

GOVERNMENT OF INDIA MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP DIRECTORATE GENERAL OF TRAINING

**COMPETENCY BASED CURRICULUM** 

## **DOMESTIC PAINTER**

(Duration: One Year)

## **CRAFTSMEN TRAINING SCHEME (CTS)**

**NSQF LEVEL- 3.5** 



## SECTOR – CONSTRUCTION



# DOMESTICPAINTER

(Engineering Trade)

(Revised in March 2023)

Version: 2.0

### **CRAFTSMEN TRAINING SCHEME (CTS)**

NSQF LEVEL – 3.5

Developed By

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#### **1. COURSE INFORMATION**

During the one-year duration of "Domestic Painter" trade, a candidate is trained on Professional Skill, Professional Knowledge and Employability Skill related to job role. In addition to this, a candidate is entrusted to undertake project work, extracurricular activities and on-thejob training to build up confidence. The broad components covered under Professional skill subject are as below: -

In this year the trainees will recognize and comply safe working practices with PPE and MSDS. They will also learn hazard and non-hazard items, uses of firefighting equipment. They will also go through the allied training on carpenter, sheet metal work. Preparation of different types of wooden surface and painting on it. Knowledge of various pipe fittings, cutting and threading and also join/fittings of different materials of different diameters. They will practice on DTP, Corel draw and photo shop with different paint software. Create ornamental designs for stencils, cut it and make a print.

They will practice on building painting using different decorative painting. Paint and decorate exterior articles. Process on pipes & pipe line painting for hospitals & commercial buildings with colour code. Practice on plaster of Paris. (P.O.P.) Create Textures on wall surface. Process for Interior work in commercial places. Practice on Texture material for relief work. Offices and corporate spaces for modern painting work. They will also practice on Estimation & Planning for Home renovation with computer aided designing, 2-D-/3-D design, productive work of screen printing.



#### **2.1 GENERAL**

The Directorate General of Training (DGT) under Ministry of Skill Development & Entrepreneurship offers a range of vocational training courses catering to the need of different sectors of economy/ Labour market. The vocational training programmes are delivered under the aegis of Directorate General of Training (DGT). Craftsman Training Scheme (CTS) with variants and Apprenticeship Training Scheme (ATS) are two pioneer programmes of DGT for propagating vocational training.

Domestic Painter trade under CTS is one of the popular courses delivered nationwide through a network of ITIs. The course is of one-year duration. It mainly consists of Domain area and Core area. In the Domain area (Trade Theory & Practical) impart professional skills and knowledge, while Core area (Employability Skills) impart requisite core skill & knowledge and life skills. After passing out of the training programme, the trainee is awarded National Trade Certificate (NTC) by DGT which is recognized worldwide.

#### Trainee broadly needs to demonstrate that they are able to:

- Read and interpret technical parameters/ documentation, plan and organize work processes, identify necessary materials and tools.
- Perform tasks with due consideration to safety rules, accident prevention regulations and environmental protection stipulations.
- Apply professional knowledge & employability skills while performing the job and modification & maintenance work.
- Document the technical parameter related to the task undertaken.

#### **2.2 PROGRESSION PATHWAYS**

- Can join industry as Technician and will progress further as Senior Technician, Supervisor and can rise up to the level of Manager.
- Can become Entrepreneur in the related field.
- Can join the apprenticeship program in different types of industries leading to a National Apprenticeship Certificate (NAC).
- Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming an instructor in ITIs.
- Can join Advanced Diploma (Vocational) courses under DGT as applicable.



#### **2.3 COURSE STRUCTURE**

Table below depicts the distribution of training hours across various course elements during a period of one-year:

S No.	Course Element	Notional Training Hours
1	Professional Skill (Trade Practical)	840
2	Professional Knowledge (Trade Theory)	240
3	Employability Skills	120
	Total	1200

150 hours of mandatory OJT (On the Job Training) at nearby industry, wherever not available then group project is mandatory.

On the Job Training (OJT)/ Group Project	150
Optional Courses (10th/ 12th class certificate along with ITI certification or add on short term courses)	240

Trainees of one-year or two-year trade can also opt. for optional courses of up to 240 hours in each year for 10th/ 12th class certificate along with ITI certification, or, add on short term courses.

#### **2.4 ASSESSMENT & CERTIFICATION**

The trainee will be tested for his skill, knowledge and attitude during the period of course through formative assessment and at the end of the training programme through summative assessment as notified by the DGT from time to time.

a) The **Continuous Assessment (Internal)** during the period of training will be done by **Formative assessment method** by testing for assessment criteria listed against learning outcomes. The training institute have to maintain individual *trainee portfolio* as detailed in assessment guideline. The marks of internal assessment will be as per the formative assessment template provided on <u>www.bharatskills.gov.in</u>

b) The final assessment will be in the form of summative assessment. The All India Trade Test for awarding NTC will be conducted by Controller of examinations, DGT as per the guidelines. The pattern and marking structure is being notified by DGT from time to time. **The learning outcome and assessment criteria will be the basis for setting question papers for final assessment. The examiner during final examination will also check** the individual trainee's profile as detailed in assessment guideline before giving marks for practical examination.



#### **2.4.1 PASS REGULATION**

For the purposes of determining the overall result, weightage of 100% is applied for six months and one year duration courses and 50% weightage is applied to each examination for two years courses. The minimum pass percent for Trade Practical and Formative assessment is 60% & for all other subjects is 33%.

#### **2.4.2 ASSESSMENT GUIDELINE**

Appropriate arrangements should be made to ensure that there will be no artificial barriers to assessment. The nature of special needs should be taken into account while undertaking the assessment. Due consideration should be given while assessing for teamwork, avoidance/reduction of scrap/wastage and disposal of scrap/waste as per procedure, behavioral attitude, sensitivity to the environment and regularity in training. The sensitivity towards OSHE and self-learning attitude are to be considered while assessing competency.

Assessment will be evidence based comprising some of the following:

- Job carried out in labs/workshop
- Record book/ daily diary
- Answer sheet of assessment
- Viva-voce
- Progress chart
- Attendance and punctuality
- Assignment
- Project work
- Computer based multiple choice question examination
- Practical Examination

Evidences and records of internal (Formative) assessments are to be preserved until forthcoming examination for audit and verification by examining body. The following marking pattern to be adopted for formative assessment:

Performance Level		Evidence
(a) Marks in the range of 60%-75% to be al	lott	ed during assessment
For performance in this grade, the candidate should produce work which demonstrates attainment of an		Demonstration of good skill in the use of hand tools, machine tools and workshop equipment.
acceptable standard of craftsmanship	•	Below 70% accuracy achieved while



with occasional guidance, and due regard for safety procedures and practices	<ul> <li>undertaking different work with those demanded by the component/job.</li> <li>A fairly good level of neatness and consistency in the finish.</li> <li>Occasional support in completing the project/job.</li> </ul>
<ul> <li>(b) Marks in the range of 75%-90% to be all For this grade, a candidate should produce work which demonstrates attainment of a reasonable standard of craftsmanship, with little guidance, and regard for safety procedures and practices</li> <li>(c) Marks in the range of more than 90% to</li> </ul>	<ul> <li>Good skill levels in the use of hand tools, machine tools and workshop equipment.</li> <li>70-80% accuracy achieved while undertaking different work with those demanded by the component/job.</li> <li>A good level of neatness and consistency in the finish.</li> <li>Little support in completing the project/job.</li> </ul>
For performance in this grade, the candidate, with minimal or no support in organization and execution and with due regard for safety procedures and practices, has produced work which demonstrates attainment of a high standard of craftsmanship.	<ul> <li>High skill levels in the use of hand tools, machine tools and workshop equipment.</li> <li>Above 80% accuracy achieved while undertaking different work with those demanded by the component/job.</li> <li>A high level of neatness and consistency in the finish.</li> <li>Minimal or no support in completing the project.</li> </ul>



#### Brief description of job roles:

**Painter, Building**; Painter, House applies coats of paint, varnish and other similar material to protect or decorate exterior and interior surface of buildings using spray gun, hand brush, etc. Selects paint materials. Mixes paints and matches colours by stirring together proper proportions of pigment, oil, thinner etc. and drying substances. Erects working scaffolding with bamboo poles and wooden planks or positions ladders at required height or places to be painted. Cleans surface packs, cracks and holes with mud fillers or mortar to prepare it for painting. Applies prime coat and allows it to dry. Brushes or sprays one or more coats of paint on surface to required finish. May finish and decorate surfaces with marble or brick and tile effects or by building silvering, stenciling etc.

#### Reference NCO-2015:

(i) 7131.0100 - Painter, Building

#### **Reference NOS:**

- i) PCS/N5016
- ii) PCS/N5004
- iii) PCS/N5002
- iv) PCS/N5110
- v) PCS/N5111
- vi) CSC/N0304
- vii) PCS/N9437
- viii) PCS/N0133
- ix) PCS/N9425
- x) PCS/N9426
- xi) PCS/N9427
- xii) PCS/N5016
- xiii) CSC/N9401
- xiv) CSC/N9402



#### **4. GENERAL INFORMATION**

Name of the Trade	DOMESTIC PAINTER			
Trade Code	DGT/1112			
NCO - 2015	7131.0100			
NOS Covered	PCS/N5016, PCS/N5004, PCS/N5002, PCS/N5110, PCS/N5111, CSC/N0304, PCS/N9437, PCS/N0133, PCS/N9425, PCS/N9426, PCS/N9427, PCS/N5016, CSC/N9401, CSC/N9402			
NSQF Level	Level-3.5			
Duration of Craftsmen Training	One year (1200 Hours + 150 Hours OJT/Group Project)			
Entry Qualification	Passed 10 <sup>th</sup> class examination			
Minimum Age	14 years as on first day of academic session.			
Eligibility for PwD	LD, CP, LC, DW, AA, LV, DEAF, HH, AUTISM, ID, SLD, MI			
Unit Strength (No. of Student)	24 (There is no separate provision of supernumerary seats)			
Space Norms	80 Sq. m			
Power Norms	2.5KW			
Instructors Qualification	for			
1. Domestic Painter Trade	AICTE/UGC recognized Engineering College/ university with one-year experience in the relevant field.			
	OR 03 years Diploma in Electrical/ Electrical and Electronics Engineering			
	from AICTE/recognized board of technical education or relevant Advanced Diploma (Vocational) from DGT with two years' experience in the relevant field.			
	OR			
	NTC/NAC passed in the Trade of "Domestic Painter" With three years' experience in the relevant field.			
	<b>Essential Qualification:</b> Relevant Regular/RPL variant of National Craft Instructor Certificate (NCIC) under DGT.			
	NOTE: Out of two Instructors required for the unit of 2 (1+1), one must have Degree/Diploma and other must have NTC/NAC qualifications. However both of them must possess NCIC in any of its variants.			



2. Workshop	B.Voc/Degree in Engineering from AICTE/UGC recognized Engineering
2. Workshop Calculation & Science	College/ university with one-year experience in the relevant field.
Calculation & Science	OR
	03 years Diploma in Engineering from AICTE/ recognized board of
	technical education or relevant Advanced Diploma (Vocational) from
	DGT with two years' experience in the relevant field
	OR
	NTC/ NAC in any one of the engineering trades with three years
	experience.
	Essential Qualification:
	Regular/RPL variants of National Craft Instructor Certificate (NCIC) in
	relevant trade
	Regular/RPL variant s NCIC in RoDA or any of its variants under DGT.
3. Engineering	B.Voc/Degree in Engineering from AICTE/UGC recognized Engineering
Drawing	College/ university with one-year experience in the relevant field.
	OR
	03 years Diploma in Engineering from AICTE/ recognized board of
	technical education or relevant Advanced Diploma (Vocational) from
	DGT with two years' experience in the relevant field.
	OR
	NTC/ NAC in any one of the engineering/ Draughtsman group of trades with three years' experience.
	with three years experience.
	Essential Qualification:
	Regular / RPL variants of National Craft Instructor Certificate (NCIC) in
	relevant trade
	OR
	Regular/RPL variants NCIC in RoDA or any of its variants under DGT
4. Employability Skill	MBA/ BBA / Any Graduate/ Diploma in any discipline with Two years'
	experience with short term ToT Course in Employability Skills.
	(Must have studied English/ Communication Skills and Basic Computer
	at 12 <sup>th</sup> / Diploma level and above)
	OR
	Existing Social Studies Instructors in it is with training in Employability
	skills.
5. Minimum age for	21 years
Instructor	
List of Tools and	As per Annexure – I
Equipment	



Learning outcomes are a reflection of total competencies of a trainee and assessment will be carried out as per the assessment criteria.

#### **5.1. LEARNING OUTCOMES:**

- 1. Perform marking, sawing, planning, Chiselling, Drilling following safety precautions. (CSC/N0304)
- 2. Make a type of joints for different frames (like- Screen frame, sign board, & hanging Paintings frame. (PCS/N9437)
- 3. Manufacture simple sheet metal items as per drawing and join them by soldering, brazing and riveting. (PCS/N9437)
- 4. Apply Knowledge of various pipe fittings. (PCS/N0133)
- 5. Work on Operating System, Practice on DTP, Corel Draw, Photo shop etc. (PCS/N9425)
- 6. Produce stencils involving different shapes in ornamental design, text, symbols, etc. operations for different medium like papers, cards, tin, foam board, observing procedure and check for accuracy. (PCS/N9426)
- 7. Produce Sign board, Name plate. Prepare back ground painting, Observe finishing, lettering proportion & evenness. (PCS/N5016)
- 8. Prepare wooden surface using various techniques, decorate & make an attractive wooden article. (PCS/N5004)
- 9. Prepare different types of wooden surface & paint it Like Plywood, MDF & low-quality wood. (PCS/N5004)
- 10. Develop Building painting using different decorative process. (PCS/N5002)
- 11. Paint and decorate exterior articles. (PCS/N5016, PCS/N5004)
- 12. Process on pipes & pipe line painting with colour code. (PCS/N5110, PCS/N5111)
- 13. Use plaster of Paris. (P.O.P.) Create Textures on wall surface. Process for Interior work in commercial places. Use of Texture material for relief work. Offices and corporate spaces for modern painting work. (PCS/N5002)
- Estimate& Plan for Home renovation with computer aided designing, 2-D-/3-D design. Texture and light effects for school Building. Use of mural and landscapes in interior work. (PCS/N5016, PCS/N5004)
- 15. Develop craftwork knowledge about radium & vinyl cutting manually as well as plotter, pasting, etc. (PCS/N9427)
- 16. Produce productive work of screen printing. (PCS/N5016)
- 17. Read and apply engineering drawing for different application in the field of work. (CSC/N9401)
- 18. Demonstrate basic mathematical concept and principles to perform practical operations. Understand and explain basic science in the field of study. (CSC/N9402)



	LEARNING OUTCOMES	ASSESSMENT CRITERIA
1.	Perform marking, sawing,	Marking Practice on wood.
	planning, Chiselling, Drilling	Apply holding & sawing practice on different size of wood.
	following safety precautions.	Work on teeth setting & sharpening of different saw.
	(CSC/N0304)	Apply tenoning Half cut on wooden border.
		Make setting of planers & sharpening on plane blade.
		Do plane on different wooden surfaces.
		Do chiselling slots on thick wood.
		Drilling on wood with different drilling tools (Gimlet, Hand Drill,
		Portable elect. drilling machine.
2.	Make a type of joints for	Make a simple lap joint.
	different frames (like- Screen	Make a simple mitred half lap joint.
	frame, sign board, & hanging	Make a simple Dovetail joint.
	Paintings frame (PCS/N9437)	Apply Joint fitting with nails, screw, glue etc.
3.	Manufacture simple sheet	Marking practice of straight lines, circles, profiles and various
	metal items as per drawing	geometrical shapes.
	and join them by soldering,	Cutting practice of straight lines, circles, profiles and various
	brazing and riveting.	geometrical shapes on sheets with snips.
	(PCS/N9437)	Marking out of simple development.
		Marking out for fold for joints.
		Make the joint of hemming, form locked.
		Make the joint of grooved and knocked up single hem
		Make the joint of straight and curved edges form double
		hemming.
		Make cylindrical objects with joints.
4.	Apply Knowledge of various	Identify & check different types of pipe.
	pipe fittings	Do pipe cutting & threading
	(PCS/N0133)	Apply different types of pipe joint/ fitting of different materials &
		different diameter. (Use PVC pipe)
		Make joint/ fitting for rain water (Use PVC pipe)
		Make joint/ fitting for water pipe line (Use GI pipe)
		Make joint/ fitting for water pipe line (Use PVC pipe)
Г	Work on Operating System	Operate & familiarize with computer operating system
5.	Work on Operating System, Bractice on DTR. Corol Draw	Operate & familiarize with computer operating system.
	Practice on DTP, Corel Draw,	Operate paint software & draw freehand sketch & practice on
	Photo shop etc.	color bucket, eraser, pencil & all tools.
	(PCS/N9425)	Draw scenery like realistic in paint software



	Tool handling in photo shop familiarise with all hand tools.
	Make a different layer & create background, artistic text, design,
	images.
	Apply import photo image from file & scanner, edit photo
	images.
	Edit Image adjustment effects. & layer style effects.
	Edit special effect on different layer, colours, textures, filter
	effects.
	Edit & Save image in PSD, JPEG &other format.
	Create a colour advertise design for festival offer
	Develop export Design, image, photograph from Photoshop to
	other different format for different software's & make a print &
	print file for different printers.
	Tool handling in Corel draw familiarise with all hand tools Apply
	select /move /copy /objects, retire skew, size Objects.
	Apply Combine, Shape, weld, trim, Align, Group / Ungroup
	objects.
	Practice on add text & Format text create different heading &
	Sub-heading.
	Draw dimensionally objects. Creating special effects for
	backgrounds & related objects.
	Do graphical effects to tex. Creating symbols, logo, special
	effects.
	Make a flex design for marketing offers. Convert & Save to CD/
	DVD/ PD for final printing.
6. Produce stencils involving	Create ornamental designs for stencils.
different shapes in	Cut the stencils & make a print.
ornamental design, text,	Draw simple sentence in different lettering stencil.
symbols, etc. operations for	Cutting & stencilling the letters.
different medium like	
papers, cards, tin, foam	
board, observing procedure	
and check for accuracy.	
(PCS/N9426)	
7. Produce Sign board, Name	Make sign board
plate. Prepare back ground	Paint the background of sign board.
painting, Observe finishing,	Make Figure Enlargement for sign board.
lettering proportion &	Draw and painting letters & design or logo on Sign Board.
evenness.	Practice the Painting of name plate on different material
(PCS/N5016)	
8. Prepare wooden surface	Apply Cleaning, sanding, knotting, stooping, staining preparation



	on wooden surface property for polich
using various techniques,	on wooden surface properly for polish.
decorate & make an	Make & apply putty for varnishing & polishing.
attractive wooden article.	Apply polish on prepared wooden surface with cotton rags.
(PCS/N5004)	Apply Cleaning, sanding, knotting, stooping, staining preparation
	wooden surface properly for varnish.
	Apply varnish on prepared wooden surface with brush.
	Prepare wooden article & apply varnish with spray.
	Prepare wooden article & apply melamine or PU wooden finish with spray.
	Make a wooden top with thick layer of melamine polish.
9. Prepare different types of	Prepare wooden surface properly for painting.
wooden surface & paint it.	
Like Plywood, MDF & low-	Practice of applying wood primer by brush.
• ·	Make a putty for wood finishing.
quality wood.	Apply putty & prepare wooden surface properly.
(PCS/N5004)	Do paint wooden surface properly with brush
	Prepare & spray painting on different furniture take the all
	precautions.
10. Develop Building painting	Prepare ceiling & Wall surface for lime wash. (Sanding &
using different decorative	Cleaning)
process	Apply POP on wall.
(PCS/N5002)	Make & mixing of lime & Steiner.
	Apply Lime on ceiling & wall with brush properly.
	Prepare ceiling & wall for distemper painting.
	Make wall putty for distempering.
	Apply wall putty with finish & prepare wall surface.
	Mixing & apply a distemper properly for wall.
	Prepare ceiling & wall surface with putty & Apply interior
	emulsion paint. Use roller & brush.
	Prepare interior wall surface with putty, Apply enamel or luster
	paint.
	Making process of scaffolding for exterior wall painting.
	Clean exterior wall area with cleaning process & water pressure
	process.
	Prepare exterior wall with white cement for painting.
	Paint the prepared wall by brush with cement paint.
	Prepare exterior wall with exterior priming for painting.
	Paint the prepared wall by brush with emulsion paint.
	Decorate the projection with dark shade apply special shades of
	emulsion colour.
	Prepare wall & design wall paper pasting on wall.
	Find the defects on wall before painting and remove it.



	Find the defects on wall after painting and remove it.
<ol> <li>Paint and decorate exterior articles. (PCS/N5016, PCS/N5004)</li> </ol>	Cleaning, Sanding, or wire brushing & paint by brush windows, grill, doors, safety doors, gate etc. Prepare Paint & painting on ceiling and wall. Use dip-feed roller / pad or airless spray.
	· · · ·
12. Process on pipes & pipe line	Paint the GI pipe by brush.
painting with colour code. (PCS/N5110, PCS/N5111)	Paint the sanitary pipe of building. Take & care self precaution & safety.
	Paint the MS square & round pipe, take all precautions & safety while painting.
	Do Paint deferent pipe line with colour code as per ISI.
13. Use plaster of Paris. (P.O.P.)	Prepare Wall surface for POP work Use damping material.
Create Textures on wall	Prepare equal level for filling POP
surface. Process for Interior work in commercial places.	Procedure the Filling POP & make an equal level the selected area.
Use of Texture material for	Prepare a suitable border by Pop work
relief work. Offices and	Make a Simple 3D shapes of flowers, leafs, ornamental by POP
corporate spaces for modern	Prepare & Compose the 3D parts, different texture material and
painting work.	assemble in frame & make a Finished 3D wall poster
(PCS/N5002)	Do suitable colours & paint the 3D poster by spray.
14. Estimate& Plan for Home	Make an estimate Different material use in different civil work.
renovation with computer aided designing, 2-D-/3-D design. Texture and light	With Drawing a lay out Draw & create textures effects On different presentation material.
effects for school Building.	Make a 3D Models of simple geometrical shapes.
Use of mural and landscapes	· - · ·
in interior work. (PCS/N5016, PCS/N5004)	Make a 3D Models of simple ornamental shapes. & compose it.
15. Develop a craft work	Use manually ornamental design on radium or vinyl.
knowledge about radium &	Create symbol or image design by computer graphics.
vinyl cutting manually as	Procedure of image design Cutting with plotter.
well as plotter, pasting, etc.	Do "Instruction board" on acrylic sheet with help of multilayer
(PCS/N9427)	radium or vinyl.
	Make a lettering/ image/ symbol design for "Instruction board"
	by computer graphics, with help of radium or vinyl & cutting it
	with plotter, pasting on glass/ acrylic/ sun mica or different
	sheets.
	Create a design for wall decoration by computer in graphics & cut it on multi colour vinyl, paste on wall.
	Cut it on multi colour vinyi, paste oli wali.



16. Produce productive work of	Make a wooden frame with bolting cloth.
screen printing. (PCS/N5016)	Create Art work on tracing for screen exposing.
	Coating solution & expose screen with ready art work,
	Develop exposed screen with cold water, touch up pin holes and
	nonprinting area, taping around inside.
	Apply cromoline film & expose work, develop screen for ready to
	printing.
	Prepare & registration Pining work on printing table.
	Do colour printing on selected cards/sheets.
	Apply screen de-coating process.
17. Read and apply engineering	Read & interpret the information on drawings and apply in
drawing for different	executing practical work.
application in the field of	Read & analyze the specification to ascertain the material
work.	requirement, tools and assembly/maintenance parameters.
(CSC/N9401)	Encounter drawings with missing/unspecified key information
	and make own calculations to fill in missing
	dimension/parameters to carry out the work.
18. Demonstrate basic	Solve different mathematical problems
mathematical concept and	Explain concept of basic science related to the field of study
principles to perform	
practical operations.	
Understand and explain	
basic science in the field of	
study. (CSC/N9402)	



	SYLLABUS FOR DOMESTIC PAINTER TRADE			
		DURATION - ONE YEAR		
Duration	Reference Learning	Professional Skills	Professional Knowledge	
Buration	Outcome	(Trade Practical)	(Trade Theory)	
Professional Skill 80 Hrs; Professional Knowledge 18 Hrs	Perform marking, sawing, planning, Chiseling, Drilling following safety precautions (Mapped NOS: CSC/N0304)	<ol> <li>Introduction of trade skills and work application.</li> <li>Safety attitude development of the trainee by educating them to use personal protective equipment (PPE) and Material safety data sheet (MSDS).</li> <li>First-aid method and basic training.</li> <li>Safe disposal of waste materials like- cotton waste, waste paint and waste paint material etc.</li> <li>Hazard and non-hazard identification and avoidance.</li> <li>Use of fire fighting equipment, like- extinguishers, sand bucket, water etc.</li> <li>Identification of safety signs, like- Danger, warning, caution and personnel safety.</li> <li>Importance of trade training.</li> <li>Understand precautions to be followed while working in the painting jobs.</li> <li>Motivational talk by experts.</li> <li>St raining.</li> <li>Draw different sketches and hand writing practice.</li> <li>CARPENTER WORK:</li> <li>Marking Practice on wood.</li> </ol>	Introduction of the Institution; rules and management (work) Process of an Institution. Knowledge about the facilities; leaves and rules and subjects a syllabus. Introduction of vocational trade, The importance of trade in the industrial Development of the nation Care in Vocational trade	
		<ol> <li>Holding &amp; Sawing Practice different size of wood.</li> <li>Teeth setting &amp; sharpening of different saw.</li> <li>Tennening Half cut on wooden border.</li> <li>Setting of planers &amp;</li> </ol>	carpenter tools, types of wood their description & use common defects in timber & their effects.	



Professional Skill 24 Hrs; Professional Knowledge 05 Hrs	Make a types of joints for different frames (like- Screen frame, sign board, & hanging Paintings frames. (Mapped	<ul> <li>sharpening on plane blade</li> <li>18. Plane on different wooden surfaces.</li> <li>19. Chiseling slots on thick wood.</li> <li>20. Drilling on wood with different drilling tools (Gimlet, Hand Drill, Portable etc. drilling machine.</li> <li>21. Make a simple lap joint.</li> <li>22. Make a simple mitred half lap joint.</li> <li>23. Make a simple Dovetail joint.</li> <li>24. Joint fitting with nails, screw, glue etc.</li> </ul>
	NOS: PCS/N9437)	
Professional Skill 60 Hrs; Professional Knowledge 14Hrs	Manufacture simple sheet metal items as per drawing and join them by soldering, brazing and riveting. (Mapped NOS: PCS/N9437)	<ul> <li>SHEET METAL WORK:</li> <li>19. Marking of straight lines, circles, profiles and various geometrical shapes and cutting the sheets with snips.</li> <li>20. Marking out of simple development.</li> <li>21. Marking out for flaps for joints.</li> <li>22. Make various joints: hemming, form locked, grooved and knocked up single hem straight and curved edges form double hemming.</li> <li>23. Make cylindrical objects with joints.</li> <li>24. Make simple Square table tray with folding edge and fix handle with riveting.</li> <li>25. Make simple triangular tray with folding edge and fix</li> <li>25. Make ut it is the straight and curved is the straight and provide and the simple straight and provide table tray with folding edge and fix</li> <li>25. Make simple triangular tray</li> <li>24. Make simple triangular tray</li> <li>25. Make simple triangular tray</li> <li>26. Make simple triangular tray</li> <li>27. Make ut is the simple triangular tray</li> <li>28. Make ut is the simple triangular tray</li> <li>29. Make ut is the simple triangular tray</li> <li>20. Make ut is the simple triangular tray</li> <li>21. Make ut is the simple triangular tray</li> <li>23. Make ut is the simple triangular tray</li> <li>24. Make simple triangular tray</li> <li>25. Make ut is the simple triangular tray</li> <li>26. Make triangular tray</li> <li>27. Make triangular tray</li> <li>28. Make triangular tray</li> <li>29. Make triangular tray</li> <li>20. Make triangular tray</li> <li>20. Make triangular tray</li> <li>21. Make triangular tray</li> <li>22. Make triangular tray</li> <li>23. Make triangular tray</li> <li>24. Make triangular tray</li> <li>25. Make triangular tray</li> <li>26. Make triangular tray</li> <li>27. Make triangular tray</li> <li>28. Make triangular tray</li> <li>29. Make triangular tray</li> <li>20. Make triangular tray</li> <li>20. Make triangular tray</li> <li>21. Make triangular tray</li> <li>22. Make triangular tray</li> <li>23. Make triangular tray</li> <li>24. Make triangular tray</li> <li>25. Make triangul</li></ul>
Professional	Apply Knowledge of	handle with riveting.26. Identify & check differentPlumber:
Professional Skill 43 Hrs; Professional Knowledge 10 Hrs	various pipe fittings. (mapped NOS: PCS/N0133)	<ul> <li>28. Identify &amp; check different</li> <li>types of pipe.</li> <li>27. Do pipe cutting &amp; threading</li> <li>28. Apply different types of pipe</li> <li>joint/ fitting of different</li> <li>materials &amp; different diameter</li> <li>(Use PVC pipe).</li> <li>Pumber.</li> <li>Instruction to the trade</li> <li>safety precautions and</li> <li>elementary first aid. Plumber</li> <li>hand tools description on</li> <li>rain water &amp; pipe system</li> <li>including installation of</li> </ul>
		29. Make joint/ fitting for rain water supply fitting.
		16



			water (Use PVC pipe)	Description of different types
		30.	Make joint/ fitting for water	of pipes & their use such as
			pipe line (Use GI pipe)	galvanized pipes, PVC pipes.
		31.	Make joint/ fitting for water	Pipe line leakage &
			pipe line (Use PVC pipe)	Maintenance.
Professional	Work on Operating	32.	Operate & familiarise with	Standard pipe threads,
Skill 80 Hrs;	System, Practice on		computer operating system.	nominal diameter, wall
	DTP, Corel Draw,	33.	Operate paint software &	thickness, schedule number,
Professional	Photo shop etc.		draw freehand sketch & use	die& diestock, tubing.
Knowledge	(Mapped NOS:		like as colour bucket, eraser,	
18 Hrs	PCS/N9425)		pencil & all tools.	
		34.	Draw scenery like realistic in	
			paint software	
		35.	Photoshop: tool handling in	
			photo shop familiarise with all	
			hand.	
		36.	Make a deferent layer &	
			create background, artistic	
			text, design, images,	
		37.	Import photo image from file	
			& scanner, edit photo image.	
		38.	Edit Image adjustment effects.	
		20	& layer style effects.	
		39.	Edit special effect on different	
			layer, colours, textures, filter	
		40	effects.	
		40.	Edit & Save image in PSD, JPEG	
		4.4	& other format.	
		41.	Create a colour advertise	Drawing instruments-
		12	design for festival offer.	Drawing board; T- square;
		42.	Export Design, image,	steel and wooden scale; set
			photograph from Photoshop to other different format for	square; compass; Colour
				dish.
			different software's. & make a	
			print & print file for different	
			printers.	
			orel Draw :	Drawing simple geometric
		43.	Apply select /move /copy	objects using Corel Draw
			/objects, retire skew, size	Transforming objects, Organizing objects, Working
		11	Objects.	
		44.	Apply Combine, Shape, weld,	with text, Dimensioning
			trim, Align, Group / Ungroup	objects Creating special effects
		15	objects. Add text & Format text create	
		45.		
			different heading & Sub-	



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		47.	heading Draw dimensionally objects, creating special effects for backgrounds & related objects. Do graphical effects to text. Creating symbols, logo, special effects. Make a flex design for marketing offers. Convert & Save to CD/DVD/PD for final printing.	
Professional	Produce stencils	49	Create ornamental designs for	Stencil -Definition and types
Skill 24 Hrs; Professional	involving different shapes in ornamental design,		stencils, cut it & make a print. Draw simple sentence in different lettering, stencil	of stencils. Uses; Care and cleaning of different types of stencils. Instruments and
Knowledge 05 Hrs	text, symbols, etc. operations for different medium like papers, cards, tin, foam board, observing procedure and check for accuracy. (Mapped NOS: PCS/N9426)		cutting & stencilling.	equipment for stencil.
Professional Skill 43 Hrs;	Produce Sign board, Name plate. prepare back ground		Make sign board with background painting. Make Figure Enlargement for	Advertisement-Sign Board, Banner, Posters, Hoardings, Wall painting, Name plate,
Professional	painting, Observe		sign board.	Logo, Symbol, Monogram,
Knowledge	finishing, lettering	53.	Draw and painting letters &	Digital Flex Board.
09 Hrs	proportion &		design or logo on Sign Board.	Graph Making
	Evenness. (Mapped NOS: PCS/N5016)	54.	Paint a name plate on deferent material (wood/ tin/ acrylic).	&Enlargement, Need of graph for Enlargement
Professional Skill 42 Hrs;	Prepare wooden surface using various techniques,	64.	Clean, sanding, knotting, stooping, staining preparation wooden surface properly for	Polish paper-Types and uses. Putty - Definition, their material types and uses.
Professional	decorate & make a		polish.	Method of mixing & its
Knowledge	attractive wooden	65.	Make & apply putty for	different system of
09 Hrs	articles. (Mapped		varnishing & polishing.	application.
	NOS: PCS/N5004)	66.	Apply polish on prepared wooden surface with cotton rags.	Varnish - Definition; types and characteristics of varnish. Process of making of
		67	Clean, sanding, knotting,	varnish its importance and
			stooping, staining preparation	contains.
		I		



		68.	wooden surface properly for varnish. Apply varnish on prepared	Polish- Types and uses. Different application methods
			wooden surface with brush. Prepare wooden article& apply varnish with spray.	
		70.	Prepare wooden article & apply melamine or PU wooden finish with spray.	
		71.	Make a wooden top with thick layer of melamine polish.	
Professional Skill 42 Hrs;	Prepare different types of wooden		Prepare wooden surface properly for painting.	Paint- Definition; classification and use.
Professional	surface & paint it like Plywood, MDF	74.	Apply wood primer by brush. Make putty for wood finishing.	Pigment, Binders, Solvent, oil, dryers; additives.
Knowledge 09 Hrs	&low quality wood. (Mapped NOS: PCS/N5004)		Apply putty & prepare wooden surface properly. Do paint wooden surface	Painting- Definition and importance of painting. Method of wooden surface
			properly with brush Prepare & spray painting on	painting.
			different furniture taking all precautions.	
Professional Skill 150 Hrs;	Develop Building painting		Prepare ceiling surface for lime wash.	Types, uses of building (wall) paints. Wall primer- Water
Professional Knowledge	using different decorative process.		Prepare wall surface for lime wash. Apply POP on wall for lime	base / Oil base, types of putty for wall. Mixing, Preparation
29 Hrs	(Mapped NOS: PCS/N5002)		painting. Make & mixing of lime &	process of Lime and Distemper. Other required
		82.	stainer. Apply Lime on ceiling & wall	Equipments- Below lamp, bucket, plum-
		83.	with brush properly. Prepare ceiling & wall for	bob, putty blender, Paint strainer. Types of Trestle,
		84.	distemper painting. Make wall putty for distempering.	ladder, scaffolding
		85.	Apply wall putty with finish & prepare wall surface.	
		86.	Mixing & apply a distemper properly for wall.	
		87.	Prepare ceiling & wall surface with putty & Apply interior	Colour selection for interior wall painting and use of
			emulsion paint. Use roller & brush.	Paints. Effects; Intention; Purpose of colours. Paint
		ōŏ.	Prepare office & work shop	mixing and preparation



	1	1		1
			interior wall surface with	process. Difference between
			putty, Apply enamel or luster	emulsion paint and Oil paint.
			paint.	
		79.	Make scaffolding for exterior	Color selection for exterior
			wall painting.	wall painting and use of
		80.	Clean exterior wall aria with	Paints. Method of paint
			cleaning process & water	mixing and preparation.
			pressure process	Paint used for exterior wall
		81.	Prepare exterior wall with	painting.
			white cement for painting.	
		82.	Paint the prepared wall by	
			brush with cement paint.	
		83.	Prepare exterior wall with	
			exterior priming for painting.	
		84.	Paint the prepared wall by	
			brush with emulsion paint.	
		85.	Decorate the projection with	
			dark shade apply special	
			shades of emulsion colour.	
		86.	Decorate the wall with	Difference between brush
			design roller/ stamp/ stencil.	painting and Roller painting.
		87.	Prepare wall & create texture,	Types of Roller and
			use different medium, colour	preparation of texture for
			& make a different textures.	wall painting.
		88.	1 0	Wall defects and defects
			paper pasting on wall	removal process of wall
		89.	Find the defect on wall before	painting.
			painting and remove it.	
		90.		
			painting and remove it.	
Professional	Paint and decorate	91.	Prepare & paint by brush	Building Painting estimate &
Skill 42 Hrs;	exterior articles		windows, grill, doors, safety	costing.
	(Mapped NOS:		doors, gate etc.	
Professional	PCS/N5016,	92.	Paint a ceiling and wall with	-Do-
Knowledge	PCS/N5004)		dip-feed roller / pad or airless	
10 Hrs			spray.	
Professional	Process on pipes &	93.	Paint the GI pipe, take all	Intention and effects of pipe
Skill 24 Hrs;	pipe line painting for		precautions while painting.	line painting, Colour Codes of
	hospitals &	94.	Paint the sanitary pipe, take	pipe line painting. ISI colour
Professional	commercial	0-	all precautions while painting.	code.
Knowledge	buildings with colour	95.	Paint the MS square & round	
05 Hrs	code. (Mapped NOS:		pipe, take all precautions	
	PCS/N5110,		while painting.	
	PCS/N5111)			



Professional	Use plaster of Paris.	96. Prepare Wall surface for POP	Description of various filling
Skill 42 Hrs;	(P.O.P.) Create	work Use damping material.	materials Its field of
	Textures on wall	97. Create equal level for filling	application Safety in spray
Professional	surface. Process for	POP.	methods.
Knowledge	Interior work in	98. Fill POP & make a equal level	Occupational safety hazards
09 Hrs	commercial places.	the selected area.	and its precaution. Like
	Use of Texture	99. Create a suitable border by	furniture paint, epoxy paint
	material for relief	Pop work.	metallic paint for decoration
	work. Offices and	100. Make a Simple 3D shapes of	work selection of paints for
	corporate spaces for	flowers, leafs, ornamental by	different surface. Using mix
	modern painting	POP.	material for - 3-D design.
	work.	101. Compose the 3D parts,	Working condition & modern
	(Mapped NOS:	different texture material and	decoration
	PCS/N5002)	assemble in frame & make a	
	1 00/110002/	finished 3D wall poster.	
		102. Use suitable colours & paint	
		the 3D poster by spray.	
Professional	Estimate & Plan for	103. Make an estimate Different	Information about wide
Skill 42 Hrs;	Home renovation	material use in different civil	range of working conditions
3Kiii 42 1113,	with computer	work With Drawing a lay out.	in floor plans & home
Professional	aided designing, 2-	104. Draw & create textures effects	renovation. Exterior painting
Knowledge	D-/3-D design.	On different presentation	with texture paint.
09 Hrs	Texture and light	material.	Importance of safe and
091115	effects for school	105. Make a 3D Models of simple	esthetically pleasing space
	Building. Use of		for building uses. General
	mural and	geometrical shapes. 106. Make a 3D Models of simple	-
			ideas of relief painting in P.O.P. work.
	landscapes in interior work.	ornamental shapes &	P.O.P. WORK
		compose it.	
	(Mapped NOS:		
	PCS/N5016,		
Duefeesienel	PCS/N5004)	107 Make a manually amamantal	Their was Queene different
Professional	Develop a craft work	107. Make a manually ornamental	Their use & care. different
Skill 42 Hrs;	knowledge about	design on radium or vinyl	medium paper for plotter
	radium & vinyl	108. Make a symbol or image	cutting. Manual cutting
Professional	cutting manually as	design by computer in	Instruments & their safety/
Knowledge	well as plotter,	graphics & cut it with plotter	care/ precautions, Proper
09 Hrs	pasting, etc.	109. Do "Instruction board" on	pesting procedure, pasting
	(Mapped NOS:	acrylic sheet with help of	techniques, care &
	PCS/N9427)	multi layer radium or vinyl.	precaution.
		110. Make a lettering/ image/	
		symbol design for "Instruction	
		board" by computer in	
		graphics, with help of radium	
		or vinyl & cutting it with	
		plotter, pasting on glass/	



		Γ	г
		acrylic/ sun mica or different	
		sheets	
		111. Create a design for wall	
		decoration by computer in	
		graphics & cut it on multi	
		colour vinyl, paste on wall	
Professional	Produce productive	112. Make a wooden frame with	Screen Printing - Types,
Skill 60 Hrs;	work of screen	bolting cloth.	definition and explanation.
	printing.	113. Create Art work on tracing for	Origin and development of
Professional	(Mapped NOS:	screen exposing.	screen painting.
Knowledge	PCS/N5016)	114. Coating solution & expose	Selection of cloth,
14 Hrs		screen with ready art work,	instruments, chemicals, cloth
_		Develop exposed screen with	fitting, exposing.
		cold water, touch up pin holes	
		and nonprinting area, taping	
		around inside.	
		115. Use cromoline film & expose	
		screen with ready art work,	
		Develop exposed screen with	
		cold water, touch up pin holes	
		and nonprinting area, taping	
		around inside.	
		116. Prepare & registration Pining	Screen developing; printing
		work on printing table.	and de-exposing /washing.
		117. Testing of registration with	Types of ink
		Squeezing ink.	
		118. Do single colour printing on	
		selected cards/sheets.	
		119. Do multi colour printing on	
		selected cards/sheets.	
		120. Decoating used screen with	
		bleach powder or decoating	
		solution, wash & clean.	
		Engineering Drawing – 40 Hrs.	
Professional	Read and apply	Engineering Drawing:	
Knowledge	engineering drawing	Introduction to Engineering Drawing	Instruments –
ED- 40 Hrs.	for different	Conventions	
	application in the	• Sizes and layout of drawing s	heets
	field of work.	• Title Block, its position and co	
	(Mapped NOS:	Drawing instrument	
	CSC/N9401)	Free hand drawing of –	
		Geometrical figures and block	ks with dimension
		Transferring measurement fr	
		free hand sketches.	



		<ul> <li>Free hand drawing of hand tools and measuring tools.</li> </ul>
		Drawing of Geometrical figures:
		<ul> <li>Angle, Triangle, Circle, Rectangle, Square, Parallelogram.</li> </ul>
		<ul> <li>Lettering &amp; Numbering – Single Stroke, double stroke,</li> </ul>
		inclined
		Dimensioning –
		<ul> <li>Types of arrowhead</li> </ul>
		Symbolic representation –
		<ul> <li>Different symbols used in the related trade.</li> </ul>
	WORKS	HOP CALCULATION & SCIENCE – 18 hrs.
Professional	Demonstrate basic	WORKSHOP CALCULATION & SCIENCE:
Knowledge	mathematical	Unit, Fractions
WCS- 18 Hrs	concept and	Classification of unit system
	principles to	Fundamental and Derived units F.P.S, C.G.S, M.K.S and SI units
	perform practical	Measurement units and conversion
	operations.	Factors, HCF, LCM and problems
	Understand and	Fractions - Addition, substraction, multiplication & division
	explain basic science	Decimal fractions - Addition, subtraction, multiplication& division
	in the field of study.	Solving problems by using calculator
	(Mapped NOS:	Square root, Ratio and Proportions, Percentage
	CSC/N9402)	Square and square root
		Simple problems using calculator
		Applications of Pythagoras theorem and related problems
		Ratio and proportion
		Ratio and proportion - Direct and indirect proportions
		Percentage
		Percentage - Changing percentage to decimal and fraction
		<u>Mensuration</u>
		Area and perimeter of square, rectangle and parallelogram
		Area and perimeter of Triangles
		Area and perimeter of circle, semi-circle, circular ring, sector of
		circle, hexagon and ellipse
		Surface area and volume of solids - cube, cuboid, cylinder, sphere
		and hollow cylinder
		Finding the lateral surface area, total surface area and capacity in
		litres of hexagonal, conical and cylindrical shaped vessels
		Trigonometry
		Measurement of angles
	-	Trigonometrical ratios
Project Work	/ Industrial visit	

Broad areas:

- a) Make a Radium or vinyl cutting designs and pasting them on walls.
- b) Decorate wall with different texture.



#### SYLLABUS FOR CORE SKILLS

1. Employability Skills(Common for all CTS trades) (120Hrs)

Learning outcomes, assessment criteria, syllabus and Tool List of Core Skills subjects which is common for a group of trades, provided separately in <u>www.bharatskills.gov.in/dgt.gov.in</u>



LIST OF TOOLS & EQUIPMENT						
	Domestic Painter (For batch of 24 Candidates)					
S No.	Name of the Tools and Equipment	Specification	Quantity			
A. TF	AINEES TOOL KIT					
1.	Screw driver set	150,200,250mm	24Nos. each			
2.	Measuring tape-	10 meters	24Nos.			
3.	Flat brush-	4", 3", 2" and 1"	24Nos. each			
4.	Lettering brush-	2,4,6,8,10 no.	24Nos. each			
5.	Wooden rule	24"	24Nos.			
6.	Glass pencil (any colour)		24Nos.			
7.	Lead pencil	HB, 2b, 4b, charcoal	24Nos. each			
8.	Putty knife-	2", 4"	24Nos. each			
9.	Mask		24Nos.			
10.	Apron		24Nos.			
B. SHO	P TOOLS, INSTRUMENTS					
Lists of	Tools and Equipments:					
11.	Blow lamp	1/2ltr/1 Ltr	1 Nos. each			
12.	Steel wire brush	50 mmX150 mm	10 Nos.			
13.	Scriber		4 Nos.			
14.	Putty Knives	2",4",6"	24Nos. each			
15.	Marking Gauge		4 Nos.			
16.	Plier insulated	150mm	4 Nos.			
17.	Nose Plier insulated	150mm	4 Nos.			
18.	Screw drivers	150mm	4 Nos.			
19.	Electrician testing Pencil (Line/Neon tester)		4 Nos.			
20.	Rule Steel	300mm	12 Nos.			
21.	Punch Centre	150mm X 9mm	4 Nos.			
22.	Heavy duty screw driver	200mm	4 Nos.			
23.	Hammer Ball Peen	0.50Kg with handle	4 Nos.			
24.	Hammer Cross Peen	lOOgms. With handle	4 Nos.			
25.	Pliers Side Cutting insulated	150mm	4 Nos.			
26.	Pincers	150mm	4 Nos.			
27.	Single straight ladder	8" wooden	1 No.			
28.	Step ladder-	12' aluminium	1 No.			
29.	Extension ladder		1 No.			
30.	Scrapping knife		12 Nos.			
31.	Chisel knife		12 Nos.			
32.	Pallet knife		4 Nos.			



33.	Chisels		4 Nos.
34.	Face mask		24 Nos.
35.	Hand gloves-solvent		24 Nos.
36.	Safety goggles		6 pairs
37.	Airless pumps (Wagner with		1 No.
•	complete accessories		
38.	Spanner set	6 to 32mm set DE	1 No.
39.	Adjustable spanner	300 mm	2 Nos.
40.	Bench vice	120mm, 150mm each one	2 Nos. each
41.	Spray gun (painting)		2 Nos.
42.	Air filter		2 Nos.
43.	Air hoses pipe	20 meter	1 No.
44.	Regulators for paints		1 No.
45.	Paint filter-conical		24 Nos.
46.	Fume filter mask		24Nos.
47.	Out side spring caliper	150 mm	4 Nos.
48.	Inside spring caliper	150 mm	4 Nos.
49.	Divider spring	150 mm	4 Nos.
50.	Centre punch	100 mm	4 Nos.
51.	File flat 2 <sup>nd</sup> cut	250 mm	4 Nos.
52.	Ordinary wooden mallet	50 mm	4 Nos.
53.	Cross pen hammer	0.25kg with handle	4 Nos.
54.	Snip straight	250 mm	4 Nos.
55.	Right cut snip	250 mm	4Nos.
56.	Steel wire brush		4 Nos.
57.	Marking gauge		4 Nos.
58.	Tennon saw	300 mm to 375 mm	2 Nos.
59.	Jack plane metal		2Nos.
60.	Smoothing plane wooden		2 Nos.
61.	Carpenter hammer with wooden handle		2 Nos.
62.	Chisel farmer	6 mm to 25 mm set	2 Nos.
63.	Chisel mortise	9 mm	2 Nos.
64.	Trying plane		2 Nos.
65.	Paint mixing rack		1 No.
66.	Colour chart's		12 Nos.
67.	Air brush(air master make		1 No.
	complete accessories)		
68.	Hair drier heavy duty		2Nos.
69.	File flat smooth		4 Nos.
70.	"C" clamp	2"	4 Nos.
71.	Squeeze-	2",4",6",8"with aluminum handle	2 Nos. each
72.	Palette knife		4 Nos.



73.	Viscosity cup no. 4 with stand		1 No.
74.	Air compressor with complete		1 No.
	accessories		
75.	Spray equipments and its		1 No.
	accessories		
76.	Pot gun		2 Nos.
77.	Baking oven		1 No.
D. Shop	o Floor Furniture and Materials		
78.	Stool		24 Nos.
79.	Desk with Locker		24 Nos.
80.	Metal Shelving Rack Open Type	1800 x 900 x 500 mm with 4	2 Nos.
		Adjustable Shelves	2 1105.
81.	Steel Locker's with 8 Drawer's	One locker for each trainee	3 Nos.
82.	Green Glass Board	6'X4'	1 No.
83.	Cupboard		4 Nos.
84.	Instructor table		1No.
85.	Instructor chair		2Nos.
E. DESI	GNING LAB		
86.	Computer's with Accessories (Table & Chair)	CPU: 32/64 Bit i3/i5/i7 or latest processor, Speed: 3 GHz or Higher. RAM:-4 GB DDR-III or Higher, Wi-Fi Enabled. Network Card: Integrated Gigabit Ethernet, with USB Mouse, USB Keyboard and Monitor (Min. 17 Inch. Licensed Operating System and Antivirus compatible with trade related software.	5 set
87.	Printer Lager/colour/scanner		1 No.
88.	Software CorelDraw / Page Maker/ Photo Shop / Shree Lippi / ISM / Acee - Dcee Viewer (Latest Version)		1 Each (Multi user)
89.	UPS		As required
90.	Camera Digital	Higher mega-pixel with Tri-Pod	1 No.
91.	Radium Plotter and cutter with stand	complete accessories 48"	1 No.



The DGT sincerely acknowledges contributions of the Industries, State Directorates, Trade Experts, Domain Experts, trainers of ITIs, NSTIs, faculties from universities and all others who contributed in revising the curriculum.

Special acknowledgement is extended by DGT to the following expert members who had contributed immensely in this curriculum.

List of Expert members participated for finalizing the course curricula of Domestic Painter at ITI,	
Ambernath, Maharashtra and ITC, Vadodara, Gujarat.	

S No.	Name & Designation Sh./Mr./Ms.	Organization	Remarks	
Industry Expert				
1.	Laxmidas Hinduja, MD	Transpek Industries Itd, Gujarat	Chairman	
2.	S. A. Pandav, RDD, Vadodara	DET, Gujarat	Coordinator	
3.	L. K. Mukherjee, DDT	CSTARI, Kolkata	Coordinator	
4.	Akash Vergurlekar, Mechanical Maintenance Executive	VVF India Ltd. Taloja, Raigad	Member	
5.	Jayesh Karnik, Instrumentation Maintenance Executive- Engg. Service	-do-	Member	
6.	Pradeep Kumar Pandey, Asst. Deputy Manager	Century Rayon, Mumbai	Member	
7.	Deepak M Kanitkar, Executive	Huhtamaki PPL Ltd, Bansri, Thopoli, Raigad	Member	
8.	Atul D. Taksande, Sr. Executive P&A	Bombay Dyeing & Manufacturing Co., Patulganga	Member	
9.	K. M. Unni Krishnan, Sr. Manager HR & Admin.	ASB International Pvt. Ltd., Ambernath	Member	
10.	Ajit D. Bagwe, Manager- Molding	-do-	Member	
11.	Rohan Kadlay, General Manager	Siemens Ltd., Mumbai	Member	
12.	VidyadharTakle, Asst. Manager- Engg. Service	Godrej Industries Ltd., Ambernath	Member	
13.	RoshanVagade, QC- Engineer	Indore Composite Pvt. Ltd. Mumbai	Member	
14.	Sandip D. Pisal, Asso. Chief Manager- Painter	Godrej & Boyce Manufacturing Co. Ltd, Mumbai	Member	
15.	RajendraAgashe, Manager- HR	Asian Paints India Itd. Taloja	Member	
16.	Mahesh Bandekar, Coating Officer	Indore Composite Pvt. Ltd. Mumbai	Member	
17.	Prashant A Bhosale, Sr. Manager- Production	Jubilant Life Science Ltd., N-34 Additional, Ambernath	Member	
18.	UdayrajRansing, Dy. Manager Engg.	-do-	Member	



19.	SatyandraPatra, Manager	Du Pont, Vadodara	Member	
20.	Varun Bhai, Manager	-do-	Member	
21.	Nitesh Chakraborty, Manager	-do-	Member	
22.	Chirag Mistry, Sr. Manager	GromaxAgri Equipment Ltd., Vadodara	Member	
23.	Ashish Solanki, Executive	-do-	Member	
24.	Ingle Kalpesh, Manager-HR	Kataria Automobiles Pvt. Ltd, Vadodara	Member	
25.	Amar Dherenge	Aldium Motors Pvt. Ltd., Vadodara	Member	
26.	Gopal Badgujar	Saidham Motors, Vadodara	Member	
DGT & Training Institute				
27.	S. P. Parmar, Principal	ITI Petlad, Gujarat	Member	
28.	R. S. Khule R.S., Craft Instructor	ITI, Nandurbar, Maharastra	Member	
29.	V.V. Ranalkar, Craft Instructor	ITI (G.) Nashik, Maharastra	Member	
30.	H. N. Bargal, TO	DVET, Mumbai	Member	
31.	P. K. Bairagi, TO	CSTARI, Kolkata	Member	



#### **ABBREVIATIONS**

CTS	Craftsmen Training Scheme	
ATS	Apprenticeship Training Scheme	
CITS	Craft Instructor Training Scheme	
DGT	Directorate General of Training	
MSDE	Ministry of Skill Development and Entrepreneurship	
NTC	NTC National Trade Certificate	
NAC	NAC National Apprenticeship Certificate	
NCIC	National Craft Instructor Certificate	
LD	Locomotor Disability	
СР	Cerebral Palsy	
MD	Multiple Disabilities	
LV	/ Low Vision	
НН	Hard of Hearing	
ID	ID Intellectual Disabilities	
LC	LC Leprosy Cured	
SLD	SLD Specific Learning Disabilities	
DW	DW Dwarfism	
MI	Mental Illness	
AA	Acid Attack	
PwD	Person with disabilities	



