Q.27 Define the terms

a) Aeration b) Tackiness

c) Opacity d) Foaming

Q.28 Describe in brief the paint manufacturing process with help of flow sheet.

Q.29 Define varnishes and lacquers. Also write their uses.

Q.30 Define paint failure. Write the primary causes of paint failure.

Q.31 Explain the terms with their uses and examples.

a) Corrosion Inhibitors b) Flame retardants

Q.32 What are solvents? Discuss the types and significance of solvents in paint formulation.

Q.33 Describe in brief the need and importance of surface coating.

Q.34 Explain the term primer, under coat and final coat.

Q.35 Discus the effects and uses of electroplating.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Write short notes on :

a) Classification of paint architectural coating

b) Ball mill

Q.37 Explain any five paint application techniques used for surface coating.

Q.38 Describe pigments and types of pigments. Discuss any four properties of pigment.

Roll No. .....

6th Sem / Branch : Chemical Engineering

Sub.: Paint Technology

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 Which of the following is oxygenated solvent:

a) Ketones b) Alcohols

c) Esters d) All of these

Q.2 Which of the following is used to kill bacteria, which attack water borne Paints.

a) Flame retardants b) Biocides

c) Anti skinning agent d) Corrosion inhibitors

Q.3 Which of the following is Inorganic Pigment

a) Red Lead b) BON red

c) Hansa yellow d) Toluidine red

Q.4 Paint that forms a smooth, shining and glossy film after applied to Surface.

a) Lake b) Putty

c) Enamel d) Sealer

Q.5 Organic pigment that doesn't contain inorganic pigment or in organic base

a) Tonar b) Lake

c) Putty d) Sealer

Q.6 Which of the following mill contains two S-shaped, intermeshing blades.

a) Pug mill b) Ball mill
c) Roll mill d) Pebble mill

Q.7 Which of the following is a solvent based Paint

a) Acrylic paint b) Later Paint
c) Alkyd Paint d) None of these

Q.8 Degeneration occurring in a coating during the passage of time or heating

a) Aging b) Blistering
c) Chalking d) Cracking

Q.9 Which of the following is a natural binder

a) Alkyds b) Polyesters
c) Linseed oil d) Vinyl's

Q.10 In electroplating _____ are deposited on other surfaces.

a) Non metals b) Metals
c) Alloys d) None of these

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Name any two binders used for thermoplastic powder coating.

Q.12 _____ is a solution of a hard linear polymer in an organic solvent.

Q.13 In which paint application technique, paint is deposited on a conductive surface from a water bath containing the paint?

Q.14 _____ is defined as the percentage of pigment volume in total volume of solids in the paint.

Q.15 Name the paint defect in which there is attrition of film by natural weathering while may expose the substrate.

Q.16 _____ may be defined as relative capacity of a pigment to impart color to the white base.

Q.17 Name any two benefits of surface coating.

Q.18 The ability of paint to completely obliterate (destroy) any underlying color is defined as _____.

Q.19 Name any two fundamental constituents of paint.

Q.20 Write any two uses of electroplating.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Define PVC & CPVC and write its significance.

Q.22 Explain chalking and skinning paint defect. Write its causes and their remedies.

Q.23 Differentiate between electrochemical and electrolytic cell.

Q.24 State two faraday's laws of electrolysis with their significance in electroplating.

Q.25 Discuss the cleaning methods for substrate before electroplating.

Q.26 Define pigment to binder ratio and solid content. Discuss its significance in paint formulation.