

CHEMISTRY

SECTION-A

51. The law of triad is applicable to a group of
 (1) Cl,Br,I (2)C,N,O (3)Na,K,Rb (4)H,O,N
52. Assertion (A) Mendeleev left the gap under aluminium and silicon and called these Eka-Aluminium and Eka-Silicon respectively.
 Reason (R) Dobereiner arranged elements on the basis of increasing atomic number.
 (1) Both A and R are correct; R is the correct explanation of A
 (2) Both A and R are correct; R is not the correct explanation of A
 (3) A is correct; R is incorrect
 (4) R is correct; A is incorrect
53. The molecular formula of chloride of Eka-Aluminium and Eka-Silicon respectively are
 (1) $GaCl_3$ and $SiCl_4$ (2) $GaCl_3$ and $AlCl_3$ (3) $AlCl_3$ and $SiCl_4$ (4) $GaCl_3$ and $GeCl_4$
54. 14 elements of 7th periods in the Periodic Table are called
 (1) actinoids (2) lanthanoids (3) Both (1) and (2) (4) None
55. **Statement (I)** : F is more electronegative than Cl.
Statement (II) : F has high electron affinity than Cl.
 (1) Both Statement (I) and Statement (II) are correct; Statement (II) is the correct explanation of Statement (I).
 (2) Both Statement (I) and Statement (II) are correct; Statement (II) is not the correct explanation of Statement (I).
 (3) Statement (I) is correct; Statement (II) is incorrect
 (4) Statement (I) is incorrect; Statement (II) is correct
56. The fifth period in the Periodic Table which transition series.
 (1) 3d (2) 2d (3) 4d (4) 5d
57. Match the Column I with Column II and select the correct answer by given codes.
Column I (Element types)
 A. Inert - gas elements
 B. Transition elements
 C. Inner - transition elements
Column II (Electronic configuration)
 1. $(n-1)d^{1-10}ns^{1-2}$
 2. ns^2 to ns^2np^6
 3. $(n-2)f^{1-14}(n-1)s^2p^6d^{0-1}ns^2$
- | | A | B | C |
|-----|---|---|---|
| (1) | 1 | 2 | 3 |
| (2) | 2 | 1 | 3 |
| (3) | 3 | 2 | 1 |
| (4) | 2 | 3 | 1 |
58. Electronic configuration of Zn, Cd and Hg is
 (1) $(n-1)d^{10}ns^2$ (2) $(n-1)d^9ns^2$ (3) $(n-1)d^8ns^2$ (4) $(n-1)d^8ns^2np^1$
59. "The properties of the elements are periodic function of their atomic numbers." The statement was given by
 (1) N. Bohr (2) J.W. Dobereiner (3) D.I. Mendeleef (4) H.G.J. Moseley
60. The elements with atomic number 10, 18, 36, 54 and 86 are all
 (1) Light metals (2) Inert gases (3) Halogens (4) Rare-earths