Extended or long form of periodic table

31. The elements having the electronic configuration, $[Kr]\ 4d^{10}f^{14}, 5s^2p^6d^2, 6s^2$ belongs to
(a) *s*-block (b) *p*-block
(c) *d*-block (d) *f*-block

32. Chemical property of *Li* and *Mg* similar because
(a) These belong to same group
(b) Both ionisation potential is same
(c) Shows diagonal relationship
(d) Both electron affinity is same

33. According to the periodic law of elements, the variation in properties of elements is related to their
(a) Atomic masses
(b) Nuclear masses
(c) Atomic numbers
(d) Nuclear neutron-proton number

34. The element with atomic number 36 belongs to …… block in the periodic table
(a) *p* (b) *s*
(c) *f* (d) *d*

35. Which group of the periodic table contains only metals
(a) IIA
(b) IB
(c) IA
(d) None of these

36. The elements in which *s* and *p*-orbitals are present
(a) Common elements
(b) Inert gases
(c) Halogens
(d) Transitional elements

37. Aluminium is diagonally related to (in periodic table)
(a) *Li* (b) *C*
(c) *B* (d) *Be*

38. An element has the electronic configuration $1s^2, 2s^22p^6, 3s^23p^63d^5, 4s^1$. It is a
(a) *s*-block element
(b) *p*-block element
(c) *d*-block element
(d) Inert gas

39. Which of the following show diagonal relationship
(a) *B* and *Si* (b) *B* and *Al*
(c) *B* and *Ga* (d) *B* and *C*

40. Which of the following dinegative anion is quite common
(a) S^{2-} (b) Se^{2-}
(c) Te^{2-} (d) O^{2-}

41. An element has electronic configuration $1s^2 2s^2 2p^6 3s^2 3p^4$. Predict their period, group and block
(a) Period = 3rd, block = *p*, group = 16
(b) Period = 5th, block = *s*, group = 1
(c) Period = 3rd, block = *p*, group = 10
(d) Period = 4th, block = *d*, group = 12

42. If the atomic number of an element is 33, it will be placed in the periodic table in the
(a) First *gp* (b) Third *gp*
(c) Fifth *gp* (d) Seventh *gp*

43. Which of the following is the atomic number of a metal
(a) 32 (b) 34
(c) 36 (d) 38

44. Which of the following statement is not correct regarding hydrogen atom
(a) It resembles halogens in some properties
(b) It resembles alkali metals in some properties
(c) It can be placed in 7th group of periodic table
(d) It can not be placed in first group of periodic table

45. Lithium shows similarities to magnesium in its chemical behaviour because
(a) Similar size, same electronegativity and lower polarizing power
(b) Similar size, greater electronegativity and similar polarizing power
(c) Similar size, same electronegativity and similar high polarizing power
(d) None of these

46. On going left to right in a period, in transition metals, their atomic volumes
(a) Decrease
(b) Increase
(c) Remain same
(d) None of these of correct

47. Electronic configuration of chalcons in their outermost orbit is
(a) s^2p^3 (b) s^2p^4
(c) s^2p^5 (d) s^2p^6

48. Which configuration represents a noble gas
(a) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2$
(b) $1s^2 2s^2 2p^6 3s^2 3p^6$
(c) $1s^2 2s^2 2p^6 3p^6$
(d) $1s^2 2s^2 2p^6 3s^2$

49. Which of the following pair has elements containing same number of electrons in the outermost orbit
(a) N, O (b) Na, Ca
(c) As, Bi (d) Pb, Sb

50. Dobereiner traids is
(a) Na, K, Rb (b) Mg, S, As
(c) Cl, Br, I (d) $P, S, , As$

51. As per the modern periodic law, the physical and chemical properties of elements are periodic functions of their
(a) Atomic volume
(b) Electronic configuration
(c) Atomic weight
(d) Atomic size

52. Elements after atomic number 103 have been discovered till now. If an element with atomic number 106 were ever discovered which of the following electronic configuration will it possess
(a) $[Rn]5f^{14}6d^{4}7s^{2}$
(b) $[Rn]5f^{14}6d^{5}7s^{1}$
(c) $[Rn]5f^{14}6d^{6}7s^{0}$
(d) $[Rn]5f^{14}6d^{1}7s^{2}7p^{3}$

53. The element *X*, *Y*, *Z* and *T* have the indicated electronic configurations. Starting with the innermost shell, which is the most metallic element
(a) $X = 2,8,4$ (b) $Y = 2,8,8$
(c) $Z = 2,8,8,1$ (d) $T = 2,8,8,7$

54. Which pair of atomic numbers represents s -block elements
(a) 7, 15 (b) 6, 12
(c) 9, 17 (d) 3, 12

55. Which pair of elements has same chemical properties
(a) 13, 22 (b) 3, 11
(c) 4, 24 (d) 2, 4

56. Mosley's name is most closely associated with the discovery of
(a) Positron
(b) Deutrons
(c) Atomic number
(d) Atomic weight

57. In the periodic table going down in fluorine group
(a) Reactivity will increase
(b) Electronegativity will increase
(c) Ionic radius will increase
(d) Ionization potential will increase

58. Beryllium resembles much with
(a) Zn (b) Al
(c) Li (d) Ra

59. The last member in each period of the periodic table is
(a) An inert gas element
(b) A transition element
(c) A halogen
(d) An alkali metal

60. Which one of the following combination represents a metallic element
(a) 2, 8, 7 (b) 2, 8, 8
(c) 2, 8, 4 (d) 2, 8, 2