

Chemistry Worksheets Class 12 on Chapter 5 Surface Chemistry - Set 2

Q1. The enzyme which hydrolyses to fatty acids and glycerol is called-

- a.) maltase
- b.) lipase
- c.) zymase
- d.) pepsin

Q2. A colloidal system has particles of which of the following size?

- a.) 10^{-9} m to 10^{-12} m
- b.) 10^{-6} m to 10^{-9} m
- c.) 10^{-4} m to 10^{-1} m
- d.) 10^{-5} m to 10^{-7} m

Q3. On which of the following properties does the coagulation power of an ion depend?

- a.) The magnitude of the charge on the ion alone.
- b.) Size of the ion alone.
- c.) Both magnitude and sign if the charge of the ion.
- d.) The sign of the charge on the ion alone.

Q4. Fog is a colloidal solution of-

- a.) solid in gas
- b.) gas in gas
- c.) gas in liquid
- d.) liquid in gas

Q5. Measuring zeta potential is useful in determining which property of colloidal solution?

- a.) Stability of the colloidal particles
- b.) Size of the colloidal particles
- c.) Solubility
- d.) Viscosity

Q6. Why are finely divided substances more effective as an absorbent?

Q7. What is meant by shape selective catalysis?

Q8. What is Kraft temperature?

Q9. What are two types of emulsions?

Q10. What is the activation of an adsorbent? How can it be achieved?

Q11. Differentiate between colloids and emulsions?

Q12. What are the criteria of the colloids?

Q13. On what factors is the extent of adsorption of a gas on a solid surface is affected by?

Q14. What are the applications of enzymes?

Q15. Cottrell's smoke precipitator is fitted at the mouth of chimneys used in factories. Give reasons.

Q16. Define the terms-

- (i) Brownian movement
- (ii) Electrophoresis

Q17. 1 g of charcoal adsorbs 100mL of 0.5 M CH_3COOH to form a monolayer and thereby molarity of acetic acid is reduced to 0.49 M. Calculate the surface area of the charcoal adsorbed by each molecule of acetic acid.

The surface area of charcoal = $3.01 \times 10^2 \text{ m}^2/\text{g}$

Q18. What are the applications of colloids?

Q19. Account for the following:

- (i) Artificial rain can be caused by spraying electrified sand on the clouds.
- (ii) Electrical precipitation of smoke.

Q20. What happens when-

- a.) Electric current is passed through a colloidal solution.
- b.) Solution of NaCl is added to a colloidal solution of $\text{Fe}(\text{OH})_3$.
- c.) An emulsion is subjected to centrifugation.