

# Competency Based Training (CBT) Curriculum Guide for Building Painter

[Market Oriented Short Term (MOST), Modular Curriculum]

Developed by



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## 1. INTRODUCTION:

The Technical Education and Vocational training (TVET) system has a large role to play in economic growth and social development as workforce provider to the labor market and as provider of skills to those who are looking for employment. In the case of Bangladesh, the TVET sector needs major reforms to ensure that issues of quality and capacity, relevance, and access are properly addressed.

This curriculum guide is designed and developed using competency based training (CBT) approach with the aim of producing skilled human resources for respective trade and occupation. This is based on the tasks to be performed for Building Painting occupation. The modules are included in course structure section of this curriculum guide. The training methodology is learner friendly where theoretical inputs, demonstration, guided and individual practices will be sufficiently provided to **master the skills at the industry standards**. Sufficient and updated tools and equipment will also be used during the training to provide hands on skills to the trainees. The curriculum guide is developed in consultation with the trainer, mid-level industry supervisors, and skilled workers. SEP-B engaged Training Institute for Technical Instruction (TITI), Nepal to develop the curriculum guide on Building Painter.

## 2. AIMS:

The main aim of this training program is to produce medium level skilled workforce (semi-skilled workers) required for the construction sector in the formal and informal sector and create better opportunities for employment and increased revenue.

## 3. OBJECTIVES:

At the end of the training course, the trainees will be able to:

- Practice Occupational Health and Safety (OHS) Procedure;
- Apply Fundamental Skills of Building Painting Works;
- Preparation for Building Painting Works;
- Perform Building Painting Works.

## 4. DESCRIPTION:

This is a competency based training package for the unemployed and underemployed workforce of Bangladesh. The curriculum is based on the tasks to be performed in the Building Painter occupation and subsequently these tasks have been grouped to form various modules. This will provide flexibility for the trainees to learn one module at a time. The modules are included in the 'Course Structure' section of this curriculum guide. The training methodology will be **learner-centered** where theoretical input, demonstration,

guided and individual practices will sufficiently be provided to the trainees to **master their skills at business and industry standards**. Sufficient tools, equipment and aids will also be used during the training to provide hands on skills to the trainees.

### 5. COURSE STRUCTURE:

Job title: Building Painter				Time (hrs.)		
S.N	Modules	Tasks	Nature	Th.	Pr.	Tot.
1	Practice Occupational Health and Safety (OHS) Procedure	5	T+P	2.5	3.5	6.0
2	Apply Fundamental Skills of Building Painting Works;	5	T+P	7.0	17.0	24.0
3	Preparation for Building Painting Works;	7	T+P	7.0	22.0	29.0
4	Perform Building Painting Works.	12	T+P	12.0	99.0	111.0
<b>All total:</b>		<b>29</b>		<b>28.5</b>	<b>141.5</b>	<b>170</b>

Timings are finalized subject to verification during implementation of training.

It should further be noted that although Health and Safety is dealt with as a separate module, the principles should be integrated into each task. It should be seen as a way of life and not an activity to be done during training only.

### 6. DURATION:

Total duration of the training is **170 hours** excluding soft skills and On-the-Job Training (OJT)/Apprenticeship. The participants will be sent for wage employment after completion of the training. Only technical modules with occupational health and safety procedure have been considered under this duration.

### 7. TARGET GROUP:

The target group of this training course will be dropped out youths from the formal schooling, job seekers/underemployed young men or women, disadvantaged people. Male and female both are entitled to receive this training. The basic education for the trainees would be grade-V or equivalent. Above 18 years of age, trainees will be enrolled in the training course.

## **8. GROUP SIZE:**

Maximum 20 trainees will be placed in each group and provided adequate resources.

## **9. TARGET LOCATION:**

The training will be implemented in partnership with private training providers and industry led training situated in the different areas of the country.

## **10. MEDIUM OF INSTRUCTION:**

The medium of instruction for this course will be Bangla but the trainees will also be oriented on technical terminology in English.

## **11. PATTERN OF ATTENDANCE:**

At least 90% attendance will be required during the theory and practical classes to appear in the internal and final assessment.

## **12. FOCUS OF THE PROGRAM:**

Since this course is a competency-based training, the focus is given on the performance of the trainees rather than the theoretical input. Where practicable, at least 80% of the total training time is allocated for practical training and 20% for theory.

## **13. ENTRY CRITERIA:**

The following criteria will be considered for the individual to enter into this training program:

- Education: Class 5 or equivalent
- Age: 18 years and above
- Physical and mental health

## **14. FOLLOW UP SUGGESTION:**

The training institutes who implement CBT program will build rapport with the employers to link graduates with the industries for employment.

Placement: Within one month after completion of the training program, the graduates will be assisted in finding out appropriate and decent wage-based job relevant to the occupation concerned.

To measure the success in job, the follow up will be taken as below:

First follow-up- three months after placement of graduates in job and the next follow up six months after placement of graduates in job.

#### **15. CERTIFICATE REQUIREMENT:**

Training service provider and Industry Led Training will certify the graduates as a Semi-Skilled Building Painter only after successful completion of the training program through systematic skills testing. Certification can also be linked to the Bangladesh Technical and Education Board (BTEB) at the relevant NTVQF level through Recognition of Prior Learning (RPL).

#### **16. TRAINEES EVALUATION DETAILS:**

Module wise evaluation will be conducted to ensure the performance of the learners. Final evaluation will be conducted to evaluate the participants at the end of the training course. Trainees must secure 100% marks in practical and 80% marks in theoretical examination.

#### **17. TRAINERS' QUALIFICATION:**

Preference will be given to the trainer's having the following criteria:

- Minimum five years' experience in the respective occupation in the construction industry
- Working experience as an Instructor/Trainer
- Trade course/Diploma in Civil Engineering

#### **18. TRAINER – TRAINEES RATIO:**

- For theoretical class, trainer and trainee ratio should be 1:20.
- For practical class, trainer and trainee ratio should be 1:10.
- And for final practical assessment 1:1

#### **19. SUGGESTION FOR INSTRUCTION:**

Where practicable:

- At least 80% time of the course will be allocated for practical purpose.
- Maximum 20% time of the course will be allocated for theoretical purpose.
- Follow the safety rules.
- Create a friendly learning environment.
- Arrange the materials and equipment at the right place.
- Trainer/Instructor will be available in the training classes/labs in time.
- Take attendance of participants.

- Learner centered training.
- Encourage the participants to speak.
- Arrange question and answer (Q&A) sessions.
- Make plans for classroom / workshop instructions.
- Prepare lesson plans for theoretical and practical classes.

## **20. LIST OF MODULES AND SUB MODULES:**

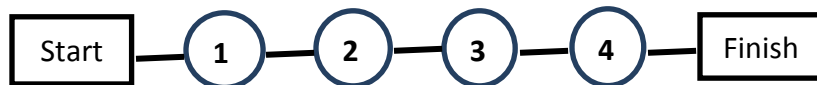
**Module: 1: Practice Occupational Health and Safety (OHS) Procedure**

**Module: 2: Apply Fundamental Skills of Building Painting Works**

**Module: 3: Preparation for Building Painting Works**

**Module: 4: Perform Building Painting Works**

## **21. MODULE SEQUENCE:**



**22. DETAILS OF MODULES AND SUB MODULES:**



# Module 1: Practice Occupational Health and Safety (OHS) Procedure

22.1. Module- 1: Practice Occupational Health and Safety (OHS) Procedure						
	<b>Description:</b> It consists of skills and knowledge related to occupational health and safety applicable to the related performance.			Hours		
	<b>Module outcomes:</b> After completion of this module, trainees will be able to <ul style="list-style-type: none"> <li>• Follow safety sign and regulations;</li> <li>• Apply personal protective equipment;</li> <li>• Control house-keeping hazards;</li> <li>• Apply First Aid on minor injuries;</li> <li>• Control Electrical Fire Hazards.</li> </ul>			<b>Th.</b> 2.5	<b>Pr.</b> 3.5	<b>Tot.</b> 6.0
1.	<b>Task:</b> Follow safety sign and regulations	<b>Terminal Performance Objective (TPO):</b>  <b>Given:</b> Simulated situation  <b>What:</b> Follow safety sign and regulations.  <b>How well:</b> <ul style="list-style-type: none"> <li>• All safety signs and regulations must be followed in the workplace</li> </ul>	Th. 0.5	Pr. 0.5	Tot. 1.0	
	<b>Steps:</b> <ol style="list-style-type: none"> <li>1. Collect the safety sign, emergency exit plan and list of rules and regulation.</li> <li>2. Explain the application of safety sign and regulation.</li> <li>3. Follow the emergency exit plan.</li> <li>4. Comply with safety signs and regulations.</li> </ol>	<b>Enabling objectives:</b> <ul style="list-style-type: none"> <li>• Explain about the uses of safety sign and regulation.</li> <li>• Explain how to use the regulation.</li> <li>• Explain types of the safety sign.</li> <li>• List the safety sign and regulation.</li> <li>• Use the all safety items and rules.</li> <li>• Explain the emergency exit way.</li> </ul>				
	<b>Tools/equipment/materials required:</b> Safety sign, visual aids, danger zone area indicators and regulation charts.  <b>PPE:</b> Apron, Safety Shoe, Hand Gloves, Hamlet.					
2.	<b>Task:</b> Apply personal protective equipment	<b>Terminal Performance Objective (TPO):</b>  <b>Given:</b>	Th. 0.5	Pr. 1.0	Tot. 1.5	

		<p>Protective equipment</p> <p><b>What:</b> Apply personal protective equipment</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• The status of the protective equipment must be checked</li> <li>• Safety goggle, helmet, gloves to be worn at all times during execution of tasks and safety belt must be tightened properly</li> </ul>			
	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect the personal protective equipment.</li> <li>2. Check the condition of protective equipment.</li> <li>3. Use the protective equipment.</li> <li>4. Maintain the protective equipment.</li> <li>5. Preserve the protective equipment in organized way at safe place.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Explain about the uses of protective equipment.</li> <li>• Explain how to use the protective equipment.</li> <li>• Explain the function of the protective equipment in hazards works.</li> <li>• Use the protective equipment properly.</li> <li>• Explain the positive and negative side of uses the protective equipment.</li> <li>• List the protective equipment.</li> </ul>			
	<p><b>Tools/equipment/materials required:</b> Hamlet, Life Jacket, Safety Goggles, Hand Gloves, Safety Belt and Safety shoes/Gumboot.</p> <p><b>PPE:</b> Hamlet, Life Jacket, Safety Goggles, Hand Gloves, Safety Belt and Safety shoes/Gumboot.</p>				
3.	<p><b>Task:</b> Control House-Keeping Hazards</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Simulated situation</p> <p><b>What:</b> Control House-Keeping Hazards</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Tools, equipment, Chemicals and safety materials of workplace must be placed in</li> </ul>	Th. 0.5	Pr. 0.5	Tot. 1.0

		<p>organized way</p> <ul style="list-style-type: none"> <li>The periodical maintenance of tools, equipment and safety materials of workplace must be done.</li> </ul>			
	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>List the expected hazards exist in workplace.</li> <li>Place the tools and equipment with different painting materials in workplace following organized way.</li> <li>Follow up the periodic maintenance of tools and equipment.</li> <li>Handle the tools/equipment and chemicals carefully.</li> <li>Follow up the maintenance of all the electrical fittings and fixtures.</li> <li>Identify the faulty tools/equipment.</li> <li>Dispose the wastage/outdated tools and equipment from workplace.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>Define house-keeping hazards.</li> <li>Identify the types of housekeeping hazards.</li> <li>Explain the necessity of keeping the house neat and clean (including dinning place, washroom/toilets, store and exit path).</li> <li>Understand safety precautions to be taken for housekeeping hazards.</li> <li>List the expected house-keeping hazards in the workplace.</li> </ul>			
	<p><b>Tools/equipment/materials required:</b> Painting Chemicals/Color, Tools and equipment.</p> <p><b>PPE:</b> Apron, Safety Shoe, Hand Gloves, Hamlet.</p>				
4.	<p><b>Task:</b> Apply First Aid on Minor Injuries.</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Dummy of a simulated victim.</p> <p><b>What:</b> Apply First Aid on Minor Injuries</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>Injured person must be isolated from the crowd.</li> <li>Information of accident must be given to the administration.</li> </ul>	Th. 0.5	Pr. 1.0	Tot. 1.5

	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Isolate the injured person.</li> <li>2. Collect first aid box with necessary medicine, materials and equipment.</li> <li>3. Clean the injured area.</li> <li>4. Dress the injured portion properly.</li> <li>5. Use the necessary medicine and other materials as per requirement.</li> <li>6. Inform the administration.</li> <li>7. Restore the First Aid Box.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Define the minor injury.</li> <li>• Explain about the first aid treatment.</li> <li>• Describe the steps of dressing.</li> <li>• List out the first aid medicine, equipment and materials.</li> </ul>			
<p><b>Tools/equipment/materials required:</b> First Aid Box with required medicine and materials.</p> <p><b>PPE:</b> Apron, Safety Shoe, Hamlet.</p>					
5.	<p><b>Task:</b> Control Electrical Fire Hazards</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Work place situation (real/simulation)</p> <p><b>What:</b> Control Electrical Fire Hazards</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Firefighting aids must be checked periodically.</li> <li>• Emergency exit must be followed during evacuation.</li> </ul>	Th. 0.5	Pr. 0.5	Tot. 1.0
<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Check the availability of fire extinguishers, sands buckets/ reservoir.</li> <li>2. Wear safety device to work closed to the electrification area.</li> <li>3. Check the fire extinguisher.</li> <li>4. Apply fire extinguisher during small electric fire.</li> <li>5. Inform the police and fire station for mass electric fire.</li> </ol>		<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Describe the possible electrical fire hazards in workplace.</li> <li>• List the types of electrical hazards.</li> </ul>			
<p><b>Tools/equipment/materials required:</b> Safety materials like fire Extinguisher, Sands,</p>					

	<p>Vacuum cleaner/hand blower etc.</p> <p><b>PPE:</b> Apron, Safety Shoe, Hand Gloves, Hamlet.</p>
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## Module 2: Apply Fundamental Skills of Building Painting Works

22.2. Module- 2: Apply Fundamental Skills of Building Painting Works						
	<b>Description:</b> This module covers the fundamentals skills of building painting. It provides skills and knowledge required to apply and maintain building painting related tools, equipment and materials. Additionally, this module deals with measurement and calculation, and interpretation of drawing and specifications.			Hours		
	<b>Module outcomes:</b> After completion of this module, trainees will be able to: <ul style="list-style-type: none"> <li>• Apply hand tools;</li> <li>• Apply power tools;</li> <li>• Interpret drawing &amp; specification;</li> <li>• Estimate tools and materials required for building painting work;</li> <li>• Maintain tools and equipment.</li> </ul>			<b>Th.</b> <b>7.0</b>	<b>Pr.</b> <b>17.0</b>	<b>Tot.</b> <b>24.0</b>
1.	<b>Task:</b> Apply hand tools		<b>Terminal Performance Objective (TPO):</b>  <b>Given:</b> Simulated workplace, user's manual and different types of hand tools.  <b>What:</b> Apply hand tools.  <b>How well:</b> <ul style="list-style-type: none"> <li>• Safety precaution is taken while using hand tools.</li> <li>• Different hand tools are identify required for building painting works.</li> <li>• Different types of hand tools (Brushes, Roller, Scarpers, Spatula/Putty Knives, Wire brush, Sand paper) are applied according to the user's manual.</li> <li>• Right tools are selected for specific job.</li> </ul>	Th. 1.0	Pr. 3.0	Tot. 4.0



	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect required hand tools for building painting works.</li> <li>2. Place them separately on table.</li> <li>3. Identify hand tools for building painting work.</li> <li>4. Demonstrate the functions each tools.</li> <li>5. Clean the tools after use.</li> <li>6. Clean the workplace.</li> <li>7. Keep hand tools in toolbox.</li> <li>8. Restore the toolbox in safe place.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Make a list of different types of hand tools used for building painting works.</li> <li>• Explain the application of different types of hand tools.</li> <li>• Explain how to apply different types of hand tools (Brushes, Roller, Scarpers, Spatula/Putty Knives, Wire brush, Sand paper).</li> </ul>			
	<p><b>Tools/equipment/materials required:</b> Measuring Tape, Paint Brushes, Roller, Scarpers, Spatula/Putty Knives, Bucket, Wire brush, Pipe Level, Jar, Thread, Water Proof Paper(120 no), Sprit ,Marking Cloth, Sand paper,</p> <p><b>PPE:</b> Apron, Hand gloves, Safety shoes, Mask, Cap, safety goggles, etc.</p>				
2.	<p><b>Task:</b> Apply power tools.</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Simulated workplace, user's manual and different types of power tools for building painting works.</p> <p><b>What:</b> Apply power tools.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Safety precautions are taken while using power tools.</li> <li>• Power tools are identified based on the nature of building painting works.</li> <li>• Different types of power tools (Spray Gun, Compressor) are applied according to the user's manual.</li> </ul>	Th. 1.0	Pr. 3.0	Tot. 4.0

	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Identify the nature of the job.</li> <li>2. Select the power tools as per the nature of the job.</li> <li>3. Prepare the power tools (Spray Gun, Compressor).</li> <li>4. Connect the power cable with the power source.</li> <li>5. Switch ON the power tool.</li> <li>6. Apply power tools following time and nature of the job.</li> <li>7. Switch OFF the power tools.</li> <li>8. Clean the power tools.</li> <li>9. Clean the work place.</li> <li>10. Restore the power tools in safe place.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Explain power tools used for building painting works.</li> <li>• Explain the application of different types of power tools.</li> <li>• Explain how to apply different types of power tools (Spray Gun, Compressor).</li> </ul>								
<p><b>Tools/equipment/materials required:</b> Measuring Tape, Paint Brushes, Roller, Spray Gun, Compressor, Scarpers, Spatula/Putty Knives, Bucket, Wire brush, Pipe Level, Jar, Thread, Water Proof Paper (120 No.), Sprit, Marking Cloth, Sand paper.</p> <p><b>PPE:</b> Apron, Hand gloves, Safety shoes, Mask, Safety Goggles, etc.</p>										
3.	<p><b>Task:</b> Interpret drawing &amp; specification</p>	<table border="1"> <thead> <tr> <th data-bbox="763 1003 1182 1073"><b>Terminal Performance Objective (TPO):</b></th> <th data-bbox="1182 1003 1284 1073">Th.</th> <th data-bbox="1284 1003 1386 1073">Pr.</th> <th data-bbox="1386 1003 1487 1073">Tot.</th> </tr> </thead> <tbody> <tr> <td data-bbox="763 1073 1182 1703"> <p><b>Given:</b> Working drawing of building painting works and specification.</p> <p><b>What:</b> Interpret drawing &amp; specification</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Specifications and abbreviations are identified and explained.</li> <li>• Required materials are estimated from drawing.</li> </ul> </td> <td data-bbox="1182 1073 1284 1703">1.0</td> <td data-bbox="1284 1073 1386 1703">3.0</td> <td data-bbox="1386 1073 1487 1703">4.0</td> </tr> </tbody> </table>	<b>Terminal Performance Objective (TPO):</b>	Th.	Pr.	Tot.	<p><b>Given:</b> Working drawing of building painting works and specification.</p> <p><b>What:</b> Interpret drawing &amp; specification</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Specifications and abbreviations are identified and explained.</li> <li>• Required materials are estimated from drawing.</li> </ul>	1.0	3.0	4.0
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	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect working drawing and specification.</li> <li>2. Identify portion of working drawing and specification</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Define specification and working drawing.</li> <li>• State different types of signs, symbols used for building painting works.</li> <li>• Explain the dimension, scale, signs and</li> </ul>								

	<p>related to building painting.</p> <ol style="list-style-type: none"> <li>3. Identify the terms and abbreviations.</li> <li>4. Identify signs and symbols.</li> <li>5. Interpret the schedules, dimensions and other signs and symbols in the drawing and specification.</li> <li>6. Restore the drawings in a safe place.</li> </ol>	<p>symbols of working drawing.</p>			
<p><b>Tools/equipment/materials required:</b> Technical Specification and Drawing.</p> <p><b>PPE:</b> Apron, Safety Shoe, Helmet</p>					
<p>4.</p>	<p><b>Task:</b> Estimate tools and materials required for building painting work.</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Working drawing, specification and estimation format or the actual area to be painted with specification.</p> <p><b>What:</b> Estimate materials for building painting work.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Estimated quantity of material is given as per the drawing and specification.</li> <li>• Estimated quantity of material is <math>\pm 5\%</math> of the actual quantity required.</li> </ul>	<p>Th. 3.0</p>	<p>Pr. 6</p>	<p>Tot. 9.0</p>
<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect working drawing.</li> <li>2. Interpret the working drawing.</li> <li>3. List the required materials and accessories/tools.</li> <li>4. Insert all the dimension in estimation format.</li> <li>5. Measure the length for painting in running meter/feet.</li> <li>6. Calculate the total unit of the</li> </ol>		<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Describe the importance of estimation.</li> <li>• Explain different components of estimation format.</li> <li>• Explain the unit of MKS and FPS system.</li> <li>• State the formulas for calculating different types of Area (Square, rectangular, Circular).</li> <li>• Describe how to find out the required quantity of painting</li> </ul>			

	<p>area for painting in square meter/feet.</p> <p>7. Calculate the total materials and accessories/tools required.</p> <p>8. Restore the drawings in a safe place.</p> <p>9. Report the estimation.</p>				
<p><b>Tools/equipment/materials required:</b> Technical Specification and Drawing, Estimation format, calculator, measuring tape, scale, pencil, paper, pen, eraser and file.</p> <p><b>PPE:</b> Apron, Safety Shoe</p>					
5.	<p><b>Task:</b> Maintain tools &amp; equipment</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Different types of tools &amp; equipment required for painting works, maintenance chart/schedule</p> <p><b>What:</b> Maintain tools &amp; equipment</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>Tools &amp; equipment are inspected, maintained and repaired periodically.</li> <li>Maintenance is done as per maintenance chart/schedule</li> <li>No damage made while maintaining tools and equipment.</li> </ul>	Th. 1.0	Pr. 2.0	Tot. 3.0
<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>Collect tools and equipment.</li> <li>Check each tools and equipment for repair and maintenance.</li> <li>Remove dust and rust from tools &amp; equipment.</li> <li>Clean brush, roller and other painting tools with</li> </ol>		<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>Explain preventive maintenance methods, techniques and procedure.</li> <li>Explain the necessity of maintaining the tools &amp; equipment.</li> <li>Describe environment friendly disposal procedure of waste paint and nonfunctional tools and equipment.</li> </ul>			

	<p>recommended solvent to remove excess paint and foreign particles.</p> <ol style="list-style-type: none"> <li>5. Check faults in tools and equipment.</li> <li>6. Repair minor faults.</li> <li>7. Isolate nonfunctional tools &amp; equipment, if any.</li> <li>8. Dispose waste paint and nonfunctional tools and equipment following environment friendly manner.</li> <li>9. Restore the tools &amp; equipment.</li> </ol>	
<p><b>Tools/equipment/materials required:</b> Measuring Tape, Paint Brushes, Roller, Spray Gun, Compressor, Scarpers, Spatula/Putty Knives, Bucket, Wire brush, Pipe Level, Jar, calculator.</p> <p><b>PPE:</b> Apron, Safety Shoe, Hand Gloves, Goggles, Mask, Ear Plug, Helmet.</p>		

## Module 3: Prepare for Building Painting Works

22.3. Module- 3: Preparation for Building Painting Works						
	<b>Description:</b> This module covers skills and knowledge required to prepare for building painting works.			Hours		
	<b>Module outcomes:</b> After completion of this module, trainees will be able to: <ul style="list-style-type: none"> <li>• Assemble scaffolding;</li> <li>• Make Jhul Macha (Rope Ladder);</li> <li>• Prepare Plastered/Concrete Surface for Painting;</li> <li>• Prepare Old Plastered Surface for Painting;</li> <li>• Prepare Wooden Surface for Painting;</li> <li>• Prepare Ferrous/ Iron Surface for Painting;</li> <li>• Make Putty for Painting Work.</li> </ul>			<b>Th.</b> <b>3.0</b>	<b>Pr.</b> <b>30.0</b>	<b>Tot.</b> <b>33.0</b>
1.	<b>Task:</b> Assemble scaffolding.	<b>Terminal Performance Objective (TPO):</b>  <b>Given:</b> Pre prepared Scaffolding components and required height of the scaffolding.  <b>What:</b> Assemble scaffolding.  <b>How well:</b> <ul style="list-style-type: none"> <li>• Scaffolds are tight and safe.</li> <li>• PPE is applied.</li> </ul>	Th. 1.0	Pr. 2.0	Tot. 3.0	
	<b>Steps:</b> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Place four vertical post in specific distance.</li> <li>3. Join horizontal bracing with four posts at bottom by nail for wooden and nut bolt for steel joint.</li> <li>4. Attach horizontal cross bracing at bottom.</li> <li>5. Join horizontal bracing with four posts at top by nail for wooden and nut bolt for steel joint.</li> <li>6. Attach horizontal cross</li> </ol>	<b>Enabling objectives:</b> <ul style="list-style-type: none"> <li>• State the purpose of using scaffolding while painting.</li> <li>• Explain the installation procedure of scaffolding.</li> <li>• Describe how to disassemble scaffolding.</li> </ul>				

	<p>bracing with post at top.</p> <p>7. Set vertical cross bracing at any two adjacent sides.</p> <p>8. Add additional horizontal cross bracing as required.</p> <p>9. Place Steel/Wooden board on the top of the scaffolding.</p> <p>10. Clean the workplace.</p> <p>11. Restore tools and materials.</p>				
<p><b>Tools/equipment/materials required:</b> Pre prepared Scaffolding components, Steel/Wooden Board, Steel /Wooden post, Nail/Nut bolt , Saw, Ball pin hammer</p> <p><b>PPE:</b> Hand Gloves, Apron, Helmet, Safety shoe.</p>					
2.	<p><b>Task:</b> Make Jhul Macha (Rope Ladder).</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Required length for Jhul Macha, prepared components of bamboo rungs and specification.</p> <p><b>What:</b> Make Jhul Macha (Rope Ladder).</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>Jhul Macha are tight and safe to use.</li> <li>PPE is applied.</li> </ul>	Th. 1.0	Pr. 3.0	Tot. 4.0
<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>Collect tools and materials required.</li> <li>Set 1.5" diameter two rope between 4 feet apart.</li> <li>Take Bamboo rungs as per required length (5 feet long).</li> <li>Place bamboo rung on the standing rope making perpendicular to both standing ropes.</li> <li>Tie both side with another 3/8" rope.</li> <li>Place another bamboo rung 3 feet c/c apart from the previous rung on the standing</li> </ol>		<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>Explain the making procedure of jhul macha.</li> <li>Describe the importance to take safety for using jhul macha.</li> </ul>			



	<p>rope making perpendicular to both standing ropes.</p> <ol style="list-style-type: none"> <li>7. Tie both side with another 3/8" rope.</li> <li>8. Repeat step 6-7 until reaching the desired length.</li> <li>9. Secure the Jhul Macha with column or heavy loaded component at the top by using hutch knot</li> <li>10. Check all joints thoroughly.</li> <li>11. Clean the workplace.</li> <li>12. Restore the tools and materials.</li> </ol>				
<p><b>Tools/equipment/materials required:</b> Bamboo rungs , rope(different size and length), saw, rope cutter</p> <p><b>PPE:</b> Safety belt, Hand gloves, Apron, Helmet, Mask,</p>					
3.	<p><b>Task:</b> Prepare Plastered/Concrete Surface for Painting.</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Actual Site</p> <p><b>What:</b> Prepare plastered/ Concrete Surface for Painting.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Surface is leveled.</li> <li>• Rubbed uniformly and no undulation seen.</li> <li>• No damage seen.</li> <li>• No dust seen and work place is cleaned after preparing surface.</li> </ul>	Th. 1.0	Pr. 5.0	Tot. 6.0
<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Use scaffolding (If required).</li> <li>3. Rub the surface using 60/80/120 No. Pumice stone and Scraper.</li> <li>4. Clean the surface.</li> <li>5. Apply sealer on the surface as base coat.</li> </ol>		<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Describe the procedure of surface preparation on plastered surface.</li> <li>• Discuss precautions to be taken while preparing surface for painting.</li> <li>• State the use of 60/80/120 No. pumice stone.</li> <li>• Explain the procedure of using Pumice stone.</li> </ul>			

	6. Clean tools and work place. 7. Restore the tools and materials.				
<b>Tools/equipment/materials required:</b> Pumice stone (60/80/120), Sealer, Scraper, Scaffolding (if required)  <b>PPE:</b> Safety Goggles , Mask, Apron,					
4.	<b>Task:</b> Prepare Old Plastered Surface for Painting.	<b>Terminal Performance Objective (TPO):</b>  <b>Given:</b> Actual Site  <b>What:</b> Prepare plastered/Concrete Surface for Painting. <b>How well:</b> <ul style="list-style-type: none"> <li>• Surface is leveled.</li> <li>• Rubbed uniformly and no undulation seen.</li> <li>• No damage seen.</li> <li>• No dust seen and work place is cleaned after preparing surface.</li> </ul>	Th. 1.0	Pr. 3.0	Tot. 4.0
<b>Steps:</b> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Use Scaffolding (If required).</li> <li>3. Remove lichen (shewlla) and old paint using steel wire brush (if required).</li> <li>4. Rub the surface using 120 No. waterproof paper.</li> <li>5. Clean the surface.</li> <li>6. Apply sealer on the surface (If required).</li> <li>7. Let the surface dry.</li> <li>8. Clean tools and work place.</li> <li>9. Restore the tools and materials.</li> </ol>		<b>Enabling objectives:</b> <ul style="list-style-type: none"> <li>• Describe the procedure of surface preparation on old plastered surface.</li> <li>• Discuss precautions to be taken.</li> <li>• Explain the procedure of using Sealer.</li> </ul>			
5.	<b>Task:</b> Prepare Wooden Surface for Painting.	<b>Terminal Performance Objective (TPO):</b>  <b>Given:</b> Actual Site  <b>What:</b> Prepare Wooden	Th. 1.0	Pr. 3.0	Tot. 4.0

		<p>Surface for Painting.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Surface is leveled.</li> <li>• Rubbed uniformly and no undulation seen.</li> <li>• No damage seen.</li> <li>• No dust seen and work place is cleaned after preparing surface.</li> </ul>			
	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Take Appropriate PPE</li> <li>3. Rub the surface using 120 No. waterproof paper and Scraper.</li> <li>4. Clean the surface using brush and markin cloth.</li> <li>5. Apply base coat using oil base sealer.</li> <li>6. Let the surface dry.</li> <li>7. Apply putty on the surface.</li> <li>8. Rub the surface using 120 No. waterproof paper.</li> <li>9. Clean tools and work place.</li> <li>10. Restore the tools and materials.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Describe the procedure of surface preparation on wooden surface.</li> <li>• Discuss precautions to be taken.</li> <li>• Explain the procedure of using sealer and putty on wooden surface.</li> </ul>			
	<p><b>Tools/equipment/materials required:</b> 120 No. water proof paper, Oil based Sealer, Scraper, Flower broom, Putty, <b>PPE:</b> Safety Goggles , Mask, Apron,</p>				
6.	<p><b>Task:</b> Prepare Ferrous/Iron Surface for Painting;</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Rough iron surface or readymade product in actual site.</p> <p><b>What:</b> Prepare Ferrous/Iron Surface for Painting.</p> <p><b>How well:</b></p>	Th. 1.0	Pr. 3.0	Tot. 4.0

		<ul style="list-style-type: none"> <li>• No corrosion seen.</li> <li>• Rubbed uniformly surface is smooth.</li> <li>• No dust seen and work place is cleaned after preparing surface.</li> </ul>			
	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Rub the metal surface using Emery paper and Scraper.</li> <li>3. Clean the surface using brush and markin cloth.</li> <li>4. Apply base coat using Anticorrosive material (Red Oxide)</li> <li>5. Dry the surface.</li> <li>6. Rub the surface smoothly using Emery paper and Scraper.</li> <li>7. Clean tools and work place</li> <li>8. Restore the tools and materials.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Describe the procedure of surface preparation on metal surface.</li> <li>• Discuss the necessity to wear PPE.</li> <li>• Explain the procedure of using Anticorrosive paint.</li> </ul>			
	<p><b>Tools/equipment/materials required:</b> Emery paper (2 No. and 2.5 No.), Red oxide, Scraper, Brush, Markin cloth,</p> <p><b>PPE:</b> Safety Goggles , Mask, Apron,</p>				
7.	<p><b>Task:</b> Make Putty for Painting Work.</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Surface type</p> <p><b>What:</b> Make Putty for Painting Work.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Putty is uniformly mixed.</li> <li>• Putty is made as per the surface type.</li> </ul>	Th. 1.0	Pr. 3.0	Tot. 4.0
	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Take 6:1:1 (Chalk powder: enamel: plastic paint).</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Define Putty.</li> <li>• Explain types of putty applicable for different types of surface.</li> </ul>			

	<ol style="list-style-type: none"> <li>3. Mix the ratio uniformly before applying first coat.</li> <li>4. Take 6:0.5:0.5 (Chalk powder: enamel: plastic paint).</li> <li>5. Mix the ratio uniformly before applying second coat.</li> <li>6. Clean the tools and workplace.</li> <li>7. Restore the tools and materials.</li> </ol>	<ul style="list-style-type: none"> <li>• State the procedure of making putty.</li> </ul>
<p><b>Tools/equipment/materials required:</b> Chalk powder, Enamel paint ,Plastic paint, Scraper</p> <p><b>PPE:</b> Safety Goggles , Mask, Apron,</p>		

## Module 4: Perform Building Painting Works

22.4. Module- 4: Perform Building Painting Works						
	<b>Description:</b> This module deals with the skills and knowledge required to perform building painting works in different surfaces.			Hours		
	<b>Module outcomes:</b> After completion of this module, trainees will be able to- <ul style="list-style-type: none"> <li>• Perform white wash on plaster/concrete surface;</li> <li>• Perform distemper painting on concrete/plaster surface;</li> <li>• Perform plastic emulsion paint on new surface;</li> <li>• Perform plastic emulsion paint on old surface;</li> <li>• Apply enamel paint on wooden/plastered surface;</li> <li>• Perform enamel paint on ferrous/iron surface;</li> <li>• Apply cement paint (snow cem) on plastered surface;</li> <li>• Apply weather coat on external plastered surface;</li> <li>• Perform fair patch work;</li> <li>• Apply silicon paint on facing brick wall (fare face);</li> <li>• Apply readymade Varnish on Wooden Surface;</li> <li>• Repair painting works on (plaser/concrete) damaged surface.</li> </ul>			<b>Th.</b> <b>12.0</b>	<b>Pr.</b> <b>99.0</b>	<b>Tot.</b> <b>111.0</b>
1.	<b>Task:</b> Perform white wash on plaster/concrete surface;		<b>Terminal Performance Objective (TPO):</b>  <b>Given:</b> Actual work site  <b>What:</b> Perform white wash on plaster/concrete surface.  <b>How well:</b> <ul style="list-style-type: none"> <li>• Painted Surface is uniformly colored.</li> <li>• Surface is clean and free from dust.</li> <li>• No damage or crack remains on the surface after painting.</li> <li>• No wastage of paint seen on surface and work area.</li> </ul>	Th. 1.0	Pr. 5.0	Tot. 6.0
	<b>Steps:</b> 1. Collect tools and materials. 2. Take required quantity of		<b>Enabling objectives:</b> <ul style="list-style-type: none"> <li>• List required materials for white washing.</li> </ul>			

<p>water.</p> <ol style="list-style-type: none"> <li>3. Mix required quantity of lime stone and adhesive with the water.</li> <li>4. Stir until getting uniform color by bamboo stick after 24 hour.</li> <li>5. Add nil for white wash (color pigment for lime color wash) as per requirement.</li> <li>6. Stir until getting uniform color and consistency using bamboo stick.</li> <li>7. Use scaffolding (if needed).</li> <li>8. Clean the surface by wire brush (if needed).</li> <li>9. Rub the work surface using sand/emery paper.</li> <li>10. Clean the surface by flower broom.</li> <li>11. Screen the mix by marking cloth in another bucket.</li> <li>12. Pour some paint into small container.</li> <li>13. Hold the painting brush or Jute Pusra.</li> <li>14. Dip the brush bristles or Jute Pusra straight down into the paint to load paint.</li> <li>15. Tap gently each side of the brush/jute Pursa against the paint container.</li> <li>16. Paint a downward stroke in the corner or use a horizontal stroke along the ceiling or wall.</li> <li>17. Sweep gently the brush back over the painted area to erase brush marks.</li> <li>18. Repeat step 12 to 16 as needed to complete the first coat of painting.</li> <li>19. Clean the brush immediately after stopping.</li> <li>20. Clean the work area and other tools.</li> </ol>	<ul style="list-style-type: none"> <li>• Explain how to prepare mix for white washing.</li> <li>• Describe Nil and color pigment.</li> <li>• Describe how select color for painting.</li> <li>• Explain the application procedure of white washing.</li> </ul>
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	<p>21. Keep the surface to dry for 8-10 hours.</p> <p>22. Apply final coat by repeating step 11 to step 16.</p> <p>23. Clean the brush/Jute Pusra immediately after stopping.</p> <p>24. Clean the work area and other tools.</p> <p>25. Keep the surface to dry for 8-10 hours.</p> <p>26. Restore tools &amp; materials.</p>				
<p><b>Tools/equipment/materials required:</b> Paint Brushes/Jute Pusra, Bucket, Wire brush, Jar, Thread, Blue(Nil), Lime Stone, Adhesive, Pigments, Marking Cloth, Sand paper, Flower broom, Scaffolding</p> <p><b>PPE:</b> Apron, Safety Shoe, Mask, Cap</p>					
2.	<p><b>Task:</b> Perform distemper painting on concrete/plaster Surface;</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Actual work site/ plastered/concrete area to be painted</p> <p><b>What:</b> Perform distemper painting on concrete/plaster surface</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Distempere surface is smooth and uniformly colored.</li> <li>• Surface must be dry.</li> <li>• Surface is clean and free from dust.</li> <li>• No damage or crack remains on the surface after painting.</li> <li>• No wastage of paint seen on paint surface.</li> </ul>	Th. 1.0	Pr. 8.0	Tot. 9.0
<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Confirm the surface to be</li> </ol>		<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• List the required tools and material for distemper painting.</li> </ul>			

<p>3. Rub the work surface using 60 No. pumice stone (if needed).</p> <p>4. Clean the surface using flower broom.</p> <p>5. Apply chalk wash or Sealer as primer coat.</p> <p>6. Dry the surface properly.</p> <p>7. Mix distemper with water in ratio 1:1.</p> <p>8. Stir until getting uniform color and consistency using bamboo stick or hand (PPE needs to be used).</p> <p>9. Pour some paint into small container.</p> <p>10. Hold the painting brush while painting corner and roller while painting other area.</p> <p>11. Dip the brush bristles/roller straight down into the paint to load paint.</p> <p>12. Tap each side of the brush/roller gently against the paint container.</p> <p>13. Paint a downward stroke in the corner or use a gentle horizontal/vertical rolling pressure along the ceiling or wall.</p> <p>14. Sweep the brush/roller back over the painted area gently to erase brush/roller marks.</p> <p>15. Repeat step 9 to 14 as needed to complete the first coat of painting.</p> <p>16. Let the surface dry.</p> <p>17. Apply touch putty if required.</p> <p>18. Rub the surface using 120 No. waterproof paper after drying the surface.</p> <p>19. Give a touch with distemper over touched putty area.</p>	<ul style="list-style-type: none"> <li>• Explain the mixing ratio.</li> <li>• Explain the advantage of using distemper for painting.</li> <li>• Mention why the painted surface should be kept for drying before another coat.</li> <li>• State the function of different types of rubbing materials.</li> <li>• State different types of distemper available in the local market.</li> <li>• Explain the application procedure of distemper.</li> </ul>
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	<p>20. Let the surface dry. 21. Apply final coat of distemper paint by repeating step 9 to step 14. 22. Clean the brush/roller immediately after stopping. 23. Clean the work area and other tools. 24. Keep the surface to dry before using. 25. Restore tools &amp; materials</p>				
<p><b>Tools/equipment/materials required:</b> Paint Brushes( 1” to 4”), Bucket, Jar, Thread, Marking Cloth, Flower broom, 60 no Pumice stone, Roller , Roller stick, Scraper, Distemper, Chalk powder, Masking tape, Polythene, Water proof paper 120 No.</p> <p><b>PPE:</b> Apron, Safety Shoe, Mask, Cap, Hand Gloves</p>					
3.	<p><b>Task:</b> Perform plastic emulsion paint on new surface.</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Actual work site and primer coated surface and Specification for painting.</p> <p><b>What:</b> Perform plastic emulsion paint on new surface.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Painted surface is uniformly colored.</li> <li>• No Undulation surface found</li> <li>• No damage or crack remains on the surface after painting.</li> <li>• No wastage of paint seen on painted surface.</li> <li>• Tools and working area are cleaned.</li> </ul>	Th. 1.0	Pr. 11.0	Tot. 12.0
<p><b>Steps:</b> 1. Collect tools and materials.</p>		<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• List the required tools and material for plastic</li> </ul>			

	<ol style="list-style-type: none"> <li>2. Apply lime putty two coat over primer coated surface</li> <li>3. Let the surface dry.</li> <li>4. Rub the surface using 120 No. waterproof paper.</li> <li>5. Clean the surface with flower broom</li> <li>6. Apply second coat water based sealer mix with sealer and water in ratio 1:1.</li> <li>7. Mix plastic emulsion paint with 25% to 30% potable water.</li> <li>8. Apply first coat plastic emulsion paint using Brush and roller.</li> <li>9. Let the surface dry.</li> <li>10. Apply touch putty.</li> <li>11. Check immediately the surface using 200 W light.</li> <li>12. Make it smooth (if needed).</li> <li>13. Let the surface dry.</li> <li>14. Rub the surface using 120 No. waterproof paper.</li> <li>15. Clean the surface.</li> <li>16. Apply final coat Plastic emulsion paint.</li> <li>17. Clean the work place.</li> <li>18. Clean the tools.</li> <li>19. Restore tools &amp; materials.</li> </ol> <p><b>Note:</b> Application procedure for Luxury silk, Easy clean and other ecofriendly emulsion is same.</p>	<p>emulsion painting work.</p> <ul style="list-style-type: none"> <li>• Calculate the required material used for plastic emulsion painting work.</li> <li>• Describe the application procedure of lime putty.</li> <li>• State the advantage of applying plastic emulsion paint, Luxury silk, Easy clean paint and Breathe easy paint.</li> <li>• Explain the application procedure of plastic emulsion painting work.</li> </ul>				
<p><b>Tools/equipment/materials required:</b> Paint Brushes( 1" to 4"), Bucket, Jar, Thread, Marking Cloth, Water proof paper 120 No, Flower broom, 60 No Pumice stone, Roller , Roller stick, Scraper, Plastic Emulsion Paint, Putty, Sealer, Blue(Nil),Masking tape, Polythene.</p> <p><b>PPE:</b> Apron, Safety Shoe, Mask, Cap, Hand Gloves.</p>						
4.	<p><b>Task:</b> Perform plastic emulsion paint on old painted surface.</p>	<table border="1"> <tr> <td data-bbox="764 1682 1170 1787"> <p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Old painted surface and Specification</p> </td> <td data-bbox="1170 1682 1274 1873">Th. 1.0</td> <td data-bbox="1274 1682 1382 1873">Pr. 8.0</td> <td data-bbox="1382 1682 1489 1873">Tot. 9.0</td> </tr> </table>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Old painted surface and Specification</p>	Th. 1.0	Pr. 8.0	Tot. 9.0
<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Old painted surface and Specification</p>	Th. 1.0	Pr. 8.0	Tot. 9.0			

		<p>for painting.</p> <p><b>What:</b> Perform plastic emulsion paint on old Painted surface.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Painted surface is uniformly colored.</li> <li>• No Undulation surface found</li> <li>• No damage or crack remains on the surface after painting.</li> <li>• No wastage of paint seen on painted surface.</li> <li>• Tools and working area are cleaned</li> </ul>			
	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Repair the old surface from damp and crack.</li> <li>3. Rub the surface using 120 No. waterproof paper and scraper.</li> <li>4. Clean the surface with flower broom</li> <li>5. Mix plastic emulsion paint with 25% to 30% potable water.</li> <li>6. Apply first coat plastic emulsion paint using Brush and roller.</li> <li>7. Dry the surface before application of touch putty.</li> <li>8. Apply touch putty</li> <li>9. Check the surface using 200 W light.</li> <li>10. Dry the surface before dubbing.</li> <li>11. Rub the surface using 120 No. waterproof paper.</li> <li>12. Clean the surface.</li> <li>13. Apply touch paint over the touch putty area.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Identify the default work of old surface.</li> <li>• State different types of damp treatment material.</li> <li>• Describe the application procedure of damp treatment.</li> <li>• Explain the characteristics of plastic emulsion paints</li> <li>• Describe the use of touch paint and touch putty on old painted surface</li> <li>• Explain the procedure of painting with plastic emulsion paint on old surface.</li> </ul>			

	<p>14. Dry the surface before applying final coat. 15. Apply final coat Plastic emulsion paint 16. Clean the tools and work place 17. Restore tools &amp; materials.</p>				
<p><b>Tools/equipment/materials required:</b> Paint Brushes ( 1” to 4”), Bucket, Jar, Thread, Marking Cloth, Water proof paper 120 No., Flower broom, Roller , Roller stick, Scraper, Plastic Emulsion Paint, Putty, Blue (Nil), Masking tape, Polythene, Pretreatment solution, Sealer, etc.</p> <p><b>PPE:</b> Apron, Safety Shoe, Mask, Cap, Hand Gloves</p>					
5.	<p><b>Task:</b> Apply enamel paint on wooden/plastered surface</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Actual Plastered surface/ Wooden surface and specification.</p> <p><b>What:</b> Apply enamel paint on wooden/plastered surface.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Painted surface is uniformly colored.</li> <li>• No undulation surface is found</li> <li>• No damage or crack remains on the surface after painting.</li> </ul>	Th. 1.0	Pr. 11.0	Tot. 12.0

		<ul style="list-style-type: none"> <li>• No wastage of paint seen on painted surface.</li> <li>• Tools and working area are cleaned.</li> </ul>			
	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Rub the surface (using 120 No. waterproof paper for wooden and 60 no pumice stone for plastered surface).</li> <li>3. Clean the surface with flower broom/Markin cloth.</li> <li>4. Apply first coat sealer (Oil sealer for wooden surface and Water sealer for plastered surface).</li> <li>5. Dry the surface before applying sext step.</li> <li>6. Apply two coat putty in between 6-8 hour gap over primer coated surface.</li> <li>7. Dry the surface before applying sext step.</li> <li>8. Rub the surface using 120 No. waterproof paper.</li> <li>9. Clean the surface with flower broom/Markin cloth.</li> <li>10. Apply second coat oil based sealer/water based sealer according to the surface.</li> <li>11. Dry the surface before next application.</li> <li>12. Mix Enamel paint with 5% to 10% thinner/turpentine.</li> <li>13. Apply first coat Enamel paint using Brush.</li> <li>14. Dry the surface before next application.</li> <li>15. Apply touch putty.</li> <li>16. Check immediately the surface using 200 W light.</li> <li>17. Dry the surface before rubbing.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Describe the advantage and disadvantage of enamel painting work.</li> <li>• Explain the procedure of cleaning enamel painted brush.</li> <li>• Calculate the required material used for enamel paintwork.</li> <li>• State and purpose of using different types of Sealer.</li> <li>• Explain the procedure of Enamel painting work.</li> </ul>			

	<p>18. Rub the surface using 120 No. waterproof paper. 19. Clean the surface. 20. Apply touch paint over the touch putty area. 21. Dry the surface before putting final coat. 22. Apply final coat of Enamel paint. 23. Clean the tools and work place. 24. Restore tools &amp; materials.</p>									
<p><b>Tools/equipment/materials required:</b> Paint Brushes( 1” to 4”), Bucket, Jar, Thread, Marking Cloth, Water proof paper 120 No., Flower broom, 60 No. Pumice stone, Scraper, Enamel Paint, Putty, Sealer (Oil based/Water based), Masking tape, Polythene, Thinner/Turpentine, measuring tape.</p> <p><b>PPE:</b> Apron, Safety Shoe, Mask, Cap, Hand Gloves</p>										
6.	<p><b>Task:</b> Perform enamel paint on ferrous/iron surface.</p>	<table border="1"> <thead> <tr> <th data-bbox="764 911 1170 989"><b>Terminal Performance Objective (TPO):</b></th> <th data-bbox="1170 911 1274 989">Th.</th> <th data-bbox="1274 911 1382 989">Pr.</th> <th data-bbox="1382 911 1489 989">Tot.</th> </tr> </thead> <tbody> <tr> <td data-bbox="764 989 1170 1881"> <p><b>Given:</b> Actual ferrous/iron surface in actual site and Specification for enamel painting on ferrous/iron surface.</p> <p><b>What:</b> Apply enamel paint on ferrous/iron surface.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Painted surface is uniformly colored.</li> <li>• No Undulation surface found.</li> <li>• No wastage of paint seen on painted surface.</li> <li>• Enamel is applied as per the given specification.</li> <li>• Tools and working area are cleaned.</li> </ul> </td> <td data-bbox="1170 989 1274 1881">1.0</td> <td data-bbox="1274 989 1382 1881">8.0</td> <td data-bbox="1382 989 1489 1881">9.0</td> </tr> </tbody> </table>	<b>Terminal Performance Objective (TPO):</b>	Th.	Pr.	Tot.	<p><b>Given:</b> Actual ferrous/iron surface in actual site and Specification for enamel painting on ferrous/iron surface.</p> <p><b>What:</b> Apply enamel paint on ferrous/iron surface.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Painted surface is uniformly colored.</li> <li>• No Undulation surface found.</li> <li>• No wastage of paint seen on painted surface.</li> <li>• Enamel is applied as per the given specification.</li> <li>• Tools and working area are cleaned.</li> </ul>	1.0	8.0	9.0
<b>Terminal Performance Objective (TPO):</b>	Th.	Pr.	Tot.							
<p><b>Given:</b> Actual ferrous/iron surface in actual site and Specification for enamel painting on ferrous/iron surface.</p> <p><b>What:</b> Apply enamel paint on ferrous/iron surface.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Painted surface is uniformly colored.</li> <li>• No Undulation surface found.</li> <li>• No wastage of paint seen on painted surface.</li> <li>• Enamel is applied as per the given specification.</li> <li>• Tools and working area are cleaned.</li> </ul>	1.0	8.0	9.0							



	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Rub the surface using emery paper.</li> <li>3. Clean the surface with cloth.</li> <li>4. Mix anti corrosive paint using 5% to 10% Turpentine.</li> <li>5. Apply anti corrosive paint (Red oxide) using brush/cloth.</li> <li>6. Dry the surface properly before applying next process.</li> <li>7. Mix enamel paint with 5% to 10% thinner/ turpentine</li> <li>8. Apply first coat enamel paint using brush/roller.</li> <li>9. Dry the surface properly before applying next process..</li> <li>10. Apply final coat Enamel paint.</li> <li>11. Clean the tools and work place.</li> <li>12. Restore tools &amp; materials.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Explain the procedure of Enamel painting work on ferrous/iron surface.</li> <li>• Describe the advantage of painting enamel on ferrous/Iron surface.</li> <li>• Calculate the required materials used for enamel paintwork on ferrous/iron surface.</li> <li>• Define Anticorrosive paint.</li> <li>• Explain why anticorrosive paint is used on ferrous/iron surface.</li> </ul>			
<p><b>Tools/equipment/materials required:</b> Paint Brushes( 1” to 4”), Bucket, Jar, Thread, Marking Cloth, Emery paper, Flower broom, Scraper, Enamel Paint, Putty, Masking tape, Polythene, Thinner/Turpentine oil.</p> <p><b>PPE:</b> Apron, Safety Shoe, Mask, Cap, Hand Gloves</p>					
7.	<p><b>Task:</b> Apply cement paint (snow cem) on plastered surface.</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Actual Work site and specification</p> <p><b>What:</b> Apply cement paint (snow cem) on plastered surface.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Cement painted surface is uniformly colored.</li> <li>• Surface is clean and free from dust.</li> </ul>	Th. 1.0	Pr. 5.0	Tot. 6.0

		<ul style="list-style-type: none"> <li>No Undulation surface found.</li> <li>No wastage of paint seen on painted surface.</li> <li>Snow cem/Cement Paint is applied as per the given specification.</li> <li>Tools and working area are cleaned.</li> </ul>			
	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>Collect tools and materials.</li> <li>Install Jhul macha/Suspended platform</li> <li>Rub the work surface using 60 No. pumice stone.</li> <li>Wash the surface using water.</li> <li>Mix cement paint with water</li> <li>Apply cement paint using Brush and jute posra.</li> <li>Dry the surface before putting final coat.</li> <li>Apply final coat cement paint.</li> <li>Clean the tools and work place.</li> <li>Restore tools &amp; materials.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>List the required material to use in cement paintwork.</li> <li>Explain the procedure of macha/suspended platform installation.</li> <li>Explain the mixing procedure of cement paint.</li> <li>Describe the application procedure of cement paint.</li> </ul>			
	<p><b>Tools/equipment/materials required:</b> Paint Brushes( 1" to 4"), Bucket, Jar, Thread, Marking Cloth, Flower broom, 60 No., Pumice stone, Scraper, cement paint, Jhul Macha</p> <p><b>PPE:</b> Apron, Safety Shoe, Mask, Cap, Hand Gloves.</p>				
8.	<p><b>Task:</b> Apply weather coat in external plastered surface.</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Actual Work site and specification.</p> <p><b>What:</b> Apply weather coat</p>	Th. 1.0	Pr. 11.0	Tot. 12.0

		<p>in external plastered surface.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Painted surface is uniformly colored.</li> <li>• No Undulation surface found.</li> <li>• No wastage of paint seen on painted surface.</li> <li>• Weather coat is applied as per the given specification.</li> <li>• Tools and working area are cleaned immediately after applying whether coat.</li> </ul>			
	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Install Jhul Macha/Suspended platform.</li> <li>3. Rub the work surface using 60 No. pumice stone.</li> <li>4. Wash the surface using water.</li> <li>5. Mix cement paint with water.</li> <li>6. Apply cement paint as primer coat using Brush and jute posra.</li> <li>7. Dry the surface up to 20 to 24 hours.</li> <li>8. Mix weather coat paint with 20% to 25% water.</li> <li>9. Apply first coat weather coat.</li> <li>10. Dry the surface up to 06 to 08 hours.</li> <li>11. Apply final coat of weather coat.</li> <li>12. Clean the tools and work place.</li> <li>13. Restore tools &amp; materials.</li> </ol> <p><b>Note:</b> When sealer is used as primer coat then skip steps 4, 5</p>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Explain the mixing procedure of weather coat.</li> <li>• List the required material used in weather coat paintwork.</li> <li>• Differentiate between weather coat and cement paint.</li> <li>• Describe the safety precautions to be taken while applying weather coat.</li> </ul> <p>Describe the application procedure of weather coat paint.</p>			

	and 6.				
	<p><b>Tools/equipment/materials required:</b> Paint Brushes (1" to 4"), Bucket, Jar, Thread, Marking Cloth, Flower broom, 60 No. Pumice stone, Scraper, cement paint, Sealer, Jhul Macha/Suspended platform, weather coat paint.</p> <p><b>PPE:</b> Apron, Safety Shoe, Mask, Helmet, Safety belt, Hand Gloves</p>				
9.	<b>Task:</b> Perform fair patchwork.	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Concrete surface with specification.</p> <p><b>What:</b> Perform fair patchwork.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Surface is uniformly fair faced.</li> <li>• Surface is clean and free from dust.</li> <li>• No damage or crack seen on the surface after performing fair patchwork.</li> </ul>	Th. 1.0	Pr. 8.0	Tot. 9.0
	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Install Jhul Macha/Suspended platform.</li> <li>3. Rub the work surface using 80 No. pumice stone cup, Scraper and grinder.</li> <li>4. Wash the surface using water and plumb brush.</li> <li>5. Mix grey cement and white cement as putty.</li> <li>6. Apply the putty by a Formica on the surface.</li> <li>7. Dry the surface for 20 to 24 hours.</li> <li>8. Rub the work surface using 120 No. waterproof paper.</li> <li>9. Clean the surface before</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Explain the mixing procedure of putty for fair patchwork.</li> <li>• Explain the procedure for replacing pumice stone cup in a grinder.</li> <li>• Describe the application procedure of silicon.</li> <li>• Describe the safety precaution to be taken while performing fair patchwork.</li> </ul>			

	<p>applying next step.</p> <p>10. Apply first coat silicon using brush.</p> <p>11. Dry the surface for 6 to 8 hours.</p> <p>12. Apply final coat silicon.</p> <p>13. Clean the tools and work place.</p> <p>14. Restore tools &amp; materials.</p>				
<p><b>Tools/equipment/materials required:</b> Paint Brushes( 1" to 4"), Bucket, Jar, Marking Cloth, Flower broom, 80 No Pumice stone cup type, 120 No water proof paper, Scraper, Grey cement, White cement, Silicon paint, ,Jhul Macha/Suspended platform, Grinder.</p> <p><b>PPE:</b> Apron, Safety Shoe, Mask, Helmet, Safety belt, Hand Gloves.</p>					
10.	<p><b>Task</b> Apply silicon paint on facing brick wall (fare face).</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Actual work place and specification for silicon paint application.</p> <p><b>What :</b>Apply silicon paint on facing brick wall (fare face).</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>Painted surface is uniformly colored.</li> <li>No wastage of paint seen.</li> <li>Silicon paint is applied as per the given specification.</li> <li>Tools and working area are cleaned immediately after applying silicon paint coat.</li> </ul>	Th. 1.0	Pr. 9.0	Tot. 9.0
<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>Collect tools and materials.</li> <li>Install Jhul Macha/Suspended platform.</li> <li>Rub and clean the work surface using Scraper.</li> </ol>		<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>Explain why to use silicon paint.</li> <li>Describe application procedure of silicon in brick facing surface.</li> <li>Mention the safety procedure to be taken before silicon paint to apply on brick facing</li> </ul>			

	<ol style="list-style-type: none"> <li>4. Wash the surface using water and Plumb brush.</li> <li>5. Dry the surface dfor 20 to 24 hours.</li> <li>6. Apply first coat silicon using brush.</li> <li>7. Dry the surface for 06 to 08 hours</li> <li>8. Apply second coat silicon using brush.</li> <li>9. Dry the surface for 20 to 24 hours.</li> <li>10. Apply final coat silicon using brush.</li> <li>11. Clean the tools and work place</li> <li>12. Restore tools &amp; materials.</li> </ol>	<p>surface.</p>			
<p><b>Tools/equipment/materials required:</b> Paint Brushes (1" to 4"), Bucket, Jar, Marking Cloth, Flower broom, Scraper, Silicon paint, Jhul Macha/Suspended platform.</p> <p><b>PPE:</b> Apron, Safety Shoe, Mask, Helmet, Safety belt, Hand Gloves</p>					
11.	<p><b>Task:</b> Apply readymade Varnish on Wooden Surface.</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Any Wooden surface and specification for applying readymade varnish.</p> <p><b>What:</b> Apply readymade Varnish on Wooden Surface.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>• Varnished surface is smooth and glossy.</li> <li>• No crack seen.</li> <li>• No wastage of Varnish seen on surface.</li> <li>• Varnish is applied as per the given specification.</li> <li>• Tools and working area are cleaned</li> </ul>	Th. 1.0	Pr. 8.0	Tot. 9.0

		immediately after applying Varnish.			
	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Collect tools and materials.</li> <li>2. Rub the wooden surface using 120 No. waterproof paper.</li> <li>3. Clean the surface with markin cloth or brush.</li> <li>4. Apply chalk powder and sprit as base.</li> <li>5. Clean the surface with markin cloth.</li> <li>6. Mix the varnish with 15% to 20% Turpentine/Thinner.</li> <li>7. Apply first coat Varnish using brush.</li> <li>8. Dry the surface for 20 to 24 hours.</li> <li>9. Make wax putty using Chalk powder, wax, and required pigment color.</li> <li>10. Apply wax putty using wooden knife.</li> <li>11. Rub the putty by scraper.</li> <li>12. Clean the surface by markin cloth.</li> <li>13. Apply final coat varnish on the wooden surface.</li> <li>14. Clean the tools and work place</li> <li>15. Restore tools &amp; materials.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>• Describe the procedure to make wax putty.</li> <li>• Calculate the required material used for readymade varnish work.</li> <li>• Explain the procedure of applying readymade varnish work.</li> </ul>			
	<p><b>Tools/equipment/materials required:</b> Paint Brushes (1” to 4”), Jar, Marking Cloth, Flower broom, 120 No waterproof paper, Scraper, Readymade varnish, Chalk powder, Wax, Pigment, wooden knife.</p> <p><b>PPE:</b> Apron, Safety Shoe, Mask, Hand Gloves</p>				
12.	<p><b>Task:</b> Repair painting works on damaged (plaser/concrete) surface.</p>	<p><b>Terminal Performance Objective (TPO):</b></p> <p><b>Given:</b> Actual work place.</p> <p><b>What:</b> Repair painting works on damaged</p>	Th. 1.0	Pr. 8.0	Tot. 9.0

		<p>surface.</p> <p><b>How well:</b></p> <ul style="list-style-type: none"> <li>No damage is found after repairing.</li> </ul>			
	<p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>Collect tools and materials.</li> <li>Identify the types of damage.</li> <li>Prepare the damaged area for painting as per the nature of damage.</li> <li>Clean the surface properly before applying next step.</li> <li>Apply water barrier to leak proof (if required).</li> <li>Dry the surface dry before rubbing.</li> <li>Rub the work surface using 60 No. pumice stone and 120 No. waterproof paper.</li> <li>Clean the surface before using sealer.</li> <li>Apply sealer on the surface.</li> <li>Apply paint as per specification and nature of the surface.</li> <li>Clean the tools and workplace.</li> <li>Restore tools &amp; materials.</li> </ol>	<p><b>Enabling objectives:</b></p> <ul style="list-style-type: none"> <li>Mention different types of Damage.</li> <li>Describe the procedure of damage remedy.</li> <li>Explain different types of materials to use as damage treatment.</li> <li>Explain how to prepare damaged area for painting</li> <li>Explain the procedure for repairing painting works on damaged surface.</li> </ul>			
<p><b>Tools/equipment/materials required:</b> Trowel, Hand Shovel, Mortar pan, Soft hammer, Bucket, Wire brush, Thread, Sprit Level, Scraper, broom, Foam, Fresh water, Cement, Pretreatment solution, Solsafe etc., Brush, 120 No waterproof paper, 60 No pumice stone.</p> <p><b>PPE:</b> Apron, Safety Shoe, Hand Gloves, Mask.</p>					



## 23. LIST OF TOOLS, EQUIPMENT AND MATERIALS:

### LIST OF TOOLS AND EQUIPMENT:

S. No	Name of the items	Specification	QTY.	Unit
1.	Ball Pin Hammer	1 lbs	2	Pcs
2.	Ladder	Standard Size	5	Pcs
3.	Ball Pin Hammer	1/2 lbs	2	Pcs
4.	Chipping Hammer	1 lbs	5	Pcs
5.	Claw Hammer	1lbs	5	Pcs
6.	Cold Chisel	10"	1	Pcs
7.	Hacksaw frame with blade	steel body	1	Pcs
8.	Level Pipe ( 6mm - 10mmdia)	10 m long	5	Pcs
9.	Measuring Tape	3m/5m, Steel	20	Pcs
10.	Mixing Board	4'x8' size	2	Pcs
11.	Mortar Pan (18 "/20" dia)	As required size	2	Pcs
12.	Notch Trowel	2"/4"	2	Pcs
13.	Plumb bob	100 gm	2	Pcs
14.	Scissor	10" Steel	5	Pcs
15.	Scraper	2"-4"	20	Pcs
16.	Hand Shovel	Standard size	5	Pcs
17.	Sprit level	12"/24"	5	Pcs
18.	Trowel	6"	5	Pcs

### LIST OF TRAINING MATERIALS:

S. No	Name of the items	Specification	QTY.	Unit
1.	Cement ( Grey)	Standard	50	kg
2.	Coloring pigment	Different color, As required	500	gm
3.	Adhesive		5	Liter
4.	Marker pen		10	Nos
5.	Markin cloth		75	yard
6.	Sand (F.M-1.5)	Standard	10	cft
7.	Steel Nail	1.5"-3"	5	lbs
8.	Waterproof paper	120 No.	50	Pcs
9.	White Cement	Standard	40	Kg
10.	Putty	Standard	50	Kg
11.	Emery Cloth	Standard	20	Pcs
12.	Distemper	Standard	36.4	Liter
13.	Plastic Paint	Standard	36.4	Liter
14.	Enamel Paint	Standard	36.4	Liter

S. No	Name of the items	Specification	QTY.	Unit
15.	Chalk Powder	Standard	50	Kg
16.	Turpentine	Standard	10	Liter
17.	Sealer	Standard	10	Liter
18.	Silicon	Standard	7.2	Liter
19.	Weather Coat	Standard	36.4	Liter
20.	Cement Paint (Snow Cem)	Standard	40	Kg
21.	Wax		1	Kg
22.	Brush 1", 2", 3", 4"	Standard Size	48	Pcs
23.	Roller	4" and 10", Standard Size	20	Pcs
24.	Formica	6"x4"	20	Pcs
25.	Bucket	20 litre	10	Pcs
26.	Flower Broom	Good quality	20	Pcs
27.	Foam	Good quality	10	Pcs
28.	Hose pipe	¾" to 1" dia	200	ft
29.	Jar	2 liter	10	Pcs
30.	Nylon Thread	0.5 – 1 mm dia	1	kgs
31.	Pumice Stone 60, 80, 120 No.	Standard Size	20	Pcs
32.	Stick Broom	Good quality	20	Pcs
33.	Wire brush	8"	20	Pcs
34.	Wooden Float	10"	5	Pcs

#### 24. PHYSICAL FACILITIES FOR 20 TRAINEES:

S. No	Name of the items	Specification	QTY.	Unit
1.	Working Place/Practical Room	40' X 30'	1	Room
2.	Stool	Plastic (RFL)	20	Pcs
3.	Training wall	20' X 7'	2	Pcs
4.	Instructor Chair Arm Less	Size: 18" X 16" X 36"	2	Pcs
5.	Working Table	Size: 8' X 3' X 3'	5	Pcs
6.	Class Room Table	Size: 24" X 30" X 36"	1	Pcs
7.	Display Board	4' X8' X3/4", Surface Cover With White Formica, Border bracing with 3/4 " Aluminum Angle	1	Pcs
8.	White Board	6'X4'X3/4" Surface Cover With White Formica, Border bracing with 3/4 " Aluminum Angle	1	Pcs

S. No	Name of the items	Specification	QTY.	Unit
9.	Steel Rack	44" X 72" X 15" 20-22 SWG	2	Pcs
10.	First Aid Box with accessories		1	Pcs
11.	Steel Almirah	Standard Size , 20-22 SWG	2	Pcs
12.	White Board Marker	Red leaf	5	Doz
13.	Water Filter	40 Ltr	1	Pcs
14.	Safety Goggles	Plastic (Transparent )	20	Pcs
15.	Hand Gloves	Skin/rubber type	20	Pair
16.	Safety Shoes	APS	20	Pair
17.	Helmet	Plastic	20	Pcs
18.	Fire extinguisher	ABC	2	cylinder

### 25. LIST OF TOOLS IN THE HAND TOOL BOX:

S. No	Name of the items	Specification	QTY.	Unit
1.	Brush 1", 2",3", 4"	Standard Size	1	Pcs
2.	Roller	4" and 10", Standard Size	1	Pcs
3.	Formica	6"x4"	1	Pcs
4.	Ball Pin Hammer	1 lbs	1	Pcs
5.	Ball Pin Hammer	1/2 lbs	1	Pcs
6.	Chipping Hammer	1 lbs	1	Pcs
7.	Claw Hammer	lbs.	1	Pcs
8.	Flower Broom	Good quality	1	Pcs
9.	Hacksaw frame with blade	steel body	1	Pcs
10.	Level Pipe ( 6mm - 10mmdia)	10 m long	1	Pcs
11.	Measuring Tape	3m/5m, Steel	1	Pcs
12.	Nylon Thread	0.5 – 1 mm dia	1	kgs
13.	Pumice Stone 60, 80, 120 No.	Standard Size	1	Pcs
14.	Scissor	10" Steel	1	Pcs
15.	Scraper	2"-4"	1	Pcs
16.	Sprit level	12"/24"	1	Pcs
17.	Stick Broom	Good quality	1	Pcs
18.	Trowel	6"	1	Pcs
19.	Wire brush	8"	1	Pcs

## 20. SUGGESTED REFERENCE BOOKS:

- Sushil Kumar, Building Construction (Latest Edition)
- Punmia B.C. Dr., Building Construction (Latest Edition)
- Engr. Major Md. Nurul Islam, Construction painting manual (Greenland Training Center Ltd.)

## 21. CURRICULUM TERMS AND DEFINITION:

<b>Competency</b>	Competency means a cluster of related abilities, commitments, knowledge, and skills that enable a trainees or person to act effectively in a job.
<b>Curriculum Guide</b>	A curriculum guide is a detail resource for trainers/instructors to conduct training programs effectively. The guide intends to add the trainers/instructors in developing lesson plan, handouts/learning materials, training manuals, and evaluation criteria etc., which are basic elements in the teaching learning process.
<b>Curriculum</b>	A plan for providing sets of learning opportunity to achieve broad goal and related specific objectives for the people by a single school center.
<b>DACUM/RJA</b>	Developing <u>A CURriculum</u> / Rapid Job Analysis. DACUM/RJA is a technique that is used to identify the competencies relevant to a particular occupation. Then the competencies of the DACUM/RJA have been formulated in details to build a curriculum guideline
<b>Duty</b>	Duty is an arbitrary clustering of related tasks in to broad functional area or general area of responsibility of trainees.
<b>Enabling Objective</b>	A statement expressing a knowledge, skills or attitudes those will enable the trainee to accomplish a terminal performance objective.
<b>Instructional Guide</b>	Instructional guide is a well-planned and structured document for the instructor to deliver effective instruction so that trainees can attain learning objectives as per training standards.
<b>Module</b>	A module is defined as a specific learning material. Modules are essentially self-contained. Self-instructional packages, with learning paced by each learner according to his/her individual ability and needs. A module covers either a single element of subject matter content or a group of content elements forming a discrete unit of subject matter or area of skills.
<b>Occupational Analysis</b>	Occupational analysis is a process used to identify the duties and tasks those are important to workers in any given occupation. A number of alternative and acceptable approaches to occupational analysis are available.
<b>Program guide</b>	A program guide is a comprehensive resource for trainers/instructors, planners, and top-level management for planning and implementation of any training programs.
<b>Program Objectives</b>	The objectives are set in a broad way to target to achieve mastery learning of the complete occupation.
<b>Skill</b>	The ability to perform on occupational task with the degree of proficiency required for a given occupation
<b>Step</b>	The smallest discrete or observable aspect of a task.
<b>Task Analysis</b>	Task analysis is the process of identifying and writing down the specific skills, knowledge and attitudes that distinguish someone who performs a task competently from someone who cannot perform the task at all.

<b>Task</b>	A unit of work complete in itself that forms a logical part of an occupation. It can be broken down into discrete steps.
<b>Terminal Performance Objective</b>	The objectives set to attain at the end of the training completion. It includes condition, unit of work and standard of teaching and learning.

## 22. CURRICULUM DEVELOPMENT TEAM:

SL #	Name	Designation	Organization	Contact Number
1.	Engr. Md. Zillur Rahman Khan	Jr. Instructor	Dhaka Polytechnic Institute	01711-158084
2.	Engr. Aman Ullah	Sr. Project Engineer	Engineer's Foundation & Consultation	01778-822448
3.	Md. Shajib Sarkar	Jr. Instructor	Greenland Training Center	01820-160164
4.	Md. Ruhul Amin	Paint Contractor	Ideal Builder's	01827-100849
5.	Mohammad Mokammel Hossain	Paint Contractor	Barger Paint Limited	01711-056028

Overall Supervision: Md. Anisuzzaman

Workshop Facilitator(s): Md. Anisuzzaman, Anoj Bhattarai and Akim Shrestha

Record and Documentation: Anoj Bhattarai and Akim Shrestha

## 23. REFERENCES (FOR DEVELOPING CURRICULUMS)

- Skills and Employment Programme-Bangladesh (SEP-B) (2015, May). Rapid Job Analysis of Building Painter. Dhaka Bangladesh.
- Bangladesh Technical Education Board. *National Competency Standards for Painter*. National Skills Certificate II in Painter (Construction Sector).

## 24. LINKAGES OF SUDOKKHO CURRICULUM WITH BTEB COMPETENCY STANDARDS:

S.N.	SEP-B Training Module	BTEB Competency Standards
1.	Practice Occupational Health and Safety (OHS) Procedure	GC100312A: Practice workplace cleanliness GC100412A: Practice occupational health and safety (OHS)
2.	Apply Fundamental Skills of Building Painting Works;	CON100212A: Interpret Drawings and Specifications in Construction Manuals CON100312A : Use Hand Tools and Power Tools for the Construction Sector

		<p>CON100412A: Perform Measurement and Calculations in Painting</p> <p>CONPNT100112A: Prepare tools, equipment and materials for painting</p>
3.	Prepare for Building Painting Works;	CONPNT100212A: Prepare surface for white washing.
4.	Perform Building Painting Works.	<p>CONPNT100312A: Perform white washing.</p> <p>CONPNT100412A: Perform color washing.</p> <p>CONPNT200512A: Perform distempering.</p> <p>CONPNT200712A: Perform plastic emulsion painting.</p> <p>CONPNT200812A: Perform weather coat painting.</p> <p>CONPNT200912A: Perform synthetic enamel painting.</p> <p>CONPNT301012A: Perform cement painting.</p> <p>CONPNT3011012A: Perform varnishing.</p>

### **25. SPECIAL NOTE FOR TRAINING PROVIDERS:**

Since the technology is moving fast, if there will have any new demand/skills beyond the curriculum guide, please send the comments and suggestions to the address given in the curriculum. The project believes that the development has no boundaries.

SUDOKKHO

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