CHEMISTRY

SpeedLabs
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Board – CBSE	Class – 12th	Topic – Surface Chemistry

1. Explain Freundlich adsorption isotherm.
2. What are homogeneous and heterogeneous catalysis? Give example.
3. Explain the mechanism of enzyme catalysis.
4. What is the difference between physisorption and chemisorption?
5. What role does adsorption play in heterogeneous catalysis?
6. What is the difference between multimolecular and macromolecular colloids? Give one example of each. How are associated colloids different from these two types of colloids?
7. Give four examples of heterogeneous catalysis.
8. Explain the following terms:
   (i) Electrophoresis (ii) Coagulation (iii) Dialysis (iv) Tyndall effect.
9. Explain the terms with suitable examples:
   (i) Alcosol (ii) Aerosol (iii) Hydrosol
10. What do you mean by activity and selectivity of catalysts?
11. Action of soap is due to emulsification and micelle formation. Comment.
12. Explain what is observed
    (i) When a beam of light is passed through a colloidal sol.
    (ii) An electrolyte, NaCl is added to hydrated ferric oxide sol.
    (iii) Electric current is passed through a colloidal sol?
13. Why is adsorption always exothermic?
14. Differentiate between lyophobic and lyophillic sol?
15. Explain modern theory of heterogeneous catalysis.
16. Comment on the statement that "colloid is not a substance but a state of substance".
17. Give four uses of emulsions.
18. Describe some features of catalysis by zeolites.
19. Discuss the effect of pressure and temperature on the adsorption of gases on solids.
20. What modification can you suggest in the Hardy-Schulze law?