

**Practical No.7: Paint the given surface of wall after preparing a required base of relevant material.**

**I. Practical Significance-** Painting a wall surface after preparing the required base results in enhanced aesthetics, surface protection, improved durability, easy maintenance, and increased property value. These practical outcomes contribute to creating a more attractive, resilient, and valuable living or working environment.

**II. Industry or Employer Expected Outcome-**

Undertake safe building construction practices with relevant building materials.

**III. Course Level Learning Outcome-**

Use the relevant type of special purpose construction materials in the given situation.

**IV. Laboratory Learning Outcome-**

Paint the given surface of wall after preparing a required base of relevant material.

**V. Relevant Affective domain related Outcome**

1. Follow safety practices
2. Practice good housekeeping

**VI. Relevant Theoretical Background**

1. A paint should possess good covering power or spreading power.
2. Should have such consistency so that it can be applied easily and freely on the surface with a brush or spray.
3. It should adhere well to the surface to which it is applied.
4. The paint smooth, hard and wear resisting.
5. Paint should be not affected by weathering agencies.
6. Paint color should neither fade nor change.
7. It should offer a surface which is durable and strong enough to resist moisture penetration.

**XI. Observation Table**

Sr. No.	Name of Paint	Name of color	No. of coats applied
1	Acrylic	Blue	2
2	oil based	white	3
3	Emulsion	green	2
4	Distemper	yellow	1
5	Enamel	red	3

**XII. Result**

I have use all type of points of special purpose construction material.

**XIII. Interpretation of results**

Point of the all the type of surface and wall after give the all types of materials is available.

**XIV. Conclusions and Recommendations (if any)**

proper wall surface preparation is essential before painting to ensure durability, smoothness and aesthetically pleasing finish. the process of wall involves cleaning the wall material.

**XV. Practical Related Questions**

**Note:** Below given are few sample questions for reference. Teachers must design more such questions so as to ensure the achievement of identified CO. Write answers of minimum three questions.

1. What is paint and its types?
2. Give any four properties of plastic paints.

3. State the situation where oil paint is used
4. State the Uses of paints.
5. What are Distempers and where it is used?

Q. 1)  $\rightarrow$  According to the nature of surface and the finishing required the surface should be treated with a paint, Varnish or distemper etc.

Q. 2)  $\rightarrow$  1) Decorative appearance 2) quick Drying points  
3) it passes pleasing appearance 4) this type of paint has high Covering power.  
Uses:- used for painting show rooms, auditoriums, offices, cinema halls, etc. where attractive appearance is required.

Q. 3)  $\rightarrow$  However, oil paint should not be applied during humid and damp weather.

Q. 4)  $\rightarrow$  the paints are coatings of fluid materials and they are applied over the surface of timber.

Q. 5)  $\rightarrow$  Distempers are considered to be water paints a distemper is composed of base carriers Colouring pigments and a binder such as glue.

### XI. Observation Table

Sr.No.	Name and Brand of Cement	Proportion	Observation
1	Wall retech OPC 53	1: 2: 4	wood strength
2	Acc. cement PPC	1: 3: 6	durable
3	Ambuja cement OPC 43	1: 1: 5: 3	Fast setting high strength
4	Shree cement PSC	1: 2: 3	Good workability
5	JK cement white cement	1: 3: 5	Fine texture

### XII. Result

Cement mortar is usually prepared in a proper ratio such as 1:3, 1:4, 1:5 or 1:6 (cement : sand).

### XIII. Interpretation of results

Wrote APC S3 1:2:4 good strength and the proportion are very good.

### XIV. Conclusions and Recommendations (if any)

If all parameters meet the required standard the mortar is suitable for construction.

### XV. Practical Related Questions

**Note:** Below given are few sample questions for reference. Teachers must design more such questions so as to ensure the achievement of identified CO. Write answers of minimum three questions.

1. Write four properties of cement mortar.
2. Write the five brands of cement.
3. State the situation where lime mortar is used with its proportion
4. Write the various types of mortars.
5. Write difference between artificial sand and natural sand.

Q. 1) → ?

Ans:- ① it has high fire resistance, ② it has high strength, ③ initial settings time should be more of cement mortar, ④ water cement ratio preparation of cement mortar.

Q. 2) → ?

Ans:- ordinary portland cement, ② rapid hardening cements, ③ low heat cements, ④ pazzaland portland cement.

Q. 3) → ?

Ans:- this is type of mortar classified on the basis of binding materials. In this lime is used as binding material.

It is mixture of lime, sand or lime aggregate and water with appropriate proportion.

Q. 4) → ?

Ans - 1) fire-resistance mortar 2) light weight mortar 3) injection mortar 4) hydraulic insulating mortar 5) a caustic mortar  
6) x-ray shielding mortar.

#### XVI. References/ suggestions for further Reading

Sr.No.	Links	Description
1	<a href="https://youtu.be/LrFP6ohFAGg?si=X0kWjKfa4LHhFN73">https://youtu.be/LrFP6ohFAGg?si=X0kWjKfa4LHhFN73</a>	Prepare cement mortar
2	<a href="https://youtu.be/ehBKETtRImk?si=DdHoEkj5-CAFCVdE">https://youtu.be/ehBKETtRImk?si=DdHoEkj5-CAFCVdE</a>	Prepare cement mortar