

- Q.28 Discuss any three properties of pigment in paint constituent.  
 a) Light tartness      b) Refractive index  
 c) tinting strength      d) Bleeding
- Q.29 What are special effects additives? Discuss biocides and skinning agents.
- Q.30 Discuss the cleaning methods for substrate before electroplating.
- Q.31 Define electroplating and discuss the quantitative aspects of electrolysis.
- Q.32 Explain paint failure. What are the primary causes responsible for paint failure?
- Q.33 Define the terms with respect to paint failure.  
 a) Peeling      b) Sagging  
 c) Lifting      d) Hazing
- Q.34 Define the term.  
 a) Printing ink      b) Putty  
 c) Enamel      d) Shellac
- Q.35 What are special purpose coatings? Describe varnishing and lacquer.

#### **SECTION-D**

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain the process of paint manufacturing with the help of flow diagram in detail.
- Q.37 State the first and second faraday's law of electrolysis. Also discuss the difference between electrochemical and electrolytic cell.
- Q.38 Describe the important constituents of paint. Explain each constituent with their types and significance in paint formulation.

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**6th Sem / Chem  
Subject:- Paint Technology**

Time : 3Hrs.      M.M. : 100

#### **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Formula for Refractive Index is:-  
 (where C = speed of light in vacuum, V = speed of light in medium.)  
 a) C/V      b) V/C  
 c) V\*C      d) None of these
- Q.2 Hiding power of paint depends upon:-  
 a) Wave length of light      b) Refractive Index  
 c) Practicle size & shape      d) All of these
- Q.3 Which of the following is organic pigment:-  
 a) Titanium oxide      b) iron oxide  
 c) SiO<sub>2</sub>      d) BON red
- Q.4 Hydrocarbon solvent used to reduce viscosity of paint:-  
 a) Stain      b) Putty  
 c) Thinner      d) Primer
- Q.5 Colored or pigmented liquid or paste that dries to form solid film.  
 a) Sealer      b) Printing Ink  
 c) Tonar      d) Shellac
- Q.6 Which of the following is used as binder for thermoplastic power coating.

- a) PVC  
b) Polyamides  
c) Thermoplastic Polyesters  
d) All of these
- Q.7 Which of the following is non-pigmented Paint.  
a) Varnishes      b) Enamel  
c) Power coating      d) OEM Paint
- Q.8 In which of the following technique the substrate to be painted is immersed in a tank containing large quantity of paint.  
a) Brush Coating      b) Dip coating  
c) Electrodeposition      d) Power coating
- Q.9 The degree stickiness of a paint film after a given drying time.  
a) setting      b) Skinning  
c) Tackiness      d) Peeling
- Q.10 Semitransparent coating tinted with pigment used to produce a decorative effect.  
a) Glaze      b) Lake  
c) Sealer      d) Shellac
- SECTION-B**
- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Name any two application of surface Coating.
- Q.12 \_\_\_\_\_ is a liquid composition used to prevent/Seal excessive absorption of finished coats into the porous surface.
- Q.13 \_\_\_\_\_ are pigmented coatings that are applied to new surfaces before application of undercoat or final coat.
- Q.14 Name any two Inorganic colored pigments.
- Q.15 Name any two natural binders used in formulation of paint.
- Q.16 What is full form of OEM Coating.
- Q.17 Name any two fundamental parameters used in the formulation of paints.
- Q.18 \_\_\_\_\_ is a paint defect in which minute holes in the dry film which forms during application and drying of paint.
- Q.19 Name any two methods for cleaning substate before electroplating.
- Q.20 Name one white inorganic pigment used in paint industry.
- SECTION-C**
- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Explain PVC and pigment to binder ratio in paint technology.
- Q.22 Explain the following paint defects.  
a) Blooming      b) Aeration  
c) Thickening      d) Blistering
- Q.23 What is spray coating technique? Describe the various types of spray coating equipment.
- Q.24 Explain pug mill and roller mill used for pigment dispersion.
- Q.25 Differentiate between water based paint and solvent based paint.
- Q.26 Describe the electrode deposit technique of paint application. Discuss its advantage and disadvantages
- Q.27 Differentiate between brush coating and roller coating technique of paint application.

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