

(Following Paper ID and Roll No. to be filled in your
Answer Books)

Paper ID : 187862

Roll No.

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B.TECH.

Theory Examination (Semester-VIII) 2015-16

SURFACE COATING TECHNOLOGY

Time : 3 Hours

Max. Marks : 100

Section-A

Q1. Attempt all parts. All parts carry equal marks. Write answer of each part in short. [2×10=20]

- (a) Explain functions of coating.
- (b) What is the functions of binder?
- (c) Define pigments.
- (d) What is the function of solvents?
- (e) What do you mean by varnishes?
- (f) What is wetting agents?

- (g) What is dispersive agents?
- (h) Define plasticizers with suitable examples.
- (i) What do you mean by water based coatings?
- (j) What is the difference between film and coatings?

Section-B

Q2. Attempt any five questions from this section.

[10×5=50]

- (a) What do you mean by paint? Discuss in detail the constituents of paint.
- (b) Give a detailed account of advantages and disadvantages of water based coatings.
- (c) Why is it important to prepare the substrate prior to painting?
- (d) Give a detailed account of rheological behaviour of coatings.
- (e) Discuss in detail advantages and disadvantages of offset Varnish.

- (f) Write various dispersion techniques and give in brief about pigmentations.
- (g) Give a detailed account of speciality coatings based on water and powder.
- (h) Write short note on lacquers.

Section-C

Note: Attempt any two questions from this section.

[15×2=30]

- Q3. Write in detail about the origin and development of surface coatings and its applications.
- Q4. Write in detail on the fundamentals of coating formulations based on synthetic polymers.
- Q5. Give a detailed account of functions of coatings and mechanism of film formation.