

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) $V \cdot C$ d) None of these

Q.2 Hiding power of paint depends upon:-

- a) Wave length of light b) Refractive Index
c) Particulate size & shape d) All of these

Q.3 Which of the following is organic pigment:-

- a) Titanium oxide b) iron oxide
c) SiO_2 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) Toner d) Shellac

Q.6 Which of the following is used as binder for thermoplastic powder 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.

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- 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 substrate 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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