



- 4 What is meant by 'offset' in OSL printing?
- 5 What is the purpose of the addition of wax in printing inks?
- 6 Corrosion reaction in different environment?
- 7 What is tuberculation?
- 8 Give characteristics on heavy duty protective coatings?
- 9 What is shop primer?

- Q.3(a) Write in brief about screen printing process and inks. (6)  
(b) Write a note on 'Oils and their uses in inks'. (6)

**OR**

- (b) Explain about water fountain in offset lithographic printing process. What are sheet fed and web fed lithography printing inks? (6)

- Q.4(a) What are the different methods by which Ink dry? Explain. (6)  
(b) Describe and illustrate a Gravure printing process. (6)

**OR**

- (b) Describe and illustrate a Flexographic printing process. (6)

- Q.5(a) What is corrosion cell? Explain different types of corrosion cell? (6)  
(b) Write note on **any one** in detail (6)

- i. Microbiologically Influenced Corrosion
- ii. Pitting corrosion

**OR**

- (b) Write short note on Galvanic corrosion? (6)

- Q.6(a) What are Zinc rich primers? Why they are used in HDPC? Give their classification according to SSPC-paint 20? Explain their corrosion protection mechanism in detail? (6)

- (b) Give short note on **any one** (6)  
  - i. Write in brief about different environment as classified in ISO 12944
  - ii. Compare solventless and solventborne epoxy systems.

**OR**

- (b) Give short note on **any one** (6)  
  - i. Different methods of corrosion control
  - ii. Coal Tar Epoxy
  - iii. In tabular form selection of coating systems for different environment

