroxine
1897	Which of the following is the correct equation to calculate relative molecular mass of a gas	A. M=mPRTV B. M=mPR/VT C. M=PV/mRT D. M=mRT/PV
1898	Energy required to remove electron from an atom	A. Ionization potential B. Electronegativity C. Electropositivity D. Electron affinity
1899	A gas is heated in a closed vessel. Which of the following statement is not true for the gas?	A. the intermolecular forces between particles weaken B. the kinetic energy of particles increases C. the total internal energy of the gas remains constant D. the total internal energy of the gas increases
1900	The crystal system are of	A. 7 types B. 10 types C. 5 types D. 8 types
1901	What is the formula of bauxite?	A. Al2O3.2H2O B. Al2O3 C. Na2B4O7 .10 H2O D. Ca2B6O11. 5H2O
1902	How many secondary carbon atoms are present in Methylcylopropand	A. 1 B. 2 C. 3 D. 0
1903	What is the formula of cryolite?	A. Al2O3.2H2O B. Na2B4O7 .10 H2O C. Na3AlF6 D. Ca2B6O11. 5H2O
1904	Electronic configuration of Gold [Au79] is	A. [Xe] 4f¹⁴, 5d¹⁰, 6s¹ B. [Xe] 4f¹⁰, 5d¹⁰, 6s² C. [Xe] 4f¹⁴, 5d⁹, 6s² D. [Xe] 4f¹⁴, 5d¹⁰, 6s²
1905	The number of reacting molecules whose concentration change during reaction is called	A. Activated molecule B. Rate of reaction C. Order of reaction D. half-life
1906	The alcohol that does not form curbonyl compound on oxidation	A. iso-butyl alcohol B. neo pentyl alcohol C. Ethanol D. ter-butyl alcohol
1907	Which of the following is an example of diffusion?	A. Spreading of smell of flowers in garden B. Steam condensing on a cold window C. Bubbles rising in a beaker of boiling water D. All of above
1908	The bond angle between any two sp hybrid orbitals is A.109.28°	A. 107.09° B. 120° C. 90° D. 80°
1909	The standard electrode potential of hydrogen is arbitrarily taken at 298k is	A. 1.00volt B. 0.10 volt C. 0.00 volt D. 10.0 volt
1910	The movement of gas molecules from a region of high pressure to vacuum is called:	A. Evaporation B. Effusion C. Conduction D. Diffusion
1911	In MgCl2, the oxidation state ofCl is	A. Zero B. -2 C. +2 D. -1
	The destruction of the	A. Dehydration

1912	The destruction of the biological nature and activity of proteins by heat or chemical agent is called:	A. Dehydration B. Oxidation C. Denaturation D. Polymerization
1913	Which is property of CO?	A. Soluble in water B. Insoluble in water C. No toxic D. Pole coloured
1914	A compound has an empirical formula CH2Cl2 and molecular formula mass as 99 mol-1, identify the compound.	A. C2H4Cl B. C4H6Cl C. C2H4Cl2 D. C2H4Cl3
1915	Which fiber contains 85% acrylonitrile by weght?	A. azlon fiber B. saran fiber C. acrylic fiber D. rayon fiber
1916	If a = b = c and x = y = z 90° then crystal structure is	A. Cubic B. Tetragonal C. Orthorhombic D. Triclinic
1917	Nylon 6, 6 is a condensation polymer of	A. Phthalic acid and hexa ethylene diamine B. Adipic acid and hexaethylene diamine C. Phthalic acid and glycerol D. Adipic acid and glycerol
1918	Which pair of molecules have debye force	A. Ne and Ne B. Argon and water C. Na⁺ion and water D. Water and water
1919	The amino group in 19 alpha-amino acids is primary; only one alpha-amino acid has secondary amino group which one is that	A. Alanine B. Glutamic acid C. Glycine D. Proline
1920	The pressure exerted by the vapours in equilibrium with its pure liquid at given temperature is called the	A. equilibrium pressure B. atmospheric pressure C. vapour pressure D. external pressure
1921	Esters have fruity smell and are used as artificial favours. Amyl acetate gives flavour of	A. Banana B. Jasmine C. Pineapple D. Orange
1922	If the rate of the reaction is equal to the rate constant, the order of the reaction is	A. 3 B. 1 C. 0 D. 2
1923	Glycerin boil at 290°C under normal atmospheric pressure. If the pressure is reduced to 50 mm of Hg, it will boil	A. above the given temperature B. below the given temperature C. at the same temperature D. at 25°C
1924	Crystals can be classified into	A. 7 crystal systems B. 4 crystal systems C. 3 crystal systems D. 14 crystal systems
1925	Vegetables oils are	A. Unsaturated fatty acids B. Glycerides of unsaturated fatty acids C. Glycerides of saturated fatty acids D. Essential oils obtained from plants
1926	Which of the following molecules should be more volatile	A. HF B. HCl C. HBr D. HI
1927	pi-bond can be formed by sideways overlap of	A. s-orbital B. d-orbital C. p-orbital D. sp orbital
1928	One gram of carbohydrate yields energy	A. 10 kcal B. 100 kcal C. 4 kcal D. 9 kcal
1929	Increase viscosity of proteins is due to	A. Denaturation B. Isoelectric point C. Both D. None
1930	The composition mixture of clay and lime stone in a raw material is:	A. 75% limestone & 25% clay B. 15% limestone & 55% clay C. 25 limestone & 75% clay D. 55% limestone & 15% clay

1931	Amino acid produce α-hydroxy carboxylic acid when treated with	A. KNO₃/HBr B. Zn/HCl C. NaNO₂/HCl D. Pd/BaSO₄
1932	Naphthalene has two fused aromatic ring of carbon atom the molecular formula	A. C10H8 B. C10H14 C. C10H10 D. C12H12
1933	Honey contains glucose and fructose along with some other ingredients. It has greater viscosity due to:	A. irregular shape of the molecules B. greater molecular size and strong intermolecular forces C. H-bonding D. irregular shape of the molecules
1934	Surfactants are organic compounds used in detergents which reduce the:	A. viscosity of water B. surface tension of water C. boiling points of water D. surface ability of water
1935	An oil of fat with no double bond have iodine number:	A. Zero B. 100% C. 50% D. Minimum
1936	The boiling point of H2O is 100°C while that of C2H5-OH is 78.5C°. The reason is that:	A. H2O molecules are small-sized B. the bond angles at oxygen atom are different C. C2H5-group is electron donating D. the number of H-bonds are greater in H20, than C2H5-OH
1937	Which one of the following is not a form of chemical bonding?	A. covalent bonding B. hydrogen bonding C. ionic bonding D. metallic bonding
1938	The spreading of ink on blotting paper is due to	A. capillary action B. hydrogen bonding C. intermolecular forces of the ink D. intermolecular forces of the ink and paper
1939	Benedict solution gives a positive test with:	A. glucose B. frutose C. sucrose D. starch
1940	At STP,a container has 1 mole of Ar,2 moles of CO_2,3 moles of O_2 and 4 moles of N_2.Without changing the total pressure if one mole of O_2 is removed,the partial pressure of O_2	A. Is changed by about 26% B. Is halved C. Is unchanged D. Change by 33%
1941	When HCl gas is passed through saturated solution of rock salt, the solubility of NaCl	A. Increases B. May increase or decrease C. Decreases D. None of these
1942	The distribution of energies among the molecules of gases was studied by:	A. Maxwell B. Coulomb C. Newton D. Boltzmann
1943	The substitution of a'-H' by '-NO2' group in benzene is called	A. Nitration B. Sulphonation C. Ammunolusis D. Reduction of benzene
1944	Which of the following substance is not present in acid rain?	A. Sulphuric acid B. Nitric acid C. Sulphurous acid D. Acetic acid
1945	Enzymes consist of	A. proteins only B. proteins and non-protein parts C. fats only D. futs and non-fatty components
1946	Coagulation removes suspended particles in ran water:	A. 60% B. 70% C. 80% D. 90%
1947	In which of the following Equilibria will Kc and Kp have not the same value	A. 2HI <--------> H2+I2 B. 2SO2 + O2 <---------> 2SO3 C. N2 + O2 <---------> 2NO D. All of these
1948	_____ is the major source of acid deposition in atmosphere.	A. SiO2 B. CO2 C. SO3 D. Al2O3

1949	Which of the following folymer is used as binder	A. PVC B. PVA C. Acrylic resins D. Polyester
1950	Which one the following is not postulated in the kinetic molecular theory of gases	A. molecules of all the gases have same size and same mass B. molecules are in chaotic motion C. all molecular collisions are elastic D. the volume of the molecules is negligible
1951	Carboxylic acids can be prepared from:	A. Oxidation of alkane B. Oxidation of alcohols C. Oxidation of aldehydes D. All of these
1952	Temperature at which molecular motion ceases is called	A. Absolute zero B. Absolute temperature C. Critical temperature D. Difficult to predict
1953	Keratomalacia is caused due to the deficiency of vitamin	A. A B. K C. B D. D
1954	The reagent used to distinguish between ethanol and propanal is	A. I2/ NaOH B. Benedict's reagent C. LiAlH D. sodium nitroprusside
1955	Number of neutrons in ^{66} Zn will be 30	A. 30 B. 35 C. 38 D. 36
1956	Which pair of elements have bonds of the same type between their molecules in the solid state?	A. phosphorous and nitrogen B. sulphur and magnesium C. carbon and sodium D. hydrogen and sodium
1957	The reaction of alkyl halide in the presence of alcoholic KOH is	A. Substitution B. Addition C. Acid-base D. Elimination
1958	Which gas molecules escape through a hole of molecular dimension this phenomenon is called	A. diffusion B. mixing C. effusion D. flowing of gas
1959	Sea gets polluted bu accidental oil spills and	A. Atmospheric pressure B. Nitrogen gas C. Cargo oil tankers D. Aero plane
1960	Which of the following reactions are usually slow?	A. Neutralization of acids and bases B. Displacement Reactions C. Organic substitution reaction D. Free radical reactions
1961	Molten lead and iead (II) bromide both conduct electricity. Which one of the following statements relating to this is true?	A. Both undergo chemical change when they conduct B. Both conduct by the movement of charge particles C. Both will also conduct in the solid state D. Both contain mobile electrons
1962	Which is unnecessary for purification of water for drinking purposes	A. Coagulation B. Aeration C. Treatment with Iodine D. Treatment with chlorine
1963	Crystal lattice of the substances can be categorized into	A. five types B. seven types C. six types D. none of these
1964	Agriculture consumes part of fresh water:	A. 1% B. 2% C. 69% D. 23%
1965	Which not a method for solid waste management>	A. Landfill B. Incinerating C. Recycling D. None of these
1966	The forces of attraction between the solid atoms of helium are	A. hydrogen boding B. coordinate covalent bond C. covalent bond D. London dispersion force
1967	Temperature required for the dehydration of ethanol into ethene in the presence of H_2SO_4 is	A. 130°C B. 170°C C. 175°C

	presence of H_2SO_4 is	C. 175°C D. 180°C
1968	Which product is formed by teh reaction of carboxylic acid with alcohol?	A. Aldehyde B. Ether C. Alkane D. Ester
1969	IUPAC name of alanine is.	A. 2-aminopropanoic acid B. 2- aminoethanoic acid C. 2-aminobutane-1,4 choleric acid D. 2-aminobutanoic acid
1970	1 gram molecule refers to amount in grams	A. Equivalent to 1 mole of an atom B. Equivalent to 1 mole of a molecule C. Equivalent to 1 mole of an ionic species D. Of an ionic compound
1971	Dehydrohalogenation of alkyl halides happens in the presence of	A. Pd B. Ni C. Zn D. KOH/alcohol
1972	Vapour pressure is not affected by	A. Surface area B. Intermolecular forces C. Temperature D. Nature of liquid
1973	The solubility product of AgCl is 2.0 x 10(-10) mol2 dm(-6). The maximum concentration Ag+ ions in the solution is:	A. 1.41 × 10(-5) mol. dm(-3) B. 1.41 × 10(-10) mol. dm(-3) C. 2.0 × 10(-10) mol. dm(-3) D. 4.0 × 10(-20) mol. dm(-3)
1974	Which of the following is not a postulate of the kinetic theory of gases?	A. when gas particles collide, their total kinetic energy increases B. gases consist of molecules in a constant state of random motion C. when gas particles collide their total kinetic energy does not change at all D. The gas particles travel in straight lines unit they collide with one another or with the walls of the container
1975	Carboxylic acid is given name by replacing "a" of alkane by:	A. "oic" acid B. "one" C. "al" D. "ol"
1976	The overall effect of the photochemical smog in the after noon is built up of	A. Neutralization B. oxidizing agent C. Reducing agent D. Activating agent
1977	Chloroethene, CH_2 = CHC/ is the monomer of PVC. What are the C-C-C bond angles along the polymeric chain in PVC?	A. They are all 109.5° B. half are 109.5° and half are 120° C. They are all 120° D. They are all 180°
1978	NaCl is completely ionized in water due to presence of	A. hydrogen bonding B. dipole dipole forces C. ion dipole forces D. London dispersion forces
1979	When a metal rod is dipped in its one molar ionie solution	A. Electricity is produced B. Electricity is consumed C. Redox reaction occurs D. Potential difference is set up
1980	In beta elimination reaction	A. carbon number changes B. unsaturated compound is formed C. hybridization. ofC remains same D. pi bonds are decreased
1981	Scandium has atomic number 21, which one will be its electronic configuration.	A. 1s², 2s², 2p⁶, 3s², 3p⁶, 3d¹ B. 1s², 2s², 2p⁶, 3s², 3p⁶, 4s²,3d¹ C. 1s², 2s², 2p⁶, 3s², 3p⁶, 4s².4p¹ D. 1s², 2s², 2p⁶, 3s², 3p⁶, 4s¹,4p²
1982	Lithium differs from rest of members of its group due to which of following reasons	A. High E.N of Li+1 B. Small radius C. High charge density D. All above are correct
1983	The bonding occurs among polar covalent molecules containing H and one of the small electronegative element such as O,F or N is called:	A. Ionic bonding B. Metallic bonding C. Bridge bonding D. H-bonding
1984	Which woody raw material is used for the manufacture of paper pulp?	A. cotton B. bagasse C. poplar D. rice staw
		A. 3 B. 2

1985	pH value of pepsin is:	B. 2 C. 4 D. 1.4
1986	How many zones through which the charge passes in a rotary kiln?	A. 4 B. 3 C. 2 D. 5
1987	When chlorofluoro carbon are subjected to U.V they form	A. Cations B. Aninons C. Free radicals D. None of these
1988	According to Boyle's law at constant temperature, the product of pressure and volume of a given mass of gas is:	A. a constant B. fraction C. whole number D. a multiple
1989	choose the temperature among the following at which real gas obeys ideal gas laws when pressure range is appreciable:	A. critical temperature B. boyle's temperature C. inversion temperature D. transition temperature
1990	Ice occupies more space than liquid water	A. 9% B. 10% C. 11% D. 12%
1991	One atmosphere is equal _____ Pascal	A. 760 B. 101325 C. 14.7 D. 1.01325
1992	Which of the following transition metal forms colourless compounds in +4 oxidation state?	A. Ti B. Cr C. Cu D. Zn
1993	The molecular mass of a polymer is obtained by multiplying mass of the monomer unit with the degree of polymerization, The degree of polymerization of PVC is 1000.What is molecular mass?	A. 65000 B. 63000 C. 62000 D. 60000
1994	Hydrosphere includes	A. Seas and rivers B. Ocean & polar ice caps C. Ground water D. All of above
1995	If volume of an ideal gas at 0°C 536cm3, what is volume at 1°C	A. 373 cm3 B. 646 cm3 C. Becomes 0cm3 D. 746 cm3
1996	Which of the following tends to approach ideal gas like behavior at R.T.P	A. ammonia B. neon C. carbon dioxide D. chlorine
1997	Which is the correct electronic configuration of chromium.	A. 1s²,2s²,3s²,2p⁶,3p⁶,4s²,3d⁶ B. 1s²,2s²,2p⁶,3s⁶,3p⁶,3d⁶ C. 1s²,2s²,3s²,2p⁶,3p⁶,4s²,3d⁴ D. 1s²,2s²,2p⁶,3s²,3p⁶,4s²,3d⁵
1998	Which of the following least resembles an ideal gas?	A. ammonia B. helium C. hydrogen D. trichloromethane
1999	Albumin is	A. Insoluble in water B. Heat coagulable protein C. A plant protein D. A protein of low biological value
2000	polymerisation of vinyl chloride gives PVC: How does the carbon-carbon bond in PVC compare with that in chloroethene?	A. longer and stronger B. fructose C. sucrose D. starch
2001	Which behaves as insulator for animals body?	A. Carbohydrates B. Proteins C. Fats D. Skin
		A. 900 to 1000<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;">°C
2002	The temperature in the incineration process has a range:	B. 650 to 1100<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;">°C C. 950 to 1300<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;">°C D. 500 to 900<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;">°C
2003	If Kc value is small then equilibrium position will shift	A. Towards left B. Remains unchanged C. Towards right D. It is always constant value
2004	Which of the following tests helps to distinguish between alkyne and alkene?	A. Lucas test B. Tollen's reagent test C. Baeyer's test D. Fehling's solution test
2005	Chemicals used to kill herbs are:	A. Herbicides B. Insecticides C. Pesticides D. Fungicides
2006	The reagent for alkaline hydrolysis of ethyl bromide to form ethyl alcohol is	A. water at room T B. Alcoholic KOH+heat C. Ethanol + heat D. dil. NaOH+ heat
2007	Which of the following elements is most metallic	A. Bi B. sb C. As D. P
2008	Pan is an irritant to human beings and it affects	A. Eyes B. Nose C. Hair D. Skin
2009	Which one of the following is the most abundant organic substance found in nature?	A. fructose B. starch C. glucose D. cellulose
2010	The change in enthalpy of a system when one mole of the substance is completely burnt in excess of air or oxygen is called	A. Heat of reaction B. Heat of formation C. Heat of atomization D. Heat of combustion
2011	Photochemical smog consists of higher concentration of:	A. Oxidants B. Ozone C. a & b D. NO₃
2012	Butane has isomeric forms	A. 3 B. 4 C. 2 D. 1
2013	For which mechanisms, the first step involved is the same	A. E1 and E2 B. E2 and SN2 C. E2 and E1 D. E1 and SN1
2014	Proxy acetyl nitrat5e (PAN) is an irritant to human beings and it affects:	A. nose B. stomach C. eyes D. ears
2015	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⁺
2016	Point out the substance which has maximum vapour pressure at a given temperature?	A. Acetone B. Water C. Ethanol D. Acetic acid
2017	Glass is a	A. Micro-crystalline solid B. Super-cooled liquid C. Gel D. Polymeric mixture
2018	The pressure exerted by gas molecules is due to their	A. collisions B. densities C. masses D. kinetic energy

2019	The electrochemical series is based on	A. pH scale B. Redox scale C. Hdrogen scale D. Arrhenius scale
2020	Enzymes are	A. simple proteins B. derived proteins C. compound proteins D. conjugated proteins
2021	What is not true about DNA?	A. it preserves genetic information B. Synthesizes protein C. it has a linear structure D. To replicates
2022	Which of the following least resemble an ideal gas?	A. ammonia B. helium C. hydrogen D. trichloromethane
2023	In intense electrical field and at a very high temperature matter generally exist in	A. Solid state B. Plasma state C. Liquid state D. Gaseous state
2024	Which is trigonal cyrstal	A. BaSO₄. 4H₂O B. FeSO₄ C. NaNO₃ D. None
2025	The values of ΔH for the process I(g)+e-1---------> I-1(g) is:	A. >0 B. <0 C. 0 D. None
2026	When the temperature is raised, the viscosity of the liquid decreases.This is because of	A. Decreased volume of the solution B. Increase in temperature increases the average kinetic energy of molecules which overcome the attractive force between them C. Decreased covalent and hydrogen bond forces D. Increased attraction between the moelcules
2027	Gases of air, always remain in random motion and do not settle due to:	A. Difference of molecules 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.
2028	The factor responsible for lower mercury level in a capillary tube is	A. High density B. Surface tension C. Liquid state D. Metallic Colour
2029	The reaction which is zero order	A. Decomposition ofN2O5 B. Formation of Glucose in plant C. Formation of FeI2 D. Chorination of methane in sunlight
2030	For an endothermic reaction, enthalpy of reactants	A. Is smaller than that of the products B. Is greater than that of the products C. Must be greater or smaller than that of the products D. Is equal to that of the products
2031	Choose an addition polymer among the following:	A. terylone B. nylon 6,6 C. polystyrene D. epoxy resin
2032	Benzene reacts with Ethyl chloride in presence of AlCls to give	A. Benzalchloride B. Benzyl chloride C. Ethyl benzene D. Benzotrichloride
2033	Formula of paltimic acid is:	A. C₁₁H₂₂COOH B. C₁₃H₂₇COOH C. C₁₅H₃₁COOH D. C₁₇H₃₅COOH
2034	The boding which covalent molecules containing hydrogen and one of the small electronegative element such as O, For Mis called:	A. ionic bonding B. bridge bonding C. H-bonding D. metalic bonding
2035	According to kinetic theory of gases kinetic energy depends on	A. Temperature B. Collision C. Pressure D. Atomic number
2036	The boiling point of radon (211 K) is higher than boiling point of Helium (4.4 K) because	A. the atomic number of Rn is larger than that of the He B. the atomic mass of Rn is larger than that of He C. the dispersion forces between Rn atoms are more prominent that between He atoms D. Rn atoms are joined by dipole-dipole force whereas He atoms are joined by hydrogen bonding
2037	Macromolecules or polymers are large molecules built up from small molecules known as	A. Newton B. Schrodinger C. Lewis

	monomers. This hypothesis put forward by	D. Staudinger
2038	Which one of the following elements is the strongest reducing agent?	A. Chlorine B. Sodium C. Magnesium D. Aluminium
2039	The elements of group I-A react violently with water and make the solution	A. neutral B. amphoteric C. acidic D. alkaline
2040	London dispersion forces are also called	A. Ion-dipole forces B. Dipole-induced dipole forces C. Dipole-dipole forces D. Instantaneous dipole induced dipole forces
2041	When ethyl magnesium bromide is treated with carbon dioxide and the product hydrolyzed we get	A. formic acid B. propionic acid C. oxalic acid D. acetic acid
2042	State of hybridization of carbon in the carbocation is	A. sp3 B. sp C. sp2 D. dsp2
2043	A compound that has a nucleophilic carbon?	A. C2H2 B. C2H4 C. C3H8 D. C6H6
2044	The existence of an element in more than one form is called	A. allotropy B. isomorphism C. polymorphism D. isotropy
2045	Setting process of cement is based on:	A. Hydrolysis B. Dehydration C. Hydration D. Oxidation
2046	The reaction kinetics concerned with the	A. Rate of reaction B. Direction of reaction C. Factor effecting rate of reaction D. both a &b
2047	Lithosphere extends upto kilometer of earth crust in depth:	A. 10 km B. 100 km C. 1000 km D. 10000 km
2048	Which is the example of diffusion of gases	A. bubbling in soda bottle B. vapour condensing on a moist surface C. hot air rising above a candle D. spreading of smell from a scent bottle
2049	Rte of evaporation of petrol is greater than that of water at room temperature. This is due to the reason that:	A. petrol is an organic compound B. water molecules have small size C. petrol molecules do not have D. petrol molecules have greater size
2050	In solid, the temperature is the measure of:	A. Rotational kinetic energies. B. Translational kinetic energies. C. Vibrational kinetic energies. D. None of above.
2051	The B.P of H2O at Murree Hills is	A. 99.8C B. 98°C C. 100C° D. 89°C
2052	Steroid belong to the family of:	A. protein B. enzyme C. lipids D. carbohydrates
2053	Which is not a steroid	A. Cholesterol B. Ergosterol C. Phospholipids D. None of these
2054	The non polar gases of low polarizability have a very:	A. Low critical temperature B. Stable critical temperature C. High critical temperature
2055	Enzymes have been classified on the basis of	A. protein structure B. prosthetic groups C. type of reaction they catalyse D. bonding in them
2056	Moles of protons in 20g of SO3	A. 10 B. 20 C. 40 D. 80
		A. 3 kcal/gm

2057	The energy produced by a carbohydrate is:	B. 2kcal/gm C. 6kcal/gm D. 4kcal/gm
2058	The standard reduction potential of Zinc is	A. 0.76V B. 0.34 C. -0.34V D. -0.76V
2059	The type of isomerism shown by alkyl halides is	A. geometric B. functional C. positional D. metamerism
2060	The value of ΔV being very small. The term PΔV can be neglected for process involving	A. Liquid and gas B. Solids and gases C. Liquid and solid D. None of these
2061	A fat or oil is characterized for extent of unsaturation by one of the following number. Which one is	A. Acid number B. Saoilucfucation number C. Rancidity number D. Iodine number
2062	An element that is not an essential par of proteins is	A. O B. N C. H D. S
2063	Polymers class is:	A. homopolymer B. copolymer C. ter polymer D. All of these
2064	The highest oxidation state of manganese is	A. +7 B. -7 C. +6 D. +4
2065	The gas which obeys the gas laws at all conditions of temperature and pressure is	A. ideal gas B. perfect gas C. real gas D. noble gas
2066	The peptide bond is	A. Glycine B. Non-covalent bond C. Weak bond D. Responsible for secondary structure of protein
2067	Which of the folowing compound is expected to be colored	A. Na2SO4 B. ZnCl2 C. MgF₂ D. CuF₂
2068	In the formation of NaCl crystals from its aqueous solution, its cubic shape is changed to needle like when 10% urea is present as impurity, this phenomenon is called as	A. habit of crystal B. polymorphism C. anisotropy D. cleavage
2069	Density of water becomes maximum at	A. 10°C B. 4°C C. 5°C D. 12°C
2070	All the Hydrolytic reactions are	A. First order B. Second order C. Third order D. pseudo-first order
2071	The crystal of $K_2SO_4$and $K_2CrO_4$are orthorhombic. These are isomrophs due to	A. same physical properties B. their cations identical C. number of O atms is equal D. same shape of SO₄⁻²and CrO₄⁻²tetrahedral
2072	The substance added to the soil to provide one or more nutrient elements which are necessary plant growth are known as:	A. Harmones B. minerals C. fertilizers D. none of above
2073	One statement of isomorphism is incorrect	A. they have different chemical properties B. they have same physical properties C. they have same atomic ratio D. they have definite geometric shape
2074	suppose that an ocean of mercury replaced all the air of the air of the earth . How deep would this ocean have to be to exert the same pressure as the air:	A. 77cm B. 76cm C. 79cm D. 78cm
	The maximum number of	A. 2

2075	isomer for an alkene with the molecular formula C2H8	B. 3 C. 4 D. 5
2076	If the volume of a gas collected at a temperature of 600 ^{o}C and pressure of 1.05 x 10^{5}Nm-2 is 60 dm3, what would be the volume of gas at STP.(P =1.01 X 103 Nm-2,T= 273 K)?	A. 25 Cm3 B. 75 cm3 C. 100 cm3 D. 51 cm3
2077	How many fertilizer plants are now in Pakistan?	A. 20 B. 14 C. 12 D. 10
2078	Most reactive among the following	A. Li B. Mg C. Ca D. Na
2079	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
2080	The law of distribution of energy is given by	A. Clausius B. Maxwell C. Bernoulli D. Boltzmann
2081	Which ion is most polarising?	A. Al³⁺ B. Ba²⁺ C. Mg²⁺ D. Na⁺
2082	Which is not the affect of polluted air on environment	A. acid rain B. smog C. ozone D. global warming
2083	Most of the reactions which give stable products are	A. Endothermic B. Exothermic C. Isothermal D. Non of these
2084	Ar has low critical temperature and pressure due to its	A. small size B. monatomic molecule C. low polarizability D. liquefaction temperature close to room temperature
2085	Which of the following molecule has largest number of shared pair of electrons?	A. CO₂ B. N₂ C. NH₃ D. C₂H₄
2086	It is a biodegradable pollutant	A. Salts of HG B. DDt C. Aluminum foil D. Domestic fuel
2087	Compressibility factor for an ideal gas is	A. 1.5 B. 1.0 C. 2.0 D. 0.5
2088	Formamide is formed by the reaction of which acid with ammonia	A. Oualic acid B. Formic acid C. Ethanoic acid D. Propanoic acid
2089	Pyridine is an example af	A. Homocyclic compound B. Heterocyclic compound C. Carbocyclic compound D. Aliphatic compound
2090	Covalent bonds are least likely to be formed:	A. between atoms of the same element B. between atoms of different elements on the right of the periodic table C. by head of the group elements with high ionization energies D. between an element in Group I and an element in Group VII
2091	Which one of the following was uses as one of the earliest antiseptic and disinfectant?	A. Phenol B. Ether C. Ethanol D. Methanol
2092	The working condition/s for SHE	A. 1atm pressure B. 1M H-solution C. 298K temperature D. All of these
2093	Which three element are needed for the health growth of plants:	A. S,S,P B. N,Ca,P C. N,P,K D. N,K,C

2094	Materials suspended in water or present as colloidal form in raw water are removed by:	A. aeration B. coagulation C. chlorination D. treatment
2095	Which if the following will have the same number of molecules at S.T.P?	A. 280cm³ of CO₂ and 280cm³ of N₂O B. 11.2dm³ of O₂and 32g of O₂ C. 44g of CO₂and 11.2dm³ of CO D. 28g of N₂and 5.6dm³ of oxygen
2096	Which of the following is a pseudo solid?	A. CaF₂ B. glass C. NaCl D. all these
2097	Which is not true in case of an ideal gas?	A. It cannot be converted into a liquid B. There is no interaction between the molecules C. All molecules of the gas move with same speed D. At a given temperature P'V is proportional to the amount of the gas
2098	Glucose and fructose are isomers	A. Chain isomers B. Position isomers C. Functional group isomers D. Metamers
2099	Sponification number of a fat which requires 178,000 mg of KOH for saponification is (mol wt = 1240)	A. 120 B. 143 C. 208 D. 210
2100	The origin ofacidic nature of alkyne is?	A. small size of C B. Small size of H C. polarity of triple bond D. sp hybridization
2101	The respiration process taking place in animals depends upon a difference in:	A. vapour pressure B. osmotic pressure C. partial pressure D. atmospheric pressure
2102	At present the number of cement factories is Pakistan are	A. 20 B. 22 C. 25 D. 30
2103	The elements like N,P,K added into the large amount in soil are called:	A. Basic elements B. Additives C. Macronutrients D. Micronutrients
2104	The B.P. of compound is mostly raised by	A. dipole-induced dipole interactions B. london dispersion forces C. intramolecular H-bonding D. intermolecular H-bonding
2105	Which one of the following organic acids is made form methanol?	A. acetic acid B. bothanic acid C. formic acid D. propanoic acid
2106	Amino acids ionize in water to form	A. Zwitterion B. Internal saH C. Dipolar ion D. All of these
2107	Choose from the followings the correct statement about Born Haber cycle	A. Born Haber cycle is different from Hess's law B. The energy changes in a cyclic process is not zero C. The lattice energy of crystalline substances can be calculated easily D. None
2108	The word "Lipids" derived from the language	A. Greek B. Latin C. German D. English
2109	Amino acids which contain two amino groups are called	A. Acidic amino acids B. Basic amino acids C. Neutral amino acids D. Amphoteric amino acids
2110	The temperature of in the incineration of industrial and hazardous waste process has range	A. 900 - 1000°C B. 250 - 500°C C. 950 - 1300°C D. 500 - 900°C
2111	Which of the following is a base according to lowery Bronsted concept?	A. I-1 B. HCl C. H3O+ D. NH4+1
2112	In which of the following processes are small organic molecules made into macromolecules	A. The cracking of petroleum fractions B. The fractional distillation of crude oil C. The polymerization of ethene D. The hydrolysis of protein

2113	Theoretically, the temperature at which volume of gas become equal to zero is called	A. Boiling point of water B. Zero absolute C. Zero Kelvin D. both B and C
2114	Factors affecting quality of water:	A. D.O B. BOD C. COD D. a,b,c
2115	Leachate contains:	A. fatty acids B. Bacteria C. Heavy metals D. All of these
2116	Which of the following are more temperature senesitive	A. Liquid crystals B. Solid crystals C. Ionic stals D. None of above
2117	When vapour pressure is equal to atmospheric pressure than it is called	A. Evaporation B. M.P C. B.P D. Freezing point
2118	A temperature at which two cyrstalline forms of a substances coexist in equilibrium is called	A. standard temperature B. critical temperature C. transition temperature D. absolute temperature
2119	The fiber which is made from acrylonitrile as monomers:	A. PVC B. rayon fiber C. acrylic fiber D. Polyester fiber
2120	Classification of polymerization into two types was suggested by	A. W.H Carothers B. Staudinger C. OSwald D. Aspdin
2121	The order of reactivitv of alksl halides towards nucleophile is	A. RI>RBr RF>RCl B. RF>RCl>RBr>RI C. RI>RBr> RCl>RE D. RF>RBr>RCl>RI
2122	If temperature is 73K and volume is 146 cm3 then calculate the value of K=V/T	A. 5 B. 4 C. 3 D. 2
2123	To produce absolute alcohol (100%) from rectified spirit (95.6%) alcohol), the remaining 4.4 % water must be removed by a drying agent such as.	A. Calcium oxide B. Calcium chloride C. Calcium carbonate D. Carbon mono oxide
2124	When a compressed gas is allowed to pass through a nozzle of a jet into a region of low pressure, it produces	A. cooling B. vaporization C. fusion D. expansion
2125	The kinetic theory of gases predicts that total kinetic energy of a gaseous assembly depends on	A. Pressure of the gas B. Temperature of the gas C. Volume of the gas D. Pressure,temperature,and volume of the gas.
2126	SO3 , formed in contact process is absorbed in _____% H2SO4.	A. 90 B. 80 C. 98 D. 89
2127	An ester is prepared by:	A. two alcohols B. carboxylic acid and alcohol C. ketone and alcohol D. aldehyde and alcohol
2128	Choose the correct equation among the following given by clauslus to understand to behaviour of molecules:	A. PV =nRT B. C_{r.m.s}= √3RT/M C. d = PM/RT D. PV = 1/3mnc⁻²
2129	Proteins are classifies into _____ classes based on physic-chemical properties	A. 2 B. 3 C. 5 D. 9
2130	Which of the following is most found in protein molecule	A. Carbon B. Hydrogen C. Oxygen D. Nitrogen
2131	Which of the following may be called as London dispersion forces?	A. instantaneous dipole-induced dipole forces B. dipole-dipole forces C. ion-dipole forces D. dipole-dipole forces

		D. dipole-dipole forces
2132	Transportation causes to produce CO_2 in atmosphere:	A. 72% B. 73% C. 74% D. 75%
2133	Which sequence of step is correct for the manufacture of cement:	A. Crushing, mixing, heating, grinding B. Crushing, heating, mixing, grinding C. Crushing, grinding, mixing, heating D. Mixing, heating, grinding, crushing
2134	Which one is an isomorphic pair?	A. NaNO3, CaCO3, B. NaF, MgO C. K2SO4 ,K2Cr2O7 D. Zn, Cd
2135	99.5% mass of lithosphere is made of	A. 03 elements B. 8 elements C. 11 elements D. 15 elements
2136	In aldehydes and ketones carbon of carbonyl group is;	A. sp^3 hyhridized B. sp^2 hybridized C. sp hybridized D. un hybridized
2137	The %age of nitrogen in urea is:	A. 46 B. 60 C. 70 D. 80
2138	2,5-dimethyl-1-hexene has	A. Two sp2 hybridized carbons B. Six sp2 hybrid carbons C. Two double bonds D. Four pi electrons
2139	A chemical inert and heat resistant plastic, that is made from tetrafluoroethylene, is called	A. teflon B. PVC C. Bakelite D. polyamide
2140	The normal amount of overhead ozone is	A. 350 DU B. 450 DU C. 400 DU D. 300 DU
2141	The sole produets of combustion analysis are	A. CO2 and NH3 B. H2O and Mg(ClO4)2 C. CO2 and KOH D. CO2 and H2O
2142	Alcohol in which carbon atom bonded to OH group is further attached with three alkyl group is	A. Aromatic alcohol B. Tertiary alcohol C. Primary alcohol D. Secondary alcohol
2143	a hole used to dump the municipal wastes is called:	A. landfill B. effluents C. leachate D. inclneration
2144	Ethene is produced from ethyl chloride by reacting with alcoholic KOH. The process is called	A. Hydrogenation B. Dehydrogenation C. Dehydrohalogenation D. Oxidation
2145	Stronger is the oxidizing agent, stronger is the	A. emf of cell B. Oxidation potential C. Reduction potential D. Reduction potential
2146	[Ti (H20)6]3+ ion isin colour.	A. Yellow B. Blue C. Violet D. Red
2147	Which is the least reactive of all the alkali metals	A. Li B. Na C. K D. Cs
2148	Fe+2 is the co-factor for	A. Chrome oxidase B. Glucose-6-phosphatase C. Carbonic anhydrase D. Hydrolase
2149	One metabolite that fits on the enzyme surface and is converted to products is called.	A. Co-factor B. Prosthetic group C. Isoenzyme D. Substrate
2150	Reaction of ethyl bromide with ammonia	A. Completes in a single step B. Completes in two steps C. Continues till N is left with no lone pair D. is reversible

2151	Which of the following is a macronutrient?	A. Boron B. Iron C. Copper D. Carbon
2152	All of the following are polar amino acids except	A. Serine B. Glutamate C. Arginine D. Alanine
2153	What is the weight of 10 litres of CO_2at 27°C and 2 atm?	A. 89.3 g B. 36.1 g C. 125 g D. 127 g
2154	Which is the optimum temperature for the activity of enzyme	A. 20 - 35°C B. 10 - 15°C C. 55 - 70°C D. 35 - 55°C
2155	Which one increases by common ion effect except?	A. Crystallization B. Solubility C. Association of ions D. All of these
2156	The structure of a polymer depends upon how the monomer-repeating unit joins to makes a polymer, What is not the type of structure of a polymer?	A. synthetic polymer B. linear polymer C. branched D. cross linked or inter connected polymer
2157	As gases can adopt the shape of the container. Therefore gases have:	A. different shapes B. fixed shapes C. no fixed shapes D. definite shapes
2158	Only those metals can replace Hydrogen from dilute acids, which have	A. High negative reduction potential B. Low negative reduction potential C. High positive reduction potential D. low positive reduction potential
2159	The smog having high contents of $SO_2$is	A. Neutral smog B. Reducing smog C. Oxidizing smog D. Artificial smog
2160	Which option shows all the molecule with bond angle 109.5^o.	A. CH_{4,}CCl₄,NH₃ B. CH₄,NH₄ PH₃ C. SiCl₄ H₂O BeCl₂ D. SiCl₄ Nh₄CH₄
2161	The layer of earth around the earth is called:	A. Atmosphere B. Hydrosphere C. Lithosphere D. Biosphere
2162	A polymeric substance that is formed in the liquid state and then hardened to a rigid solid is called:	A. fiber B. plastic C. varnish D. polyamide resin
2163	Cane sugar on hydrolysis gives	A. Glucose and glucose B. Glucose and lactose C. Fructose and fructose D. Glucose and fructose
2164	The suspended particles in the raw water can be removed by the	A. Coagulation B. Aeration C. Hydration D. Dehydration
2165	The % of CO_2in the atmosphere is	A. 3.0% B. 0.03% C. 0.3% D. 0.5%
2166	Which of the following may be called London dispersion forces	A. dipole-dipole forces B. ion-dipole forces C. dipole-induced dipole forces D. instantaneous dipole-induced dipole forces
2167	The proteins which give an amino acid and non-protein group on hydrolysis are known as	A. Derived protein B. Albumins C. Conjugated simple protein D. Conjugated protein
2168	Surface and ground water sources are contaminated by various human activities. Which of the following is not a human activity that causes contamination in fresh water	A. Rain B. Live stock waste C. Oil leaks and spills D. Disposal of industrial effluents
	solubility of carboxylic acids decreases in water with	A. Bigger molecules are more polar B. bigger molecules have bigger non-polar groups

2169	increase in molar mass because	C. bigger molecules make more hydrogen bonds D. bigger molecules can form lesser hydrogen bonds/molecule
2170	Ozone layer is present in	A. Troposphere B. Stratosphere C. Mesosphere D. Ionosphere
2171	Glycerine is a polar compound. It boils at 290°C under one atmospheric pressure. It should be distilled under reduced pressure due to reason that	A. there are strong intermolecular forces between molecules of glycerine B. it decomposes at 290°C C. low pressure makes the liquid to boil at high temperature D. the reduced pressure decreases the boiing point of liquids
2172	Formic acid is obtained from red out by:	A. Distillation B. Crystallization C. Filtration D. Sublimation
2173	Which is unnecessary for purification of water for drinking purpose?	A. Coagulation B. Treatment with iodine C. Aeration D. Chlorination
2174	What is the numerical value of 'R; (the gas constant) in S.I units?	A. 83143 J/mole/K B. Avogadro's law C. 83.143 J/mole/K D. 8.3143 J/mole/K
2175	Which of the following has isomorphous structure	A. NaF B. S C. Sn D. N
2176	To prepare ethane by Wurtz synthesis the suitable alkyl halide is	A. Ethyl iodide B. any alkyl iodide C. Ethyl chloride D. Methyl bromide
2177	Which is the optimum temperature for the activity of enzyme?	A. 20 - 35°C B. 10 -15°C C. 55 - 70°C D. 35 - 55°C
2178	C=O and C=C bonds are differentiated by	A. Hybridization of C-atom B. Bond angles C. Ammonical AgNO3 D. <span style="font-size:11.0pt;line-height:115%; font-family:"Calibri","sans-serif";mso-fareast-font-family:SimSun;mso-bidi-font-family: "Times New Roman";mso-ansi-language:EN-US;mso-fareast-language:ZH-CN; mso-bidi-language:AR-SA">Conc. HNO3
2179	Dehydrogenase is an erample of	A. Transferase B. Hydrolase C. Lyase D. Oxido-reductase
2180	The substance which adversely affects the human health is:	A. Ecosystem B. Ecosphere C. Atmosphere D. Pollutant
2181	Glucose forms a polymer which is stored in liver the name of this polymer is:	A. glycogen B. starch C. cellulose D. arnylose
2182	The catalyst used for the manufacture of H2SO4 by contact process is with bromine?	A. SO3 B. Pt/pd C. V2O5 D. Fe2O3
2183	Cotton has cellulose in it:	A. 96% B. 97% C. 98% D. 99%
2184	Example of essential aromatic amino acids	A. Theronine B. Alanine C. Phenyl alanine D. Glycine
2185	Sudden expansion of gas molecule cause cooling because	A. Expansion release some amount of energy B. During expansion new force of attraction are developed and energy is released C. During expansion force of attraction between closest molecules break and energy is used D. Kinetic energy of gas molecules increases
2186	Ligands having two lone pair of electrons for donation to the central transition metal ion are known as.	A. Bidentate ligands B. Hexadentate ligands C. Polydentate ligands D. Monodentate ligands
2187	A single free chlorine redical can destroy ozone	A. 100000 B. 100

	molecules upto:	C. 1000 D. 10000
2188	Choose the crop for which ammonium nitrate is not used:	A. paddy rise B. cotton C. wheat D. sugar cane
2189	The potential difference set up at 25 C and 1 atm when clectrode is dipped m Tis one molar ionic sohution is called	A. Single electrode potential B. electrode potential C. Standard electrode potential D. Standard hydrogen electrode
2190	In the equation PV = nRT which one cannot be numerically equal to R	A. 8.31 x 10⁷ erg⁷ K⁻¹ mol⁻¹ B. 8.31 x 10⁷ dynes Cm K⁻¹ mol⁻¹ C. 8.31 JK⁻¹ mol⁻¹ D. 8.31 L atm K⁻¹ mol⁻¹
2191	The molecules of air don't settle down. This is due to:	A. non-polar nature of gases B. different molar mass C. elastic collisions of gas molecules D. pressure of dust particles in air
2192	Optimum PH rang for amylases is	A. 6 - 6.4 B. 6.4 - 6.6 C. 6.4 - 6.9 D. 6.6 - 6.9
2193	The volume of 2.8 g of carbon monoxide at 27°C and 0.821 atm pressure is ($R = 0.0821$ lit.atm.Mol^{-1} K^{-1})	A. 30 L B. 3 L C. 0.3 L D. 1.5 L
2194	The total pressure exerted by a mixture of gases is the sum of the partial pressure of all the gases present is a statement of	A. Charle's Law B. Boyle's Law C. Dalton's Law D. Graham's Law
2195	Cholesterol is a precursor of steroid hormones. Choose the class of steroid	A. A carbohydrate B. A hydrocarbon C. A natural lipid D. A protein a hydrocarbon
2196	The root mean square velocity of a gas is doubled when the temperature is	A. reduced to half. B. reduced to one-fourth C. increased four times D. inereased two times
2197	Micro nutrients are required in quality ranging from:	A. 4g - 40g B. 6g - 200g C. 6dg - 200kg D. 4kg - 40kg
2198	Which one of the following compounds will give idoform test on treatment with aqueous iodine?	A. 3-pentanone B. Propanone C. Propanal D. Butanal
2199	Absolute temperature of a gas is proportional to:	A. Rotational Kinetic energy B. Translational Kinetic energy C. Vibrational Kinetic energy D. Potential energy
2200	When calcium formate and calcium acetate are dry heated they form	A. HCOOH B. C2H5OH C. CH3CHO D. HCHO
2201	Which statement is incorrect	A. pH and [OH-] are inversely related to cach other B. pOH and [OH-] are inversely related to each other C. pH and [OH-] are directly related to each other D. pOH means potential of hydroxyl ion concentration
2202	The Cl- ion present at the corner of the unit cell is NaCl crystal, contributes	A. 1/8 th B. 1/4 th C. 1/2 th D. 1
2203	Formic acid is given name from Latin word a "formic" which means:	A. Red out B. Vinegar C. Butter D. Milk
2204	The elements for which the value of ionization energy is low can	A. Gain electrons readily B. Lose electron less readily C. Gain electrons with difficulty D. Lose electron readily
2205	Photo chemical smog contains _____ as main reactants	A. Nitrons oxide and unburnt hydrocarbons B. Nilric oxide and unburnt hydrocarbons C. No and burnt hydrocarbons D. N₂O and burnt hydrocarbons
		A. Covalent solids

2206	Among solids,the highet melting point is exhibited by	A. Covalent solids B. Ionic solids C. Pseudo solids D. Molecular solids
2207	Indicate the number of open chain isomers of C6H14	A. 4 B. 5 C. 6 D. 7
2208	Abumins and globulins are defined as	A. Derived protein B. Conjugated protein C. Fibrous protein D. Simple Protein
2209	In the body carbohydrates are broken down into:	A. glucose B. fatty acids C. amino acids D. nucleic acid
2210	What is the mass of 10^{20}molecules of CO_2at STP?	A. 7.3 x 10⁻³g B. 7.9 x 10⁻³g C. 3.2 x 10⁻³g D. 4.9 x 10⁻³g
2211	Irreversible precipitation of protein caused by heating is called	A. Polymerization B. Denaturing C. Inversion D. Co-angular
2212	Dipole-dipole interaction are present in the	A. atoms of the He gas B. molecules of CCl4 C. molecules of solid iodine D. molecules of :NH3
2213	Denaturation of proteins is often characterised by	A. Loss of biological activity B. Aiways being irreversible C. Being ereater the lower the temperature D. Changes in primary structure
2214	The amount of heat required to vaporize one mole of liquid at its boiling point without change in temperature is called	A. molar heat of vaporization B. molar heat of sublimation C. molar heat of fusion D. none of these
2215	The ratio of most probable velocity to that of average velocity is	A. π/2 B. 2/π C. √π/2
2216	A mixture of 1-chloropropane and 2-chloro-propane when treated with alcoholic KOH, gives	A. Prop-2-ene B. Isopropy lene C. Propene D. A mixture of prop-l-ene
2217	Which of the following decides the reactivity of alkyl halides?	A. C-C bond strength B. C-H bond strength C. C-X bond strength D. Electronegativity difference
2218	Enthalpy of neutralization of strong acids and strong bases have same values because	A. Neutralization leads to the formation of salt and water B. Acids always give rise to H+ and bases always furnish OH- C. Strong acids and bases are ionic substances D. The net change involves the combination of H and OH ions to form water
2219	The fibre which is obtained from naturally occuring protein is called	A. saran B. azlon C. rayon D. nylon
2220	Which one of the following compounds act as catalyst when alcohols react with carboxylic acids.	A. Pt B. Conc. H2SO5 C. Conc HNO3 D. Ni
2221	Plasma was introduced by	A. Crookes B. Soddy C. Faraday D. Van der Waal
2222	Volcanoes produce SO_2:	A. 47% B. 57% C. 67% D. 77%
2223	The element which is not present in all proteins is	A. C B. H C. O D. S
2224	Hydrosphere covers the surface of erath:	A. 70.8% B. 71.8% C. 72.8% D. 73.8%
		A. Monomer

2225	The simplest separating unit of a polymer is called:	B. Dimer C. Trimer D. Macromer
2226	How much heat is absorbed by 100 g of water when its temperature decreases from 25°C to 5°C? (heat capacity is 4.2 J/gK)	A. 84,000J B. 2000/4.2J C. -2000/4.2j D. -8400J
2227	Which of the following alcohol is more soluble in H2O	A. Propanol B. Butanol C. Pentanol D. Hexanol
2228	The curve which is obtain from Boyle's law is called as	A. Isochoric B. Isotherm C. Adiabatic D. All of these
2229	Components of environment is (in km) around the earth:	A. 10 km B. 100 km C. 1000 km D. 1500 km
2230	Which is the following would have most like an ideal gas at room temperature?	A. carbon dioxide B. helium C. hydrogen D. nitrogen
2231	Oxidation of secondary alcohol produces	A. Aldehyde B. Ketone C. Alkyl halide D. Ester
2232	The crystal system which has all cell angles equal, but not 90°and less than 120° , the system is	A. orthorhombic B. monoclinic C. hexagonal D. rhombohedral
2233	choose the best example of diffusion of gases:	A. vapour condensing on moist surface B. spreading of small from a scent bottle C. hot air rising above a candle D. bubbling in soda bottle
2234	The rate of diffusion of a gas is:	A. Inversely proportional to its density. B. Inversely proportional to square root of its molecules mass. C. Directly proportional to molecular mass. D. Directly proportional to its density.
2235	When purely alcoholic solution of sodium/potassiumhydroxide and halogenoalkanes are reacted an alkene is formed, what is the mechanism of reaction?	A. Elimination B. Debromination C. Dehydration D. Reduction
2236	Choose the gas law which gives relationship between volume and pressure:	A. Bolye,s law B. Graham,s law C. Dalton,s law D. Charles,s law
2237	Which class of compound cannot show positional isomerism?	A. Alkanes B. Alkene C. Alkynes D. Alcohol
2238	The reaction between Cu and conc. H2SO4 produces	A. Cu+2 B. SO₂ C. SO₃ D. H₂
2239	Potassium fertilizers are especially useful for:	A. Tobacco B. Potato C. Coffee D. All of these
2240	The derivatives that cannot be prepared directly from the acetie acid	A. Acetamide B. Acetic anhydride C. Ethyl acetate D. Ester
2241	Depletion of ozone is more during the month:	A. Jan-March B. April-Jun C. July-Aug D. Sept-Nov
2242	Which of the following waste material is not recycled for use again	A. Glasses B. Paper C. Plastic toys D. Hides of animals
2243	Which of the following metal does not liberate hydrogen on reaction with acid?	A. Mg B. Pt C. Zn D. Ca

2244	When we dissolve 15.8 g of KMnO4 in 1000g of H20. The solution is	A. , 0.1 M B. 0.1 M C. 0.2 M D. 0.2 M
2245	pH of 10-4 mole dm-3 of HCl	A. 2 B. 4 C. 3 D. 5
2246	A combination of glucose and fructose is called	A. sucrose B. table sugar C. a & b D. Lactose
2247	Which reactant does hnof liberate water on reaction with alcohol	A. NH3 B. K2Cr2O7/15H2O C. HCl D. PCl3
2248	Chose a point which is not included in the components of environment	A. Stratosphere B. Hydrosphere C. Lithosphere D. Biosphere
2249	An amion acid exists in the form of Zwitter-ioin which has:	A. one + ve charge B. one - ve charge C. one +ve and -ve charge D. two +ve charge
2250	If a strip of Cu metal is placed in a solution of FeSO4	A. Cu will be deposited B. Cu and Fe both dissolve C. Fe is precipitated out D. No reaction take place
2251	Boron, aluminium, gallium, indium and thallium belong to group lll-A of the periodic table show a decrease with increasing relative atomic mass:	A. Ionic character of the compounds B. The first ionization energy C. The basic character of the oxides D. The stability of +2 oxidation
2252	The rate of diffusion of two gases are inversely proportional to the square roots of their densities or molecular weights, is a statement of	A. Charle's Law B. Boyle's Law C. Graham's Law D. Dalton's Law
2253	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
2254	Enzymes are catalysts which contain other than carbon and hydrogen one other element	A. oxygen B. sulphur C. phosphorus D. iodine
2255	Which of the following represents peptide linkage	A. -C=N- B. -CO-NH- C. -CH₂-NH- D. -CH-NH-
2256	Formula of sodium beryllite is	A. Na2B4O7 B. Na2BeO2 C. BeONa D. Na2B4O7 .10 H2O
2257	Coenzymes are the species which increase the activity of enzymes. They are chemically:	A. metal ions B. none - metals C. organic acids D. organic bases
2258	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.
2259	Grey tin crystals belong to	A. tetragonal B. cubic C. orthorhombic D. rhomtrohedral
2260	The substances added in paints for improving the mechanical properties is called:	A. pigmein B. filter C. stabilizer D. binder
2261	In big/metropolitan cities, atmosphere is mostly polluted due to:	A. radioactive fall out B. household waste C. pesticide residue D. automobile exhausts
2262	Charles's law is only obeyed at which temperature scale	A. Celsius B. Kelvin C. Fahrenheit

	temperature scale	D. both A&B
2263	The pressure of 5dm^{3}gas increase from 250 torr to 500 torr then new volume of gas	A. 500 cm³ B. 375 cm³ C. 2500 cm³ D. None of these
2264	The correct order of increasing attractive strength for weak intermolecular forces is....	A. dipole-dipole interaction hydrogen bonding, van der Waals forces B. van der waals forces dipole- dipole interaction, hydrogen bonding C. hydrogen bonding, dipole-interaction, van der Waals forces D. hydrogen bonding, van der Waals forces, dipole-dipole interaction
2265	DDT is a:	A. Fungicide B. Insecticide C. Herbicide D. All
2266	Which of these the most widely used nitrogen fertilizer in Pakistan?	A. urea B. ammonium nitrate C. ammonium sulphate D. ammonium chloride
2267	Soaps are basically salts of	A. Glycerol B. Triglyceride C. Fatty acid D. Fat
2268	The protein component of enzyme Is called	A. apoenzyme B. proenzyme C. holoenyme D. co-enzyme
2269	Cotton is _____ % cellulose	A. 90 B. 100 C. 99 D. 30
2270	The ionization energy of hydrogen atom is	A. Zero B. 131.3kJmole C. 13.13kJ/mole D. 1313kJ/mole
2271	Nitro alkanes exhibit the:	A. Chain isomerism B. Positional isomerism C. Functional group D. Metamerism
2272	Which of following is primary pollutants	A. N₂O B. PAN C. H₂SO₄ D. None of these
2273	The common oxidation number of halogens is	A. -1 B. +1 C. -2 D. 0
2274	Temporary hardness can be removed by adding	A. Lime B. Carbon C. Oxygen D. Slaked lime
2275	What forces operate between ethyl group of ethyl alcohol and oxygen of water	A. H-bonding B. attractive forces C. repulsive forces D. dipole forces
2276	Matter having no definite shape and volume is called:	A. gas B. liquid C. solid D. plasma
2277	One kilo calorie is equal to	A. 4.184J B. 1000J C. 4184J D. 1kJ
2278	The value of R is SI units is	A. 0.0821 dm³. atm. J⁻¹mole⁻¹ B. 62.4 dm³torr K⁻¹mole⁻¹ C. 8.31 dm³atm. K⁻¹mole⁻¹ D. 8.31 JK⁻¹mole⁻¹
2279	Which of the following protien is found in bone	A. Keratin B. Ossein C. Mucin D. Actin
2280	Which compound gives carbon when heated with conc. H2SO4.	A. Starch B. Ethyl alcohol C. Oxalic acid D. Formic acid
2281	Rise in vapour pressure of water from 30 to 60°C is only 32 torr to 149.4 torr (117.4 torr) but from 60 to 90°C is 149.4 to 527.8 torr	A. change in geometry of H₂O molecules at higher temperature B. decrease in volume takes place at higher temperature C. vapour pressure of liquids increases rapidly closer to their boiling points D. boiling starts

	90 C is 149.4 to 527.8 torr (378.4 torr).it is due to	D. boiling starts
2282	Total pressure of mixture of two gases is:	A. The ratio of their partial pressure B. The product of their partial pressure C. The difference partial pressure D. The sum of their partial pressure
2283	Which of the following substance is used as filler or additive in paper making:	A. Glucose B. Starch C. Fructose D. Cellulose
2284	In most of the cases the molecular crystals are	A. very soft B. soft C. extremely hard D. sufficiently hard
2285	All of the following have cleavage planes except:	A. molecular crystals B. metallic crystals C. covanent crystals D. ionic crystals
2286	What is effect of polluted air on enviroment:	A. Ozone B. Global warming C. Acid rain D. Smog
2287	Propanoic acid is functional group isomer of	A. Methyl acetate B. Ethyl acetate C. Propanal D. Proparone
2288	Which compound is obtained hy the elimination reaction on bromoethane?	A. Butene B. Ethene C. Propene D. Propane
2289	Which group activates the benzene ring	A. -COOH B. -COR C. -CHO D. -OH
2290	The optimum pH value for the enzyme "Pepsin" is:	A. 2 B. 8 C. 10 D. 1.4
2291	Formalin contains-------% alcohol.	A. 37 B. 80 C. 8 D. 52
2292	$SO_2$and NO_2cause pollution due to increase in	A. Buffer action B. Basicity C. Acidity D. Neutrality
2293	Which is not present as heteroatom in heteroeyclie compounds?	A. Sulphur B. Nitrogen C. Oxygen D. Chlorine
2294	Alkaline phosphatese is associated with _____ disease	A. Heart disease B. Rickets C. Diabtese D. None
2295	A reaction A- B is independent of concentration of reactant A. The order of reaction will be	A. First order B. Second order C. Third order D. Zero order
2296	In laboratory experiment an unknown compound was added in test tube containing iodine, the colour became intense blue, what could be the unknown compound.	A. Cellulose B. Raffinose C. Ribose D. Starch
2297	A fibre which is made from acrylonitrile as monomer	A. PVC B. rayon fibre C. acrylic fibre D. polyester fibre
2298	Which of the follwing dnes not give brick red precispitate wits Fehling's solution	A. Acetaldehyde B. Formalin C. prorionaldehyde D. Acetone
2299	The reaction of aldehydes and ketones with ammonia derivatives G-NH3 to form compounds containing >C=N-C and water is known as _____ reaction	A. Nucleophilic addition B. Electrophilic addition C. Electrophilic substitution D. Nucleophilic substitution

	as_____ reaction.	
2300	The enzymes that bring about exchange of functional groups like phosphate are called	A. Ligases B. Lyases C. Isomerases D. Transferases
2301	One of the following is potically non active amino acid	A. Valine B. Tyrosine C. Glycine D. Theronine
2302	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
2303	The acidity of phenol is due to its	A. Nature of Benzene B. Double bond in benzene ring C. Natute of phenoxide ion D. Hydroxyl group
2304	Which of the following has the lowet solubility in water	A. HCOOH B. CH3COOH C. CH3-CH2-COOH D. C3H7-COOH
2305	During space flights, astronauts ohlained water from	A. Nickel cadmium cells B. Lead accumulator C. Fuel Cell D. Alkaline battery
2306	The number paper industries in Pakistan are:	A. 30 B. 25 C. 35 D. 20
2307	Amino acid which synthesized many hormones is	A. Valine B. Phenylalanine C. Alanine D. Histidine
2308	Albumins and globulins are defined as	A. Derived protein B. Conjugated protein C. Fibrous protein D. Globular protein
2309	Some substance are good conductors of electricity in both the solid and liquid states. These substance are generally:	A. molecular solids B. ionic substances C. metallic substances D. covalent network solids
2310	During the nitration of benzene the nitrating agent is	A. NO3 B. NO2+ C. NO2- D. HNO3
2311	As gases can adopt the shape of the container so they have	A. no fixed shapes B. fixed shapes C. different shapes D. definite shapes
2312	Neutralization of acid-base is	A. Spontaneous B. Exothermic C. Non spontaneous D. Both "a" and "c
2313	Region of earth capable of supporting life is called:	A. Atmosphere B. Hydrosphere C. Lithosphere D. All of these
2314	Amino acids react together to form the primary structure of proteins which is accompanied by	A. addition of water B. addition of ammonia C. removal of ammonia D. removal of water
2315	Zine does not show variable oxidation state, because	A. Its d-subshell is incomplete B. Its d-subshell is complete C. It is relatively soft metal D. It has two electrons in outermost shell
2316	NaCl has face centered cubic structure. The Na ion at the face of the unit cell is shared by	A. 2-unit cells B. 4-units cells C. only one unit cell D. 8-unit cells
2317	Water is essential for life on	A. Moon B. Space C. Earth D. Sun
2318	Which of the following are responsible for the colour developed in transition elements compounds?	A. s-orbitals B. p-orbitals C. d-orbitals D. f-orbitals

2319	In which of the following techniques rate of reaction is directly related with number ofions	A. Spectrometry B. Dilatometric method C. Conductometric method D. Refractometric method
2320	The reaction between fat and NaOH is called?	A. Esterification B. Hydrogenolysis C. Fermentation D. Sponification
2321	Stronger the intermolecular forces	A. Lower the Vapour pressure B. Greater the Vapour pressure C. May be smaller or greater D. None
2322	The temperature in the incineration of industrial and hazardous waste process has a range of:	A. 950-1300C B. 250-500C C. 500-900C D. 900-1000C
2323	By increasing the concentration of reactants, the rate of reaction	A. Decreases B. Increases C. Remains constant D. Not predicted
2324	Elevated concentration of _____ is harmful for fish as it clog the gills causing suffocation	A. Al B. Hg C. As D. Cr(vi)
2325	Which of the following is an addition polymer	A. Nylon-6, 6 B. Polystyrene C. Terylene D. Epoxy resin
2326	Ozone acts as:	A. Pollutant B. saver C. oxidatant D. All of these
2327	Chemicals used to kill fungi are:	A. Herbicides B. Insecticides C. Pesticides D. fungicides
2328	NaCl is completely ionized in water due to the presence of:	A. dipole-dipole forces B. ion- dipole forces C. H-bonding D. London dispersimforces
2329	The maximum number of electron in electronic configuration can be calculated by using formula.	A. 2l+1 B. 2n² +2 C. 2n² D. 2n²+1
2330	Which of these polymers is an addition polymer?	A. nylon 6,6 B. polystyrene C. terylene D. epoxy resin
2331	In proteins, the alpha-helix and Beta-pleated sheet are examples of	A. ^{Primary Structure} B. Secondary Structure C. Tertiary Structure D. Quaternary Structure
2332	The vapour pressure of a liquid depends upon	A. amount of the liquid B. surface area C. temperature D. size of container
2333	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
2334	How should the conditions be changed to prevent the volume of a given gas from expanding when its mass in increased	A. temperature is lowered and pressure is increased B. temperature is increased and pressured is lowered C. temperature and pressure both are lowered D. temperature and pressure both are increased
2335	About 80% of ammonia is used for the production of	A. Explosives B. Fertilizers C. Nylon D. Polymers
2336	Reaction mechanism of alkanes with halogens is known as	A. Propagation B. Additon C. Elimination D. Free radical substitution
2337	A fat with 18 carbon & no double bond will be	A. Solid B. Liquids C. Gel like D. None

2338	A molecule of polysacharide on hydrolysis produces _____of molecules of monosacharide,	A. 2 - 10 B. 3 C. >10 D. 2
2339	Which one of the followings has polar covalent bonds hut is overall nom-polar molecule:	A. HF B. CO₂ C. CH₄ D. N₂
2340	Coagulation in the purification of water is carried out by	A. Alum B. NiSO₄ C. BaSO₄ D. CuSO₄
2341	Which of the following is not an electrophilic substitutional reaction of benzene?	A. Free radical chlorination of benzene B. Friedel Craft alkylation C. Sulphonation D. Nitration
2342	Which of these is a synthetic polymer	A. Polypeptide B. Cellulose C. Polyester D. Starch
2343	Which of the following category of enzyme catalyze addition of Ammonia	A. Ligases B. Lyases C. Isomerases D. Pepsinogen
2344	Surface tension is measured by	A. viscometer B. barometer C. stalagmometer D. manometer
2345	If the pressure of gas reduced to one half and temperature is increased twice then density of gas will be	A. 4 times B. 2 times C. 1/2 times D. 1/4 times
2346	Which noble gas is used in mixture used for breathing by divers?	A. Ge B. Ar C. Kr D. He
2347	Biochemical oxygen demand (BOD) is the capacity of organic matter in natural water to consume oxygen with in a period of	A. 2 day B. 6 day C. 5 day D. 7 day
2348	Which gas diffuses more rapidly?	A. O₂ B. SO₃ C. NH₃ D. H₂
2349	The hetero atom in py ridine is	A. Oxygen B. Nitrogen C. Chlorine D. Sulphur
2350	Proteins are the polymers of amino acids having	A. NH₂ group only B. OH⁻group only C. NH₂andOH⁻ group D. NH₂and COOH group
2351	Which of the following is correct statement about cellulose	A. It is sweet is taste B. It contain 20% amylose C. It is used in laundering D. It containsβ1-4-linkage
2352	Which one is best buffer those have	A. pH = pKa B. pH > pKa C. pOH < pKb D. pKa =0
2353	Which one of the following is the main function of DNA.	A. Making of problem B. Making of among C. Breaking of ribose sugar D. Carries genetic material
2354	In ethyl alcohol, the bond that undergoes heterolytic cleavage most readily is	A. C-C B. C-O C. C-H D. O-H
2355	Which factor is helping to reduce the environmental pollution	A. Urbanization B. Industrialization C. Increase of plantation D. Rapid growth of population
2356	Monomer for acrylic resins is	A. Acrylic acid B. Methylmethacrylate C. Acryloritrile

		D. All
2357	The structure normally associated with ionic bonding is:	A. a giant lattice B. a simple molecule C. a giant molecule D. a regular arrangement of ions surrounded by a sea , or cloud, of electrons
2358	The process in which solid is directly coverted into gaseous state is called	A. evaporation B. boiling C. sublimation D. transformation
2359	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
2360	Correct order of intermolecular forces	A. Gas < liquid < solid B. Liquid < gas < solid C. Gas < liquid < solid D. Gas = liquid = solid
2361	Lipids are naturally occurring compounds produced in cell and are water insoluble but soluble in organic solvents. One of the followings is not a lipid. Select among the following	A. Nucleic acid B. A triglyceride C. Sterol D. Vitamin D
2362	Amount of ozone in atmosphere is expressed in units:	A. Kilograms B. cm C. molarity D. DU
2363	Fungicides are the pesticides which	A. Kill plants B. Kill herbs C. Kill insects D. Control the growth of fungus
2364	As the number of carbon atoms increases the number of isomers also increase. The 5 C compound pentane has as many as	A. 3 isomers B. 5 isomers C. 6 isomers D. 10 isomers
2365	How should the conditions be changed to prevent the volume of a given gas from expanding when its mass increased?	A. temperature and pressure both ara increased B. temperature and pressure both are lowered C. temperature is lowered and pressure is increased D. temperature is increased and pressure is descreased
2366	what is the exact value of angle in BF3	A. 90 B. 104.51 C. 119.5 D. 120°
2367	A single chlorine free radical can destory how many ozone molecules	A. 10 B. 100 C. 1000 D. 10000
2368	The pH range of the acid rain is	A. 7 - 6.5 B. 6.5 - 6 C. 6 - 5.6 D. Less than 5
2369	How many balloons of 0.25 dm^3capacity at I atmospheric pressure can be filled from a hydrogen gas cylinder of 5 dm^3capacity at 10 atmospheric pressure	A. 50 B. 90 C. 180 D. 200
2370	Which one of the following element is not present in all proteins?	A. carbon B. hydrogen C. nitrogen D. sulphur
2371	The red brown ppt. of Fehling solution and benedict solution tests are of	A. Ag B. Cu2O C. CuO D. AgBr
2372	A polymer of PVC having D.P 500 has molar mass:	A. 6300 B. 63000 C. 3150 D. 31500
2373	One of the following is not a biopolymer,Point out that one:	A. lipid B. starch C. diamond D. protein
		A. Equal number of cation and anion vacancies

2374	Ionic solids with defects,contain	A. Equal number of cation and anion vacancies B. Interstitial anions and anion vacanies C. Cation vacancies only D. Cation vacancies and interstitial cations
2375	Which of the following acts as a nucleophile in the reaction of alkyl halide with alcoholic aqueous ammonia?	A. NH3 B. H+ C. Br- D. NO2-
2376	Which is an intermediate in SN1 reaction	A. Ethoxide ion B. Carbocation C. alkyl halide D. alkene
2377	Critical temperature for a gas depends upon	A. Shape of molecule B. Size of molecules C. Inter molecular forces D. All of these
2378	Simple sugars are:	A. Monosaccharides B. Disaccharides C. Oligo saccharides D. Trisaccharides
2379	In which of the following types of reactions are the carbonyl compounds and alkene are similar in behaviour	A. Nucleophilic addition B. Electrophilic addition C. Nucleophilic suhstitution D. Catalytic hydrogenation
2380	Which one of the following groups is indicated when HCl is formed by reaction of ethanol with phosphorous pentachloride?	A. Amino group B. Halide group C. Hydroxyl group D. Hydride group
2381	Raffinose is a trisacharirde composed of monosaccharide is	A. Glucose B. Glactose C. Fructose D. All
2382	When liquid water changes to ice, the volume expands. The expansion in volume is	A. 5% B. 7% C. 9% D. 12%
2383	The normal amount of overhead ozone is	A. 350 DU B. 450 DU C. 400 DU D. 300 DU
2384	Which of the following does not give yellow precipitate with I2+ NaOH	A. Acetone B. Benzaldehyde C. Acetildehyde D. Acetophenone
2385	Polarity of a molecule is expressed in terms of	A. Bond strength B. Dipole moment C. Bond length D. Shape
2386	An excess af silver nitrate is added to the aqueous barium chloride and the precipitate is removed by filtration. What are the main ions in the filtrate?	A. Ag+ and NO3-, only B. NO3- and Ba+2 only C. Ag+ and NO-3, and Ba+2 only D. Cl- and NO-3, and Ba+2 only
2387	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
2388	Which of these polymers is and addition polymer?	A. Nylon-6, 6 B. Polystyrene C. Terylene D. Epoxy resin
2389	Equal volumes of all gases at STP contain equal no of molecules is called	A. Dalton's law of partial pressure B. Graham'a law of diffusion C. Avogadro's law D. None
2390	The attractive forces which are created due to repulsion of electronic cloud of the molecules are	A. dipole-dipole forces B. ion dipole forces C. instantaneous dipole-induced dipole forces D. dipole-induced dipole forces
2391	Which of the following is pure substance	A. Distilled water B. , Sea water C. , NaCl (aq) D. Brass
2392	The amount of oxygen in	A. 35.50% B. 40.60%

2392	the lithosphere is about	C. 46.60% D. 50.50%
2393	Which pair gives same dehydrohalogenation product	A. l-Chlorobutane, 2-Chlorobutane B. l-Chloropropane, 2-Chloropropane C. l-Bromopentane. 3-Bromopentane D. iso-butvl chloride. 2°- butyl chloride
2394	How many zones through which the charge passes in a rotary kiln?	A. 4 B. 3 C. 2 D. 5
2395	The deviation of a gas from ideal behaviour is maximum at	A. -10°C and 5.0 atm B. 100°C and 2.0 atm C. -10°C and 2.0 atm D. 0°C and 2.0 atm
2396	A single chlorine free radical can destroy how many ozone molecules	A. 100 B. 100000 C. 10000 D. 10
2397	CFC's are known to cause depletion of ozone layer therefore their use has been banned in refrigerators and air conditioners. Which alternate compound may be suitable to replace CFC	A. CCl₄ B. CHCl₃ C. CH₃- CH₂- CH₂- CH₃ D. CHCl₂- CHF₂
2398	Amino acids are building material of:	A. lipids B. protein C. carbohydrates D. fats
2399	Which of the following compounds does not exhibit positional isomerism?	A. Alkynes B. Nitroalkanes C. Carboxylic acid D. Alcohol
2400	The forces which are present between the ions and the water molecules are known as	A. dipole-induced dipole forces B. dipole-dipole forces C. ion-dipole forces D. London dispersion forces
2401	Polymerisation of vinyl acetate is a type of:	A. homopolymer B. copolymer C. ter polymer D. All of these
2402	The molar volume of CO_2 is maximum at:	A. S.T.P. (0[◦]C and 1 atm) B. 127[◦]C and 1 atm C. 0[◦]C and 2 atm D. 273[◦]C 2atm
2403	One of the following is a ionic solid. Which is that?	A. Fe B. KBr C. Diamond D. Cr
2404	Water is considered pollutant when value of Do is	A. 6 PPM B. 8 PPM C. 03 PPM D. 10 PPM
2405	The pi-electrons in the styrene are	A. 13 B. 10 C. 8 D. 6
2406	The one atmospheric pressure of air in term of pound per square inches is	A. 101.325 B. 1.01325 C. 760 D. 14.7
2407	Ester with raspberry flavor	A. Amyl acetate B. Isobutyl formate C. Amyl butyrate D. Octyl acetate
2408	Dipole-induced dipole forces are also called	A. dipole-dipole forces B. ion-dipole forces C. Debye forces D. London-dispersion forces
2409	Which of the statement is applicable for both ideal and real gases molecules?	A. Have no forces of attraction B. Collisions between the molecules is elastic C. Molecules are in random movement D. The actual volume of gas is negligible as compared to the volume of gas
2410	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

2411	The examples of a hexagonal system is	A. sugar B. graphite(a=b not equal to c) {Alpha =beta. not equal to gamma} C. sulphur D. diamond
2412	Polypeptides are formed from amino acids by	A. Oxidation B. Addition C. Condensation D. Reduction
2413	What is teh order of increasing reactivity of alkyl halides?	A. Iodoalkane <bromoalkane<chloroalkane<Fluoroalkane B. Fluoroalkane<Chloroalkane<Bromoalkane<Iodoalkane C. Iodoalkane<Bromoalkane<Chloroalkane<Fluoroalkane D. Fluroalkane<Chloroalakane< Bromo alkane<Iodo alkane
2414	With increase in temperature, ionic product of H2O	A. Decreases B. Remains same C. Increases D. May increase or decrease
2415	How many Cl- ions are there around Na+ ion in NaCl crystal?	A. 3 B. 4 C. 6 D. 8
2416	Which element is expected to show the greatest tendency to form some covalent compounds?	A. aluminium B. calcium C. magnesium D. sodium
2417	H3O+ can't accept a lp because	A. it has positive charge B. The central atom is not electron deficient C. The shell of oxygen has reached its limit D. it already has a coordinate bond
2418	Which compounds is alicyclic in nature?	A. Cyclobutane B. Iso-bstand C. n-Butane D. Toluend
2419	The forces of attraction between ions and water molecules are known as	A. dipole-dipole forces B. London forces C. dipole- induced dipole forces D. ion-dipole forces
2420	Enzymes are chemically	A. carbohydrates B. proteins C. fatty acids D. phospholipids
2421	CH3CH2CH2OH--------A---------B Here B is	A. Propyne B. Propanal C. Propene D. Propane
2422	Equal masses of methane and oxygen are mixed in an empty container at 25◦C.	A. 1/3 B. 8/9 C. 1/9 D. 16/17
2423	In elimination reaction i.e, in the formation of alkene, the reactivity of alkyl halide is in the order:	A. Cl>Br>I B. I>Br>Cl C. Br>Cl>I D. I>Cl> Br
2424	Most of high molecular mass polymers, used to make plastic rubbers or fibers have molecular masses between:	A. 1000-10000 B. 1000-100000 C. 10000-100000 D. 10000-1000000
2425	At which oxidation state Cu achieves electronic configuration of Zn+2	A. 0 B. +2 C. +1 D. +3
2426	Which one of the following doesn't exhibit allotropy?	A. Bi B. As C. N D. P
2427	The gases in the atmosphere are essential for sustaining life on earth. Thus oxygen is required for breathing. What for is carbon dioxide required	A. To help plant to under go photosynthesis B. To destroy nitrogen oxide from the atmosphere C. To help to clean the atmosphere D. To help in fixing of bacteria
2428	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 uncharged B. Double C. Reduced D. Increased four times
2429	Glucose and gulose are ____ for each other	A. Geometrical isomers B. Metamers C. Anomers

	____ for each other	C. Apimers D. None
2430	Correct statement about Nucleophilic substitution bimolecular is	A. Transition state is formed B. Inversion take place C. It is two step reacticn D. Both a &c
2431	Steam causes more seers burns than boiling water. It is due to	A. Latent heat of fusion B. Latent heat of vaporization C. Latent heat of sublimation D. All of above
2432	What is name of hydrated variety of quartz?	A. Rose quartz B. Smokey quartz C. Silica D. Opal
2433	Which of the following are thermoplastic materials?	A. PVC (poly vinyl chloride) B. polystryences C. polyethylene D. all above
2434	Absolute temperature is the temperature at which	A. All molecular motion ceases B. volume becomes zero C. Mass becomes zero D. None of these
2435	The gasses in the atmosphere are essential for sustaining life on earth; Thus oxygen is required for breathing, What for is carbon dioxide required?	A. to help plant to under go photosynthesis B. to destroy nitrogen oxide form the atmosphere C. to help to clean to atmosphere D. to help in fixing of bacteria
2436	Commonly used coagulants are ions of:	A. Ferrous B. Al C. Cr D. Ferric
2437	All of following acids have hydrogen bond in liquid state except:	A. nitric acid B. sulphuric acid C. hydrochloric acid D. hydrofluoric acid
2438	Styrene has empirical formula CH, and there is 92.2%C and 7.75% hydrogen. If molar mass is 104g mol^{-}, what will be integral multiple (n) to get molecular formula:	A. 2 B. 4 C. 6 D. 8
2439	Third order of protein structure refers to	A. Bending of protein chain B. Three-dimensional structure of protein C. Number and sequence of amino acids D. Site of disulphide bonds
2440	The addition of HCl to ethene gives?	A. Chloroethane B. 1,2-dichloroethane C. 1.1-dichloroethane D. 2-chloroethane
2441	The system in which all the three axes are unequal and are at righ angle to each other is called	A. cubic B. hexagonal C. orthorhombic D. tetragonal
2442	How many isotopes are present in palladium	A. Two B. Four C. Six D. nine
2443	The fibre which is made from acrylonitrile as monomer:	A. PVC B. Rayon fibre C. Acrylic fibre D. Polyester fibre
2444	Large molecules with high molecular mass formed due to smaller units ae called:	A. polymer B. macromolecule C. micromolecule D. a & b
2445	Equal volume of all gases at same temperature and pressure contain number of molecules:	A. multiples B. equal C. different D. in fractions
2446	At same temperature which substance has high kinetic energy:	A. Liquid water B. N₂gas in a container C. Solid piece of iron D. Solution of alcohol and water
2447	Higher the surface area available for reaction	A. slower the reaction B. faster the reaction C. constant the reaction D. lower the Ea

2448	Which one of the following gases has lowest density at room temperature:	A. NH₃ B. Ne C. N₂ D. CO
2449	The value of general gas constant R is derived from:	A. Newton's Cooling law B. Maxwell's law C. Avogadro's law D. Charle's law
2450	Glycogen on hydrolysis give	A. Glucose B. Lactose C. Fructose D. None
2451	1-chloropropane and 2.chlorpropane are isomers of each other, the type of isomerism in these two is called	A. Cis-trans isomerisn B. Position isomerism C. Chain isomerism D. Functional group isomerism
2452	Protein of high biological value	A. Contains essential amino acids B. Is poor in essential amino acids C. Is of plant source D. Contains amino acid glycine e. Is a basic protein
2453	Term ozone hole is used for depletion of ozone during months of:	A. Jan-Feb B. March - Sep C. Sep- Nov D. Dec-Feb
2454	All of the following are simple proteins except	A. Histones B. Albumin C. Keratins D. Glycoprotein
2455	On hydrolysis sucrose gives:	A. glucose and maltose B. fructose and lactose C. fructose and maltose D. glucose and Fructose
2456	On the basis of intermolecular forces diamond is a	A. ionic solid B. covalent solid C. metallic solid D. molecular solid
2457	One of the following metals is the most reactive and form super oxide. Indicate that	A. Mg B. K C. Be D. Li
2458	Ionization of KClO3. is suppressed by	A. Increasing temperatuse B. adding KCl C. adding NaNO3 D. Decreasing temperature
2459	Type of bond between nitrogen and carbonyl group	A. Hydrogne bonds B. Covalent bond C. Peptide bond D. Disulphide bond
2460	Lecithin is an example of:	A. A simple lipid B. Phospholipids C. Waxes D. Proteins
2461	Plastics are 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
2462	When a nitrogeneous base combine with a sugar it is called	A. Ribose B. Nucleotides C. Nucleoside D. None
2463	At equilibrium rate of evaporation and rate of condensation	A. Become very high B. Become very low C. Become equal D. Can never be equal
2464	The average bond energy of C-Br is	A. 228 kJmol-1 B. 250 kJmol-1 C. 200 kJmol-1 D. 290 kJmol-1
2465	Which of the following is not a carbohydrate?	A. nuclic acid B. strach C. glycoyen D. cellulose
2466	Dalton's law finds its application during the process of:	A. Digestion B. Respiration C. Reproduction D. All of above

2467	Born-Haber cycle is an application of	A. Hess's law B. 1" law of thermodynamics C. Avogadro's law D. 1law of thermochemistry
2468	Which is the chemical formula of calcium super phosphate:	A. CaH₂PO₄ B. CaHPO₄ C. Ca(H₂PO₄)₂ D. none of above
2469	The nature of the attractive force in acetone and chloroform are	A. dipole-induced dipole forces B. dipole-dipole forces C. ion-dipole forces D. instantaneous forces
2470	Alpha helix and beta pleated sheath are secondary structures of protein which are maintained by	A. dipole forces B. non-polar interactions C. ionic bonds D. Hydrogen bonds
2471	Ketones are less reactive than aldehydes because:	A. alkyl groups electorn donation B. steric hindrance is greater in ketone C. both a and b D. ketones are non-polar
2472	Carboxylic acid can be prepared from:	A. Hydrolysis of alkyl nitrites B. Reaction of CO₂with Gringard's reagent C. Hydrolysis of esters D. All of these
2473	Lipids, proteins, carbohydrates and nucleic acids belong to macromolecules:	A. inorganic B. organic C. Biopolymer D. synthetic
2474	The oxidation state of carbon in C2O-²4 is	A. +4 B. -4 C. +3 D. +2
2475	Under what conditions do real gases show close to ideal gas behavior?	A. low pressure, low temperature B. high pressure, low temperature C. low pressure, high temperature D. high pressure, high temperature
2476	d-d transition cannot be shows by	A. Cu+1 B. Sc+3 C. Zn+2 D. All
2477	The enthalpy change AH of a process is given by the relation	A. ΔH =ΔE + PΔV B. ΔH=ΔE +W C. ΔH =ΔE-ΔnRT D. ΔE =ΔH + PΔV
2478	The rate of reaction between A and B increases by a factor of 100, when the concentration of A is increased 10 folds, the order of reaction with respect to A is	A. 10 B. 1 C. 4 D. 2
2479	Purines include	A. Adenine B. Guanine C. Both a and b D. None
2480	The potential of SHE is taken as zero which is avalue	A. Reference B. Arbitrary C. Exact D. Experimental
2481	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. phthalic acid and hexaethylene diamine
2482	No of electron in $^{69}Ga^{3+}$ will be 31	A. 28 B. 29 C. 30 D. 34
2483	One of the best applications of Hess's law to calculate the lattice energy of ionic compound is	A. Measurement of enthalpy change in a calorimeter B. Studying of first law of thermodynamics C. Measurement of a heat of formation of a compound D. Born-Haber cycle
2484	Enthalpy of a system can be calculated by which of following relationship	A. q=ΔE B. q=m×S×ΔT C. q=pv D. q=m×v×ΔT
	The phenomenon in which	A. evaporation

2485	The phenomenon in which sudden expansion of a gas causes cooling is called	B. cooling C. Joule Thomson effect D. sublimation
2486	The strength of binding energy of transition elements depends upon	A. Number of electron pairs B. Number of unpaired electrons C. Number of neutrons D. Number of protons
2487	Plastic are a pollution problem because many plastics	A. Burn to produce toxic fumes B. Decompose to produce toxic products C. Are made from petroleum D. Are very inflammable
2488	Liquid in the container have temperature 70 C. What will be the temperature in Kelvin Scale?	A. 203 K B. 350 K C. 343 K D. 300 K
2489	The charring of glucose when it is heated with conc.H_2SO_4 is due to	A. Oxidation B. Reduction C. Dehydration D. Dehydrogenation
2490	The non-stick lining of pans is.	A. Diffluoroethane B. Chlorofluororylhane C. Chloroethane D. Tetrafluoroethane
2491	To become a carbohydrate a compound must contain	A. 2-carbon B. 3-carbon C. 4-carbon D. 5-carbon
2492	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
2493	Choose the correct statement:	A. SO₂ affects the nucleus B. SO₂ affects plasmodesmate C. SO₂ affects cell wall D. SO₂ affects all membrane systems
2494	Plasma proteins are separated by	A. Dialysis B. Electrophoresis C. Filtration D. Alcohol precipitation
2495	Ozone concentration is measured in	A. Debye units B. Dupont units C. Debacle units D. Dobson units
2496	Absolute zero, the lowest temperature on kelvin scale lies at	A. -273°C B. 273° C. -100°C D. 100°C
2497	Wt. of 112 ml of oxygen at NTP on liquifaction would be	A. 0.32 g B. 0.64 g C. 0.16 g D. 0.96 g
2498	The essential property of a fertilizer is that it should be.	A. Partially soluble B. Highly soluble C. In soluble D. Immiscible
2499	The increase in reaction rate as a result of increase in temperature from 10K to 90K is	A. 512 B. 256 C. 400 D. 112
2500	Out of monochloro, monobromo and mongiodo derivatives of ethane, the mos reactive compound towards nucleophilic substitution will be	A. C2H5Br B. C2H5Cl C. C2H5I D. All are equally reactive
2501	0.1M HCl having pH =1.0 it is about 100 time stronger than acetic acid what will be the pH of acetic acid:	A. 0.1 B. 1.3 C. 2 D. 3
2502	Group VIB of transition elements contains	A. Zn. Cd. Hg B. Cr. Mo, w C. Fe. Ru, Os D. Mn. Te. Re
2503	Kinetic energy of one mole of an ideal gas at 300 K in kJ is	A. 34.8 B. 3.48 C. 3.74 D. 348

2504	Evaporation of liquid takes place at every temperature. What when temperature becomes constant?	A. the rate of condensation is greater than teh rate of condensation B. it depends upon the nature of the liquid C. rate of evaporation is greater than the rate of condensation D. the rate of condensation and evaporation become equal
2505	Macromolecules or polymers are large molecules built up from small m0lecules known as monomers.This hypothesis put forward by:	A. Newton B. schrodinger C. Lewis D. Stadinger
2506	Silk is an example of:	A. animal fiber B. vegetable fiber C. mineral fiber D. none of all
2507	If the four tubes of a car are filled to the same pressure with N_2, O_2, H_2 and helium separately,then which one will be filled first.	A. N₂ B. O₂ C. H₂ D. He
2508	Geometry of simple molecule with sp2 hybridization	A. Triangular planar B. Trigonal C. Square planner D. Pyramidal
2509	If the distance between Na^+ and Cl^- ions in sodium chloride crystal is X pm,the length of the edge of the unit cell is	A. 4X om B. X/4 pm C. X/2 pm D. 2X pm
2510	How will you distinguish between methanol and ethanol?	A. By Lucas test B. By silver mirror test C. By oxidation D. By Iodoform test
2511	Always carboxylic acid produced will have number of carbon atoms from carbon atom in alkyl nitriles:	A. One more B. Two more C. Equal & same D. One less
2512	ΔH° represent the enthalpy change at	A. 0°C and 1 atm pressure B. 25°Cand 1atm C. 0K and I atm pressure D. 25°C and 2 atm pressure
2513	Forms of waste products:	A. Heat B. Smoke C. Solid D. All of these
2514	Water has high boiling point which is due to	A. weak dissociation B. hydrogen bonding C. high specific heat D. high dielectric constant