













## Published by

National Vocational and Technical Training Commission Government of Pakistan

### Headquarter

Plot 38, Kirthar Road, Sector H-9/4, Islamabad, Pakistan www.navttc.org

## Responsible

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## Layout & design

SAP Communications

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This document has been produced with the technical assistance of the TVET Sector Support Programme, which is funded by the European Union, the Federal Republic of Germany and the Royal Norwegian Embassy and has been commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ). The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in close collaboration with the National Vocational and Technical Training Commission (NAVTTC) as well as provincial Technical Education and Vocational Training Authorities (TEVTAs), Punjab Vocational Training Council (PVTC), Qualification Awarding Bodies (QABs)s and private sector organizations.

Document Version January, 2020 Islamabad, Pakistan



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## 1. Introduction

Competence-based training helps to bridge the gap between what is taught in training and what tasks will be performed on the job. Training trainees to perform actual job functions helps to ensure that future front-line workers have the skills, knowledge and abilities required to perform their jobs properly, safely and effectively. In addition to competence-based training, assessment based on the performance of actual work competencies helps to ensure that:

- Trainees are performing their work tasks as safely as possible
- Performance gaps are recognized prior to serious incidents
- Training can be implemented to improve competence.

There are significant benefits to competence-based training:

## 1.1. Cost effectiveness

Since training activities and assessments in a competence-based approach are goal-oriented, trainers focus on clearly defined areas of skills, knowledge and understanding that their own industry has defined in the competence standards. At the same time, trainees are more motivated to learn when they realize the benefits of improved performance.

## 1.2. Efficiency

The transfer gap between the training environment and working on the job is reduced substantially in a competence-based approach. This is because training and assessment are relevant to what needs to be done on the job. As a result, it takes less time for trainees to become competent in the required areas. This, in turn, contributes to improved efficiency where training and assessment are concerned.

## 1.3. Increased productivity

When trainees become competent in the competence standards that their own industry has defined, when they know what the performance expectations are and receive recognition for their abilities through successful assessments, they are likely to be more motivated and experience higher job satisfaction. The result is improved productivity for organizations. The communication and constructive feedback between future employers and employees will improve as a result of a competence-based approach, which can also increase productivity.

## 1.4. Reduced risk

Using a competence-based approach to training, development, and assessment, employers are able to create project teams of people with complementary skills. A trainee's record of the skills, knowledge and understanding relating to the competence standards they have achieved can be used by a future employer to identify and provide further relevant training and assessment for new skills areas. Competence standards can shape employee development and promotional paths within an organization and give employees the opportunity to learn more competencies beyond their roles. It can also provide organizations with greater ability to scale and flex as needed, thereby reducing the risk they face.

#### 1.5. Increased customer satisfaction

Employees who have been trained and assessed using a competence-based approach are, by the definition of the relevant competence standards, able to perform the required tasks associated with a job. The knock-on effect is that, in service-related industries, they are able to provide high service levels, thereby increasing customer satisfaction. In production or manufacturing industries, they are able to work closely to industry standards in a more effective and efficient way.

## 2. Lesson plans

This manual provides a series of lesson plans that will guide delivery of each module for the Cabinet Maker Level-4 qualification. It is important for trainers to be flexible and be ready to adapt lesson plans to suit the context of the subject and the needs of their trainees.

Good teachers acknowledge that CBT means each and every trainee in the class learns at a different speed. The good teacher is prepared to throw aside the day's lesson plan and do something different (and unplanned) for the class even if it means 'writing' a lesson plans for each trainee to match their learning pace for that day or week.

Learning by doing is different from learning theory and then applying it. To learn to do something, trainees need someone looking over their shoulder saying 'it's not quite like that, it's like this', 'you do it like this because ...', or even 'tell me why you chose to do it like this?'.

In this way, trainees learn that theoretical knowledge is meaningless if it is not seen in the context of what they are doing. In other words, if a trainee doesn't know why they do something, they will not do it competently (skills underpinned by knowledge = competent performer).

This is how a *Cabinet Maker* acquires a practical grasp of the standards expected. It's not by learning it in theory, but because those standards are acquired through correction by people who show what the standards are, and correct the trainee where they do not meet those standards, and where they repeat it correction until they have internalized those standards.

## 3. Demonstration of skill

Demonstration or modeling a skill is a powerful tool, which is used, in vocational training. The instructions for trainers for demonstration are as under:

- 1. Read the procedure mentioned in the Trainer Guide for the relevant Learning Unit before demonstration.
- 2. Arrange all tools, equipment and consumable material, which are required for demonstration of a skill.
- 3. Practice the skill before demonstration to trainees, if possible.
- 4. Introduce the skill to trainees clearly at the commencement of demonstration.
- 5. Explain how the skill relates to the skill(s) already acquired and describe the expected results or show the objects to trainees.
- 6. Carry out demonstration in a way that can be seen by all trainees.
- 7. Use the same tools and materials that the learner will be using.
- 8. Go through EACH of the steps involved in performing the skill.
- 9. Go SLOWLY describe each step as it is completed.
- 10. Encourage the learners to move around and watch what you are doing from a number of different angles.
- 11. Identify critical or complex steps, or steps that involve safety precautions to be followed.
- 12. Explain theoretical knowledge where applicable and ask questions to trainees to test their understanding.
- 13. Try to involve the learners: Ask them questions about why they think the process may work that way.

- 14. Repeat critical steps in demonstration, if required.
- 15. Summarize the demonstration by asking questions to trainees.

Involvement in the process (actively seeing) is important at this stage. When you work on getting involved, getting people to participate, you make them a part of what is happening. Questions for clarification or explanation are important throughout the demonstration. It is up to the learners to ask questions about things they do not understand, but it is also important for trainers to seek out and elicit questions from learners. A trainer may need to do repeated demonstrations of difficult or complex skills.

## 4. Overview of the program

Course: Cabinet Maker Level 4 Total Course Duration: 450 Hours

#### **Course Overview:**

In this training program trainee will learn and acquire specialized knowledge and practical skills required to function as a Cabinet Maker both at domestic and commercial levels. Cabinet Maker will be responsible to Perform Polishing, Maintain Machines, Perform CAD/CAM Operations, Develop Professionalism and Develop Entrepreneur ship skills. The specific objectives of developing these qualifications are as under:

- Improve the overall quality of training delivery and setting national benchmarks for training of Cabinet Maker in the country
- Provide flexible pathways and progressions to learners enabling them to receive relevant, up-to-date and recent skills
- Provide basis for competency-based assessment which is recognized and accepted by employers
- Establish a standardized and sustainable system of training for Cabinet Maker in the country

Module Title	and Aim	Learning Units	Theory¹ Days/hours	Workplace <sup>2</sup> Days/hours	Timeframe of modules
		LU1. Ensure Personal safety			
		LU2. Ensure workplace safety.			
Module A.	Maintain	LU3. Ensure safety of tools and equipment	20	80	100
	Workplace Safety	LU4. Maintain First aid Box		80	100
		LU5. Ensure Machines Safety			
		LU6. Interpret Environmental Regulation			
		LU1. Maintain tools Cabinet			
Module B.	Maintain Tools	LU2. Arrange tool & Equipment	10	40	50
	and Equipment	LU3. Calibrate measuring tools	10	40	30
		LU4. Prepare tools for job			

<sup>&</sup>lt;sup>1</sup> Learning hours in training provider premises,

<sup>&</sup>lt;sup>2</sup> Training workshop, laboratory and on-the-job workplace

		LU5. Clean Tools & equipment			
		LU6. Manage Inventory of tools and equipment			
		LU1. Maintain Log yard			
Module C.		LU2. Dump Logs			
	Workplace /	LU3. Ensure clear passage	10	40	50
		LU4. Manage safe Storage of allied materials			
		LU5. Maintain Inventory			
		LU1. Apply basic Literacy skills			
Module D.	Develop Basic	LU2. Apply basic Numeracy skills			
	Literacy and Numeracy Skills	LU3. Perform Measurement	20	80	100
		LU4. Perform basic mathematical calculations			
		LU5. Calculate Area and Volume of Logs			
		LU1. Operate MS word			
Module E.	Develop basic	LU2. Operate MS Excel			
	computer	LU3. Operate MS Power Point	20	80	100
	operating skills	LU4. Perform Browsing			
		LU5. Print document			
		LU1. Interpret drawing/design			
Madula E	Internat Decis	LU2. Perform Interconversion of Scales			
Module F.	Interpret Basic Drawing & Design	LU3. Interpret drawing symbols	20	80	100
		LU4. Take Measurement			
		LU5. interpret Hatching			
		LU1. Adopt effective Listening			
Module G.	Develop basic communication	LU2. Develop Nonverbal Communication Skill		00	400
	Skills	LU3. Develop verbal communication Skill.	20	80	100
		LU4. Develop Written Communication Skills			

		LU1. Identify Machine and its sizes.			
		LU2. Identify components & Attachments			
Module H.	Identify Machines & Its Attachments	LU3. Identify capacities & capabilities of Machine	20	80	100
		LU4. Identify basic tools and supplies associated with Machines			
		LU5. Maintain Inventory of Machines			
		LU1. Perform Ripping			
		LU2. Perform Cross Cutting			
Module I.	Dranara lainta	LU3. Perform Curve Cutting			
wodule i.	Prepare Joints Manually	LU4. Perform Surface Plaining	20	80	100
		LU5. Perform Edge Plaining			
		LU6. Perform Size Plaining			
	LU7.	LU7. Make Joints Manually			
		LU1. Load log for cutting (by crane/manual)			
	Perform Wood LU4. Cutting LU5.	LU2. Cut slab with log band saw	20	80	100
		LU3. Cut planks with log band saw			
Module J.		LU4. Stack planks for seasoning			
		LU5. Perform cross cutting of planks with Pendulum saw	20	30	100
		LU6. Perform Pattern Cutting on Band Saw			
		LU7. Perform ripping of planks			
		LU8. Perform board cutting			
		LU1. Perform surface planning			
Module K.	Perform Wood	LU2. Perform edge plaining			
	Planning by Machine	LU3. Perform plaining for desired thickness	20	80	100
	waciiiie	LU4. Perform plaining for desired width			
		LU5. Cut to size (cross cutting)			
Module L.	Prepare Job on	LU1. Identify job as per drawing	20	80	100
	machine	LU2. Make Joints by machine	20	30	100

		LU3	Perform Drilling/Boring			
			Perform Profiling/ shaping			
			Perform Turning on Wood Lathe			
			Perform Lipping			
			Perform Sanding			
			•			
			Install Hardware (Woodworking)			
			Perform Pre-assembly of job			
Modulo M	Assemble the Job		clamp the job			
iviodule ivi.	Assemble the Job		Test accuracy of the assembled job	10	40	50
			Perform Final Assembling of job			
		LU5.	Test Firmness of Joints			
		LU1.	Perform Surface Finishing			
		LU2.	Arrange Polishing tools & Material			
		LU3.	Perform Lacquer Polishing			
Module N.	Perform Polishing	Perform Staining	20	80	50	
		LU5.	Perform Spirit/French Polishing	20	80	30
		LU6.	Perform Paint Finishing			
	LU	LU7.	Perform Varnish Finishing			
		LU8.	Perform High Gloss Finishing			
		LU1.	Replace Machine Belts/chains			
		LU2.	Perform Sharpening of Cutting Blades			
Module O.	<b>Maintain Machines</b>	LU3.	Perform Lubrication of machine parts.	20	80	100
		LU4.	Replace Drilling/ boring bits			
		LU5.	Replace Profile Cutters			
	D. ( 01D/0111	LU1.	Interpret Drawing & Design using CAD			
Module P.	Perform CAD/CAM Operations	LU2.	Draw & Design the job using CAD	20	80	100
	- p-3.4	LU3.	Load the desired Tools			

		LU4. Perform Simulation			
		LU5. Perform Material Loading			
		LU6. Perform CAM Operations			
		LU1. Resolve problems or disagreements with others			
		LU2. Demonstrate work ethic			
Module Q.	Develop	LU3. Work with others	10	40	100
	Professionalism.	LU4. Work independently	10	40	100
		LU5. Communicate with signals			
		LU6. Interpret documentation			
		LU1. Conduct Market survey			
		LU2. Develop basic marketing skills			
		LU3. Identify needs of the market.			
Module R.	Develop Entrepreneurial	LU4. Prepare Business plan	20	80	100
	skills	LU5. Implement marketing activities	20	00	100
		<b>LU6.</b> Evaluate marketing performance.			
		LU7. Develop Business promotion technique			
		LU8. Develop Business competition Skills			
		TOTAL	320	1280	1600

## Lesson Plan of Module. (Sample)

	FORMAT FOR LESSON PLAN		
Module:			
Learning	g Unit>		
Learning	g Outcomes>		
Methods	Key Notes	Media	Time
	Introduction		
	State the Learning Objectives of the lesson. This allows the learners to organize their thoughts on what they will learn and to perform. Also state some questions to recall prior knowledge of learners to arouse their interest and motivation		
	Main Body		
	Present the new information or material that is to be learned. Demonstration of a skill relevant with the Learning Unit is also stated here. Also mention the teaching and learning methods for each leaning element from <i>Trainer Guidelines</i> , the relevant media including handouts, power-point slides, videos, white board and time duration for each activity in the relevant columns		
	Conclusion		
	List the strategies used for summarizing and reviewing the lesson delivered. Also mention the strategies for formative assessment to ensure that the transfer of knowledge and skill has been achieved		
	<u>Assessment</u>		
	How this lesson will be assessed?		
·	Tot	al time:	•



## 5. Trainer's guidelines

Module 14: Perform Polishing						
Module 14: Perfo	rm Polishing					
Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media			
LU-1: Perform Surface Finishing	Deliver an illustrated presentation on how to Perform Surface Finishing with special attention to the following points. Prompt learners to consider learn and apply the following:  Identify the required tools for surface preparation.  Punch the nails for surface smoothing.  Check for surface dents  Fill up the cracks/minute holes  Remove the extra adhesive.  Apply sand paper for edge/ surface smoothing.  Display a slide or flip chart with a key question relating to Perform Surface Finishing.  Step 1 – Think  Working on their own, each learner thinks about the question and makes notes of their responses or key points which they believe to be important.  Step 2 – Pair  For the next step, each learner pairs up with a partner. The two learners exchange their ideas and make further notes to add clarity to their own ideas.  Step 3 – Share  The final step is for you to invite different pairs to share the ideas they have discussed in response to the key question relating to Perform Surface Finishing.  Learners must be able to practice and develop their knowledge and skills relating to Perform Surface Finishing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.	Class room / Work place/site	<ul> <li>Multimedia</li> <li>PPT     Presentation</li> <li>White board</li> </ul>			

## LU-2:

# Arrange Polishing tools & Material

Discuss and demonstrate the importance of Arrange Polishing tools & Material. Prompt learners to consider learn and apply the following points:

- · Identify polishing tools & materials
- Test spray gun for proper working.
- Set the spray gun for polishing.

## Prepare either

A flip chart / A PowerPoint slide / A handout

...showing the key topics about Arrange Polishing tools & Material. Go through all the key topics briefly and then allocate one key topic to each group.

Learners need to work in their small groups discussing the key topic that has been allocated to their group. Each group should use a sheet of flip chart paper to record **three main points** from their discussions that relate to **their key topic**.

After the discussion, begin the feedback session. Ask one group to come to the front of the class with their flipchart. Put up the flipchart where it can be easily seen by other learners. Ask the group to share the main points they have recorded for their key topic for Arrange Polishing tools & Material. Discuss these main points briefly with the whole group. Learners should make additional notes **on the flip chart** to record additional points their group had not identified.

Then ask the next group to share their flipchart showing the main points they have recorded for the next key topic. Repeat the discussion process. Continue until you have covered all the key topics.

End the group discussion activity with a summary. Photograph or scan all the flipcharts and use these to create a handout to distribute to all learners.

Learners must be able to practice and develop their knowledge and skills relating to Arrange Polishing tools & Material in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.

Class room / Work place / site

- Multimedia
- PPT
   Presentation
- White board
- •

## LU-3:

# Perform Lacquer Polishing

Discuss and demonstrate the importance of how to Perform Lacquer Polishing. Prompt learners to consider learn and apply the following:

- Select the desired material (sealer/ lacquer/ thinner) for lacquer polishing.
- Prepare solution (sealer & thinner) to apply first coat
- Spray the sealer.
- Match the Color if required.
- Apply sand paper to the product.
- Prepare solution (lacquer & thinner) to apply first coat.
- Apply the required number of lacquer coats.
- Apply sand paper to the product if required.

Learners need to devise 10 quiz questions with answers based on how to Perform Lacquer Polishing. They must make sure their questions cover key topics for Develop Verbal Communication.

Issue each learner with 10 blank cards. Each learner should number the cards and write their name on one side with a question about Perform Lacquer Polishing. On the reverse of the card, they should write an appropriate answer to their question.

For the quiz, arrange learners in two equal teams. Ask one learner to keep score using a suitable score-card. Player 1 for Team A asks one of their questions to Player 1 of Team B, who needs to answer the question. Discuss the answer with the group and ask the group to determine if the answer is correct. Player 1 of Team A then confirms the answer they had devised. (You need to correct answers if the learner's answer was not wholly correct.)

The scorekeeper records 1 mark for a correct answer under the appropriate team's score column. Play then passes to Player 1 of Team B, who asks their question to Player 1 of Team A, and so on.

Total the scores at the end of the quiz to see which team won.

After the quiz, collect learners' question/answer cards and check that answers provided were correct. Return any incorrect answers to learners and ask them to change their answer to the correct one.

Learners must be able to practice and develop their knowledge and skills relating to Perform Lacquer Polishing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.

Class room / Work place / lab

- Multi media
- White Board
- Stationary
- Polishing Material

## LU- 4:

## **Perform Staining**

Deliver an illustrated presentation on how to Perform Staining. Prompt learners to consider learn and apply the following:

- · Identify the required staining material.
- Prepare solution (Stain & thinner) to apply first coat to the product.
- Apply the required number of stain coats.
- Apply sand paper to the product if required.
- · Apply lacquer coat for final finishing of the product.

Display a flip chart showing the following key question related to Perform Staining: '(How to Perform Staining)'?

Give each learner a sheet of paper and asked them to write their name at the top. Explain to learners that they will be sharing their work with other learners.

Ask learners to write silently for 3-5 minutes answering the question displayed on the flip chart. When learners have completed writing, instruct them to pass their paper to the learner on their left. Each learner will read what their partner has passed to them and write a response. This will also be done silently.

After another 2-3 minutes, instruct the learners to pass the paper to their left a second time. Repeat the same procedure, also done in silence.

At the end of the activity, ask the learners to return the paper to the original writer. Allow learners a few moments to read over the responses to their writing. Ask learners to work in pairs to reflect on and discuss the responses to the question on the flip chart. When this activity is concluded, collect the papers and make copies for each learner.

Learners must be able to practice and develop their knowledge and skills relating to Perform Staining in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.

Class room
/ Work place /
Lab

- Multi media
- White Board
- Stationary
- Staining material

LU-5:	Discuss and demonstrate the importance to Perform Spirit/French Polishing.	Classroom /	•	Multimedia
Perform Spirit/French	Prompt learners to consider learn and apply the following:	Work place / lab	•	Stationery items pen
Polishing	Identify the required shellac material.		•	pencil, etc. Spirit
	Apply the powder coat to the product.		•	Clothing
	Sand the product.			
	Prepare solution (Shellac & Spirit) to apply first coat to the product.			
	Apply the required number of shellac coats.			
	Apply sand paper to the product if required.			
	Display a slide or flip chart with a key question relating to Perform Spirit/French Polishing.  • Step 1 – Think			
	Working on their own, each learner <b>thinks</b> about the question and makes notes of their responses or key points which they believe to be important.			
	Step 2 – Pair			
	For the next step, each learner <b>pairs</b> up with a partner. The two learners exchange their ideas and make further notes to add clarity to their own ideas.			
	Step 3 – Share			
	The final step is for you to invite different pairs to share the ideas they have discussed in response to the key question relating to Perform Spirit/French Polishing.			
	Learners must be able to practice and develop their knowledge and skills relating to Perform Spirit/French Polishing. in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.			

## LU-6: Perform Paint Finishing

Demonstrate an illustrative representation on how to Perform Paint Finishing. Prompt learners to consider learn and apply the following:

- Identify the required paint material.
- Select the quantity of materials (undercoat/paint/thinner) for paint finishing.
- Prepare solution (undercoat & thinner) to apply first coat
- Spray the undercoat to the product.
- Apply sand paper to the product.
- Prepare solution (paint & thinner) to apply first coat.
- Apply the required number of paint coats.
- Apply sand paper to the product if required.
- Apply lacquer coat for final finishing of the product. Learners need to devise 10 quiz questions
  with answers based on Perform Paint Finishing. They must make sure their questions cover
  key topics for Perform Paint Finishing.

Issue each learner with 10 blank cards. Each learner should number the cards and write their name on one side with a question about Perform Paint Finishing. On the reverse of the card, they should write an appropriate answer to their question.

For the quiz, arrange learners in two equal teams. Ask one learner to keep score using a suitable score-card. Player 1 for Team A asks one of their questions to Player 1 of Team B, who needs to answer the question. Discuss the answer with the group and ask the group to determine if the answer is correct. Player 1 of Team A then confirms the answer they had devised. (You need to correct answers if the learner's answer was not wholly correct.)

The scorekeeper records 1 mark for a correct answer under the appropriate team's score column. Play then passes to Player 1 of Team B, who asks their question to Player 1 of Team A, and so on.

Total the scores at the end of the guiz to see which team won.

After the quiz, collect learners' question/answer cards and check that answers provided were correct. Return any incorrect answers to learners and ask them to change their answer to the correct one.

Learners must be able to practice and develop their knowledge and skills relating to Perform Paint Finishing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.

## Classroom / Work place/Lab

- Multimedia
- Instruction charts
- Paint finishing material

## LU-7: Lead a brainstorm discussion and demonstrate how to Perform Varnish Finishing. Use ideas from Classroom / Multimedia the brainstorm to explain the following key points: Vanish material Work place/Lab **Perform Varnish Finishing** Identify the required varnish material. Select Quantity of material (Varnish/thinner) for lacquer polishing. Prepare solution (varnish & thinner) to apply first coat Spray varnish coat to the product. Perform Color matching if required. Apply sand paper to the product. Apply the required number of varnish coat. Prepare either: Display a flip chart showing the following key question: 'What are the steps to Perform Varnish Finishing?' Give each learner a sheet of paper and asked them to write their name at the top. Explain to learners that they will be sharing their work with other learners. Ask learners to write silently for 3-5 minutes answering the question displayed on the flip chart. When learners have completed writing, instruct them to pass their paper to the learner on their left. Each learner will read what their partner has passed to them and write a response. This will also be done silently. After another 2-3 minutes, instruct the learners to pass the paper to their left a second time. Repeat the same procedure, also done in silence. At the end of the activity, ask the learners to return the paper to the original writer. Allow learners a few moments to read over the responses to their writing. Ask learners to work in pairs to reflect on and discuss the responses to the question on the flip chart.

When this activity is concluded, collect the papers and make copies for each learner. Learners must be able to practice and develop their knowledge and skills relating to Perform Varnish Finishing in an appropriate practical setting. Ensure that learners have

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the opportunity to ask questions to support their understanding.

# LU-8: Perform High Gloss Finishing

Lead a brainstorm on Perform High Gloss Finishing. Use ideas from the brainstorm to explain the following key points:

- Identify the high gloss finishing material.
- Select the Quantity of materials (hardener/sealer/ lacquer/ thinner) for lacquer polishing.
- Prepare solution (sealer & thinner) to apply first coat
- Spray the sealer.
- Match the Color if required.
- Apply sand paper to the product.
- Prepare solution (lacquer, hardener & thinner) to apply first coat.
- Apply the required number of high gloss finish coats to the product.

Display a slide or flip chart with a key question relating to Perform High Gloss Finishing.

Step 1 - Think

Working on their own, each learner thinks about the question and makes notes of their responses or key points which they believe to be important.

Step 2 - Pair

For the next step, each learner pairs up with a partner. The two learners exchange their ideas and make further notes to add clarity to their own ideas.

Step 3 - Share

The final step is for you to invite different pairs to share the ideas they have discussed in response to the key question relating to Perform High Gloss Finishing

Learners must be able to practice and develop their knowledge and skills relating to Perform High Gloss Finishing in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.

Classroom / Work place / Lab

- Multi media
- PPT
   Presentation
- Learner Guide
- Finishing material



## **Module 15: Maintain Machines**

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU- 1: Replace Machine Belts/chains	Deliver an illustrated presentation on how to Replace Machine Belts/chains. Ensure you address the following points:  Disconnect power supply of machine. Remove the safety covers Check condition of the belt/chain. Unmount the belt/chain Replace the belt/chain as per specification. Adjust tension of the belt/chain. Connect the Power supply. Carry out test run of the machine. Mount the Safety covers.	Class room with multimedia aid, audio- visual facilities and flip charts	<ul> <li>PPT Presentations</li> <li>Videos</li> <li>Whiteboard</li> <li>Multi media</li> <li>Various Machines</li> </ul>
	Prepare either:  • A flip chart / A PowerPoint slide / A handoutshowing key topic how to Replace Machine Belts/chains. Learners need to work in small groups discussing the key topics. Each group should make notes from their discussions that identify three main points that related to each key topic.  After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic Identify Machines and its Sizes. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.  Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics. End the group discussion activity with a summary.  Learners must be able to practice and develop their knowledge and skills relating to Replace Machine Belts/chains in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.	Classroom / Work place/Lab	

1110.	Deliver on illustrated presentation on how to Perform Champains of Cutting Plades. France	Close ream	DDT
LU-2:	· · · · · · · · · · · · · · · · · · ·		• PPT
LU-2: Perform Sharpening of Cutting Blades	Deliver an illustrated presentation on how to Perform Sharpening of Cutting Blades. Ensure you address the importance of the following points:  Disconnect power supply of machine. Check condition of the cutting blade Lock the spindle. Unmount the safety covers/jigs/fixtures Remove the blade. Identify the required sharpening machine. Remove the slage Sharp the blade Remount the blade. Unlock the spindle. Adjust tension of the blade if required. Connect the Power supply. Carry out test run of the machine. Mount the Safety covers.	Class room with multimedia aid, audio-visual facilities and flip charts	<ul> <li>PPT</li> <li>Presentation</li> <li>Videos</li> <li>Whiteboard</li> <li>Learning guide</li> <li>Different Components and attachments</li> </ul>
	Display a slide or flip chart with a key question relating to Perform Sharpening of Cutting Blades.  Step 1 – Think	Workshop or Workplace	
	Working on their own, each learner thinks about the question and makes notes of their responses or key points which they believe to be important.		
	Step 2 – Pair		
	For the next step, each learner pairs up with a partner. The two learners exchange their ideas and make further notes to add clarity to their own ideas.		
	Step 3 – Share		
	The final step is for you to invite different pairs to share the ideas they have discussed in response to the key question relating to Perform Sharpening of Cutting Blades.		
	Observe the students and give feedback to Improve the Knowledge and skill.		
	Learners must be able to practice and develop their knowledge and skills relating to Perform Sharpening of Cutting Blades in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.		

LU-3:		Class room with	• PPT
Perform Lubrication of	Lead a discussion about importance of how to Perform Lubrication of machine parts. Use real examples to support the discussion and ensure the discussion considers:	multimedia aid, audio-	Presentations
machine parts	Identify the lubricating tools & material.	visual facilities and	• Videos
	Observe noise of the machine for smooth functioning.	flip charts	Whiteboard
	Perform lubrication of the machine parts.		<ul><li>Learning guide</li></ul>
	Learners need to devise 10 quiz questions with answers based on Perform Lubrication of machine parts. They must make sure their questions cover key topics for how to develop and use communication skills in Pine nuts processing.		3
	Issue each learner with 10 blank cards. Each learner should number the cards and write their name on one side with a question about how to Perform Lubrication of machine parts. On the reverse of the card, they should write an appropriate answer to their question.		
	For the quiz, arrange learners in two equal teams. Ask one learner to keep score using a suitable score-card. Player 1 for Team A asks one of their questions to Player 1 of Team B, who needs to answer the question. Discuss the answer with the group and ask the group to determine if the answer is correct. Player 1 of Team A then confirms the answer they had devised. (You need to correct answers if the learner's answer was not wholly correct.)		
	<ul> <li>The scorekeeper records 1 mark for a correct answer under the appropriate team's score column. Play then passes to Player 1 of Team B, who asks their question to Player 1 of Team A, and so on.</li> </ul>	Workshop or Workplace	
	Total the scores at the end of the quiz to see which team won.		
	<ul> <li>After the quiz, collect learners' question/answer cards and check that answers provided were correct. Return any incorrect answers to learners and ask them to change their answer to the correct one.</li> </ul>		
	Learners must be able to practice and develop their knowledge and skills relating to Perform Lubrication of machine parts in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU-4:	Lead a discussion about how Replace Drilling/ boring bits. Use real examples to support	Class room with	PPT     Presentations

Replace Drilling/ boring bits	the discussion and ensure the discussion considers:  • Identify types of drilling/boring bits  • Check condition of drilling/boring bits  • Identify the required tools for the replacement of drilling/boring bits.  • Replace the faulty drilling/boring bit.  Divide the Trainees into Group and perform the following about how Replace Drilling/	multimedia aid, audio- visual facilities and flip charts	<ul><li>Videos</li><li>Whiteboard</li><li>Learning guide</li><li>Drilling bits</li></ul>
	<ul> <li>boring bits</li> <li>Role play</li> <li>Group Discussion</li> <li>Brain storming</li> <li>Observe the students and give feedback to Improve the Knowledge and skill.</li> </ul>	Workshop or Workplace	
	Learners must be able to practice and develop their knowledge and skills relating Replace Drilling/ boring bits in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU-5: Replace Profile Cutters	Deliver an illustrated presentation on how to Replace Profile Cutters. Ensure you address the importance of the following points:  • Identify the profiling cutter.  • Disconnect power supply of machine.	Class room with multimedia aid, audio-	PPT     Presentations     .

Check condition of the cutting blade	visual	• Videos
Lock the spindle.	facilities and	
Unmount the safety covers/jigs/fixtures	flip charts	Whiteboard
Remove the profile cutters		Inventory
Remount the desired profile in the cutter head.		Book
Remount the safety covers/jigs/fixtures.		
Unlock the Spindle.		
Connect the power supply.		
Carry out test run.	Workshop or	
Perform operations.	Workplace	
Prepare either: A flip chart / A PowerPoint slides / A handout		
showing the key topics about Replace Profile Cutters. Go through all the key topics briefly and then allocate <b>one key topic</b> to each group.		
Learners need to work in their small groups discussing the key topic that has been allocated to their group. Each group should use a sheet of flip chart paper to record <b>three main points</b> from their discussions that relate to <b>their key topic</b> .		
After the discussion, begin the feedback session. Ask one group to come to the front of the class with their flipchart. Put up the flipchart where it can be easily seen by other learners. Ask the group to share the main points they have recorded for their key topic for Replace Profile Cutters. Discuss these main points briefly with the whole group. Learners should make additional notes <b>on the flip chart</b> to record additional points their group had not identified.		
Then ask the next group to share their flipchart showing the main points they have recorded for the next key topic. Repeat the discussion process. Continue until you have covered all the key topics.		
End the group discussion activity with a summary. Photograph or scan all the flipcharts and use these to create a handout to distribute to all learners.		
Learners must be able to practice and develop their knowledge and skills relating to Replace Profile Cutters in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.		



## Module 16: Perform CAD/CAM Operations

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU-1: Interpret Drawing & Design using CAD	Deliver an illustrated presentation on Interpret Drawing & Design using CAD. Ensure you address the importance of the following points:  • Collect the desired drawing & design  • Transfer the desired drawing & design to the concerned section/ person  • Perform supervision of the job as per drawing  Display a slide or flip chart with a key question relating to Interpret Drawing & Design using CAD.  Step 1 – Think  Working on their own, each learner thinks about the question and makes notes of their responses or key points which they believe to be important.  Step 2 – Pair  For the next step, each learner pairs up with a partner. The two learners exchange their ideas and make further notes to add clarity to their own ideas.  Step 3 – Share  The final step is for you to invite different pairs to share the ideas they have discussed in response to the key question relating to Interpret Drawing & Design using CAD.  Learners must be able to practice and develop their knowledge and skills relating to Interpret Drawing & Design using CAD in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.	Class room with multimedia aid, audiovisual facilities and flip charts  Workshop or Workplace	PPT Presentations. Videos Whiteboard Learning guide CAD Drawing
LU-2: Draw & Design	Deliver an illustrated presentation on Draw & Design the job using CAD. Ensure you address the importance of the following points:	Class room with	<ul><li>PPT Presentation</li><li>Videos</li></ul>

the job using CAD	Consult catalogue as per client demand Set Interface in CAD software Make Multi view drawing & design of the job Make 3D drawing & design of the job/ part Render the job as per client's demand Plot/ print the job Prepare either:  Aflip chart / A PowerPoint slide / A handoutshowing the key topics about Draw & Design the job using CAD. Go through all the key topics briefly and then allocate one key topic to each group. Learners need to work in their small groups discussing the key topic that has been allocated to their group. Each group should use a sheet of flip chart paper to record three main points from their discussions that relate to their key topic.  After the discussion, begin the feedback session. Ask one group to come to the front of the class with their flipchart. Put up the flipchart where it can be easily seen by other learners. Ask the group to share the main points they have recorded for their key topic for Draw & Design the job using CAD. Discuss these main points briefly with the whole group. Learners should make additional notes on the flip chart to record additional points their group had not identified.  Then ask the next group to share their flipchart showing the main points they have recorded for the next key topic. Repeat the discussion process. Continue until you have covered all the key topics.  End the group discussion activity with a summary. Photograph or scan all the flipcharts and use these to create a handout to distribute to all learners.  Learners must be able to practice and develop their knowledge and skills relating to Draw & Design the job using CAD in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.	multimedia aid, audio-visual facilities and flip charts  Workshop or Workplace	Whiteboard     Learning guide     CAD
LU-3: Load the desired Tools	Lead a discussion about importance of Loading the desired Tools. Use real examples to support the discussion and ensure the discussion considers the following points:  • Identify the required tools as per process	Class room with multimedia	<ul><li>PPT     Presentations.</li><li>Videos</li><li>Whiteboard</li></ul>

	Select the tools in the CAD/CAM software Load the tools in CAD/CAM software Prepare either:  A flip chart / A PowerPoint slides / A handoutshowing key topics for Load the desired Tools. Learners need to work in small groups discussing the key topics. Each group should make notes from their discussions that identify three main points that related to each key topic.  After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic for Load the desired Tools. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.  Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics. End the group discussion activity with a summary.  Learners must be able to practice and develop their knowledge and skills relating to Load the desired Tools in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.		• Learning guide
LU-4: Perform Simulation	Lead a discussion about Perform Simulation. Use real examples to support the discussion and ensure the discussion considers:  • Convert CAD to CAM codes using the software  • Run Simulation to check accuracy of process  Display a slide or flip chart with a key question relating to Perform Simulation.	Class room with multimedia aid, audiovisual facilities and flip charts	<ul> <li>PPT     Presentations.</li> <li>Videos</li> <li>Whiteboard</li> <li>Learning guide</li> </ul>

	Step 1 – Think  Working on their own, each learner thinks about the question and makes notes of their responses or key points which they believe to be important.  Step 2 – Pair  For the next step, each learner pairs up with a partner. The two learners exchange their ideas and make further notes to add clarity to their own ideas.  Step 3 – Share  The final step is for you to invite different pairs to share the ideas they have discussed in response to the key question relating to Perform Simulation.  Learners must be able to practice and develop their knowledge and skills relating to Perform Simulation in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.	Workshop or Workplace	
LU-5: Perform Material Loading	Discuss and demonstrate the Perform Material Loading and prompt learners to consider learn and apply the following:  • Identify required parts of the job  • Set the clamping/ vacuum sucking units as per parts of the job  • Load the job parts on the machine bed Prepare either:  . A flip chart / A PowerPoint slide / A handoutshowing the key topics about Perform Material Loading. Go through all the key topics briefly and	Class room with multimedia aid, audio- visual facilities and flip charts • Workshop or Workplace	<ul> <li>PPT Presentations.</li> <li>Videos</li> <li>Whiteboard</li> <li>Learning guide</li> </ul>

	then ellegate and key tanie to each group	<u> </u>	
	then allocate <b>one key topic</b> to each group.		
	Learners need to work in their small groups discussing the key topic that has been allocated to their group. Each group should use a sheet of flip chart paper to record <b>three main points</b> from their discussions that relate to <b>their key topic</b> .		
	After the discussion, begin the feedback session. Ask one group to come to the front of the class with their flipchart. Put up the flipchart where it can be easily seen by other learners. Ask the group to share the main points they have recorded for their key topic for Perform Material Loading. Discuss these main points briefly with the whole group. Learners should make additional notes on the flip chart to record additional points their group had not identified.		
	Then ask the next group to share their flipchart showing the main points they have recorded for the next key topic. Repeat the discussion process. Continue until you have covered all the key topics.		
	End the group discussion activity with a summary. Photograph or scan all the flipcharts and use these to create a handout to distribute to all learners.		
	Learners must be able to practice and develop their knowledge and skills relating to Perform Material Loading in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU-6: Perform CAM Operations	Discuss and demonstrate the importance of Perform CAM Operations and prompt learners to consider learn and apply the following:  • Ensure the loading of desired tools/ bits in ATC.  • Calibrate the machine.  • Execute the machine to complete the process  • Take out the completed part Prepare either:	Class room with multimedia aid, audio- visual facilities and flip charts	<ul> <li>PPT Presentations.</li> <li>Videos</li> <li>Whiteboard</li> <li>Learning guide</li> </ul>
	. A flip chart / A PowerPoint slide / A handoutshowing the key topics about Perform CAM Operations. Go through all the key topics briefly and then allocate <b>one key topic</b> to each group.		

group. Each group should use a sheet of flip chart paper to record <b>three main points</b> from their discussions that relate to <b>their key topic</b> .	Workshop or Workplace	
After the discussion, begin the feedback session. Ask one group to come to the front of the class with their flipchart. Put up the flipchart where it can be easily seen by other learners. Ask the group to share the main points they have recorded for their key topic for Perform CAM Operations. Discuss these main points briefly with the whole group. Learners should make additional notes on the flip chart to record additional points their group had not identified.		
Then ask the next group to share their flipchart showing the main points they have recorded for the next key topic. Repeat the discussion process. Continue until you have covered all the key topics.		
End the group discussion activity with a summary. Photograph or scan all the flipcharts and use these to create a handout to distribute to all learners.		
Learners must be able to practice and develop their knowledge and skills relating to Perform CAM Operations in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.		



## Module 17: Develop Professionalism

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media	
LU-2: Demonstrate work ethics	Deliver an illustrated presentation on how to Demonstrate Work ethics. Ensure you address the importance of the following points:  • Follow principles of work ethics in all situations. • Adopt professional behavior  Display a slide or flip chart with a key question relating to Demonstrate Work ethics.  Step 1 – Think  Working on their own, each learner thinks about the question and makes notes of their responses or key points which they believe to be important.  Step 2 – Pair  For the next step, each learner pairs up with a partner. The two learners exchange their ideas and make further notes to add clarity to their own ideas.  Step 3 – Share  The final step is for you to invite different pairs to share the ideas they have discussed in response to the key question relating to Demonstrate Work ethics  Learners must be able to practice and develop their knowledge and skills relating to Demonstrate Work ethics in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.	Class room with multimedia aid, audio-visual facilities and flip charts	<ul> <li>PPT Presentations</li> <li>Videos</li> <li>Whiteboard</li> <li>Learning guide</li> </ul>	

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU-3: Work in team	Lead a brainstorm on how to Work in team. Use ideas from the brainstorm to explain the following key points:  • Work as a team member to achieve common goals • Keep open mind • Participate in work place meetings • Communicate accurately and clearly • Co-ordinate job related activities • Cooperate with others  Learners need to devise 10 quiz questions with answers based on performing single phase connection. They must make sure their questions cover key topics for Work in team.  Issue each learner with 10 blank cards. Each learner should number the cards and write their name on one side with a question about how to Work in team. On the reverse of the card, they should write an appropriate answer to their question  For the quiz, arrange learners in two equal teams. Ask one learner to keep score using a suitable score-card. Player 1 for Team A asks one of their questions to Player 1 of Team B, who needs to answer the question. Discuss the answer with the group and ask the group to determine if the answer is correct. Player 1 of Team A then confirms the answer they had devised. (You need to correct answers if the learner's answer was not wholly correct.)  The scorekeeper records 1 mark for a correct answer under the appropriate team's score column. Play then passes to Player 1 of Team B, who asks their question to Player 1 of Team A, and so on.  Total the scores at the end of the quiz to see which team won.  After the quiz, collect learners' question/answer cards and check that answers provided were correct. Return any incorrect answers to learners and ask them to change their answer to the correct one.  To prepare for practical sessions, divide the trainees in small groups. Provide each group with different tasks related to Work in team. Check that each trainee understands their task. Trainees need to practice their skills to Work in team in a real or realistic environment. Learners must be able to practice and develop their knowledge and skills relating to roast the Pine nuts in an appropriate practical setting.	Class room with multimedia aid, audio-visual facilities and flip charts	<ul> <li>PPT Presentations</li> <li>Videos</li> <li>Whiteboard</li> <li>Learning guide</li> </ul>

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU-4: Work independently	Lead a brainstorm discussion and demonstrate how to Work independently. Use ideas from the brainstorm to explain the following key points:  • Confirm and clarify assignment • Take initiative, anticipate and prepare for next steps in job • Identify and resolve potential and actual problems • Communicate with other site personnel • Complete assignment  Prepare either:  Display a flip chart showing the following key question: 'What are the important steps to Work independently?'  Give each learner a sheet of paper and asked them to write their name at the top. Explain to learners that they will be sharing their work with other learners.  Ask learners to write silently for 3-5 minutes answering the question displayed on the flip chart. When learners have completed writing, instruct them to pass their paper to the learner on their left. Each learner will read what their partner has passed to them and write a response. This will also be done silently.  After another 2-3 minutes, instruct the learners to pass the paper to their left a second time. Repeat the same procedure, also done in silence.  At the end of the activity, ask the learners to return the paper to the original writer. Allow learners a few moments to read over the responses to their writing.  Ask learners to work in pairs to reflect on and discuss the responses to the question on the flip chart.  When this activity is concluded, collect the papers and make copies for each learner.	_	PPT Presentations. Videos Whiteboard Learning guide
	Learners must be able to practice and develop their knowledge and skills relating to Work independently in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.		

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU-5: Communicate with signals	Deliver an illustrated presentation on how to Communicate with signals. Ensure you address the following points:  • Identify and work with signals  • Communicate with audible signals, such as back-up alarm, and site emergency horn  • Communicate with hand signals Prepare either:  A flip chart / A PowerPoint slide / A handout showing the key topics about Communicate with signals. Go through all the key topics briefly and then allocate one key topic to each group.  Learners need to work in their small groups discussing the key topic that has been allocated to their group. Each group should use a sheet of flip chart paper to record three main points from their discussions that relate to their key topic.  After the discussion, begin the feedback session. Ask one group to come to the front of the class with their flipchart. Put up the flipchart where it can be easily seen by other learners. Ask the group to share the main points they have recorded for their key topic for Communicate with signals. Discuss these main points briefly with the whole group. Learners should make additional notes on the flip chart to record additional points their group had not identified.  Then ask the next group to share their flipchart showing the main points they have recorded for the next key topic. Repeat the discussion process. Continue until you have covered all the key topics.  End the group discussion activity with a summary. Photograph or scan all the flipcharts and use these to create a handout to distribute to all learners.  Learners must be able to practice and develop their knowledge and skills relating to Communicate with signals in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.	Class room with multimedia aid, audio-visual facilities and flip charts	PPT Presentations. Videos Whiteboard Learning guide

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU-6: Interpret documentation	Lead a brainstorm on Interpret documentation. Use ideas from the brainstorm to explain the following key points:  • Access and maintain documents • Provide complete, legible and accurate information in documents. • Interpret equipment inspection documentation from previous shifts before conducting pre-operational inspection  Display a slide or flip chart with a key question relating to Interpret documentation  Step 1 – Think  Working on their own, each learner thinks about the question and makes notes of their responses or key points which they believe to be important.  Step 2 – Pair  For the next step, each learner pairs up with a partner. The two learners exchange their ideas and make further notes to add clarity to their own ideas.  Step 3 – Share  The final step is for you to invite different pairs to share the ideas they have discussed in response to the key question relating to Interpret documentation.  Learners must be able to practice and develop their knowledge and skills relating to Interpret documentation in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.	Class room with multimedia aid, audio-visual facilities and flip charts	<ul> <li>Multi media</li> <li>Packing material</li> <li>Wight scale</li> </ul>



## **Module 18: Develop Entrepreneurial skills**

Learning Unit	Suggested Teaching / Learning Activities	Delivery Context	Media
LU-1: Conduct Market Survey	Deliver an illustrated presentation on how to Conduct Market Survey. Ensure you address the importance of the following points:  Collect information regarding market size and potential from appropriate sources Investigate market trends and developments to identify market needs relative to business ideas Gather market information from primary and secondary sources to identify possible market needs in relation to business ideas Identify ethical and cultural requirements of the market and their impact on business ideas Identify new and emerging markets and document their features Identify and organize information on expected market growth or decline and associated risk factors  Prepare either:  A flip chart A PowerPoint slide A handout  A handout  A handout  A handout  A powerPoint slide A handout  A powerPoint slide A handout  A handout  A handout  A handout  A handout  A powerPoint slide A handout  A handout  A handout  A handout  A powerPoint slide A powerPoint slide A handout  A powerPoint slide A powerPoint slide A powerPo	Class room with multimedia aid, audiovisual facilities and flip charts	PPT Presentations Videos Whiteboard Multi media

LU-2:	Deliver an illustrated presentation on how to Develop basic marketing skills. Ensure you address the	Class room	• PPT
LU-2: Develop basic marketing skills	Deliver an illustrated presentation on how to Develop basic marketing skills. Ensure you address the importance of the following points:  Present a design to the client as per requirement Finalize the business deal Purchase the equipment/tools and consumables as per agreed design Adopt correct means of transportation Select promotional means, according to target needs of clients  Display a slide or flip chart with a key question relating to Develop basic marketing skills.  Step 1 – Think Working on their own, each learner thinks about the question and makes notes of their responses or key points which they believe to be important.  Step 2 – Pair For the next step, each learner pairs up with a partner. The two learners exchange their ideas and make further notes to add clarity to their own ideas.  Step 3 – Share  The final step is for you to invite different pairs to share the ideas they have discussed in response to the key question relating to Develop basic marketing skills.  Observe the students and give feedback to Improve the Knowledge and skill.  Learners must be able to practice and develop their knowledge and skills relating to Develop basic marketing skills in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.	Class room with multimedia aid, audio-visual facilities and flip charts	<ul> <li>PPT</li> <li>Presentation</li> <li>Videos</li> <li>Whiteboard</li> <li>Learning guide</li> </ul>
LU-3: Identify needs of the market.	Lead a discussion about importance of how to Identify needs of the market. Use real examples to support the discussion and ensure the discussion considers:  • Analyse upcoming market trends.  • Develop Professional network.  • Demonstrate behavioural skills.  • Develop sound interpersonal skills  • Develop new designs.  Learners need to devise 10 quiz questions with answers based on Identify needs of the market. They must make sure their questions cover key topics for how to Identify needs of the market. Issue each learner with 10 blank cards. Each learner should number the cards and write their name on one side with a question about how to Identify needs of the market. On the reverse of the card, they should write an appropriate answer to their question.  For the quiz, arrange learners in two equal teams. Ask one learner to keep score using a suitable score-card. Player 1 for Team A asks one of their questions to Player 1 of Team B, who needs to answer the question. Discuss the answer with the group and ask the group to determine if the	Class room with multimedia aid, audio- visual facilities and flip charts	<ul> <li>PPT     Presentations.</li> <li>Videos</li> <li>Whiteboard</li> <li>Learning guide</li> </ul>

	answer is correct. Player 1 of Team A then confirms the answer they had devised. (You need to correct answers if the learner's answer was not wholly correct.)  The scorekeeper records 1 mark for a correct answer under the appropriate team's score column. Play then passes to Player 1 of Team B, who asks their question to Player 1 of Team A, and so on.  Total the scores at the end of the quiz to see which team won.  After the quiz, collect learners' question/answer cards and check that answers provided were correct. Return any incorrect answers to learners and ask them to change their answer to the correct one.  Learners must be able to practice and develop their knowledge and skills relating to Identify needs of the market. in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU-4: Prepare Business plan	Deliver an illustrated presentation on how to Prepare Business plan. Use real examples to support the discussion and ensure the discussion considers:  Develop operational goals and targets to meet the enterprise strategic plan.  Identify and incorporate supply chains into the business plan.  Identify risk management needs are within the business plan.  Set clear and measurable indicators of operational performance to allow for realistic analysis of performance.  Divide the Trainees into Group and perform the following about how to Prepare Business plan  Role play  Group Discussion  Brain storming  Observe the students and give feedback to Improve the Knowledge and skill.  Learners must be able to practice and develop their knowledge and skills relating to Prepare Business plan in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.	Class room with multimedia aid, audio- visual facilities and flip charts	<ul> <li>PPT Presentations.</li> <li>Videos</li> <li>Whiteboard</li> <li>Learning guide</li> </ul>
LU-5: Implement marketing activities	Deliver an illustrated presentation on how to Implement marketing activities. Ensure you address the importance of the following points:  • Schedule planned marketing activities within appropriate timeframes  • Develop measurable performance targets that meet business plan objectives  • Organize distribution channels and ensure product and service information is accurate and readily available to clients  • Implement marketing activities within budgetary constraints to meet legal, ethical and enterprise requirements  Prepare either:  • A flip chart / A PowerPoint slides / A handout	Class room with multimedia aid, audio- visual facilities and flip charts	<ul> <li>PPT Presentations.</li> <li>Videos</li> <li>Whiteboard</li> <li>Learning guide</li> </ul>

	showing the key topics about Implement marketing activities. Go through all the key topics briefly and then allocate <b>one key topic</b> to each group.		
	Learners need to work in their small groups discussing the key topic that has been allocated to their group. Each group should use a sheet of flip chart paper to record <b>three main points</b> from their discussions that relate to <b>their key topic</b> .		
	After the discussion, begin the feedback session. Ask one group to come to the front of the class with their flipchart. Put up the flipchart where it can be easily seen by other learners. Ask the group to share the main points they have recorded for their key topic for Implement marketing activities. Discuss these main points briefly with the whole group. Learners should make additional notes <b>on the flip chart</b> to record additional points their group had not identified.		
	Then ask the next group to share their flipchart showing the main points they have recorded for the next key topic. Repeat the discussion process. Continue until you have covered all the key topics.		
	End the group discussion activity with a summary. Photograph or scan all the flipcharts and use these to create a handout to distribute to all learners.		
	Learners must be able to practice and develop their knowledge and skills relating to Implement marketing activities in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU-6: Evaluate	Deliver an illustrated presentation on how to Evaluate marketing performance. Ensure you address the importance of the following points:	Class room with	PPT Presentations.
marketing	Review the established marketing objectives to ensure they remain viable	multimedia aid, audio- visual facilities and flip charts	<ul><li>Videos</li><li>Whiteboard</li><li>Multi media</li></ul>
performance	<ul> <li>Assess product, pricing and distribution policies in relation to market changes, marketing objectives and enterprise requirements.</li> </ul>		
	<ul> <li>Identify areas of positive marketing performance and take corrective action to remedy poor marketing performance areas.</li> <li>Prepare either:</li> </ul>		
	<ul> <li>A flip charts</li> <li>A PowerPoint slides</li> <li>A handout</li> </ul>		
	showing key topic how to Evaluate marketing performance. Learners need to work in small groups discussing the key topics. Each group should make notes from their discussions that identify <b>three main points</b> that related to <b>each key topic</b> .		
	After the discussion, begin the feedback session. Ask one group to share the main points they have recorded for the first key topic to evaluate marketing performance. Discuss these main points briefly with the whole group. Learners should make additional notes to record additional points their group had not identified.		
	Then ask the next group to share the main points they have recorded for the second key topic. Repeat the discussion process. Continue until you have covered all the key topics.		
	End the group discussion activity with a summary.		

	Learners must be able to practice and develop their knowledge and skills relating to Evaluate marketing performance in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU-7: Develop Business promotion technique	Deliver an illustrated presentation on how to Develop Business promotion technique. Ensure you address the importance of the following points:  • Establish marketing objectives based on current and potential product specifications • Select appropriate production processes to ensure product specifications are met • Select selling strategies to ensure required prices are achieved • Select appropriate distribution channel options to ensure access to target markets is achieved efficiently and appropriately • Establish time-frames for distribution and selling activities  Display a slide or flip chart with a key question relating to Develop Business promotion technique.  Step 1 – Think  Working on their own, each learner thinks about the question and makes notes of their responses or key points which they believe to be important.  Step 2 – Pair  For the next step, each learner pairs up with a partner. The two learners exchange their ideas and make further notes to add clarity to their own ideas.  Step 3 – Share  The final step is for you to invite different pairs to share the ideas they have discussed in response to the key question relating to Develop Business promotion technique  Observe the students and give feedback to Improve the Knowledge and skill.  Learners must be able to practice and develop their knowledge and skills relating to Develop Business promotion technique in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.	Class room with multimedia aid, audio-visual facilities and flip charts	<ul> <li>PPT Presentations.</li> <li>Videos</li> <li>Whiteboard</li> <li>Multi media</li> </ul>
LU-8: Develop Business Competition skills	Lead a discussion about importance of how to Develop Business Competition skills. Use real examples to support the discussion and ensure the discussion considers:  • Prepare and record detailed plans for promotional activities  • Outline objectives, level of exposure and available markets  • Ensure strategies take account of time management and scheduling issues, and resource constraints	Class room with multimedia aid, audio-visual facilities	<ul><li>PPT     Presentations.</li><li>Videos</li><li>Whiteboard</li><li>Multi media</li></ul>

Create promotional materials that enhance the product and commercial presentation

Record and communicate priorities, responsibilities, timelines and budgets for promotional activities.

Learners need to devise 10 quiz questions with answers based on Develop Business Competition skills. They must make sure their questions cover key topics for how to Develop Business Competition skills.

Issue each learner with 10 blank cards. Each learner should number the cards and write their name on one side with a question about how to Develop Business Competition skills. On the reverse of the card, they should write an appropriate answer to their question.

For the quiz, arrange learners in two equal teams. Ask one learner to keep score using a suitable score-card. Player 1 for Team A asks one of their questions to Player 1 of Team B, who needs to answer the question. Discuss the answer with the group and ask the group to determine if the answer is correct. Player 1 of Team A then confirms the answer they had devised. (You need to correct answers if the learner's answer was not wholly correct.)

The scorekeeper records 1 mark for a correct answer under the appropriate team's score column. Play then passes to Player 1 of Team B, who asks their question to Player 1 of Team A, and so on.

Total the scores at the end of the guiz to see which team won.

After the quiz, collect learners' question/answer cards and check that answers provided were correct. Return any incorrect answers to learners and ask them to change their answer to the correct one.

Learners must be able to practice and develop their knowledge and skills relating to Develop Business Competition skills in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding.

and flip charts

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## **Frequently Asked Questions**

1.	What is Competency Based Training (CBT) and how is it different from currently offered trainings in institutes?	Competency-based training (CBT) is an approach to vocational education and training that places emphasis on what a person can do in the workplace as a result of completing a program of training. Compared to conventional programs, the competency-based training is not primarily content based; it rather focuses on the competence requirement of the envisaged job role. The whole qualification refers to certain industry standard criterion and is modularized in nature rather than being course oriented.
2.	What is the passing criterion for CBT certificate?	You shall be required to be declared "Competent" in the summative assessment to attain the certificate.
3.	What are the entry requirements for this course?	The entry requirement for this course is 8th Grade or equivalent.
4.	How can I progress in my educational career after attaining this certificate?	You shall be eligible to take admission in the National Vocational Certificate Level-5 in Carpentry Sector (Cabinet Maker) after the completion of National Vocational Certificate Level-4 in Carpentry Sector (Cabinet Maker): You shall be able to progress further to take admission in a level-5, DAE or equivalent course (if applicable). In certain case, you may be required to attain an equivalence certificate from The Inter Board Committee of Chairmen (IBCC).
5.	If I have the experience and skills mentioned in the competency standards, do I still need to attend the course to attain this certificate?	You can opt to take part in the Recognition of Prior Learning (RPL) program by contacting the relevant training institute and getting assessed by providing the required evidences.
6.	What is the entry requirement for Recognition of Prior Learning program (RPL)?	There is no general entry requirement. The institute shall assess you, identify your competence gaps and offer you courses to cover the gaps; after which you can take up the final assessment.
7.	Is there any age restriction for entry in this course or Recognition of Prior Learning program (RPL)?	There are no age restrictions to enter this course or take up the Recognition of Prior Learning program

8. Wha	nat is the duration of this course?	The duration of the course work is 1,510 hrs. (11 months)
9. Wha	nat are the class timings?	The classes are normally offered 25 days a month from 08:00am to 01:30pm. These may vary according to the practices of certain institutes.
	nat is equivalence of this certificate with er qualifications?	As per the national vocational qualification's framework, the level-4 certificate is equivalent to Matriculation. The equivalence certificate can be obtained from The Inter Board Committee of Chairmen (IBCC).
	nat is the importance of this certificate National and International job market?	This certificate is based on the nationally standardized and notified competency standards by National Vocational and Technical Training Commission (NAVTTC). These standards are also recognized worldwide as all the standards are coded using international methodology and are accessible to the employers worldwide through NAVTTC website.
cert	nich jobs can I get after attaining this rtificate? Are there job for this certificate public sector as well?	You shall be able to take up jobs in the local or overseas construction companies in heavy machinery operator job profile.
	nat are possible career progressions in ustry after attaining this certificate?	You shall be able to progress up to the level of supervisor after attaining sufficient experience, knowledge and skills during the job. Attaining additional relevant qualifications may aid your career advancement to even higher levels.
	his certificate recognized by any npetent authority in Pakistan?	This certificate is based on the nationally standardized and notified competency standards by National Vocational and Technical Training Commission (NAVTTC). The official certificates shall be awarded by the relevant certificate awarding body.
cert	on-the-job training mandatory for this tificate? If yes, what is the duration of the-job training?	On-the-job training is not a requirement for final / summative assessment of this certificate. However, taking up on-the-job training after or during the course work may add your chances to get a job afterwards.
	w much salary can I get on job after aining this certificate?	The minimum wages announced by the Government of Pakistan in 2019 are PKR 17,500. This may vary in subsequent years and different regions of the country. Progressive employers may pay more than the mentioned amount. The heavy Machinery Operator normally earns 20,000 to 25,000 in the start.
17. Are	e there any alternative certificates	There are some short courses offered by some training institutes on this subject. Some

which I can take up?	institutes may still be offering conventional certificate courses in the field.
18. What is the teaching language of this course?	The leaching language of this course is Urdu and English.
19. Is it possible to switch to other certifica programs during the course?	There are some short courses offered by some training institutes on this subject. Some institutes may still be offering conventional certificate courses in the field.
20. What is the examination / assessment system in this program?	Competency based assessments are organized by training institutes during the course which serve the purpose of assessing the progress and preparedness of each student. Final / summative assessments are organized by the relevant qualification awarding bodies at the end of the certificate program. You shall be required to be declared "Competent" in the summative assessment to attain the certificate.
21. Does this certificate enable me to work freelancer?	as You can start your small business by purchasing your own heavy construction machine and can start earning 50,000 per month. You may need additional skills on entrepreneurship to support your initiative.

**Test Yourself (Multiple Choice Questions)** 

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