MDCAT Chemistry Chapter 16 Alcohols and Phenols Online Test

Sr	Questions	Answers Choice
1	A molecule that has polar bonds but is overall non - polar	A. IF B. CCl4 C. PCl3 D. All
2	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
3	Which one of the following enzymes brings about the hydrolysis of fats	A. Urease B. Maltase C. Zymase D. Lypase
4	Zwitter ion are	A. Basic B. Acidic C. Neutral D. Carry both -ve and +ve charges
5	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
6	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.
7	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)
8	Per hydro cyclopentano phenathrene is the basic structure of all the:	A. Proteins B. vitamins C. waxes D. amines
9	Which is not an air pollutant	A. N₂ B. CO C. NO D. N₂O
10	The optimum PH value fro the enzyme pepsin is:	A. 10 B. 1.4 C. 2 D. 8
11	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
12	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
13	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
14	Abumins and globulins are defined as	A. Derived protein B. Conjugated protein C. Fibrous protein D. Simple Protein
15	Elastic collision involves:	A. gain of energy B. loss of energy C. no relationship between elastic D. no gain or loss of energy
16	Which gas molecules escape through a hole of molecular dimension this phenomenon is called	A. diffusion B. mixing C. effusion D. flowing of gas

	phenomenon is called	B. flowing of gas
17	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
18	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
19	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
20	Potency and turn over are terms related to:	A. enzymes B. proteins C. fats D. oils
21	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
22	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
23	Which of these polymers is an addition polymer	A. Nylon 6, 6 B. Polystyrene C. Terylene D. Epoxy resin
24	Amino acid α-hydroxy carboxylic acid and	A. CO₂ gas B. H₂ gas C. N₂ gas D. NH₃ gas
25	The pure crystalline substance on being heated 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
26	Carboxylic acids reacts with sodium carbonate, & gas evolved in this reaction	A. CO2 B. H2 C. CO D. Both a &b
27	In aldehydes and ketones carbon of carbonyl group is;	A. sp^3 hyhridized B. sp^2 hybridized C. sp hybridized D. un hybridized
28	Aspartic acid is a (an)	A. Monoamino dicarboxylic acid B. Diamino Monocarboxylic acid C. Aromatic amino acid D. Imino acid
29	The B.P of glycerine at 760 torr pressure is	A. 200°C B. 290C° C. 250C° D. 262C°
30	How many zones through which the charge passes in a rotary kiln?	A. 4 B. 3 C. 2 D. 5
31	Chose a point which is not included in the components of environment	A. Stratosphere B. Hydrosphere C. Lithosphere D. Biosphere
32	The radioactive disintegration of 238U92 is	A. First order B. Second order C. Third order D. Zero order
33	Commonly used coagulants are ions of:	A. Ferrous B. Al C. Cr D. Ferric
	A mixture of H_2, H2 and CH_4has total number of	A. 0.4 atm

34	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
35	All of following acids have hydrogen bond in liquid state except:	A. nitric acid B. sulphuric acid C. hydrochloric acid D. hydrofluoric acid
36	The trade name of polytereafluoroethylene (PTFE) is	A. Teflon B. PVC C. terelene D. polyester
37	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
38	Types of bonds between C terminal and N terminal is	A. Covalent B. Disulphide bond C. Peptide D. Ionic
39	A pollutant affects	A. Human affects B. Quality of life C. Functioning of ecosystem D. All of these
40	Which of the following does not give flame test?	A. Li B. Ba C. Mg D. Sr
41	Which of the following is exact relationship between °F and C°	A. °F= 5/9[°C-32] B. °C = 5/9 [°F]+32 C. °F = 9/5°C+32 D. All
42	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
43	Violet colour of $[Ti(H_2O)]_4$ ion is due to.	A. Central metal ion B. Complex ion C. Water molecule D. Outer anion
44	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
45	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
46	A single chlorine free radical can destory how many ozone molecules	A. 10 B. 100 C. 1000 D. 10000
47	When a nitrogeneous base combine with a sugar it is called	A. Ribose B. Nucleotides C. Nucleoside D. None
48	The temperature of a gas is directly proportional to its	A. average translational kinetic energy B. enthalpy C. internal energy D. hydration energy
49	what is the exact value of angle in BF3	A. 90 B. 104.51 C. 119.5 D. 120°
50	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
51	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
52	Which one of the following enzymes brings about the hydrolysis of fats?	A. urease B. maltase C. zymase D. lypase
		A. Carboxylic acid > Alcohol > Phenol > Water

53	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
54	Peroxyacetylnitrate (PAN) is an irritant to human beings and it affects:	A. Eyes B. Ears C. Stomach D. Nose
55	Newspaper can be recycled again and again by how many times?	A. 2 B. 3 C. 4 D. 5
56	An example of bydrolase is	A. Amylase B. Lipase C. Fumarase D. A,C
57	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
58	Benedict solution gives a positive test with but catalyze the same reaction:	A. fructose B. glucose C. starch D. sucrose
59	The maximum number of isomer for an alkene with the molecular formula C2H8	A. 2 B. 3 C. 4 D. 5
60	To prepare ethane by Wurtz synthesis the suitable alkyl halide is	A. Ethyl iodide B. any alkyl iodide C. Ethyl chloride D. Methyl bromide
61	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 NH₃< that of N₂ C. a(NH₃) > a (N₂) but b (NH₃) < b(N₂) D. a (NH₃) < a (N₂) but b (NH₃) > b (N₂)
62	Glucose and gulose are ____ for each other	A. Geometrical isomers B. Metamers C. Apimers D. None
63	Which is an intermediate in SN1 reaction	A. Ethoxide ion B. Carbocation C. alkyl halide D. alkene
64	Which of the following successive ionization energies belong to a Group ll 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
65	Mercury does not wet the glass because of	A. repulsion B. weak cohesive force C. high viscosity D. capillary action
66	The primary building blocks of lipids are	A. Fatty acid B. Glycerol C. Sterols D. All
67	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
68	Per hydro cyclopentanone phenantherene is the basic structural of all the.	A. Waxes B. vitamins C. proteins D. steroids
69	The derivatives that cannot be prepared directly from the acetie acid	A. Acetamide B. Acetic anhydride C. Ethyl acetate D. Ester
70	Fresh water of total earth water is:	A. 1% B. 2% C. 3% D. 4%
71	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
	Considering the physical properties of the gases	A. orderly arranged

72	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
73	Which of the following equation is for idea gas:	A. PV = dRT B. PR = nTP C. PM = nRT D. PV = nRT
74	Polar ice caps can melt due to	A. Acid rain B. Green House Effect C. Smog D. Chlorofluorocarbons
75	Which compound is obtained by the elimination of bromopropane?	A. Propene B. Ethene C. Propane D. Butane
76	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
77	The relationship between density and molar mass of a gas is	A. Directly proportional B. ^{Inversly proportional} C. Straight line D. Stoichiometric
78	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
79	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
80	The graph between pressure and volume at constant temperature for gas is:	A. Isobaric B. Isothermal C. Isotherm D. None of above
81	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
82	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
83	In which of the following molecules strongest hydrogen bond is shown	A. water B. ammonia C. hydrogen fluoride D. hydrogen sulphide
84	Micronutrients are required in quantity ranging from:	A. 4----40g B. 6------200kg C. 6-----200g D. 4-------40kg
85	Ice floats on water because	A. the hydrogen bonding in ice is stronger than that of in water B. empty spaces are left in ice C. ice has two-dimensional structure D. the bond length of the oxygen and hydrogen bond is different in water and ice
86	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
87	In most of the cases the molecular crystals are	A. very soft B. soft C. extremely hard D. sufficiently hard
88	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
89	A single chloride free redical can destroy bow many ozene molecules?	A. 100 B. 100000 C. 10000 D. 10
	Methyl mercaptan, CH_3SH, is one of the substances	

90	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
91	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
92	Ti+3 shows minimum absorption (maximum transmittance) at-------and-------wavelength	A. Yellow, Green B. Red. Yellow C. Blue. Green D. Red. Blue
93	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⁻
94	BOD means	A. Boron oxygen deuterium B. Biochemical oxygen demand C. Biochemical oxygen dissolved D. Biochemical oxygen death
95	According to Lowery Bronsted concept, which of the following is considered as an acid?	A. BF3 B. OH- C. H3O+ D. Cl-
96	In which of the following molecules, strongest H-bond is shown?	A. hydrogen fluoride B. water C. hydrogen sulphide D. ammonia
97	Which one of the followings has polar covalent bonds hut is overall nom-polar molecule:	A. HF B. CO₂ C. CH₄ D. N₂
98	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.
99	Absolute zero, the lowest temperature on kelvin scale lies at	A. -273°C B. 273° C. -100°C D. 100°C
100	Men residence time of methane in atmosphere in years is:	A. 1-7 B. 2-7 C. 3-7 D. 4-7
101	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
102	One Joule is equivalent to	A. 4.184 cal. B. 0.4184cal. C. 1/2 cal. D. 1/4.184 cal
103	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
104	Ecology is a science of environment and deals specially with	A. stratosphere B. biosphere C. lithosphere D. hydrosphere
105	Oceans, rivers, streams, leaks, polar ice caps, glaciers and group water reservoirs are included in	A. Atmosphere B. Lithosphere C. Hydrosphere D. Biosphere
106	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
107	Which of the following is synthetic thermoplastic polymer	A. PVC B. Bakelite C. Synthetic varnishes D. Both b & c
	To purify water which has	

108	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⁺
109	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
110	What is the formula of magnesite?	A. PbS B. MgSO4. 7H2O C. MgCO3 D. CaCO3
111	Super conductors are derived from compounds of	A. P-block elements B. Lanthanides C. Actinides D. Transition elements
112	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
113	Baever's reagent is misture of	A. HCl& ZnCl B. Ageous bromine C. Alkaline KMn4 D. Mix of Br2&KMnO4
114	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
115	Polymerisation of vinyl acetate is a type of:	A. homopolymer B. copolymer C. ter polymer D. All of these
116	The word paper is derived form the name of which reedy plant:	A. rose B. sun flower C. papyrus D. water hyacinth
117	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
118	How many isotopes are present in palladium	A. Two B. Four C. Six D. nine
119	Which one of the following nitrogen base is NOT present in DNA.	A. Adenine B. Guanine C. Uracil D. Cytosine
120	The substances which soften the polymer are called	A. stabilizers B. plasticizers C. retarders D. pigments
121	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
122	Which fiber contains 85% acrylonitrile by weght?	A. azlon fiber B. saran fiber C. acrylic fiber D. rayon fiber
123	Equal masses of methane and oxygen are mixed in an empty container at 25°C The fraction of total pressure exerted by oxygen is	A. 1/3 B. 1/9 C. 8/9 D. 16/17
124	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

125	Which will not react with phenol	A. NaOH B. Br2 C. KMn04/OH- D. Na
126	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
127	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
128	Which element is expected to show the greatest tendency to form some covalent compounds?	A. aluminium B. calcium C. magnesium D. sodium
129	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
130	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 (378.4 torr).it is due to	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
131	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
132	Crystals can be classified into	A. 7 crystal systems B. 4 crystal systems C. 3 crystal systems D. 14 crystal systems
133	At present the number of cement factories is Pakistan are	A. 20 B. 22 C. 25 D. 30
134	Which of the following wast material is not recycled for use again?	A. glasses B. paper C. plastic toys D. hides of animals
135	The simplest separating unit of a polymer is called:	A. Monomer B. Dimer C. Trimer D. Macromer
136	The order of reaction provides valuable information about of reaction	A. Condition B. Concentration C. Mechanism D. Parameters
137	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
138	Which is unnecessary for purification of water for drink purposes:	A. coagulation B. aeration C. treatment with Iodine D. treatment with chlorine
139	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
140	What is clinker?	A. Roasted calcareous material B. Roasted calcareous & argelarious material C. Roasted argillaceous material D. Roasted gypsum
141	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
142	If the volume of a gas collected at a temperature of 600 ^oC and pressure of 1.05 x 10^5Nm-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

143	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
144	Which of the following alpha-Amino acids has basic R-group	A. Proline B. Glutamic acid C. Histidine D. Valine
145	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
146	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
147	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
148	Fumaric acid converted into malic acid in the presence of	A. Lyases B. Glyceomutases C. Fumarase D. Hydrolases
149	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
150	Total number of valence electrons in phosphonium ion (PH4-) is	A. 8 B. 9 C. 12 D. 10
151	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
152	Which one will be act as a strong acid.	A. Dichloroethanoic acid B. Emanoic acid C. Chloroethanoic acid D. Trichlorothanoic acid
153	Lipids, proteins, carbohydrates and nucleic acids belong to macromolecules:	A. inorganic B. organic C. Biopolymer D. synthetic
154	The destiny of a gas is directly proportional to pressure, inversely proportional to temperature and directly proportional to:	A. Viscosity B. Molar mass C. Momentum D. All of above
155	Biological oxygen demand (BOD) is associated with	A. Organic matter B. Micro organisms C. Both a and b D. None
156	Fine powder gypsum is mixed with clinker up to:	A. 4% B. 6% C. 5% D. 7%
157	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
158	A protein rich in proline and hydroxy proline is	A. Globin B. Collagen C. Casein D. Histone
159	The existence of a substance in more than one solid modification is known as	A. Isomorphism B. Polymorphism C. Amorphism D. None of these
160	The substance upon which an enzyme acts is known as its	A. domain B. field C. substrate D. reactant
		A. Valine

161	Amino acid which synthesized many hormones is	A. Valine B. Phenylalanine C. Alanine D. Histidine
162	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
163	The pH range of acid rain is?	A. 7-6.5 B. 6.5-6 C. 6-5.6 D. Less than 5
164	Acetylide can give back ethyne upon treatment with	A. water B. strong base C. dil. Acid D. weak base
165	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
166	Keratomalacia is caused due to the d3eficiency of vitamin:	A. A B. B C. K D. D
167	IUPAC name of alanine is.	A. 2-aminopropanoic acid B. 2- aminoethanoic acid C. 2-aminobutane-1,4 choleric acid D. 2-aminobutanoic acid
168	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
169	The high molecular weight materials which yield on hydrolysis the amino acids is called:	A. Carbohydrates B. Lipids C. Fatty acids D. Proteins
170	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
171	How much pesticides have been synthesized at present?	A. Four thousand B. Six thousand C. Eight thousand D. Ten thousand
172	Which of the following substance is not present in acid rain?	A. Sulphuric acid B. Nitric acid C. Sulphurous acid D. Acetic acid
173	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
174	The highest oxidation state of manganese is	A. +7 B. -7 C. +6 D. +4
175	Benzene has pi electron	A. 2 B. 4 C. 6 D. 8
176	Viscosity of a liquid is measured by	A. barometer B. thermometer C. viscometer D. manometer
177	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.
178	Which of the following is NOT thermoplastic	A. PVC pipes B. Plastic toys C. Varnish D. Both A and B
179	The temperature below which a gas does not exist is called its	A. Inversion temperature B. Critical temperature C. Neutral temperature D. Curie point
	In ethyl alcohol, the bond	A. C-C

180	that undergoes heterolytic cleavage most readily is	B. C-O C. C-H D. O-H
181	Methyl cyanide, on boiling with mineral acids yield	A. Acetic acid B. Formic acid C. Propanoie acid D. Butanoic acid
182	Which of the following is an addition polymer	A. Nylon-6, 6 B. Polystyrene C. Terylene D. Epoxy resin
183	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
184	Neutralization of acid-base is	A. Spontaneous B. Exothermic C. Non spontaneous D. Both "a" and "c
185	The compound which does not form iodoform:	A. methyl alcohol B. ethyl alcohol C. acetone D. acetaldehyde
186	Volcanoes produce SO_2:	A. 47% B. 57% C. 67% D. 77%
187	The stoichiometric calculations for a chemical reaction results in	A. Actual yield B. Percentage yield C. Theoretical yield D. Selectivity
188	Which one is nitrogen fertilizer among the following:	A. calcium sulphate B. urea C. magnesium carbonate D. potassium phosphate
189	Which of the follwing dnes not give brick red precispitate wits Fehling's solution	A. Acetaldehyde B. Formalin C. prorionaldehyde D. Acetone
190	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
191	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
192	Naturally occurring isotopes of silver are	A. ,Two B. , Four C. , Forty seven D. , sixteen
193	At present the number or cement factories in Pakistan are:	A. 20 B. 22 C. 25 D. 30
194	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
195	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)
196	Monomer for acrylic resins is	A. Acrylic acid B. Methylmethacrylate C. Acryloritrile D. All
197	Butyric acid was named from butyrum means:	A. Red out B. Vinegar C. Butter D. Milk
198	Photochemical smog contains----as main reactants	A. Nitrous oxide & unburnt hydrocarbons B. NO & brunt hydrocarbons C. Nitric oxide & unburnt hydrocarbons D. N2O & burnt hydrocarbons
	Reaction of alkyl halides	A. Carboxylic acids

199	with potassium cyanide in the presence of alcohols give:	B. Aldehydess C. Alkyl nitriles D. Acid amides
200	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
201	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
202	The respiration process taking place in animals depends on a difference in	A. Partial pressure B. Osomotic pressure C. Vapour pressure D. Atomospheric pressure
203	The largest item which is recycled is	A. newspaper B. plastic C. aluminium D. oil
204	The compound that reacts the slowest in Lucas test	A. 1-Pentanol B. sec-butyl alcohol C. 3-Pentanol D. ter- butyl alcoho
205	Which of the following gases have maximum root mean square velocity at 25°C:	A. SO₂ B. NH₃ C. CO₂ D. H₂S
206	Liquids have definite volume due to	A. Negligible spaces B. Intermolecular force C. Motion D. Both a and b
207	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°
208	The oxidation of 1 - propanol in the presence of H2SO4, +K2Cr207 produces final product	A. Acetaldehyde B. Propanal C. Acetone D. Propanoic acic
209	The reaction kinetics concerned with the	A. Rate of reaction B. Direction of reaction C. Factor effecting rate of reaction D. both a &b
210	The hexagonal closed packing is associated with	A. Ag, Cu, Au B. Zn, Cd, Hg C. Li, Na, K D. NaCl, KBr
211	Amino acids ionize in water to form	A. Zwitterion B. Internal saH C. Dipolar ion D. All of these
212	A complete food contains at least	A. Three nutrients B. Ten nutrients C. Six nutrients D. Ten nutrients
213	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
214	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
215	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
216	which of the following d blocks element can showthe highest oxidation number is its ompound	A. Chromium B. iron C. Copper D. Manganese
217	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

218	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
219	Which of the following is derived lipid	A. Sterols B. Vit D C. Terpenes D. All
220	The unit of R depends on	A. Mole B. Pressure volume C. Temperature D. None of these
221	The state of matter which exist only within a relatively narrow range of temperature and pressure	A. Solid B. Gas C. Liquid D. Plasma
222	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
223	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.
224	Lecithin is an example of:	A. A simple lipid B. Phospholipids C. Waxes D. Proteins
225	Heat balance of earth is maintained by	A. Atmosphere B. Hydrosphere C. Lithosphere D. Stratosphere
226	At higher temperature isotherm moves away from both the axes because of increase in	A. Pressure B. Volume C. Number of moles D. All
227	Most of the universe consists of the matter in :	A. Gaseous state B. Liquid state C. Plazma state D. Solid state
228	Electrolytic products of dilute aqueous solution of sodium sulphate is	A. Na. SO2 B. H2. S02 C. Na. O2 D. H2,O2
229	Which is the structure of polyvinyl chloride?	A. [H2C=CH-Cl] B. -[HCCl-CH-Cl]- C. -[H2C-CH-Cl]- D. -[CCl2-CCl2]-
230	Glycine is characerized by	A. Absence of an asymmeteric carbon B. Absence of optical activity C. The shortest amino acid D. All of these
231	The degree of unsaturation in fats or oils is usually measured by numbers of grams of iodine required by 100 grams of fat, this is called	A. oil number B. saturation number C. iodine number D. un saturation number
232	Which forms metallic crystals	A. Cu B. NaCl C. SO₂ D. NH₄Cl
233	All of the following are simple proteins except	A. Histones B. Albumin C. Keratins D. Glycoprotein
234	Which of the compounds cannot show positional isomerism?	A. Alkanes B. Alkenes C. Alkynes D. Alcohols
235	All amino acids are optically active except	A. Amino acid B. Series C. Threonine D. Tryltophan
236	Which of the following enthalpy change always have a negative value	A. ΔHf B. ΔH sol C. ΔHc

	have a negative value	D. ΔHat
237	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
238	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
239	The pH of ideal buffer is	A. 10 B. 7 C. Less than 7 D. 0
240	Which noble gas is alpha emitter?	A. Xenon B. Radon C. Krypton D. Argon
241	The rate of diffusion of a gas is proportional to	A. P /√d B. √p/d C. P/d D. √ P/d
242	The bonds present in the primary structure of proteins are by	A. Dialysis B. Electrophoresis C. Filtration D. Alcohol precipitation
243	One of the following is not type of polymer	A. homopolymer B. copolymer C. heteropolymer D. terpolymer
244	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
245	Phosphorus is very useful in the growth of:	A. leave B. stem C. seed D. root
246	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
247	Which of the following metal cannot evolve hydrogen from the acetic acid	A. Sodium B. Potassium C. Magnesium D. Copper
248	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
249	Tertiary alcohols have alpha bydrogens	A. 1 B. Zero C. 2 D. 3
250	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
251	Which one of the following organic acids is made form methanol?	A. acetic acid B. bothanic acid C. formic acid D. propanoic acid
252	If a = b = c and x = y = z 90° then crystal structure is	A. Cubic B. Tetragonal C. Orthorhombic D. Triclinic
253	Detergents are	A. synthetic products B. natural products C. both a and b D. none of the above
254	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
255	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
256	The volume of gas depends upon the _____ molecules	A. Size of B. Molecular weight C. Space between D. Both a and b
257	Which of the following is a base according to lowery Bronsted concept?	A. I-1 B. HCl C. H3O+ D. NH4+1
258	Elements of group IA and IIA are	A. electronegative B. neutral C. electropositive D. non-metals
259	What is the co-ordination number of face centered cubic structure?	A. 12 B. 8 C. 6 D. 10
260	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
261	The polymers which can be re-softened again and again are called	A. Thermoplastic B. Thermosetting C. Both a and b D. None
262	The protein which only yield amino acids and their derivatives	A. Simple proteins B. Complex proteins C. Derived protein D. All of these
263	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
264	Plasma was introduced by	A. Crookes B. Soddy C. Faraday D. Van der Waal
265	Soda lime is often employed to remove both	A. H2O and NO2 B. CO2, and NO2, C. H2O and CO2 D. H2S and CO2
266	Example of essential aromatic amino acids	A. Theronine B. Alanine C. Phenyl alanine D. Glycine
267	Which of the following has isomorphous structure	A. NaF B. S C. Sn D. N
268	Phenomenon of acid rains gain importance in:	A. 1930s B. 1940s C. 1950s D. 1960s
269	Which one of the following is an aromatic compound?	A. Benzene B. Thiophene C. Furan D. All of them
270	99.5% mass of lithosphere is made of	A. 03 elements B. 8 elements C. 11 elements D. 15 elements
271	Polyesters resins have special use in:	A. Clothing B. Paints C. Emulsion D. Floor covering
272	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

273	Fungicides are the pesticides which	A. Kill plants B. Kill herbs C. Kill insects D. Control the growth of fungus
274	The reason that diamond and graphite have different physical properties is	A. density B. color C. bonding D. hardness
275	Amides are	A. Strongly basic B. Weakly basic C. Acidic D. Strongly
276	The simplest separating unit of a polymer is called:	A. Monomer B. Dimer C. Trimer D. Macromer
277	The solubility of Fe(OH)3 is 'x' mole per dm3. Its Ksp would be	A. 9X3 B. 3X4 C. 27X4 D. 9X4
278	The pH range of the acid rain is	A. 7 - 6.5 B. 6.5 - 6 C. 6 - 5.6 D. Less than 5
279	Starch gives _____ color with iodine:	A. blue B. red C. yellow D. green
280	Stronger the oxidizing agent, higher is	A. Redox potential B. Standard reduction potential C. Reduction potential D. _{Oxidation potemial}
281	The kinetic energy of three moles of gas is:	A. 3/2 RT B. 3 RT C. 1/2 RT D. 2 RT
282	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
283	Estyl butyrate has flavour like	A. Banans B. Jasmine C. Pineapple D. Orange
284	Lactoglobulin is found in	A. nucleus B. nerve cells C. Plants only D. muscles and in plants
285	Furan is a compound	A. Acyclic B. Alicyclic C. Heterocyclic D. non-aromatic
286	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
287	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
288	Carboxylic acid is given name by replacing "a" of alkane by:	A. "oic" acid B. "one" C. "al" D. "ol"
289	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
290	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
291	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

292	Amino acid produce α-hydroxy carboxylic acid when treated with	A. KNO₃/HBr B. Zn/HCl C. NaNO₂/HCl D. Pd/BaSO₄
293	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
294	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
295	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
296	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
297	Water has high boiling point which is due to	A. weak dissociation B. hydrogen bonding C. high specific heat D. high dielectric constant
298	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
299	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
300	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
301	Which functional group is present in glycerol tristearate	A. Carboxylic acid B. Alcohol C. Aldehyde D. Ester
302	Which among the following will show anisotropy?	A. Wood B. Glass C. Paper D. BeCl2
303	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
304	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
305	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
306	One of the following does not give the flame test. Which is that	A. Sr B. Ba C. Be D. Na
307	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
308	The reaction between fat and NaOH is called:	A. esterification B. hydrogenolysis C. fermentation D. sponification
309	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
310	.Both aldehydes and ketones are planar to the neighborhoods of carbonyl (C-0) group. Which one of	A. pi-bond of C and O B. Sigma bond of C and O

	(C-O) group. Which one of the following bonds is distorted towards the oxygen atoms?	C. Sigma bond of C and H D. Sigma bond of C and C
311	On the basis of intermolecular forces diamond is a	A. ionic solid B. covalent solid C. metallic solid D. molecular solid
312	CH3CH2CH2OH--------A---------B Here B is	A. Propyne B. Propanal C. Propene D. Propane
313	The electrochemical series is based on	A. pH scale B. Redox scale C. Hdrogen scale D. Arrhenius scale
314	The value of ΔV being very small. The term $P\Delta V$ can be neglected for process involving	A. Liquid and gas B. Solids and gases C. Liquid and solid D. None of these
315	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
316	Sex harmones belong to a group of organic compounds called:	A. heterocyclics B. steroids C. amino acids D. amines
317	Triple point of water is	A. 273 K B. 373 K C. 203 K D. 193 K
318	The crystals formed due to London forces of interaction are	A. ionic B. covalent C. molecular D. metallic
319	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
320	Naphthalene has two fused aromatic ring of carbon atom the molecular formula	A. C10H8 B. C10H14 C. C10H10 D. C12H12
321	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
322	Gases show uniform behavior towards their:	A. Internal conditions. B. External conditions. C. Internal and external conditions. D. None of above.
323	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
324	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
325	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.
326	Aniline is the derivative of the benzene containing the	A. Hydroxyl group B. Amino group C. Amido group D. Imido group
327	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
	An ideal gas, obeying	A. its critical temperature is above 0°C

328	Kinetic theory of gases cannot be liquified, because	B. its molecules are relatively small in size C. It solidifies before becoming a liquid D. Forces acting between its molecules are negligible
329	At ordinary temperature, the most nearly ideal gases are	A. N₂ B. He C. H₂ D. all these
330	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
331	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
332	In diamond, which hybridization is there?	A. sp2 B. dsp2 C. sp3 D. sp
333	Which of the following carbohydrates is used in silvering of mirrors	A. Sucrose B. Cellulose C. Fructose D. Glucose
334	Which of the following is precursor of T3 and T4	A. Gaba B. Dopa C. B-Alanine D. Di-iodotyrosine
335	The active group of glutathione is	A. Amino group B. Sulfhydryl group C. Carboxylic group D. Imino group
336	The B.P of H2O at Murree Hills is	A. 99.8C B. 98°C C. 100C° D. 89°C
337	In big/metropolitan cities, atmosphere is mostly polluted due to	A. Radioactive fall out B. Household waste C. Pesticide residue D. Automobile exhausts
338	LiF is a crystalline substance and has	A. ionic crystal B. metallic crystal C. covalent crystal D. molecular crystal
339	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
340	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
341	Ricket is caused due to the deficiency of vitamin	A. A B. D C. B D. E
342	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 P D. Low T and low P
343	The working condition/s for SHE	A. 1atm pressure B. 1M H-solution C. 298K temperature D. All of these
344	Proteins have linkage between amino acids	A. imide B. amide C. ester D. ether
345	What is the formula of bauxite?	A. Al2O3.2H2O B. Al2O3 C. Na2B4O7 .10 H2O D. Ca2B6O11. 5H2O
346	Ionic solids are characterized by	A. low melting points B. good conductivity in solid state C. high vapour pressure D. solubility in polar solvents

347	2-propanol shows----- isomerism with 1-propanol	A. Chain isomerism B. Positional isomerism C. Metamerism D. Geometrical isomerism
348	Phenol can be diatingushed from ethyl alcohol by all of the following reagents except	A. Iodoforrn test B. Na C. Br2 /H2O D. NaOH
349	Glass is a	A. Micro-crystalline solid B. Super-cooled liquid C. Gel D. Polymeric mixture
350	Cyclone collector is used to reduce:	A. noise pollution B. air pollution C. water pollution D. radioactive pollution
351	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
352	Which of these has at least one d electron	A. Sc+3 B. Mn+7 C. Ti+4 D. Cr+3
353	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
354	Which compound is obtained hy the elimination reaction on bromoethane?	A. Butene B. Ethene C. Propene D. Propane
355	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
356	Which is not considered as pollutant	A. O₃ B. CO₂ C. NO₂ D. SO₂
357	Which of the following is not a charbohydrate	A. Nuclic acid B. Starch C. Glycoyen D. Cellulose
358	The collision which results in chemical reaction	A. Effective collision B. Ineffective collision C. Useless collision D. All of the above
359	One gram of Carbohydrate yield energy:	A. 4Kcal B. 9Kcal C. 10Kcal D. 100Kcal
360	Evaporation occurs at all temperatures and is effected by	A. surface area B. temperature C. intermolecular forces D. all of these
361	Contamination of water of tanning industries is due to:	A. Cr(III) B. Cr(VI) C. Mn(III) D. Mn(VII)
362	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
363	Which one of the pollutants of automobile exhausts affects the nervous system or produces mental diseases	A. NO₂ B. SO₂ C. Hg D. Pb
364	Heat balance of earth is maintained by sphere:	A. Hydrosphere B. atmosphers C. lithosphere D. biosphere

365	One gram of carbohydrate yields energy	A. 10 kcal B. 100 kcal C. 4 kcal D. 9 kcal
366	Which of these polymers is and addition polymer?	A. Nylon-6, 6 B. Polystyrene C. Terylene D. Epoxy resin
367	According to Hess's law, the enthalpy change for a reaction	A. Depends on path B. Independent of the path C. The sum of ΔE and ΔH D. None of these
368	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
369	The maximum hydrogen bonding is in:	A. diethyl ether B. ethanol C. water D. benzene
370	A complete food contains at least:	A. three nutrients B. ten nutrients C. six nutrients D. eight nutrients
371	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
372	Which of the following is a strong acid	A. CH3COOH B. C2H5OH C. HCOOH D. Phenol
373	Alkanes do not show geometrical isomerism due to	A. Hyperconjugation B. Resonance C. Rotation around single hond D. Restricted rotation around doubled bond
374	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
375	The reaction between fat and NaOH is called	A. Esterification B. Hydrogenolysis C. Fermentation D. Sponification
376	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
377	Coordination number of Zn and ZnS (Zinc blends) is	A. 4 B. 6 C. 2 D. None of these
378	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
379	Which is not an amino acid	A. Lysine B. Gylcine C. Alanine D. Aniline
380	The gas which is mainly produced in landfills from the waste is.	A. CH4 B. CO2 C. SO2 D. Cl2
381	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
382	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}
383	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
384	In elimination reaction i.e, in the formation of alkene.	A. Cl>Br>I B. I&at:Br&at:Cl

384	the reactivity of alkyl halide is in the order:	C. Br>Cl>I D. I>Cl> Br
385	Adipic acid and Hexamethylenediammine polymerize to give	A. Acrylic resins B. Plastic fiber C. Nylon-6, 6 D. None
386	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
387	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
388	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
389	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
390	Which of the following represents peptide linkage	A. -C=N- B. -CO-NH- C. -CH₂-NH- D. -CH-NH-
391	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
392	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
393	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
394	In big/metropolitan cities, atmosphere is mostly polluted due to:	A. radioactive fall out B. household waste C. pesticide residue D. automobile exhausts
395	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
396	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
397	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
398	SN2-reactions can be usually observed in	A. Primary alkyl halide B. secondary alkyl halide C. Tertiary alkyl halide D. Both A. and B
399	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
400	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
401	Ethane when completely halogenated in excess of chiorine can form	A. Hexachloroethane B. Dichloroethane C. Pentachloroethane D. 1.1.2.2-terachloroethane
		A. Orthogonal lattice

402	Potassium crystallizes with a	B. Cubic lattice C. Triclinic D. Ortho rhombic lattice
403	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
404	Which of the following would react with ozone in the atmosphere?	A. F B. Cl C. O2 D. O
405	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
406	Which of the following species is used to formation of glycerol fatty acid from triglyceride	A. NaOH B. Ni C. Lipase D. All
407	What is the effect of polluted air on environment	A. Ozone B. Acid rain C. Global warming D. Smog
408	In which molecule. all atoms are coplanar?	A. CH4 B. BF3 C. NH3 D. PH3
409	Amino acids are building material of:	A. lipids B. protein C. carbohydrates D. fats
410	During the nitration of benzene the nitrating agent is	A. NO3 B. NO2+ C. NO2- D. HNO3
411	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
412	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
413	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
414	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
415	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]
416	Butane molecule can have maximum no of isomers	A. 2 B. 5 C. 4 D. 3
417	Which of the following is thermosetting polymer	A. Synthetic varnishes B. Epoxy resins C. PVC D. Both A and B
418	The enzyme which is found in saliva, accelerates the conversion of starch into sugar is	A. Pepsin B. Thrombin C. Ptyalin D. Fumarase
419	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.
420	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
	Which one of the following	A. Cyclohexene

421	Which one of the following is not an alicyclic compound?	B. Cyclohexane C. Benzene D. Cyclopentane
422	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
423	One of the following is neutral amino acid	A. Arginine B. Lysine C. Glutamine D. Valine
424	A chemical inert and heat resistant plastic, that is made from tetrafluoroethylene, is called	A. teflon B. PVC C. Bakelite D. polyamide
425	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
426	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
427	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
428	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
429	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
430	Depletion of ozone is more during the month:	A. Jan-March B. April-Jun C. July-Aug D. Sept-Nov
431	Fungicides are the pesticides which:	A. Control the growth of fungus B. Kills insects C. Kills plants D. Kill herb
432	The word "Lipids" derived from the language	A. Greek B. Latin C. German D. English
433	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
434	The total number of 3d-series transition elements is	A. 10 B. 40 C. 14 D. 58
435	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
436	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
437	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
	Keeping in view the charge	A. LiBr

438	density select the compound amoung the following having highest lattic energy:	A. LiBr B. KCl C. MgO D. NaF
439	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
440	Rigid rocky crust earth upto a depth of 100 km is called:	A. Atmosphere B. Hydrosphere C. Lithosphere D. All of these
441	The substitution of a'-H' by '-NO2' group in benzene is called	A. Nitration B. Sulphonation C. Ammunolusis D. Reduction of benzene
442	d-d transition cannot be shows by	A. Cu+1 B. Sc+3 C. Zn+2 D. All
443	Substituted phenyl group are called	A. Arene groups B. Alkyl groups C. Aryl groups D. Acyl groups
444	If ionic product is equal to Ksp then the solution is	A. Unsaturatec B. Ideal C. Supersaturated D. Saturated
445	Glycogen is stored in	A. Animals B. Plants C. Soil D. None of these
446	Which of the following liquid has highest bolling point	A. HCl B. HBr C. H2O D. Br2
447	The nature of crystal of diamond is	A. metallic B. molecular C. covalent D. ionic
448	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
449	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
450	Which one of the following alcohol is indicated by formation of yellow crystals in lodoform tesr?	A. Methanol B. Ethanol C. Butanol D. Propanol
451	The word paper is derived from the name of which reedy plant	A. rose B. sun flower C. papyrus D. water hyacinth
452	Electrical conductivity of graphite is greater in one direction that in other due to	A. Isomorphism B. Cleavage plane C. Anisotropy D. Symmetry
453	Macromolecular hypothesis acceptance due to efforts of standinger came about in:	A. 1910 B. 1920 C. 1930 D. 1940
454	When calcium formate and calcium acetate are dry heated they form	A. HCOOH B. C2H5OH C. CH3CHO D. HCHO
455	Which is unnecessary for purification of water for drinking purposes	A. Coagulation B. Aeration C. Treatment with Iodine D. Treatment with chlorine
456	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
457	Which one of the following gases has lowest density at	A. NH₃ B. Ne C. N₂

	room temperature:	C. N₂ D. CO
458	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
459	The amount of oxygen in the lithosphere is about	A. 35.50% B. 40.60% C. 46.60% D. 50.50%
460	RNA regulate the synthesis of	A. Vitamis B. Carbohydrate C. Proteins D. Lipids
461	The reaction between fat and NaOH is called?	A. Esterification B. Hydrogenolysis C. Fermentation D. Sponification
462	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
463	Site of land for landfill is selected based upon.	A. topography B. location of ground C. water table D. All of these
464	betta-D-glucose is a monomer for	A. Starch B. Cellulose C. Glycogen D. Protein
465	The incineration may reduce volume of wastes upto:	A. 1/4th B. 1/2nd C. 2/3rd D. 3/4th
466	In Pakistan consumption per person is:	A. 8kg B. 5kg C. 10kg D. 6kg
467	The number of unpaired electrons present in Fe ions is	A. 1 B. 2 C. 5 D. 0
468	Crystal can be classified in to .....basic crystal habits	A. 7 B. 4 C. 14 D. 3
469	Which of the following elements is most metallic	A. Bi B. sb C. As D. P
470	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
471	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
472	Fungicides are the pesticides which:	A. Kill plants B. Kill insects C. Kill herbs D. Control the growth of fungus
473	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
474	Ethene is produced from ethyl chloride by reacting with alcoholic KOH. The process is called	A. Hydrogenation B. Dehydrogenation C. Dehydrohalogenation D. Oxidation
475	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)
476	In which of the following a re dipole-dipole interaction present?	A. molecules of CCL₄ B. molecules of solid iodine C. molecules of NH₃ D. atoms of the helium gas

	.	D. atoms of the helium gas
477	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
478	The suspended particles in the raw water can be removed by the	A. Coagulation B. Aeration C. Hydration D. Dehydration
479	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
480	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	
481	Which one of the following enzymes brings about the hydrolysis of fats?	A. Urease B. Maltase C. Zymase D. Lypase
482	A molecule of polysacharide on hydrolysis produces _____ molecules of monosacharide	A. 2 - 10 B. 3 C. 10 D. 2
483	In MgCl2, the oxidation state ofCl is	A. Zero B. -2 C. +2 D. -1
484	Formic acid is obtained from red out by:	A. Distillation B. Crystallization C. Filtration D. Sublimation
485	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
486	Which of the following is a steroid?	A. vitamin A B. vitamin B C. vitamin C D. vitamin D
487	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
488	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⁺
489	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
490	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
491	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
492	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
		A. Ethanol

493	Halogen is a halo derivative of	B. Methane C. Methanol D. Ethane
494	Which woody raw material is used of the manufacture of paper pulp?	A. cotton B. bagasse C. poplar D. rice straw
495	Which compound shows the highest melting point	A. water B. Propanoic acid C. Methanoic acid D. Ethanoic acid
496	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)
497	Choose the correct statement:	A. SO₂ affects the nucleus B. SO₂ affects plasmodesmate C. SO₂ affects cell wall D. SO₂ affects all membrane systems
498	Ethanol react with HCN to form cyanohydrin, it is an example of.	A. Nucleophilic addition B. Electrophilic addition C. Electrophilic substitution D. Nucleophilic substitution
499	In NO3 the oxidation number of N is.	A. +5 B. +2 C. +3 D. -3
500	The fibre which is made from acrylonitrile as monomer:	A. PVC B. Rayon fibre C. Acrylic fibre D. Polyester fibre
501	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
502	Which solids are called true solids	A. Crystalline B. Vitreous C. Amorphous D. Metallic
503	The process of coagulation can remove suspended solids in raw water about	A. 50% B. 60% C. Less than 40% D. More than 80%
504	Name the compound, which shows geometric isomerism	A. l-bromo-2-chloropropene B. 2.3-dimethy lpropene C. 2-pentene D. Both A & B
505	Which of the following does not give yellow precipitate with I2+ NaOH	A. Acetone B. Benzaldehyde C. Acetildehyde D. Acetophenone
506	Sponification is the hydrolysis of fats or oil with an/a:	A. enzyme B. me5tallic ion C. acid D. alkali
507	Which of the following gives silver mirror with ammonicaT AgNO3	A. Benzyl alcohol B. Benzene C. Benzoic acid D. Benzaldehyde
508	Photochemical smog consists of higher concentration of:	A. Oxidants B. Ozone C. a & b D. NO₃
509	The reagent used to distinguish between ethanol and propanal is	A. I2/ NaOH B. Benedict's reagent C. LiAlH D. sodium nitroprusside
510	What is the percentage of nitrogen in NH_3NO_3?	A. 65% B. 35% C. 20% D. 58%
511	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
512	The system in which all the three axes are unequal and are at righ angle to each	A. cubic B. hexagonal C. orthorhombic

	are at high angle to each other is called	C. orthorhombic D. tetragonal
513	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
514	Which is the most toxic among the given?	A. heavy metals B. non-metals C. Metals D. Metalloids
515	One of the following is a ionic solid. Which is that?	A. Fe B. KBr C. Diamond D. Cr
516	Potassium fertilizers are especially useful for:	A. Tobacco B. Potato C. Coffee D. All of these
517	Highest oxidation state af the transition elements is	A. +8 B. +7 C. +5 D. +1
518	A molecule of polysacharide on hydrolysis produces _____of molecules of monosacharide,	A. 2 - 10 B. 3 C. >10 D. 2
519	Formic acid is given name from Latin word a "formic" which means:	A. Red out B. Vinegar C. Butter D. Milk
520	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.
521	An excellent source of energy without causing pollution is	A. Fossil fuel B. Sun C. Petroleum D. Nuclear reactor
522	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
523	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
524	Which one of the following elements is not present in all protens	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur
525	Chromium (VI) is highly toxic and can cause	A. Blindness B. Cancer C. Liver problems D. Blood problems
526	The percentage of SO_2 produced by volcanoes is:	A. 47% B. 57% C. 67% D. 77%
527	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
528	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
529	TiCl4 is used as catalyst for manufacture of	A. Sulphuric acid B. Plastics C. Ethanol D. Tetraethyl lead
530	Which of the following tends to approach ideal gas like behavior at R.T.P	A. ammonia B. neon C. carbon dioxide D. chlorine
531	Contamination of Hg comes into surface water from chlor industrial wastes	A. It attaches to sulphur of the disulphide link B. Hg is a heavy metal C. Hg is liquid at room temperature

	chlor industrial wastes. Why is Hg toxic	C. Hg is liquid at room temperature D. Hg is reactive chemically
532	The pH range of acid rain is?	A. 7-6.5 B. 6.5-6 C. 6-5.6 D. Less than 5
533	The layer of earth around the earth is called:	A. Atmosphere B. Hydrosphere C. Lithosphere D. Biosphere
534	Choose the crop for which ammonium nitrate is not used:	A. paddy rise B. cotton C. wheat D. sugar cane
535	The compound used to distinguish the ethyne and ethene is	A. Alkaline KMnO4 B. Ammonical AgNO3 C. Bromine water D. Tollen's Reagent
536	which of the following is not a symmetrical ketone	A. 4-heptanone B. Butanone C. Propanone D. 3-pentanone
537	The chemical reactivity of glass is reduced by the use of	A. fluxes B. formers C. stabilizers D. none of the above
538	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
539	Carbohydrate that cannot be digested by human digestive system is	A. Cellulose B. Glycogen C. Starch D. All of these
540	The height of the peak in the mass spectrum shows	A. Number of isotopes B. Relative abundance C. Mass number D. Number of protons
541	What is distilled first?	A. Liquid CO₂ B. Liquid N₂ C. Liquid O₂ D. Liquid H₂
542	SO_2makes _____ acid rains	A. carbonic acid B. Sulfuric C. Nitric acid D. All of these
543	How many esters are possible for C2H8O2	A. 3 B. 2 C. 4 D. 5
544	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
545	Formalin is used as:	A. Fungicide B. Germicide C. Sterilizing of surgical instruments D. All three
546	The emf produced by galvanic cell is called	A. Cell potential B. Oxidation potential C. Redox potential D. Reduction potential
547	Coal contains percentage of sulphur:	A. 1-9% B. 5-9% C. 6-9% D. 7-9%
548	The enzymes that bring about exchange of functional groups like phosphate are called	A. Ligases B. Lyases C. Isomerases D. Transferases
549	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
550	Water which his considered to be safe for human	A. distilled water B. contaminated water C. potable water

	consumption is known as	C. potable water D. rain water
551	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.
552	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
553	Glucose is converted into ethanol by the enzyme present in the yeast	A. Urease B. Zymase C. Invertase D. Sucrase
554	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
555	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
556	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
557	An example of neutral amino acid is	A. Gylcine B. Lysine C. Aspartic acid D. Glutamic acid
558	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
559	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
560	The molarity of 2% W/V NaOH solution is	A. 2 B. 0.25 C. 0.05 D. 0.5
561	The protein component of enzyme Is called	A. apoenzyme B. proenzyme C. holoenyme D. co-enzyme
562	Octyl acetate has the flavor of	A. Orange B. Pineapple C. Banana D. Apple
563	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
564	Elimination unimolecular reactions involve	A. Second order kinetics B. First order kinetics C. Third order kinetics D. Zero order kinetics
565	Which volume of gas has minimum value	A. Apparent volume B. Actual volume C. Excluded volume D. All have equal value
566	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
567	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)
568	In the body carbohydrates are broken down into:	A. glucose B. fatty acids C. amino acids D. nucleic acid

569	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
570	Which one of the following has zero dipole moment	A. NH3 B. CHCl3 C. H2O D. BF3
571	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
572	Which noble gas is used in mixture used for breathing by divers?	A. Ge B. Ar C. Kr D. He
573	The element with highest E°red	A. N B. F C. O D. Cl
574	Elements of group ll-A are called	A. f-block elements B. s-block elements C. p-block elements D. d-block elements
575	The structure of protein helps protein to	A. be in proper shape B. attach substrate C. perform is function D. All of these
576	Which of the following is pure substance	A. Distilled water B. , Sea water C. , NaCl (aq) D. Brass
577	Which is not the affect of polluted air on environment	A. acid rain B. smog C. ozone D. global warming
578	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
579	The basic difference between synthetic and natural fertilizer is in their	A. raw material B. crop application C. usage D. shapes
580	Which of the following is most found in protein molecule	A. Carbon B. Hydrogen C. Oxygen D. Nitrogen
581	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
582	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
583	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
584	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
585	Which factor is helping to reduce the environmental pollution	A. Urbanization B. Industrialization C. Increase of plantation D. Rapid growth of population
586	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
		A. Pollutant

587	Ozone acts as:	B. saver C. oxidatant D. All of these
588	Which one of the following does not show isomerism?	A. Propane B. Hexane C. Butane D. Pentane
589	Raffinose is a trisacharirde composed of monosaccharide is	A. Glucose B. Glactose C. Fructose D. All
590	Lanthanides an actinides belong to following group of periodic table:	A. IB B. VIIIB C. IIB D. IIIB
591	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
592	Which property of liquid is measured by polarimeter	A. Conductance B. Optical activity C. Refractiye Indéx D. Change in volume
593	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
594	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
595	What is the effect of polluted air on environment:	A. ozone B. acid rain C. global warming D. smog
596	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
597	Hexamethylene reacts with _____ to prepare nylon 6,6	A. acetic acid B. adipic acid C. formic acid D. none of above
598	Which one is more toxic?	A. Fe B. C C. Hg D. Ag
599	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
600	Which one of the following elements is not present in all proteins?	A. carbon B. hydrogen C. nitrogen D. sulphur
601	Collagen contains high percentage of	A. Glycine B. Tryptophan C. Phenyl Alanine D. Serine
602	Which of the following gas cannot be liquefied by Linde s method	A. H₂O vapours B. N₂ C. H₂ D. CO₂
603	Question Image	A. T₁= T₂= T₃ B. T₁< T₂< T₃ C. T₁> T₂> T₃ D. T₁> T₂= T₃
604	Equal volume of all gases at same temperature and pressure contain number of molecules	A. different B. multiples C. equal D. in fractions
605	SO2 and NO2 cause pollution due to increase in:	A. buffer action B. basicity C. acidity D. neutrality

606	The buffering property of proteins is due to the presence of	A. Acidic and basic group B. Hydrogen bonds C. Indole group D. Hyrophobic
607	The thickness of ozone layer is:	A. 25----50 km B. 3km only C. 25---28 km D. 1 km only
608	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
609	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
610	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
611	Type of bond between nitrogen and carbonyl group	A. Hydrogne bonds B. Covalent bond C. Peptide bond D. Disulphide bond
612	What is not true about DNA?	A. it preserves genetic information B. Synthesizes protein C. it has a linear structure D. To replicates
613	Part of fresh water consumed in domestic purpose:	A. 1% B. 2% C. 69% D. 8%
614	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
615	Esterification of CH3COOH isreaction	A. Acid base B. Electrophilic C. Redox D. Nucleophilic
616	The crystal of diamond is	A. ionic B. molecular C. covalent D. metallic
617	For better or worst we are living in society:	A. wood B. food C. diseased D. plastic
618	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
619	Which of the following is an example of aldohexose?	A. Ribose B. Sucrose C. Fructose D. Glucose
620	Elements having high ionization potential values are	A. metals B. non- metal C. liquids D. solid
621	in diamond a unit cell is tetrahedral and averall crystai structure is	A. face centred cubic B. body centred cubic C. tetrahedral D. hexagonal
622	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
623	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
		A. Metallic pollution

624	Lead pollution is mainly due to	A. Metallic pollution B. Space pollution C. Acid rain D. Cd pollution
625	Which forms metallic cyrstals	A. Cu B. NaCl C. Diamond D. None
626	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
627	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
628	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
629	Transportation causes to produce CO_2 in atmosphere:	A. 72% B. 73% C. 74% D. 75%
630	How many fertilizer plants are now in Pakistan?	A. 20 B. 14 C. 12 D. 10
631	Large molecules with high molecular mass formed due to smaller units ae called:	A. polymer B. macromolecule C. micromolecule D. a & b
632	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
633	Which of the following liquid has high vapour pressure?	A. H₂O B. ether C. CH₃OH D. C₂H₅OH
634	Moles of protons in 20g of SO3	A. 10 B. 20 C. 40 D. 80
635	Which of these polymers is an addition polymer?	A. nylon 6,6 B. polystyrene C. terylene D. epoxy resin
636	The pi-electrons in the styrene are	A. 13 B. 10 C. 8 D. 6
637	Which is unnecessary for purification of water for drinking purpose?	A. Coagulation B. Treatment with iodine C. Aeration D. Chlorination
638	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
639	Carbon Monoxide is:	A. colouriess B. orderless C. high toxic D. All of these
640	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
641	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
642	Proxy acetyl nitrate (PAN) is an irritant to human	A. Nose B. Stomach C. Eyes

	beings and it affect	D. Ears
643	Which gas is not a constituent of atmosphere?	A. Xe B. O₃ C. H₂ D. F₂
644	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
645	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
646	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
647	Which of the following transition metal forms colourless compounds in +4 oxidation state?	A. Ti B. Cr C. Cu D. Zn
648	Common names of carboxylic acids are given by then:	A. Source B. Person discovered C. Place D. Habit
649	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
650	A substances has M_r 74.5, 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
651	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
652	Enzymes have been classified on the basis of	A. protein structure B. prosthetic groups C. type of reaction they catalyse D. bonding in them
653	Oxygen molecule is 16 times heavier than:	A. Helium B. Hydrogen C. Neon D. Aluminium
654	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
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	Oxidation of secondary alcohol produces	A. Aldehyde B. Ketone C. Alkyl halide D. Ester
657	C-H bond length in the benzene is	A. 0.99A° B. 1.09A° C. 1.12A° D. 1.34A°
658	Pyridine is an example af	A. Homocyclic compound B. Heterocyclic compound C. Carbocyclic compound D. Aliphatic compound
659	Equal volume of all gases at same temperature and pressure contain number of molecules:	A. multiples B. equal C. different D. in fractions
660	Cement is mixture of so many compounds roasted in rotary kiln.Which substance has greater	A. Lime B. Alumina C. Silica

	substance has greater percentage:	D. Magnesia
661	Cane sugar on hydrolysis gives	A. Glucose+Glucose B. Glucose+Fruclose C. Glucose+Galactose D. Glucose+Gacatose
662	Which of the following liquids have low vapour pressure at 25°C	A. Water B. Ethyl alcohol C. Acetone D. Diethyl ether
663	Albumins and globulins are defined as	A. Derived protein B. Conjugated protein C. Fibrous protein D. Globular protein
664	Which one of the following is more acidic	A. Phenol B. Carboxylic acid C. Alcohols D. Amines
665	R = 0.08205:	A. atm dm³mol⁻¹k⁻¹ B. J mole⁻¹k⁻¹ C. Nm mol⁻¹k⁻¹ D. cal. mol⁻¹k⁻¹
666	N terminal of glutathione is	A. Glycine B. Cysteine C. Glutamate D. Aspartate
667	Most complex structure of protein is	A. Primary protein B. Secondary protein C. Tertiary protein D. Quaternary protein
668	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
669	Dehydrogenase is an example of	A. ligase B. oxidoreductase C. lyase D. hydrolase
670	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
671	In proteins, the alpha-helix and Beta-pleated sheet are examples of	A. ^{Primary Structure} B. Secondary Structure C. Tertiary Structure D. Quaternary Structure
672	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
673	Cotton is _____ % cellulose	A. 90 B. 100 C. 99 D. 30
674	Which of following is oxidation state of oxygen in peroxides?	A. -2 B. 1/2 C. -1 D. +2
675	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
676	The non polar gases of low polarizability have a very:	A. Low critical temperature B. Stable critical temperature C. High critical temperature
677	An element that is not an essential par of proteins is	A. O B. N C. H D. S
678	Carboxylic acid is more acidic than phenol because of the greater stability of	A. Carboxylic acid B. Phenoxide ion C. proton D. Carboxylate ion
679	London forces are more affective at:	A. high temperature B. low temperature C. low pressure D. high pressure
	Each of the following	

680	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
681	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
682	Which one the following gases is ideal at -200°C?	A. N₂ B. He C. both D. none
683	The potential difference of an electrochemical cell is measured by	A. Calorimeter B. Voltmeter C. Galvanometer D. Ammeter
684	The enthalpy of formation of a compound is	A. Positive B. Either positive or negative C. Negative D. None
685	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
686	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
687	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
688	The nature of I_2crystals are	A. Metallic B. Covalent C. Ionic D. Molecular
689	Ether show the phenomenon of	A. Positional isomerism B. Functional group isomeris C. Meta merism D. Cis trans isomerism
690	The oxidation state of carbon in C2O-²4 is	A. +4 B. -4 C. +3 D. +2
691	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
692	Which one of the following is NOT a nucleophile	A. NH2+ B. BF3 C. H2O D. CH3-
693	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
694	Which of the following is a non-crystalline solids pair	A. Diamond, wood B. Glass, table salt C. Wood, glass D. Sucrose, glass
695	Which is not a calcareous material?	A. line B. clay C. marble D. marine shell
696	The formation of PVC from vinyl chloride is an example of	A. subtsitution reaction B. addition polymerization C. condensation polymerization D. condensation reaction
697	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
698	Which of these polymers is a synthetic polymer?	A. animal fat B. starch C. cellulose D. polyester

699	The optimum pH value for the enzyme "Pepsin" is:	A. 2 B. 8 C. 10 D. 1.4
700	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.
701	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
702	Which one of the following is not type of polymer:	A. copolymer B. homopolymer C. terpolymer D. hereropolymer
703	Slight oxidation of primary alcohol eives	A. Ketone B. Aldehyde C. -Organic acid D. An ester
704	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
705	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
706	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
707	For incineration temperature range is (in ^{o}C)	A. 700-800 B. 800-900 C. 900-1000 D. 1000-1100
708	Which is used as a coagulant:	A. Ferric salts B. Potash alum C. a and b both D. Chlorine
709	Which one of the following element is not present in all proteins?	A. carbon B. hydrogen C. nitrogen D. sulphur
710	The other name for cross linked polymers is	A. Linear polymer B. Branched polymers C. Inter connected polymers D. None of these
711	Group of element belongs to IIB group	A. Zn. Cd. Hg B. Cu. Ag. Au C. Sc. Y. La D. Ni. Pd. Pt
712	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
713	Which of the following shows group IIIB	A. Zn, Cd. Hg B. Cu. Ag. Au C. Sc. Y. La D. Ni. Pd. Pt
714	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
715	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
716	At room temperature, the vapour pressure of water and ether will be	A. equal B. different C. zero D. almost same
717	How much quantity of water is in the domestic use	A. 0.08% B. 16% C. 24% D. 90%

718	Which of the following gases have lowest density at room temperature	A. CO B. N₂ C. Ne D. NH₃
719	Gases are good conductor of electricity at	A. Low temperature B. Low pressure C. High pressure D. Low temperature and high pressure
720	The element which shows highest binding energy	A. V B. T C. So D. Cr
721	Which of the following activates phosphatase enzyme	A. Ca²⁺ B. K⁺¹ C. Mg²⁺ D. Zn²⁺
722	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
723	Smell of cooking gas during leakage from gas cylinder is detected because of the property of:	A. Effusion B. Evapotration C. Diffusion D. Conduction
724	The alternate name of Glucose is	A. Dextrose B. Grape sugar C. Blood sugar D. All
725	Factors affecting quality of water:	A. D.O B. BOD C. COD D. a,b,c
726	The specie that develops strongest hydrogen bonding with water	A. HCOOH B. B.CH3CH2COOH C. CH3COOH D. ClCH2COOH
727	Which one of the following is co-polymer	A. PVC B. PVA C. Polystyrene D. Terylene
728	The volume of a real gas	A. is constant B. increases with T decrease C. becomes zero at absolute zero D. never becomes zero
729	Percentage of nitrogen by volume in air is	A. 20% B. 78% C. 98% D. 50%
730	Butane has isomeric forms	A. 3 B. 4 C. 2 D. 1
731	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
732	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
733	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
734	Storage form of iron	A. Transferrin B. Ferritin C. Myosin D. Actin
735	Chloroform is carcinogenic:	A. Heart B. Lungs C. Liver D. Kidney
736	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
737	A single chlorine free radical can destroy how	A. 100 B. 100000

	many ozone molecules	C. 10000 D. 10
738	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
739	Which compound is not formed as a result of reaction between acetic acid & HI & red phosphorous	A. Ethanol B. Water C. Iodine D. Ethane
740	$(CH_2O)_n$is general formula for	A. Monosacchardies B. Oligosaccharides C. Polysaccharides D. None of these
741	Which one of the followings is resistant to oxidation under normal conditions	A. Methyl alcohol B. Acetaldehyde C. Ethyl alcohol D. Acetone
742	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
743	Vapour pressure of a substance does not depend upon:	A. physical state of matter B. temperature C. intermolecular forces D. surface area
744	Polar ice caps and glaciers consists total earth water:	A. 1% B. 2% C. 3% D. 4%
745	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
746	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
747	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
748	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
749	The normal amount of overhead ozone is about in DU:	A. 150 B. 250 C. 350 D. 450
750	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
751	Which of the following compound shows the geometrical isomerism	A. 2-butene B. 2-butyne C. 2-butanol D. Butanol
752	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
753	The elements of group I-A react violently with water and make the solution	A. neutral B. amphoteric C. acidic D. alkaline
754	Which of these polymers is a synthetic polymer?	A. starch B. animal fat C. polyester in an addition polymer D. cellulose

755	$[Ti(H_2O)_6]^{+3}$ transmits	A. Yellow and Red light B. Yellow and blue light C. Red and white light D. Red and blue light
756	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
757	Which one of the following will have the smallest radius?	A. Al⁺³ B. Si⁺⁴ C. Mg⁺² D. Na⁺²
758	The red brown ppt. of Fehling solution and benedict solution tests are of	A. Ag B. Cu2O C. CuO D. AgBr
759	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
760	All of the following have cleavage planes except:	A. molecular crystals B. metallic crystals C. covanent crystals D. ionic crystals
761	The curve which is obtain from Boyle's law is called as	A. Isochoric B. Isotherm C. Adiabatic D. All of these
762	Silk is an example of:	A. animal fiber B. vegetable fiber C. mineral fiber D. none of all
763	The maximum oxidation state of Mn is	A. +6 B. +7 C. +5 D. +4
764	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
765	Term ozone hole is used for depletion of ozone during months of:	A. Jan-Feb B. March - Sep C. Sep- Nov D. Dec-Feb
766	A pressure of $1Nm^{-2}$ is equal to:	A. one bar B. one pascal C. stalagmometer D. one aomosphere
767	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
768	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
769	Which of the following does not represent a type of crystal system	A. Triclinic B. Monoclinic C. Rhombohedral D. Isotropical
770	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
771	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
772	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
	Always carboxylic acid	

773	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
774	_____ is the major source of acid deposition in atmosphere.	A. SiO2 B. CO2 C. SO3 D. Al2O3
775	Crystal lattice of the substances can be categorized into	A. five types B. seven types C. six types D. none of these
776	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
777	Which of the following belongs to alkaline earth metals	A. Cu B. Zn C. Sn D. Mg
778	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
779	Acetic acid is obtained from:	A. Red out B. Vinegar C. Butter D. Milk
780	[Ti (H20)6]3+ ion isin colour.	A. Yellow B. Blue C. Violet D. Red
781	Helical structure of protein is stabilized by	A. Peptide bond B. Dipeptide bond C. Van der wall's forces D. Hydrogen bonding
782	The fertilizer contains 33___35%n is:	A. ammonium nitrate B. potassium nitrate C. urea D. ammonia
783	Plastic toys are	A. Copolymer B. Thermoplastic polymer C. Thermosetting polymer D. Homopolymer
784	Formula of sodium beryllite is	A. Na2B4O7 B. Na2BeO2 C. BeONa D. Na2B4O7 .10 H2O
785	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
786	Reason of pollution are:	A. Population and urbanization B. Transportation C. Industrialization D. All of these
787	Benzene in the presence of AlCl3 produces acetophenone when reacts with	A. Acetyl chloride B. Ethyl benzene C. Acetic acid D. Ethanoic acic
788	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
789	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
790	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
791	Plasma proteins are separated by	A. Dialysis B. Electrophoresis C. Filtration D. Alcohol precipitation
	Halogen are being used as	

792	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
793	Elements of group IV-A are	A. neither strongly electropositive nor strongly electronegative B. strongly electropositive C. strongly electronegative D. none of these
794	Soaps are basically salts of	A. Glycerol B. Triglyceride C. Fatty acid D. Fat
795	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
796	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
797	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
798	Dissolved impurities of potable water can be separated by the process of	A. reduction B. Aeration C. Electrolysis D. Co-angulation
799	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
800	The non-stick lining of pans is.	A. Diffluoroethane B. Chlorofluororylhane C. Chloroethane D. Tetrafluoroethane
801	The enzymes that catalyse the addition or removal of ammonia are:	A. Lyases B. Ligases C. Transferases D. Kinses
802	BOD is the oxygen demand with in day(s):	A. Four B. Two C. Three D. Five
803	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
804	Density of water becomes maximum at	A. 10°C B. 4°C C. 5°C D. 12°C
805	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
806	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
807	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
808	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

809	Which of the following is BLOOD iron carrier	A. Haemoglobin B. Albumin C. Transferrin D. Globulin
810	Catalyst used for ammonia synthesis is	A. Cu B. Co C. Zn D. Fe
811	Exposure to CO results in	A. Headche B. Fatigue C. Unconsciousness D. All of these
812	Diamond, graphite and sand grant molecules are belonged to:	A. Inorganic B. Organic C. biopolymer D. synthetic
813	Digestion of carbohydrates begins in the	A. large intestine B. Small intestine C. Duoderium D. Buccal cavity / mouth
814	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
815	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
816	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
817	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
818	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
819	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
820	Which one among the following is not a natural polymer	A. Protein B. Cellulose C. Nylon D. Nucleic acid
821	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
822	Poly hydroxyl compounds of aldehyde and ketones are?	A. Carbohydrates B. Proteins C. Fats D. Lipids
823	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
824	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
825	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
826	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

827	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
828	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
829	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
830	Question Image	
831	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
832	A molecule oilgosacharide on hydrolysis produces _____ molecules of monosacharide:	A. 1 B. 2 C. 4 D. 6
833	Reaction of alcohol with hydrogen chloride, in the presence of Zinc chloride yields	A. Ketone B. Carboxylic C. Alkyl halide D. Ester
834	Polymerization process was classified in	A. 1926 B. 1927 C. 1929 D. 1931
835	A polymer of polyvinyl chloride with DP 1000 has molecular or molar mass:	A. 630 B. 6300 C. 63000 D. 630000
836	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.
837	Industrial effluents have toxic synthetic organic compounds as well as heavy metals like	A. Pb B. Cr C. Hg D. All of these
838	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
839	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
840	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
841	Activity of the enzyme is reduced by	A. temperature B. concentration C. pH D. inhibitors
842	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
843	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
844	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.
845	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
846	The most important pesticides are:	A. Herbicides B. Insecticides C. Fungicides

	pesticides are:	C. Pungicides D. All
847	Which of the following acid is unsaturated carboxylie acid	A. Malonic acid B. Oxalic acid C. Succinic acid D. Maleic acid
848	The law of distribution of energy is given by	A. Clausius B. Maxwell C. Bernoulli D. Boltzmann
849	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
850	The order of reactivitv of alksl halides towards nucleophile is	A. RI>RBr RF>RCI B. RF>RCl>RBr>RI C. RI>RBr> RCl>RE D. RF>RBr>RCl>RI
851	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)
852	Industrial materials and thermal power stations are coated by	A. PVC B. Polyester C. Epoxy resin D. PVA
853	The total number of lattice arrangements in different crystal system is	A. 7.0 B. 3.0 C. 8.0 D. 14
854	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
855	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
856	The number of paper industries in Pakistan are	A. 30 B. 25 C. 35 D. 20
857	Caseinogen is	A. Simple protein B. Derived protein C. Phosphoprotein D. Rich in sulfur containing amino acids
858	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
859	The factor responsible for lower mercury level in a capillary tube is	A. High density B. Surface tension C. Liquid state D. Metallic Colour
860	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
861	The compound that has zero dipole moment is	A. HCl B. H₂S C. NH₃ D. CH₄
862	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
863	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
864	A single free chlorine redical can destroy ozone molecules upto:	A. 100000 B. 100 C. 1000 D. 10000
865	Tasteless sugars are:	A. monosaccharides B. trisaccharides

	Tasteless sugars are:	C. oligo saccharides D. poly saccharides
866	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
867	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
868	Diffusion of different species is due to difference of	A. potential energy B. temperature C. density D. all the above
869	In esterification, the OH of carboxylic acid is replaced by	A. OR+ B. R+ C. OR D. R
870	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
871	Which molecule is least ionic"	A. NaCl B. HCL C. HF D. CsF
872	Which of the following metal oxides is antiferromanetic in nature?	A. MnO₂ B. TiO₂ C. NO₂ D. CrO₂
873	Pathogens in raw water are killed in step:	A. aeration B. coagulation C. chlorination D. treatment
874	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
875	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
876	Inside every fluorescent lamp there is present a:	A. Gas B. Plasma C. Liquid D. Solid
877	The elements like N,P,K added into the large amount in soil are called:	A. Basic elements B. Additives C. Macronutrients D. Micronutrients
878	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
879	All the Hydrolytic reactions are	A. First order B. Second order C. Third order D. pseudo-first order
880	Calorie is equivalent to	A. 0.4184J B. 4.184J C. 418.4J D. 40.18J
881	Ionization of KClO3. is suppressed by	A. Increasing temperatuse B. adding KCl C. adding NaNO3 D. Decreasing temperature
882	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
883	CFCs destroy ozone layer. How many ozone molecule a chlorine free radical can	A. 50000 B. 20000 C. 100000

	destroy?	D. 10000
884	The % of CO_2 in the atmosphere is	A. 3.0% B. 0.03% C. 0.3% D. 0.5%
885	Stronger the intermolecular forces	A. Lower the Vapour pressure B. Greater the Vapour pressure C. May be smaller or greater D. None
886	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
887	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
888	The gases law describe the _____ Behaviour of gases	A. Variable B. Constant C. Uniform D. Best
889	Which one of the following is the most abundant organic substance found in nature?	A. fructose B. starch C. glucose D. cellulose
890	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
891	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
892	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
893	Which polymerization is free radical mechanism based	A. Addition B. Condensation C. Both a and b D. None
894	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
895	Dehydrogenase is an erample of	A. Transferase B. Hydrolase C. Lyase D. Oxido-reductase
896	Which products are formed when triglyceride is hydrolysed	A. Glycerol B. Fatty acid C. Glycerin D. Both A and B
897	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
898	Digestion of carbohydrates begins in the:	A. large intestine B. small intestine C. duuoderium D. beccal cavity/mouth
899	.The number of moles in 2.24 dm3 of H2 gas at STP is:	A. 1 B. 0.1 C. 10 D. 0.01
900	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
901	The reaction takes place among the molecules when they have:	A. Activation energy B. Properly oriented C. Concentrated D. Activation energy and proper orientation
902	Reason for the rancidity of fat is	A. Low sponification B. High reactivity of fat C. Oxidation of fat D. All

903	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
904	Density of a gas is usually expressed in	A. Kg m³ B. Kg dm³ C. g dm⁻³ D. g cm⁻³
905	The normal amount of overhead ozone is	A. 350 DU B. 450 DU C. 400 DU D. 300 DU
906	Most reactive among the following	A. Li B. Mg C. Ca D. Na
907	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
908	Born-Haber cycle is an application of	A. Hess's law B. 1" law of thermodynamics C. Avogadro's law D. 1law of thermochemistry
909	Which one of the following polymer is called as Nylon 6,67	A. Polyester B. Polyvinyl chloride C. Polyemide D. Polyvinyl acetate
910	Which one of the following molecules show maximum hydrogen bonding?	A. H₂O B. H₂Se C. H₂S D. HF
911	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
912	The synthesis of ethene from ethyl alcohol is a reaction	A. Dehydration B. Polymerization C. Addition D. Substitution
913	The vapour pressure of a liquid depends upon	A. amount of the liquid B. surface area C. temperature D. size of container
914	Which of the following gives positive haloform test and positive Fehling solution	A. Acetone B. Echanol C. Acetaldehyde D. Formaldehyde
915	The pH range of the acid rain is	A. 6.5 - 6 B. Less than 5 C. 8 - 7.5 D. 7 - 6.5
916	Which of the following has no hydrogen-bonding	A. Diethyl ether B. Water C. Ethyl alcohol D. Phenol
917	Active sulphonating agent during sulphonation of benzene is	A. SO2 B. SO3 C. SO3H D. SO3+
918	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
919	Which of the following is used as coagulant for purification potable water?	A. Copper sulphate B. Barium sulphate C. Alum D. Nickel sulphate
920	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
921	Ammonium nitrate fertilizer is not used for which crop:	A. cotton B. wheat C. sugar cane D. paddy rice

922	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
923	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
924	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
925	Water may boil at 170C when external pressure is	A. 760 torr B. 170 torr C. 2115 torr D. 700 torr
926	Carboxylic acid can be prepared from the reaction of Grigard's reagent with:	A. Aldehydes B. Ketones C. Formaldehyde D. CO₂
927	Density of a gas increases by	A. increasing value of R B. decreasing value of R C. increasing T D. decreasing T
928	The dilute solution of _____ is called vinegar.	A. Formic acid B. Acetic acid C. Oxalic acid D. Benzoic acid
929	Which one is a non-polar compound?	A. SnCl2 B. PH3 C. Gecl4 D. H2O
930	The film forming components of paints are	A. resins B. thinners C. pigments D. driers
931	Lonic solids are characterized by:	A. low melting points B. _{good conductivety in solid state} C. high vapour pressures D. solubility in polar solvents
932	Sugar are polyhydroxy compounds of	A. Carboxylic acid B. Ketones C. Aldehyde D. Both B and C
933	Sterols, vitamin D and terpenese belong to	A. Simple lipids B. Complex lipids C. Derived lipids D. None
934	In Purification of potable water the coagulant used is	A. nickel sulpahte B. copper sulpahte C. barium sulphate D. alum
935	The mono atomic gas molecules are _____ gas molecules	A. Halogen B. Zero C. Noble D. Both b and c
936	What element is not essential for the growth of plants and not required in the fertilizers?	A. nitrogen B. potassium C. phosphorus D. barium
937	Which is not present as heteroatom in heteroeyclie compounds?	A. Sulphur B. Nitrogen C. Oxygen D. Chlorine
938	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
939	Which of the following least resemble an ideal gas?	A. ammonia B. helium C. hydrogen D. trichloromethane
940	Lattice energy is also termed as	A. ionization B. crystal energy C. dissociation D. bond energy

941	Nucleic acid contain elements like N,H,O,C and	A. Ca B. S C. P D. F
942	Detergent greatly effects the	A. Aquatic life B. Modern life C. Terrestrial life D. Plants life
943	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
944	Polypeptides are formed from amino acids by	A. Oxidation B. Addition C. Condensation D. Reduction
945	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
946	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
947	Cotton has cellulose in it:	A. 96% B. 97% C. 98% D. 99%
948	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
949	All of the following are aliphatic amino acids except	A. Glycine B. Alanine C. Proline D. Lysine
950	Intermolecular forces are _________ than binding forces	A. stronger B. Equal C. Weaker D. None
951	Usually the % of moisture in paper is:	A. 1---3% B. 6---8% C. 4---6% D. 5%
952	At 100 atm, CH_4 develops:	A. Ideal attitude B. Non-ideal attitude C. Serious attitude D. Laughing attitude
953	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
954	Van der Waals equation explains the behaviour of	A. Real gases B. Mixture of gases C. Ideal gas D. Diatomic gases
955	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
956	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
957	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
958	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
959	Gases are effused through a whole due to _______ motion	A. Vibration B. Rotaional C. Translational D. Chaotic
	If v is the volume of one	

960	molecule of a gas under given conditions, then Van der Waals constant b is ($N_A$is Avogadro number)	
961	Which of following is primary pollutants	A. N₂O B. PAN C. H₂SO₄ D. None of these
962	Which of the following factors is not used to determine the quality of water	A. COD B. BOD C. DO D. Available chlorine
963	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
964	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
965	The volume of gas depends upon the------- moleules	A. Size of B. Space between C. Molecular weight D. both a and b
966	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
967	solubility of carboxylic acids decreases in water with increase in molar mass because	A. Bigger molecules are more polar B. bigger molecules have bigger non-polar groups C. bigger molecules make more hydrogen bonds D. bigger molecules can form lesser hydrogen bonds/molecule
968	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
969	Organic pollutants in water are measured by	A. DO B. COD C. Water logging D. PH
970	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
971	Total heat content of a system is called	A. Internal energy B. Entropy C. Enthalpy D. All of these
972	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
973	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
974	The amount of Si in the lithosphere is about	A. 27.72% B. 30.35% C. 35.30% D. 40.21%
975	What is the most common catalyst used in hydrogenation of oils?	A. cobalt B. nickel C. tungsten D. copper
976	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

977	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
978	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
979	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
980	The number of resonating structures of phenoxide ion are	A. 3 B. 5 C. 6 D. 4
981	Albumin, globin and casein are	A. Milk proteins B. Plasma proteins C. Egg proteins D. Meat proteins
982	At equilibrium, the concentration of reactants and products are	A. Constant B. Maximum C. Different D. Equal
983	Residence time of methane in the atmosphere is	A. 3 - 7 days B. 2 -3 days C. 3 - 7 years D. 2 - 3 years
984	Which pair of molecules have debye force	A. Ne and Ne B. Argon and water C. Na⁺ion and water D. Water and water
985	Atmosphere consists of gasses:	A. N₂ B. O₂ C. Ar D. All
986	Which of the following is an example of body centred cube?	A. Magnesium B. Zinc C. Copper D. Sodium
987	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
988	Which impurity makes the shape of NaCl crystal needle like	A. MgSO4 B. urea C. glucose D. MgCO3
989	The reaction of alkyl halide in the presence of alcoholic KOH is	A. Substitution B. Addition C. Acid-base D. Elimination
990	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
991	A polymer of PVC having D.P 500 has molar mass:	A. 6300 B. 63000 C. 3150 D. 31500
992	It is a biodegradable pollutant	A. Salts of HG B. DDt C. Aluminum foil D. Domestic fuel
993	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
994	Which one of the following is not a component of environment:	A. biosphere B. stratosphere C. hydrosphere D. lithosphere
995	Which of the following category of enzyme catalyze addition of Ammonia	A. Ligases B. Lyases C. Isomerases D. Pepsinogen

996	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
997	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
998	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
999	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
1000	Which type of motion is exhibited by gases?	A. Vibrational B. Transitional C. Rotational D. All of them
1001	Properties of polymeric material depends upon	A. Chemical composition B. Structure of molecule C. Boiling point D. Both A and B
1002	Which of the following substance is used as filler or additive in paper making:	A. Glucose B. Starch C. Fructose D. Cellulose
1003	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
1004	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
1005	Which is biopolymer?	A. Plastic B. Rubber C. synthetic fiber D. Lipid
1006	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
1007	Ethene can give all of the following reactions except	A. Addition B. Free radical substitution C. Hydrohalogenation D. Hydration
1008	The existence of an element in more than one form is called	A. allotropy B. isomorphism C. polymorphism D. isotropy
1009	The fibre which is made from acrylonitrile as monomers	A. PVC B. Rayon fibre C. Acrylic fibre D. Polyester fibre
1010	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
1011	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
1012	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
1013	Number of neutrons in $^{66}_{30}Zn$ will be	A. 30 B. 35 C. 38 D. 36

1014	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
1015	Exhaust fumes of cars contain which poisonous gas	A. CH₄ B. C₂H₆ C. CO D. All of these
1016	Which of these polymers is a synthetic polymer	A. Animal fat B. Strach C. Cellulose D. Polyester
1017	The critical temperature of CO_2_____°C at 73 atm critical pressure	A. 21.142 B. 28.892 C. 31.142 D. 35.452
1018	Ecosystem is a smaller unit of	A. Hydrosphere B. Lithosphere C. Biosphere D. Atmosphere
1019	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
1020	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
1021	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
1022	Which is the polymer that has amide linkage in its structure	A. PVC B. Poly ethene C. Polyester D. Nylon
1023	The rate of diffusion of two gases are inverselly 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
1024	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
1025	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
1026	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
1027	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
1028	Chemicals used to kill herbs are:	A. Herbicides B. Insecticides C. Pesticides D. Fungicides
1029	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
1030	Which not a method for solid waste management>	A. Landfill B. Incinerating C. Recycling D. None of these
1031	Oceans cove _____ percent of the surface of the earth	A. 60 B. 70 C. 80 D. 97

1032	Macromolecules are classified:	A. inorganic B. organic C. biopolymer D. synthetic
1033	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
1034	Which of the following is pseudosolid?	A. CaF₂ B. Glass C. NaCl D. All
1035	Absolute temperature of a gas is proportional to:	A. Rotational Kinetic energy B. Translational Kinetic energy C. Vibrational Kinetic energy D. Potential energy
1036	Polysaccharides are also called	A. Crystals B. Sugars C. Liquids D. Non Sugars
1037	Which of the following has the lowet solubility in water	A. HCOOH B. CH3COOH C. CH3-CH2-COOH D. C3H7-COOH
1038	Which of the following is not a secondary pollutant	A. Ozone B. Carbonic acid C. Sulphuric acid D. Carbon dioxide
1039	Chemicals used to kill pests are:	A. Herbicides B. Insecticides C. Pesticides D. fungicides
1040	Plaster of Paris is obtained from	A. marble B. bauxite C. gypsum D. limestone
1041	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
1042	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
1043	For a chemical reaction which can never be a fractional no	A. order B. molecularity C. half-life D. rate constant
1044	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
1045	Dalton's law finds its application during the process of:	A. Digestion B. Respiration C. Reproduction D. All of above
1046	Which one of the following is a water soluble vitamin	A. Niacin B. Riboflavin C. Trypsin D. Ascobic acid
1047	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
1048	Choose the correct statements	A. SO₂affects the nucleus B. SO₂affects plasmodesmata C. SO₂affects cell wall D. SO₂affects all membrane systems
1049	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
1050	The layer of gases around the earth are called?	A. Atmosphere B. Hydrosphere C. Lithosphere D. All of these
1051	Ketones are less reactive	A. alkyl groups electorn donation B. steric hindrance is greater in ketone

1051	than aldehydes because:	C. both a and b D. ketones are non-polar
1052	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)
1053	Which ion is most polarising?	A. Al³⁺ B. Ba²⁺ C. Mg²⁺ D. Na⁺
1054	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
1055	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
1056	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
1057	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
1058	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
1059	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
1060	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
1061	Many petroleum products are:	A. coloured B. colourless C. testy D. poisoinous
1062	What is the formula of talc or soapstone?	A. Na2B4O7.10H2O B. H2Mg3(SiO3)4 C. Cu2S D. NaNO3
1063	The main pollution of leather tanneries in the waste is due to the salt of	A. Chromium B. Copper C. Chromium D. Lead
1064	Empirical formula of monosaccharide is	A. (CHO)_n B. CH_nO_{n+1} C. C_nH₂O D. (CH₂O)_n
1065	$NaNO_3$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
1066	Compounds having -CH group are called as	A. Cyano compounds B. Nitro compounds C. Carbon nitrogen compounds D. Nitriles
1067	Which of these polymers is an addition polymer?	A. nylon 6,6 B. Polystyrene C. terylene D. epoxy resin
1068	At higher temperature isotherm moves away from y-axis because of increase in	A. Pressure B. Number of moles C. Volume D. Mass
1069	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
1070	Theoretically, the temperature at which	A. Boiling point of water B. Zero absolute

	volume of gas become equal to zero is called	C. Zero Kelvin D. both B and C
1071	All are dicarboxylic acids except	A. Oxalic acid B. Malonic acid C. Picric acid D. Tartaric acid
1072	The structure of sodium chloride is	A. simple cube B. body centered cubic C. face centered cubic D. depends upon conditions
1073	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
1074	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
1075	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
1076	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
1077	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
1078	Which substances do not react immediately with bromine water	A. Wthane B. Benzene C. Ethene D. Phenol
1079	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
1080	Which is inorganic polymer?	A. Plastic B. Rubber C. synthetic fiber D. Lipids
1081	2,5-dimethyl-1-hexene has	A. Two sp2 hybridized carbons B. Six sp2 hybrid carbons C. Two double bonds D. Four pi electrons
1082	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
1083	Lithosphere has amount of silicon	A. 35.30% B. 27.72% C. 40.01% D. 21.13%
1084	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
1085	Unit of the rate constant depends upon the	A. Molecularity of reaction B. Order of reaction C. Concentration terms D. Number of reactants
1086	Oxidation reduction is done by	A. Oxidoreductase B. Lipases C. Lyase D. None of these
1087	The number paper industries in Pakistan are:	A. 30 B. 25 C. 35 D. 20
1088	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

1089	Dipole-dipole forces are present between:	A. non-polar molecules B. polar molecules C. both polar and non-polar D. none pf above
1090	Which of the following least resembles an ideal gas?	A. ammonia B. helium C. hydrogen D. trichloromethane
1091	The volume of given mass of gas is directly proportional to absolute temperature when pressure is kept constant this is called	A. Boyle's law B. Charles's law C. Graham's law D. Dalton's law
1092	Global warming is mainly caused by _____ radiations	A. UV B. I.R C. gama D. X-rays
1093	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
1094	Ozone in stratosphere extends upto km:	A. 0-15 km B. 10-15 km C. 15-40 km D. 15-25 km
1095	Which alkaline earth metal makes peroxide?	A. Ba B. Be C. Mg D. Ca
1096	Pan is an irritant to human beings and it affects	A. Eyes B. Nose C. Hair D. Skin
1097	Butane molecule can have max no of isomers.	A. 4 B. 5 C. 3 D. 2
1098	Alkaline phosphatese is associated with _____ disease	A. Heart disease B. Rickets C. Diabtese D. None
1099	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
1100	Energy required to remove electron from an atom	A. Ionization potential B. Electronegativity C. Electropositivity D. Electron affinity
1101	The minimum temperature recorded by Kelvin scale is:	A. 273K B. 373K C. Absolute scale is unable D. 0K to record this temperature
1102	What is the formula of cryolite?	A. Al2O3.2H2O B. Na2B4O7 .10 H2O C. Na3AlF6 D. Ca2B6O11. 5H2O
1103	Which of the following is a molecular formula of vinyl acetate	A. C₄H₆O₂ B. C₂H₄O₂ C. C₄H₆O₃ D. None of these
1104	Optimum temperature for enzyme activity is	A. 125°C B. 37°C C. 40°C D. 100°C
1105	All the following have crystals except:	A. potassium bromide B. diamond C. cadmium sulphide D. sodium chloride
1106	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
	Rancidification of fast and	A. hydrolysis reaction B. oxidation reaction

1107	Rancidification of fast and oils is due to:	B. oxidation reaction C. both a and b D. hydrogenation reaction
1108	Zwitterion is formed by	A. Lysine B. Benzoic acid C. Aniline D. Acetamide
1109	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
1110	Example of basic essential amino acids	A. Arginine B. Histidine C. Lysine D. All of the above
1111	Which is the drived lipid?	A. Common fats B. Vitamin-D C. Common oils D. Spinolipids
1112	Cooling happens under the Joule Thomson Effect due to sudden:	A. Contraction. B. Absorption. C. Expansion. D. All of above.
1113	Ozone layer is present in	A. Troposphere B. Stratosphere C. Mesosphere D. Ionosphere
1114	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
1115	The simplest separating unit of a polymer is called:	A. Monomer B. Dimer C. Trimer D. Macromer
1116	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
1117	Polumerization process was classified by	A. W.H. Garold B. William Hackel C. W.H. Carothers D. H. Carothers
1118	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
1119	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
1120	The value of R in term of $dm^3torr\ k^{-1}mol^{-1}$	A. 62400 B. 62.4 C. 8.313 D. 0.0821
1121	Which behaves as insulator for animals body?	A. Carbohydrates B. Proteins C. Fats D. Skin
1122	The reaction C2H5Cl + aqueous KOH--------- C2H5OH+ KCl is	A. Electrophilic addition B. Nucleophilic addition C. Electrophilic substitution D. Nucleophilic substitution
1123	Setting process of cement is based on:	A. Hydrolysis B. Dehydration C. Hydration D. Oxidation
1124	In a group, the atomic radii from top to bottom	A. increase B. decrease C. don't change D. show variable trend
1125	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
	In many countries plastic	

1126	waste is collected separataly 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
1127	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
1128	Factors affected denaturation of proteins:	A. Change in temp and pH B. Strong reducing agent C. Strong oxidizing agent D. All of these
1129	By convention, the standard heat of formation of all elements is assumed to be	A. Zero B. positive C. Negative D. Infinity
1130	Ozone is present in layer around earth:	A. atmosphere B. tropospher C. stratosphere D. thermosphere
1131	For gases obeying Boyle's law, if pressure is quadrupled, the volume becomes	A. Double B. One half C. One fourth D. Remains constant
1132	Which is not an essential amino acid	A. Leucine B. Methionine C. Histidine D. Lysine
1133	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
1134	Kerosene is liquid at room temperature.This is due to:	A. organic nature B. H-bonding C. molecular size D. dipole-dipole forces
1135	Formation of PVC form vinyl chloride is an example of	A. substitution reaction B. addition polymerization C. condensational reaction D. Aldol condensation
1136	In a cubic lattice a unit cell is shard equally by how many unit cells?	A. 4 B. 2 C. 6 D. 8
1137	Pressure of 1Nm^{-2} is equal to	A. One bar B. 1 psi C. One pascal D. One atmosphere
1138	In the body fats are hydrolysed into:	A. fatty acid and water B. fatty acid C. glycerol and water D. acid and glycerol
1139	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
1140	Which one is non-reducing sugar?	A. sucrose B. glucose C. fructose D. galactose
1141	In macromolecules DP stands for	A. Dissociation parameter B. Dissociation polymer C. Degree of polymerization D. None of these
1142	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
1143	Covalent solids are composed of	A. Ions B. Different molecules C. Neutral atoms D. Diethyl ether
	chemist was able to	

1144	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 KI 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
1145	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
1146	Carboxylic acid having three carboxyl groups are:	A. Mono carboxylic acid B. Di-carboxylic acid C. Tri-carboxylic acid D. Tetra carboxylic acid
1147	Which one increases by common ion effect except?	A. Crystallization B. Solubility C. Association of ions D. All of these
1148	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
1149	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
1150	Monosaccharides adn oligosacchardies are generally called as	A. Crystal B. Sugars C. liquids D. Non-sugars
1151	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
1152	Which of the following molecules have a permanent dipole	A. CH₄ B. CHCl₃ C. CCl₄ D. CO₂
1153	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
1154	A molecule of polysaccharide hydrolysis produces _____ molecules of:	A. 2 B. 3 C. 2-10 D. 100
1155	Indicate the number of open chain isomers of C6H14	A. 4 B. 5 C. 6 D. 7
1156	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
1157	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
1158	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
1159	Water is purified by:	A. Filtration B. aeration C. coagualation D. All of these
1160	Nitrogen gas reacts under _____ conditions	A. Standard B. Normal C. Cool D. Harsh
1161	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
1162	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

1163	The motion imparted to the gas molecules by gravity is	A. very small B. very large C. negligible D. appreciable
1164	Which one of the following compounds will give idoform test on treatment with aqueous iodine?	A. 3-pentanone B. Propanone C. Propanal D. Butanal
1165	Forms of waste products:	A. Heat B. Smoke C. Solid D. All of these
1166	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
1167	All gases can be compressed by:	A. Keeping constant pressure B. Decreasing pressure C. Increasing pressure D. None of above
1168	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
1169	Propanoic acid is functional group isomer of	A. Methyl acetate B. Ethyl acetate C. Propanal D. Proparone
1170	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
1171	Cholestryl benzoate tums into milky liquid at	A. 140°C B. 145°C C. 148C° D. 149°C
1172	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
1173	Which pair of following pair is metalloid?	A. Antimony and bismuth B. Phosphorous and arsenic C. Nitrogen and phosphorous D. Arsenic and antimony
1174	What are the conditions under which the relation between volume (V) and number of moles (n) of gas is plotted? (Pressure; T-temperature)	A. constant P and T B. constant P and V C. constant T and V D. constant n and v
1175	One of the following is not a biopolymer,Point out that one:	A. lipid B. starch C. diamond D. protein
1176	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
1177	Which one of the following substances is a synthetic polyester?	A. cotton B. nylon C. rayon D. terylene
1178	Total number of valence electrons in CH4	A. 8 B. 9 C. 10 D. 12
1179	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
1180	In elimination reaction, alcoholic KOH is used -oh in this case will act as.	A. Electrophile B. Base C. Leaving group D. Acid

1181	Ionic bond is produced after complete transfer of	A. nucleus B. neutrons C. electrons D. protons
1182	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
1183	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
1184	How many zones through which the charge passes in a rotary kiln?	A. 4 B. 3 C. 2 D. 5
1185	Which one of the following organic acids is made fork methanol?	A. propanoic acid B. butanoic acid C. formic acid D. acetic acid
1186	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
1187	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
1188	Asbestos is commonly used in making	A. wall board B. black board C. soft board D. hard board
1189	Enzymes are chemically	A. carbohydrates B. proteins C. fatty acids D. phospholipids
1190	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.
1191	A compound that has a nucleophilic carbon?	A. C2H2 B. C2H4 C. C3H8 D. C6H6
1192	One kilo calorie is equal to	A. 4.184J B. 1000J C. 4184J D. 1kJ
1193	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
1194	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
1195	Which one of the following is not a component of environment	A. Biosphere B. Stratosphere C. Hydrosphere D. Lithosphere
1196	Structure of CrO4(-2) is'	A. triclinic B. cubic C. octahedral D. tetrahedral
1197	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
1198	Vegetable oils are:	A. Unsaturated fatty acids B. Glycerides of unsaturated fatty acids C. Essential oils obtained from plants
1199	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
1200	Which of the following bond is responsible for joining the amino acids in	A. Metallic Bond B. Di sulfide bond C. Peptide Bond

	proteins?	D. Peptide Bond
1201	In solid, the temperature is the measure of:	A. Rotational kinetic energies. B. Translational kinetic energies. C. Vibrational kinetic energies. D. None of above.
1202	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
1203	Which of the following is a pseudo solid?	A. CaF₂ B. glass C. NaCl D. all these
1204	Which is trigonal cyrstal	A. BaSO₄. 4H₂O B. FeSO₄ C. NaNO₃ D. None
1205	Ozone gas has boiling point:	A. Low B. High C. Medium D. Highest
1206	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
1207	The unit of pressure _____ is commonly used by meteorologists	A. mm of Hg B. Kilopascal C. Millibar D. Pound per square inch
1208	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
1209	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
1210	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
1211	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
1212	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
1213	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
1214	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
1215	Detergents are:	A. synthetic products B. natural product C. both a and b D. none of the above
	How many allotropic forms	A. Two B. Four

1216	How many allotropic forms are present in carbon?	B. Four C. Three D. Five
1217	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
1218	Ethanol reacts with sodium metal to liberate	A. CO2 gas B. CO gas C. H2 gas D. Steam
1219	Optimum PH for enzyme pepsin is	A. 01 B. 2 C. 05 D. 6.5
1220	Enzymes that catalyse the transfer of groups within the molecules are called:	A. transferases B. isomerases C. ligases D. lyases
1221	Tertiary structure of proteins involves EXCEPT	A. Domains B. Globular C. Fibrous D. Beta sheets
1222	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
1223	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
1224	NO and NO_2gases in atmosphere are represented by	A. NO B. NO₄ C. NO_x D. N_xO_y
1225	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
1226	Which of the following is not a category of proteins based upon their function?	A. genetic B. Regulatory C. nucleo D. structural
1227	Fatty acids are:	A. Aliphatic mono-carboxylic acids B. Di-carboxylic acids C. Tri-carboxylic acids D. Tetra carboxylic acids E. Poly carboxylic acids
1228	Electrons in 5d energy level are filled up in case of	A. Lanthanides B. Transition metals C. Actinides D. Rare gases
1229	Which alcohol is most reactive towards sodium metal?	A. Ter Butyl alcohol B. n-Propyl alcolol C. Isopropyl alcohol D. Have same reactivity
1230	The surface formed by the breakage of a crystal is called _____ plane	A. Crystal B. Unit C. Cleavage D. None
1231	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
1232	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
1233	Which of these polymer is synthetic polymer	A. Animal fat B. Starch C. Cellulose D. Polyester
1234	Which one of the following was uses as one of the earliest antiseptic and disinfectant?	A. Phenol B. Ether C. Ethanol D. Methanol
	The main pollutant of	A. Lead

1235	The main pollutant of leather tanneries in the waste water is due to:	B. Copper C. Chromium (VI) D. Chromium (III)
1236	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
1237	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
1238	Half-lives required to convert 100% reactant to produet for a first order reaction are	A. 10 B. 1000 C. 100 D. Infinity
1239	Ozone is produced in regions:	A. tropical B. Polor C. antaric D. equator
1240	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
1241	Casenogen is	A. Chromoprotein B. Phosphoprotein C. Glycoprotein D. Lipoprotein
1242	In Case of elements the polymorphism is called	A. Isotopic form B. Allotropy C. Isomorphism D. Crystalline forms
1243	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
1244	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
1245	Water is considered pollutant when value of Do is	A. 6 PPM B. 8 PPM C. 03 PPM D. 10 PPM
1246	Which one of the following is not true relationship	
1247	Water which forms scum with soap is called	A. Hard water B. Soft water C. Distilled water D. Un distilled water
1248	Real gases deviate from the ideal behaviour at very	A. high pressure B. low temperature C. low pressure D. both a and b
1249	The reaction of formaldehyde with HCN is	A. Nucleophilic substitution B. Electrophilic substitution C. Nucleophilic addition D. Free radical addition
1250	Separation of low molecular weight protein from high one is	A. Dialysis B. Cromotography C. Electrophoiesis D. Ultracentrifugation
1251	Irreversible precipitation of protein caused by heating is called	A. Polymerization B. Denaturing C. Inversion D. Co-angular
1252	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
1253	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

	agent ranges form.	
1254	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
1255	Which of the following gas will have lowest rate of diffusion	A. CH₄ B. N₂ C. NH₃ D. CO₂
1256	Which compound gives carbon when heated with conc. H2SO4.	A. Starch B. Ethyl alcohol C. Oxalic acid D. Formic acid
1257	Which is property of CO?	A. Soluble in water B. Insoluble in water C. No toxic D. Pole coloured
1258	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
1259	Water is essential for life on	A. Moon B. Space C. Earth D. Sun
1260	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
1261	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
1262	Polarity of a molecule is expressed in terms of	A. Bond strength B. Dipole moment C. Bond length D. Shape
1263	How magnesium reacts with water?	A. In frozen ice water B. With cold water C. In with steam D. In hot state
1264	Which of the following protein has application is food industry	A. Globulin B. Gelatin C. Casein D. All
1265	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
1266	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
1267	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
1268	Rusting of iron is the example of	A. Fast B. Slow C. moderate D. depends upon conditions
1269	Which of the following compound have empirical formula, but no molecular formula	A. H20 B. C6H6 C. H₂O₂ D. NaCl
1270	In the body, carbohydrates are broken down into	A. Glucose B. Fatty acids C. Amino acids D. Nucleic acid
	Which of the following does	A. NO

1271	Which of the following does not contribute towards the formation of photochemical smog?	A. NO B. SO₂ C. O₃ D. Hydrocarbons
1272	The process in which solid is directly coverted into gaseous state is called	A. evaporation B. boiling C. sublimation D. transformation
1273	Which one of the following is an organic compound?	A. Calcium carbide B. Calcium cyanide C. Carbon disulphide D. None of these
1274	which of the following is a typical transition metal?	A. Sc B. Y C. Ra D. Co
1275	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
1276	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
1277	Which property is not present in lipids?	A. Liquid B. Solid and semi solid C. Soluble in water D. Form emulsion
1278	Acetic acid is also named:	A. Methanoic acid B. Ethanoic acid C. Propanoic acid D. Butanoic acid
1279	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
1280	The most suitable temperature for preparing ammonia gas is	A. 250°C B. 450°C C. 350°C D. 550°C
1281	Water is purified by the process:	A. Aeration B. Coagulation C. Chlorination D. All of these
1282	What is effect of polluted air on enviroment:	A. Ozone B. Global warming C. Acid rain D. Smog
1283	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
1284	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
1285	The fibre which is made form acrylonitrile as monomer	A. PVC B. rayon fibre C. acrylic fibre D. polyester fibre
1286	The energy produced by a carbohydrate is:	A. 3 kcal/gm B. 2kcal/gm C. 6kcal/gm D. 4kcal/gm
1287	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
1288	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
1289	Terylen fibre is made by reaction of terephthalic acid with	A. ethylene B. ethylene glycol C. glycol D. terylene
1290	In Boyle's law which of the following pair remains	A. Temperature and quality of a gas. B. Pressure and quality of a gas. C. Temperature and pressure.

	constant:	D. Temperature and quantity of a gas.
1291	Lactic acid is buffered by	A. L. Carnosine B. Glutathione C. Casenogin D. Dopa
1292	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
1293	The common oxidation number of halogens is	A. -1 B. +1 C. -2 D. 0
1294	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
1295	Sponification is the hydrolysis of fast or fats or4 oils with an/a:	A. acid B. alkali C. enzyme D. metallic ion
1296	Enthalpy of a reaction can be measured by	A. Glass calorimeter B. Barometer C. Manometer D. Thermometer
1297	The kinetic energy of 4 moles of nitrogen gas at 127°C is? cals.(R = 2 cal mol^{-1} K^{-1})	A. 4400 B. 3200 C. 4800 D. 1524
1298	Amylum is another name of	A. Starch B. Amylose C. Amylopectin D. Cellulose
1299	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
1300	Substance which is formed as well as consumed during a chemical reaction and have temporary existence.	A. Reactant B. product C. Catalyst D. Intermediate
1301	Which of the following alkyl halides undergoes SN1 reaction fastest	A. Methyl chloride B. Isobutyl chlorido C. Ethy l chloride D. Tertiary butyl chloride
1302	SO3 , formed in contact process is absorbed in _____% H2SO4.	A. 90 B. 80 C. 98 D. 89
1303	Which product is formed by teh reaction of carboxylic acid with alcohol?	A. Aldehyde B. Ether C. Alkane D. Ester
1304	The main source of natural fibre is	A. animal fibres B. vegetables fibres C. mineral fibres D. all of the above
1305	The steroids of fungi and yeast are called:	A. Vitamin D B. Vitamin D₂ C. Ergosterol D. Cholesterol
1306	In the esterification, first attack is due toon carborylic acid	A. Hydrogen ion B. Alcohols C. Water D. All
1307	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
1308	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

	carbon dioxide required	
1309	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
1310	General gas equation is combination of	A. Boyle s law B. Avogadro s law C. Charles s law D. All of these
1311	BOD is the oxygen demand with in day(s):	A. Four B. Two C. Three D. Five
1312	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
1313	Elements in lithosphere exist generally as:	A. metals B. non-metals C. metalloids D. minerals
1314	Gram atoms of hydrogen in 5.5 g H2	A. 5.50 B. 2.25 C. 5.45 D. 2.20
1315	Naturally occuring lipids are called	A. Fats B. Protein C. Steroids D. None
1316	How many zones through which charge passes in a rotary kiln.	A. 3 B. 4 C. 5 D. 6
1317	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
1318	Lysine	A. Basic Only ketogenic B. Ketogenic glucogenic C. Acidic glucogenic D. Non essential
1319	An ester is prepared by:	A. two alcohols B. carboxylic acid and alcohol C. ketone and alcohol D. aldehyde and alcohol
1320	Among the following molecules, which one has coordinate covalent (dative) bond?	A. CCl4 B. CO2 C. CO D. CH4
1321	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
1322	Condensation occurs between amino acids with the elimination of	A. H₂O B. H₂ C. O₂ D. NH₃
1323	Nihydrin reacts with amino acid to give product of	A. Bluish color B. Violet color C. Bluish violet color D. No color
1324	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
1325	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
1326	Diamond and graphite are	A. isomorphous B. polymorphous C. allotropes D. none of these
1327	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

1328	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
1329	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
1330	Which one of the following organic acids is made from methanol	A. Propanoic acid B. Butanoic acid C. Formic acid D. Acetic acid
1331	Polysaccharides are	A. Polyester B. Polyamides C. Poly ethers D. Polynucleotide
1332	Dehydrohalogenation of alkyl halides happens in the presence of	A. Pd B. Ni C. Zn D. KOH/alcohol
1333	Which factor is helping to reduce the environmental pollution:	A. urbanization B. industrialization C. increases of plantation D. rapid growth of population
1334	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
1335	A single chloride free radical of CFCs can destroy upto ozone molecules:	A. 10 B. 100 C. 1000 D. 100000
1336	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
1337	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
1338	Compared with alkaline earth metals, the alkali metals exhibit.	A. lower ionization energies B. greater hardness C. high boiling point D. smaller ionic radii
1339	The actual volume of gas molecules is considered negligible at following pressures	A. 2atm B. 4atm C. 6 atm D. 8 atm
1340	Which fiber contains 85% acrylonitrile by weight:	A. Acrylic fiber B. Azlon fiber C. Saran fiber D. Rayon fiber
1341	Dipole-induced dipole forces are also called	A. dipole-dipole forces B. ion-dipole forces C. Debye forces D. London-dispersion forces
1342	Haemoglobin is a	A. Genetic protein B. Building protein C. Transport protein D. Structural protein
1343	Water is made disinfectant during purification of water to the step:	A. aeration B. coagulation C. chlorination D. treatment
1344	In diamond, the carbon atoms are arranged in a	A. tetrahedral manner B. hexagonal manner C. square planar manner D. octahedral manner
1345	Test of incomplete combustion of petrol in the presence of	A. CO₂ B. SO₂ C. NO₂

		D. Co
1346	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
1347	Primary pollutants are:	A. oxides of sulphur B. oxides of carbon C. oxides of nitrogen D. All of these
1348	Which class of compound cannot show positional isomerism?	A. Alkanes B. Alkene C. Alkynes D. Alcohol
1349	Corrundam is ore of which element?	A. Al B. Th C. In D. Mg
1350	Sugar crystals belong to the system	A. cubic B. monoclinic C. triclinic D. orthorhombic
1351	Which of the following is addition polymerization	A. PVA B. Polystyrene C. Both D. None
1352	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
1353	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
1354	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
1355	The conversion of an halide of an alkene is an example:	A. addition reaction B. substitution reaction C. elimination reaction D. oxidation reaction
1356	During incineration temperature range of non-rotating chamber is	A. 900-1000C° B. 650-1100C° C. 950-1300C° D. 700-900C°
1357	Which one is very weak acid	A. HF B. HCl C. H2CO3 D. H2O
1358	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
1359	Diamond is a bad conductor because	A. it has light structure B. it has a high density C. there are no free electron present in the crystal of diamond to conduct electricity D. it transparent to light
1360	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
1361	The scale of temperature that shows the freezing point of water at 0° **is called**	A. Fahrenheit B. Kelvin C. absolute D. Celsius
1362	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
1363	Ethyl alcohol reacts with PCL and produces:	A. Haloalkane B. Alkyl halide & H3PO3, C. Alkyl halide & POCl3 D. Alkyl halides &H3PO4.
1364	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

1365	Which substances do nto react immediately with bromine water:	A. ethane B. benzene C. ethene D. phenol
1366	The value of oxidation number of chlorine in HClOs is	A. +7 B. +5 C. -1 D. +3
1367	Which of the following alkyl halides shows higher reactivity?	A. R __ F B. R __ Cl C. R __ Br D. R __ I
1368	The temperature in the incineration process has a range:	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 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
1369	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
1370	Carboxylic acid having two carboxyl group are:	A. Mono-carboxylic acid B. Di-carboxylic acid C. Tri-carboxylic acid D. Tetra carboxylic acid
1371	In which of the following compounds H-binding is not present?	A. ethanol B. ether C. water D. ammonia
1372	For what value of Kc almost forward reaction is complete	A. Kc.=10(-30) B. Kc.=1 C. Kc = 10(30) D. Kc,=0
1373	Which of the following are more temperature senesitive	A. Liquid crystals B. Solid crystals C. Ionic stals D. None of above
1374	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
1375	Greater shielding effect corresponds to ionization potential value	A. greater B. lesser C. remain same D. no effect
1376	The reaction between Cu and conc. H2SO4 produces	A. Cu+2 B. SO₂ C. SO₃ D. H₂
1377	A semiconductor of Ge can be made p-type by adding	A. Trivalent impurity B. Tetravalent C. Pentavalent impurity D. Divalent impurity
1378	Eleven elements made part of earth mass:	A. 97.5% B. 98.5% C. 99.5% D. 100%
1379	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
1380	Which of the following substance has maximum critical temperature	A. H₂O B. N₂ C. SO₂ D. Ne
1381	Cane sugar on hydrolysis gives	A. Glucose and glucose B. Glucose and lactose C. Fructose and fructose D. Glucose and fructose
	At higher temperature isotherm of Boyle's law	A. pressure B. No. of moles

1382	moves away from both axis, is due to increase in:	C. Volume D. All
1383	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
1384	During esterifcation, the alcobol molecule acts as:	A. Oxidizing agent B. Electrophile C. Reducing agent D. Nucleophile
1385	Choose a point which is not included in the components of environment:	A. stratosphere B. hydrosphere C. lithosphere D. biosphere
1386	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
1387	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
1388	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
1389	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
1390	Which of the following air pollutant is called quiet killer	A. PAN B. CO C. NO₃ D. SO₃
1391	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
1392	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
1393	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
1394	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
1395	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
1396	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
1397	Which of the following liquid has higher boiling point?	A. HCl B. HBr C. H₂O D. Br₂
1398	London forces are more affective at	A. low temperature B. high temperature C. low pressure D. low temperature and high pressure
1399	Which of these polymers is a synthetic polymer?	A. animal fat B. starch C. cellulose D. polyester
1400	Ethylene polymerizes at 100 atm pressure and 400 °C to give	A. Polybenzene B. Polypropylene C. Polyalcohol D. Polyethylene

1401	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
1402	The biggest source of acid rain is the oxide of.	A. N B. S C. O D. C
1403	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
1404	Enzymes consist of	A. proteins only B. proteins and non-protein parts C. fats only D. futs and non-fatty components
1405	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
1406	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
1407	The distribution of energies among the molecules of gases was studied by:	A. Maxwell B. Coulomb C. Newton D. Boltzmann
1408	Which is not a component of environment?	A. Biosphere B. Lithosphere C. Hydrosphere D. None of these
1409	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
1410	Out of these which nitrogen base is NOT present in DNA?	A. Adenine B. Guanine C. Uracil D. Thymine
1411	Air pollution causes	A. Acid rain B. O₃ depletion C. Green House Effect D. All
1412	Ozone is effectively removed by	A. TNT B. CFCs C. PVC D. CNG
1413	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
1414	Which reactant does hnof liberate water on reaction with alcohol	A. NH3 B. K2Cr2O7/15H2O C. HCl D. PCl3
1415	The element which is not present in all proteins is	A. C B. H C. O D. S
1416	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
1417	Chemicals used to kill fungi are:	A. Herbicides B. Insecticides C. Pesticides D. fungicides
1418	The % age of nitrogen in ammonia is:	A. 80% B. 92% C. 90% D. 50%
1419	Soap is formed when triglyceride reacts with	A. Caustic soda B. Soda lime C. Lime D. Caustic potash

1420	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
1421	$C_6H_{12}O_6$is molecular formula of:	A. Glucose B. Dextrose C. Fructose D. All of these
1422	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
1423	Major cause of SO2 on global scale is	A. Volcanoes B. Electric sparks C. Combustion D. All
1424	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
1425	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
1426	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
1427	Final product of hydrolysis of nitrile is	A. Ketone B. Alcohol C. Aldehyde D. Carboxylic acid
1428	Choose the difference between natural and synthetic fertilizers:	A. shapes B. usage C. crop application D. raw material
1429	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
1430	Monosacharide belong to the group	A. Fats B. Carbohydrates C. Lipids D. Proteins
1431	Benedict solution gives a positive test with	A. Glucose B. Fructose C. Sucrose D. Starch
1432	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
1433	Major food factors are?	A. Fats and oils B. Carbohydrates C. Proteins D. All of these
1434	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
1435	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
1436	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
1437	Which of the following is not molecular crystal	A. Sugar B. Iodine C. Ice D. Graphite

		D. Graphite
1438	Identify the element that has maximum oxidation states.	A. Zinc B. Chromium C. Vanadium D. Maganese
1439	Glyoxal molecule has?	A. two carbonyl groups B. One aldehydic and one carbonyl group C. Two aldehydic groups D. Two carboxyl group
1440	The ratio of most probable velocity to that of average velocity is	A. π/2 B. 2/π C. √π/2
1441	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
1442	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
1443	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
1444	Which one of the following does not act as pollutant	A. Carbon monoxide B. Sulphur dioxide C. Hydrocarbons D. Carbon dioxide
1445	The no. of lp's on oxygen in CO are	A. 1 B. 3 C. 4 D. 2
1446	pH value of pepsin is:	A. 3 B. 2 C. 4 D. 1.4
1447	Which is most acidic?	A. H2O B. C2H5OH C. C4H9OH D. CH3-CH2-CH2OH
1448	The number of NaCl molecules in unit cell of its crystal is	A. 2 B. 4 C. 6 D. 8
1449	General formula of aliphatic carboxylic acids:	A. R-OH B. R-COH C. R-CO-R D. RCOOH
1450	Cyclone collector is used to reduce	A. Noise pollution B. Air pollution C. Water pollution D. Radioactive pollution
1451	Bonding in MgO is an example of	A. Ionic bond B. Polar bond C. Covalent bond D. Coordination covalent bond
1452	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
1453	Benzene cannot undergo the ------- directly	A. Substitution reaction B. Addition reaction C. Oxidation reaction D. Elimination reaction
1454	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
1455	An organic compound made from oxidation of ethanol is	A. Formic acid B. Acetic acid C. Malonic acid D. Citric acid
1456	A covalent bond may be	A. 100% covalent B. Partial ionic C. 100% ionic D. Both a and b
		A. Glucose

1457	$C_6H_{12}O_6$is molecular formula of:	B. Dextrose C. Fructose D. All of these
1458	Poisoning of CO can be reveresed by giving oxygen at pressure:	A. low B. least C. medium D. High
1459	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
1460	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
1461	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
1462	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
1463	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
1464	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
1465	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
1466	The number of Na+, ions which surround each Cl- ion in the NaCl crystal lattice is	A. 8 B. 12 C. 6 D. 10
1467	Sulphate aerosols cause severe respiratory problems particularly among	A. Infants B. Women C. Young people D. Old people
1468	The addition of HCl to ethene gives?	A. Chloroethane B. 1,2-dichloroethane C. 1.1-dichloroethane D. 2-chloroethane
1469	$Cl_2$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
1470	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
1471	Choose the example having hexagonal system:	A. graphite B. sugar C. sulphur D. diamond
1472	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
1473	Ecosystem is a smaller unity of	A. Nydosphere B. Biosphere C. Lithosphere D. Attmosphere
1474	Alkali metals react viotlently with halogens:	A. Halides B. Anhydrides C. Hydrides D. None of the above
1475	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

1476	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
1477	Methyl butyrate has an smell of:	A. apple B. pine apple C. banana D. winter green
1478	A large hole in the ozone layer over antarctica region was discovered in:	A. 1960s B. 1970s C. 1980s D. 1990s
1479	Ozone concentration is measured in	A. Debye units B. Dupont units C. Debacle units D. Dobson units
1480	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
1481	Nitro alkanes exhibit the:	A. Chain isomerism B. Positional isomerism C. Functional group D. Metamerism
1482	The carbon atom of an alkyl group attached with halogen atom is called	A. Electrophile B. Free redical C. Nucleophile D. Nucleophilic centre
1483	The %age composition of the auxiliary agent in a detergent is:	A. 10% B. 30% C. 50% D. 70%
1484	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
1485	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
1486	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
1487	Deep sea divers take oxygen with:	A. A heavy gas B. A lighter gas C. An inert gas D. All of above
1488	Sea gets polluted bu accidental oil spills and	A. Atmospheric pressure B. Nitrogen gas C. Cargo oil tankers D. Aero plane
1489	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-
1490	Ethane nitrile can be converted into ethanoic acid through.....intermediate	A. Ethyl alcohol B. Acetyl chloride C. Acetamide D. Methyl cyanide
1491	The values of ΔH for the process I(g)+e-1---------> I-1(g) is:	A. >0 B. <0 C. 0 D. None
1492	Haemoglobin molecule is how many times heavier than helium atom	A. 68000 times B. 17000 times C. ,34000 times D. , 1700 times
1493	Geometry of NH3 is	A. ^{Tetrahedral} B. Square planer C. Pyramidal D. Linear

1494	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
1495	Which of the following compounds does not exhibit positional isomerism?	A. Alkynes B. Nitroalkanes C. Carboxylic acid D. Alcohol
1496	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.
1497	Reactivity of carbonyl compounds is due to	A. Electrophilic carbon B. Less stearic hindrance C. Unsaturation of Co D. Polarity of bond
1498	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
1499	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
1500	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
1501	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
1502	All of the following are hydroxy containing amino acids except	A. Serine B. Threonine C. Valine D. Tyrosine
1503	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
1504	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
1505	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
1506	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)
1507	In NaCl cyrstal Na^+ion is surrounded by how many ions of Cl^-	A. 4 B. 6 C. 8 D. 10
1508	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
1509	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
1510	Which of the following is not macromolecule?	A. Proteins B. Carbohydrates C. Acrylonitirle D. Lipids
1511	Which element exists as discrete small molecules in the solids state	A. Aluminum B. Silicon C. Iodine

		D. Sodium
1512	Which of the following protien is found in bone	A. Keratin B. Ossein C. Mucin D. Actin
1513	Which gas diffuses more rapidly?	A. O₂ B. SO₃ C. NH₃ D. H₂
1514	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
1515	The partial pressure of 0_2in the lungus is	A. 116 torr B. 159 torr C. 560 torr D. 760 torr
1516	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
1517	Ester with raspberry flavor	A. Amyl acetate B. Isobutyl formate C. Amyl butyrate D. Octyl acetate
1518	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
1519	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
1520	Octet rule is not allowed in the formation of	A. NF3 B. B.CF4 C. CCl4 D. PCl5
1521	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
1522	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
1523	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
1524	Rate of which reaction increases with temperature?	A. Exothermic and endothermic reactions B. Endothermic reactions C. Exothermic reactions D. None of these
1525	Components of environment is (in km) around the earth:	A. 10 km B. 100 km C. 1000 km D. 1500 km
1526	Acetaldehyde cyanohydrin upon hydrolysis prodnces	A. Tartaric acid B. Malonic acid C. Formic acid D. Lactic acid
1527	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
1528	pH of 10-4 mole dm-3 of HCl	A. 2 B. 4 C. 3 D. 5
1529	Type of polymer formed by teh polymerization of single	A. Homopolymer B. Copolymer

	type of monomer is:	C. terpolymer D. All of these
1530	Transition compounds which occur as tripositive ions have no	A. 4s-electron B. 3p-electron C. 3s-electron D. 2s-electron
1531	Which mechanism of reaction is shown by carbonyl compounds?	A. Nucleophilic addition B. Electrophilic substituion C. Free radical substitution D. Electrophilic addition
1532	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
1533	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
1534	Which one of the following is an example of co-polymer?	A. Polyamide B. Polystyrene C. Polyvinyl acetate D. Polyvinyl chloride
1535	A crystal system in which all three angles and all three edges are different is called	A. triclinic B. rhombohedral C. cubic D. hexagonal
1536	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
1537	Carbon-Carbon double bond length in C3H6	A. 154 pm B. 134 pm C. 120 pm D. 105 pm
1538	Someone is saying 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
1539	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
1540	Correct order of intermolecular forces	A. Gas < liquid < solid B. Liquid < gas < solid C. Gas < liquid < solid D. Gas = liquid = solid
1541	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.
1542	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
1543	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
1544	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
1545	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
1546	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

1547	Which does not affect vapour pressure	A. Nature of liquid B. intermolecular forces C. Temp D. None of these
1548	Amount of ozone in atmosphere is expressed in units:	A. Kilograms B. cm C. molarity D. DU
1549	Monohalo derivatives of alkanes are called:	A. two glucose molecules B. alkyl halide C. alkenes D. imide
1550	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
1551	The general electronic configuration of group IV-A elements is	A. ns2, np6 B. ns2, np4 C. ns2, np3 D. ns2, np2
1552	The pressure exerted by gas molecules is due to their	A. collisions B. densities C. masses D. kinetic energy
1553	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
1554	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
1555	Proteins are the polymers of amino acids having	A. NH₂ group only B. OH⁻group only C. NH₂andOH⁻ group D. NH₂and COOH group
1556	Bond will be covalent when electronegativity difference of bonded atom is	A. Equal to 1.7 B. between 0.5 to l.7 C. Greater to 1.7 D. zero
1557	Which of the following is not an inorganic macromolecule	A. Graphite B. Sand C. Strach D. Diamond
1558	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
1559	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
1560	2-propanol on oxidation yield	A. Propionaldehyde B. Propanone C. Propanal D. Butanal
1561	Cotton is an example of	A. animal fibre B. mineral fibre C. vegetable fibre D. synthetic fibre
1562	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
1563	The substances added in paints for improving the mechanical properties is called:	A. pigmein B. filter C. stabilizer D. binder
1564	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
1565	In FWFP the phosphate fertilizers are produced at:	A. D.I. Khan B. Haripur C. Nowshera D. Dargai

		D. Bargai
1566	The potential of SHE is taken as zero which is avalue	A. Reference B. Arbitrary C. Exact D. Experimental
1567	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
1568	Which of these pollutants is produced by burning of coal and causes acid rain	A. SO2 B. CO2 C. CO D. NO
1569	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
1570	Steroids belong to the class	A. Waxes B. Glycosides C. Phospholipids D. Lipids
1571	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
1572	A nucleoside may be	A. Ribonucleoside B. Deoxyribonucleoside C. Both a and b D. None
1573	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
1574	Which element of group V-A and VII-A does not use d-orbital?	A. Nitrogen B. Sulphur C. Arsenic D. Chlorine
1575	Simple sugars are:	A. Monosaccharides B. Disaccharides C. Oligo saccharides D. Trisaccharides
1576	An example of regulatory protein is	A. nucleoprotein B. hemoglobin C. lactoglobulin D. thyroxine
1577	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
1578	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
1579	Among the following, which one is nucleophile	A. H+ B. Ca2+ C. OH- D. Na+
1580	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
1581	Molar mass of repeating unit of PVC monomer is:	A. 43 B. 53 C. 63 D. 73
1582	Acidic character of amino acid is due to:	A. -NH2 B. -N+H2 C. -COOH D. -COO-
1583	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

1584	Enzymes are catalysts which contain other than carbon and hydrogen one other element	A. oxygen B. sulphur C. phosphorus D. iodine
1585	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
1586	The intramolecular forces in gases are:	A. Weak. B. Normal. C. Very weak. D. Strong.
1587	Tertiary aleohols producewith acidified KMno,	A. Ketones B. Aldehydes C. Malonic acid D. Alkene
1588	Increase viscosity of proteins is due to	A. Denaturation B. Isoelectric point C. Both D. None
1589	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:
1590	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
1591	Which one of the following elements is not an alkali metal?	A. Na B. Sr C. Cs D. Rb
1592	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.
1593	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
1594	In the formation of Zwitter ion which one of the following donates the proton?	A. COOH B. NH2 C. CH2COO- D. OH-
1595	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
1596	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
1597	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
1598	Chloroform (CHCl3) is?	A. Primary alkyl halide B. Secondary alkyl halide C. Tertiary alkyl halide D. a liquid
1599	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
1600	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
1601	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

1602	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
1603	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
1604	Nitrogen percentage in atmosphere is:	A. 76% B. 77% C. 78% D. 79%
1605	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
1606	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
1607	The normal amount of overhead ozone is about	A. 250 Du B. 300 DU C. 350 DU D. 400 DU
1608	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
1609	Which gases are produced from landfills?	A. NH₃ B. H₂S C. N₂ D. All of these
1610	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
1611	HOCl is a compound:	A. Polor inorganic B. organic C. Ionic D. covalant
1612	Point out the substance which has maximum vapour pressure at a given temperature?	A. Acetone B. Water C. Ethanol D. Acetic acid
1613	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
1614	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
1615	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
1616	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
1617	Which one of the following doesn't exhibit allotropy?	A. Bi B. As C. N D. P
1618	Ph of unpolluted rain water is	A. 07 B. Less than 6 C. 5.6 D. Less than 5
1619	Which is a good nucleophile as well as a good leaving group?	A. F- B. Cl- C. Br- D. I-
1620	As the number of carbon atoms increase the number of isomers also increase.	A. 10 isomers B. 3 isomers C. 5 isomers

	The six carbon compound hexane has as many as:	C. 5 isomers D. 6 isomers
1621	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
1622	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
1623	The amino linkage in Nylon -6,6 has the structure.	A. -NH2 B. -CO,O2 C. -NH-CO- D. -NH-O-CO-
1624	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%
1625	Which of the following compounds is not known?	A. SbCl B. NCl3 C. NI3 D. NCl5
1626	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
1627	Which is trigonal crystal	A. CaSO₄. 2H²O B. MgSO₄ C. NaNO₃ D. All
1628	Which one is not related with evaporation	A. Continuous B. Cooling C. Exothermic D. Spontaneous
1629	Which one of the following pairs has the same electronic configuration s possessed by neon (Ne-10)?	A. Na+, Cl- B. K+ ,Cl- C. Na+, Mg2+ D. Na+, F-
1630	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
1631	The fibre which is obtained from naturally occuring protein is called	A. saran B. azlon C. rayon D. nylon
1632	3.0 mole of calcium will contained_____ g of calcium.	A. 100 gm B. 105 gm C. 80 gm D. 120 gm
1633	Which gas produces air pollution?	A. oxides of sulphur B. oxides of carbon C. all of these
1634	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
1635	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
1636	SO_2 produced by volcanoes is about	A. 75% B. 67% C. 69% D. 70%
1637	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
1638	Micro nutrients are required in quality ranging from:	A. 4g - 40g B. 6g - 200g C. 6dg - 200kg D. 4kg - 40kg

		D. 4kg - 40kg
1639	Which of the following compound is least reactive	A. HCHO B. CH3CHO C. CH3COCH3 D. C6H5CHO
1640	K2SO4, and K2Cr2O4, are isomorphous solids and exist in	A. cubic form B. orthorhombic form C. trigonal form D. tetragonal
1641	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
1642	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
1643	Low IE is a symbol of	A. high electronegativity B. small size C. High electron affinity D. Metallic character
1644	The rate of diffusion of 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
1645	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
1646	The peptide bond is	A. Glycine B. Non-covalent bond C. Weak bond D. Responsible for secondary structure of protein
1647	A molecule of polysaccharide on hydrolysis produces _____ molecules of monosacharides:	A. many B. Few C. 2-10 D. 100
1648	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
1649	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
1650	Fe+2 is the co-factor for	A. Chrome oxidase B. Glucose-6-phosphatase C. Carbonic anhydrase D. Hydrolase
1651	The process of effusion is best understood by law	A. Grahams B. Boyle s C. Charles s D. Avogadro s
1652	The crystal system are of	A. 7 types B. 10 types C. 5 types D. 8 types
1653	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
1654	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
1655	Protein are classified into	A. Simple protein B. Complex proteins C. Derived proteins D. All of these
1656	Ornithine is	A. A basic amino acid B. An essential amino acid C. Present in protein structure

		C. Present in protein structure D. All of these
1657	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
1658	Daily protein intake for normal adults should be:	A. 0.2g/kg B. 0.5g/kg C. 0.8g/kg D. 1.1g/kg
1659	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
1660	In which of the following compounds hydrogen bonding is not present	A. water B. ethanol C. ether D. ammonia
1661	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
1662	Fungicides re the pesticides which:	A. kill plants B. kill herbs C. kill insects D. control the growth of fungus
1663	Which one of the following is not air pollutant gas	A. CO B. CO₂ C. NO D. SO₂
1664	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
1665	Which of the following waster material is not recycled for use again	A. paper B. plastic C. hides of animals D. glass
1666	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
1667	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
1668	The maximum possible number of hydrogen bonds in which a H_2O molecule can participate is:	A. 1 B. 2 C. 3 D. 4
1669	Region of earth capable of supporting life is called:	A. Atmosphere B. Hydrosphere C. Lithosphere D. All of these
1670	All of the following are non covalent except	A. Hydrophobic interactions B. Disulphide bond C. Hydrogen bond D. Electrostatic bond
1671	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
1672	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
1673	The words smog is a combination of smoke and:	A. fog B. foke C. fork D. fizzy
1674	a hole used to dump the municipal wastes is called:	A. landfill B. effluents C. leachate D. inclneration

1675	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
1676	During oxidation process, oxidation number of an element	A. Decreases B. Increases C. Remains constant D. Both a and b
1677	Which of the following is basic amino acid	A. Lysine B. Histidne C. Proline D. Both a and b
1678	Phosphoprotein comes under the type of proteins	A. Simple protein B. Derived protein C. Conjugated D. Both A & B
1679	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
1680	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
1681	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
1682	The cell which converts electrical energy to chemical energy is called	A. Electrochemical cell B. Voltaic cell C. Galvanic cell D. Down's cell
1683	The normal amount of overhead ozone is	A. 350 DU B. 450 DU C. 400 DU D. 300 DU
1684	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
1685	Steroid belong to the family of:	A. protein B. enzyme C. lipids D. carbohydrates
1686	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
1687	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
1688	Which compounds is alicyclic in nature?	A. Cyclobutane B. Iso-bstand C. n-Butane D. Toluend
1689	2-propanol on Oxidation gives	A. Aldehyde B. Carboxylic Acid C. Ketone D. Alcohol
1690	Which of the following gases shows more ideal behaviour at 0°C	A. H₂ B. CH₄ C. He D. NH₃
1691	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
1692	Substances that render enzymes catalytically inactive are called	A. coenzymes B. substrates C. inhibitors D. apoezymes
1693	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

1694	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
1695	Van der Waal's forces exist in	A. Polar compounds B. Non-polar C. Covalent D. All types of atoms and molecules
1696	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
1697	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
1698	Which one of the following is a water soluble vitamin?	A. niacin B. riboflavin C. tyrosine D. ascorbic acid
1699	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
1700	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
1701	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
1702	No of unpaired electrons are maximum in	A. V+3 B. Mn+2 C. Fe+3 D. Cr+3
1703	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
1704	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
1705	The development of disagreeable odour in fats or oil is called	A. fragrance B. perfume C. rancidity D. smell
1706	Which one of the following enzymes brings about the hydrolysis of fats?	A. urease B. maltase C. zymase D. lypase
1707	The geometry of diamonds is	A. tetragonal B. cubic C. rhombohedral D. none of these
1708	Buffer action can be explained by except	A. Common ion effect B. Le-Chatelier's principle C. Law of mass action D. Solubility product
1709	Ozone layer is	A. 25 - 28 km high B. 26 - 29 km high C. 24 - 27 km high D. 20 - 28 km high
1710	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
1711	Ozone layer is high:	A. 20-23 km B. 22-25 km C. 23-26 km D. 25-28 km
	Which of the substance is	A. Acetic acid

1712	Which of the substance is not going to react the sodium metal:	B. Methanol C. Di methyl ether D. Ethanol
1713	Which one of the following does not act as pollutant?	A. carbon monoxide B. sulphur dioxide C. hydrocarbons D. carbon dioxide
1714	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
1715	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
1716	Which heavy metals do not have any safe limits	A. As B. Hg C. Cr D. All of these
1717	The oxidation of SO2 to SO3 is exothermic reaction. The yield of SO3 will be maximum if	A. Temperature is increased and pressure is kept constant B. Temperature is reduced and pressure is increased C. Both temperature and pressure are increased D. Both temperature and pressure are increased
1718	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
1719	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
1720	Monosacharides belong to the group:	A. fats B. lipids C. carbhohydrates D. proteins
1721	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
1722	In beta elimination reaction	A. carbon number changes B. unsaturated compound is formed C. hybridization. ofC remains same D. pi bonds are decreased
1723	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
1724	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
1725	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
1726	Which of the following is not heterocyclic compound?	A. Naphthalene B. Furan C. Pyridine D. Pyrrole
1727	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
1728	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
1729	Which one of the pollutants of automobile exhausts affects the nervous system or produces mental diseases?	A. NO₂ B. SO₂ C. Hg D. Pb
	CO2 and SO2 are both triatomic molecules, but	A. greater electronegative character of sulphur

1730	heat of vaporization of SO2 is greater than that of CO2. This is due to	B. greater size of SO2 molecule C. SO2 is polar and CO2 is non-polar D. SO2 is more acidic in nature than CO2
1731	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
1732	Keratomalacia is caused due to the deficiency of vitamin:	A. A B. B C. C D. K
1733	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
1734	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
1735	Which of the following brings about the conversion of starch into maltose?	A. maltase B. zymase C. diastase D. invertase
1736	Glycogen on hydrolysis give	A. Glucose B. Lactose C. Fructose D. None
1737	The gases H_2, O_2, H_2S and SO_2diffuse in the order	A. SO₂>H₂S>H_{2>}O₂ B. H₂S>SO₂>O₂>H₂ C. O₂>SO₂>H₂>H₂S D. H₂>O₂>H₂S>SO₂
1738	Which of the following folymer is used as binder	A. PVC B. PVA C. Acrylic resins D. Polyester
1739	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
1740	Covalent bonds are	A. directional B. Bidirectional C. Multidirectional D. Non directional
1741	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
1742	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
1743	Spectrometry method is applicable if a reactant or a product absorbs radiation	A. Ultraviolet B. Visible C. Infrared D. Any of these
1744	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
1745	Which is not an enzyme	A. Transverses B. Lipase C. Lyase D. None of these
1746	The hydrocarbon with maximum B.P is	A. CH4 B. C6H14 C. C4H10 D. C2H6
1747	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

		D. 1400 mm of Hg
1748	Choose an addition polymer among the following:	A. terylone B. nylon 6,6 C. polystyrene D. epoxy resin
1749	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
1750	According to kinetic theory of gases kinetic energy depends on	A. Temperature B. Collision C. Pressure D. Atomic number
1751	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
1752	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
1753	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
1754	Main cause of reducing map is:	A. Combustion of coal B. NO and NO₂ C. Un-burnt hydrocarbons D. All of these
1755	Allotropic forms of carbon are:	A. five B. three C. four D. two
1756	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
1757	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
1758	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
1759	Which of the following is primary alkyl halide	A. Isopropyl halide B. Sec-butyl halide C. Tert-buryi halide D. Neo-pentyl halide
1760	Joule is a unit of energy which is defied as	A. Kgm⁻²s⁻² B. Kgm²s⁻¹ C. Kgms⁻² D. Kgm²s⁻²
1761	The energy produced by a carbohydrate is	A. 3 kcal/gm B. 2 kcal / gm C. 6kcal / gm D. 4 kcal/ gm
1762	Leaching of nutrients is due to	A. Drying of soil B. Combustion of soil C. Acidification of soil D. Neutralization of soil
1763	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
1764	Which pair of gases do not obey Dalton's law of partial	A. H2 and He B. NH3and HCl

1764	obey Dalton's law of partial pressures?	C. H2 and O2 D. N2 and O2
1765	The reaction which is responsible for the production of electricity in the voltaic cell is	A. Hydrolysis B. Oxidation C. Reduction D. Redox
1766	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
1767	The standard electrode potential of hydrogen is arbitrarily taken at 298 K is	A. 1.00 volt B. 0.00 volt C. 10.0 volt D. 0.10 volt
1768	Select the name of ready plant from which word "Paper" is derived:	A. sun flower B. papyrus C. water hyacinth D. rose
1769	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
1770	In graphite crystal, carbon is	A. sp hybridized B. sp²hybridized C. sp³hybridized D. None
1771	About 25% of earth crust mass is made up of element	A. Oxygen B. Silicon C. Aluminium D. Aluminates
1772	One Pascal is equal to	A. 1 Nm⁻² B. 1 Nm C. 1 Nm⁻¹ D. 1 Nm²
1773	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
1774	Benedict solution gives a positive test with:	A. glucose B. frutose C. sucrose D. starch
1775	Formula of paltimic acid is:	A. C₁₁H₂₂COOH B. C₁₃H₂₇COOH C. C₁₅H₃₁COOH D. C₁₇H₃₅COOH
1776	Which of the following alcohol is more soluble in H2O	A. Propanol B. Butanol C. Pentanol D. Hexanol
1777	Water soluble component of starch is	A. Amylose B. Amylopectin C. Both D. Cellulose
1778	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
1779	coordination number of N^{a}+ in NaC is:	A. 1 B. 2 C. 4 D. 6
1780	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
1781	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
1782	The alcohol that does not form curbonyl compound on oxidation	A. iso-butyl alcohol B. neo pentyl alcohol C. Ethanol D. ter-butyl alcohol
1783	Acceptance of macromolecular hypothesis	A. Kekule B. Gibbs

	was due to efforts of:	C. Standiger D. anderson
1784	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
1785	What is name of hydrated variety of quartz?	A. Rose quartz B. Smokey quartz C. Silica D. Opal
1786	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
1787	Ocean contains part earth's water:	A. 95% B. 96% C. 97% D. 98%
1788	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
1789	Lithosphere extends upto kilometer of earth crust in depth:	A. 10 km B. 100 km C. 1000 km D. 10000 km
1790	The nature of crystals formed due to London forces of interaction are	A. molecular B. metallic C. ionic D. covalent
1791	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
1792	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
1793	Doubling the pressure in a liquid phase reaction	A. Will double the rex B. Will increase the rex C. Will decrease the rex D. Will not alter the concentration of reactant
1794	Monosaccharides belong to the group	A. lipids B. fats C. proteins D. carbohydrates
1795	Which of the following are thermoplastic materials?	A. PVC B. polystyrenes C. polyethylene D. all these
1796	Which of the following is not a heavy industry?	A. Iron B. Fertilize C. Paper D. None
1797	Which one of the following is used as coagulant for purification potable water	A. Copper sulphate B. Alum C. Barium sulphate D. Nickel sulphate
1798	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
1799	The substance which adversely affects the human health is:	A. Ecosystem B. Ecosphere C. Atmosphere D. Pollutant
1800	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
1801	Which one is an isomorphic pair?	A. NaNO3, CaCO3, B. NaF, MgO C. K2SO4 ,K2Cr2O7 D. Zn, Cd
1802	During an exothermic or endothermic reaction which one of the following formula is used to calculate the amount of heat evolved or	A. ΔH = ΔE+PV B. ΔE= q+w C. Δp =ΔH D. q = m x s x ΔT

	amount of heat evolved or absorbed	D. q = m x s x ΔT
1803	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
1804	Nylon 6 6 is prepared by the reaction of hexamethylene with	A. formic acid B. acetic acid C. adipic acid D. none of these
1805	Chlorination of water is effective for	A. Killing pathogens B. Removing dust C. Removing hardness D. Increasing oxygen content
1806	Amorphous means	A. arranged B. ordered C. shaped D. shapeles (no arrangements)
1807	Steroids belong to the family of	A. Protein B. Enzyme C. Lipids D. Carbohydrates
1808	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
1809	Which of the following solids does not have a covalent bond?	A. Silica B. Copper C. Diamond D. Graphite
1810	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
1811	Ethanoic acid reacts with all of these to produce water except	A. Ethanol B. Sodium C. Caustic soda D. Sodium hydrogen carbonate
1812	Temperature at which molecular motion ceases is called	A. Absolute zero B. Absolute temperature C. Critical temperature D. Difficult to predict
1813	Proteins are classifies into _____ classes based on physic-chemical properties	A. 2 B. 3 C. 5 D. 9
1814	According to Lowry-bronsted acid and bass concept, H2O is	A. A salt B. An acid C. A base D. An amphoteric species
1815	Among the following the polycyclic aromatic compound is	A. Styrene B. Naphthalene C. Toluene D. Acetophenone
1816	One degree on Celsius scale is _____ time greater then Fahrenheit scale	A. 9/5 B. 5/9 C. 6/5 D. 5/6
1817	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
1818	1, 3, 5-Pentanetriol has secondary carbon	A. 3 B. 1 C. 2 D. Zero
1819	Troposphere extends upto km:	A. 0-15 km B. 10-15 km C. 15-40 km D. 15-40 km
1820	Deposition of cholesterol in arteries is responsible for:	A. Heart attach B. diabetes C. hepatitis D. cancer
1821	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

		D. Br-CH2-CH2-Br
1822	Which one of the following is used as coagulant for purification potable water:	A. copper sulphate B. alum C. barium D. nicket sulphate
1823	Oxides of sulphur react in atmosphere by various reactions to form:	A. sulphates B. sulphites C. sulphides D. sulphate aerosols
1824	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
1825	Which of following compound is solid and room temperature?	A. Ethanal B. Phenol C. Butane D. Methanol
1826	On ascending the electrochemical series strength as reducing agent	A. Increases B. Decreases C. Remains same D. not determinable
1827	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
1828	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
1829	Two or more similar monomers combine to form:	A. Homopolymer B. Copolymer C. Ter polymer D. Thermoplastic polymer
1830	Which is the least reactive of all the alkali metals	A. Li B. Na C. K D. Cs
1831	When vapour pressure is equal to atmospheric pressure than it is called	A. Evaporation B. M.P C. B.P D. Freezing point
1832	The average bond energy of C-Br is	A. 228 kJmol-1 B. 250 kJmol-1 C. 200 kJmol-1 D. 290 kJmol-1
1833	Which of the following is sweetest sugar	A. Glucose B. Maltose C. Fructose D. Sucrose
1834	Hydrogen diffuses six times faster than gas A.The molar mass gas of gas A is	A. 72 B. 6 C. 24 D. 36
1835	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
1836	Albumin is	A. Insoluble in water B. Heat coagulable protein C. A plant protein D. A protein of low biological value
1837	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
1838	Which of the following is not the property of liquid crystal	A. anisotropic B. isotropic C. three dimensional arrangement D. fluidity
1839	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
1840	Beryllium differs from other elements of group II-A due to	A. high charge density B. comparatively high nuclear charge C. small radius D. all above
		A. 0

1841	Triglyceride have iodine number _____ having no double bond	A. 0 B. 2 C. 3 D. 4
1842	Cellulose does:	A. Satisfy human appetite B. Stimulates intestinal peristalsis C. Fives fibre and bulk to the food D. All of these
1843	The electrochemical reactions occurring at both the electrodes along with the electrolytic conduction constitute	A. Oxidation B. reduction C. Redox reaction D. electrolysis
1844	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
1845	Materials suspended in water or present as colloidal form in raw water are removed by:	A. aeration B. coagulation C. chlorination D. treatment
1846	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
1847	All gases liquefly before reaching at	A. 273°K B. 373°K C. 0 K D. 73°C
1848	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
1849	α and β Glucose differs in orientation of hydroxyl group around	A. C₁ B. C₂ C. C₃ D. C₄
1850	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
1851	Which one is monosacharide?	A. starch B. glucose C. maltose D. sucrose
1852	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
1853	Smaller unit of biosphere is:	A. specie B. ecosystem C. plankton D. troposphere
1854	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
1855	Primary alcohols and aldehydes are oxidized to corresponding:	A. Alkanes B. Alkenes C. Alkynes D. Carboxylic acids
1856	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
1857	Which of the following is the element not present in all proteins?	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur
1858	Surface tension is measured by	A. viscometer B. barometer C. stalagmometer D. manometer
1859	An alcohol is converted to an aldehyde with same number of carbon atoms as that of alcohol in the presence of	A. CH3C(CH3)2OH B. (CH3)3COH C. CH3CH2CH2OH D. (CH3)2CHOH

	K2Cr2O7/H2S04 the alcohol is	D. (CH3)2CHOH
1860	Water bodies are included in:	A. Atmosphere B. Hydrosphere C. Lithosphere D. All of these
1861	Sponification is the hydrolysis of fats or oil with an:	A. alkali B. base C. enzyme D. metallic ion
1862	Stability of Cu-metal is due to filled of d-orbital	A. Half B. Completely C. Partially D. Quarterly
1863	Purines include	A. Adenine B. Guanine C. Both a and b D. None
1864	which one of the following exhibits intermolecular hydrogen bonding?	A. HF B. HC C. HBr D. HI
1865	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
1866	Urea is the most widely used nitrogen fertilizers in Pakistan. Its composition is	A. NH₂CO B. N₂H₅CO₂ C. N₂H₄CO₂ D. N₂H₄CO
1867	Which of the following is the repeating monomeric unit in cellulose?	A. sucrose B. maltose C. cellobiose D. glucose
1868	Cyclobutane structure is categorized under	A. Aromatic compounds B. Aliphatic compounds C. Alicyclic compounds D. Heterocyclic compounds
1869	Leachate contains:	A. fatty acids B. Bacteria C. Heavy metals D. All of these
1870	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
1871	Coal contains sulphur in it:	A. 1-3% B. 1-6% C. 1-9% D. 1-12%
1872	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
1873	All of the following are primary aminoacids except	A. Cysteine B. Cystine C. Alanine D. Arginine
1874	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
1875	One of the following is not a biopolymer. Point out that one	A. Lipid B. Starch C. Diamond D. Protein
1876	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
1877	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
1878	To measure the true pressure of a gas collected over water, the pressure	A. added to the total pressure B. multiplied to the total pressure C. divided by the total pressure

	over water, the pressure due to water vapour is:	C. divided by the total pressure D. subtracted form the total pressure
1879	Which of the elements has seven electrons in d-subshell?	A. Zn B. Co C. Cu D. Fe
1880	Compressibility factor for an ideal gas is	A. 1.5 B. 1.0 C. 2.0 D. 0.5
1881	Which of these polymers is a synthetic polymer?	A. Animal fat B. Starch C. Cellulose D. Polyester
1882	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
1883	About 80% of ammonia is used for the production of	A. Explosives B. Fertilizers C. Nylon D. Polymers
1884	The maximum possible number of hydrogen bonds in which a H_2O molecule can participate is	A. 1 B. 2 C. 3 D. 4
1885	White marble buildings are effected by?	A. O₂ B. SO₂ C. Cl₂ D. CFC_s
1886	Type of polymer formed by the polymerization of two monomers is:	A. homopolymer B. copolymer C. ter polymer D. All of these
1887	The transition temperature of KNO3, is	A. 13.2°C B. 95.5°C C. 128°C D. 32.02°C
1888	When liquid water changes to ice, the volume expands. The expansion in volume is	A. 5% B. 7% C. 9% D. 12%
1889	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
1890	Which of the following is not a carbohydrate?	A. nuclic acid B. strach C. glycoyen D. cellulose
1891	Formalin contains-------% alcohol.	A. 37 B. 80 C. 8 D. 52
1892	Which of the following molecules has angel of 120°	A. BeCl2 B. BF3 C. CH4 D. NH3
1893	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
1894	Natural water is	A. Pure B. Impure C. Acts as solute D. Distilled
1895	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
1896	Charle's law only obeys when temperature takes in _______ scale	A. Celsius B. Fahrenheit C. Kelvin D. Rickey
	The ...	A. Lone pair oxygen atoms overlap with the delocalized bonding system in benzene

1897	The phenoxide ion is more stable than ethoxide ion as	B. Oxygen atom is directly bonded with benzene ring in the phmoxide 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
1898	Most animals can not digest:	A. starch B. cellulose C. proteins D. glucose
1899	Which of the following solid is amorphous	A. NaCl B. diamond C. glass D. MgO
1900	Protein may have	A. Primary structure B. Secondary structure C. Tertiary structure D. All of these
1901	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
1902	Which one of the following reaction of carboxylic acid is reversible?	A. Esterification B. Salt formation C. Reaction with PCl5 D. Reaction with SOCl2
1903	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
1904	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
1905	Buffer solutions are used in except	A. Clinical analysis B. Nutrition C. Soil science D. Qualitative analysis
1906	Glucose is a:	A. ketohexose B. aldohexose C. meonosacharide D. 'b' and 'c'
1907	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
1908	The proteins which are derived by conjugated proteins are called as	A. Simple protein B. Complex protein C. Derived protein D. None
1909	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
1910	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.
1911	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
1912	$CuSO_4 5H_2O$ crystals belong to	A. triclinic B. cubic C. tetragonal D. orthorhombic
1913	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
1914	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
	Which of the following is	A. Eucalyptus

1915	Which of the following is woody raw material used for making pulp and paper:	B. Bagasse C. Wheat straw D. Cotton linter
1916	Elevated concentration of _____ is harmful for fish as it clog the gills causing suffocation	A. Al B. Hg C. As D. Cr(vi)
1917	CH_3CH_2COOH is also named as:	A. Propionic acid B. Propanoic acid C. Acetic acid D. Both (a) & (b)
1918	Rancidification of facts and oils is due to:	A. oxidation reaction B. hydrolysis reaction C. both a and b D. hydrogenation reaction
1919	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
1920	Which of the following is a non-typical transition element?	A. Cr B. Zn C. Mn D. Fe
1921	Thrombin is locally used to stop	A. Heart disease B. Bleeding C. Blood D. None of these
1922	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
1923	The region of earth capable of supporting life is	A. Hydrosphere B. Lithosphere C. Biosphere D. Atmosphere
1924	Polymer formed by the combining of three different monomers is called:	A. Homopolymer B. Copolymer C. Ter polymer D. Thermoplastic polymers
1925	How many Cl^- ions are there around Na^+ ion in NaCl crystal?	A. 3 B. 4 C. 6 D. 8
1926	The pH range of acid rain is:	A. 6.5 -6 B. 8-7.5 C. Less than 5 D. 7- 6.5
1927	Which of the following has positive value of enthalpy	A. Neutralisation B. Atomization C. combustion D. All of the above
1928	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
1929	Chlorofluorocarbons and aerosols are inert in sphere:	A. troposphere B. stratosphere C. lithosphere D. hydrosphere
1930	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
1931	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
1932	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
1933	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
		A. Halogens

1934	The mono atomic gases are	B. Noble gases C. 6h group elements D. Nitrogen and oxygen
1935	The best concentration unit used for K^+ ions present in potable water is	A. ppm B. Mole fraction C. Molarity D. Molality
1936	Which of the following polymers is used for weather resistant paints	A. acrylic resins B. polyvinyl acetate C. polystyrene D. PVC
1937	Which woody raw material is used for the manufacture of paper pulp?	A. cotton B. bagasse C. poplar D. rice staw
1938	Which substance among the following used in points to improve the mechanical properties?	A. filter B. binder C. pigment D. stablizer
1939	What is the formula of silica?	A. Si2O3 B. SiO2 C. Si3O4 D. SiO-
1940	By the electrolysis of CuCl2 using inert electrodes of platinum which species is deposited at cathode	A. H2 B. O2 C. Cu D. Cl
1941	Fluorine is largely used in	A. rocket fuels B. making Teflon C. making freon D. All
1942	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
1943	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
1944	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
1945	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
1946	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
1947	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
1948	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
1949	Which of the following is not a macromolecule?	A. diamond B. graphite C. iodine D. silica
1950	Which af the following compound reacts slower than benzene in the electrophilic substitution.	A. Phenol B. Nitrobenzene C. Toluene D. Aniline
1951	Monosacharide belongs to the groups:	A. fats B. carbohydrates C. lipids D. proteins
1952	A combination of glucose and fructose is called	A. sucrose B. table sugar C. a & b D. Lactose
	The number of moles of	A. 0.75 B. 1.50

1953	CO_2 which contain 8.00 gm of oxygen is.	B. 1.00 C. 0.25 D. 1.00
1954	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
1955	Which of the following ketone will not give iodoform test	A. Methyl isopropyl ketone B. Dimethyl ketone C. Ethyl isopropyl ketone D. 2-hexanone
1956	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
1957	A fat with 18 carbon & no double bond will be	A. Solid B. Liquids C. Gel like D. None
1958	Hydrogen bonding is not present in which of following compound?	A. Ammonia B. Ethanol C. Ether D. Water
1959	One $dm^3$of O_2at STP has mass	A. 32 g B. 16 g C. 4.438 g D. 1.4383 g
1960	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
1961	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
1962	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
1963	When 2-bromobutane reacts with alcoholic KOH, the reaction is called	A. Chlorination B. Halogenation C. Dehydrohalogenation D. Hydrogenation
1964	State of hybridization of carbon in the carbocation is	A. sp3 B. sp C. sp2 D. dsp2
1965	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
1966	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
1967	Keratin is	A. Protein of tendons B. Rich in sulfur C. Poor in cysteine D. Conjugated protein
1968	Which of the following is electrophile for alkylation?	A. NO+2 B. SO3 C. R+ D. Both a & b
1969	A peptide having molecular mass of more than 10,000 is called as	A. Fat B. Vitamin C. Carbohydrate D. Proteins
1970	Coagulation in the purification of water is carried out by	A. Alum B. NiSO₄ C. BaSO₄ D. CuSO₄
1971	All of the following are essential amino acids except	A. Lysine B. Aspartate C. Tryptophan D. Hisitidine
1972	The correct order of increasing attractive strength for weak	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

1972	strength for weak intermolecular forces is....	C. hydrogen bonding, dipole-interaction, van der Waals forces D. hydrogen bonding, van der Waals forces, dipole-dipole interaction
1973	Which one of the following is a water soluble vitamin?	A. niacin B. rioflavin C. trypsin D. ascorobic acid
1974	Which of the followings has electronic configuration of Ar in +3 oxidation state	A. Sc B. Mn C. Ti D. Zn
1975	Liquid hydrocarbon is	A. methane B. propane C. ethane D. hexane
1976	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
1977	2,4,6-Trinitrophenol is commonly called as	A. Phthalic acid B. Tartaric acid C. Malonic acid D. Picric acid
1978	Which is not mineral of Al?	A. Diaspore B. Corrundam C. Bauxite D. Galena
1979	Formamide is formed by the reaction of which acid with ammonia	A. Oualic acid B. Formic acid C. Ethanoic acid D. Propanoic acid
1980	Reaction kinetics is important to discover the---under which reaction will proceed most economically:	A. rate constant B. Conditions C. volume D. equilibrium point
1981	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
1982	The fat soluble vitamins are:	A. A and B B. B and C C. C and D D. A and D
1983	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
1984	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
1985	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
1986	For every reaction occurring in the body three is at least one type of	A. enzyme B. vitamin C. protein D. reactant
1987	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
1988	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
1989	Cellulose is the polymer of	A. α-D-glucose B. β-D-glucose C. Fructose D. None
1990	For reaction of methane and chlorine light is not	A. Reaction will take place rapidly B. No Reaction take place

1990	and chlorine light is not available then	C. Reaction occurs at double the rate D. May all cases occur
1991	Carboxylic acids having carboxyl group one is called:	A. Mono carboxylic acid B. Di-carboxylic acid C. Teri-carboxylic acid D. Tetra carboxylic acid
1992	The half life of N_2O_5 at 0 oC is 24 minutes. How long will it take for sample of N_2O_5 to decay to 25% of its original concentration?	A. 24 minutes B. 72 minutes C. 120 minutes D. 40 minutes
1993	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
1994	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
1995	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
1996	When chlorofluoro carbon are subjected to U.V they form	A. Cations B. Aninons C. Free radicals D. None of these
1997	How many secondary carbon atoms are present in Methylcylopropand	A. 1 B. 2 C. 3 D. 0
1998	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
1999	Phenol is colourless, crystalline and solid	A. Hygroscopie B. Deliquescent C. Moistening D. Odourless
2000	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
2001	Cholesterol is an important precursor in the biosynthesis of	A. Adrenal hormones B. Sex hormones C. Vitamin-D D. All of these
2002	How many times a newspaper can be recycled	A. 02 B. 05 C. 08 D. 10
2003	Which of the following is the element not present in all proteins	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur
2004	Which one of the following compounds act as catalyst when alcohols react with carboxylic acids.	A. Pt B. Conc. H_2SO_5 C. Conc HNO_3 D. Ni
2005	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
2006	In the atosphere, $CO_2$is about	A. 0.01% B. 0.03% C. 0.05% D. 0.09%
2007	Which of the following has isomorphous structure with MgO	A. NaF B. S C. Sn D. N
2008	Keeping in view the size of atoms, which order is correct?	A. N>C B. P > Si C. Ar > Cl D. Li > Be
2009	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
2010	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
2011	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
2012	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
2013	The enthalpies of all elements in their standard states are	A. Unity B. always +ve C. always -ve D. zero
2014	Nitrogen in the atmosphere is:	A. 78% B. 21% C. 0.9% D. 0.03%
2015	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
2016	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
2017	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
2018	$AgNO_3$ is a polymorphic having two different crystalline forms which are	A. cubic, tetragonal B. monoclinic, hexagonal C. cubic, orthorhombic D. orthorhombic, rhombohedral
2019	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
2020	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
2021	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
2022	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
2023	A polymer may be	A. Linear B. Branched C. Cross linked D. All of these
2024	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
		A. small size

2025	Ar has low critical temperature and pressure due to its	B. monatomic molecule C. low polarizability D. liquefaction temperature close to room temperature
2026	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
2027	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
2028	DDT is a:	A. Fungicide B. Insecticide C. Herbicide D. All
2029	Esters have fruity smell and are used as artificial favours. Amyl acetate gives flavour of	A. Banana B. Jasmine C. Pineapple D. Orange
2030	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
2031	Phosphorous is very useful in growth of:	A. Leave B. Root C. Stem D. Seed
2032	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
2033	During the Sn1 reactions, the fast reaction involves.	A. Breakage of covalent bond B. Formation of carbocation C. Transition state D. Atttack of nucleophile
2034	Lithosphere has amount of silicon:	A. 35.30% B. 27.72% C. 40.01% D. 21.13%
2035	During thunderstorms, water dissolves	A. Dust particles B. HCl C. Nitric acid D. Clouds
2036	Out of total amount of water available for human use is	A. 0.30% B. 0.2% C. 40% D. 50%
2037	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
2038	An example of simple protein is	A. lipoprotein B. Cholesterol C. lecithin D. globulin
2039	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
2040	What is component of environment?	A. Atmosphere B. Hydrosphere C. Lithosphere D. All of these
2041	Phenol is completely soluble in water above	A. 25°C B. 62.3ºC C. 68.5°C D. 66.50°c
2042	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
2043	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
		A. CaMg3 (SiO3)4

2044	What is the formula of dolomite?	A. Calcite ($CaCO_3$) B. $MgCO_3$ C. $MgCO_3.CaCO_3$, D. $MgSO_4$
2045	Most harmful of biosphere is	A. Deforestation B. Nuclear fail out C. Salinity D. Water logging
2046	Carboxylic acids can be prepared from:	A. Oxidation of alkane B. Oxidation of alcohols C. Oxidation of aldehydes D. All of these
2047	How much quantity of total water is available as fresh water	A. 3% B. 1% C. 10% D. 21%
2048	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
2049	The boiling point of glycerin at 1 atmospheric pressure is:	A. 290°C B. 390°C C. 190C° D. 210°C
2050	At which oxidation state Cu achieves electronic configuration of Zn+2	A. 0 B. +2 C. +1 D. +3
2051	Proxy acetyl nitrat5e (PAN) is an irritant to human beings and it affects:	A. nose B. stomach C. eyes D. ears
2052	All of the following substances are crystalline except:	A. carbon B. ice C. plastic D. sucrose
2053	The formation of acetic anhydride from acetic acid follows the mechanism	A. SN B. AN C. SE D. AE
2054	If a reaction involves only solids and liquids, which of the following is true?	A. $\Delta H = \Delta E$ B. $\Delta H = \Delta E$ C. ΔH>ΔE D. $AH = AE + nRT$
2055	Out of monochloro, monobromo and mongiodo derivatives of ethane, the mos reactive compound towards nucleophilic substitution will be	A. C_2H_5Br B. C_2H_5Cl C. C_2H_5I D. All are equally reactive
2056	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
2057	Propanone does not undergo	A. Oxime formation B. Reduction of Fehling solution C. Hydrazone formation with hydrazine D. Reaction with HCN
2058	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
2059	Part of fresh water consumed in industry is:	A. 1% B. 2% C. 69% D. 23%
2060	Arginine, lysine and ornithine are	A. Obtained by hydrolysis of proteins B. Essential amino acids C. Basic amino acids D. Derived from butyric acid
2061	Increased concentration of enzyme alkaline phosphatase is a sign of	A. hemophilia B. heart disease C. thrombosis D. rickets
2062	Helical structure of proteins is stabilized by	A. Peptide bond B. Dipeptide bond C. Van der Wall's forces

		D. Hydrogen bonding
2063	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
2064	Which of these is a synthetic polymer	A. Polypeptide B. Cellulose C. Polyester D. Starch
2065	Which one of the following is a disaccharide?	A. glucose B. sucrose C. fructose D. starch
2066	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
2067	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
2068	Formula of stearic acid is:	A. C₁₁H₂₃COOH B. C₁₃H₂₇COOH C. C₁₅H₃₁COOH D. C₁₇H₃₅COOH
2069	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
2070	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
2071	The strength of dipole-dipole forces depends upon	A. Electro negativity difference B. Distance between atoms C. Electropositivity difference D. Both A & B
2072	Starch is a polymer is of:	A. sucrose B. fructose C. α-D-Glucose D. lactose
2073	In [Ti (H2O)]3+ which colour is transmitted	A. Yellow B. Blue and red C. Blue and yellow D. red and yellow
2074	The Kw. of water at 25 C° is given by	A. 10(-7) B. 10(-10) C. 10(-12) D. 10(-14)
2075	Ecosytem is a smaller unity of:	A. nydosphere B. biosphere C. lithosphere D. atmosphere
2076	A single chloride free radical can destroy the ozone molecules	A. 100 B. 100000 C. 10000 D. 10
2077	Anline is a derivative of:	A. alkane B. alkene C. aromatic hydrocarbon D. alicyclic
2078	The %age of nitrogen in urea is:	A. 46 B. 60 C. 70 D. 80
2079	Which one of following elements is not present in all proteins?	A. Carbon B. Hydrogen C. Nitrogen D. Sulphur
2080	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
		A. Both are soluble in water

2081	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
2082	There are _____ types of solids	A. 1 B. 2 C. 3 D. 4
2083	During sudden expansion of a gas energy is needed to overcome the intermolecular:	A. Vibrations B. Attractions C. Repulsions D. All of above
2084	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
2085	An oil of fat with no double bond have iodine number:	A. Zero B. 100% C. 50% D. Minimum
2086	Polycyclic aromatic hydrocarbons are taught to be	A. Disinfectant B. Carcinogenic C. Helpful D. Reactive
2087	Anthracene contains number of fused benzene rings	A. 1 B. 2 C. 3 D. 4
2088	Which of these polymers is a synthetic polymer	A. Starch B. Animal fat C. Polyester in an addition polymer D. Cellulose
2089	Which is the following would have most like an ideal gas at room temperature?	A. carbon dioxide B. helium C. hydrogen D. nitrogen
2090	The oxidation state of transition elements is usually	A. Variable B. Single C. Constant D. Infinite
2091	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
2092	The phenomenon in which sudden expansion of a gas causes cooling is called	A. evaporation B. cooling C. Joule Thomson effect D. sublimation
2093	The boiling points of the halogens	A. increases down the group B. decreases down the group C. remains constant D. can not be predicted
2094	The pressure of gas at 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
2095	Which of the following gases diffuse quickly:	A. N₂ B. NH₃ C. CO₂ D. Cl₂
2096	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
2097	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
2098	In the reaction ? represents which one of the following products.	A. Ketone B. Aldehyde C. Formic acid D. Ether
	Which of the following is	A. geometric shape

2099	Which of the following is not a property of crystalline solid	B. cleavage plane C. anisotropy D. isomerism
2100	pi-bond can be formed by sideways overlap of	A. s-orbital B. d-orbital C. p-orbital D. sp orbital
2101	Substances that tend to decrease the activity of enzymes are called	A. coenzyme B. activators C. inhibitors D. apoenzyme
2102	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.
2103	The transition temperature of tin is	A. 95.5 C° B. 13.2 C° C. 13.2°C D. 128.5°
2104	The number of moles of CO2 which contain 16g of oxygen	A. 0.25 B. 1.00 C. 1.50 D. 0.50
2105	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.
2106	Which one of the following is water soluble vitamin?	A. Niacin B. Riboflavin C. Trypsin D. Ascorbic acid
2107	Water in swimming pools is purified by adding	A. Sodium B. Chlorine C. Phosphorus D. Potassium
2108	Proteins loose their ability to work	A. by slight heating B. by change in structure C. by slight cooling D. when inside the body
2109	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
2110	Which is not a calcareous material:	A. Lime B. Marble C. Clay D. Marine shel
2111	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
2112	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
2113	Chemical equilibrium involving reactants and products in more than one phase is called:	A. Homogeneous B. Heterogeneous C. Dynamic D. Static
2114	Which reagent is responsible for the conversion of ketone to secondar alcohul	A. NaAlH B. NaBH4 C. Al D. Red P
2115	Hydrosphere covers the surface of erath:	A. 70.8% B. 71.8% C. 72.8% D. 73.8%
2116	The dehydration of ethyl alcohol with concentrated H2SO4 at 140°C gives	A. Ethene B. Alcohol C. Diethyl ether D. Carboxylic acid
2117	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

2118	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
2119	Hardness which can be removed by boiling is called	A. Permanent hardness B. Temporary hardness C. Stiffness D. Toughness
2120	Velaric acid is obtained from a herb velarian, its IUPAC name is	A. Propionic acid B. Pentanoic acid C. Butyric acid D. Caporic acid
2121	Select one which is alcohol	A. CH3-CH2-OH B. CH3COOH C. CH3-O-CH3 D. CH3-CH2-Br
2122	An alkyl halide reacts with NH3 to give	A. Amide B. Cyanide C. Amine D. Aniline
2123	The electrolyte used in fuel cell is	A. KOH B. NaCl(aq) C. NaNO3 D. Molten NaCl
2124	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
2125	Among solids,the highet melting point is exhibited by	A. Covalent solids B. Ionic solids C. Pseudo solids D. Molecular solids
2126	Temporary hardness can be removed by adding	A. Lime B. Carbon C. Oxygen D. Slaked lime
2127	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
2128	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
2129	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
2130	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
2131	Which of the following is not glyceride	A. Soap B. Phospholipids C. Oil D. Fat
2132	The clotting time of blood is increased due to the deficiency of	A. vitamin A B. vitamin K C. vitamin D D. vitamin C
2133	The standard reduction potential of Zinc is	A. 0.76V B. 0.34 C. -0.34V D. -0.76V
2134	Iodine number of an oil indicates its:	A. molecular weight B. purity C. degree of unsaturation D. acidic strength
2135	The gases suddenly if these are allowed to expand:	A. react B. cool down C. heat up D. moved randomly
	Which of the following	A. 3-Methylbutan-2-ol

2136	undergoes easy dehydration?	B. Ethanol C. 2.Methylpropan-2-ol D. Methanol
2137	The hetero atom in py ridine is	A. Oxygen B. Nitrogen C. Chlorine D. Sulphur
2138	The solid particles posses only _____ kinetic energy	A. Translational B. Rotational C. Viberational D. Circular
2139	In the atmosphere, $O_2$is about	A. 10% B. 15% C. 21% D. 25%
2140	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
2141	Select the name of reedy plant from which word paper is derived:	A. Sunflower B. Water hyacinth C. Papyrus D. Rose
2142	Water exist in only	A. One state B. Two state C. Three states D. 4 states
2143	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
2144	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
2145	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
2146	The molecules of CO2, in dry ice form the	A. covalent crystals B. molecular crystals C. none of these crystals D. ionic crystals
2147	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]
2148	Newspaper can be recycled again and again by how many times	A. 5 B. 4 C. 2 D. 3
2149	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
2150	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
2151	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
2152	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
2153	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
2154	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
2155	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

	disease is the pollution of:	C. organic waste in drinking H₂O D. oil spills in H₂O
2156	Which of the following molecule has largest number of shared pair of electrons?	A. CO₂ B. N₂ C. NH₃ D. C₂H₄
2157	The existing property of an element in to more than are crystalline state is termed as:	A. isomorphism B. polymorphism C. isotropy D. allotropy
2158	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
2159	Absolute zero is equal to:	A. -273.15K B. -273.15^oC C. -237.15K D. -273 ^oC
2160	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
2161	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
2162	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
2163	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
2164	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
2165	An instrument which is used to measure the pressure of a gas is called:	A. barometer B. photometer C. stalagmometer D. viscometer
2166	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
2167	Agriculture consumes part of fresh water:	A. 1% B. 2% C. 69% D. 23%
2168	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
2169	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
2170	Which one of the following is not a form of chemical bonding?	A. covalent bonding B. hydrogen bonding C. ionic bonding D. metallic bonding
2171	Most of the reactions which give stable products are	A. Endothermic B. Exothermic C. Isothermal D. Non of these
2172	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
2173	The movement of gas molecules from a region of high pressure to vacuum is called:	A. Evaporation B. Effusion C. Conduction D. Diffusion

	called.	D. Diffusion
2174	Which of the following is a simple protein	A. Albumins B. Legumin C. Callogen D. All
2175	Identify the linear polymer out of following	A. Amylose B. Amylopectin C. Starch D. Glycogen
2176	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
2177	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
2178	By increasing the concentration of reactants, the rate of reaction	A. Decreases B. Increases C. Remains constant D. Not predicted
2179	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
2180	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
2181	The main pollution leather tanneries in the waste water is due to the salt of:	A. chromium B. copper C. calcium D. lead
2182	How many kinds of space lattices are possible in a crystal?	A. 23 B. 7 C. 230 D. 14
2183	A compound z' decolorizes bromine water and produces white ppt. The compound 'z'is	A. Alkane B. Alcohol C. Phenol D. Benzene
2184	Mathematically, Boyle's law is indicated as:	A. VT = K B. PT = K C. PV = K D. None of these
2185	Which of the following are thermoplastic materials?	A. PVC (poly vinyl chloride) B. polystryences C. polyethylene D. all above
2186	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
2187	The word polymer is derived from words poly mean many and mer means unit.	A. Latin B. Greek C. English D. French
2188	Which of the following polymer has application in paper industry	A. Starch B. Glycogen C. Protein D. All
2189	The respiration process taking place in animals depends upon a difference in:	A. vapour pressure B. osmotic pressure C. partial pressure D. atmospheric pressure
2190	With increase in temperature, ionic product of H2O	A. Decreases B. Remains same C. Increases D. May increase or decrease
2191	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
2192	What is the formula of clay?	A. Asbestos B. Talc C. H2Al2(SiO4)2.H2O D. Na2SiO3
	No of electron in $^{69}Ga^{3+}$	A. 28

2193	will be 31	B. 29 C. 30 D. 34
2194	Which liquid is more volatile?	A. water B. mercury C. benzene D. honey
2195	SiO_2 is an example of:	A. metallic crystals B. Ionic crystals C. a crystal whose structure depending upon the temperature D. covalent crystals
2196	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
2197	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
2198	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
2199	Newspapers can be recycled again and again by how many times	A. 5 B. 2 C. 4 D. 3
2200	CFCs are mainly used in industries due to	A. Low cost B. Gaseous nature C. High reactivity D. Un stability
2201	d-d transition cannot be observed in	A. Cr B. Cu C. Mn D. Zn
2202	Amount of fresh water used by agriculture is	A. 2% B. 23% C. 69% D. 97%
2203	Matter having no definite shape and volume is called:	A. gas B. liquid C. solid D. plasma
2204	The highest melting point is observed by	A. Butanoic acid B. Propanoic acid C. Pentanoie acid D. HCl
2205	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
2206	Pressure remaining constant at which temperature the volume of a gas will become twince of what it is at $0^\circ C$.	A. 546◦C B. 200◦C C. 546K D. 273K
2207	Macromolecules or polymers are large molecules built up from small molecules known as monomers. This hypothesis put forward by	A. Newton B. Schrodinger C. Lewis D. Stadinger
2208	Which of these the most widely used nitrogen fertilizer in Pakistan?	A. urea B. ammonium nitrate C. ammonium sulphate D. ammonium chloride
2209	Augus smith discovered in the mid of seventeenth century:	A. acid B. Base C. Acid rain D. Fertilizer
2210	Which of the folowing compound is expected to be colored	A. Na2SO4 B. ZnCl2 C. MgF₂ D. CuF₂
	Absolute temperature is the	A. All molecular motion ceases B. volume becomes zero

2211	Absolute temperature is the temperature at which	B. Volume becomes zero C. Mass becomes zero D. None of these
2212	All are examples of different classes of enzymes except	A. Hydrolases B. Isomerases C. Oxido-reductases D. Mutases
2213	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
2214	Temperature required for the dehydration of ethanol into ethene in the presence of HaSOu is	A. 130°C B. 170°C C. 175°C D. 180°C
2215	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
2216	The starting substance for the preparation of iodoform is any of the following, except	A. CH3CH(OH)CH3 B. CH3CH2OH C. HCH2OH D. CH3COCH3
2217	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
2218	The Complete oxidation of ethanol produces first Ethanal than	A. Ethanal B. Propanone C. Ethanoic acid D. Benzoic acid
2219	Two substances that have the same crystal structure are said to be	A. isomorphous B. anisotropic C. isotropic D. polymorphous
2220	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
2221	Acetaldchyde and ketone form addition product with	A. Phenyl hydrazine B. Hydroxylamine C. Hydrazine D. hydrogen cyanide
2222	Silk is an example of	A. animal fiber B. vegetable fibre C. mineral fibre D. none of these
2223	L-asparginase is helpful in treatment of	A. skin disease B. blood cancer C. heart failure D. obstructive jaundice
2224	Glucose forms a polymer which is stored in liver the name of this polymer is:	A. glycogen B. starch C. cellulose D. arnylose
2225	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
2226	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
2227	Zn has	A. Zero unpaired electrons B. Three unpaired electrons C. Five unpaired electrons D. One paired electrons
2228	A molecule which contains two lone pairs and two bond pairs of electrons in	A. Tetrahedral B. Trigonal pyramidal

	valence shell of central atom, geometrical shape of molecules will be	C. Angular D. Linear
2229	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
2230	Aluminium is in Group III, its oxide will have the formula.	A. AlO B. AlO₂ C. Al₂O₃ D. Al₃O₂
2231	The most unsymmetrical one in crystal system is	A. triclinic B. Li, Na, K C. monoclinic D. hexagonal
2232	Reaction of acetic acid with LiAlH4 gives	A. Ethanol B. Ethanal C. Ethane D. Ethyl acetate
2233	Large molecule formed by combination of smaller units these smaller units are called:	A. Polymers B. Macromolecule C. Micromolecule D. a & b
2234	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
2235	Silk is the example of:	A. mineral fiber B. vegetable fiber C. animal fiber D. none of above
2236	Choose an addition polymer among the following	A. Terylone B. Nylon 6, 6 C. Polystyrene D. Epoxy resin
2237	Which is not a calcareous material?	A. lime B. clay C. marble D. marine shell
2238	Ice occupies more space than liquid water	A. 9% B. 10% C. 11% D. 12%
2239	Glucose and fructose are isomers	A. Chain isomers B. Position isomers C. Functional group isomers D. Metamers
2240	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
2241	Total number of possible chain and positional isomers of butyl alcohol among alcohols are	A. Four B. Five C. Two D. Six
2242	All of the following are polar amino acids except	A. Serine B. Glutamate C. Arginine D. Alanine
2243	Oceans, rivers, streams, lakes, polar ice caps, glaciers and group water reservoirs are included in:	A. atmosphere B. lithosphere C. hydrosphere D. biosphere
2244	Aromatic carboxylic acids have corboxyl group attached to group:	A. Alkyl group B. Aryl group C. Phenyl group D. Benzyl group
2245	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
2246	The ionization energy of hydrogen atom is	A. Zero B. 131.3kJmole C. 13.13kJ/mole D. 1313kJ/mole
	Which one is best buffer	A. pH = pKa B. pH > pKa

2247	Which one is best buffer those have	B. pH < pKa C. pOH < pKb D. pKa =0
2248	Unit of ozone is?	A. Debye B. Dobson C. Esu D. Coulumb
2249	The solubility of A2B3 is X mole dm-3. Its Ksp is?	A. 6X(5) B. 36X(5) C. 64X(5) D. 108X(5)
2250	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
2251	Which element differs from rest of elements of its group?	A. Ba B. Mg C. Ca D. Be
2252	The strongest conjugate base is	A. OH- B. CH3O- C. C6H5O- D. CH3COO-
2253	Which is not a steroid	A. Cholesterol B. Ergosterol C. Phospholipids D. None of these
2254	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
2255	Enzymes are	A. simple proteins B. derived proteins C. compound proteins D. conjugated proteins
2256	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
2257	Liquid ammonia has become an important fertilizer for direct application to soil. It contains _____ nitrogen.	A. 46% B. 82% C. 14% D. 17%
2258	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
2259	Which of the following solids has a simple molecular lattice?	A. magnesium oxide B. sodium C. silicon(IV) oxide D. sulphur
2260	The lattice energy of NaCl is	A. 787 j/ mole B. 790 kj/mol C. 780 kJ/ mol D. -787 kl / mole
2261	The most complex strueture a single polypetide can assume is	A. 1° structure B. 2°structure C. 3° structure D. 4° structure
2262	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
2263	Nucleic acid fist descovered in	A. 1868 B. 1869 C. 1900 D. 1905
2264	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
2265	Amino acid which has cyclic structural is	A. Proline B. Valine C. Alanine D. Glutamic acid

		D. Glutamic acid
2266	Hydrolysis of alkyl nitriles gives:	A. Alkane B. Alkyl halide C. Alkyl nitride D. Minerals acids & Alkalies
2267	Liquids are less common than:	A. Solids. B. Plasmas. C. Gases. D. All of above.
2268	The substance for the separation of isotopes is firstly converted into the	A. Neutral state B. Free state C. Vapour state D. Charged state
2269	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
2270	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
2271	The charring of glucose when it is heated with conc.H_2SO_4 is due to	A. Oxidation B. Reduction C. Dehydration D. Dehydrogenation
2272	Which factor is helping to reduce the environment pollution	A. rapid growth population B. urbanization C. idustrialization D. increase of plantation
2273	Natural fertilizers are materials derived form:	A. plants B. animals only C. both plant and animals D. none of all
2274	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
2275	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
2276	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
2277	S.I units for measurements of pressure	A. Pascal B. mm of Hg C. atm D. Torr
2278	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
2279	In purification of potable water the coagulant used is:	A. Nickel sulphate B. Copper sulphate C. Barium sulphate D. Aluminium sulphate
2280	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
2281	Which one of the following is not type of polemer	A. Copolymer B. Homopolymer C. Terpolymer D. Heteropolymer
2282	A sing chlorine free radical can destroy how many ozone molecules:	A. 10 B. 100 C. 1000 D. 10000
	Which of the following test	A. 2. 4 DNPH test B. NaHSO3 test

2283	Which of the following test is not given by aldehvde	B. NaHSO3 test C. Tollen's test D. Sodium nitroprusside test
2284	Gases deviate from ideal behaviour at high pressure.Which of the following is correct for non-ideality?	A. at high pressure the gas molecules move in one direction only B. at high pressure the collisions between the gas molecules are increased manifold C. a high pressure the volume of the gas become insignificant D. at high pressure, the intermolecular attraction becomes significant
2285	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
2286	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
2287	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
2288	Elimination of molecular reactions usually obey:	A. first order kinetics B. second order kinetics C. third order kinetic D. zero order kinetic
2289	If allowed to expand, the gases suddenly	A. heat up B. move randomly C. react D. cool down
2290	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
2291	The unit of peptides is	A. Moiety B. Residue C. Polypeptide D. Both A and B
2292	Addition of washing soda removes	A. Softness of water B. Temporary hardness of water C. Permanent hardness of water D. Hydrogen from water
2293	Hydrosphere includes	A. Seas and rivers B. Ocean & polar ice caps C. Ground water D. All of above
2294	Benzene reacts with Ethyl chloride in presence of AlCls to give	A. Benzalchloride B. Benzyl chloride C. Ethyl benzene D. Benzotrichloride
2295	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
2296	Cyclonite is a powerful:	A. explosive B. antiseptic C. analgesic D. anti-inflammatory
2297	The fiber which is made from acrylonitrile as monomers:	A. PVC B. rayon fiber C. acrylic fiber D. Polyester fiber
2298	If there are weak intermolecular forces in a liquid, it will be	A. more volatile B. less volatile C. more dense D. less heavy
2299	In SO_4^{-2} the oxidation number of sulphur is	A. -8 B. -6 C. +8 D. +6
2300	Oils and fats belong to the class of	A. Alcohols B. Hydrocarbons C. Acids D. Esters
2301	Charles's law is only obeyed at which temperature scale	A. Celsius B. Kelvin C. Fahrenheit D. both A&B

2302	One of the following is potically non active amino acid	A. Valine B. Tyrosine C. Glycine D. Theronine
2303	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
2304	Identify the compound, which give iodoform test	A. Methanol B. 3- Hexanol C. Methyl ketone D. Propionaldehyde
2305	The instrument that is used to measure the pressure of a gas is called	A. viscometer B. photometer C. barometer D. stalagmometer
2306	which chlorine compound has bonding that can be described as ionic with some convalent character?	A. NaCl B. MgCl₂ C. AlCl₃ D. SiCl₄
2307	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
2308	At different temperature, the vapour pressure of water is	A. different B. same C. low D. high
2309	Synthetic organic pesticides formulated nowadays are more then:	A. One thousand B. Ten thousand C. Two thousands D. Twenty thousand
2310	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
2311	In a crystal a ≠ b ≠ c,a = y 90° and β ≠ 90° it is	A. Monoclinic B. Rhombic C. Trigonal D. Tetragonal
2312	Which of the following is soluble in water?	A. CH3OH B. CCL4 C. CHCl3 D. CS2
2313	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
2314	The arrangement ABC, ABC .... is referred as	A. cubic close packing B. octahedral close packing C. hexagonal close packing D. tetrahedral close packing
2315	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
2316	Geometry of simple molecule with sp2 hybridization	A. Triangular planar B. Trigonal C. Square planner D. Pyramidal
2317	Classification of polymerization into two types was suggested by	A. W.H Carothers B. Staudinger C. OSwald D. Aspdin
2318	H-bonding is maximum in:	A. ethanol B. benzene C. diethyl ether D. water
2319	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 D. 1,2-dibromo butane
2320	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

2321	The shape of $[Co(NH_3)_6]^{3+}$ complex is.	A. Linear B. Octahedral C. T Tetrahedral D. Square planer
2322	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
2323	Which one of the following will react with bothethand and ethanoic acid at room temperature	A. CaCO3 B. CuO C. Na-metal D. CH3OH
2324	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
2325	Substance that does not show the process of sublimation is	A. K2Cr2O7 B. iodine C. naphthalene D. NH4Cl
2326	Which of the following is Homopolymer	A. Polyvinyl acetate B. Acrylic resin C. Polyester resins D. Both A and C
2327	Nylon -6,6 also called	A. Polyvinyl alcohol B. Polystyren C. Polyamide D. Polyester
2328	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
2329	Which one of the following elements is the strongest reducing agent?	A. Chlorine B. Sodium C. Magnesium D. Aluminium
2330	Polymers class is:	A. homopolymer B. copolymer C. ter polymer D. All of these
2331	On hydrolysis sucrose gives:	A. glucose and maltose B. fructose and lactose C. fructose and maltose D. glucose and Fructose
2332	Which step is unnecessary for purification of water for drinking purposes	A. aeration B. coagulation C. treatment with chlorine D. treatment with iodine
2333	Vapour pressure is not affected by	A. Surface area B. Intermolecular forces C. Temperature D. Nature of liquid
2334	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
2335	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
2336	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
2337	The exothermic process is	A. Evaporation B. Sublimation C. Respiration D. Boiling
2338	Palmitic acid & steanic acid are obtained from process of fats & oils:	A. Reducing B. Neutralization C. Oxidation D. Hydrolysis
2339	Dipole-dipole forces and London forces are collectively called	A. hydrogen bonding B. Vander Waals forces C. Covalent bonding D. Ionic bonding
		A. they have cubic geometry

2340	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
2341	Ozone is usually produced in the	A. South polar region B. North pole region C. Tropical region D. Thermosphere zone
2342	$SO_2$and NO_2cause pollution due to increase in	A. Buffer action B. Basicity C. Acidity D. Neutrality
2343	During space flights, astronauts ohlained water from	A. Nickel cadmium cells B. Lead accumulator C. Fuel Cell D. Alkaline battery
2344	New3spapers can be recycled again and again by how many times?	A. 5 B. 3 C. 2 D. 4
2345	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
2346	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
2347	Instantaneous dipole-induced dipole forces are also known as:	A. dipole-dipole interactions B. hydrogen bonds C. covlent bonds D. Van der Waals forces
2348	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
2349	Decomposition of H2O is	A. Endothermic reaction B. Nuclear reaction C. Exothermic reaction D. Zero nuclear reaction
2350	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
2351	Chemicals used to kill insects are:	A. Herbicides B. Insecticides C. Pesticides D. Fungicides
2352	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
2353	Higher the surface area available for reaction	A. slower the reaction B. faster the reaction C. constant the reaction D. lower the Ea
2354	Molecular mass of PVC is (DP = 1200)	A. 63000 B. 75000 C. 75600 D. 80,000
2355	2-Propenol, on rearrangement, yields	A. Propanal B. Propanone C. 2-propano D. Both A and B
2356	The most abundant protein in the human body is	A. Collagen B. Keratin C. Myosin D. Albumin
2357	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
		A. Unsaturated fatty acids

2358	Vegetable oils are	B. Glycosides of unsaturated fatty acids C. Glycosides of saturated fatty acids D. None
2359	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 40.33g. Teacher told him that if both eggs have been dropped in water, the weight of egg B would have been:	A. equal to that of egg A B. less than that of egg A C. greater than that of egg A D. unaffected instead
2360	Covalent bond is	A. A weak bond B. A true chemical bond C. A hydrogen bond D. Responsible for secondary structure of protein
2361	Which one of the following amino acids is basic in nature?	A. Glycine B. Alanine C. Lysine D. Glutamic acid
2362	In elimination reaction , alcoholic KOH is used - OH in this case will act as.	A. Electrphile B. Base C. Leaving group D. Acid
2363	Dehydrohalogenation of secondary butyl bromide will give	A. Propene B. 1-Butene C. Butene D. 2-Butene
2364	Which of the following molecules should be more volatile	A. HF B. HCl C. HBr D. HI
2365	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
2366	The eleventh concentration of metal cause clogs of gills in fish:	A. Al B. He C. Pb D. Ca
2367	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
2368	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
2369	Example of non-protein amino acid	A. Alanine B. Citrulline C. Phenylalanine D. Leucine
2370	Suspended matter is settled in purification of water by:	A. aeration B. coagulation C. chlorination D. treatment
2371	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
2372	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
2373	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
2374	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
	The bonding which occurs	

2375	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
2376	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
2377	The element which exhibits maximum catenation property is	A. C B. Pb C. Ge D. Sn
2378	Atoms having same mass number but different atomic numbers are called.	A. Isotopes B. isobars C. Isotones D. isomers
2379	The optimum pH value for the enzyme pepsin is	A. 10 B. 1.4 C. 8 D. 6
2380	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
2381	one gram of carbohydrate yields energy:	A. 10kcal B. 100kcal C. 4kcal D. 9kcal
2382	On hydrolysis sucrose gives	A. Glucose and maltose B. Fructose and lactose C. Fructose and maltose D. Glucose and fructose
2383	Which process of ester will yield carboxylic acid?	A. Hydration B. Hydrolysis C. Oxidation D. Reduction
2384	Change in enthalpy (ΔH) of a system can be calculated by	A. $\Delta H=\Delta E - PV$ B. $\Delta H =\Delta E +q$ C. $\Delta H = \Delta E - q$ D. $\Delta H = \Delta E + P\Delta V$
2385	In an electrochemical series, elements are arranged on the basis of	A. pH scale B. pKa scale C. pOH scale D. Hydrogen scale
2386	Which of the following protein is used to make buttons	A. Gelatin B. Callogen C. Albumin D. Casein
2387	Which one among the following is not a good leaving group	A. HSO4- B. Cl- C. OH- D. Br-
2388	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
2389	Chemical like $Al_2(SO_4)$ or alum are used in purification of water druing step:	A. aeration B. coagulation C. chlorination D. treatment
2390	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
2391	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.
2392	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
2393	Plastic, rubber, synthetic fibers belong to	A. Inorganic B. organic C. Biopolymer

	macromolecules:	C. Biopolymer D. synthetic
2394	The pH range of the acid rain is:	A. 6.5 __ 6 B. Less than 5 C. 8 __ 7.5 D. 7 __ 6.5
2395	The fibre which is made from vinylidine chloride polymer is called	A. rayon fibre B. azlon fibre C. acetate fibre D. all of the above
2396	How will you distinguish between methanol and ethanol?	A. By Lucas test B. By silver mirror test C. By oxidation D. By Iodoform test
2397	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
2398	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
2399	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
2400	The compressibility factor of an ideal gas is	A. 0 B. 1 C. 2 D. 4
2401	Acidification of soil can leach metal:	A. Al B. Hg C. Pb D. Ca
2402	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
2403	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
2404	Substances that tend to decrease the activity of enzymes are called:	A. coenzymes B. activators C. inhibitors D. apoenzyme
2405	The bond angle between any two sp hybrid orbitals is A.109.28°	A. 107.09° B. 120° C. 90° D. 80°
2406	Which one among the following is not a natural polymer?	A. protein B. cellulose C. nylon D. nucleic acid
2407	In the woody parts of trees, the % age of cellulose is.	A. 50% B. 10% C. 30% D. 100%
2408	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
2409	A fibre which is made from acrylonitrile as monomer	A. PVC B. rayon fibre C. acrylic fibre D. polyester fibre
2410	Ozone is an allotropic form of:	A. Carbon B. Phosphorus C. Oxygen D. Sulfur
2411	Which of the following waste material is not recycled for use again	A. Glasses B. Paper C. Plastic toys D. Hides of animals

2412	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
2413	Group VIB of transition elements contains	A. Zn. Cd. Hg B. Cr. Mo, w C. Fe. Ru, Os D. Mn. Te. Re
2414	The polymers which can not be re-softened again and again are called	A. Thermoplastic B. Thermosetting C. Both a and b D. None
2415	By the mid of 1980s depletion of total overhead ozone in antarctic region is	A. 20% B. 30% C. 40% D. 50%
2416	Evaporation causes	A. High temperature B. High pressure C. Cooling D. Vapour
2417	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
2418	Which attractive forces cause molecular solids to be formed?	A. Ionic B. Metallic C. Covalent D. van der Waals
2419	Which of the following molecule has zero dipole moment?	A. PCl3 B. BF3 C. NH3 D. H2O
2420	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
2421	The semi solid wastes in landfills is called:	A. Landfill B. effluents C. Leachate D. Incineration
2422	All 3d series elements show an oxidation state of oxidation state	A. +1 B. +2 C. +3 D. Zero
2423	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
2424	Reaction mechanism of alkanes with halogens is known as	A. Propagation B. Additon C. Elimination D. Free radical substitution
2425	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
2426	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
2427	COD of water can be measured by	A. Cr₂O₃ B. Cr₂O₄⁻²ions C. Cr₂O₇⁻²ions D. None of these
2428	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
2429	NO. of naturally occuring aminoacids is	A. 10 B. 20 C. 30 D. 40
2430	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
2431	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
2432	The type of isomerism shown by alkyl halides is	A. geometric B. functional C. positional D. metamerism
2433	Which woody raw material is used for the manufacture of paper pulp?	A. cotton B. bugases C. poplar D. rice straw
2434	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}
2435	Ozone is a gas having boiling point	A. Unstable B. High C. Low D. Moderate
2436	The angle between the unhybridized 2pz orbital and the three sp2 hybrid orbitals in ethene is	A. 180° B. 120° C. 90° D. 60°
2437	Which of the following is a thermosetting plastic?	A. PVC B. polyethylene C. polystyrene D. melamines
2438	Which oxide when mixed with water, will produce the most acidic solution?	A. CO B. CO₂ C. SiO₂ D. P₂O₅
2439	Leather tanneries use big auantities of:	A. Cr Vi salts B. Cr III salts C. Mn-salts D. Pb-salts
2440	Grey tin crystals belong to	A. tetragonal B. cubic C. orthorhombic D. rhomtrohedral
2441	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
2442	The pH rain of acid rain is	A. 8 - 7 B. 7 - 6.5 C. 6.5 - 6 D. less than 5
2443	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
2444	The catalyst used for the manufacture of H2SO4 by contact process is with bromine?	A. SO3 B. Pt/pd C. V2O5 D. Fe2O3
2445	The helical structure of protein is stabilized by	A. Peptide bond B. Covalent C. Hydrogen bond D. Glycoside bond
2446	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
2447	Which group activates the benzene ring	A. -COOH B. -COR C. -CHO D. -OH
2448	Hydrogen bonding is involved in	A. Solubility B. Detergents C. Biological molecules D. All the above
2449	Which of the following is the simplest form of	A. Gaseous state B. Liquid state C. Solid state

	matter?	C. Solid state D. All of above
2450	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
2451	Which compound will be produced by the oxidation of ethanol by acidified K2Cr2O7?	A. Ethanone B. Ethene C. Ethanoic acid D. Ethanol
2452	Starch is a polymer of	A. Sucrose B. Fructose C. α-D-Glucose D. Lactose
2453	Which of the following metal does not liberate hydrogen on reaction with acid?	A. Mg B. Pt C. Zn D. Ca
2454	The diffusion of gasses at absolute zero will be:	A. Slightly decrease B. unchanged C. Slightly increased D. Zero
2455	Diseases like dysentery, typhoid and hepatitis are caused by mixing of in water:	A. Live stock wastes B. Oil spilage C. detergents D. pesticides
2456	On adding NH3 to water	A. Ionic product will increase B. [H3O+] will inerease C. Ionic product will decrease D. [H3O+] will decrease
2457	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
2458	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
2459	The number of Cl- ions per unit cell of NaCl are	A. 6 B. 4 C. 2 D. 8
2460	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
2461	$H_2$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
2462	Which one of the following reaction of carboxylic acid is reversible.	A. Esterification B. Salt formation C. Reaction with PCl5 D. Reaction with SOCl2
2463	Petroleum or crude oil is a complex mixture of compounds mainly:	A. benzene B. minerals C. hydrocarbons D. phenols
2464	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
2465	Which is the chemical formula of calcium super phosphate:	A. CaH₂PO₄ B. CaHPO₄ C. Ca(H₂PO₄)₂ D. none of above
2466	The smog having high contents of $SO_2$is	A. Neutral smog B. Reducing smog C. Oxidizing smog D. Artificial smog
2467	In a period the atomic radii	A. increase B. decrease C. remain same D. first increase, then decreased
2468	Number of electrons involved in d-d transition of [Ti(H2O)6]+3	A. 1 B. 3 C. 2 D. 4

		D. 4
2469	The essential property of a fertilizer is that it should be.	A. Partially soluble B. Highly soluble C. In soluble D. Immiscible
2470	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
2471	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
2472	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
2473	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
2474	The molecules of $CO_2$is dry ice form the	A. ionic crystals B. covalent crystals C. molecular crystals D. any type of crystal
2475	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
2476	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
2477	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
2478	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
2479	Stronger is the oxidizing agent, stronger is the	A. emf of cell B. Oxidation potential C. Reduction potential D. Reduction potential
2480	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
2481	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
2482	D-block elements are also called	A. Non-typical transition element B. Outer transition elements C. Abnormal transition elements D. Inner transition
2483	Coagulation removes suspended particles in ran water:	A. 60% B. 70% C. 80% D. 90%
2484	Which of the following is a macronutrient?	A. Boron B. Iron C. Copper D. Carbon
	Collagen is a fibrous	A. heart B. nucleus

2485	protein present most abundantly in	B. nucleus C. connective tissues D. Arteries
2486	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
2487	Which of the following is sulphur highly containing protein	A. Collagen B. Keratin C. Ossein D. Reticulin
2488	Which of the following does not obey general formulas of monosaccharide	A. Mannose B. Fructose C. Glucose D. Deoxyribose
2489	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
2490	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
2491	Water cover earth surface more than:	A. 50% B. 60% C. 70% D. 80%
2492	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
2493	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
2494	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
2495	During combustion analysis, which one is used for absorbing carbon dioxide:	A. 50% KOH B. 5% KOH C. Mg(ClO4)2 D. Silica gel
2496	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)
2497	Water soluble and cyrstalline carbohydrrates are:	A. monosacharides B. obiligoseacharides C. polysacharides D. a and b
2498	In incinerating the waste is burnt at	A. 1000°C B. 100°C C. 2000°C D. 1500°C
2499	Critical temperature for a gas depends upon	A. Shape of molecule B. Size of molecules C. Inter molecular forces D. All of these
2500	The value of critical temperature of a gas depends upon its:	A. Size B. Intermolecular forces in it C. Shape D. All of above
2501	Which one of the following is NOT able to denature the ethanol?	A. Methanol B. Lactic Acid C. Pyridine D. Acetone
2502	At compromise distance the forces dominating between atoms are	A. repulsive forces B. attractive forces C. Dipole induced dipole force D. H-bonding
2503	Keratomalacia is caused due to the deficiency of vitamin	A. A B. K C. B D. D

2504	Which of the following amino acid is named due to its taste	A. Alanine B. Lysine C. Valine D. Glycine
2505	Hydration of ethene is an example of	A. Electrophilic addition B. Electrophilic substitution C. Nucleophilic addition D. Nucleophilic substitution
2506	One of the following metals is the most reactive and form super oxide. Indicate that	A. Mg B. K C. Be D. Li
2507	A basic buffer solution can be prepared by mixing?	A. Weak acid and its salt with strong base 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
2508	Succinic thiokinase is an enzyme of the type	A. mutase B. peroxidase C. ligase D. lyase
2509	To become a carbohydrate a compound must contain	A. 2-carbon B. 3-carbon C. 4-carbon D. 5-carbon
2510	One atmosphere is equal _____ Pascal	A. 760 B. 101325 C. 14.7 D. 1.01325
2511	Which is an intermediate in Svl	A. Ethoxide ion B. Alkene C. Alkyl halide D. Carbocation
2512	Molar mass of formic acid in benzene comes out to be	A. 64 B. 46 C. 32 D. 92
2513	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
2514	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