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WATER
MANAGEMENT
AND PLUMBING
SKILL COUNCIL

Facilitator Guide



Sector
Plumbing

Assistant Plumber General

Sub-Sector
**Industrial / Non-Industrial
Plumbing**

Occupation
**Plumbing Systems Installation and
Maintenance**



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“ Skilling is building a better India.
If we have to move India towards
development then Skill Development
should be our mission. ”

Shri Narendra Modi

Prime Minister of India

Acknowledgements

Water management and plumbing skill council would like to express gratitude to all the individuals, subject matter experts and institutions who have contributed in different ways toward the preparation of this “Facilitator Guide”.

Without their contribution, it could not have been completed. Special thanks are extended to those who collaborated in the preparation of its different modules and thanks to those who have contributed a tremendous role to translate it from the English language to the Hindi language also. Sincere appreciation is also extended to all who provided peer reviews for these modules.

The preparation of this manual would not have been possible without the water management and plumbing industries' support. Plumbing industries' feedback has been extremely encouraging from inception to conclusion and it is with their input that we have tried to bridge the skill gap existing today in the industries.

Finally, we would like to express our gratitude to our master trainers, trainers and water management and plumbing skill council's management as they provided us with their valuable input to complete this “Facilitator Guide”.

This participant manual is dedicated to aspiring youth who desire to achieve special skills which will be a lifelong asset for their future endeavours.

Preface

The basic idea for the preparation of this book has come from the challenges faced by the trainers during the skilling of trainees who are learning the skill through the trainers.

The information contained herein has been obtained from reliable sources of the water management and plumbing skill council (WMPSC). The water management and plumbing skill council disclaim all warranties to the accuracy, completeness or adequacy of such information. Water management and plumbing skill council shall have no liability for error, omission and inadequacy, in the information contained herein or for the interpretation thereof. Every effort has been made to trace the written material included in this book.

The water management and plumbing skill council faced so many challenges to complete the facilitator book, which required collecting information about every assembly, Indian standard of measurement and new technology initiated by the industry.

We have also faced challenges to incorporate the diagrams, design and practical layout of the installation of the fixtures and other water management amenities.

About this Book

This Qualification pack is developed by Water Management and Plumbing Skill Council. This course encompasses all 5 National Occupational Standards (NOS).

Each unit starts with learning objectives, followed by relevant activities and corresponding training methodology. Upon successful completion of this course, the participant will be able to:

1. PSC/N0139: Carry out Support Activities for Plumbing Work
2. PSC/N0140: Maintain Plumbing Tools and Equipment
3. PSC/N0136: Apply Health and Safety Practices at the Workplace
4. PSC/N0133: Install Plumbing Fixtures
5. PSC/N0137: Work Effectively with Others
6. DGT/VSQ/N0101: Employability Skills (30 Hours)

This book is designed considering the technical demand and educational background of the participants. Thus, special effort has been made to explain the concepts required for the job mostly through graphics and illustrations.

Symbols Used

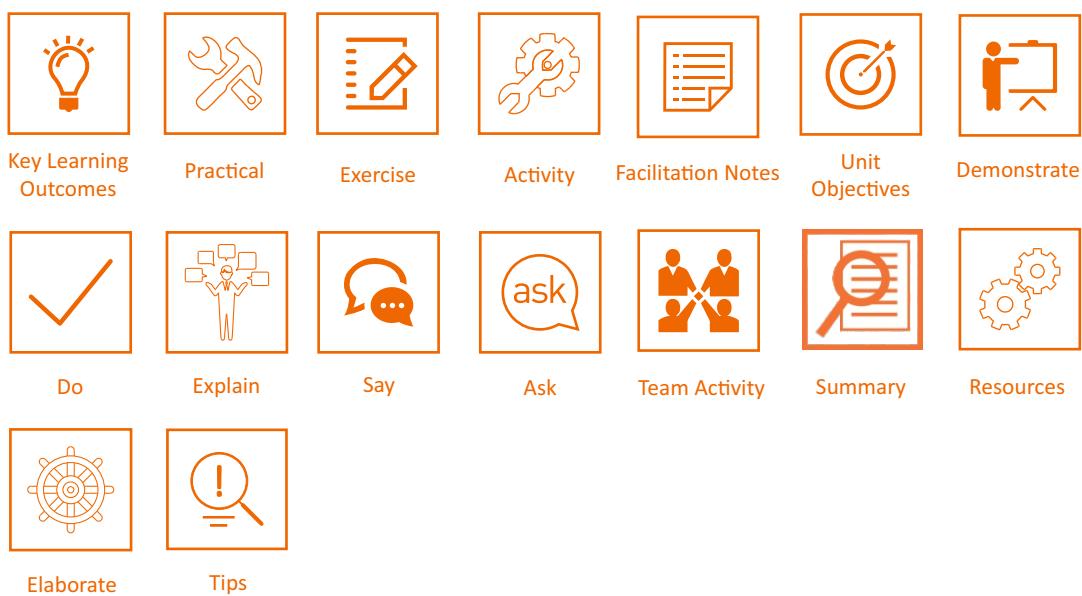


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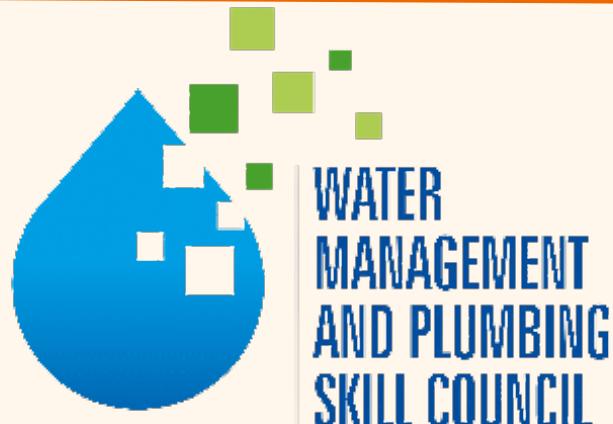




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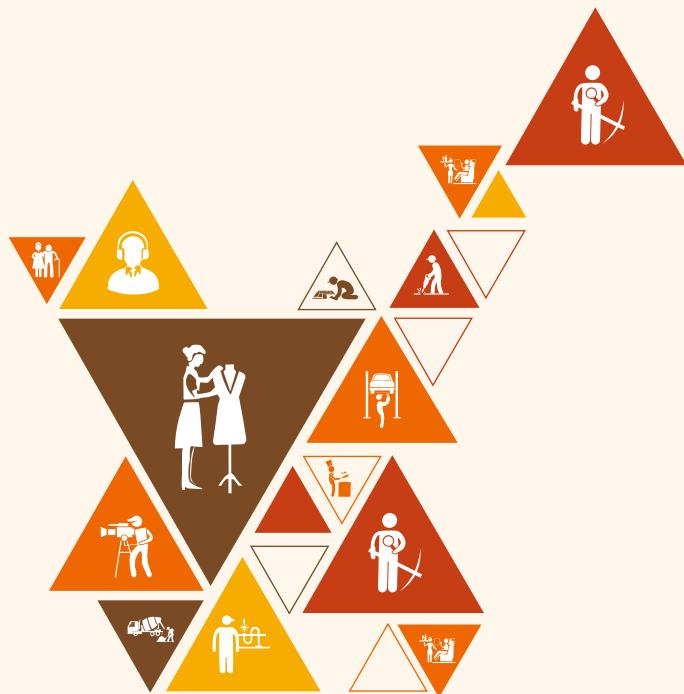
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1. Introduction to the sector and the job role

Unit 1.1 - Plumbing Industry- An Introduction



PSC/N0139

Key Learning Outcomes



At the end of this module, the participant will be able to:

1. Explain the importance of plumbing industry
2. Describe the key responsibilities of an assistant plumber general

UNIT 1.1: Plumbing Industry-An Introduction

Unit Objectives



At the end of this unit, the participant will be able to:

1. Outline the overview of the plumbing industry
2. List the common types of plumbing systems that are installed in residential setups
3. Discuss the scope of employment in the contracting segment of the industry
4. List the key responsibilities of an assistant plumber general

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Say



- Start the class by saying, "This training program is developed to impart specific knowledge and skills relevant to the job required to be performed as an "Assistant Plumber-General", in the "Plumbing Sector/Industry."
- Talk about the Qualification Pack (QP), and National Occupational Standards (NOS).
- List the compulsory NOSs to the QP " Assistant Plumber-General".
- Say, "Before we start the program let's play a small game".

Group Activity



Objective	The purpose of this activity is to build rapport with the course mates
Materials required	Parcel (for passing)

Steps/procedure

- This is an ice breaker activity.
- Welcome the new participants by giving own introduction.
- Ask the participants to stand in a circle, close enough to the person on each side of them so that they can pass the parcel quickly.
- Say 'Stop' when it is least expected. At that time, the trainee holding the parcel introduces himself/herself while saying his/her names and giving thoughts on importance of technical support in IT industry.
- The winner of the game should stand and introduce himself/herself at the end of the game.
- At last, thank the participants for their participation.

Conclusion / what has been achieved

This activity helps the participants to know each other, allows them to feel comfortable and also help them to connect.

Explain

- Explain the following topics:
 - Overview of the plumbing industry
 - Common types of plumbing systems (Fig 1.1 and Fig 1.2)
 - Various types of plumbing systems in residential setups (Fig 1.3)

Ask

- What is the future of the plumbing industry?
- List any two common types of plumbing systems
- What are the various types of plumbing systems in residential setups?

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate



- Elaborate on the following topics:
 - Scope of employment in the contracting segment
 - Plumbing industry sub-sectors (Fig 1.7)
 - Key responsibilities of an assistant plumber general (Fig 1.8)

Ask



- What is the scope of employment in the contracting segment?
- List the sub-sectors of the plumbing industry
- List a few key responsibilities of an assistant plumber general

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize



- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise



- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 1.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:

Answer to Question I:

1. Reference given in 1.1.1
2. Reference given in 1.1.3
3. Reference given in 1.1.6

QR Code

Scan the QR Code to watch the related video



<https://youtu.be/Rfz1zVu8VaQ>
Overview of the Plumbing Industry



<https://youtu.be/Fq7FlsuNCQI>
Scope of Employment in the Contracting Segment



<https://youtu.be/-bvZCdMecEo>
Plumbing Cycle



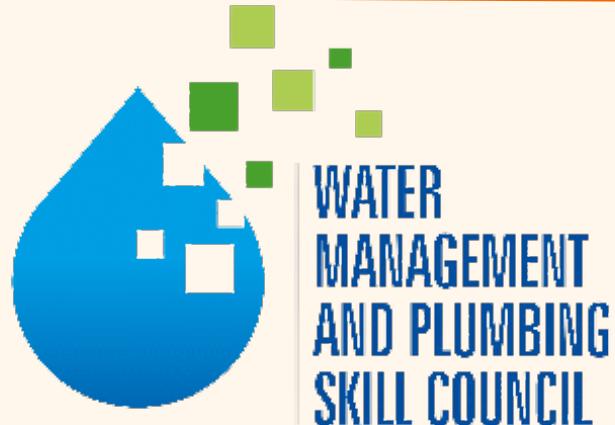
https://youtu.be/8jxRn-T_LCs
Various Types of Plumbing Systems in Residential
and Commercial Setups



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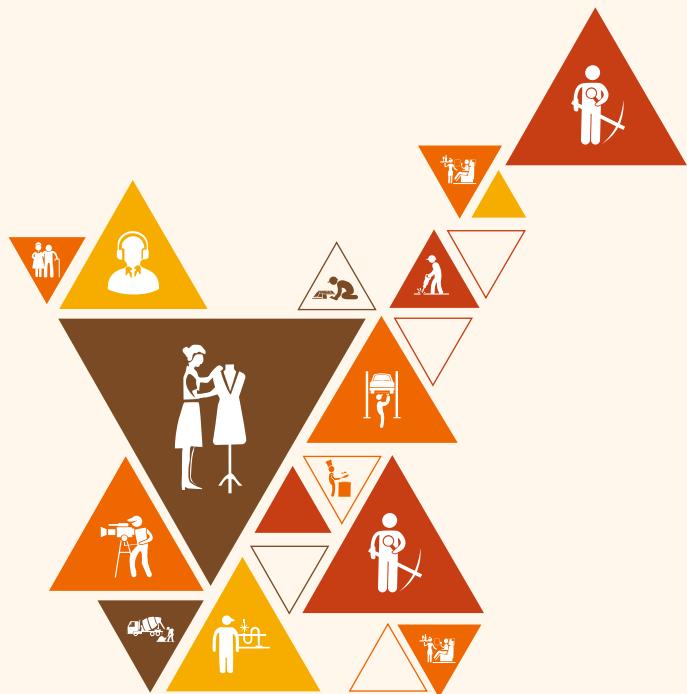


2. Basics of Plumbing

Unit 2.1-Introduction to Plumbing

Unit 2.2-Plumbing Materials

Unit 2.3-Plumbing Tools and Equipment



PSC/N0139

Key Learning Outcomes



At the end of this module, the participant will be able to:

1. Identify the various plumbing related systems, materials, tools and equipment
2. Summarize the common terms, symbols and jargon used in plumbing

UNIT 2.1 Introduction to Plumbing

Unit Objectives



At the end of this unit, the participant will be able to:

1. Explain the process of mains supply of water and drainage
2. Identify the various types of symbols and terminologies used in plumbing installation and maintenance
3. Describe the International System (SI) of measurement relevant to plumbing work

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do



- Welcome and greet the students.
- Begin the session with a brief recapitulation of the previous session.

Say



- Start the class by saying, "This unit will help you to understand the process of mains supply of water and drainage, various types of symbols and terminologies used in plumbing installation and the International System (SI) of measurement relevant to plumbing work."

Explain

- Explain the following topics:
 - Plumbing system
 - Process of mains supply of water and drainage plumbing terminologies
 - Details of customer queries have to be documented
 - Plumbing symbols – refer PH fig 2.1, 2.2 and 2.3

Group Activity

Objective	The purpose of this activity is to gain knowledge about plumbing symbols.
Materials required	Whiteboard
Steps / procedure	<ul style="list-style-type: none"> • This is a skill practice activity. • Draw different symbols of plumbing on the board. • Ask the participants to recognize the symbols. • Ask one by one and give them 1-2 minutes to share their answers. • Appreciate the participants who give correct answers.
Conclusion / what has been achieved	This activity will help them to learn about plumbing symbols.

Ask

- What do you understand by plumbing system?
- What is the process of mains supply of water and drainage plumbing terminologies?

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate



- Elaborate on the following topics:
 - Plumbing terminologies- refer PH Table 2.1
 - International system (SI) of measurement
 - Measurement tips

Group Activity



Objective	The purpose of this activity is to understand the plumbing measurements and calculations.
Materials required	Whiteboard
Steps / procedure	<ul style="list-style-type: none">• Use the Whiteboard to ask a few questions on simple conversions of units.• Share a number in a particular unit and ask the participants to convert it into another unit.• Call the participants one by one to the board.
Conclusion / what has been achieved	This activity enables to understand the plumbing measurements and calculations.

Ask

- Which types of tools are used for measuring length in the plumbing industry?
- Name the measurement units of weight and volume.
- How many kilograms are in 1 quintal?
- What do you understand by plumbing terminologies?
- What is the international system (SI) of measurement?
- List a few measurement tips for plumbing work.

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

UNIT 2.2 Plumbing Materials

Unit Objectives



At the end of this unit, the participant will be able to:

1. State the names, characteristics and applications of different pipes, pipe fittings, fixtures supports and materials used in plumbing
2. Discuss the uses and limitations of various types of fixtures
3. List the types and grades of pipes, fittings, fastening hardware (such as anchors, studs, bolts, clamps and nuts), supports, restraints, blocking and wall hangers and their properties
4. Describe the installation process of pipes and fittings for various plumbing applications

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Say



- Say that, "So, let's start today's session. In this unit, we are going to discuss plumbing materials."
- "Let's find it in detail."

Explain



- Explain the following topics:
 - Pipe materials - refer PH fig 2.4
 - Types of pipes
 - Different types of pipe fittings - refer PH fig 2.15
 - Types of pipe joints- refer PH fig 2.26

Ask

- What do you understand by pipe materials?
- What are the different types of pipe?
- What are the different types of pipe fittings?
- What are the different types of pipe joints?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate on the following topics:
 - Types of valves
 - Types of fixtures
 - Types of fasteners and their materials
 - Pipe supporting materials
 - Installation process of pipes and fittings

Ask

- What do you understand by valves and what are their types?
- What do you understand by fasteners and what are their types?
- What do you mean by pipe-supporting materials?
- What is the installation process of pipes and fittings?

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize



- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

UNIT 2.3 Plumbing Tools and Equipment

Unit Objectives



At the end of this unit, the participant will be able to:

1. Identify various plumbing tools and equipment correctly
2. Describe the commonly used corrosion protection measures such as applying coatings and using tape
3. Discuss quality procedures and standards commonly used by organisations in plumbing related work

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Say



- Say that, "So, let's start today's session. In this unit, we are going to discuss the different types of tools and equipment used in plumbing work."

Explain



- Explain the following topics:
 - Holding tools
 - Fitting tools
 - Cutting tools
 - Pipe bending tools
 - Other tools

Group Activity

Objective	The purpose of this activity is to understand the different tools and equipment used in plumbing work.
Materials required	Laptop/computer
Steps / procedure	<ul style="list-style-type: none"> This is a skill practice activity. Show the image of tools and equipment used in plumbing work through a presentation/projector screen. Ask the participants to recognize the respective tools and equipment and explain their uses in plumbing work. Ask one by one and give them 1-2 minutes to share their answers. Appreciate the participants who give correct answers.
Conclusion / what has been achieved	This activity will help them to learn the different tools and equipment used in plumbing work.

Ask

- What do you understand by holding tools?
- What do "fitting tools" mean to you?
- What is the purpose of cutting tools?
- What are pipe-bending tools?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate on the plumbing measurements and calculations:
 - Corrosion protection measures
 - Quality procedures and standards

Ask

- What are the various corrosion protection measures?
- List a few common materials to coat pipes externally.
- What are the quality procedures and standards used by the organization in plumbing?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise



- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 2.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:

Answer to Question I:

1. Reference given in 2.1.2
2. Reference given in 2.2.2
3. Reference given in 2.2.2
4. Reference given in 2.2.6
5. Reference given in 2.3.1

QR Code

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<https://youtu.be/wpQD4XzjKDM>

Process of Mains Supply of
Water and Drainage



https://youtu.be/1YQ9dpa6_lw

Pipe Materials



<https://youtu.be/GfNUaVFmxaY>

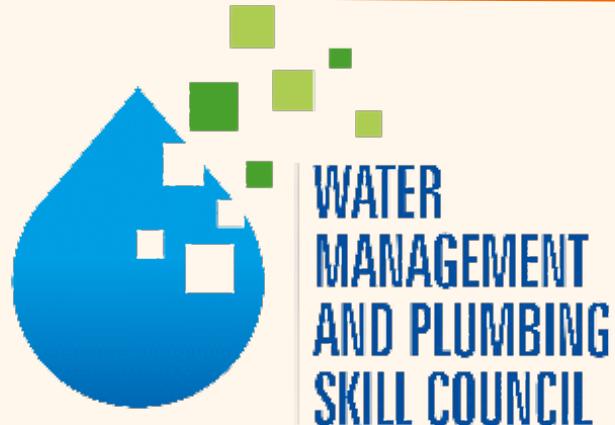
Different Types of Plumbing Tools and Equipment



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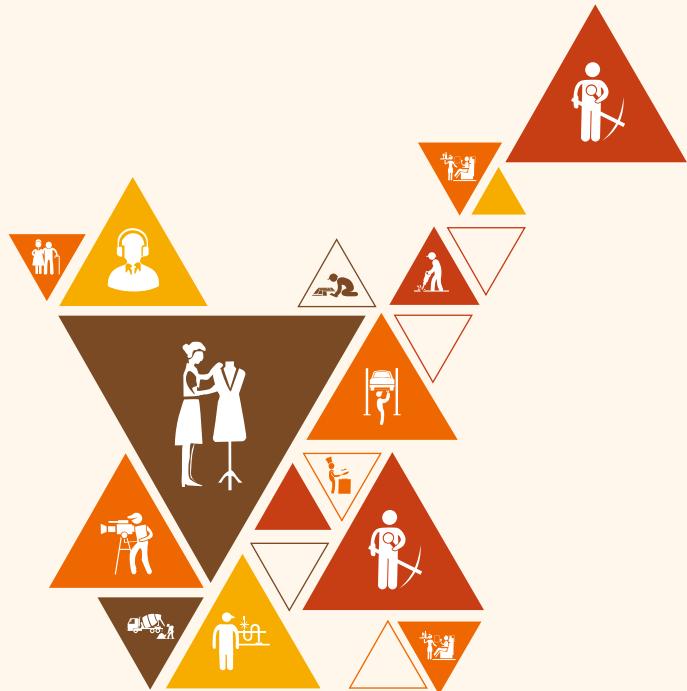
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3. Basic Tasks to Facilitate Plumbing Work

Unit 3.1-Standard Operating Procedures



PSC/N0139

Key Learning Outcomes



At the end of this module, the participant will be able to:

1. Demonstrate the steps involved in preparing for plumbing work
2. Perform supporting tasks in plumbing work

UNIT 3.1 Standard Operating Procedures

Unit Objectives



At the end of this unit, the participant will be able to:

1. Discuss the importance of obtaining clarity about the tasks to be performed and following instructions and standard operating procedures
2. Discuss the importance of unpacking of plumbing materials safely and in compliance with the manufacturer's guidelines
3. Explain the process of checking and reporting shortage of materials as per specifications
4. State the precautions to be observed while operating hand tools and power tools
5. Discuss the various pipe fit-off processes employed in plumbing work such as cutting, bending, forming, assembling, and securing of plumbing pipes and fittings
6. Explain the importance of holding the pipework and/or fixture steadily for installation

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do



- Welcome and greet the students.
- Begin the session with a brief recapitulation of the previous session.

Say



- "In the last unit, we gained an understanding of plumbing tools and equipment"
- "In today's session, we will discuss the standard operating procedures of plumbing work."

Explain

- Explain the following topics:
 - Introduction to SOP
 - Procedures involved in plumbing – refer PH fig 3.1
 - Unpacking of plumbing materials
 - Inspection of materials and its objectives – refer PH fig 3.2

Group Activity

Objective	The purpose of this activity is to understand how to make material receiving inspection reports.
Materials required	Pen and Paper
Steps / procedure	<ul style="list-style-type: none"> • This is a skill practice activity. • Ask the participants to use the sample template to prepare the material inspection report which is available in the Participant Handbook (Fig 3.3). • Ask the participants to prepare the material inspection report. • Give 5-10 minutes to complete the activity. • Ask the participants to show their answers to the class.
Conclusion / what has been achieved	This activity will help them to learn how to make material receiving inspection reports.

Ask

- What is SOP?
- Why It's Important to safely unpack the plumbing materials?
- List three objectives of the inspection of materials.
- What are the other tools which can be used in plumbing work?

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate



- Elaborate on the following topics:
 - Safe handling of hand tools and power tools
 - Safe use of plumbing tools- refer PH fig. 3.5
 - Various pipe fit-off processes – refer PH fig 3.6
 - Importance of holding the pipework

Ask



- What do you mean by safe handling of hand tools and power tools?
- List three safety measures for using plumbing tools.
- What are the common tools used in pipe cutting?
- What is the importance of holding the pipework?

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize



- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise



- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 3.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - Answers to Questions I.
 1. Reference given in 3.1.1
 2. Reference given in 3.1.1
 3. Reference given in 3.1.2
 4. Reference given in 3.1.1
 5. Reference given in 3.2.3

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<https://youtu.be/AI9YIy-86v8>
Safe use of Plumbing Tools



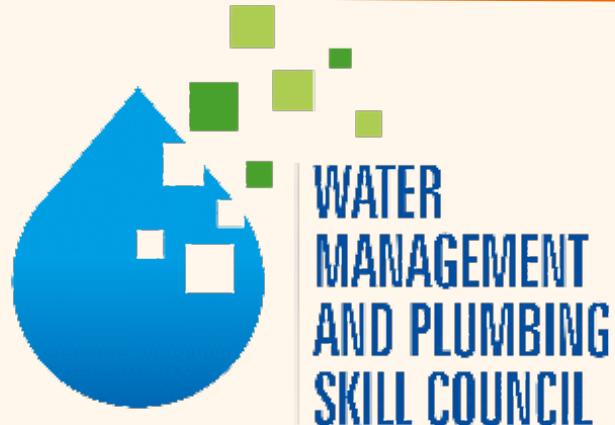
<https://youtu.be/q33WAVm0K5o>
Various Pipe Fit-Off Processes



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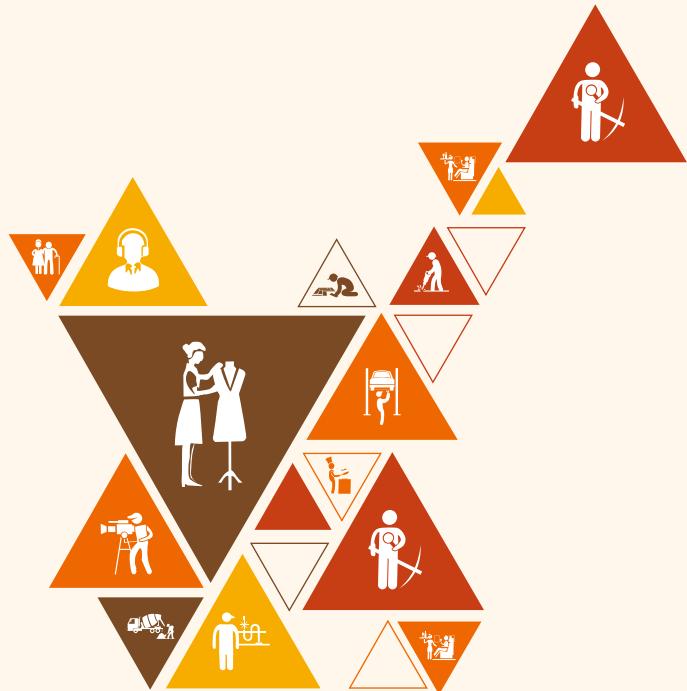


4. Maintaining the Plumbing Tools and Equipment

Unit 4.1- Tool Maintenance

Unit 4.2- Plumbing Tools Defects

Unit 4.3- Advanced Tools, Equipment, and Materials



PSC/N0140

Key Learning Outcomes



At the end of this module, the participant will be able to:

1. Discuss the need for maintenance of plumbing tools and equipment
2. Perform basic repair and maintenance of plumbing tools and equipment

UNIT 4.1 Tool Maintenance

Unit Objectives



At the end of this unit, the participant will be able to:

1. List the key considerations in ensuring proper usage and maintenance of plumbing resources (tools, equipment and related materials)
2. Discuss the importance of referring to documents such as manufacturer guidelines, organisational documents, product catalogues in storing the plumbing resources

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Notes for Facilitation



- Welcome and greet the students.
- Begin the session with a brief recapitulation of the previous session.

Say



- “In the previous session, we gained knowledge about standard operating procedures of plumbing work.”
- “In today's session, we will discuss key considerations in ensuring proper usage and maintenance of plumbing resources (tools, equipment and related materials) and importance of referring to documents in storing the plumbing resources .”

Explain



- Explain the following topics:
 - Proper usage and maintenance of plumbing tools
 - Tips for plumbing tools maintenance- refer PH fig 4.1
 - Importance of referring manufacturer guidelines

Ask



- How do you clean the plumbing tools and equipment after every use?
- Discuss a few tips for plumbing tool maintenance.
- Why is it important to refer to manufacturer guidelines?

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize



- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

UNIT 4.2 Plumbing Tools Defects

Unit Objectives



At the end of this unit, the participant will be able to:

1. Describe the various types of damages and defects that can occur to the plumbing tools, equipment and materials and their indicators
2. Describe the impact of factors such as temperature, pH (acidity levels), chemical composition, oxidation and ageing on plumbing tools, equipment, products and materials
3. Explain the processes of prevention and treatment of damaged plumbing tools and equipment
4. Describe the various types of lubricants and their application used in the plumbing industry
5. Explain the correct material disposal procedures for plumbing waste such as oily rags and other plumbing garbage

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Say



- Say that, "So, let's start today's session. In this unit, we are going to discuss the defects of plumbing tools."
- "Thousands of plumbers are hurt and even killed every year because they unintentionally used a tool or piece of equipment at work that was either defectively made or created irresponsibly. Tools with flaws can lead to severe and serious injuries. In addition to common hand-held tools like hammers, wrenches, and screwdrivers, defective tools can also be found in power instruments like table saws and drills."
- "Let's understand in detail."

Explain



- Explain the following topics:
 - Types of damages and defects – refer PH fig 4.2
 - Impact of different factors on plumbing tools
 - Prevention process of damaged tools

Ask



- What do you understand by damages and defects of tools and equipment?
- List five types of plumbing tool defects.
- Discuss the impact of different factors on plumbing tools.

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate



- Elaborate on the following topics:
 - Lubricants used in the plumbing industry- refer PH fig 4.3
 - Types of lubricants- refer PH fig 4.4
 - Proper waste disposal

Ask

- List various types of lubricants used in the plumbing industry.
- Discuss different types of lubricants.
- How do you properly dispose of plumbing waste?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

UNIT 4.3 Advanced Tools, Equipment and Materials

Unit Objectives



At the end of this unit, the participant will be able to:

1. Discuss about new advanced tools, equipment and materials being introduced in the industry

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Say



- “In previous session, we have discussed the defects of plumbing tools. Today, we will start with new advanced tools, equipment and materials being introduced in the industry.”

Explain



- Explain the following advanced plumbing tools:
 - Sink Auger
 - Hydro Jetting Machine
 - Flex Shaft Drain Cleaning Machines
 - Soldering Torch
 - Drain Inspection Camera
 - PEX Plumbing Tools
 - Metal Detectors

Do/Demonstrate

- Demonstrate the advanced plumbing tools with the help of YouTube link -
<https://www.youtube.com/watch?v=t1SjjO7wX40>

Ask

- List five tools used for customer query management.
- What is the importance of customer feedback?
- What is a knowledge database?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise



- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 4.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - Answers to Questions I.
 1. Reference given in 4.1.1
 2. Reference given in 4.2.1
 3. Reference given in 4.2.4
 4. Reference given in 4.3.1

QR Code

Scan the QR Code to watch the related video



<https://youtu.be/MxmNxqwLAP4>

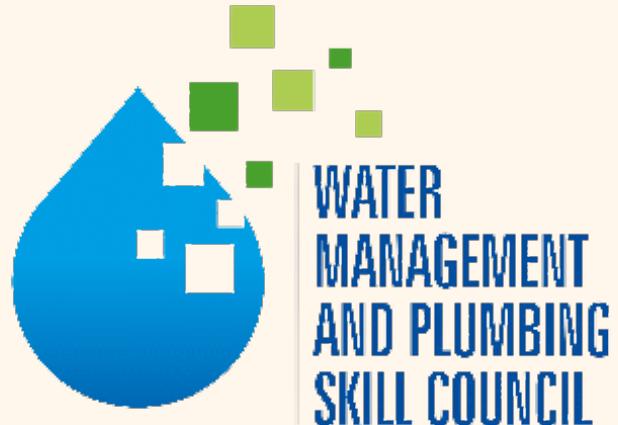
Advanced Plumbing Tools



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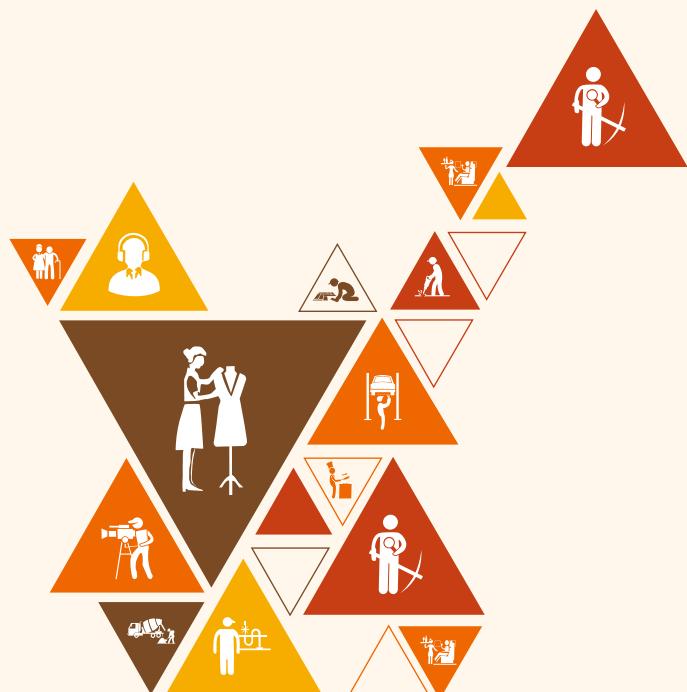


5. Health and safety

Unit 5.1- Dealing with workplace Hazards & Risks

Unit 5.2- Fire Safety Practices

Unit 5.3- First-aid Practices



PSC/N0136

Key Learning Outcomes



At the end of this module, the participant will be able to:

1. Describe the various risks and hazards at the workplace and their preventive and corrective measures
2. Employ preventive and corrective measures to protect self and others from common workplace hazards and risk

UNIT 5.1 Dealing with Workplace Hazards & Risks

Unit Objectives



At the end of this unit, the participant will be able to:

1. Differentiate between risks and hazards.
2. Discuss the specific safety and health-related problems faced in domestic, commercial and institutional setups.
3. List the various types of hazards (such as physical, fire, chemical compounds and electrical) that could affect the work process.
4. List the various hazardous environments and common hazards that can occur during plumbing installation and maintenance along with their precautions and remedial measures.
5. Discuss the importance of various types of personal protective equipment (PPE).
6. Discuss where the general health and safety equipment commonly is kept at the workplace.
7. Explain the various types of safety signs and their significance in the work process.

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do



- Begin the session with a brief recapitulation of the previous session.

Say



- “In the previous session, we learned new advanced tools, equipment and materials being introduced in the industry. Next, we shall understand how to deal with workplace hazards and risks.”

Explain



- Explain the following topics:
 - Safety hazards and risks – refer PH fig 5.1
 - Difference between hazard and risk – refer PH table 5.1
 - Types of hazards – refer PH fig 5.2
 - Common hazards at the workplace – refer PH fig 5.3
 - Remedial action procedure

Elaborate



- Elaborate on the topics below:
 - Safety and health-related problems – refer PH fig 5.4
 - Personal protective equipment and its types – refer PH fig 5.6
 - Health and safety equipment
 - Maintaining PPE – refer PH fig 5.14

Notes for Facilitation



- Conduct a team activity to let the participants identify hazards at the workplace and prepare a safety checklist

Group Activity



Objective	The purpose of this activity is to identify different workplace hazards and prepare a safety checklist
Materials required	Cards/Thick paper, pencil, pen, Whiteboard, Exhibits on workplace hazards
Steps / procedure	<ul style="list-style-type: none"> Divide the participants into groups of two. Ask the participants to refer to exhibits on workplace hazards and develop a safety checklist to prevent those hazards. Give them enough time to come up with a list. Instruct the groups to choose one representative to come to the board and present the list.
Conclusion / what has been achieved	This activity helps the participants to understand the different hazards and their safety measures.

Ask



- What is the difference between hazard and risk?
- List common hazards at the workplace.
- Name three safety and health-related problems.
- List three types of PPE.

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize



- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise



- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 5.1.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - Answers to Questions I.
 1. Hint - Refer to section 5.1.1
 2. Hint - Refer to section 5.1.6
 3. Hint - Refer to section 5.1.5
 4. Hint - Refer to section 5.1.7
 - Answers to Questions II.
 1. Hazards
 2. workplace safety sign
 3. Employers
 4. Noise
 - Answer to Question III:
 1. Safety
 2. All of the above
 3. Face Shield

UNIT 5.2 Fire Safety Practices

Unit Objectives



At the end of this unit, the participant will be able to:

1. Discuss various causes of fire and precautionary activities to prevent the fire accident.
2. List the different techniques that employ various methods (such as using extinguishers, water hose, sprinklers, sand bucket, wet blanket, etc.) and materials such as water, powder, foam, CO₂, fire extinguishing chemical, sand, blanket, etc. used for extinguishing fire as per the type (as per class A, B, C and D).
3. Describe rescue techniques applied during a fire hazard or electrocution.

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Say



- "In the last unit, we have discussed how to deal with workplace hazards and risks."
- "Now, we will try to understand fire safety practices."
- "Due to the number of individuals in the workplace and the various elements that could enhance the risk of a fire, the proper precautions must be taken to lower these risks."

Explain



- Explain the following topics:
 - Causes and prevention of fire - refer PH fig 5.15 and 5.16
 - Do's and don'ts of preventing fire - refer PH table 5.3
 - Types of fire and fire extinguishers - refer PH fig 5.17 and 5.18
 - Fire safety

Ask



- List any two do's and don'ts to prevent the fire.
- Which type of fire and fire extinguisher was used in class -B fire?
- Name three types of fire extinguishers.
- What is fire safety?

Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize



- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise



- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 5.2.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - Answers to Questions I.
 - a. Electrical fires
 - b. everyone
 - c. Follow the emergency instruction
 - d. any doubts about fighting
 - Answers to Questions II.
 1. Hint - Refer to section 5.2.2
 2. Hint - Refer to section 5.2.2
 3. Hint - Refer to section 5.2.1
 4. Hint - Refer to section 5.2.2
 5. Hint - Refer to section 5.2.1

UNIT 5.3 First-aid Practices

Unit Objectives



At the end of this unit, the participant will be able to:

1. Discuss appropriate basic first aid treatment relevant to the condition e.g. shock, electrical shock, bleeding, minor burns, poisoning, eye injuries, etc.
2. Discuss potential injuries and health problems associated with incorrect handling of tools and equipment.

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Say



- "In the last unit, we discussed fire safety practices."
- "Now, we will try to understand first-aid practices."
- "First aid is the assistance given to a person experiencing an unexpected illness or injury to save a life, prevent the condition from worsening, or promote recovery."

Explain



- Explain the following basic technologies used for voice set-up:
 - First-aid and its different procedures - refer PH table 5.4
 - Safety and health issues while handling tools and equipment - refer PH fig 5.20

Say

- “Let us now participate in another activity to understand the concept of first aid and medical assistance.”

Group Activity

Objective	The purpose of this activity is to learn the concept of first aid and medical assistance.
Materials required	Whiteboard, Marker for scores
Steps / procedure	<ul style="list-style-type: none"> This activity will be in the form of “Role Play”. The trainer will ask the trainees to form pairs. Each pair will take part in the role play. In the first round, one participant from each group will play the role of an injured worker and the other participant will help him/ her with medical assistance. The person playing the role of the medical assistant will follow the proper procedure of summoning medical help and applying first aid. He/ she should document the incident and prepare a report to produce to the supervisor. In the next round, the roles of the participants will be swapped. The participant who played the patient will become an employee who will provide medical assistance. The other set of participants will become the injured in need of medical assistance.
Conclusion / what has been achieved	This activity helps the participants to perform first-aid and medical assistance during emergency situations.

Notes for Facilitation

- Jot down the crucial points on the whiteboard as the students speak.
- Share your inputs and insight, to encourage the students and add onto what they talk about.
- Ensure that all students participate in the class.

Ask

- What do you understand by first-aid?
- What is the first-aid procedure for bleeding?
- List five safety and health issues while handling tools and equipment.

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

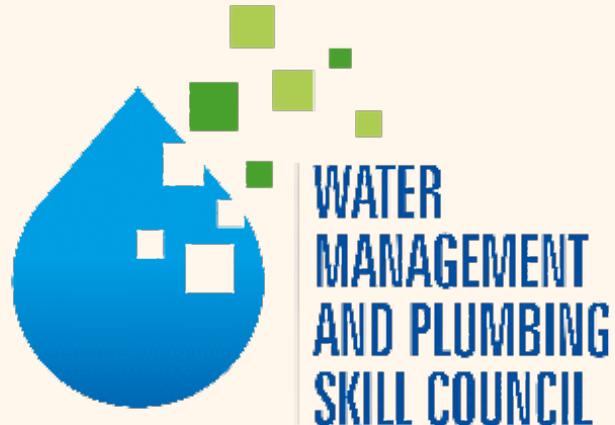
- Instruct the trainees to open their Participant Handbook and complete the exercise given in unit 5.3.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - Answers to Questions I.
 1. Hint - Refer to section 5.3.1
 2. Hint - Refer to section 5.3.2



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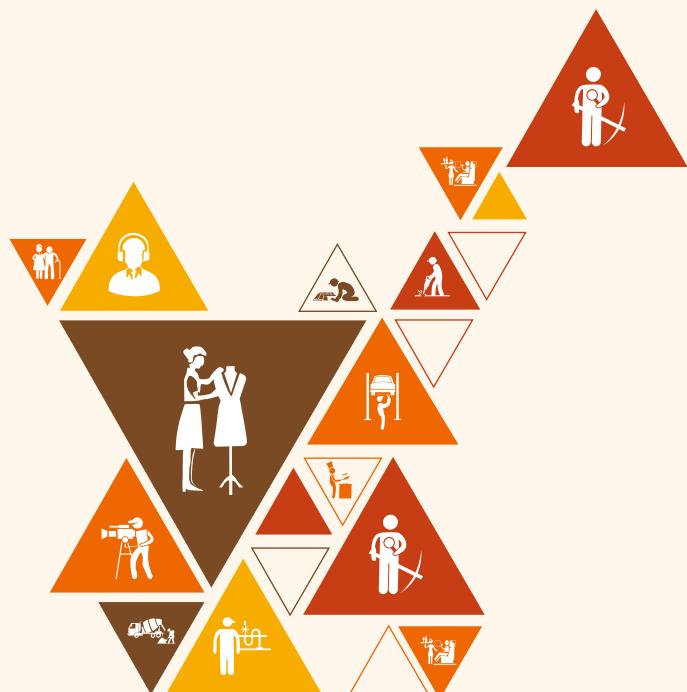


6. Working Effectively with Others

Unit 6.1- Work and Communicate Effectively at Workplace

Unit 6.2- Fire Safety Practices

Unit 6.3- Uphold Social Diversity at the Workplace



PSC/N0137

Key Learning Outcomes



At the end of this module, the participant will be able to:

1. Apply effective communication techniques
2. Demonstrate teamwork and a positive attitude
3. Demonstrate responsible and disciplined behaviour

UNIT 6.1 Work and Communicate Effectively at Workplace

Unit Objectives



At the end of this unit, the participant will be able to:

1. State the importance of effective communication in the workplace.
2. Describe the typical organisational hierarchy and the various categories of people that one is required to communicate and coordinate with.
3. List various components of effective communication.
4. State the importance of using inclusive language (verbal, non-verbal and written) that is gender, disability and culturally sensitive.
5. State the importance of teamwork and developing effective working relationships for professional success.
6. Discuss the importance and ways of managing interpersonal conflict effectively.
7. Discuss how to express and address grievances appropriately and effectively.
8. State the importance of ethics and discipline for professional success.
9. Explain what constitutes disciplined behaviour and integrity for a working professional.
10. Discuss the legislation, standards, policies, and procedures relevant to own employment and performance conditions.
11. Discuss importance of dress code in organisations.

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do



- Begin the session with a brief recapitulation of the previous session.

Say



- “In the previous session we discussed the basic first-aid practices. Let us now understand the importance of effective communication.”

Say



- “It is equally important to keep a healthy relationship with colleagues and co-workers. A relationship built on trust, excellent, clear communication, polite language, and appropriate behavior helps you succeed at work.”
- “Today, we will discuss effective ways of communicating with colleagues.”
- “Let start with a group activity.”

Explain



- Explain the following topics:
 - Significance of effective communication - refer PH fig 6.1
 - Communication process - refer PH fig 6.2
 - Elements of effective communication - refer PH fig 6.3
 - Communication barriers – refer PH table 6.1
 - Inclusive languages – refer PH fig 6.4
 - Organizational structure and its types – refer PH fig 6.5

Group Activity



Objective	The purpose of this activity is to help the trainees understand the need for effective communication
Materials required	Paper, Pen
Steps / procedure	<ul style="list-style-type: none"> • Divide the class into teams of 4 or 5. • Participants in each team should sit in a circle, facing each other. • A member from each team is given the folded sheet with a message written on it. • The member with the sheet is asked to whisper and pass the message written on the sheet into the person's ear on their right. • This process is repeated, and the last person in the circle has to write down what he has heard on the blank piece of paper, fold it and hold on to it. • At the end of the activity, the last person will say it loud, and the final message is compared to the original.
Conclusion / what has been achieved	This activity will highlight how communication can be distorted, or some elements can be lost in the process of communication.

Ask



- How accurate was the final message in the end?
- Did you confirm before whispering and check the accuracy of the message?
- How easy is it to misinterpret or change the meaning of a piece of information?

Notes for Facilitation



- Note down the responses on the whiteboard given by the students.

Notes for Facilitation



- Note down the responses on the whiteboard given by the students.

Elaborate



- Elaborate on the following topics:
 - Significance of effective communication with team members (Fig 9.6 and 9.7)
 - Managing and coordinating with the team (Fig 9.8)
 - Individual and team goals and benefits (Fig 9.9)

Group Activity



Objective	The purpose of this activity is to understand the need for effective communication with colleagues.
Materials required	Ball, bag, or any object and cloth to blindfold
Steps / procedure	<ul style="list-style-type: none"> • Divide the participants into groups of 2. • Place objects like balls or bags on the ground and then have one person in each pair put on a blindfold. • The other person must lead their partner to the object using only verbal instructions. • The person who is blindfolded isn't allowed to speak. • To make it even more complicated, the number of instructions should be limited to four or five.
Conclusion / what has been achieved	This activity will highlight the need for clarity, listening capability, and interpreting what is said, trusting a colleague, and following instructions - properly in the process of communication.

Say

- “To work effectively and efficiently, building trust with colleagues is essential.”
- “Correct communication and following rules always help to maintain a healthy relationship with co-workers.”
- “A trustworthy relationship can be built on good and clear communication, polite language, appropriate behavior.”

Ask

- What is effective communication?
- List all elements of effective communication.
- How do psychological barriers affect communication in the workplace?
- Name two types of organizational structure.
- What do you understand by individual and team goals?

Notes for Facilitation

- Note down the responses on the whiteboard given by the students.

Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 6.1.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - Answers to Questions I.
 - a. Effective communication
 - b. Trust, clear communication and appropriate behavior
 - c. Communication
 - d. Communication
 - e. Coordination
 - f. Communication policies, productivity
 - g. Etiquette
 - h. Socio-Cultural Barriers
 - i. Feedback
 - j. Behavior
 - Answers to Questions II.
 1. Specific, measurable, actionable, realistic, and timely
 2. Customer–friend
 3. Irrelevant
 4. Hint - Refer to section 6.1.7
 5. Hint - Refer to section 6.1.1
 6. Hint - Refer to section 6.1.3
 7. Hint - Refer to section 6.1.5

UNIT 6.2 Work in a Disciplined and Ethical Manner

Unit Objectives



At the end of this unit, the participant will be able to:

1. Discuss the importance and ways of managing interpersonal conflict effectively.
2. Discuss how to express and address grievances appropriately and effectively.
3. State the importance of ethics and discipline for professional success.
4. Explain what constitutes disciplined behaviour and integrity for a working professional.
5. Discuss the legislation, standards, policies, and procedures relevant to own employment and performance conditions.
6. Discuss importance of dress code in organisations.

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do



- Begin the session with a brief recapitulation of the previous session.

Say



- “In the previous session, we learned about the importance of effective communication at work place.”
- “Let’s discuss the importance of understanding how to work in a disciplined and ethical manner.”

Explain

- Explain the following topics:
 - Importance of work ethics and discipline – refer PH fig 6.10
 - Tips for maintaining discipline at the workplace – refer PH fig 6.11
 - Managing conflicts at the workplace – refer PH fig 6.12
 - Grievance management

Elaborate

- Elaborate on the topics below:
 - Disciplined behaviour and integrity (Fig 6.14)
 - Character traits related to integrity (Fig 6.15)
 - Importance of dress code (Fig 6.16)

Ask

- What is a grievance?
- Why dress code is so important in an organization?
- List five tips to manage conflicts.
- What do you understand by professional code?

Notes for Facilitation

- Note down the responses on the whiteboard given by the students.

Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise



- Instruct the trainees to open their Participant Handbook and complete the exercise given in unit 6.2.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - Answers to Questions I.
 1. Hint - Refer to section 6.2.1
 2. Hint - Refer to section 6.2.1
 3. Hint - Refer to section 6.2.2
 4. Confidentiality is important for legal and reputational reasons, but it is also important because future employment may be contingent on it.
 5. Hint - Refer to section 6.1.3

UNIT 6.3 Work and Communicate Effectively at Workplace

Unit Objectives



At the end of this unit, the participant will be able to:

1. Explain the impact of gender, disability, cultural and age-related biases, stereotyping at the workplace and in society.
2. List the different types of disabilities and the challenges faced by persons with disability (PWD).
3. State the laws, acts, provisions and schemes defined for PwD by the Government bodies.
4. Discuss gender, disability and cultural biases, stereotypes and impact on others
5. Discuss basic gender concepts such as gender power relations, gender roles, access and control, gender sensitivity, gender equity and equality.
6. Discuss the importance of gender sensitivity and equality.
7. List the indicators of harassment and discrimination based on gender, disability, caste, religion or culture that occurs at a typical workplace.
8. State general organisational norms and procedures applied to protect against harassment and discrimination.
9. Discuss the importance of reporting incidents of harassment and discrimination to appropriate authority.

Resources to be Used



- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Say



- "In the previous unit, we gained an understanding of how to work in a disciplined and ethical manner."
- "In today's session, we will discuss about uphold social diversity at the workplace."

Explain



- Explain the following topics:
 - Sensitivity for a person with disability
 - Communicating and interacting with PwD – refer PH fig 6.17
 - Gender-based issues in the workplace – refer PH fig 6.18
 - Gender sensitivity

Elaborate



- Elaborate on the topics below:
 - Rights and duties at the workplace (Fig 6.19)
 - Different types of disabilities and challenges faced by PwD (Fig 6.20 and 6.21)
 - PwD policies (Fig 6.22)

Group Activity



Objective	The purpose of this activity is to learn the laws and regulations related to PWD issued by the government.
Materials required	N/A
Steps / procedure	<ul style="list-style-type: none"> • This activity is in the form of an “elocution session.” • The Trainer will divide the class into 4 groups. • Each group will be assigned one law related to PWD compliance issued by the government of India (as discussed in the unit). • The groups will come in front of the class one by one and explain the key features and advantages of the law assigned to them. • The Trainer will supervise the session. • The best group will be appreciated by the class.
Conclusion / what has been achieved	This activity helps the participants to understand the laws and regulations related to PWD compliance issued by the government of India.

Ask

- How do you communicate and interact with PwD?
- List five general-based issues at the workplace.
- What is gender sensitivity?
- List rights and duties at the workplace for the PwD.
- Mention different types of disabilities.
- Name 3 policies of PwD.

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise



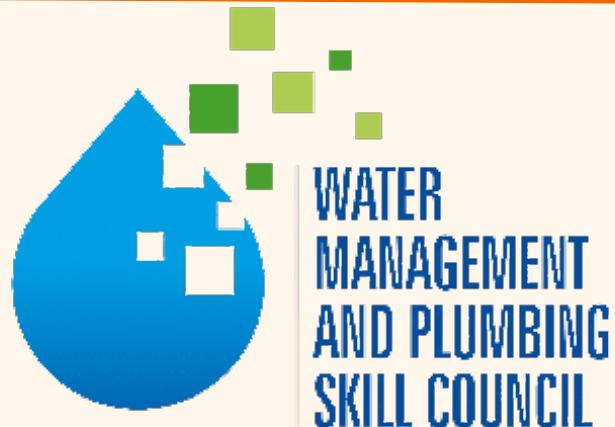
- Instruct the trainees to open their Participant Handbook and complete the exercise given in unit 6.3.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
 - Answers to Questions I.
 1. a) Hint - Refer to section 6.2.3
 - b) Hint - Refer to section 6.3.3
 - c) Hint - Refer to section 6.3.1
 - d) Hint - Refer to section 6.3.2
 - e) Hint - Refer to section 6.2.3
 - 2. i) Disparity in promotions
 - ii) While talking with people having difficulty speaking
 - iii) Equal access to benefits
 - iv) With hearing disability person to get his attention
 - v) Gender-specific social groups



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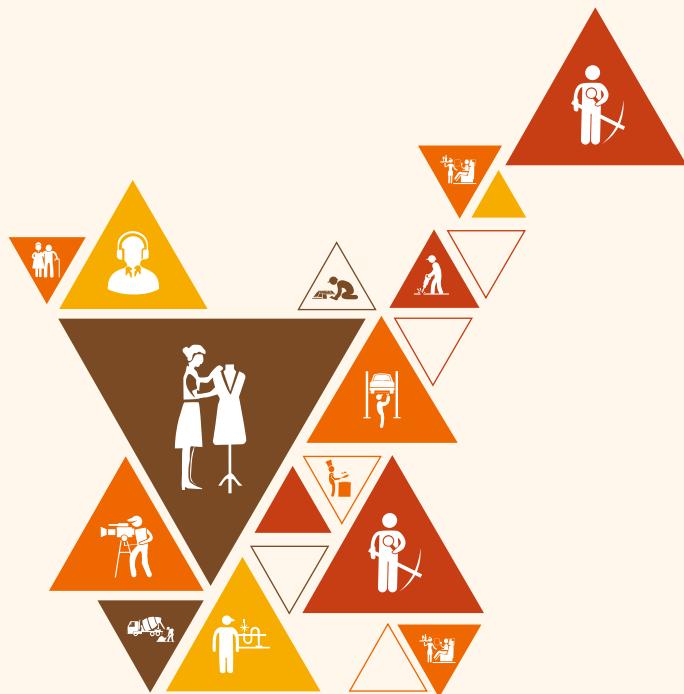
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7. Employability Skills



<https://eskillindia.org/NewEmployability>



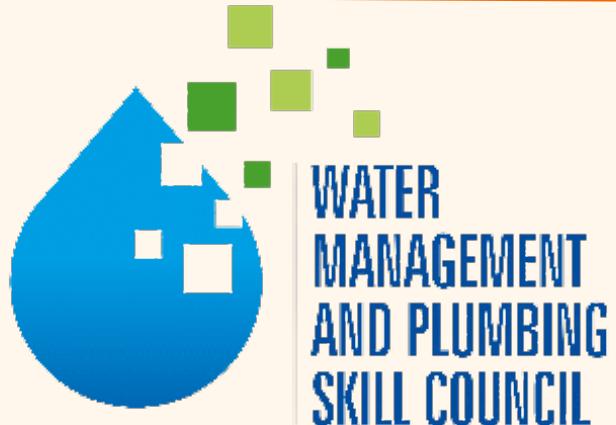
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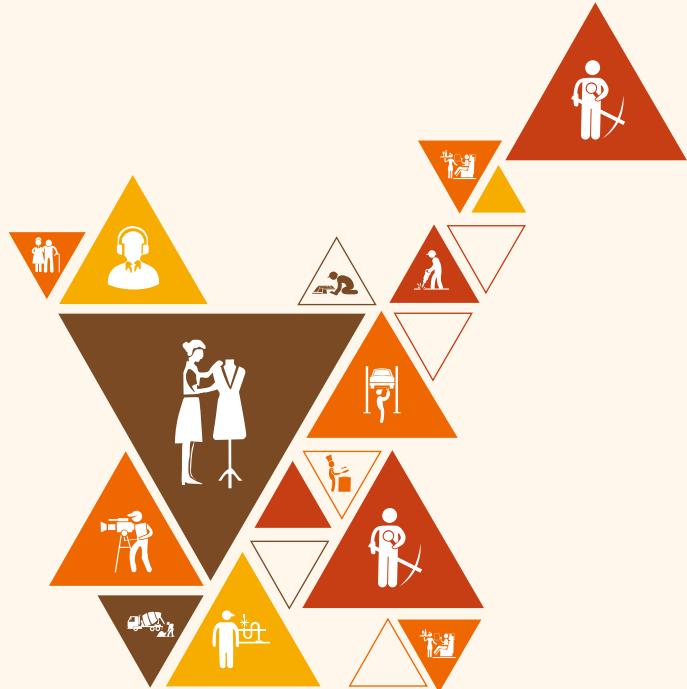


8. Annexures

Annexure i - QR Codes

Annexure II - Training Delivery Plan

Annexure III - Assessment Criteria



Annexure I - QR Code

Serial No.	Module No.	Unit Number	Topic Name	Page No.	URL	QR Code
1.	Introduction to the sector and the job role	Unit 1.1 Plumbing Industry-An Introduction	Overview of the Plumbing Industry	6	https://youtu.be/Rfz1zVu8VaQ	
			Scope of Employment in the Contracting Segment		https://youtu.be/Fq7FlsuNCQI	
			Plumbing Cycle		https://youtu.be/-bvZCdMecEo	
			Various Types of Plumbing Systems in Residential and Commercial Setups		https://youtu.be/8jxRn-T_LCs	
2.	Basics of Plumbing	Unit 2.1 Introduction to Plumbing	Process of Mains Supply of Water and Drainage	19	https://youtu.be/wpQD4XzjKDM	
		Unit 2.2 Plumbing Materials	Pipe Materials		https://youtu.be/1YQ9dpa6_lw	
		Unit 2.3 Plumbing Tools and Equipment	Different Types of Plumbing Tools and Equipment		https://youtu.be/GfNUaVFmxaY	

Annexure I - QR Code

Serial No.	Module No.	Unit Number	Topic Name	Page No.	URL	QR Code
3.	Basic Tasks to Facilitate Plumbing Work	Unit3.1 Standard Operating Procedures	Safe use of Plumbing Tools	25	https://youtu.be/AI9Yly-86v8	
			Various Pipe Fit-Off Processes		https://youtu.be/q33WAVmOK5o	
4.	Maintaining the Plumbing Tools and Equipment	Unit 4.3 Advanced Tools, Equipment and Materials	Advanced Plumbing Tools	35	https://youtu.be/MxmNxqwLAP4	

Annexure II

Training Delivery Plan

Training Delivery Plan			
Program Name	Assistant Plumber - General		
Qualification Pack, Name and Reference ID	Assistant Plumber - General PSC/Q0102, v4.0		
Version No.	4.0	Version Update Date	27/05/2021
Minimum Educational Qualification and Experience	10th grade pass OR 8th grade pass with 2 years of NTC OR 8th grade pass with 2 Years of experience Relevant OR 5th grade pass with 5 Years of experience Relevant		
Pre-requisites to Training (If any)	NA		
Training Outcome	After completing this programme, trainee will be able to: <ol style="list-style-type: none"> 1. Prepare the work area, tools and materials for plumbing tasks 2. Carry out basic plumbing related tasks such as handing over tools, fit off of pipes, securing the pipes and fixtures, etc. 3. Maintain plumbing tools and equipment 4. Adhere to health and safety practices at the workplace 5. Work in an effective manner 6. Optimize resource utilization at the workplace 		

Sl. No .	Module Name	Session Name	Session Objectives	NOS Ref.	Method_ logy	Training Tools/Aids	Durati on in Hours
1.	Introduction to the sector and the job role	Plumbing Industry-An Introduction	<ul style="list-style-type: none"> 1. Outline the overview of the plumbing industry 2. List the common types of plumbing systems that are installed in residential setups 3. Discuss the scope of employment in the contracting segment of the industry 4. List the key responsibilities of an assistant plumber general 	PSC/N0 139	Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 5 P: 0
2.	Basics of Plumbing	Introduction to Plumbing	<ul style="list-style-type: none"> 1. Explain the process of mains supply of water and drainage 2. Identify the various types of symbols and terminologies used in plumbing installation and maintenance 	PSC/N0 139	Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Introduction to Plumbing (Contd..)	<ul style="list-style-type: none"> 3. Describe the International System (SI) of measurement relevant to plumbing work 				

Sl. No .	Module Name	Session Name	Session Objectives	NOS Ref.	Method_ logy	Training Tools/Aids	Durati on in Hours
		Plumbing Materials	<ol style="list-style-type: none"> State the names, characteristics and applications of different pipes, pipe fittings, fixtures supports and materials used in plumbing Discuss the uses and limitations of various types of fixtures 		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Plumbing Materials (Contd...)	<ol style="list-style-type: none"> List the types and grades of pipes, fittings, fastening hardware (such as anchors, studs, bolts, clamps and nuts), supports, restraints, blocking and wall hangers and their properties 		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2 P: 2
		Plumbing Materials (Contd...)	<ol style="list-style-type: none"> Describe the installation process of pipes and fittings for various plumbing applications 		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2 P: 4
		Plumbing Tools and Equipment	<ol style="list-style-type: none"> Identify various plumbing tools and equipment correctly Describe the commonly used corrosion protection measures such as applying coatings and using tape 		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4

Sl. No .	Module Name	Session Name	Session Objectives	NOS Ref.	Method_ logy	Training Tools/Aids	Durati on in Hours
		Plumbing Tools and Equipment (Contd..)	3. Discuss quality procedures and standards commonly used by organisations in plumbing related work		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2 P: 6
3	Basic tasks to facilitate plumbing work	Standard Operating Procedures	1. Discuss the importance of obtaining clarity about the tasks to be performed and following instructions and standard operating procedures	PSC/NO 139	Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5
		Standard Operating Procedures (Contd.)	2. Discuss the importance of unpacking of plumbing materials safely and in compliance with the manufacturer's guidelines		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5
		Standard Operating Procedures (Contd.)	3. Explain the process of checking and reporting shortage of materials as per specifications		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5
		Standard Operating Procedures (Contd.)					T: 0 P: 6

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Standard Operating Procedures (Contd.)	4. State the precautions to be observed while operating hand tools and power tools		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5
		Standard Operating Procedures (Contd.)	5. Discuss the various pipe fit-off processes employed in plumbing work such as cutting, bending, forming, assembling, and securing of plumbing pipes and fitting		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Standard Operating Procedures (Contd.)					T: 0 P: 8
		Standard Operating Procedures (Contd.)	6. Explain the importance of holding the pipework and/or fixture steadily for installation		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Standard Operating Procedures (Contd.)					T: 0 P: 8

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
4	Maintaining the Plumbing Tools and Equipment	Tool Maintenance	1. List the key considerations in ensuring proper usage and maintenance of plumbing resources (tools, equipment and related materials)	PSC/N0140	Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Tool Maintenance (Contd.)	2. Discuss the importance of referring to documents such as manufacturer guidelines, organisational documents, product catalogues in storing the plumbing resources		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Tool Maintenance (Contd.)	3. Discuss the importance of referring to documents such as manufacturer guidelines, organisational documents, product catalogues in storing the plumbing resources		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Plumbing Tools Defects	1. Describe the various types of damages and defects that can occur to the plumbing tools, equipment and materials and their indicators		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Plumbing Tools Defects (Contd.)	2. Describe the impact of factors such as temperature, pH (acidity levels), chemical composition, oxidation and ageing on plumbing tools, equipment, products and materials		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Plumbing Tools Defects (Contd.)	3. Explain the processes of prevention and treatment of damaged plumbing tools and equipment		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5
		Plumbing Tools Defects (Contd.)			Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0 P: 8

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Plumbing Tools Defects (Contd.)	4. Describe the various types of lubricants and their application used in the plumbing industry		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5
		Plumbing Tools Defects (Contd.)					T: 0 P: 5
		Plumbing Tools Defects (Contd.)	5. Explain the correct material disposal procedures for plumbing waste such as oily rags and other plumbing garbage		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5
		Plumbing Tools Defects (Contd.)			Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0 P: 8
		Advanced Tools, Equipment and Materials	1. Discuss about new advanced tools, equipment and materials being introduced in the industry		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Advanced Tools, Equipment and Materials (Contd.)	2. Explain the process of electrolysis and problems associated with the use of dissimilar metals		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Advanced Tools, Equipment and Materials (Contd.)					T: 0 P: 8

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Advanced Tools, Equipment and Materials (Contd.)	3. State the impact of accurate marking on the fabrication process work time and finished work quality		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Advanced Tools, Equipment and Materials (Contd.)					T: 4 P: 4
5	Apply Health and Safety Practices at the Workplace	Dealing with Workplace Hazards & Risks	1. Differentiate between risks and hazards. 2. Discuss the specific safety and health-related problems faced in domestic, commercial and institutional setups. 3. List the various types of hazards (such as physical, fire, chemical compounds and electrical) that could affect the work process.	PSC/N013 6	Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.25 P: 1.25

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Dealing with Workplace Hazards & Risks	4. List the various hazardous environments and common hazards that can occur during plumbing installation and maintenance along with their precautions and remedial measures.		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.25 P: 1.25
		Dealing with Workplace Hazards & Risks (Contd.)	1. Discuss the importance of various types of personal protective equipment (PPE). 2. Discuss where the general health and safety equipment commonly is kept at the workplace. 3. Explain the various types of safety signs and their significance in the work process.		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.25 P: 1.25

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Fire Safety Practices	<p>1. Discuss various causes of fire and precautionary activities to prevent the fire accident.</p> <p>2. List the different techniques that employ various methods (such as using extinguishers, water hose, sprinklers, sand bucket, wet blanket, etc.) and materials such as water, powder, foam, CO₂, fire extinguishing chemical, sand, blanket, etc. used for extinguishing fire as per the type (as per class A, B, C and D).</p> <p>3. Describe rescue techniques applied during a fire hazard or electrocution.</p>		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.25 P: 1.25
		First-aid Practices	<p>1. Discuss appropriate basic first aid treatment relevant to the condition e.g. shock, electrical shock, bleeding, minor burns, poisoning, eye injuries, etc.</p>		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.25 P: 1.25

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		First-aid Practices	2. Discuss potential injuries and health problems associated with incorrect handling of tools and equipment.		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.25 P: 1.25
6	Work Effectively With Others	Work and Communicate Effectively at Workplace	1. State the importance of effective communication in the workplace. 2. Describe the typical organizational hierarchy and the various categories of people that one is required to communicate and coordinate with. 3. List various components of effective communication. 4. State the importance of using inclusive language (verbal, non-verbal and written) that is gender, disability and culturally sensitive. 5. State the importance of teamwork and developing effective working relationships for professional success.	PSC/N0137	Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2 P: 2

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
6	Work Effectively With Others	Work and Communicate Effectively at Workplace	<p>6. Discuss the importance and ways of managing interpersonal conflict effectively.</p> <p>7. Discuss how to express and address grievances appropriately and effectively.</p> <p>8. State the importance of ethics and discipline for professional success.</p> <p>9. Explain what constitutes disciplined behaviour and integrity for a working professional.</p> <p>10. Discuss the legislation, standards, policies, and procedures relevant to own employment and performance conditions.</p> <p>11. Discuss importance of dress code in organisations.</p>	PSC/N0137	Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2 P: 2

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Work in a Disciplined and Ethical Manner	<ol style="list-style-type: none"> 1. Discuss the importance and ways of managing interpersonal conflict effectively. 2. Discuss how to express and address grievances appropriately and effectively. 3. State the importance of ethics and discipline for professional success. 4. Explain what constitutes disciplined behaviour and integrity for a working professional. 5. Discuss the legislation, standards, policies, and procedures relevant to own employment and performance conditions. 6. Discuss importance of dress code in organisations. 		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.5 P: 1.5

Sl. No	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Uphold social diversity at the workplace	<ol style="list-style-type: none"> Explain the impact of gender, disability, cultural and age-related biases, stereotyping at the workplace and in society. List the different types of disabilities and the challenges faced by persons with disability (PWD). State the laws, acts, provisions and schemes defined for PWD by the Government bodies. Discuss gender, disability and cultural biases, stereotypes and impact on others Discuss basic gender concepts such as gender power relations, gender roles, access and control, gender sensitivity, gender equity and equality. Discuss the importance of gender sensitivity and equality. List the indicators of harassment and discrimination based on gender, disability, caste, religion or culture that occurs at a typical workplace. 			Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.5 P: 1.5

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Uphold social diversity at the workplace	8. State general organisational norms and procedures applied to protect against harassment and discrimination. 9. Discuss the importance of reporting incidents of harassment and discrimination to appropriate authority.			Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.5 P: 1.5
7.	Employability Skills (30 hours)	Introduction to Employability Skills	1. Discuss the Employability Skills required for jobs in various industries 2. List different learning and employability related GOI and private portals and their usage	DGT/V SQ/N0 101	Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0.5 P: 0.5
		Constitutional values - Citizenship	3. Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen.		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0.5 P: 0.5

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Becoming a Professional in the 21st Century	<p>4. Discuss importance of relevant 21st century skills.</p> <p>5. Exhibit 21st century skills like Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.</p>		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0.5 P: 0.5
		Basic English Skills	6. Describe the benefits of continuous learning.		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 1
		Communication Skills	<p>1. Explain the importance of active listening for effective communication</p> <p>2. Discuss the significance of working collaboratively with others in a team</p>		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.5 P: 2.5

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Diversity & Inclusion	<ol style="list-style-type: none"> 1. Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD 2. Discuss the significance of escalating sexual harassment issues as per POSH act. 		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0.5 P: 0.5
		Financial and Legal Literacy	<ol style="list-style-type: none"> 1. Outline the importance of selecting the right financial institution, product, and service 2. Demonstrate how to carry out offline and online financial transactions, safely and securely 3. List the common components of salary and compute income, expenditure, taxes, investments etc. 4. Discuss the legal rights, laws, and aids. 		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.5 P: 2.5
		Essential Digital Skills	<ol style="list-style-type: none"> 1. Describe the role of digital technology in today's life. 2. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely 		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 2

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Essential Digital Skills	<p>3. Discuss the significance of displaying responsible online behaviour while browsing, using various social media platforms, e-mails, etc., safely and securely</p> <p>4. Utilize virtual collaboration tools to work effectively</p>		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 2
		Entrepreneurship	<p>1. Explain the types of entrepreneurship and enterprises</p> <p>2. Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan</p> <p>3. Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement</p> <p>4. Create a sample business plan, for the selected business opportunity</p>		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2.5 P: 4.5
		Customer Service	1. Describe the significance of analysing different types and needs of customers		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.5 P: 2.5

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Customer Service	2. Explain the significance of identifying customer needs and responding to them in a professional manner.		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1.5 P: 2.5
		Getting ready for apprenticeship & Jobs	<ol style="list-style-type: none"> 1. Discuss the significance of maintaining hygiene and dressing appropriately 2. Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively 3. Discuss the significance of maintaining hygiene and confidence during an interview 36. Perform a mock interview 		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 1

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Training Tools/Aids	Duration in Hours
		Getting ready for apprenticeship & Jobs	4. List the steps for searching and registering for apprenticeship opportunities		Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 1
	Total (In Hours)				Theory	120
					Practical	180
					On the Job Training	60
					Grand Total (in Hours)	360 hours

Annexure III

Assessment Criteria

CRITERIA FOR ASSESSMENT OF TRAINEES

Assessment Criteria for Technical Support	
Job Role	Assistant Plumber - General
Qualification Pack	PSC/Q0102, v4.0
Sector Skill Council	Plumbing

Sr. No.	Guidelines for Assessment
1.	Criteria for assessment for each Qualifications File will be approved by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each Element / PC.
2.	The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3.	Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/ option NOS/ Set of NOS.
4.	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below).
5.	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on this criteria.
6.	To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % 70 aggregate for the QP.
7.	In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Total Marks: 550	Compulsory NOS	Marks Allocation				
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Theory Marks	Practical Marks	Project Marks	Viva Mark
PSC/N0139 Carry out Support Activities for Plumbing Work	Pc1. follow work instructions received from plumber or supervisor	100	1	3	-	1
	Pc2. unpack pipes, fittings and fixtures as per manufacturer's guidelines and safety measures		1	3	-	-
	PC3. check quantity and quality of various plumbing materials and equipment present at the work site		2	4	-	1
	PC4. report any shortcomings of supplies against specifications or requirements		1	3	-	1
	PC5. close or release water supply to the fixture and/or pipe being installed or repaired as per instructions of the plumber		2	3	-	1
	PC6. use hand and power tools for cutting, bending and assembling pipes and fittings in a safe manner		4	7	-	1
	PC7. perform cutting, bending and forming of Polyvinyl chloride (PVC), Chlorinated polyvinyl chloride (cPVC), Cross-linked polyethylene (PEX) and un-plasticized polyvinyl chloride, (uPVC) pipes as per the dimensions marked by the plumber		10	14	-	1
	PC8. assemble the fixture and/or pipework as per instructions		3	8	-	1
	PC9. secure the assembly using the fittings and fasteners as per instructions		2	5	-	1
	PC10. hold the pipework or fixture steadily during installation for the plumber when required		2	5	-	1
	PC11. clear work area and store tools and other plumbing materials safely and as per the specified guidelines		2	5	-	1
	NOS Total		30	60		10

Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Theory Marks	Practical Marks	Project Marks	Viva Marks
PSC/N0140	PC1. apply suitable treatment method to remove rust and corrosion from damaged tools	100	5	12	-	1
	PC2. sharpen the bladed tools such as cutters, filers, pliers, chisels, etc. using method appropriate to the tool		6	12	-	1
	Pc3. inspect the power tools to identify the extent and type of wear and damage		6	10	-	1
	PC4. repair, replace, discard worn out or damaged tools and accessories in a timely manner		4	8	-	1
	PC5. lubricate moving parts of the tools ensuring proper coverage and right amount of authorized lubricant, as per need and maintenance schedule		3	7	-	1
	PC6. dispose discarded oily rags and waste as per organizational procedure		6	14	-	2
	NOS Total		30	63	-	7

Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Theory Marks	Practical Marks	Project Marks	Viva Marks
PSC/N0137: Work Effectively with Others	PC1. obtain complete information and instructions	100	3	8	-	-
	Pc2. seek clarifications from appropriate source when required		1	5	-	-
	PC3. provide information accurately and clearly		3	7	-	1
	PC4. use inclusive language (verbal, non-verbal and written) that is gender, disability and culturally sensitive		4	6	-	1
	PC5. prioritize tasks as required		3	8	-	1
	PC6. consult with and assist others to maximize effectiveness and efficiency in carrying out tasks		3	8	-	1
	Pc7. escalate grievances and problems to appropriate authority as per procedure to resolve them and avoid conflict		3	4	-	1
	Pc8. act upon constructive feedback from others		2	5	-	-
	PC9. transact with everyone without any personal bias based on gender, disability, caste, religion, colour, sexual orientation and culture		3	5	-	1
	PC10. recognize indicators of harassment and discrimination based on gender, disability, caste, religion, colour, sexual orientation and culture at workplace		3	5	-	1
	PC11. report incidents of harassment and discrimination to appropriate authority		2	2	-	-
	Total		30	63		7

Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Theory Marks	Practical Marks	Project Marks	Viva Marks
PSC/N0136: Apply Health and Safety Practices at the Workplace	Pc1. identify risks and hazards at the workplace	100	2	2	-	0.5
	Pc2. wear personal protective equipment (PPE) as per the type of plumbing work		2	2	-	0.5
	PC3. place protective barricades and signages around the pits and trenches		1	4	-	0.5
	Pc4. isolate the plumbing fittings and fixtures from electrical wiring to avoid accidents		1	4	-	-
	PC5. adhere to organisational procedures for reporting hazards and incidents to relevant authorities		2	4	-	0.5
	PC6. establish ventilation before entering underground work areas		1	4	-	-
	PC7. work safely in and around trenches, elevated places and confined areas		1	3	-	-
	PC8. ensure tools and hazardous materials are not left unattended		1	3	-	-
	PC9. ensure good housekeeping in order to prevent hazards e.g. fire		1	3	-	0.5
	PC10. dispose waste materials and used PPE according to regulations and codes of practice		1	3	-	0.5
	PC11. follow recommended personal hygiene and sanitation practices, for example, washing/sanitizing hands, covering face with a bent elbow while coughing/sneezing etc.		1	3	-	0.5
	PC12. clean and disinfect work area, materials/supplies, equipment etc. before and after use.		1	3	-	0.5

Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Theory Marks	Practical Marks	Project Marks	Viva Marks
	Pc13. report hygiene and sanitation issues to appropriate authority		1	2	-	-
	Pc14. check that the tools, equipment and materials are in good condition and as per industry standards before use		1	3	-	0.25
	PC15. use power tools and machinery that are grounded		1	2	-	0.25
	PC16. replace or repair split or loose tools before use		2	2	-	0.25
	PC17. store and transport various plumbing materials safely		2	2	-	0.25
	Pc18. follow workplace emergency and evacuation procedures		2	3	-	0.5
	PC19. use a fire extinguisher correctly		2	4	-	0.5
	PC20. use safe methods to free a person from electrocution		2	3	-	0.5
	PC21. administer appropriate first aid (such as CPR etc.) to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning etc.		2	4	-	0.5
	Total	30	63	-	7	

Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Theory Marks	Practical Marks	Project Marks	Project Marks
2.DGT/VSQ/N01 01: Employability Skills (30 Hours)	Introduction to Employability Skills		1	1	-	-
	Pc1. understand the significance of employability skills in meeting the job requirements		-	-	-	-
	Constitutional values – Citizenship		1	1	-	-
	PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices		-	-	-	-
	Becoming a Professional in the 21st Century		1	3	-	-
	PC3. explain 21st Century Skills such as Self- Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.		-	-	-	-
	Basic English Skills		2	3	-	-
	PC4. speak with others using some basic English phrases or sentences		-	-	-	-
	Communication Skills		1	1	-	-
	PC5. follow good manners while communicating with others		-	-	-	-

Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Theory Marks	Practical Marks	Project Marks	Project Marks
	Pc6. work with others in a team		-	-	-	-
	Diversity & Inclusion		1	1	-	-
	PC7. communicate and behave appropriately with all genders and PwD		-	-	-	-
	PC8. report any issues related to sexual harassment		-	-	-	-
	Financial and Legal Literacy		3	4	-	-
	PC9. use various financial products and services safely and securely		-	-	-	-
	PC10. calculate income, expenses, savings etc.		-	-	-	-
	PC11. approach the concerned authorities for any exploitation as per legal rights and laws		-	-	-	-
	Essential Digital Skills		4	6	-	-
	PC12. operate digital devices and use its features and applications securely and safely		-	-	-	-
	PC13. use internet and social media platforms securely and safely		-	-	-	-
	Entrepreneurship		3	5	-	-
	PC14. identify and assess opportunities for potential business		-	-	-	-

Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Theory Marks	Practical Marks	Project Marks	Project Marks
	PC15. identify sources for arranging money and associated financial and legal challenges		-	-	-	-
	Customer Service	2	2	-	-	
	PC16. identify different types of customers		-	-	-	-
	PC17. identify customer needs and address them appropriately		-	-	-	-
	PC18. follow appropriate hygiene and grooming standards		-	-	-	-
	Getting ready for apprenticeship & Jobs	1	3	-	-	
	PC19. create a basic biodata		-	-	-	-
	PC20. search for suitable jobs and apply		-	-	-	-
	PC21. identify and register apprenticeship opportunities as per requirement		-	-	-	-
	NOS Total	20	30	-	-	

Glossary

- **Sector:** Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
- **Sub-sector:** Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
- **Occupation:** Occupation is a set of job roles, which perform similar/ related set of functions in an industry. **Job role:** Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
- **Occupational Standards (OS):** OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
- **Performance Criteria (PC):** Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
- **National Occupational Standards (NOS):** NOS are occupational standards which apply uniquely in the Indian context.
- **Qualifications Pack (QP):** QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
- **Unit Code:** Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
- **Unit Title:** Unit title gives a clear overall statement about what the incumbent should be able to do.
- **Description:** Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
- **Scope:** Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
- **Knowledge and Understanding (KU):** Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
- **Organizational Context:** Organizational context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
- **Technical Knowledge:** Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
- **Core Skills/ Generic Skills (GS):** Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
- **Electives:** Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.

- Options: Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.



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