DPP

DAILY PRACTICE PROBLEMS

CLASS : XIth **SUBJECT : CHEMISTRY**

DATE : **DPP No. : 1**

Topic :- THE SOLID STATE

1. Schottky defect generally appears in

   a) NaCl b) KCl c) CsCl d) All of these

2. Which arrangement of electrons leads ferromagnetism?

   a) ↑↑↑↑ b) ↑↓↑↓ c) ↑↑↑↓↓ d) None of these

3. The crystal are bounded by plane faces (f), straight edges (e) and interfacial angel (c). The relationship between these is :

   a) $f + c = e + 2$ b) $f + e = c + 2$ c) $c + e = f + 2$ d) None of these

4. The melting point of $RbBr$ is $682°C$, while that of NaF is $988°C$. The principle reason that melting point of NaF is much higher than that of $RbBr$ is that :

   a) The two crystals are not isomorphous

   b) The molar mass of NaF is smaller than that of $RbBr$

   c) The internuclear distance $r_c + r_a$ is greater for $RbBr$ than for NaF

   d) The bond is $RbBr$ has more covalent character than the bond in NaF.

5. If a crystal lattice of a compound, each corner of a cube is enjoyed by sodium, each edge of a cube has oxygen and centre of a cube is enjoyed by tungsten (W), then give its formula

   a) Na_2WO_4 b) $NaWO_3$ c) Na_3WO_3 d) Na_2WO_3

6. In antifluorite structure, the negative ions:

   a) Occupy tetrahedral voids

   b) Occupy octahedral voids

   c) Are arranged in ccp

   d) Are arranged in hcp

7. An insulator oxide is :

   a) CuO b) C_OO c) Fe_2O_3 d) All of these

8. A solid with high electrical and thermal conductivity from the following is :

   a) Si b) Li c) $NaCl$ d) ice

9. The radius ratio $\left(\frac{r_+}{r_-}\right)$ of an ionic solid (A^+B^-) is 0.69. What is the coordination number of B^-?

   a) 6 b) 8 c) 2 d) 10

10. The axial angles in triclinic crystal system are

    a) $\alpha = \beta = \gamma = 90°$ b) $\alpha = \gamma = 90°, \beta \neq 90°$ c) $\alpha \neq \beta \neq \gamma \neq 90°$ d) $\alpha = \beta = \gamma \neq 90°$

11. In $NaCl$ crystal each Cl^- ion is surrounded by

    a) 4 Na^+ ions b) 6 Na^+ ions c) 1 Na^+ ion d) 2 Na^+ ions

12. For an ionic crystal of the general formula A^+B^- and co-ordination number 6, the radius ration will be :

    a) Greater than 0.73

    b) Between 0.73 and 0.41

    c) Between 0.41 and 0.22

    d) Less than 0.22

13. The ratio of cations to anion in a octahedral close packing is :

a) 0.414 b) 0.225 c) 0.02 d) None of these

14. Electrons in a paramagnetic compound are

a) Shared b) Unpaired c) Donated d) Paired

15. Crystals which are good conductor of electricity and heat are known as :

a) Ionic crystals b) Covalent crystals c) Metallic crystals d) Molecular crystal

16. An element has bcc structure having unit cells 12.08×10^{23}. The number of atoms in these cells is :

a) 12.08×10^{23} b) 24.16×10^{23} c) 48.38×10^{23} d) 12.08×10^{22}

17. Among the following types of voids, which one is the largest void?

a) Triangular b) Cubic c) Tetrahedral d) Octahedral

18. The crystalline structure of $NaCl$ is

a) Hexagonal close packing b) Face centred cubic

c) Square planar d) Body centred cubic

19. Metals have conductivity of the order of $(ohm^{-1}\ cm^{-1})$:

a) 10^{12} b) 10^{8} c) 10^{2} d) 10^{-6}

20. Of the elements $Sr, Zr, Mo, Cd\ and\ Sb$, all of which are in V period, the paramagnetics are:

a) Se, Cd and Sb b) Zr, Mo and Cd c) Sr, Zr and Cd d) Zr, Mo and Sb

ॐ ऐं महासरस्वत्यै नमः।
SAMARTH
M R
EDUCARE
ॐ असतो मा सद्गमय।
तमसो मा ज्योतिर्गमय।
मृत्योर्मा अमृतं गमय।
COMPLETE CARE 4 YOUR EDUCATION
M.R. SAMARTH EDUCARE PVT. LTD.