Periods

Sr	Questions	Answers Choice
1	Which of the following is a member of -block	A. Zn B. Al C. B D. Br
2	Electron affinity depends on	A. Atomic size B. Nuclear charge C. Atomic number D. Atomic size and nuclear charge both
3	Keeping in view the size of atoms, which order is the correct one	A. Mg > Sr B. Ba > Mg C. Lu > Ce D. Cl > I
4	Ionic hydrides are generally	A. Liquid at room temperature B. Good electrical conductors C. Good reducing agents D. Easily reduced
5	In the periodic table, the element with atomic number 16 will be placed in the group	A. Fourteen B. Sixteen C. Thirteen D. Fifteen
6	Which species represented by the following formula has the largest radius	A. P³⁻ B. Cl⁻ C. A_r D. K⁺
7	The most distinctive character among the elements is their division into	A. Metals and non-metals B. Solids, liquids and gases C. Atoms and molecules D. Active and inactive elements
8	Although hydrogen resemble with the elements of group IA, IVA and VII but it is usually placed in	A. Group IA B. Group IV A C. Group VII D. Group VIII
9	The coinage metals are	A. Ni, Pd, Pt B. Cu, Ag, Au C. Zn, Al, Pb D. Fe, Si, Sn
10	Which of the following pair of atomic numbers represents s-block elements?	A. 7, 15 B. 6, 12 C. 9, 17 D. 3, 20
11	The alkali metal which is liquid at 15°C is	A. K B. Cs C. Na D. None
12	Gradation in properties in the periods of periodic tables are due to change in	A. Atomic weight B. The number of electrons C. Number of protons D. Electronic configuration
13	The elements of group IA are called	A. Chalocogens B. Halogens C. Alkali metals D. Alkaline earth metals
14	Number of elements present in 5th period is	A. 8 B. 18 C. 32 D. 24
15	The elements of f-block are also known as	A. Inner-transition B. Outer transition C. Normal elements

		D. Alkaline earth metals
16	Which of the following statement about electron affinity of two elements is correct	A. Carbon has greater than oxygen B. Sulphur has less than oxygen C. Iodine has greater than bromine D. Bromine has less than chlorine
17	From $_{39}Y$ to $_{48}Cd$ are called	A. Transition elements B. Outer transition elements C. Inner transition elements D. 2nd transition series
18	Which of the following elements is/are not liquid at 30°C?	A. Ga B. Hg C. Ge D. Cs
19	The elements with atomic numbers 9, 17, 35, 53, 85 an all	A. Noble gases B. Halogens C. Heavy metals D. Light metals
20	$NaBH_4$and $LialH_4$are	A. Ionic hydrides B. Covalent hydrides C. Interposal hydrides D. Complex hydrides
21	Mark the correct statement	A. Na⁺is smaller than Na atom B. Na⁺is larger than Na atom C. Cl⁻is the smaller than Cl atom D. Cl⁻(ion) and Cl (atom) are equal in size
22	In the modern long form of the periodic table elements are arranged in the increasing order of	A. Atomic mass B. Atomic number C. Mass number D. Isotopic number
23	Which of the following statement about fluorine is not correct?	A. Electron affinity of chlorine is greater than that of fluorine B. Bond energy of fluorine is less than that of chlorine C. Fluorine cannot be prepared by electrolysis of fused metal fluorides D. Fluorine does not form oxoacid
24	Number of elements in the first period of the periodic table are	A. Two B. Four C. One D. Eight
25	What is the nature of Al_2O_3	A. Acidic B. Basic C. Amphoteric D. Neutral
26	Which of the following elements should be the least metallic in character	A. Rb B. In C. Te D. I
27	Among O, C, F, Cl, Br, the correct order of increasing radii is	A. F O C Cl Br B. F C O Cl Br C. F Cl Br O C D. C O F Cl Br
28	From left to right, atomic radii of transition elements	A. Increases B. Decreases C. Remain same D. None of the above
29	An element of the third period (Na to S) is heated in chlorine. The product is purified and then added to water. The resulting solution is found to be neutral. What is the element	A. Sodium B. Aluminium C. Silicon D. Phosphorus
30	NaH is	A. Ionic hydride B. Complex hydride C. Covalent hydride D. Interstitial hydride
31	The valency, ionization energy and electrongativity of elements are related to its	A. Atomic number B. Properties C. Atomic weight D. Family group
		A. Normal elements

32	Variable valency is generally exhibited by	A. Normal elements B. Transition elements C. Metallic elements D. None of these
33	Which of the following pairs are chemically dissimilar?	A. Na and K B. Ba and Sr C. Zr and Hf D. Ca and Zn
34	The element with highest electron affinity among the halogen is	A. F B. Cl C. Br D. I
35	Which of the following has highest oxidation potential	A. Be B. Li C. Na D. Ca
36	The coinage metals are	A. Ni, Pd, Pt B. Cu, Ag, Au C. Zn, Al, Pb D. Fe, Si, Sn
37	In a group form top to bottom, the hardness of alkali metals	A. Remains unchanged B. Increases C. Decreases D. None
38	All the elements belongs to the 2nd period are	A. Normal elements B. Transition elements C. Stable elements D. Halogens
39	Which of the following sets of atomic numbers belong to that of the alkali metals?	A. 1,12,30,4,62 B. 37,19,3,55 C. 9,17,35,53 D. 12,20,56,88
40	Which is true about the electronegativity order of the following?	A. P > Si B. C > N C. Br > Cl D. Sr > Ca
41	Variable valency is characteristic of	A. Halogen B. Transition elements C. Alkali metals D. Noble gas
42	Of the given alkali metals, the one with smallest size is	A. Rb B. Cs C. K D. Na
43	The IA elements are called	A. Alkaline earth metal B. Alkaline metals C. The halogens D. The inert gases
44	Who gave the concept of atomic number	A. Newton B. Mosley C. Dalton D. Newland
45	Which of the following is an inert gas?	A. H₂ B. O₂ C. N₂ D. Argon
46	The amount of energy required to remove an electron from an atom of an element in the gaseous state is called	A. Electron affinity B. Electronegatively C. Ionization energy D. None of these
47	The energy absorbed when an electron is added to a gaseous atom to form a gaseous ion is called	A. Electron affinity B. Ionization energy C. Both of these D. None of these
48	Eka-aluminium and Eka-silicon are known as	A. Gallium and Germanium B. Aluminium and silicon C. Iron and sulphur D. Proton and silicon
49	Which of the following element has the maximum electron affinity?	A. F B. S C. I D. Cl

50	In a period, melting points of elements	A. Increases B. Decreases C. Remain constant D. First increases then decreases
51	According to Mendleev, the physical and the chemical properties are the periodic function of their	A. Atomic number B. Atomic mass C. Atomic wt D. None
52	Which orbital is in the process of completion in case of transition elements	A. p-orbital B. f-orbital C. d-orbital D. s-orbital
53	According to Mendeleev, the properties of the elements are periodic function of their	A. Atomic number B. Atomic volumes C. Atomic masses D. Atomic densities
54	Doberiner arranged the similar elements into	A. Pairs B. Triads C. Triplets D. Rows
55	The horizontal rows in the periodic table are called periods. The number of period are	A. 5 B. 6 C. 7 D. 8
56	The electropositive elements from	A. Acidic oxides B. Basic oxides C. Neutral oxides D. None
57	The elements of sub-group A are called	A. Transition elements B. Main elements C. Typical elements D. Rare earth elements
58	Which is the most volatile compound	A. HI B. HCl C. HBr D. HF
59	Which of the following represents elements in order of increasing atomic size?	A. I, Br, Cl B. Na, Mg, C C. C, N, O D. Li, Na, K
60	In the modern periodic table the elements are placed in the ascending order of their	A. Atomic masses B. Melting points C. Boiling points D. Atomic numbers
61	Rare earth elements are	A. s-block elements B. p-block elements C. d-block elements D. f-block elements
62	In a group, the ionization energy	A. Increase B. Decreases C. Remain constant D. First increases then decreases
63	The number of elements in the 4th periods of periodic table is	A. 8 B. 10 C. 18 D. 32
64	Which of the following has highest first ionization potential?	A. Carbon B. Oxygen C. Nitrogen D. Boron
65	The correct order of 2nd I.P. of C,N,O and F is	A. O > F > N > C B. O > N > F > C C. C > N > O > F D. F > O > N > C
66	The valence shell electronic structure of an element is ns^2np^5. The element will along to the group of	A. Alkali metals B. Inert metals C. Noble gases D. Halogen
67	Transition elements have valence electrons in	A. s-orbital B. p-orbital C. d-orbital

		D. f-orbital
68	The oxides of electronegative elements are	A. Basic B. neutral C. Acidic D. Amphoteric
69	Which of the following isoelectronic ions has the lowest ionization energy?	A. K⁺ B. Ca²⁺ C. Cl⁻ D. S²⁻
70	The number of elements in the first, second and third period are	A. 2, 8, 18 B. 8, 2, 18 C. 2, 18, 8 D. 2, 8, 8
71	Li, Be, B, C, O, Fl Ne are elements of	A. Second period B. First period C. Third period D. Fourth period
72	The positive ion is always smaller than the neutral atom while the negative ion is always bigger than the neutral atom. The atomic and ionic radii of Na, F, Na^+, $F^-$are in ppm	A. Na F Na⁺ F⁻ 157 72 95 136 B. Na F Na⁺ F⁻ 157 95 172 136 C. Na F Na⁺ F⁻ 72 95 136 157 D. Na F Na⁺ F⁻ 157 136 95 72
73	The correct order of electron affinity among the following is	A. F > Cl > Br B. Br > Cl > F C. Cl > F > Br D. F > Br > Cl
74	Two elements whose electronegativities are 1.2 and 3.0, the formed between them would be	A. Ionic B. Covalent C. Coordinate D. Metallic
75	Which of the following species has the highest ionization potential?	A. Ne B. Al⁺ C. Mg⁺ D. Li⁺
76	The fourteen elements following actinium are known as	A. Lanthanones B. Lanthanides C. Rare earths D. Actinides
77	Which of the following ion has the highest value of ionic radius?	A. Li⁺ B. F⁻ C. O²⁻ D. B³⁺
78	The atomic radius increases as we move down a group because	A. Effective nuclear charge increases B. Atomic mass increases C. Additive electrons are accommodated in new electron level D. Atomic number increases
79	The classify the elements, Newland gave the idea of	A. Octaves B. Triads C. Atomic volume D. Atomic mass
80	The valence shell of hydrogen is half filled like those of	A. IV - A B. VIA C. V - A D. VIIA
81	Which among the following elements have lowest value of IE_1?	A. Pb B. Sn C. Si D. C
82	The statement that the properties of every eight elements are similar to the first is the law of	A. Dobereiner B. Newland C. Mendeleev D. L. Meyer
83	Which among the following species has the highest ionization energy?	A. Ne B. F C. Li D. B
84	The structure of complex hydrides is	A. Tetrahedal B. Trigonal

84	The structure of complex hydrides is	C. Octahedral D. Square planar
85	The chloride of element Q is hydrolysed by water to form an acidic solution and its oxide reacts with acid to form a salt. What cold be the element Q	A. Magnesium B. Aluminium C. Silicon D. Phosphorus
86	In sixth period 14 of its transition elements are called	A. Lanthanides B. Actinides C. Radioactive elements D. None
87	The valency of noble gases, in general, is	A. Zero B. One C. Three D. Two
88	The period table contains elements in vertical column. these vertical column are called	A. Groups B. Periods C. Blocks D. Sub group
89	Which of the following does not reflect the periodicity of elements?	A. Bonding behaviour B. Electronegativity C. Ionisation potential D. Neutral/proton ratio
90	Indicate the correct statement	A. All lanthanidees are present in the same group B. All halogens are present in the same period C. All the alkali metals are present in the same group D. All the noble gases are present int he same period
91	Which of the following discoveries resulted in a version of the Mendeleefs periodic law	A. The nucleus of atom by Rutherford B. The elements polonium and radium by the Curies C. Atomic numbers by Moseley D. x-rays by Roentgen
92	The hydration energy is the heat evolved when one mole of gaseous ion is dissolved in water. The hydration energy of an ion	A. Increases with increase of charge to mass ratio B. Decreases with increase of charge to mass ratio C. Depends on sign of charge +ve or -ve D. Depends upon the solvent
93	Among the elements given below, the one with highest electropositivity is	A. Cu B. Cs C. Cr D. Ba
94	Alkali metals in each period have	A. Smallest size B. Lowest IE C. Highest IE D. Highest electronegativity
95	Which statement explains the observation that magnesium hydroxide dissolve in aqueous ammonium chloride, but not in aqueous sodium chloride	A. The ionic radius of the NH₄⁺ion is similar to that of Mg²⁺but not that of Na⁺ B. NH₄Cl dissociates less fully than NaCl C. The ions Na⁺and Mg²⁺are isoelectronic (have the same number of electrons) D. The ion NH⁺₄acts as an acid
96	The element with atomic number 26 will be found in group	A. 2 B. 8 C. 6 D. 10
97	The oxides of which of the following elements will be acidic in character	A. Mg B. Rb C. Li D. Cl
98	Which has highest 1st I.E.	A. Br B. Cl C. F D. I

99	Which of the following is not true for metalloids	A. They are borderline elements that exhibit both metallic and non-metallic properties to some extent B. They usually act as electron donors with non-metals and as electron acceptors with metals C. Some of these elements are boron, silicon and germanium D. They are good conductors of heat and electricity
100	Which of the following is most electronegative?	A. Carbon B. Silicon C. Lead D. Tin
101	Among the following elements which one has the highest value of first ionization potential?	A. Oxygen B. Argon C. Barium D. Cesium
102	For the representative elements from left to right across a period in the periodic table, the electron effinity of the atom generally	A. Increases B. Remains constant C. Decreases D. Not clear
103	The number of groups in the periodic table is	A. 6 B. 7 C. 8 D. 9
104	Ionization energy depends upon	A. Nuclear charge B. Atomic size C. Shielding effect D. All of the above
105	Elements in the same family have	A. Same atomic number B. Molecular wt same C. Same chemical properties D. Same electronic configuration
106	Which of the following elements have the largest radius	A. F B. Cl C. Br D. I
107	Which element should have the greatest value for electronegativity when combined with hydrogen	A. Na B. Si C. S D. Cl
108	A pair of elements in the same family in the periodic classification is	A. Cl and C B. Ca and Al C. N and Ne D. Na and K
109	The melting point is lowest for	A. Be B. Mg C. Ca D. Sr
110	According to the periodic law, the chemical properties of the elements are periodic functions of their	A. Density B. Atomic number C. Atomic mass D. Mass number
111	What is the nature of SO_2	A. Basic B. Strongly acidic C. Weakly acidic D. Amphoteric
112	Which of the following has greatest tendency to lose electron?	A. F B. Fr C. S D. Be
113	Which of the following metal requires radiation of highest frequency to cause emission of electrons?	A. Na B. Mg C. K D. Ca
114	The fourth period contains elements	A. 8 B. 16 C. 18 D. 32
115	The ionization potential is lowest for the	A. Halogens B. Inert gases C. Alkaline earth metals

		D. Alkali metals
116	Gradual addition of electronic shells in the nobel gases causes a decrease in their	A. Ionization energy B. Atomic radius C. Boiling point D. Density
117	The element with atomic number 55 belongs to which block of the periodic table	A. s-block B. p-block C. d-block D. f-block
118	Na_2O is	A. Acidic B. Basic C. Neutral D. Amphoteric
119	Which of the following statements is most appropriate about effective nuclear charge? It depends upon	A. The shielding constant B. The atomic number C. The charge on the nucleus D. Both the nuclear charge and the shielding constant
120	Which of the following does not exhibit the periodicity in properties of the elements?	A. Ionisation energy B. N/P ratio C. Electronegativity D. Atomic radius
121	Which of the following elements is most electronegative?	A. Oxygen B. Chlorine C. Nitrogen D. Fluorine
122	How does the ionization energy of 1st group elements vary?	A. Increases down the group B. Decreases down the group C. Remains unchanged D. Variation is not regular
123	Which of the following oxides is unlikely to dissolve in aqueous hydroxide	A. Al₂O₃ B. MgO C. SO₂ D. SlO₂
124	Ionization potential increases in moving from left to right in a period	A. Because nuclear charge increase B. Because atomic size decrease C. Both (a) and (b) D. Because atomic size increases
125	The attraction that an atom exerts on a pair of electrons that are being shared with another atom for forming covalent bond is referred to as its	A. Electron affinity B. Electronegativity C. Ionisation energy D. Valency
126	Which is the transition element among the following	A. B B. Al C. Cu D. Cs
127	Which is not interstitial hydride	A. LaH B. VH C. TaH D. None
128	Each vertical column of the periodic table includes elements with chemical characteristics that are in general	A. Identical B. Similar C. Different D. Similar as well as different
129	The correct arrangement of increasing order of atomic radius among Na, K, Mg, Rb is	A. Mg < K < Na < Rb B. Mg < Na < K < Rb C. Mg < Na < Rb < K D. Na < K < Rb < Mg
130	Which of the following oxides is amopheric in character?	A. CaO B. CO₂ C. SiO₂ D. SnO₂
131	Which is the longest period of the periodic table	A. 5th B. 7th C. 6th D. 2nd