

## ATOMIC STRUCTURE &amp; PERIODIC CLASSIFICATION

Std. XII  
CHEMISTRYTime: 1½  
Max.Marks: 75

## PART - I

Choose the correct answer

(15 × 1 = 15)

1. A wave is \_\_\_\_\_  
a delocalised      b localised      c unstable      d stable
2.  $E_n = \frac{-313.6}{n^2}$  If the value of  $E_i = -34.84$  to which value 'n' corresponds  
a 4      b 3      c 2      d 1
3. de-Broglie relationship has no significance for  
a a proton      b an iron ball  
c an electron      d a neutron
4. Which of the following particle having same kinetic energy would have the maximum de - Broglie wave length  
a  $\alpha$  - particle      b  $\beta$  - particle  
c proton      d neutron
5. The energy of electron in an atom is given by  $E_n =$   
a  $\frac{-4\pi^2me^2}{n^2h^2}$       b  $\frac{-2\pi^2me^4}{n^2h^2}$   
c  $\frac{-2\pi^2me^2}{n^2h^2}$       d  $\frac{-2\pi me^4}{n^2h^2}$
6. The hybridization in  $SF_6$  molecule is  
a  $sp^3$       b  $sp^3d^2$       c  $sp^3d$       d  $sp^3d^3$
7. In a molecule  $N_a = N_b$ , then it is  
a stable      b highly reactive      c unstable      d explosive
8. Shape of d- orbital is  
a doughnut      b clovar leaf  
c dumb - bell & doughnut      d b & c
9. Electronegativity is  
a periodic property      b kinetic property  
c optical property      d magnetic property
10. Among the following which has higher electron affinity value?  
a Flourine      b Chlorine      c Bromine      d Iodine
11. Electron affinity is expressed in  
a kJ      b J  
c KJ mol      d  $KJ mol^{-1}$

