

DPP

DAILY PRACTICE PROBLEMS

CLASS : XIth

DATE :

SUBJECT : CHEMISTRY

DPP No. : 2

Topic :- SURFACE CHEMISTRY

- Gold numbers of protective colloids A, B, C and D are 0.50, 0.01, 0.10, and 0.005, respectively. The correct order of their protective powers is
 - $D < A < C < B$
 - $C < B < D < A$
 - $A < C < B < D$
 - $B < D < A < C$
- The coagulation of 10 cm^3 of gold sol is completely prevented by addition of 0.025 g of starch to it. The gold number of starch is
 - 0.025
 - 0.25
 - 2.55
 - 25
- 50 mL of 1 M oxalic acid is shaken with 0.5g wood charcoal. The final concentration of the solution after adsorption is 0.5 M. What is the amount of oxalic acid absorbed per gram of carbon?
 - 3.15 g
 - 3.45 g
 - 6.30 g
 - None of these
- Colloidal sol is :
 - True solution
 - Suspension
 - Heterogeneous sol
 - Homogeneous sol
- The blue colour of the water of the sea is due to :
 - Refraction of the blue light by the impurities in sea water
 - Reflection of blue light by sea water
 - Scattering of blue light by sol particles
 - Absorption of other colours except the blue colour by water molecules
- The spontaneous outcome of internal liquid from gels is called :
 - Syneresis
 - Thixotropy
 - Swelling
 - None of these
- Solid aerosol is an example of colloidal system of :
 - Liquid dispersed in gas
 - Gas dispersed in gas
 - Solid dispersed in gas
 - Solid dispersed in liquid
- Which is more powerful to coagulate the negative colloid?
 - ZnSO_4
 - Na_3PO_4
 - AlCl_3
 - $\text{K}_4[\text{Fe}(\text{CN})_6]$
- Which is used as catalyst to retard the oxidation of chloroform?
 - H_2O
 - $\text{C}_2\text{H}_5\text{OH}$
 - Glycerol
 - H_2SO_4
- Micelle is a term used for the aggregates formed in solution by
 - Colloidal electrolyte
 - Colloidal non-electrolyte
 - Non associated colloids
 - None of the above
- Which reaction characteristics are changing by the addition of a catalyst to a reaction at constant temperature?

- (i)activation energy (ii)Equilibrium constant (iii)Reaction entropy (iv)Reaction enthalpy
a) (i) only b) (iii) only c) (i) and (ii) only d) All of these
12. The colour of sky is due to
a) Transmission of light b) Wavelength of scattered light
c) Adsorption of light by atmospheric gases d) All of the above
13. Egg albumin is :
a) Reversible colloid b) Lyophilic colloid c) Protective colloid d) All of these
14. How many layers are adsorbed in chemical adsorption?
a) One b) Two c) Many d) Zero
15. Blood may be purified by
a) Dialysis b) Electro-osmosis c) Coagulation d) Filtration
16. Who coined the term catalysis and awarded Nobel Prize?
a) Berzelius b) Kolbe c) Wohler d) Rutherford
17. The sky looks blue due to
a) Dispersion effect b) Reflection effect c) Transmission effect d) Scattering effect
18. Fermentation of starch to give alcohol takes place in presence of :
a) Enzymes b) CO_2 c) Air d) N_2
19. Efficiency of catalyst depends on
a) Concentration b) Molecular mass c) Size of particles d) None of these
20. The amount of gas adsorbed physically on charcoal increases with :
a) Temperature and pressure
b) Temperature and decreases with pressure
c) Pressure and decreases with temperature
d) None of the above