Surface Chemistry NEET Questions

1. Which of the following is not a method for coagulation of lyophobic sols?
(a) By electrophoresis

(b) By mixing oppositely charged sols

(c) By adding electrolyte

(d) By adding a protective colloid

Answer: By adding a protective colloid

2. Why is alum added to water containing suspended impurities?
(a) To make acolloidal solution

(b) To coagulate the suspended impurities

(c) To remove impurities of calcium and magnesium

(d) To protect the colloidal solution from gening precipitated

Answer: To coagulate the suspended impurities

3. Movement of dispersion medium under the influence of electric field is known as
(a) electrodialysis

(b) electrophoresis

(c) electroosmosis

(d) cataphoresis

Answer: electroosmosis

4. Which of the following is not a method of removing impurities from a colloidal sol?
(a) Electrodialysis

(b) Ultrafiltration

(c) Ultra centrifugation

(d) Distillation

Answer: Distillation

5. The substances which behave as colloidal solutions at higher concentration are called
(a) associated colloids

(b) multimolecular colloids

(c) macromolecular colloids

(d) protective colloids

Answer: associated colloids

6. Which of the following gases present in a polluted area will be adsorbed most easily on the charcoal gas mask?

(a) H2

(b) O3

(c) N2

(d) SO2

Answer: SO2

7. Which kind of catalysis can be explained on the basis of adsorption theory ?

(a) Homogeneous catalysis

(b) Heterogeneous catalysis

(c) Negative catalysis

(d) Auto catalysis

Answer: Heterogeneous catalysis

8. A colloidal system is which liquid is dispersed phase and solid is dispersion medium is classified as

(a) gel

(b) sol

(c) emulsion

(d) aerosol

Answer: gel

9. Which of the following will not form a colloidal system?

(a) Solid-gas

(b) Liquid-gas

(c) Gas-gas

(d) Gas-liquid

Answer: Gas-gas

10. Fog in an example of colloidal system of

(a) liquid in gas

(b) gas in liquid

(c) solid in gas

(d) gas in solid

Answer: liquid in gas

11. Substances which behave as normal electrolytes solution at low concentration and exhibit colloids properties at higher concentration are called

(a) lyophilic colloids

(b) lyophobic colloids

(c) macromolecular colloids

(d) associated colloids

Answer: associated colloids

12. Which of the following acts as the best coagulating agent for ferric hydroxide sol?
(a) Potassium ferrocyanide

(b) Potassium chloride

(c) Potassium oxalate

(d) Aluminium chloride

Answer: Potassium ferrocyanide

13. The formation of micelles takes place only above
(a) critical temperature

(b) Kraft temperature

(c) inversion temperature

(d) absolute temperature

Answer: Kraft temperature

14. The size of colloidal particles ranges between
(a) 10-7 – 10-8 cm

(b) 10-9 – 10-11 cm

(c) 10-4 – 10-7 cm

(d) 10-2 – 10-3 cm

Answer: 10-4 – 10-7 cm

15. At CMC (critical micelle concentration) the surface molecules
(a) dissociate

(b) associate

(c) become bigger in size due to adsorption

(d) become smaller in size due to decomposition

Answer: associate

16. Volume of one mole of any gas at NTP is
(a) 11.2 litre

(b) 22.4 litre

(c) 10.2 litre

(d) 22.8 litre

Answer: 22.4 litre

17. Tyndall effect confirms the

(a) gravity effect on the sol. particles

(b) light scattering by the sol. particles

(c) heterogeneous nature of sols.

(d) Brownian motion of the sol. particles

Answer: heterogeneous nature of sols.

18. Which one of the following is alyophilic colloid?

(a) Milk

(b) Gum

(c) Fog

(d) Blood

Answer: Gum

19. Which of the following is not correct for enzyme catalysis?

(a) The enzyme activity is maximum at optimum pH which is between 5-7

(b) Each enzyme is specific for a given reaction

(c) The favourable temperature range of enzyme activity is between 25-37°C

(d) The enzymatic activity is increased in presence of certain substances.called co-enzymes

Answer: The favourable temperature range of enzyme activity is between 25-37°C

20. Presence of traces of arsenious oxide (As2O3) in the reacting gases SO2 and O3 in presence of plantinised asbestos in contact process acts as

(a) catalytic promoter

(b) catalytic poison

(c) dehydrating agent

(d) drying agent

Answer: catalytic poison