



- 5 How will you check grinding on Hegman gauge?
- 6 Compare characteristics of physical & chemical drying systems in tabular form?
- 7 Give Gloss rating of coatings according to PVC?
- 8 Hydrolytic degradation of coatings?
- 9 Thixotropic behavior in coatings?

Q.3(a) What are the different methods of film formation? Write in detail about film formation in thermoplastic system? (6)

(b) Give detail account on film formation in Latex paints & UV curable coatings? (6)

OR

(b) What are different attribute of color? Explain CIE system for color matching? (6)

Q.4(a) Give a detail account of adsorption theories of adhesion? How adhesion coating is tested for Cross Hatch adhesion test? (6)

(b) Write note on following (6)

i. Factors affecting flexibility of coating and how it is checked

ii. Impact resistance test

OR

(b) Enlist different theories of Adhesion? Write about mechanical theory of adhesion in detail? How adhesion coating is tested for Pull off adhesion test? (6)

Q.5(a) Enlist different optical properties of coatings? Give detail account on gloss of water based & solvent based systems? (6)

(b) Illustrate & explain the construction & working of cone & plate viscometer & Brookfield Viscometer? (6)

OR

(b) What are different techniques to check wet film opacity? Describe in detail about Pfund cryptometer & contrast ratio method? (6)

OR

Q.6(a) How corrosion of ferrous metal takes place? How coated panels are tested for Protection against corrosion (PAC) & Salt spray tests? (6)

(b) Write about following defects and give their remedies (6)

(1) Yellowing in white paint (2) Chalking, Checking & Cracking (3) Lifting & Blistering

OR

(b) Write about three defects each occurring during Storage & Application of coatings? (6)

