



6. Why Iron is corroded faster than aluminium even though iron is placed below aluminium in electrochemical series
- (a) form Non-Porous of  $\text{Al}_2\text{O}_3$  (b) form Porous of  $\text{Al}_2\text{O}_3$   
 (c) form mixed porous Layer of  $\text{Al}_2\text{O}_3$  (d) None of the above
7. Freundlich adsorption isotherm relationship is
- (a)  $x/m = KP$  (b)  $x/m = KP^n$  (c)  $x/m = K(P)^{1/n}$  (d)  $x/m = K$
8. What is the effect of adsorption with respect to surface area
- (a) Greater the surface area, greater is the adsorption  
 (b) Lesser the surface area, greater is the adsorption  
 (c) Greater the surface area, lesser is the adsorption  
 (d) none of these
9. Chromospheres are responsible for
- (a) Colour of the compound (b) Formation of salt  
 (c) Loan pair of electrons (d) Hyperchromic shift
10. Which among the following is used to find the atomic structure of a crystal?
- (a) XRD (b) UV-Visible  
 (c) AAS (d) Flame photometry

PART – B (3 x 8= 24 Marks)

**(Answer any three of the following questions)**

11. What are reference electrodes and describe the construction of Standard Hydrogen Electrode(SHE). (8)
12. State and explain the laws of photochemistry in detail. (8)
13. Explain differential aeration corrosion with suitable example. (8)
14. Discuss the factors which influence adsorption of a gas on a solid. (8)
15. Discuss the various types of electronic transitions in detail. (8)

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