

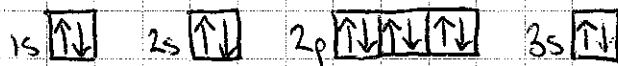
① a) 2 c) 6 e) 14 g) 10
 b) 2 d) 10 f) 6 h) 14

② a) $1s^2 2s^2 2p^6 3s^2$ 0
 b) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^8 4s^2$ 2
 c) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^1$ 1
 d) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^7 4s^2$ 3
 e) $1s^2 2s^2 2p^1$ 1
 f) $1s^2 2s^2 2p^6 3s^2 3p^5$ 1
 g) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2$ 0
 h) $1s^2 2s^2 2p^6 3s^2 3p^3$ 3
 i) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^5 4s^2$ 5
 j) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2$ 0

③ a) electrons in first 2p orbital should not be paired.



b) electrons in 2p orbitals should have opposite spins. missing one electron



④ a) F
 b) Ge
 c) V