

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

1	Name of Syllabus	<b>CERTIFICATE COURSE IN HANDLOOM WEAVING (PRACTICAL) (402107)</b>											
2	Max of Student	25 students.											
3	Duration	6 month											
4	Type	Full Time											
5	Nos Of Days / Week	6 Days											
6	Nos Of Hours /Days	7 Hrs											
7	Space Required	Workshop = 800 Sq feet Class Room = 200 Sq feet TOTAL = 1000 Sq feet											
8	Entry Qualification	Literate											
9	Objective Of Syllabus/ introduction	To provide experimental knowledge of handloom.											
10	Employment Opportunity	To provide the Industry with skilled man- power.											
11	Teacher’s Qualification	Diploma in Handloom Technology											
12	Training System	<b>Training System Per Week</b> <table><tr><td>Practical</td><td>Total</td></tr><tr><td>42 Hours</td><td>42 Hours</td></tr></table>								Practical	Total	42 Hours	42 Hours
Practical	Total												
42 Hours	42 Hours												
13	Exam. System	Sr. No.	Paper Code	Name of Subject	TH/PR	Hours	Max. Marks	Mini. Marks					
		1	40210721	Handloom weaving	PR-I	6 hrs.	200	100					
		2	40210722	Dyeing and Bleaching	PR -II	6 hrs.	200	100					
				Total			400	200					

## **INTRODUCTION :- HANDLOOM WEAVING**

1] Preparation: - Preparation of yarn prior to weaving. Various forms in which Warp and weft yarn is supplied to handloom weavers Different methods of winding the yarn from different forms to requirements. Different methods of warping-stick, warping-peg, warping- Vertical and Horizontal warping mills. Drawing in twisting and gaiting of the warp.

Sizing: - Different ingredients in use for a size mixing. Method of preparation of size mixing in Handloom Trade. Ball Warp sizing, Hank sizing and Brush sizing with the methods of leasing in each system.

2] Weaving: - Different kinds of handlooms. Their utility to different purposes. Lever and Barrel Dobbins and lag Dobbins. Method of pegging for different designs. Multiple boxes slay on drop Box and revolving box principles. Study of handloom Jacquard. Card cutting and card lacing methods.

Technical terms and functions of parts of a handloom. Different kinds of shedding and picking devices. Various kinds of heddles, reeds, shuttles and pins. Beams gaiting and setting of loom parts. Faults formed in fabrics during weaving, their causes and remedies.

3] Designing:-Knowledge of the use of design paper and counting glass to reproduce a cloth structure on the design paper with the necessary draft, denting and treading plan.

4] Study of the following cloth structures: - Plain weave and its derivations. Simple, twill, herringbone or pointed twill diamond. Warp and weft satin twill and satin checks.

5] Calculations: - Calculations on neald and reed counts finding out counts, weight and Length of single cotton yarns. Tex system of yarn numbering. Numbering of folds yarns. Finding out weight of warp, weft and size in a cloth.

## **PRACTICAL - I HANDLOOM WORKSHOP**

Practice in preparing size, mixing and sizing the yarn by one of the systems. Working on Handlooms w . Dabbles and Jacquards Card cutting and card lacing practice.

Practice in warp and weft winding, warping and working on different types of handlooms.

## **INTRODUCTION**

### **DYEING AND BLEACHING**

1) Water: - Different sources of water. Impurities in water. Hard water and soft water Effect of the impurities on dyeing and bleaching. Methods of softening hard water.

2) Fibers: - Properties of cotton. Staple length, strength and elongation. Effect of acid and alkyls in cotton. Mercerization of cotton.

Singeing: - Purpose of singeing, Flame singeing machine,

3) Desizing: - Purpose of desizing Acid and enzymes desizing.

Designing: - study of the following weaves: - Ordinary Honey comb brightens Honey comb Hark-aback, Mock, Leno. Extra weep and Extra weft figured Fabrics.

4) Scouring: - Purpose of scouring. Pressure kier. Chemicals and assistants used for scouring cotton cloth. Other conditions like temperature. Pressure time and circulation of solution

5) Bleaching: - Bleaching powder: - how it is made and how it is used. Scouring antichlor and bluing. Use of hydrogen peroxide as a bleaching agent.

## **PRACTICAL- II**

### **DYEING AND BLEACHING**

#### **DYEING AND BLEACHING LABORATORY**

1] Simple experiments to illustrate the action of acids and alkalis on cotton wool and silk.

Designing of grey cloth piece. Scouring bleaching with hypochlorite.

#### **List of Equipment**

1) Hand loom	1 Nos
2) Hand loom dobby	1 Nos
3) Hand loom jacquard	1 Nos

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