

SECTION-3

Q1

Ans Difference between Paint & Varnishes :-

Paint :- Paint contain pigment and generally range from opaque to translucent they provide decorative and protective layer.

Desirable Properties of Paint:

1. It should be possible to apply easily and freely.
2. It should be dry in reasonable time.
3. It should be form hard and durable surface.
4. It should ~~be~~ not be harmful to the health of workers.
5. It should possess attractive and pleasing appearance.
6. It should be cheap.

There is many type of Paint is available :-

1. oil paint
2. Enamel paint
3. Emulsion Paint
4. Cement Paint
5. Bituminous Paint
6. Synthetic Rubber Paint
7. Aluminium Paint
8. Anti - Corrosive Paint.

Varnish :- Varnish has little or no colour, it is transparent, and has no added pigment, varnishes also applied over wood stains as a final step to achieve a film for gloss and protection.

- (2) Varnish is the solution of resins or resinous substances like amber, copal, shalac, gum resin etc., in solvents like oil, turpentine, alcohol etc.
3. Depending upon the solvents used varnishes are classified as, oil varnishes, turpentine varnishes, spirit varnishes and water varnishes.
4. The desirable characteristics of an ideal varnish are:
- (i) It should dry rapidly and present a finished surface which is uniform in nature and pleasing in appearance.
 - (ii) It should be give good render the surface glossy.
 - (iii) The protecting film developed by varnish should be tough, hard and durable.
 - (iv) It should not shrink or show cracks after drying.

⇒ Various ingredient of all the paint :-

The essential constituents of paint are as follows:

1. Base: (i) It is a principal constituent of paint. It also possesses the binding properties and forms an opaque coating.
- (ii) Commonly used bases for paint are white lead, red lead, zinc oxide, iron oxide, titanium, white aluminium powder and lithopone.

2. Vehicles: (i) The vehicles are the liquid substance which hold the ingredients of paint in liquid substance and allow them to be applied on the surface to be painted.

(ii) Boiling makes the oil thicker and darker.

(iii) Linseed oil reacts with oxygen and hardens by forming a thin film.

3. Pigment: (i) pigment give required colour for paint. They are fine particles and have a reinforcing effect on thin film of the paint.

(ii) They protect the paint film by reflecting the destructive ultra violet light which act as a catalytic agent for the destructive oxidation of the film.

(iii) They also improve the impermeability for the paint film.

4. Driers: (i) These are the compounds of metal like, lead, manganese, cobalt.

(ii) The drier should not be added until the paint is about to be used.

(iii) The excess drier is harmful because it destroys elasticity and causes flaking.

5. Thinner: (i) It is known as solvent also. It make paint thinner and hence increase the coverage.