CHEMISTRY

51 (1) Average of atomic masses of Cl & I gives the atomic mass of Br and they have similar properties too.

52 (3) Dobereiner arranged elements on the basis of increasing atomic weights.

53 (4) Chloride formulas

(i) Eka-Aluminium $= GaCl_3\left(ECl_3\right)$

(ii) Eka-Silicon $= GeCl_4\left(ECl_4\right)$

54 (1) 14 elements of 7th period are called actinoids.

55 (3)

56 (3) The fifth period (n = 5), beginning with rubidium is similar to the forth period and contains 4d transition series starting at yttrium (Z = 39).

57 (2)

58 (1) Electronic configuration is determined with the help of atomi number.

so, electronic configuration of Zn, Cd and Hg is (n - 1) $d^{10}ns^2$

Zn = [Ar] $3d^{10}4s^2$

Cd = [Kr] $4d^{10}5s^2$

Hg = [Xe] $4f^{14}6s^2$

59 (4) H.G.J. Moseley

60 (2) Inert gases, these have ns^2np^6 configuration.