



## CHEMISTRY

ELITE IIT 1

17. The three dimensional graph of lattice points which sets the pattern for the whole lattice is called  
A. Space lattice      B. Simple lattice  
C. Cell lattice      D. Unit cell
18. If the radius ratio is the range of 0.414-0.732, then the co-ordination number will be:  
A. 2      B. 4  
C. 6      D. 8
19. In a solid AB having the NaCl structure, 'A' atoms occupy the Corners of the cubic unit cell. If all the face centered atoms along one of the axis are removed, then the resultant stoichiometry of the solid is :  
A.  $AB_2$       B.  $A_2B$   
C.  $A_3B_4$       D.  $A_4B_3$
20. The number of unit cell in 58.5 g of NaCl is nearly  
A.  $0.5 \times 10^{24}$       B.  $1.5 \times 10^{25}$   
C.  $3 \times 10^{25}$       D.  $4 \times 10^{25}$
21. Which one of the following is not a colloid?  
A. Latex      B. Blood  
C. Butter      D. Ghee.
22. The colloidal dispersion of solid in a gas is called  
A. Foam      B. Aerosol  
C. Gel      D. Sol
23. An emulsion is a colloidal dispersion of  
A. A liquid in a gas      B. A liquid in a liquid  
C. A solid in a liquid      D. A gas in a solid.
24. Which of the following is not a property of hydrophilic sols?  
A. High concentration of dispersed phase can be easily attained.  
B. Coagulation is reversible  
C. Viscosity and surface tension are about the same for water  
D. The charge on the particle depends upon the pH value of the medium, it may be positive, negative or even zero.
25. The process of preparation of colloidal sol from a precipitate is called  
A. Coagulation      B. Dissolution  
C. Dispersion      D. Peptisation
26. The separation of colloidal particles from those of molecular dimension is called  
A. Photolysis      B. Dialysis  
C. Pyrolysis      D. Peptisation
27. The arsenic sulphide is prepared by passing  $H_2S$  through arsenic oxide solution. The charge developed on the particles is due to adsorption of  
A.  $H^+$       B.  $S^{2-}$   
C.  $OH^-$       D.  $O^{2-}$
28. The charge on the colloidal particle can be determined by  
A. Electrophoresis  
B. Electrodialysis  
C. Geiger-Muller counter  
D. Mulliken oil drop experiment
29. The movement of colloidal particles under the influence of electric field is called  
1. Electrophoresis 2. Electrolysis  
3. Electro-dialysis 4. Electro-osmosis.
30. Which of the following has maximum flocculation value for a negatively charged sol?  
A. NaCl      B.  $BaCl_2$   
C.  $AlCl_3$       D.  $SnCl_4$
31. Which of the following substance gives a positively charged sol  
A. Gold      B. A metal sulphide  
C. Ferric hydroxide      D. An acidic dye
32. Colloidal sol found effective in treating eye disease is  
A. Colloidal sulphur      B. Colloidal antimony  
C. Colloidal gold      D. Colloidal silver