Periods

Sr	Questions	Answers Choice
1	Doberiner arranged the similar elements into	A. Pairs B. Triads C. Triplets D. Rows
2	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
3	The period table contains elements in vertical column. these vertical column are called	A. Groups B. Periods C. Blocks D. Sub group
4	The number of groups in the periodic table is	A. 6 B. 7 C. 8 D. 9
5	The horizontal rows in the periodic table are called periods. The number of period are	A. 5 B. 6 C. 7 D. 8
6	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
7	The IA elements are called	A. Alkaline earth metal B. Alkaline metals C. The halogens D. The inert gases
8	Rare earth elements are	A. s-block elements B. p-block elements C. d-block elements D. f-block elements
9	Transition elements have valence electrons in	A. s-orbital B. p-orbital C. d-orbital D. f-orbital
10	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
11	The electropositive elements from	A. Acidic oxides B. Basic oxides C. Neutral oxides D. None
12	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
13	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
14	Number of elements in the first period of the periodic table are	A. Two B. Four C. One D. Eight

15	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
16	Which is the longest period of the periodic table	A. 5th B. 7th C. 6th D. 2nd
17	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
18	In sixth period 14 of its transition elements are called	A. Lanthanides B. Actinides C. Radioactive elements D. None
19	Which is the transition element among the following	A. B B. Al C. Cu D. Cs
20	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
21	In a group, the ionization energy	A. Increase B. Decreases C. Remain constant D. First increases then decreases
22	Ionization energy depends upon	A. Nuclear charge B. Atomic size C. Shielding effect D. All of the above
23	In a period, melting points of elements	A. Increases B. Decreases C. Remain constant D. First increases then decreases
24	The coinage metals are	A. Ni, Pd, Pt B. Cu, Ag, Au C. Zn, Al, Pb D. Fe, Si, Sn
25	The oxides of electronegative elements are	A. Basic B. neutral C. Acidic D. Amphoteric
26	The elements of group IA are called	A. Chalocogens B. Halogens C. Alkali metals D. Alkaline earth metals
27	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
28	Na_2O is	A. Acidic B. Basic C. Neutral D. Amphoteric
29	What is the nature of SO_2	A. Basic B. Strongly acidic C. Weakly acidic D. Amphoteric
30	What is the nature of Al_2O_3	A. Acidic B. Basic C. Amphoteric D. Neutral
31	The fourth period contains elements	A. 8 B. 16 C. 18 D. 32
32	The fourteen elements following actinium are known as	A. Lanthanones B. Lanthanides C. Rare earths D. Actinides

		D. Actinides
33	Which of the following is a member of -block	A. Zn B. Al C. B D. Br
34	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
35	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
36	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
37	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
38	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
39	Which of the following elements should be the least metallic in character	A. Rb B. In C. Te D. I
40	Which of the following elements have the largest radius	A. F B. Cl C. Br D. I
41	Which element should have the greatest value for electronegativity when combined with hydrogen	A. Na B. Si C. S D. Cl
42	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
43	Which has highest 1st I.E.	A. Br B. Cl C. F D. I
44	In a group form top to bottom, the hardness of alkali metals	A. Remains unchanged B. Increases C. Decreases D. None
45	Which is not interstitial hydride	A. LaH B. VH C. TaH D. None
46	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
47	Elements in the same family have	A. Same atomic number B. Molecular wt same C. Same chemical properties D. Same electronic configuration
48	The elements of f-block are also known as	A. Inner-transition B. Outer transition C. Normal elements D. Alkaline earth metals
49	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
50	The structure of complex hydrides is	A. Tetrahedal B. Trigonal C. Octahedral D. Square planar
51	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
52	The valence shell of hydrogen is half filled like those of	A. IV - A B. VIA C. V - A D. VIIA
53	Which of the following has highest oxidation potential	A. Be B. Li C. Na D. Ca
54	The valency, ionization energy and electrongativity of elements are related to its	A. Atomic number B. Properties C. Atomic weight D. Family group
55	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
56	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
57	Which is the most volatile compound	A. HI B. HCl C. HBr D. HF
58	The coinage metals are	A. Ni, Pd, Pt B. Cu, Ag, Au C. Zn, Al, Pb D. Fe, Si, Sn
59	From left to right, atomic radii of transition elements	A. Increases B. Decreases C. Remain same D. None of the above
60	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
61	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
62	From $_{39}Y$ to $_{48}Cd$ are called	A. Transition elements B. Outer transition elements C. Inner transition elements D. 2nd transition series
63	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
64	The classify the elements, Newland gave the idea of	A. Octaves B. Triads C. Atomic volume

		D. Atomic mass
65	Who gave the concept of atomic number	A. Newton B. Mosley C. Dalton D. Newland
66	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
67	All the elements belongs to the 2nd period are	A. Normal elements B. Transition elements C. Stable elements D. Halogens
68	The elements of sub-group A are called	A. Transition elements B. Main elements C. Typical elements D. Rare earth elements
69	Li, Be, B, C, O, Fl Ne are elements of	A. Second period B. First period C. Third period D. Fourth period
70	Ionic hydrides are generally	A. Liquid at room temperature B. Good electrical conductors C. Good reducing agents D. Easily reduced
71	NaH is	A. Ionic hydride B. Complex hydride C. Covalent hydride D. Interstitial hydride
72	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
73	$NaBH_4$and $LiaIH_4$are	A. Ionic hydrides B. Covalent hydrides C. Interposal hydrides D. Complex hydrides
74	Which species represented by the following formula has the largest radius	A. P³⁻ B. Cl⁻ C. A_r D. K⁺
75	Which of the following oxides is unlikely to dissolve in aqueous hydroxide	A. Al₂O₃ B. MgO C. SO₂ D. SlO₂
76	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
77	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
78	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
79	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
80	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

81	Variable valency is generally exhibited by	A. Normal elements B. Transition elements C. Metallic elements D. None of these
82	Which of the following pairs are chemically dissimilar?	A. Na and K B. Ba and Sr C. Zr and Hf D. Ca and Zn
83	The alkali metal which is liquid at 15°C is	A. K B. Cs C. Na D. None
84	Which of the following elements is most electronegative?	A. Oxygen B. Chlorine C. Nitrogen D. Fluorine
85	Which of the following has greatest tendency to lose electron?	A. F B. Fr C. S D. Be
86	Which of the following does not reflect the periodicity of elements?	A. Bonding behaviour B. Electronegativity C. Ionisation potential D. Neutral/proton ratio
87	Which of the following metal requires radiation of highest frequency to cause emission of electrons?	A. Na B. Mg C. K D. Ca
88	Which of the following elements is/are not liquid at 30°C?	A. Ga B. Hg C. Ge D. Cs
89	Of the given alkali metals, the one with smallest size is	A. Rb B. Cs C. K D. Na
90	Which among the following elements have lowest value of IE_1?	A. Pb B. Sn C. Si D. C
91	The valency of noble gases, in general, is	A. Zero B. One C. Three D. Two
92	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
93	Which of the following pair of atomic numbers represents s-block elements?	A. 7, 15 B. 6, 12 C. 9, 17 D. 3, 20
94	The element with atomic number 26 will be found in group	A. 2 B. 8 C. 6 D. 10
95	Among the following elements which one has the highest value of first ionization potential?	A. Oxygen B. Argon C. Barium D. Cesium
96	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
97	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
98	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
99	Alkali metals in each period have	A. Smallest size B. Lowest IE C. Highest IE D. Highest electronegativity
100	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
101	Among the elements given below, the one with highest electropositivity is	A. Cu B. Cs C. Cr D. Ba
102	In the periodic table, the element with atomic number 16 will be placed in the group	A. Fourteen B. Sixteen C. Thirteen D. Fifteen
103	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
104	Which of the following species has the highest ionization potential?	A. Ne B. Al⁺ C. Mg⁺ D. Li⁺
105	Which of the following has highest first ionization potential?	A. Carbon B. Oxygen C. Nitrogen D. Boron
106	Which of the following element has the maximum electron affinity?	A. F B. S C. I D. Cl
107	Which of the following is most electronegative?	A. Carbon B. Silicon C. Lead D. Tin
108	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
109	Variable valency is characteristic of	A. Halogen B. Transition elements C. Alkali metals D. Noble gas
110	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
111	The ionization potential is lowest for the	A. Halogens B. Inert gases C. Alkaline earth metals D. Alkali metals
112	The element with highest electron affinity among the halogen is	A. F B. Cl C. Br D. I
113	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
114	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
		A. K⁺ B. Ca²⁺

115	Which of the following isoelectronic ions has the lowest ionization energy?	C. Cl⁻ D. S²⁻
116	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
117	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
118	Which among the following species has the highest ionization energy?	A. Ne B. F C. Li D. B
119	Eka-aluminium and Eka-silicon are known as	A. Gallium and Germanium B. Aluminium and silicon C. Iron and sulphur D. Proton and silicon
120	Which is true about the electronegativity order of the following?	A. P > Si B. C > N C. Br > Cl D. Sr > Ca
121	Electron affinity depends on	A. Atomic size B. Nuclear charge C. Atomic number D. Atomic size and nuclear charge both
122	Two elements whose electronegativities are 1.2 and 3.0, the formed between them would be	A. Ionic B. Covalent C. Coordinate D. Metallic
123	Number of elements present in 5th period is	A. 8 B. 18 C. 32 D. 24
124	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
125	The elements with atomic numbers 9, 17, 35, 53, 85 an all	A. Noble gases B. Halogens C. Heavy metals D. Light metals
126	Which of the following ion has the highest value of ionic radius?	A. Li⁺ B. F⁻ C. O²⁻ D. B³⁺
127	Which of the following oxides is amopheric in character?	A. CaO B. CO₂ C. SiO₂ D. SnO₂
128	Which of the following is an inert gas?	A. H₂ B. O₂ C. N₂ D. Argon
129	The oxides of which of the following elements will be acidic in character	A. Mg B. Rb C. Li D. Cl
130	The number of elements in the 4th periods of periodic table is	A. 8 B. 10 C. 18 D. 32
131	The melting point is lowest for	A. Be B. Mg C. Ca D. Sr