## Extended or long form of periodic table

- **61.** The electronic configuration of an atom A is  $1s^2$ ,  $2s^2p^6$ ,  $3s^2p^6d^{10}$ ,  $4s^2p^3$ . The chemistry of A is therefore likely to be similar to that of
  - (a) Chlorine
- (b) Nitrogen
- (c) Oxygen
- (d) Boron
- **62.** The element having the electronic configuration  $1s^2$ ,  $2s^22p^6$ ,  $3s^23p^1$  is
  - (a) A transition element
  - (b) A representative element
  - (c) An inert gas
  - (d) An inner-transition element
- **63.** The element with configuration  $1s^2$ ,  $2s^2p^6$ ,  $3s^2$  would be
  - (a) A metal
- (b) A non-metal
- (c) An inert gas
- (d) A metalloid
- 64. The long form of periodic table is based on
  - (a) Shape of the atom
  - (b) Mass of the atom
  - (c) Atomic number of the atom
  - (d) Electronegativity
- **65.** Chloride of an element *A* gives neutral solution in water. In the periodic table, the element *A* belongs to
  - (a) First group
  - b) Third group
  - (c) Fifth group

- d) First transition series
- 66. The fundamental basis of the presentday Periodic Table is that elements are

CHEMICAL PREIODICITY

- (a) Arranged in the order of increasing atomic weights
- (b) Grouped according to chemical properties
- (c) Arranged in the order of increasing number of neutrons in the atomic nucleus
- (d) Arranged in the order of increasing number of protons in the nucleus
- **67.** All the elements in a group in the periodic table have the same
  - (a) Atomic number
  - (b) Electronic configuration
  - (c) Atomic weight
  - (d) Number of electrons in the outermost shell or number of electrons for bonding
- **68.** The most predominantly ionic compounds will be obtained from the combination of elements belonging to
  - (a) 1 and 7 groups
  - (b) 2 and 6 groups
  - (c) 3 and 5 groups
  - (d) 0 and 7 groups
- **69.** An atom with atomic number 21 belongs to the category of
  - (a) s -block elements



- (b) p -block elements
- (c) d -block elements
- (d) *f* -block elements
- **70.** Which metal has 2 electrons in the outermost orbit
  - (a) Na
- (b) Cu
- (c) Au
- (d) Be
- **71.** In the modern periodic table, elements are arranged in
  - (a) Increasing mass
  - (b) Increasing volume
  - (c) Increasing atomic number
  - (d) Alphabetically
- 72. Alkali metals in each period have
  - (a) Smallest size
  - (b) Lowest ionization potential
  - (c) Highest ionization potential
  - (d) Highest electronegativity
- **73.** The elements on the right side of the periodic table are
  - (a) Metals
  - (b) Metalloids
  - (c) Non-metals
  - (d) Transition elements
- **74.** The screening effect of *d*-electons is
  - (a) Equal to that of *p*-electrons
  - (b) More than that of *p*-electrons
  - (c) Same as f-electrons
  - (d) Less than p-electrons

- **75.** Chemical behaviour of an atom is determined by
  - (a) Atomic number
  - (b) Mass number
  - (c) Binding energy
  - (d) Number of isotopes
- **76.** Which of the following is a inert element
  - (a) Na
- (b) *Fe*

(c) Li

- (d) He
- 77. The lightest metal is
  - (a) *Li*
- (b) *Mg*
- (c) *Ca*
- (d) *Na*
- 78. Choose the typical element
  - (a) *K*

- (b) Na
- (c) Sc
- (d) He
- **79.** Of the following pairs, the one containing example of metalloid elements in the periodic table is
  - (a) Sodium and potassium
  - (b) Fluorine and chlorine
  - (c) Calcium and magnesium
  - (d) Boron and silicon
- **80.** The number of elements in each of the long periods in the periodic table is
  - (a) 2

- (b) 8
- (c) 18
- (d) 32



## **IIT-JEE CHEMISTRY**



- 81. In the long form of the periodic table, all the non- metals are placed under
  - (a) s-block
- (b) p-block
- (c) d-block
- (d) f-block
- 82. Elements with outer electronic configuration  $ns^2np^6$  are
  - (a) Alkaline earth metals
  - (b) Transition elements
  - (c) Chalcogenes
  - (d) Noble gases
- 83. Highest density is of
  - (a) *Ir*

- (c) Pb

- 84. Lithium shows diagonal relationship with
  - (a) AI
- (b) *Mg*
- (c) Be
- (d) B
- **85.**  $1s^22s^22p^63s^2$ the electronic is configuration of the metal
  - (a) *Na*
- (b) *Mg*
- (c) *Fe*
- (d) Al
- 86. Element having atomic number 17 is placed in
  - (a) I-group
- (b) V-group
- (c) VIII-group
- (d) VII-group
- 87. The most importasnt active step in the development of periodic table was taken by



- (a) Mendeleef
- (b) Dalton
- (c) Avogadro
- (d) Cavendish
- **88.** Who is called the father of chemistry
  - (a) Faraday
- (b) Priestley
- (c) Rutherford
- (d) Lavosier
- **89.** The total number of rare-earth elements is
  - (a) 8

- (b) 32
- (c) 14
- (d) 10
- 90. Which is metalloid
  - (a) Pb
- (b) *Sb*
- (c) Bi
- (d) Zn
- (e) Mg