



Co-funded by the European Union



Norwegian Embassy
Islamabad



© TVET SSP

POST PRESS OPERATIONS (Packaging)

Learner Guide

National Vocational Certificate Level 4

Version 1 - December 2019



Implemented by

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

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

Director General Skills Standard and Curricula, National Vocational and Technical Training Commission
National Deputy Head, TVET Sector Support Programme, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Layout & design

SAP Communications

Photo Credits

TVET Sector Support Programme

URL links

Responsibility for the content of external websites linked in this publication always lies with their respective publishers. TVET Sector Support Programme expressly dissociates itself from such content.

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 (NAVTTTC) 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

December, 2019
Islamabad, Pakistan

POST PRESS OPERATIONS (Packaging)

Learner Guide

National Vocational
Certificate Level 4

Version 1 - December 2019

Introduction:

This Learner's Guide is developed on the basis of competency standards and curriculum of "Post Press Operations".

The National Vocational & Technical Training Commission (NAVTTTC) has developed a national qualification entitled, "National Vocational Certificate Level-4 in Post press Operations (Senior Post Press Operator)". Relevant industry and employers were consulted in the design and validation processes in order to come up with a national qualification that fulfills the requirements of the sector in general and the occupation in particular.

This book covers all the topics in a clear and organized format for the Post Press students. Through learning outcomes practical activities were added step by steps. The topics covered were neatly illustrated for better understanding of the learners. All of the lesson pages were carefully designed to eliminate distraction and to focus the pupil's full attention on the work at hand.

It carries 5 learning modules which are as under:

- Module .1 Perform Cutting & Trimming
- Module .2 Perform Hot Foil Stamping
- Module .3 Carry out envelope making
- Module .4 Solve problem at workplace
- Module .5 Develop Communication Skill

POST PRESS OPERATIONS (Packaging)

Learner Guide

National Vocational
Certificate Level 4

Version 1 - December 2019

Module-1

Module 1: Perform Cutting & Trimming

Learning Unit:

After completion of this module the learner will be able to:

- LU1: Perform Substrate handling
- LU2: Make ready workstation for cutting and trimming operation
- LU3: Perform cutting and trimming operation
- LU4: Perform post production activity
- LU5: Maintain log book

Learning Unit-1

Perform Substrate Handling

Overview:

This learning unit describes the handling procedures of substrate.

Describe types of substrate:


Types of substrate in terms of paper

1. Offset paper
2. Copy Paper
3. Hard Paper Glossy
4. Hard Paper Matt Finish
5. News Print
6. Adhesive Paper (Gum Paper)

Types of paper in terms of Box Board

1. Bleach Board
2. Metallize Board
3. Hard Card
4. Fancy Card
5. Grey Back

Practical Activity 1/1:

		Perform Cutting and Trimming	
Module: 1	Learning Unit: 1	Perform substrate handling	
	Practical Description:	Handle the substrate to verify grain and gram per square meter of the printed substrate.	
Time:	8 Hours		
Equipment	N/A		
Tools	N/A		
PPE	Proper dress, safety shoes, safety gloves		
Materials	Substrate (Paper / Box Board)		
Key Point	Carefully handle the substrate.		
Learning Outcome:	<ul style="list-style-type: none"> • Verify grain of the substrate • Verify Gram per square meter (GSM) of the substrate • Prepare paper stacking/jogging 		
Precautions:	Ensure to wear safety shoes and other safety equipment before starting this process		
Instructions		Illustrations	
1. Tear or twist the substrate to verify the grain			
2. Measure the substrate with the help of Thickness meter (micrometer) to verify the gram per square meter (GSM)			
3. Perform Paper Stacking			

Learning Unit-2

Make ready workstation for cutting and trimming operation

Overview:

This learning unit describes the procedure of making workshop ready for cutting and trimming.

List the programming parameters

1. Cutting according to given size

Understand the use of measuring instrument (scale, calculator, weight machine)

Scale:

Each scale of measurement satisfies one or more of the following properties of measurement.

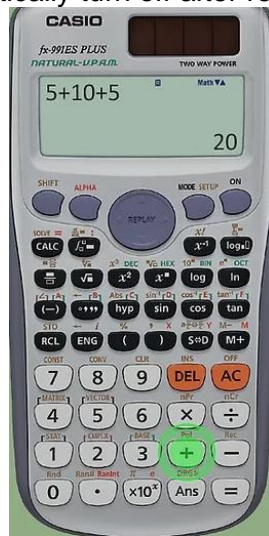
- **Identity.** Each value on the measurement scale has a unique meaning.
- **Magnitude.** Values on the measurement scale have an ordered relationship to one another. That is, some values are larger and some are smaller.
- **Equal intervals.** Scale units along the scale are equal to one another. This means, for example, that the difference between 1 and 2 would be equal to the difference between 19 and 20.
- **A minimum value of zero.** The scale has a true zero point, below which no values exist



Calculator:

Learning Basic Functions

1. **Find the power button if there is one.** Although most newer calculators are solar powered—meaning light turns them on automatically—some also have an "ON" or "ON/OFF" button. If you spot any one of these power buttons, press it to turn the calculator on and off.^[1]
 - If your calculator has an "ON" button, press it when the calculator is powered on to turn it off.
 - Some calculators automatically turn off after remaining unused for a few minutes





2. Divide numbers or turn fractions into decimals with the "÷" or "/" key. For example, to divide 2 by 1, press "2," "÷," and "1" and then "=". To change the fraction 4/5 to a decimal, press "4," "/", "5," and then "="
 - If you're using a physical calculator, the division key is likely "÷." For computer calculators, the division key is probably "/".
 - Divide in a series by pressing "÷" or "/" followed by a number. For example, if your calculator says "2 ÷ 1," hit "÷," "2," and then "=" to get a final answer of "1."

Weight Machine

Used for the measuring the mass of objects.

Practical Activity # 1/1

		Perform Cutting and Trimming	
Module: 1	Learning Unit: 2	Make ready workstation for cutting and trimming operation.	
	Practical Description:	Fix cutting knife and cutting stick as per SOP	
Time:	44 hours		
Equipment	Cutting Machine		
Tools	N/A		
PPE	Hand Gloves, Safety Shoes.		
Materials	<ul style="list-style-type: none"> • Spanner set • Oil can • Tommy bar • Grease gun • Guillotine machine- Programmable. 		
Key Point	A clean workplace ensures the safety and health of employees and visitors.		
Learning Outcome:	<ul style="list-style-type: none"> • Fix cutting knife as per instruction. • Adjust knife impression as per instruction • Verify cutting knife fixing. • Fix cutting stick in machine as per OEM. • Feed cutting program as per docket. 		
Precautions:	Ensure safety of hands from and parts of body from cutting knife		
Instructions		Illustrations	

1. Fix the cutting knife as per SOP.	
2. Adjust the knife impression as per SOP	
3. Fix cutting stick in machine as per OEM	
4. Feed cutting program as per size given	N/A

Learning Unit-3

Perform cutting and trimming operation

Overview:


This learning unit describes the procedure of cutting and trimming.

Describe the standard paper sizes:

There are different sizes of paper according to machines

1. 115 mm
2. 90 mm
3. 76 mm

Practical Activity # 1/1

		Perform Cutting and Trimming	
Module: D	Learning Unit: 3	Perform cutting and trimming operation	
	Practical Description:	Set the machine according to paper size and trim it.	
Time:	82 hours		
Equipment	Cutting Machine		
Tools	N/A		
PPE	Safety Shoes, Hand Gloves		
Materials	<ul style="list-style-type: none"> • Guillotine machine- • Programmable 		
Key Point	A clean workplace ensures the safety and health of employees and visitors.		
Learning Outcome:	<ul style="list-style-type: none"> • Make a sample trim/cut for approval from supervisor. • carryout cutting/trimming operation as per instruction 		
Precautions:	Ensure safety of hands from and parts of body from cutting knife		
Instructions		Illustrations	
<ol style="list-style-type: none"> 1. Set the machine according required paper size and trim it, sample submit to supervisor for approval. 			

Learning Unit-4

Perform post production activity


Overview:

This learning unit describes the procedure of post-production activity.

Describe the importance of maintaining/cleaning of work station:

Cleaning a dirty workstation not only helps prevent getting infections and sicknesses, it also helps make your workspace more efficient to use.

Practical Activity 1/1:

		Perform Cutting and Trimming	
Module: 1	Learning Unit: 4	Perform post production activity	
	Practical Description:	Stack the finished product on pallet and segregate the trimmed waste.	
Time:	8 hours		
Equipment	N/A		
Tools	Pallet, Bin		
PPE	Hand gloves, Safety Shoes		
Materials	Cleaning brush		
Key Point	A clean workplace ensures the safety and health of employees and visitors.		
Learning Outcome:	<ul style="list-style-type: none"> • Stack the finished items on pallets as per instruction. • Store the segregated trimmed waste at the designated bin. • Clear the workstation. 		
Precautions:	Ensure to wear safety equipment during manual handling.		
Instructions		Illustrations	
1. Stack the finished substrate on pallets.			

2. Store the segregated trimmed waste at the designated bin and clean the workshop.



Learning Unit-5

Maintain log book.

Overview:

This learning unit describes how to maintain the log book and its importance.

Importance of record keeping:

Keeping accurate and up-to-date records is vital to the success of any business.

A manufacturing production log, is an excellent way of recording the 'stage by stage process of manufacturing a product. In its simplest form, it is a series of photographs accompanied by notes

Practical Activity 1/1:

		Perform Cutting and Trimming	
Module: 1	Learning Unit: 5	Maintain log book.	
	Practical Description:	Maintain the record sheet in terms of final counter along with wastages and down time of machine.	
Time:	6 hours		
Equipment	N/A		
Tools	N/A		
PPE	N/A		
Materials	Logbook		
Key Point	Properly maintain the record sheet		
Learning Outcome:	<ul style="list-style-type: none"> Record the final count along with the wastages Record the down time. 		
Precautions:	N/A		
Instructions		Illustrations	
1. Record the total count of the quality sheets on log book			
2. Record the total count of the waste sheets on log book			
3. Record downtime of the cutting/trimming operation on log book			

Summary of the Module

In above module types of substrate described, defined programing parameters. Explained use of measuring instrument (scale, calculator, weight machine). Described standard size of paper and importance of log book.

Frequently Asked Questions (FAQs)

Question	Answer
1. Define the magnitude of scale?	Values on the measurement scale have an ordered relationship to one another. That is, some values are larger and some are smaller.
2. Enlist types of substrate in terms of paper	<ul style="list-style-type: none"> a. Offset paper b. Copy Paper c. Hard Paper Glossy d. Hard Paper Matt Finish e. News Print f. Adhesive Paper (Gum Paper)
3. How to measure the substrate?	Measure the substrate with the help of Thickness meter (micrometer) to verify the gram per square meter (GSM)
4. Describe the standard paper sizes?	<p>There are different sizes of paper according to machines</p> <ul style="list-style-type: none"> a. 115 mm b. 90 mm c. 76 mm
5. Describe the importance of maintaining/cleaning of work station?	Cleaning a dirty workstation not only helps prevent getting infections and sicknesses, it also helps make your workspace more efficient to use.
6. Explain importance of record keeping?	A manufacturing production log is an excellent way of recording the 'stage by stage process of manufacturing a product. In its simplest form, it is a series of photographs accompanied by notes
7. How to fix cutting stick in machine?	Fix cutting stick in machine as per OEM
8. How to adjust knife impression?	Adjust the knife impression as per SOP or requirement.
9. What do you mean by Equal Interval on Scale?	Scale units along the scale are equal to one another. This means, for example, that the difference between 1 and 2 would be equal to the difference between 19 and 20.
10. Define about Learning Basic Functions	Find the power button if there is one. Although most new calculators are solar powered—meaning light turns those on automatically—some also have an "ON" or "ON/OFF" button. If you spot any one of these power buttons, press it to turn the calculator on and off.[1]

Self-Assessment

(MCQs)

- 1) If your calculator has a _____ button, press it when the calculator is powered on to turn it off.
 - a. "ON"
 - b. "OFF"
 - c. a and b
 - d. none of above

- 2) Values on the measurement scale have a _____ relationship to one another.
 - a. Ordered
 - b. Dis-ordered
 - c. Managed
 - d. Proper

- 3) The scale has a true point, below which no values exist
 - a. Zero
 - b. One
 - c. Two
 - d. Five

- 4) Fix cutting stick in machine as per Original _____.
 - a. SOPs
 - b. Original Equipment Manufacturer (OEM)
 - c. Requirements
 - d. None of above

- 5) Stack the finished substrate on _____.
 - a. Floor
 - b. Table
 - c. Pallets
 - d. None of above

- 6) Keeping _____ record is vital to the success of any business.
 - a. Sequential
 - b. Step by step
 - c. Accurate and up-to-date
 - d. None of them

- 7) Record the _____ count of the waste sheets on log book.
 - a. Total
 - b. Half
 - c. Partial
 - d. None of above

- 8) SOP stands for?
 - a. Standard Operating Procedure
 - b. State Operating Program
 - c. Static Operating Process

- d. None of them
- 9) Some _____ automatically turn off after remaining unused for a few minutes.
- a. Machines
 - b. Calculators
 - c. Splitters
 - d. Air Conditioner
- 10) Values on the measurement scale have an ordered relationship to one another.
- a. True
 - b. False

Answer Key

MCQ No.	Correct Answer
1	a
2	a
3	a
4	b
5	c
6	c
7	a
8	a
9	b
10	a

POST PRESS OPERATIONS (Packaging)

Learner Guide

National Vocational
Certificate Level 4

Version 1 - December 2019

Module-2

Module 2: Perform Hot Foil Stamping

Learning Unit:

After completion of this module the learner will be able to:

- LU1: Perform Substrate handling
- LU2: Make ready workstation for hot foiling
- LU3: Perform Hot Foil operation
- LU4: Perform post production activity
- LU5: Maintain log Book

Learning Unit - :

LU 1: Perform substrate handling

Overview: The purpose of this learning unit is to inform the learner about side lay and front lay and their importance.

Side lay and front lay:

- The purpose of side lay is to keep a perfect registration of the substrate from the pin side.
- The purpose of front lay is to keep a perfect handling of the substrate from the front lay side

Importance of substrate (paper) Stacking:

The purpose of this learning unit is to inform the learner about stacking by proper fanning of substrate.

Purpose of fanning: Purpose of fanning is to avoid paper static charging. It also separates the paper.

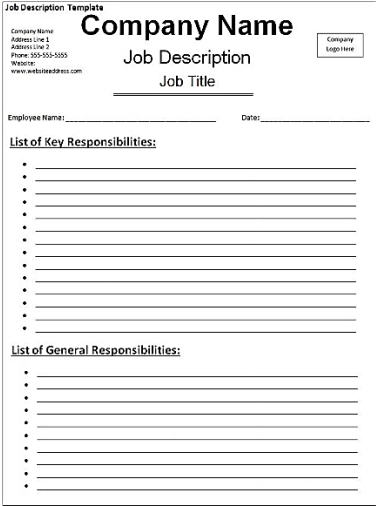











Purpose of stacking

Practical Activity # 1

Perform Substrate handling as per press SOP's

		Perform Hot foil stamping	
Module:02	Learning Unit: 1	Perform Substrate handling	
	Practical Description:	Ready printed substrate for hot foil stamping	
Time:	10 hours		
Equipment	Weighing scale		
Tools	Micrometer, GSM cutter		
PPE	Gloves		
Materials	Printed substrate		
Key Point	Registration on the substrate must be verified diligently.		
Learning Outcome:	<ul style="list-style-type: none"> • Verify side-lay & front-lay of the printed substrate • Perform Substrate Stacking as per instruction. • Verify the thickness and GSM value of the substrate. • Verify the foil color, type and size as per docket 		
Precautions:	Make sure that the printed substrate as per docket.		
Instructions		Illustrations	

<p>1. Read docket carefully</p>	 <p>The image shows a 'Job Description Template' form. It includes fields for 'Company Name', 'Job Description', and 'Job Title'. There are also fields for 'Employee Name' and 'Date'. Below these are two sections: 'List of Key Responsibilities' and 'List of General Responsibilities', each with a series of horizontal lines for text entry.</p>
<p>2. Identify where the printed substrate is located in the workshop</p>	 <p>The image shows a close-up of a person's hand holding a stack of white printed sheets. The sheets are slightly fanned out, showing the edges and the printed content on the top sheet.</p>
<p>3. Collect a sample sheet from the pile of substrate</p>	 <p>This image is identical to the one in the previous row, showing a hand holding a stack of printed sheets.</p>
<p>4. Thoroughly observe registration marks on the sample sheet for registration</p>	 <p>This image is identical to the ones in the previous rows, showing a hand holding a stack of printed sheets.</p>
<p>5. If mis-registration is observed report to the supervisor</p>	 <p>This image is identical to the ones in the previous rows, showing a hand holding a stack of printed sheets.</p>
<p>6. Cut the sheet of substrate with a GSM cutter</p>	 <p>The image shows two pieces of equipment: a white digital scale with a blue display and a green circular GSM cutter with a black handle.</p>

<p>7. Place the cut out portion on GSM weighing scale and note the value</p>	
<p>8. Compare the GSM and thickness value of the substrate with the one mentioned in docket</p>	
<p>9. If the GSM and thickness value is incorrect report to the supervisor</p>	
<p>10. If the value is correct perform fanning on substrate pile</p>	
<p>11. Stack the paper carefully near hot foil stamping workstation</p>	

Learning Unit - :

LU 2: Make ready workstation for hot foiling stamping.

Overview:

The purpose of this learning unit is to inform the learner about make ready workstation for hot foil stamping and their importance.

➤ **Describe make ready of a Hot Foil job.**

Hot foil stamping and embossing jobs that it's important to have well make ready practices in place. It goes beyond understanding your equipment well, it now includes more options with paper, inks, coatings and complex design choices. Having the correct make ready products and knowledge are critical to having an effective make ready technique appropriate to the job

➤ **Describe the procedure of mounting of block on honeycomb chase.**

Place the honey comb chase on the table and mount the foil block on the chase with the help of layout.



➤ **Describe the importance of block thickness and height.**

An additional consideration to gauge is Type Height, the measurement from the machines base bed to the impression contact point of the machine. Machines do vary, but for the most of machines there is standard set UK/USA 23.3mm height and an EU/Rest of World 23.5mm height which derives from the old letterpress format machines.


Machines then usually allow for an additional make-ready guide of 1mm-1.5mm. Type Height should be met with the thickness of your bed/heater plate and your stamping block. This is why many machines have either a 17mm or 16.3mm heater plate to function at Type Height with 6.35mm or 7mm respectively. Exceeding the Type Height could result in you causing damage to your machine and likely your block if you run the machine oversized.

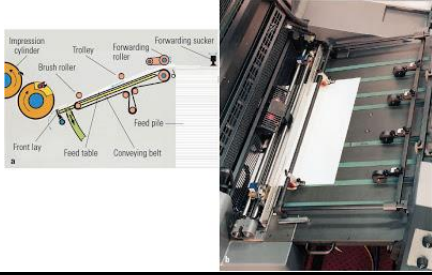







GAUGE SIZE (MM)	GAUGE SIZE (INCHES)
1.63mm	0.06"
3.05mm	0.12"
4mm	0.15"
5.02mm – no longer available	0.2" – no longer available
6.35mm	0.25" (quarter inch)
7mm	0.275"

Practical Activity # 2

Make ready workstation for hot foiling as per press SOP's

		Perform Hot foil stamping	
Module:02	Learning Unit: 2	Make ready workstation for hot foiling	
	Practical Description:	To perform make ready and setting of block on die.	
Time:	20 hours		
Equipment	Hot foiling machine semi auto		
Tools	Allen key set, spanner set, Scissor		
PPE	Gloves,		
Materials	Hot foil block, hot foil		
Key Point	N/A		
Learning Outcome:	<ul style="list-style-type: none"> • Set the Hot foil Block on to the honeycomb chase. • Adjust the feeder according to the job • Perform Substrate Stacking in to the feeder • Adjust the front-lay & the side-lay • Mount the honeycomb chase on to the machine • Fix the Counter hot foil block / hot foil impression plate on the impression plate. • Adjust the registration and impression as per job requirement • Calculate hot foil pull and adjust the foiling unit. • Perform test run 		
Precautions:	N/A		
Instructions		Illustrations	
<ol style="list-style-type: none"> 1. Place the honey comb chase on the table and mount the foil block on the chase with the help of layout. 			

<p>2. Stack the material on the pile and adjust the feeder head as per pile</p>	
<p>3. Adjust the front & side lay as per machine and job requirement.</p>	
<p>4. Open the clamp and mounting screws and mount the chase in the machine.</p>	
<p>5. Fix the Counter hot foil block with the help of double side tape and take impression.</p>	

<p>6. Mount the foil rolls and set the foil pull to make a test run.</p>	
<p>7. Adjust the registration and impression as per job requirement.</p>	
<p>8. Perform test run</p>	

Learning Unit - :

LU 3: Perform Hot Foil operation

Overview: Hot foil operation involves running the printed substrate on hot foil stamping machine. The operator needs to do periodic quality checks on hot foil stamped sheet. These quality checks include proper registration as well as transfer of foil on to the substrate. The speed of hot foil stamping machine needs to be regulated as per requirement.

State Safety precautions of the Hot Foil machine:

Hot foil machine operator should take care of the following factors:

1. All the moving parts of the machine are clear of any debris or tools.
2. The operator should stand clear of all moving parts when machine is in operation.
3. The operator should be wearing proper press operation clothing which should not include loose sleeves.
4. The operator should not use the machine body as a support while machine is in operation.
5. Any substrate jammed in the machine should be cleared after stopping the machine operation.

Calculation of the hot foil pull after each impression:



Hot foil stamping operator performs the following steps in order to adjust the foil pull:

1. Carefully calculate the distance of hot foil stamp from the corner of the sheet from the dummy.
2. Test run one sheet on the hot foil stamping machine to know the current position of the foil pull.
3. Enter the adjustment values on PLC micrometer or adjust the gear according to requirement.
4. Compare the final sheet with the dummy before starting hot foil stamping operation.

Practical Activity # 3

Perform Hot Foil operation as per press SOP's

Perform Hot foil stamping	
Module:02	Learning Unit: 3 Perform Hot Foil operation
	Practical Description: Run hot foil machine
Time:	84 hours
Equipment	Hot foil machine-semi auto
Tools	N/A
PPE	N/A
Materials	Printed substrate
Key Point	Random picks should be made to check quality of hot foil
Learning Outcome:	<ul style="list-style-type: none"> • Get approval from the supervisor • Carry out Hot Foil operation as per instruction • Check & maintain the quality of Hot Foil
Precautions:	Operator should remain clear of any moving parts when machine is operational
Instructions	Illustrations

<p>1. After approval of make ready sheet run the hot foil machine as per instructions</p>	
<p>2. After every 100 sheets pick a sheet from the finished pile and observe for deficiencies</p>	
<p>3. If deficiencies are found adjust the hot foil machine accordingly</p>	
<p>4. When finished stop the machine and perform post operation activities</p>	

Learning Unit - :

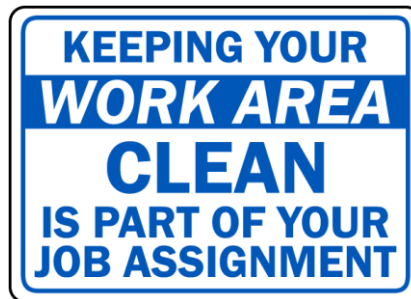
LU 4: Perform post production activity

Overview: The purpose of this learning unit is to inform the learner about importance of the cleaning after work.

Describe the importance of maintaining/cleaning of work station

Cleaning and tidiness can help control or eliminate workplace hazards. Poor housekeeping practices frequently contribute to incidents.

Effective cleaning is an ongoing operation: it is not a one-time or hit-and-miss cleanup done occasionally. Periodic "panic" cleanups are costly and ineffective in reducing incidents.



The workplace environment influences employees' productivity, performance and well-being. No matter the industry, maintaining a clean workplace may help keep staff members safe, healthy and efficient. However, busy production schedules and increasing workloads may cause standards to dip.

While it may be tempting to put off dusting or other types of cleaning around the office or worksite, doing so may put employees at risk of suffering an injury or illness and may even impact performance levels. Maintaining a clean workplace is vital for employers to reduce their workers compensation claims and keep efficiency high.

Essential to safety

When employees work in a messy environment, they may not notice all hazards, which increases the risk of an accident. According to the Occupational Safety and Health Administration (OSHA), an occupational hazard is anything in the workplace that may cause harm. An occupational hazard is commonly caused by neglect on the part of the employer or a lack of awareness by workers. When the office or worksite isn't clean, it may increase the chance that a hazard will go unnoticed by a supervisor and staff members.

For example, if equipment is placed along an emergency route, workers may become injured if they trip or fall over it because it is out of place. If boxes aren't stacked properly, they may fall on a worker and cause an injury. Employers may want to remember to keep the workplace free of debris and remind workers to put all equipment, such as personal protective equipment (PPE), in designated places to prevent an accident.

Crucial to health

Flu season is rapidly approaching and workplaces may see an increase in the number of employees using sick days if they become ill. According to Kimberly-Clark Professional, germs can spread quickly through the workplace if supervisors and employees don't adequately sanitize their hands and their workspaces. Commonly used spaces, such as break rooms, can be hot spots for germs to accumulate.


According to Kimberly-Clark, break rooms have been found to have approximately 20,951 germs per square inch. Parts of the break room that tend to be touched the most, such as doorknobs, microwave oven handles and sinks, can be ripe with germs. Employers may want to clean these places on a frequent basis, and daily during flu season.



Another common health hazard of unclean workplaces is the germination of mold. According to OSHA, mold can cause adverse health effects for employees who are exposed to mold spores. Mold is a fungi that can release millions of spores into the air and can cause respiratory illnesses. Because of this, OSHA has strict standards employers are asked to follow to prevent the growth of mold in the workplace. According to OSHA, mold germination occurs in warm and humid conditions, making it essential that employers regularly clean worksite facilities, such as bathrooms, to reduce the chance of mold growth. Employers also may want to replace or clean indoor air filtration systems frequently to ensure any mold spores that are released into the air don't reach workers.

As a result, a messy or unhygienic workplace may influence worker productivity. If employees receive an injury or illness at work, they may not be able to perform their tasks as well as when they were healthy. This decrease in efficiency may cause deadlines to be missed and additional errors to occur.

Practical Activity # 4

Perform post production activity as per press SOP's

		Perform Hot foil stamping	
Module:02	Learning Unit: 4	Perform post production activity	
	Practical Description:	Ensure cleanliness after completion of the job.	
Time:	08 hours		
Equipment	Hot foil machine		
Tools	Scraper and blade		
PPE	Uniform, safety shoes, gloves and goggles		
Materials	Handout on related topic and cleaning chemical		
Key Point	To save time and to ensure long lasting of machine.		
Learning Outcome:	<ul style="list-style-type: none"> • Remove the foil block and Impression plate from the machine as per instruction • Remove the pile form feeder and delivery. • Clean the machine & workplace 		
Precautions:	Ensure safety as required with use of PPE'S as per SOP.		
Instructions		Illustrations	
<ol style="list-style-type: none"> 1. Make machine come to the correct position to pull out the chase from the machine. Remove the impression plate. 			
<ol style="list-style-type: none"> 2. Remove the die from the chase and place it on the rack. Place all the proper fitting and fixtures back to its allocated position. 			

<p>3. Clean the cutting plate with the help of chemical and scraper. Ensure safety of yourself.</p>	
<p>4. Remove the pile from feeder and delivery with tagging of material. Clean the machine and the workplace.</p>	

Learning Unit - :

LU 5: Maintain log Book


Overview: The purpose of this learning unit is to inform the learner about importance of record keeping.

Importance of record keeping:

A key part of any preventive maintenance program is proper documentation of the work completed, ideally recorded directly into an electronic format, but also on paper. This can reduce the number of expensive repairs, increase operator accountability, make warranty claims easier, increase operator safety, identify trends, enhance visibility of individual asset health, and have significant positive impact on resale value. Proper record keeping also helps in many managerial operation such as analyzing production activity, workforce deliverables and employee evaluation based on KPIs.

Practical Activity # 5

Maintain log Book as per press SOP's

		Perform Hot foil stamping	
Module:12	Learning Unit: 5	Maintain log Book	
	Practical Description:	To record the time data during process.	
Time:	06 hours		
Equipment	N/A		
Tools	N/A		
PPE	N/A		
Materials	Uniform, safety shoes, gloves		
Key Point	Proper maintaining and filling of the log book.		
Learning Outcome:	<ul style="list-style-type: none"> • Record the final counter along-with the wastages • Record downtime during hot foil operation 		
Precautions:	Ensure recorded data must be neat written.		
Instructions		Illustrations	
1. Fill and record the log book. Ensure following records are filled: <ol style="list-style-type: none"> a) Total counter b) Wastage c) Down Time d) Any other remarks 			

Summary of the Module

Hot foil operation involves running the printed substrate on hot foil stamping machine. The operator needs to do periodic quality checks on hot foil stamped sheet. These quality checks include proper registration as well as transfer of foil on to the substrate. The speed of hot foil stamping machine needs to be regulated as per requirement.

State Safety precautions of the Hot Foil machine:

Hot foil machine operator should take care of the following factors:

1. All the moving parts of the machine are clear of any debris or tools.
2. The operator should stand clear of all moving parts when machine is in operation.
3. The operator should be wearing proper press operation clothing which should not include loose sleeves.
4. The operator should not use the machine body as a support while machine is in operation.
5. Any substrate jammed in the machine should be cleared after stopping the machine operation.

Frequently Asked Questions (FAQs)

Question	Answer
What is Hot Foiling?	A: Hot foil stamping, also referred to as gold blocking, foil blocking or hot foil blocking, is a dry printing process in which the mirror image is transferred to the surface to be printed by a combination of heat and pressure.
What material can I foil onto?	A: There is a wide variety of materials that can be used to foil onto: most high quality, smooth/glossy card, paper and cardboard, leather, ribbon, cellophane, wood
Can I use the foil on fabric?	A: No: Due to the lack of elasticity and stretch, most foils will simply crack and flake when applied to fabrics.
Can I use different color foils?	A: You can. We have a wide assortment of foils to choose from. Not only are different colors available, but different finishes as well. This includes glossy and matte.
What colors are available?	A: We have access to a vast range of colored, gold, silver, clear and patterned foils. If you supply a Pantone ref we can suggest the nearest match. We can also supply samples of the colored foil.
Can I have hot foil printing on both sides?	A: Yes, the same rules apply as printing letterpress on both sides. Read more about double sided printing .
How long does it take compared to letterpress?	A: Turnaround is the same for hot foiling. Give a more accurate turnaround time before order confirmation.

Self-Assessment

(MCQs)

- Q 1. Adjust the block when block is hot?
- a) True
 - b) False
- Q 2. Use of hammer is to do adjust the block?
- a) True
 - b) False
- Q 3. What is the importance of front and side lay?
- a) Binding
 - b) Pasting
 - c) Clamping
 - d) Registration
- Q 4. What is importance of fanning?
- a) To remove air
 - b) To remove static in paper
 - c) To remove glue
 - d) To include static
- Q 5. We mount hot foil block with double side tape?
- a) True
 - b) False
- Q 6. We need to adjust impression of machine for hot stamping?
- a) True
 - b) False
- Q 7. We can hot foiling on laminated sheets?
- a) True
 - b) False

Q 8. Exceeding the Type Height could result in?

- a) Damage to machine
- b) Damage to block
- c) Nothing will happen
- d) Both a & b

Q 9. We do not need to dry hot foil prints?

- a) True
- b) False

Answer Key

MCQ No.	Correct Answer
1	A
2	A
3	D
4	B
5	B
6	A
7	A
8	D
9	A

POST PRESS OPERATIONS (Packaging)

Learner Guide

National Vocational
Certificate Level 4

Version 1 - December 2019

Module-3

Module 3: Carry out envelope making

Learning Unit:

After completion of this module the learner will be able to:

- LU1: Perform Substrate handling
- LU2: Make ready workstation for envelope making operation
- LU3: Perform envelope making operation
- LU4: Perform post production activity
- LU5: Maintain log book

Learning Unit-1

Perform Substrate Handling

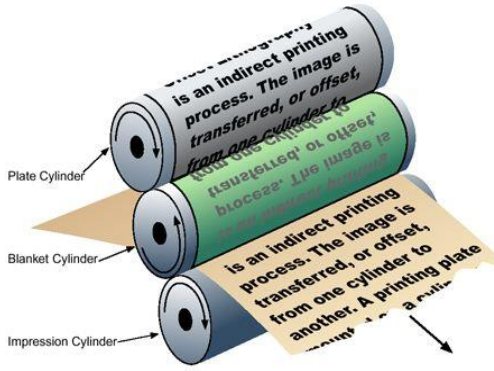

Overview:

This learning unit describes the handling procedures of substrate

Define Importance of the substrate stacking:

If stacking is not proper papers are not properly stacked there will be mis-feeding.

Practical Activity 1/1:

Carry out envelope making	
Module: 3	Learning Unit: 1 Perform Substrate handling
	Practical Description: Verify the substrate according to docket
Time:	08 hours
Equipment	N/A
Tools	Measuring Scale
PPE	Hand Gloves, Safety Shoes
Materials	N/A
Key Point	Carefully stack the substrate
Learning Outcome:	<ul style="list-style-type: none"> Verify substrate as per docket. Perform stacking of envelope as per instruction
Precautions:	N/A
Instructions	Illustrations
1. Verify the substrate according to docket	 <p>The diagram illustrates the offset printing process. It shows three cylinders: the Plate Cylinder (top), the Blanket Cylinder (middle), and the Impression Cylinder (bottom). The image is first transferred from the Plate Cylinder to the Blanket Cylinder, and then from the Blanket Cylinder to the Impression Cylinder. The text on the cylinders reads: 'is an indirect printing process. The image is transferred, or offset, from one cylinder to another. The image is transferred or offset to the next cylinder in the process. The image is transferred, or offset, from one cylinder to another. A printing plate'.</p>
2. Stack the envelope as per instruction	 <p>The illustration shows a stack of white envelopes, with one envelope in the foreground slightly offset to show its top and side.</p>

Learning Unit-2

Make ready workstation for envelope making operation


Overview:

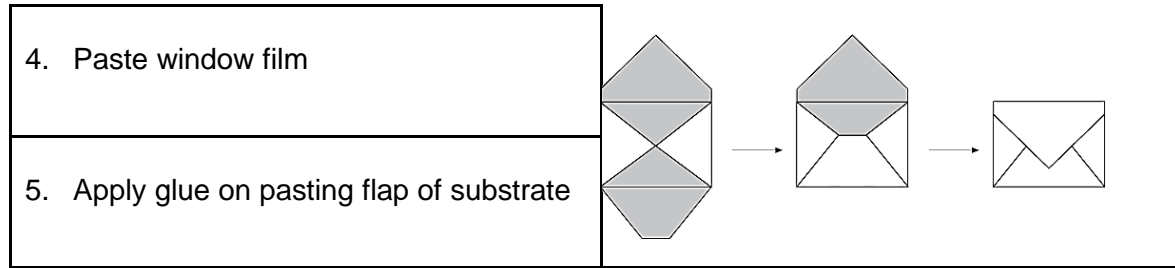
This learning unit describes the procedure of making workshop ready for envelope making operation.

Describe the types of envelope:

1. Letter size Envelope
2. Window Envelope
3. Catalogue Envelope
4. Ticket Envelope
5. Square Envelope
6. Open end Envelope
7. Booklet Envelope

Practical Activity 1/1:

Carry out envelope making		
Module: 3	Learning Unit: 2	Make ready workstation for envelope making operation
	Practical Description:	Prepare glue viscosity and crease folding.
Time:	14 hours	
Equipment	Glue pot, Viscosity Cup, Paint brush	
Tools	Paint brush, Sponge	
PPE	Gloves	
Materials	Bone folder	
Key Point	Carefully prepare glue viscosity	
Learning Outcome:	<ul style="list-style-type: none"> • Prepare work station as per instruction. • Prepare glue viscosity as per envelope substrate. • Prepare glue viscosity as per window film. • Perform crease folding as per instruction. • Paste window film before envelope pasting. • Apply glue on pasting flap of substrate as per instruction • Perform test run 	
Precautions:	Ensure safety of hands in glue preparation.	
Instructions		Illustrations
1. Prepare glue viscosity as per envelope substrate.		
2. Prepare glue viscosity as per window film		
3. Crease folding of envelope as per instruction		



Learning Unit-3

Perform envelope making operation

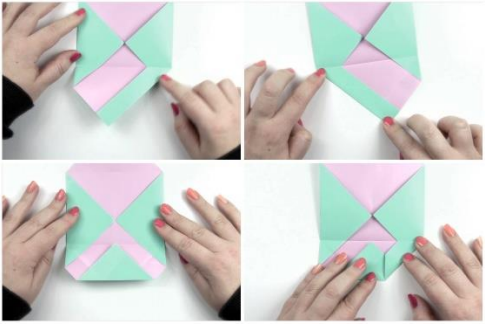
Overview:

This learning unit describes the procedure of envelope making operation.

Understand the importance of glue viscosity:

Glue used in envelope making is re-moisture able glue.

Practical Activity 1/1:

		Carry out envelope making	
Module: 3	Learning Unit: 3	Perform envelope making operation	
	Practical Description:	Carryout envelope making operation maintaining quality	
Time:	44 hours		
Equipment	Hot foil machine-semi auto		
Tools	Paint brush		
PPE			
Materials	Bone folder (folder stick)		
Key Point	Carefully prepare envelope.		
Learning Outcome:	<ul style="list-style-type: none"> • Get approval from the supervisor. • Carry out envelope making operation as per instruction • Check & maintain the quality of envelope making operation 		
Precautions:	Maintain quality of envelope.		
Instructions		Illustrations	
1. Make envelope as per instruction by hand.			
2. Maintain the quality of envelope.			

Learning Unit-4

Perform post production activity


Overview:

This learning unit describes the procedure of post-production activity.

Describe the importance of maintaining/cleaning of work station:

Cleaning a dirty workstation not only helps prevent getting infections and sicknesses, it also helps make your workspace more efficient to use.

Practical Activity 1/1:

		Carry out envelope making	
Module: 3	Learning Unit: 4	Perform post production activity	
	Practical Description:	Remove the waste material as per instruction and clean the work station	
Time:	8 hours		
Equipment	N/A		
Tools	Pallet, Bin		
PPE	Hand gloves, Safety Shoes		
Materials	Cleaning brush		
Key Point	A clean workplace ensures the safety and health of employees and visitors.		
Learning Outcome:	<ul style="list-style-type: none"> • Remove the waste material as per instruction • Clean the work station as per instruction 		
Precautions:	Ensure to wear safety during manual handling.		
Instructions		Illustrations	
1. Store the segregated trimmed waste at the designated bin and clean the workshop.			

Learning Unit-5

Maintain log book.

Overview:

This learning unit describes how to maintain the log book and its importance.

Importance of record keeping:

Keeping accurate and up-to-date records is vital to the success of any business.

A manufacturing production log, is an excellent way of recording the 'stage by stage process of manufacturing a product. In its simplest form, it is a series of photographs accompanied by notes

Practical Activity 1/1:

Module: 3	Carry out envelope making	
	Learning Unit: 5	Maintain log book.
	Practical Description:	Maintain the record sheet in terms of final counter along with wastages and down time of machine.
Time:	6 hours	
Equipment	N/A	
Tools	N/A	
PPE	N/A	
Materials	Logbook	
Key Point	Properly maintain the record sheet	
Learning Outcome:	<ul style="list-style-type: none"> Record the final count along with the wastages Record the down time. 	
Precautions:	N/A	
Instructions		Illustrations
<ol style="list-style-type: none"> Record the total count of the quality sheets on log book 		
<ol style="list-style-type: none"> Record the total count of the waste sheets on log book 		
<ol style="list-style-type: none"> Record downtime of the envelop making operation on log book 		

Summary of the Module

In above module types of substrate described, defined types of envelopes. Described importance of viscosity. Explained the importance of maintaining/cleaning workshop and importance of log book.

Frequently Asked Questions (FAQs)

Question	Answer
1. Define Importance of the substrate stacking?	If stacking is not proper papers are not properly stacked there will be mis-feeding.
2. Describe the types of envelope?	<ol style="list-style-type: none"> 1. Letter size Envelope 2. Window Envelope 3. Catalogue Envelope 4. Ticket Envelope 5. Square Envelope 6. Open end Envelope 7. Booklet Envelope
3. Describe the importance of maintaining/cleaning of work station?	Cleaning a dirty workstation not only helps prevent getting infections and sicknesses, it also helps make your workspace more efficient to use.
4. How to prepare glue viscosity?	Prepare glue viscosity as per envelope substrate, and window film
5. How to verify the substrate?	Verify the substrate according to docket
6. How many types of envelope are? Mention any three names.	<p>There are 7 types of envelope.</p> <ol style="list-style-type: none"> 1. Letter size Envelope 2. Window Envelope 3. Catalogue Envelope
7. Where should we store the segregated trimmed waste?	Store the segregated trimmed waste at the designated bin and clean the workshop
8. For which purpose, Glue is used?	Glue used in envelope making is re-moisture able glue.
9. What is the purpose of counting?	The purpose of counting is to ensure the output quantity.
10. What is the purpose of fanning?	The purpose of fanning is to separate each sheet

Self-Assessment

(MCQs)

1. If stacking is not proper, then papers are not properly _____ there will be mis-feeding.
 - a) Stacked
 - b) Flatted
 - c) Placed
 - d) None of above

2. These are types of envelope:
 - a) Letter size
 - b) Window Envelope
 - c) Catalogue Envelope
 - d) All of above

3. Stack the _____ as per instruction
 - a) Envelope
 - b) Paper
 - c) Rim-holder
 - d) None of them

4. Verify the _____ according to docket.
 - a) Substrate
 - b) Envelope
 - c) Paper Rim
 - d) None of above

5. If crease is not form properly, select the possible effects on envelope making?
 - a) Out of shape.
 - b) Problem in glue pasting.
 - c) Cannot fold properly.
 - d) All of the above.

6. When will window film paste on the envelope?
 - a) After pasting the envelope.
 - b) Before pasting the envelope.
 - c) During glue pasting.
 - d) All of the above.

7. If glue layer is thick, what will happen with the envelope?
 - a) Glue will spread.
 - b) Envelope stick with other.
 - c) Take more time to dry
 - d) All of the above

8. If printing on pasting flap so what will be the impact on envelope making?
 - a) Pasting problem.
 - b) Take more time to dry
 - c) Glue will spread
 - d) None of the above

9. It is important to prepare glue viscosity as per envelope substrate?
- a) True
 - b) False
10. What is the reference to ensure correct positioning of artwork on the finished envelope?
- a) Docket
 - b) Visual confirmation
 - c) Through spectrophotometer
 - d) Through micrometer

Answer Key

MCQ No.	Correct Answer
1	a
2	d
3	a
4	a
5	d
6	b
7	d
8	a
9	a
10	a

POST PRESS OPERATIONS (Packaging)

Learner Guide

National Vocational
Certificate Level 4

Version 1 - December 2019

Module-4

Module 4: - Solve Problems at workplace

Learning Unit:

After completion of this module the learner will be able to:

- LU6: Analyse the problem
- LU7: Identify possible Solutions
- LU8: Recommend solution to higher management
- LU9: Implement solution
- LU10: Evaluate/monitor results and outcome

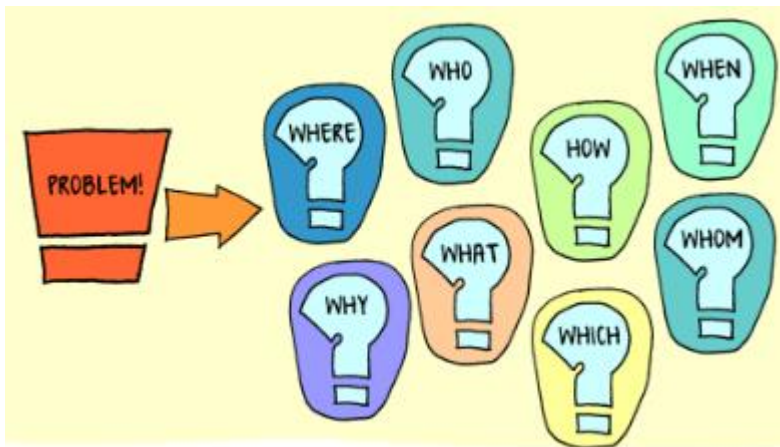
Learning Unit - :

LU-1: Analyze the problem

Overview:

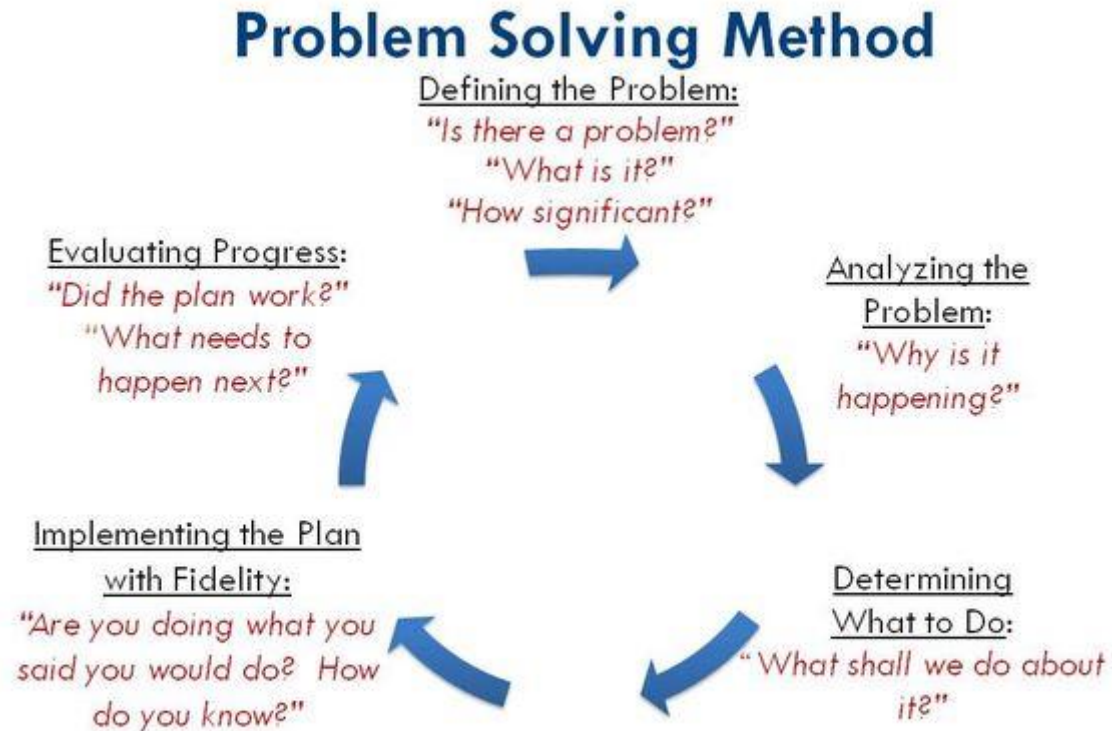
Explain Analytical skills and broad knowledge of diagnostic tools

The ability to solve problems is a basic life skill and is essential to our day-to-day lives, at home, at school, and at work. We solve problems every day without really thinking about how we solve them. For example: it's raining and you need to go to the store. What do you do? There are lots of possible solutions. Take your umbrella and walk. If you don't want to get wet, you can drive, or take the bus. You might decide to call a friend for a ride, or you might decide to go to the store another day. There is no right way to solve this problem and different people will solve it differently.



Here are seven-steps for an effective problem-solving process.

1. Identify the **issues**. Be clear about what the **problem** is. ...
2. Understand everyone's interests. ...
3. List the possible solutions (options) ...
4. Evaluate the options. ...
5. Select an option or options. ...
6. Document the agreement(s). ...
7. Agree on contingencies, monitoring, and evaluation



Explain broad knowledge of the client business domain

In order to utilize technology effectively it must fit the user's goals. It is no good developing a database that manages stock when the requirement was for a system that manages contacts of potential customers. To ensure that you get off on the right track it is important to have an understanding of the organization's business domain.

What is the client's core business? Sometimes it is apparent what the organisation's core business is. Coca Cola for example, which has a high profile world-wide, is in the business of producing non-alcoholic beverages. For other organisations it is not always straightforward. How can you find out what an organisation's core business is?

Documents produced at a high level in the organisation are usually a good source of information for determining a company's core business or businesses. **Mission statements, strategic goals and organisation charts** are good examples of these.

- **Mission statement** states the main purpose of the organisation and usually incorporates its financial, social and/or environmental goals.
- **Organisation charts** can provide a graphical representation of the business in terms of how it is organised to fulfil its core business.

Elaborate broad understanding of organizational systems and functions

Understanding an organisation's core business helps to put into context the business itself. With this in mind we can begin to look at the various areas that an organisation consists of. All businesses perform basic business functions such as:

- producing a product or service
- selling
- marketing
- accounting
- Managing its human resources.

This is usually the case regardless of its size. In small operations, one person may perform all the basic business functions. Larger organisations may be organised around the business functions. Information technology is another function of business that is becoming common place. As well as these basic business functions some organisations perform functions that are common to a few or unique to it alone. Research and development, legal consultancy and special projects are some examples these.

LU-2: Identify possible Solutions

Outline communication skills according to the type of audience

Formal lines of communication are another aspect that is depicted in an organisation chart. This has significance when analysing the requirements for a given area within an organisation and how it interacts with other departments. This needs to be interpreted from an informal perspective as well as a formal one.

Describe the ways to develop critical thinking


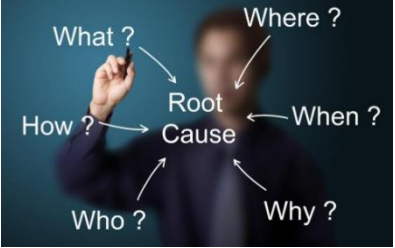

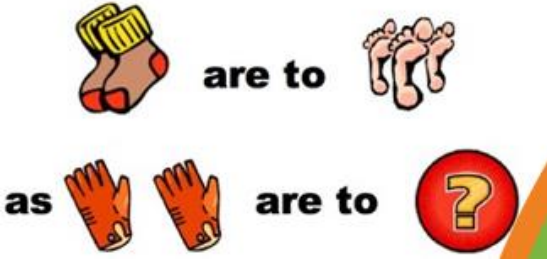
5 Ways to Improve Your Critical Thinking Skills

1. Formulate **the** question (DEFINE)
2. Gather information (DISCOVER, DREAM)
3. Apply **the** information (DESIGN, DELIVER)
4. Consider **the** implications (DEBRIEF, DISCOVER, DESIGN)
5. Explore other points of view (DEBRIEF)

Practical Activity # 1/1

Case Study - ABC customer report a problem regarding envelope pasting, there were order of 2000 envelope and out of which 500 envelope are not pasted properly and the documents are falling out

		Solve problems at work place
Module: 4	Learning Unit: 1 & 2	<ul style="list-style-type: none"> • Analyze the problem • Identify possible Solutions
	Practical Description:	Case Study - ABC customer report a problem regarding envelope pasting, there were order of 2000 envelope and out of which 500 envelope are not pasted properly and the documents are falling out
Time:	5 hours	
Equipment	N/A	
Tools	N/A	
PPE	N/A	
Materials	Flip Chart, Pen, Pencil , Paper , Note book	
Key Point		
Learning Outcome:	<ul style="list-style-type: none"> • Evaluate issues/concerns based on data gathered. • Identify possible causes of problem within the area of responsibility as based on experience • Use problem solving tools/analytical techniques. • Develop possible cause statements based on findings. • Use analogies to support reasoning. • Identify cause and effects based on the criteria or information provided to support reasoning 	
Precautions:	N/A	
Instructions		Illustrations

<p>1. Evaluate issues/concerns based on data gathered.</p>	 <p>EVALUATE</p>
<p>2. Identify possible causes of problem within the area of responsibility as based on experience</p>	
<p>3. Use problem solving tools/analytical techniques.</p>	
<p>4. Develop possible cause statements based on findings.</p>	
<p>5. Use analogies to support reasoning.</p>	<p>Analogies</p> 
<p>6. Identify cause and effects based on the criteria or information provided to support reasoning</p>	<p>N/A</p>

<p>7. Perform SWOT (Strength & weaknesses) analysis</p>	<p style="text-align: center;">How to Conduct a SWOT Analysis for Your Small Business</p>
<p>8. Evaluate Past experience</p>	
<p>9. Take Corrective measures to solve the problem</p>	

LU-3: Recommend solution to higher management

Explain methods and techniques for decision making within a limited range of options

According to Patterson, Grenny, McMillan, and Switzler, there's four common ways of making decisions:

- Command – **decisions** are made with no involvement.
- Consult – invite input from others.
- Vote – discuss options and then call for a vote.
- Consensus – talk until everyone agrees to one **decision**.

Describe general customer service skills

The most common customer service skills

1. **Patience.** **Patience** is crucial for customer service professionals. ...
2. Attentiveness. ...
3. Ability to **communicate** clearly. ...
4. Knowledge of the product. ...
5. Ability to use positive language. ...
6. Acting skills. ...
7. Time management skills. ...
8. Ability to read customers.
9. Unflappability
10. Goal-oriented focus
11. Ability to handle surprises
12. Persuasion skills
13. Tenacity
14. Closing ability
15. Empathy
16. Willingness to learn

Explain the methods of questioning and active listening employed to clarify general information

There are a range of question types that can be used for different purposes. Some questions provide structure, others direct flow, and some help us to reach closure. Question types include:

- Open questions: to gather information and facts, for example "What are your concerns and worries about this situation?"
- Probing questions, to gain additional detail, e.g. "Can you explain why that matters?"
- Hypothetical questions, to suggest an approach or introduce new ideas. An example might be "If you could get additional funding or resources, how might that help?"
- Reflective questions, to check understanding, such as "So would you priorities the most critical areas for attention first and make sure that everyone knew what was most important?"
- Leading questions, to help a person reach a conclusion or have an 'idea' that you feel will be beneficial; a few well planned questions can very often lead the person towards the idea and instead of responding to your request, they have their idea of how to help you be more successful.
- Deflective questions to defuse an aggressive or defiant situation by redirecting the force of the other person's attack instead of facing it head-on. 'Attacks' are synonymous with dissatisfaction, insubordination or resistance and prevent you from moving forward. Dealing with a strong objection by responding with similar force creates conflict. Deflective questions help to transform the negative situation into a collaborative problem-solving6 occasion. Some examples include: o

- Dissatisfaction: I'm not happy with this project!
- Response: What can WE do to make it right?
- Insubordination: I have major concerns. I won't do it!
- Response: How can WE address your concerns?
- Resistance: I disagree with the approach!
- Response: If you were to do it, what would be your approach?

- Closing questions, to bring agreement, commitment and conclusion, e.g. "When will you talk to your team and the client about this?"

Questions are not neutral:

- Asking 'leading questions' when you are seeking information closes off options;
- Whereas asking 'open questions' when you are intending to move a person towards the conclusion you want them to reach can be counterproductive.

Hypothetical, reflective and leading questions help generate ideas, motivate people and develop insights, they are particularly useful when leading knowledge workers. Other question sets are designed to gather information. To be effective, you need to know the objectives of the questions you are asking and then design the questions to support the objective.

LU-4: Implement solution

Elaborate problem solving tools:

- **Cause/effect**

Cause and Effect Analysis is a technique that helps you identify all the likely causes of a problem. This means that you can find and fix the main cause, first time around, without the problem running on and on

- **Pareto**

Pareto Analysis is a simple technique for prioritizing problem-solving work so that the first piece of work you do resolves the greatest number of problems. It's based on the Pareto Principle (also known as the 80/20 Rule) – the idea that 80 percent of problems may be caused by as few as 20 percent of causes.

- **Multi criteria matrix**

A criteria matrix is a valuable decision-making tool that is used to assess and rank a list of options based on specific criteria. For example, the simplest criteria matrix will compare the Pros and Cons of each option



LU-5: Evaluate/monitor results and outcome

Explain the ways to improve teamwork in reference to personal responsibility



If you want your employees to work together and produce great results, here are some tips to improve teamwork within your organization.

1. Encourage Informal Social Events. ...
2. Clarify Roles. ...
3. Specify Goals. ...
4. Reward Excellent **Teamwork**. ...
5. Don't Micro-manage. ...
6. Establish Effective Communications. ...
7. Celebrate Individuality.
8. Use Project Management Tools
9. Get Feedback From Everyone
10. Hire Wisely



Explain the ways of time management and planning


10 Practical Ways to Improve Your Time Management Skills



1. Delegate Tasks. It is common for all of us to take more tasks than our desired potential. ...
2. Prioritize Work. Before the start of the day, make a list of tasks that need your immediate attention. ...
3. Schedule Tasks. ...
4. Set up Deadlines. ...
5. Overcome Procrastination. ...
6. Deal with Stress Wisely. ...
7. Avoid Multitasking. ...
8. Start Early.
9. Take Regular Breaks
10. Learn to Say No

Practical Activity # 1/1

Prepare report and implement solution

Solve problems at work place	
Module: 4	Learning Unit: 3, 4 & 5 <ul style="list-style-type: none"> • Recommend solution to higher management • Implement solution • Evaluate/monitor results and outcome
	Practical Description: Prepare report and implement solution
Time:	5 hours
Equipment	N/A
Tools	N/A
PPE	N/A
Materials	Flip Chart, Pen, Pencil, Paper, Note book
Key Point	Prepare report and implement solution
Learning Outcome:	<ul style="list-style-type: none"> • Prepare report or documentation • Present recommendations to appropriate personnel. • Follow up recommendations
Precautions:	N/A
Instructions	Illustrations
1. Prepare report	

<p>2. Present report to appropriate personnel</p>	 An icon showing a person in a suit pointing at a line graph on a presentation board. The graph has five blue data points connected by a line, showing an upward trend.
<p>3. Prepare plan to solve the issue</p>	 An icon of a hand holding a blue marker, writing the words 'TIME TO PLAN' on a clock face. The clock face is white with black tick marks and a black arc at the top.
<p>4. Implement solution</p>	 An icon showing two stylized human figures, one grey and one white, pushing large puzzle pieces. One piece is blue and the other is yellow.
<p>5. Monitor the activity as per plan</p>	 An icon of a magnifying glass with a black handle and silver frame, positioned over a computer monitor. The monitor displays a bar chart with five bars of increasing height (green, yellow, orange, red, red) and a red line graph with an upward arrow.

Summary of the Module

Problem solving is the art in resolving conflicts at workplace. Here, following point were discussed and explained to make understand the problem solving techniques.

- Analyse the problem
- Identify possible Solutions
- Recommend solution to higher management
- Implement solution
- Evaluate/monitor results and outcome

With the help of above mentioned point student can analyse the ways how problem can be asses and how we can resolve the problem in any organization or at any workplace. And we also have explained an effective problem-solving process.

Frequently Asked Questions (FAQs)

Question	Answer
1) What are the techniques of problem solving?	<ul style="list-style-type: none"> • Identify the issues. Be clear about what the problem is. ... • Understand everyone's interests. ... • List the possible solutions (options) ... • Evaluate the options. ... • Select an option or options. ... • Document the agreement(s). ... • Agree on contingencies, monitoring, and evaluation
2) What are the 7 steps to problem solving?	<ul style="list-style-type: none"> • Step 1: Identifying the Problem. Ask yourself what the problem is. ... • Step 2: Defining Goals. ... • Step 3: Brainstorming. ... • Step 4: Assessing Alternatives. ... • Step 5: Choosing the Solution. ... • Step 6: Active Execution of the Chosen Solution. ... • Step 7: Evaluation.
3) What is creative problem solving techniques?	<p>Creative problem solving (CPS) is a way of solving problems or identifying opportunities when conventional thinking has failed. It encourages you to find fresh perspectives and come up with innovative solutions, so that you can formulate a plan to overcome obstacles and reach your goals.</p>
4) What is a problem solving model?	<p>After you have the problem defined, the model leads you through analyzing data you gather about the process, determining the root cause of the problem, and identifying possible solutions to the problem. ... The problem-solving model, introduced below, incorporates an effective set of skills into a step-by-step process.</p>
5) Why is problem solving important?	<p>Problem-solving is important both to individuals and organizations because it enables us to exert control over our environment. ... Problem-solving gives us a mechanism for identifying these things, figuring out why they are broken and determining a course of action to fix them.</p>

Self-Assessment

(MCQs)

Please mark the correct one from the given options. You can check your answer with the Answer Key at the end of this module.

- Q 1. What is the first step of solving a problem?
- a) Identify the problem
 - b) Prepare alternative
 - c) Take decision
 - d) None of the above
- Q 2. When an employee leave work due to low wage, is it a cause or effect?
- a) Effect
 - b) Cause
- Q 3. What is not the communication skills?
- a) Listening
 - b) Delegating
 - c) Meeting
 - d) Non-verbal communication
- Q 4. It is important to complete paper work after every operations?
- a) True
 - b) False
- Q 5. Who should you contact if you have a recommendation to improve work process?
- a) Supervisor
 - b) CEO
 - c) Sales Dept.
 - d) Marketing dept.
- Q 6. What is SWOT?
- a) Strength, Weakness, Opportunity, Threats
- Q 7. The first step when making a plan is?
- a) To-do-list
 - b) Prioritized options
 - c) Take decision
 - d) None of the above

- Q 8. For a team, goals are?
- a) Individual
 - b) Not assigned
 - c) Collective
 - d) As per policy
- Q 9. What is active listening?
- a) To pay full attention to someone's voice to get a clear message
 - b) Listening to Radio
 - c) Listening current affairs.
 - d) None of above
- Q 10. Decision making matrix has two dimensions?
- a) Options and factors
 - b) Cause and effect
 - d) Cost & revenue
 - c) None of the above

Answer Key

MCQ No.	Correct Answer
1	A
2	A
3	C
4	A
5	A
6	A
7	A
8	C
9	A
10	A

POST PRESS OPERATIONS (Packaging)

Learner Guide

National Vocational
Certificate Level 4

Version 1 - December 2019

Module-5

Module 5: - Develop communication skills

Learning Unit:

After completion of this module the learner will be able to:

- LU1: Make telephone calls
- LU2: Instruct labors
- LU3: Communicate with supervisor
- LU4: Maintain relations with people

Learning Unit 1-:

LU-1: Make Telephone Calls

Overview:

With regular phonecalls you can know what products a potential customer is interested in, what are their objectives, what do they expect from you and if it results in a conversion. These information will help marketers and business owners to better understand the quality of their customers

➤ Concentrate on commands/speeches

Here are two techniques that will enable you to speak clearly when you're talking to someone on the phone.

- a) Speak in phrases. When speaking on the phone, be sure to slow down. The best way to slow down is to speak in phrases. ...
- b) Use the correct intonation. When talking on the phone, you're usually asking questions.

➤ Record information about enquiry or complaint as per company's practice

Collecting and storing customer information

Collecting and storing information about customers is essential to tailoring your customer service program and growing your business. However, there are legal requirements regarding what you can do with the information you have collected.

Privacy

Any customer information that you collect must comply with privacy laws, whether you use this information or not. The laws also cover how you can store and use the information.

Learn more about protecting privacy and information.

Collecting information

When collecting information about customers, try to find out what your customers are buying, why they are buying, and how often they are buying. Include any potential customers who have made enquiries about your goods or services.

There are many ways to collect information on your customers, including:

- order forms
- enquiries
- complaints
- warranty cards
- customer rewards programs
- customer satisfaction surveys
- feedback cards
- customer competitions
- Your website.

➤ Identify factors required to communicate effectively and precisely within same organization


Factors that enhance effective communication


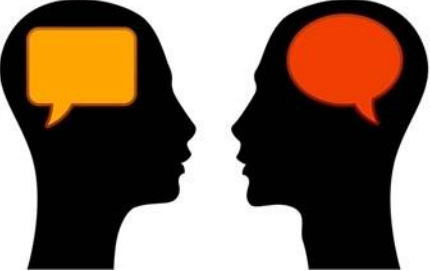

- Active listening.
- Simplicity.
- Straight forwardness.
- Feedback.
- Speaking clearly/articulation.
- Knowledge of the receiver / audience.
- Speed and sequence of speech.
- Relationship between the sender and the receiver

➤ Enlist elements required to deal with vendors and the other organizations

Your third party vendor contract should contain an adequate and measurable service level agreement (SLA). Your vendor contract should include minimum service level requirements along with any remedies for failure to meet such standards, Functionality and availability the vendor is committed to providing

Practical Activity # 1/1

Develop communication skills		
Module: 6	Learning Unit: 1	Make telephone calls
	Practical Description:	Make telephone calls as per standard practice
Time:	4 hours	
Equipment	N/A	
Tools	N/A	
PPE	N/A	
Materials	Flip Chart, Pen, Pencil, Paper, Telephone set	
Key Point	Keep maintain norms of telephone calls.	
Learning Outcome:	<ul style="list-style-type: none"> • Determine communication styles • Investigate issue /problem through relevant questions • Demonstrate courteous behavior while listen to the people • Perform phone conversation applying time management concisely 	
Precautions:	N/A	
Instructions		Illustrations
<p>1. Determine communication styles: Every person has a unique communication style, learner should know how to interact and exchange information with others.</p>		

<p>2. Learner should know how to ask the right question; Learner should be able to determine question to ask & not to ask.</p>	
<p>3. Learner should be polite when listening someone.</p>	
<p>4. Learner able to manage his time when talking on phone.</p>	

Learning Unit 2:-

LU-2: Describe methods to overcome the sentiment

Overview: sentiment can be defined as an attitude, thought or judgment prompted by feelings or a specific view or opinion.


➤ **Describe methods to overcome the sentiment.**

Tracking customer sentiment helps give insight into how customers feel about your brand. The more you listen to how your customers feel about recommending your company, giving you a rating, engaging with you on social channels, and giving you direct feedback, the more customer love everyone is sure to feel. Win-win.

➤ **Opt language which labor could understand elegantly.**

- Have you heard the idiomatic expression, “**like a deer in headlights?**”
- To feel like a deer in headlights means to be so frightened or surprised that you can’t think, move, or speak. Have you ever felt like a deer in headlights when speaking English?
- Sometimes this feeling is especially common when we don’t understand another person. Maybe they used a new word. Maybe it was their accent or how fast they spoke. Maybe it’s a new situation and you’re feeling nervous
- So it is better to opt language which labor could understand elegantly (National/regional language is recommended)

Practical Activity # 1/1

		Develop communication skills	
Module: 6	Learning Unit: 2	Instruct labors	
	Practical Description:	Instruct labor as per standard.	
Time:	4 hours		
Equipment	N/A		
Tools	N/A		
PPE	N/A		
Materials	Flip Chart, Pen, Pencil, Paper		
Key Point	N/A		
Learning Outcome:	<ol style="list-style-type: none"> 1. Display body language while communicating to a customer to show attention 2. Communicate within department as per SOPs. 3. Opt language for commanding 		
Precautions:	N/A		
Instructions		Illustrations	
<ol style="list-style-type: none"> 1. Learner able to use body language while communicating to a customer to show attention. 			
<ol style="list-style-type: none"> 2. Learner should be able to understand communication according to SOPs of the organization. 			

	
<p>3. Learner able to opt out language for commanding.</p>	

Learning Unit 3-:

LU-3: Communicate with supervisor

Overview:

Corporate communication is a crucial element in the success of business operations. A big challenge, when it comes to internal communication within an organization, is communicating with top-level management.

While business communication tools (via technology) save time, energy, and money, it may still be necessary to learn how to communicate effectively with your supervisor.

➤ **Adapt strategy to produce the quality of outcomes required**

Strategies for effective verbal communication

- Focus on the issue, not the person. ...
- Be genuine rather than manipulative. ...
- Empathize rather than remain detached. ...
- Be flexible towards others. ...
- Value yourself and your own experiences. ...
- Use affirming responses.

➤ **Describe importance of accurate communication**

Accuracy in communication is one of the most critical communication skills. It sounds so obvious and simple! Yet this essential aspect of communication is often overlooked. The impact can be massive. For better or worse. This applies to both verbal and written communications.



Accuracy in communication puts you on the same page. Your message is clearly and accurately delivered. It is clearly and accurately received. The possibility of misunderstandings, misinterpretations and even poor decisions, is radically reduced.



An initial misunderstanding can quickly and easily escalate into a critical incident. Many people have paid a high price for not checking the accuracy of facts, instructions and interpretations. Even one initial inaccuracy can cause irreparable damage. Careers and reputations have been damaged. Key relationships and friendships have been eroded. Lives have been sacrificed. All because of some inaccuracy in communication which could have been avoided.

In 1983 an Air Canada flight reportedly ran out of fuel midflight because the crew confused pounds and kilograms while fueling the aircraft. Tragedy was only averted because the plane was able to make an emergency landing. You have probably heard

stories of parents being given the wrong baby in hospital. Or cases where tragic mistakes have been made in surgery or medical diagnoses.

Practical Activity # 1/1

		Develop communication skills	
Module: 6	Learning Unit: 3	Communicate with supervisor	
	Practical Description:	Communicate with supervisor as per standard.	
Time:	5 hours		
Equipment	N/A		
Tools	N/A		
PPE	N/A		
Materials	Flip Chart, Pen, Pencil, Paper		
Key Point	N/A		
Learning Outcome:	<ol style="list-style-type: none"> 1. Develop a strategy for using communication skills 2. Convey ideas to the supervisor precisely 3. Report safety hazards to supervisor urgently 4. Maintain good working relation with supervisor 		
Precautions:	N/A		
Instructions		Illustrations	
1. Learner able to develop strategy for using communication skills			
2. Learner should be able to communicate with supervisor precisely.			

<p>3. Learner able to report safety hazards to supervisor urgently</p>	
<p>4. Learner able to maintain good working relationship with supervisor</p>	

Learning Unit 4-:

LU-4: Maintain relations with people

Overview:

Defining a Good *Relationship* If you trust the *people* you work with, you can be open and honest in your thoughts and actions, and you don't have to waste time and energy "watching your back." Mutual Respect – When you respect the *people* who you work with, you value their input and ideas, and they value yours

➤ Write work reports

Rules for Drafting a Work Report

- Use a cover or title page. ...
- Provide an executive summary detailing the key information. ...
- Include a table of contents listing what's in your **report**. ...
- **Write** an introduction to provide an overview of the **report**. ...
- Explain the results or conclusions you're presenting

➤ Fill indent form

Material indent form is simple listing of the material requirements which is store department property but filled by user department as and when required. For the material indent form sample format given as below:

- I. Product / material name
- II. Required Quantity
- III. U.O.M – Unit of measurement
- IV. Expected date of receiving.
- V. Remarks if any technical or any other details are needs.
- VI. Required for / purpose of indented the material.

➤ Maintain work history

Your **work history**, also known as your **work** record or employment **history**, is a detailed report of all the jobs you have held, including the company name, job title, and dates **of employment**.

When You Need to Provide Your Career History

When you apply for jobs, companies typically require that applicants provide their work history, either on their resume or on a job application, or both. The job application may ask for information on your most recent jobs, typically two to five positions. Or, the employer may ask for a number of years of experience, typically five to ten years of experience.


Employers generally want information on the company you worked for, your job title, and the dates you were employed there. However, sometimes the employer will ask for a more detailed employment history and more information on the jobs you have held as part of the hiring process. For example, they might ask for the name and contact information for your previous supervisors




➤ **Give advantages of maintaining good occupational relations with printing industry people**

Organizations that invest in good employee relations, however, can witness numerous benefits.

- Growth and Development.
- Reduction in Turnover.
- Employees Have Extensive Knowledge of Company Practices.
- Enhanced Motivation.
- Increase in Revenue.
- Conflict Reduction.
- Employee Loyalty.

Practical Activity # 1/1

Develop communication skills		
Module: 6	Learning Unit: 4	Maintain relations with people
	Practical Description:	Maintain relations with people
Time:	2 hours	
Equipment	N/A	
Tools	N/A	
PPE	N/A	
Materials	Flip Chart, Pen, Pencil, Paper, Note book	
Key Point	N/A	
Learning Outcome:	<ol style="list-style-type: none"> 1. Communication with other departments. 2. Communicate effectively with colleagues, peers, the Community, other related personnel to exchange information. 3. Interact with other professionals through effective teamwork. 4. Enlist names and address of printing press related people and organization. 	
Precautions:	N/A	
Instructions	Illustrations	
1. Learner able to communicate with other departments.		

<p>2. Learner able to communicate with colleagues, peers, the Community, other related personnel to exchange information.</p>	
<p>3. Learner able to interact with other professionals through effective teamwork.</p>	
<p>4. Learner should be able to enlist names and address of printing press related people and organization.</p>	

Summary of the Module

Effective communication skills are fundamental to success in many aspects of life. Many jobs require strong communication skills. People with good communication skills also usually enjoy better interpersonal relationships with friends and family.

Effective communication is therefore a key interpersonal skill and learning how to improve your communication has many benefits. However, many people find it difficult to know where to start. This page sets out the most common 'problem areas' and suggests where you might focus your attention.

Here are the 9 Tips for Improving Your Communication Skills:

- a) Make **communication** a priority.
- b) Simplify and stay on message.
- c) Engage your listeners or readers.
- d) Take time to respond.
- e) Make sure you are understood.
- f) **Develop** your listening **skills**, too.
- g) Body language is important.
- h) Maintain eye contact.

Frequently Asked Questions (FAQs)

Question	Answer
1. Proper nouns always begin with _____ letters	Ans: Capital Letter
2. Why is effective communication important	The ability to communicate is an essential life skill and one that can be continually developed
3. What communication styles are there?	Each person's communication style is a unique combination of their own innate skills and those learnt both formally and through experience
4. What is active listening?	Active listening is a straightforward technique that you can use to improve your communication skills. It involves listening for meaning, in a neutral and non-judgmental way.
5. What questioning skills are used in active listening?	Questions can help you to focus attention, elicit new ideas, encourage exploration, and foster commitment. There are seven different types of question you can use: open, probing, closed, reflective, leading, hypothetical, and paraphrasing.

Self-Assessment

(MCQs)

Please mark the correct one from the given options. You can check your answer with the Answer Key at the end of this module.

- Q 1. Communication is a nonstop_____.
- (A) paper
 - (B) process
 - (C) program
 - (D) plan
- Q 2. Communication is a part of _____ skills.
- (A) soft
 - (B) Hard
 - (C) Rough
 - (D) Short
- Q 3. The _____ is the person who transmits the message.
- (A) receiver
 - (B) Driver
 - (C) Sender
 - (D) cleaner
- Q 4. _____ is the person who notices and decodes and attaches some meaning to a message.
- (A) receiver
 - (B) Driver
 - (C) Sender
 - (D) cleaner
- Q 5. Message is any signal that triggers the response of a _____
- (A) receiver
 - (B) Driver
 - (C) Sender
 - (D) cleaner
- Q 6. The response to a sender's message is called _____
- (A) Food bank
 - (B) Feedback
 - (C) Food
 - (D) Back
- Q 7. _____ context refers to the relationship between the sender and the receiver
- (A) social
 - (B) Physical
 - (C) Cultural
 - (D) Chronological

- Q 8. _____ Context refers to the similarity of backgrounds between the sender and the receiver.
- (A) physical
 - (B) Social
 - (C) Chronological
 - (D) Cultural
- Q 9. _____ refers to all these factors that disrupt the communication.
- (A) Nonsense
 - (B) Noise
 - (C) Nowhere
 - (D) Nobody
- Q 10. Environmental barriers are the same as _____ noise.
- (A) Physiological
 - (B) Psychological
 - (C) physical
 - (D) Sociological


Answer Key

MCQ No.	Correct Answer
1	B
2	A
3	C
4	A
5	A
6	B
7	A
8	D
9	B
10	C

National Vocational and Technical Training Commission (NAVTTTC)

 Plot 38, Kirthar Road, Sector H-9/4, Islamabad, Pakistan

 +92 51 9044 322

 +92 51 9044 322

 info@navttc.org

 www.navttc.org