

**MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI.**

1	Name of Syllabus	C. C. In Commercial Painting (412103)																																								
2	Max.Nos of Student	25 Students																																								
3	Duration	6 Month																																								
4	Type	Part Time																																								
5	Nos Of Days / Week	6 Days																																								
6	Nos Of Hours /Days	4 Hrs																																								
7	Space Required	Workshop = 300 Sq feet <u>Class Room = 200 Sq feet</u> TOTAL = 500 Sq feet																																								
8	Entry Qualification	VIII th Pass																																								
9	Objective Of Syllabus/ introduction	To provide systematic training in commercial painting. It provides self employment of Jobs.																																								
10	Employment Opportunity	In color industries painting work, an contract, as job as a painter.																																								
11	Teacher’s Qualification	ITI Pass in Painter trade with 2 years exam. Or CC in commercial painting 3 years exam.																																								
12	Training System	<table><tr><th colspan="7">Training System Per Week</th></tr><tr><td>Theory</td><td>Practical</td><td colspan="5">Total</td></tr><tr><td>6 Hours</td><td>18 Hours</td><td colspan="5">24 Hours</td></tr></table>						Training System Per Week							Theory	Practical	Total					6 Hours	18 Hours	24 Hours																		
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## **Theory - I - Basic in Painting**

Safety precautions and first-aid-type of woods their description and use common defects in timber and their effects- common tools and their uses.

Tools-brushes of various sizes, diamond glazier, stopping knife, scrapers palette knife, shave hook, lining tool, rule etc. Their description, use, care and maintenance. Blowlamp, its use and maintenance.

Trade equipments ladders-steps scaffolding- buckets, etc. Their description and use. Method of metal Pre-tread by various processes. Corrosion and its prevention.

Dry distemper – cement color for flours – cement paints – lime colors oil bound distemper

Methods of stenciling. Special types of stencils. Care of stencils Theory involved drawing instruments used in lettering, methods employed precautions to be taken.

Spray-painting plants with compressed air, principles of spray gun painting. Conception of colors, primary, secondary and tertiary. Definition of colors, terms such as font shade, hue, tone, monochromic, warm colors. Glossary of terms for paints, and enamel. Different types of paints such as primer, primer surfaces, under coats, full – gloss paint and enamels.

Methods of testing paints and varnishes. The methods employed in preparing surfaces various painting faults and their remedies. Calculation of the amount of paint needed for a job.

Blow lamp - its use. Cane and maintenance putty definition, types uses. Method of mixing and its different system of application.

Various types of varnishes synthetic varnish etc. preparation of different types on surface.

Oil, driers, risings, solvents and thinners. Description of each of the items, classification and uses.

Method employed in repainting surfaces for oil painting of wall various painting faults and their remedies.

## **Practical - I WOOD SURFACE PREPARATION**

Introduction Use of Carpenter's hand tools Sawing , Planing and chiseling. Surface preparation of wood for varnishing and painting.

Preparing surfaces on wood by cleaning, rubbing down, knotting, stopping, filling, artificial wood staining & graining and preparation of putty. Finishing and polishing of wooden furniture and wooden signboards, wooden name plats and other wooden display boards.

Metal pre-treatment such as pickling, phosphating and wire brushing for metal signboards and hording.

## **Practical - II - Painting**

Mixing paints and color making. Distemping walls, matching colours for ceiling and walls, relief painting and texturing of walls and ceiling.

Cutting stencil of Gothic letter and Roman letters. Lettering-Different types of lettering-Roman, Gothic architectural, ornamental and freehand, cutting ornamental stencils in a cardboard.

Painting on machine tools, Car body, etc. by brushing spraying and dipping. Removal of paints and surface treatment. Use of musking and musking compound.

Testing of different paints and varnishes for specific gravity, weight per liter, viscosity hardness, gloss and finish, adhesion, flexibility and drying time.

Achievement : - should be able to:-

- (1) Prepare surfaces on wood for varnishing and painting etc.
- (2) Prepare metal surfaces for painting.
- (3) Prepare the mixtures of paints and apply paints on  
metal surfaces.
- (4) Do spray painting of metal surfaces with good Finish.
- (5) Paint walls with distemper and oil colours.
- (6) Paint letters and figures of different types,  
Nameplates and signboards etc.
- (7) Remove paints prepare surfaces and paint  
Machine tools etc.
- (8) Repair painting defects and do job work of new  
End old furniture etc.

Putty preparation, mixing of putty different processes of making. Use of putty of Different wooden surfaces.

Finishing – polishing of wooden surface chairs tables, cupboard a both old furniture.

Metal pretreatment such as scrubbing rubbing by energy papers, wire brush etc.

Painting - All walls with oil colour preparing wall for oil Paints mixing of paint.

**:- List of Tools, Equipments and Furniture :-**

<b>Sr. No.</b>	<b>Name of item</b>	<b>Quantity</b>
1.	Carpenter's tool kit	10 Nos.
2.	Carpenter's vice 175 mm	4 Nos.
3.	Bench vice 125mm	2 Nos.
4.	Spray gun with gravity feed, cup complete with accessories and portable electric air compressor.	4 Units.
5.	Pressure feed container 20 Ltr. Capacity.	1 No.
6.	Drawing desks.	16 Nos.
7.	Stools.	16 Nos.
8.	Working benches 240 x 120 x 75 cm.	2 Nos.
9.	Instructor's table.	1 No.
10.	Chair.	2 Nos.
11.	Steel cupboards.	2 Nos.
12.	Steel locker (8 Lockers)	2 Nos.
13.	Rack 200 x 150 x 45cm.	2 Nos.
14.	Oil paint brush (assorted sizes & numbers)	15 Sets
15.	Blowlamp.	2 Nos.
16.	Knife putty glazier	8 Nos.
17.	Knife palette	8 Nos.
18.	Knife stencil.	15 Nos.
19.	Knife Hacking.	8 Nos.
20.	Scraper Dapper hanger.	2 Nos.
21.	Trestle painter with stool.	8 Nos.
22.	Arcograph (Air Brush).	
23.	Spraying mask.	
24.	Steel comb.	
25.	Pallets	
26.	Beam compasses	
27.	Metal straight edge with outing wheel.	
28.	Physical balance with weight box.	
29.	Ford cup No.4 for viscosity measurement.	
30.	Stop watch.	
31.	Marble slab 90 x 30 cm.	

- 32. Porcelain basin. 200, 250, 300 mm.**
- 33. Staving oven**
- 34. Fire extinguisher/**
- 35. Fire basket with stand.**
- 36. Black board with case**

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