



Facilitator Guide



Sector
Iron & Steel

Sub-Sector
Steel, Sponge Iron

Occupation
Electrical Maintenance

Reference ID: **ISC/Q0908, Version 1.0**
NSQF Level: **3**

Rigger: Rigging of Heavy Material



Shri Narendra Modi
Prime Minister of India

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



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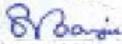
SKILLING CONTENT : PARTICIPANT HANDBOOK

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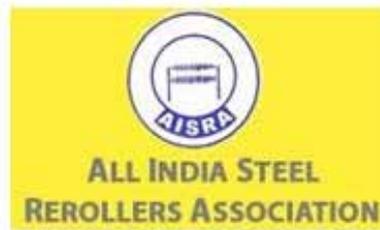
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About this book

This Facilitator Guide is designed to enable training for the specific Qualification Pack (QP). Each National Occupational (NOS) is covered across Unit/s.

The job is all about selection of tools and tackles, understanding and analysis of load distribution and lifting, moving (to be tied with rope to arrest lateral movement) of loads safely as per needs of the group (Fitter, Welder etc). This job requires the individual to work independently as well as in teams. He should be physically fit, not have color blindness, have analytical skills, problem solving attitude, high concentration levels and willingness to work in a factory environment.

Key Learning Objectives for the specific NOS mark the beginning of the Unit/s for that NOS. The symbols used in this book are described below.

Symbols Used



Steps



Time



Tips



Notes



Objectives



Do



Ask



Explain



Elaborate



Field Visit



Practical



Lab



Demonstrat



Exercise



Team Activity



Facilitation Notes



Learning Outcomes



Say



Resources



Activity



Summary



Role Play



Example

Table of Contents

S.No.	Modules and Units	Page No.
1.	Introduction	1
	Unit 1.1 – Understanding of Iron & Steel industry	3
	Unit 1.2 – Understanding various types of Iron & Steel industry	5
	UNIT 1.3– Role of rigger in industry	6
2.	Occupational health and safety (OHAS) (ISC/N0008)	9
	Unit 2.1 – Learn Occupational health & Safety	11
	Unit 2.2 – What is hazard	13
	Unit 2.3 – Safe working practices	16
	Unit 2.4 – Working at heights and confined spaces	20
	Unit 2.5 – Fire Prevention	27
	Unit 2.6 – Emergencies, rescue and first aid procedures	32
3.	5S & housekeeping (ISC/N0008)	37
	Unit 3.1 - Identification of bottlenecks in functioning of work place	39
	Unit 3.2 - Various methods of housekeeping	41
	Unit 3.3 - Waste management	44
4.	Rigging tools and equipments (ISC/N0935)	47
	Unit 4.1 – Slings	49
	Unit 4.2 – Fitting components required	53
	Unit 4.3 - Knots and hitches	75
	Unit 4.4 - Auxiliary devices and tools required	79
5.	Basis of rigging (ISC/N0936)	81
	Unit 5.1 – Rigging fundamentals	83
	Unit 5.2 – Pre inspection of rigging equipments	88
	Unit 5.3 – Rigging hand signals	92
	Unit 5.4 – Good and bad rigging practices	94
6.	Rigging operations (ISC/N0936)	97
	Unit 6.1 - Lifting and moving loads	99
	Unit 6.2 - Rigging and lifting practices	107





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N.S.D.C
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Transforming the skill landscape

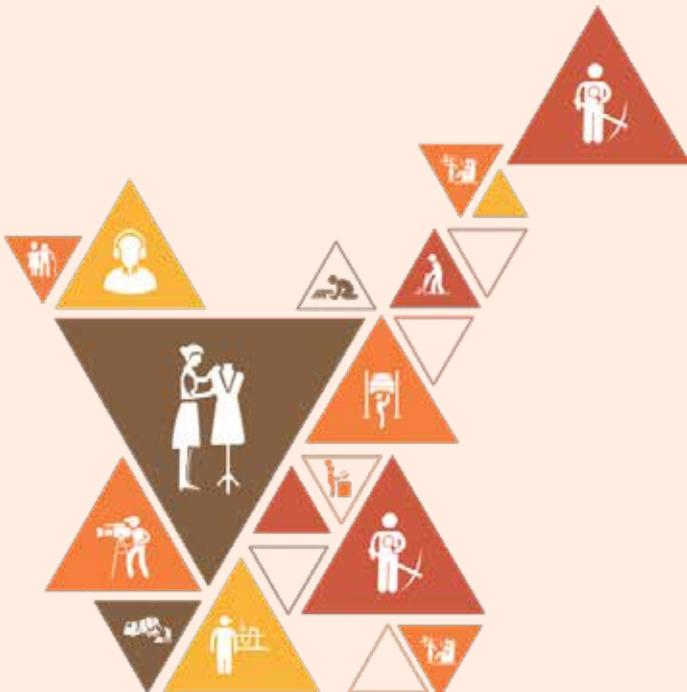


1. Introduction

Unit 1.1 - Understanding of Iron & steel industry

Unit 1.2 - Understanding various types of Iron & Steel Industry

Unit 1.3 - Role of rigger in the industry



Key Learning Outcomes

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

1. Discuss about Iron & Steel industry
2. Discuss about development activities in Iron & Steel industry
3. Discuss about employment opportunities in India
4. Know about industry structure
5. Know about Iron & Steel plants in India
6. Know about roles and responsibilities of rigger

UNIT 1.1: Understanding of Iron & Steel Industry

Unit Objectives

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

1. Discuss about Iron & Steel industry
2. Discuss about development activities in the industry
3. Know about opportunities in Iron & Steel Industry in India

Resources to be Used

- Invigilator can use the available objects such as a marker, duster, pen, notebook etc.

Do

- Take a parcel, mention some details such as student name, hobbies, likes, dislikes etc.
- Make the students stand in a circle, close enough to the person each side of them that they can
- Pass the parcel quickly.
- Say 'Stop' when the students least expect it. The person who has the parcel at that time should get out from the class.
- Those who get out should introduce themselves by providing the details mentioned in the parcel.
- The winner of the game should stand and introduce himself/herself at the end of the game.
- At last, say thank the students for their participation.

Say

- India comes under the list of world's largest crude steel producer countries.
- Crude steel capacity of India reached 109.85 Million tonnes (MT), with a growth of 7.4 per cent.
- Requirement of large amount of iron ore and coal for production of steel.
- According to the data, the Indian metallurgical industries attracted Foreign Direct Investments (FDI) of around US\$ 8.7 billion.
- Indian government is aiming to increase steel production to 300 MT by 2025 in the country.

- The Ministry of Steel is facilitating setting up of an industry driven Steel Research and Technology Mission of India (SRTMI) in association with the public and private sector steel companies to spearhead research and development activities in the iron and steel industry at an initial corpus of Rs 200 crore.
- The total employment in the steel industry is more than 2 million which includes both direct and indirect employment.

Notes for Facilitation



- You could ask the students who get out during the game to be the music keepers. They can start and stop the music as the game progresses.
- Encourage shy students to provide information about themselves by prompting them with questions such as 'what do you enjoy doing the most', 'what is your favorite movie or book' etc.
- Brief about iron and steel industry.
- What all conditions for the growth in iron and steel industry.
- Explain the government initiatives in this sector.
- You could ask from the students about employment opportunities in the industry.

UNIT 1.2: Understanding various types of Iron & Steel Industry

Unit Objectives

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

1. Discuss about Iron & Steel industry structure
2. Know about Iron & Steel plants in India

Say

- The Iron and Steel Industry in India is separated into two divisions:
 - o Integrated producers, and
 - o Secondary producers
- TISCO is the oldest iron and steel plant of India.
- There are more than 50 Iron and Steel industries in India.
- There capacity varying from ten thousand to five lakh tonnes, these are known as mini steel plants.

Notes for Facilitation

- You could ask the students about the expectations from the course.
- Invite students to participate.
- List the major Iron and Steel producing companies in India.
- Give the students a brief overview of what all will be covered in the program.
- You could ask the location of different industries in India.
- You could ask the iron and steel industries name in India.

UNIT 1.3: Role of rigger in industry

Unit Objectives

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

1. Know about rigging
2. Know about job responsibilities of a rigger

Resources to be Used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster.
- PC with LCD Projector or Flip Chart
- Participant Manual

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.

Say

- **Rigger** directs dangerous or pre-engineered lifts.
- If the lift is pre-engineered lift, then extra measures are required before the operation. If lift is critical, then specialized engineering riggers are required.
- During the lift, it is necessary to check Lift Planning checklist and consider weather factors for safe lifting operation.

Elaborate

The following items must be checked and confirmed before selecting rigging components:

- | | |
|---------------------|------------------------------------|
| • Weight of lift | • Sharp corners and angles on load |
| • Center of Gravity | • Sling angles |

- Lift points
- Anchor capacity
- Speed, height, width, and length of lift
- Wind, temperature and visibility
- Load angle factor
- Travel route clearance
- Floor loading capacity
- Work zone safety

Job Duties and Tasks for: “Rigger”

1. Proper alignment and attachment of equipment.
2. Attaching loads with crane and preparation of hand and power tools required during operation.
3. Attaching pulleys and blocks with beams, ceilings etc by securing them with bolts and clamps.



Fig. 1.3.1: Rigging work

4. Moving heavy loads through narrow openings or confined spaces by utilizing chainfalls, slings and other equipment.
5. Dismantling and storing of rigging equipment after completion of work.
6. Fabrication and repairing of hoists, supporting structures and pulling gear, if required.
7. Manipulation of hoists, rigging lines and pulling gear for moving heavy equipment, ships etc.



Fig. 1.3.2: Rigging work

8. According to load weight and size, selection of pulleys, cables and winches.
9. Give signals to crane operator during the load movement.

10. Testing of rigging components for ensuring safety.
11. Tilting and turning of suspended loads to move it over, under or around the obstacles.
12. Cleaning of machine surfaces and components.

Ask



- You could ask the students the list of items must be checked and confirmed before selecting rigging components.
- You could ask the students job duties and tasks for rigger.

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.



2. Occupational, Health and safety (OHAS)

Unit 2.1 - Learn Occupational health & Safety

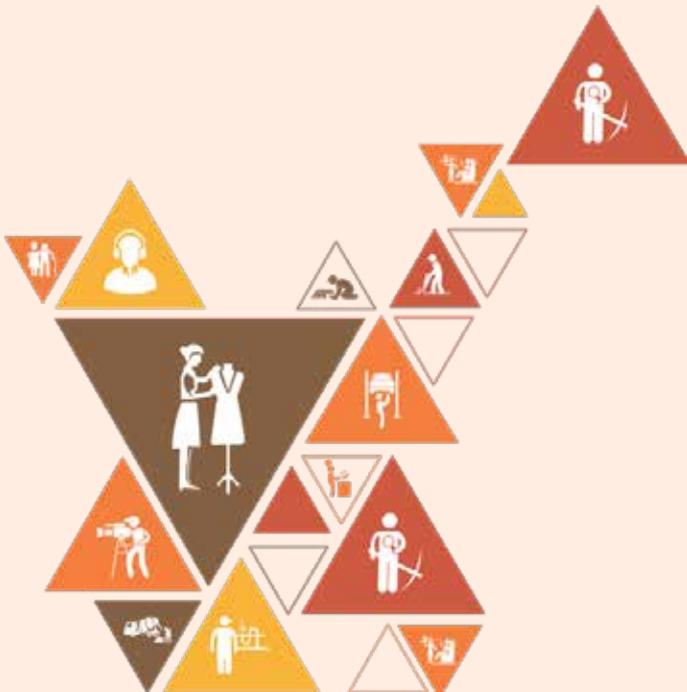
Unit 2.2 - What is hazard

Unit 2.3 - Safe working practices

Unit 2.4 - Working at Heights and confined spaces

Unit 2.5 – Fire prevention

Unit 2.6 - Emergencies, rescue and first aid procedures



Key Learning Outcomes

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

1. Discuss about safety requirements, procedures, and resources for different areas
2. Discuss about safe work practices
3. Know about hazards, types of hazards and how to control hazards
4. Know about PPE requirements
5. Know about safe working practices at heights
6. Know about safe working practices at confined spaces
7. Discuss about protection from fire hazards
8. Know about fire extinguisher and how to use it.

UNIT 2.1: Learn Occupational Health & Safety

Unit Objectives

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

1. Discuss about health and safety requirements in industry
2. Know about essential elements for safety
3. Know about good safety work practices

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts. At last, say thank the students for their participation.

Say

- The health and safety of workers is a very important factor in this industry because it affects both social and economic factors of an organization.
- An iceberg of incidents is showing the nature of various types of accidents. They are unsafe actions, incidents, minor injuries, lost time injuries, serious accidents and fatalities.
- Three features are vital for advancement of safety in a workshop.
- Conducting regular safety audits to identify unsafe practices and areas and how to take corrective actions to overcome the issues. Safety audits can help in timely recognition of hazards and risks.

Elaborate

- Three features are vital for advancement of safety in a workshop:
 - o Situation of environment of work place in terms of plant access, housekeeping, safety and safe place of work etc..
 - o Workers training and ability which assists them to recognize and apply safe systems of work.

- o The development of motivational and behavioral influences of employees. This includes identifying unsafe behavior and attitudes by using more direct strategies and to motivate employees.

Ask



- Ask various type of accident.
- Ask three aspects are important for progress of safety in a steel plant.
- Ask the essential elements necessary for safety
- Ask about the good safety practices

Notes for Facilitation



- You could ask what the students think about safety in steel plant.
- You could ask the benefits to adopt such technique.

UNIT 2.2: What Is Hazard

Unit Objectives

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

1. Discuss about hazards and different types of hazards
2. Know about, how to identify and control hazards
3. Know about safe working practices

Resources to be Used

- Available objects such as a duster, pen, notebook, PPE, heavy weight etc.

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- A hazard is something that has the potential to cause injury, disease or death in a workplace.
- Aspects for the development of a safe workplace environment are development policies, consultative process, hazard identification and control.
- Hazards are of following types: Physical, Mechanical, chemical and Electrical etc.
- Mineral oil is typically used for operation purposes for bulk density control and dust suppression.
- The emissions contain numerous polycyclic aromatic hydrocarbons (PAHs), some of which are carcinogenic.
- Ensure the control measures

Elaborate



There are a number of aspects to the development of a safe workplace environment.

- The development of policies
- The development of consultative processes
- Hazard identification, assessment and control.

A steel plant is full of hazards. For the sake of workers safety in plant, these hazards have to be tackled. Major hazards occur in plant are:

- Road hazards- road hazards are very high because of movement of heavy and heterogeneous traffic on plant. This hazard occurs mainly during the shift change timings of workers.
- Coke oven and sinter plant – Here hazards occur due to dust, heat, chemicals, smoke, fire and explosion etc.
- Blast furnace and steel melting shop – The main hazards occur here due to gas poisoning, heat, slag, dust, moving equipments and vehicles, fire and working at heights.
- Rolling mills – In rolling mills, the hazards occur are moving equipment, heat, suspended loads, splinters and slippery floors.
- Power plant – The main hazards are heat, working at height, noise, vibrations and gas and steam lines etc.
- Material handling – The main hazards occur due to improper material handling are posture, improper signaling, moving equipment, loads and suspended overhead loads etc.
- Other major hazards which are common to most of the places are working in confined space, working with improper tools, poor illumination, poor ventilation, electrical hazards, loco movements, unmanned crossings, unpreparedness for emergencies, unsafe scaffoldings, over confidence and working without safety appliances, personal protective equipments (PPEs), written clearances, and shutdown clearances etc.

Ask



- You can ask the different types of hazard
- You can pick the students and ask the hazard warning sign.
- You can ask the different ideas to control the hazard.
- You could ask the common causes of hazard.

Notes for Facilitation



- You could ask the hazard during workplace.
- You could show all the hazard warning sign and their differences.
- You could ask the various techniques to avoid and control from hazards.
- Give students some time to think about how the hazard affects physical and mentally to our body.

Activity



- Conduct a skill practice activity.
- Ask the students to assemble together.
- You could show the various Hazard signs and ask the identification from the students one by one.

UNIT 2.3: Safe Working Practices

Unit Objectives

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

1. Discuss about safe working practices
2. Know about material safe handling
3. Know about personal protective equipments

Resources to be Used

- Available objects such as a duster, pen, notebook, PPE, heavy weight etc.

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- There are safe practices need to be consider for avoiding general shop hazards
- There are safe practices need to be consider for avoiding machine hazards
- Every worker has to lift and move heavy weight during the job whenever required.
- Extreme care should be taken while lifting or moving the job so that no damage occurs to the job or plant and also to prevent accidents at work place.

Elaborate

Personal protective equipment provides us the last level for controlling hazards. Before using of personal protective equipment, the working requirements of the equipment should be checked to make sure it fulfills the same, verify the required standards, make sure it fits the body shape of the user, be user-friendly and is under regular maintenance and can be switched if required.

Personal Protective Equipment (PPE)

- **Safety helmet:** Safety helmets guard the head from injuries caused by falling objects.
- **Earmuffs, earplugs:** Earmuffs and earplugs protect the ears from injuries by loud noises.
- **Safety belt:** Safety harnesses guard from falling from heights.
- **Goggles:** Goggles protect the eyes from injuries caused by strong light or flying objects.
- **Safety boots:** Safety boots guard the feet from puncture wounds, injuries and slipping.
- **Respirator:** Respirators guard the respiratory system from the attack of poisonous gases, mist, fumes and dust.



Fig 2.3.1: PPE

Ask



- You can pick the students and ask the safe practices for avoiding general shop hazards.
- You can ask the various types of personal protective equipment.

Notes for Facilitation



- You could ask the safety checklist before operating a machine.
- You could show the protective equipment and ask the causes.
- You could ask the causes of wrong handling

Do



- Show them the PPE
- Demonstrate the use and requirement of PPE
- Demonstrate the safe material handling practices

Demonstrate



Points to be taken care of while lifting / moving material

- Lift the materials in correct posture.
- Do not try to lift too heavy materials alone.
- Ensure the grip is right so that the job doesn't slip from hand and fall
- Put down the job at the destined place properly.
- Do not throw the job on ground.
- Avoid double handling.
- Take rest breaks during heavy or repetitive work.

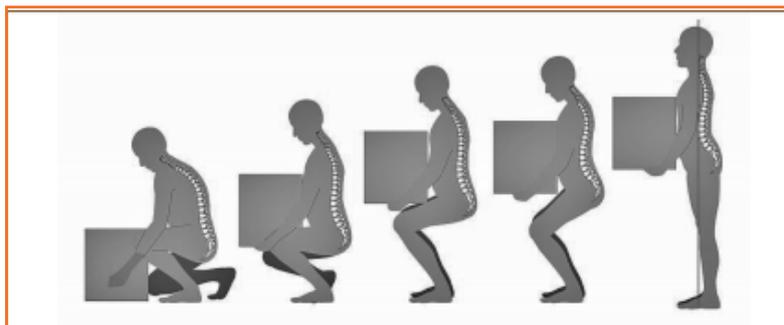


Fig 2.3.2: Safe material lifting

Activity

- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Skill Practice	Time	Resources
PPE and Safe material handling	2 hours	PPE
		Heavy weight

Do

- Ask them to get into pairs for practice.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Lab

- You could show the various personal protective equipments (PPE) to the students in the lab

UNIT 2.4: Working at heights and confined spaces

Unit Objectives

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

1. Discuss about risks of working at heights
2. Know about safety precautions while working at heights
3. Discuss about risks of working at confined spaces
4. Know about safety precautions while working at confined spaces

Resources to be Used

- Available objects such as a duster, pen, notebook, ladder, respiratory equipments etc.

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Notes for Facilitation

- You could ask the students about the understanding of safe working practices at heights and confined spaces.
- Invite students to participate. List the responses from students on the whiteboard.
- Give the students a brief overview of what all will be covered in the program.

2.4.1: Safe working at heights

Say



- Falls from height are responsible for many serious and fatal injuries every year.
- The Health and Safety Executive recommends a five-step approach to risk assessment, and the risk of slips, trips and falls should also be considered.

Elaborate



The main hazards associated with working at height are people falling and objects falling onto people below. These may occur as a result of inadequate edge protection, or from objects in storage being poorly secured.

Safety equipments can use while working at heights:

- Mobile elevated platforms
- Ladders
- Step-ladders
- Scaffolder
- Harnessing belts

Do



- Show the risk assessment procedure
 1. Look for hazards associated with falls from height around the workplace. Where are people required to work at height? Do they carry out work from ladders, platforms, scaffolds, or unprotected or fragile roofs?
 2. Decide who might be harmed and how. Who comes into the workplace? Are they at risk? Are some groups more at risk than others?
 3. Consider the risks. Are there already measures in place to deal with the risks? Look at areas with unguarded openings or without guardrails and covers. Are regular inspections carried out?
 4. Record your findings if you have five or more employees.
 5. Regularly review the assessment. If any significant changes take place, make sure that precautions are still adequate to deal with the risks.
- Demonstrate the safe use of ladders

Demonstrate

Steps of how to work safely on ladder:

1. Climb only the front of the ladder, never the back.
2. Don't climb higher than the tread that's third from the top (there should be two steps above you, including the top); never sit on the top.
3. Keep your hips centered between the vertical side rails; don't overreach to either side.
4. Never stand on the spreaders or paint shelf.
5. Don't leave ladders unattended, especially around children.
6. Allow only one person on the ladder at a time.
7. Never lean a closed stepladder against a wall and climb it; it can slide out from under you.

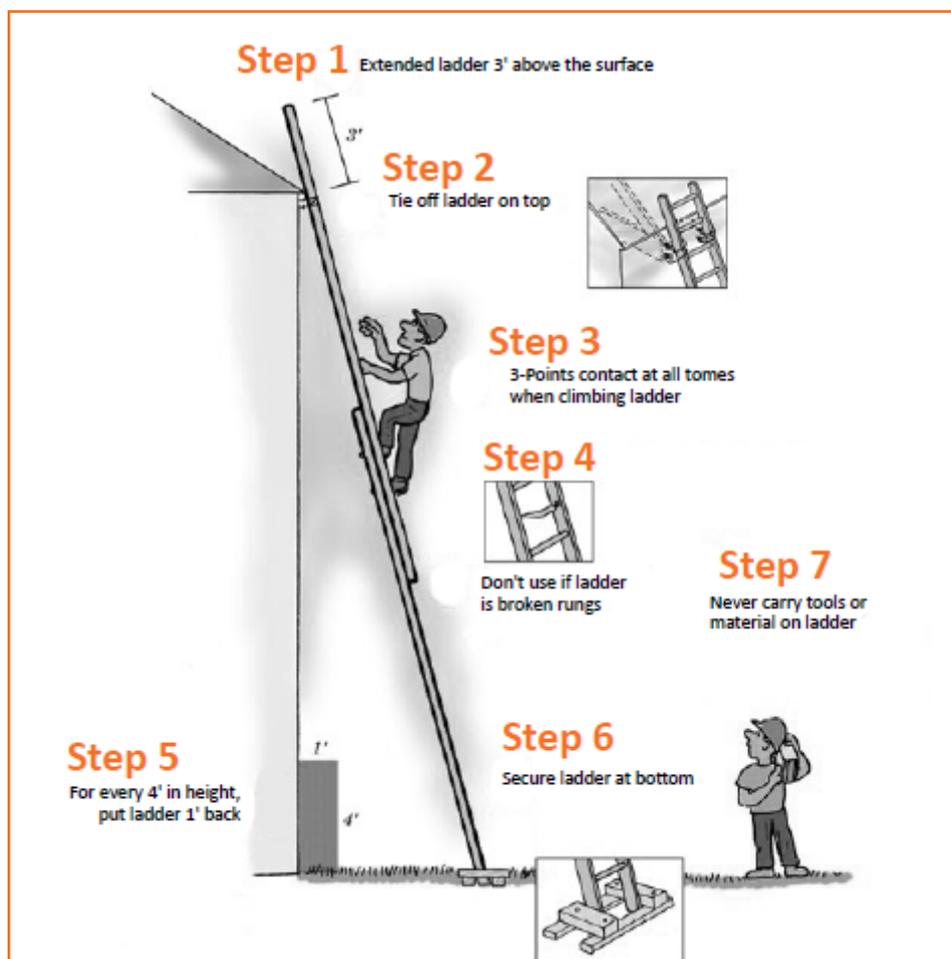


Fig 2.4.1: Safe use of ladder

Do's

- Work on ground level, as much as possible.
- Make sure equipment is sufficiently stable, appropriate and strong for the job.

- When working on or near delicate areas, take safeguards
- Always be prepared for protection from falling objects
- make strategy for evacuation in case of emergency and rescue procedures

Don't

- Overload ladders
- Overreach on ladders or stepladders
- Fix the ladder on weak and uneven surfaces
- Use stepladders or ladders for tough or heavy tasks.

Ask

- You could ask the safe working procedure while working at height.

2.4.2: Safe working at confined spaces

Say

- Spaces which are enclosed from all around and risk of death or serious injury from dangerous conditions and hazardous substances is very high, are known as confined spaces.
- If you cannot avoid entry into a confined space, make sure you have a safe system for working inside the space.

Elaborate

Dangers can arise in confined spaces because of the following issues.

- A lack of oxygen. This can occur:
 - Spaces where reaction between some soils type and oxygen happens in the atmosphere;
 - Reaction of groundwater with limestone produces carbon dioxide;
 - Rust formation inside the vessels and steel tanks.
- Poisonous gas, fume:
 - Formation of poisonous gases in sewers and manholes;
 - Leakage of gases and fumes into trenches and pits in a poisonous area.
 - enter tanks or vessels from connecting pipes;
- Liquids and solids which can suddenly fill the space, or release gases into it, when disturbed. Free-flowing solids such as grain can also partially solidify or 'bridge' in silos, causing blockages which can collapse unexpectedly.
- Fire and explosions due to excess oxygen and flammable vapours.
- Filling of liquids and solids inside the space, when disturbed.
- Hot temperature conditions leading to increase in body temperature dangerously.
- Residues of fumes and vapour left in tanks, vessels etc.
- High concentrations of dust e.g. in flour silos.

Safe systems of work at confined spaces

If you have to work in a confined space, carry safety systems and equipments for working inside the space. The following checklist is important while working in a confined space.

- **Isolation:** Isolate the electrical and mechanical system of equipments need to be operating in space. In any cases, ensure that isolation done is effective.

- **Cleaning:** Make sure that there is no formation of fumes from residues during the work.
- **Size of entrance:** Entrance size is big enough to permit workers to enter in the space with all the necessary equipment required, and provide ready exit during an emergency.
- **Provision of ventilation:** Ensure that there is proper mechanical ventilation for an adequate supply of fresh air in the confined space. It is very important where portable gas cylinders and diesel fuelled equipment are used.
- **Isolation:** Mechanical and electrical isolation of equipment is essential if it could otherwise operate, or be operated, inadvertently. If gas, fume or vapour could enter the confined space, you need to isolate the pipework. In all cases, a check should be made to ensure isolation is effective.
- **Cleaning:** before entry this may be necessary to ensure fumes do not develop from residues etc while the work is done.
- **Check the size of the entrance:** Is it big enough to allow workers wearing all the necessary equipment to climb in and out easily, and provide ready access and exit in an emergency? For example, the size of the opening may mean choosing air-line breathing apparatus in place of self-contained equipment which is more bulky and therefore likely to restrict ready passage.
- **Provision of ventilation:** You may be able to increase the number of openings and therefore improve ventilation. Mechanical ventilation may be needed to make sure there is an adequate supply of fresh air. This is essential where portable gas cylinders and diesel fuelled equipment are used inside the space because of the dangers from build-up of engine exhaust.
- **Provision of special tools and lighting:** Use non-sparking tools and protected lighting systems to avoid flammable and explosive atmospheres. In confined space like inside metal tanks, appropriate precautions are required for safety from electric shock.
- **Provision of breathing apparatus:** Availability of breathing apparatus, if the air inside the space is not adequate and suitable for breathing because of poisonous fumes, gases or vapours in the space and lack of oxygen.
- **Preparation of emergency arrangements:** Proper emergency arrangements which cover the necessary equipments and practice drills.
- **Provision of rescue harnesses:** Availability of safety harnesses at the point outside the confined space.
- **Emergency procedures:** When situations are not favorable, there can be chance of serious and immediate danger. Effective arrangements like alarm systems and rescue operations during an emergency are essential.

Notes for Facilitation



- You could ask about essential elements to help prepare a safe system of work at confined spaces.
- Show them the safety equipments required while working at confined spaces.

Ask



- You could ask the confined space at safe working.
- You could ask how the danger can arise in confined space.
- What can occur if there is lack of oxygen?
- You could ask the isolation process.
- You could ask the safe systems of work at confined spaces.

UNIT 2.5: Fire Prevention

Unit Objectives

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

1. Discuss about fire hazards and how to control
2. Discuss about fire extinguishers
3. Know about types of fire extinguishers
4. Know about how to use fire extinguishers

Resources to be Used

- Available objects such as a duster, pen, notebook, fire extinguisher, fire alarm, PPE etc.

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- Fire is defined as a self-sustaining combustion process in which a substance (fuel) combines with oxygen in air to produce immense heat and light.
- Fire hazards pose threats to life and property.
- Fire is categorized into class A, B and C fire.
- A fire extinguisher is a fire protection device used to extinguish or control small fires during fire emergency situations.
- Dry chemical is a powder based. They stops and halts the production of fire supporting by “free-radicals”, accordingly extinguish the fire.

Elaborate

Different fuels create different fires and require different types of fire extinguishing agents.



Class A

Class A fires are fires in ordinary combustibles such as wood, paper, cloth, trash, and Plastics.



Class B

Class B fires are fires in flammable liquids such as gasoline, petroleum oil and paint. Class B fires also include flammable gases such as propane and butane. Class B fires do not include fires involving cooking oils and grease.



Class C

Class C fires are fires involving energized electrical equipment such as motors, transformers, and appliances. Remove the power and the Class C fire becomes one of the other classes of fire.



Class D

Class D fires are fires in combustible metals such as potassium, sodium, aluminum and magnesium.

Common fire extinguishers are:

- **Dry chemical:** These types of fire extinguisher are in powder form. They stop and halt the production of fire supporting by “free-radicals”, accordingly extinguish the fire.
- **Foams:** This type is applied over aspirated or non-aspirated fuels. It forms a seal or foamy blanket over the fuel and stops oxygen to reach near the fuel. Unlike powder type, foam type fire extinguisher is used to extinguish fires without flashback.



Fig 2.5.1: Fire extinguisher

- **Water:** It cools burning material by absorbing heat through the use of air pressurized water. It is successful to extinguish class A fires. Unlike dry chemicals and foams based fire extinguisher it is harmless, inexpensive and easy to clean.
- **Clean agents and carbon dioxide:** These types of extinguisher displace oxygen, control chemical chain reaction and remove heat from fire zone. This extinguisher does not leave any remains after release which is ideal for electronics items and sensitive documents.

Do



- Tell them about the fire fighting equipments.
- Show them the equipments and explain their use.
- Demonstrate them the use of fire extinguisher.
- Explain them about different types of fire extinguishers.

Demonstrate



Steps for using the fire extinguisher



- Step 1: Pull the pin** from the top of the extinguisher for releasing locking mechanism which discharges the extinguisher.
- Step 2: Aim the extinguisher towards** the base of the fire not the flame.
- Step 3: Squeeze the lever slowly.** Deliver the extinguishing agent in the extinguisher. When the lever of extinguisher is released, the discharge of extinguishing agent stops.
- Step 4: Sweep from side to side.** Move the fire extinguisher to and fro by sweeping motion until the fire is under control. Operate the extinguisher from a safe distance. Move towards the fire when it starts to reduce.

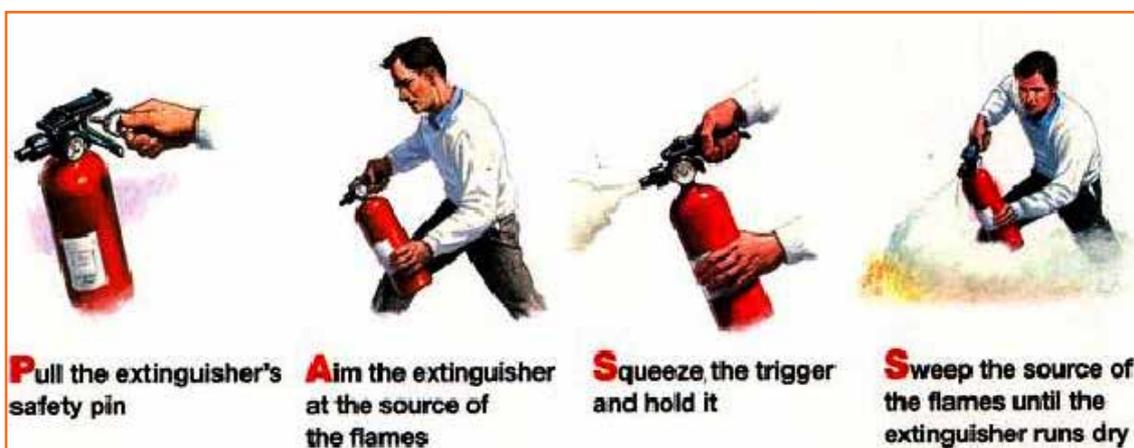


Fig 2.5.2: Using fire extinguisher

Notes for Facilitation

- You could ask the common fire extinguisher.
- You could ask the type of fire extinguisher and their role?
- You could ask what all information contains fire drill report.

Tips - During fire outbreak

1. On noticing a fire, immediately start shouting “fire” at top of your voice. Do not wait for the automatic fire alarms to start ringing.
2. Take a fire extinguisher
3. Use extinguisher as per fire type: - Water and co2 fire extinguishers for general fires - Foam type extinguishers for oil fires - Co2 fire extinguisher only for electrical fires.
4. Switch off all main switches during an electrical fire.
5. Do not try to switch off electrical equipment. Cut the power from the main source.
6. do not panic and alert the building fire department
7. Call the fire brigade immediately.
8. Ensure that the water sprinklers and other fire-fighting equipment have started operating.
9. First priority should be to save people. Help others to safely get out of the floor
10. Alert the nearest hospital to prepare to treat serious burn injuries.

Activity

- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Skill Practice	Time	Resources
Use of fire extinguisher	2 hours	Fire extinguisher
		PPE

Do

- Ask them to get into pairs for practice.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Field Visit

- You could visit any of the industry and show the firefighting equipment. With the help of field visit you could show the where we need to fit various firefighting equipment and its role.

UNIT 2.6: Emergencies, rescue and first aid procedures

Unit Objectives

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

1. Discuss about basic first aid techniques during electric shock, burns and choking
2. Know about CPR process
3. Know about bandaging process

Say

- If you think someone is suffering from electric shock, approach with extreme caution.

Demonstrate

You can make a group of few students to do demonstrate:

Steps - How to free a person from electrocution

If find someone is suffering from electric shock, approach with extreme caution and following first aid steps.

Step 1: **Firstly take** the suffered person away from the electricity source as fast as possible. Turning off the electric supply of machine is the best method for doing this.

Step 2: If this seems impossible, remove the person from electricity source by using a piece of wood or insulating material.

Step 3: **Don't touch the victim getting the electric shock** because you could also get shock too.

Step 4: **After successful executing the victim from the electricity source**, call the ambulance, if victim is unconscious. Give first-aid to victim till the time ambulance is coming.

Step 5: **If victim is conscious** and looking well, monitor its condition, as the results of shock must not be clear immediately.



Fig 2.6.1: Freeing a person from electrocution

Bleeding and Wounds

Step 1: Cover the wound by a clean cloth and gloved hand; then apply firm and steady pressure on wound for 5 mins at least.

Step 2: Lift up the injured leg or arm above the victim's heart level.

Step 3: Secure the wound by a bandage when bleeding stops. Ensure that bandage is not fixed too tightly—it may stop blood circulation.

Step 4: Check the victim for shock.

Burns

Chemical or Compressed Gas Burns

Step 1: Use a drench hose and emergency shower for at least 15 mins to rinse away all residues of chemicals.

Step 2: Cover the burn by a clean and dry cloth or special dressing for burns.

Heat or Electrical Burns

Step 1: Cool burning of skin by water.

Step 2: Place the burned area under cold running water if the skin is not broken and gently compress the wound by hand. Bandage the wound by a dry and clean cloth.

Step 3: If blister appear, don't try to break it.

Step 4: Do not apply ointments or creams.

Step 5: If skin is cracked, or if injuries are severe:

- Do not clean the wound or remove embedded clothing.
- Cover the injury insecurely with a clean, dry cloth.
- Expect shock and treat accordingly.

Choking

Step 1: Wrap your arms around the stomach and stand directly behind the victim.

Step 2: Just above the navel and well below the ribs, make a fist by a hand. Place that fist with the thumb and forefinger side toward you.

Step 3: Hold the fist by other hand and pull it rapidly towards you by a slightly upward and inward thrust. If required, repeat it.

Basic techniques of banding

The key points when applying a bandage are:

- Step 1:** Make sure the person is comfortable.
- Step 2:** Never lean across their body and ensure that you are working from the side of the injury.
- Step 3:** First clean the wound and apply the antibacterial cream over it.
- Step 4:** When the bandage is on always remember keep the injured part of the body supported in the position it will be in.
- Step 5:** Always use right size of bandage.
- Step 6:** To check the passage easily, don't cover fingers or toes when bandaging a limb.
- Step 7:** Never wrap the bandage tight, and secure the end by folding it over and binding a knot in the end. Safety pin, adhesive tape, or a bandage clip can be used.

Artificial respiration and the CPR Process

- Step 1:** Check the Victim - tap and shout to get response.
- Step 2:** Circulation - pump the chest 30 times.
- Step 3:** At the center of the chest put the heel of one hand and your other hand on top of it. At a rate of 100 per minute (16 compressions in 10 seconds), press chest down 2 inches.
- Step 4:** Tilt head back, lift chin up to open airway - Airway.
- Step 5:** Breathing - Tweak nose closed, take a normal breath, cover patient mouth with yours and blow out your breath until you see the chest rise. Make one breath per 1 second. Again open airway again if chest doesn't rise.



Fig 2.6.2: CPR Process

- Step 6:** Repeat procedure until help arrives or the victim begins breathing.

Correct method to move injured people during an emergency

- Step 1:** Stand on either side of the conscious victim. Grab the victim's wrist with the hand closest to the victim's feet on your side.
- Step 2:** Use your other hand to grasp the clothing on the shoulder nearest to you and pull the victim's arms to help them to a sitting position.
- Step 3:** Assist the victim to his or her feet and place the arms around your shoulders, if possible.

Step 4: Place your free hand around the person’s waist and let him or her set the pace on hobbling out.

Step.5: Help the victim for moving slowly.

Do 

- Shock can be life threatening. Symptoms include cold sweat, weakness, irregular breathing, chills, pale or bluish lips and fingernails, rapid weak pulse and nausea.

SHOCK	Do's	Don't
Shock	Take a rest	Do not give the victim anything to eat or drink
Shock	Lay the victim on his/her back	Do not move him/her.
Shock	Keep the victim warm by using the blanket or clothes.	Do not keep the victim hot.
Shock	If the victim not in pain, raise their feet and legs with a pillow.	If victim in pain do not move.

Notes for Facilitation 

- You could ask the steps to free a person from electrocution.
- You could ask the steps of bleeding and wounds
- You could ask the steps of burn
- You could ask the steps of choking
- You could ask the steps of banding
- You could ask the steps of CPR

Activity



- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Skill Practice	Time	Resources
First aid practices	3 hours	Mannequin
		First aid box

Do



- Ask them to get into pairs for practice.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.



3. 5S & House Keeping

Unit 3.1 – Identification of bottlenecks in functioning of work place

Unit 3.2 - Various methods of housekeeping

Unit 3.3 – Waste management



Key Learning Outcomes

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

1. Discuss about safety issues at workplace
2. Know about 5S safety management system
3. Discuss about housekeeping practices
4. Know about benefits of housekeeping
5. Know about elements of effective housekeeping
6. Know about waste management practices

UNIT 3.1: Identification of bottlenecks in functioning of work place

Unit Objectives

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

1. Discuss about safety issues in the industry
2. Know about housekeeping issues in the industry

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- Manufacturing facilities are riddled with risks, both hidden and out in the open. Hazards can result in serious injury or death, if don't know where to begin looking.
- Few of the biggest safety concerns in any manufacturing setting like hearing protection, eye hazards, chemical exposures, mechanical hazards etc
- The Occupational Safety & Health Administration requires companies to provide hearing guard when noise levels surpass specific levels.
- 61 percent of eye damages occur in the manufacturing, construction industries and trade a report by the Vision Council reports.
- In manufacturing, heat and flame can produce by the tools and equipment, which cumulative the risk for fires.
- During the manufacturing process, at many points dust and fumes are generated. Dense fumes released during the use of oxygen can cause lung diseases.

Elaborate

Safety concerns in any manufacturing setting are:

- **Hearing Protection:** Hearing can be affected by noise produced by industrial machines if you are uncovered to the noise on a long basis.
- **Eye Hazards:** 61 percent of eye damages occur in the manufacturing, construction industries and trade a report by the Vision Council reports. Eyes may be injured by dust, metal, concrete and other particles thrown by machines. Eyes can burn or irritate by chemical fumes and splashes.
- **Chemical Exposure:** Some employees in manufacturing units work with hazardous chemicals like workers who produce batteries may be exposed to lead in the form of dust or fumes. This can harm nervous, urinary systems and reproductive with lead exposure linked to failures, seizures, coma and death.
- **Mechanical Hazards:** There are several risks to employees while working with manufacturing machines. Machines that have sprockets, gears, pulleys and rotating shafts pose risks of predicament.
- **Fire Hazards:** In manufacturing, heat and flame can be produced by the tools and equipment, which cumulative the risk for fires. Employees should be aware of where to find fire extinguishers and how to rescue the facility immediately in the event of a serious fire.
- **Carbon monoxide poisoning:** In manufacturing industries, blast furnaces and converters generate huge amounts of gases. Once dust has been removed, these gases are used as fuel resources and some are used as raw materials and supplied to chemical plants.
- **Dust and fumes:** During the manufacturing process, at many points dust and fumes are generated. Dense fumes released during the use of oxygen can cause lung diseases. Contact with silica is also a danger for the workers and cause serious infections and injuries.



Fig 3.1.1: Chemicals



Fig 3.1.2: Mechanical hazard



Fig 3.1.3: Dust and fumes

Notes for Facilitation

- You could ask the students about safety concerns in a manufacturing plant.
- Invite students to participate.
- You could ask the students how carbon monoxide poisoning is released.
- You could ask the students about the effects of chemical exposure.

UNIT 3.2: Various methods of Housekeeping

Unit Objectives

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

1. Know about 5S Safety system
2. Discuss about essential elements of housekeeping
3. Know about good housekeeping practices

Say

- 5S is a fundamental, systematic, basic, approach for quality, productivity and safety improvement.
- 5S is created by a list of five Japanese words: seiri, seiton, seiso, seiketsu, and shitsuke.
- Workplaces hazards can be eliminate by effective housekeeping and complete a job safely and properly.
- Poor housekeeping and hiding hazards can cause frequent accidents which can cause injuries.
- Elements of an effective housekeeping program are Dust and Dirt removal, clean surfaces, Maintain light fixtures, aisles and stairways, spills control, waste disposal, storage etc.

Elaborate

5S is created by a list of five Japanese words: seiri, seiton, seiso, seiketsu, and shitsuke. 5S system is implemented for organizing the workplace for increasing effectiveness and efficiency by maintaining the area and items, storing the items used, and sustaining the new practices.

Purposes of conducting regular 5S audits are:

- Evaluation of 5S standards for industry
- To fix what is wrong! - note and address non-compliance
- Give a official chance to suggest improvements

The basic steps of 5S audit are:

- Plan for the audit. Divide the workplace into several areas for successful audit reviews.

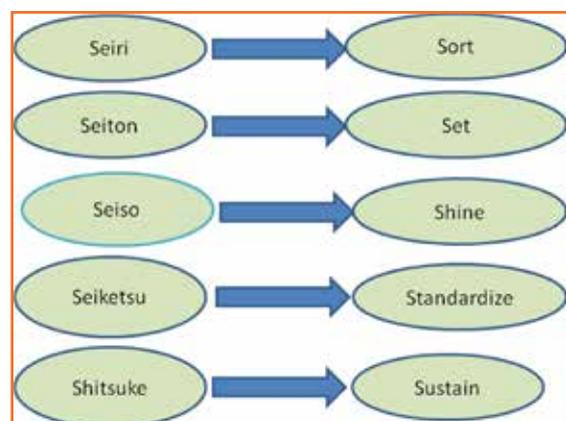


Fig 3.2.1: 5 S terminology

- Based on the standards set during audit, make a list for every area.

Three key tasks has to be done during the audit

1. Find out whether known difficulties have been addressed:
 - Lubricants are still leak from this machine?
 - People are not walking under crane, is the warning sign in place?
 - Why outdated drill press is still in the workshop?
2. Look into the standards is being met:
 - Are tools left on work tables?
 - From the tool rack is something missing?
 - Is dirt collecting anywhere?
 - Are safety labels visible and readable?
3. To be noted that what has not yet been standardized – Most imaginative and hard section, it may include seeing what is missing in an area that seems neat:
 - Why is there no sign over the well-ordered stack of work-in-process materials on that shelf?
 - Tools that are not yet labeled

Housekeeping

Cleanliness doesn't mean housekeeping. Housekeeping includes keeping work areas tidy and arranged; keep floors free of slip and trip accidents; clearing of waste materials (paper, cardboard) and other fire hazards.

Efficient housekeeping results in:

- Decrease handling to comfort the materials flow
- Fewer slipping and tripping accidents
- Less fire hazards
- Hazardous substances e.g. dusts, vapors exposures to lower worker
- Better control of tools and materials in managing inventory and supplies
- Equipment's are more cleaned and well maintained.
- Better hygienic conditions for good health
- Space utilization is more efficient
- Reduced property damage due to improvement in preventive maintenance
- Improved efficiency because it is easy to find tools and materials.

Ask



- You could ask the objectives and advantages of 5S
- You could ask the benefits of good housekeeping practices.
- You could ask the elements of an effective housekeeping program

Notes for Facilitation



- Invite students to participate.
- You could ask about the standards that were set during 5S for make a checklist
- You could ask how housekeeping program make effective.

Activity



- Conduct a skill practice activity.
- Ask the students to assemble together.
- Do the 5S audit of your training center and make the 5S Audit form and fill it.

Field Visit



You could visit any of the industry and show the 5S Safety system and check the various points of safety with the help of housekeeping checklist

UNIT 3.3: Waste Management

Unit Objectives

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

1. Discuss about waste management
2. Know about elements of waste management
3. Know about methods of waste management

Say

- Waste management is gathering, transport, recycling, processing and disposal of waste materials. Waste management is carried by recovering resources from waste materials.
- Waste may be classified as garbage, rubbish, industrial wastes, mining wastes etc.
- Industrial waste can be of two types: non-hazardous and hazardous waste.
- Waste management strategy involves legal and proper decomposition of waste.
- Methods of waste management are segregation, composting and burning.

Elaborate

Elements of a waste management strategy

Good waste management practices involve much more than that disposing of waste legally and properly. Strategy for the management of industrial waste can include the subsequent elements:

- Current waste management procedures and primary audit of wastes produced.
- Risk assessment to find that stowage and handling procedures does not possess any health or environmental risk.
- Identification of options for reuse, waste reduction, recovery assessment and recycling of waste.
- Identification of best practicable environment! There should be an option for dumping of waste and residues.
- Selection of the contractor offering the best service and audit of potential waste management contractors.

Waste management methods

1. **Segregation:** Separation of waste using different containers is necessary because plastics, building materials, glass and waste from the site work could take a really long time period to decompose. This is the reason, thus, it is required to maintain green practices so waste management should be done



Fig 3.3.1: Waste segregation

with proper segregation. Thus we make sure to support you in removing hazardous waste from compostable non-hazardous solid waste, organic waste, recyclable materials and other regulated material.

2. **Composting:** This waste management process turns waste into organic compounds that you can use to feed plants. In terms of the environment advantages this is actually beneficial technique. Making use of this method, it's easy to turn unsafe organic products into safe compost.
3. **Burning:** If your approach is not towards disposing materials and other wastes, then burning method will be a good approach for you. If waste is bio-degradable or cannot produce hazardous gases after burning, you can burn the waste.



Fig 3.3.2: Waste Compositing

Ask



- You could ask the elements of waste management strategy
- You could ask from the students' different method of waste management

Field Visit



- You could visit any of the industry and show the waste management system and how they do the segregation of waste.



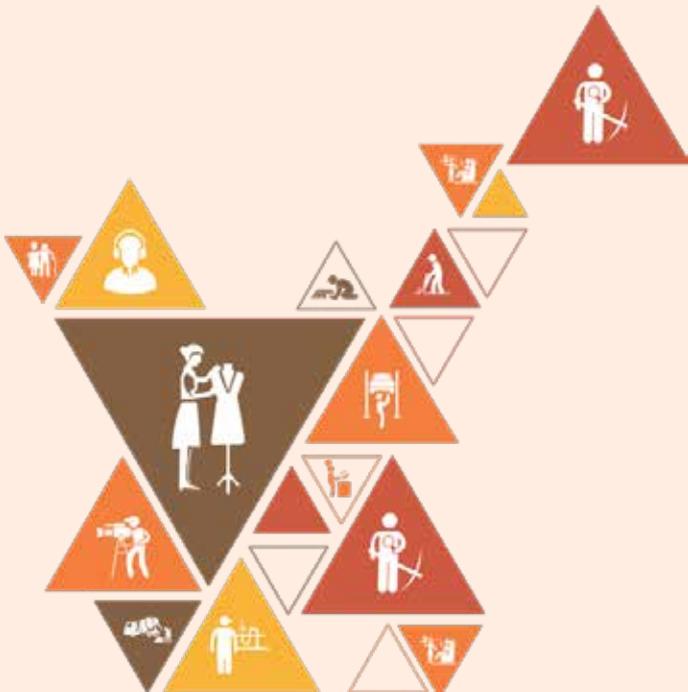
4. Rigging tools and equipments

Unit 4.1 – Slings

Unit 4.2 – Fitting components required

Unit 4.3 – Knots and hitches

Unit 4.4 – Auxiliary devices and tools required



Key Learning Outcomes

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

1. Know about slings
2. Identify different types of slings
3. Know about wire rope, chain and synthetic slings
4. Know about fitting components required during rigging operation
5. Know about inspection and installation requirements of fitting components
6. Know about knots
7. Know about hitches
8. Know about auxiliary devices required for rigging

UNIT 4.1: Slings

Unit Objectives

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

1. Know about slings
2. Identify wire rope slings
3. Identify chain slings
4. Identify synthetic slings

Resources to be Used

- Available objects such as a duster, pen, notebook etc.

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- Wire rope consists of individual wires laid into a number of strands, which are then wrapped around a central core.
- Different number of wires in the strands and various methods of arrangement may affect the characteristics of the wire rope sling.
- Wire rope slings have great strength combined with flexibility.
- The core of wire rope may be constructed of fiber rope, independent wire rope, or a wire strand.
- There are two types of synthetic web slings: nylon and polyester.
- Causes of wear or damage to synthetic web slings include acid or caustic attack; melting or charring; holes, tears, cuts or snags; excessive Abrasive Wear; broken or worn stitching and knots.
- Chain slings are made up of chain rings. The advantage of chain slings is that they deteriorate and corrode less.
- Defects to look for on chain slings are length, master link, identification tag, connecting link and links.

Elaborate

There are three components of wire rope:

1. The center of the wire rope is CORE. The core supports the rope to hold together.
2. The unit of the wire rope is WIRE. The wires form the strand. Mostly wires are with high carbon steel, but additional material types are existing.
3. The specific number of wires creates the STRAND, laid helically around a wire core.

Factors of wire rope sling

- **Rope lay:** The direction of rotation of the strand and the wires is known as rope lay.
- **Sling eye design:** At the ends of the sling body provide what amount to “small inverted slings” is design as sling eyes
- **D/d Ratios Apply to Slings:** When rigged as a basket, diameter of the bend where a sling contacts the load can be a limiting factor on sling capacity.
- **Choker Hitch Rated Capacity Adjustment:** The choke angle is less than 135 degrees for wire rope slings in choker hitch. At an angle of less than 120degrees when a choker hitch is drawn tight,the rated capacity of Choker Hitch shown in the sling.

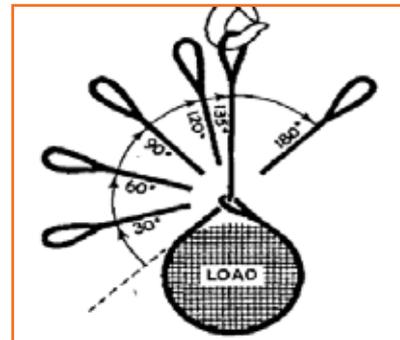


Fig. 4.1.1: Choker hitch angles

Synthetic web slings have a number of advantages which include:

- Flexible, pliable and tend to mildew themselves to the shape.
- Minimize twisting and spinning.
- Do not rust and are non-sparking.
- Won't mar or crush the load.
- Are elastic and stretch.

General operating practices of slings

- Within the rated capacity of the sling the weight of the load should be consider.
- Slings shall not be lengthened or shortened by twisting, knotting with wire rope clips or other methods not permitted by the sling constructor.
- Damaged slings should not be used.
- The sling should be padded to avoid sharp corners to save harm to the sling.
- Shock loading should be evaded.
- The stress is created by instant starts and stops in the sling and crane lift rope.
- Storage area of slings is safe from extreme heat, corrosive action, moisture, kinking or mechanical damage
- In a choker hitch, wire rope slings shall be extended sufficient so that the choker suitable will choke on the rope body and not on the fitting.
- Minimum 45 degree angle is required for sling.

Do



Pre-use inspection of wire rope sling

1. Broken wires.
2. Severe localized scraping or graze.
3. Result in distortion of the rope structure by crushing, bird caging, kinking or any other damage.
4. Indication of heat harm.
5. The power of the sling is significantly pretentious if the end attachments that are deformed, cracked or worn to the level.
6. Severe corrosion.

Points for attention:

- The proper wire rope slings must be used.
- Wire rope slings should never be damaged.
- At the time of lifting, the Safe Working Load must not be surpassed.
- Steady examinations shall be directed.
- Instant elevation is not acceptable.
- The angles between the slings play an important role if additional wire rope sling is utilize in lifting.

Pre-use inspection of synthetic web slings:

- **Acid or Caustic Attack:** It is generally by discoloration of the fabric.
- **Melting or Charring:** Damaged areas will be melted, hard and blackened like speckled or plastic as when spoiled from weld spatter.
- **Holes, Tears, Cuts or Snags:** To decide on the sling is to be taken out of service or not, judgments call is on if tears, holes, snags or cuts look on synthetic web slings.
- **Excessive Abrasive Wear:** It is described by frayed fibers on the surface webbing of the sling that hold in place the load-bearing (longitudinal) fibers.
- **Broken or Worn Stitching:** Slings must be examined for this stitching in the load bearing joints of the sling.
- **Knots:** Any part of slings if knots exist shall not be used. The sling capacity of sling is reduce up to 50% in the area of knot.

Chain sling pre use inspection

- **Length:** To match up with the length on the tag check whole length. If a sling is longer or shorter than the length on the tag then sling must be booked out of service.
- **Master Link:** Check the master link for elongation and wear on its bearing points.
- **Identification Tag:** Always confirm that proper information should be available and the identification tag is legible.
- **Connecting Link:** Always check the connecting link to see if it's deformed, twisted, or bent in any way.

- **Links:** Chain links must be tested for gouges, cracks and nicks.
 - o Elongation
 - o Bends or twists
 - o Heat damage
 - o Excessive wear
 - o Hooks

Ask



- You could ask the wire rope slings and its components.
- You could ask the factors of wire rope slings.
- You could ask the important points should be looked for in a pre use inspection
- You could ask the advantages of synthetic web slings
- You could ask the general operating practices of slings.

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 4.2: Fitting components required

Unit Objectives

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

1. Know about different fitting components required
2. Know about use of shackles, eye bolts, hooks, chain blocks etc.
3. Identify pre inspection requirements of shackles, eye bolts, hooks, chain blocks etc.
4. Identify operating conditions of shackles, eye bolts, hooks, chain blocks etc.

Resources to be Used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster and fitting components.
- PC with LCD Projector or Flip Chart
- Participant Manual

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.

Say

- Shackles are the one of the most used rigging fittings.
- Eye bolt is one of the rigging fitting components.
- Anchor means a designated point for the purpose of attaching a working line, safety line or other fall protection system.
- Regular, shoulder and screw eye bolts have a hot dip galvanized finish and the machinery eye bolts are self-colored with light rust preventative oil applied.
- All hoisting hooks must be equipped with safety catches.
- Wire rope clips are used in the field to make an eye on wire rope.
- Chain hoists come in a variety of types, shapes, sizes, lifting capacities, and diverse features/controls.
- Sheaves assembled in multiples form blocks that provide the required mechanical advantage.

4.2.1: Shackles

Say

- A shackle is a curved piece of metal secured with a pin or bolt across the opening.
- There are two basic shapes for shackles and they are either anchor pattern or chain pattern.
- Shackles should be inspected for:
 1. Mechanical damage to pin or body
 2. Correct tensile pin fitted
 3. Correct pin length
 4. Wear

Elaborate

Different types of Shackles

Designated the shape of the shackle: Anchor Shackle or Chain Shackles.

Lifting is only possible by these two shackle types and body diameter is smaller than the pin diameter.



Fig. 4.2.1: Anchor shackle



Fig. 4.2.2: Chain shackle

Technique to use shackles

- The forged alloy steel is used for hoisting.
- Bolts should not be used in place of shackle pins with bolts. To match shackle capacity the pins are manufactured and designed.
- Always check for opening up, distortion and wear. Regular checking is required for crown. Discard shackles noticeably worn at the crown.
- The shackle should not be used where it will be loaded or pulled at an angle.
- This severely decreases its capacity and opens up the legs.
- If the pin can roll under load and unscrew never use screw pin shackles.

Points for attention:

- Never use a bolt in place of the shackle pin.
- The pin is entirely locked.
- At the time of pin unscrew and roll never use screw pin shackles.
- The shackles shall not lean to one side at the time of lifting.
- The hook is always attached with shackle pins.
- To keep the shackle at center the washers may be used.

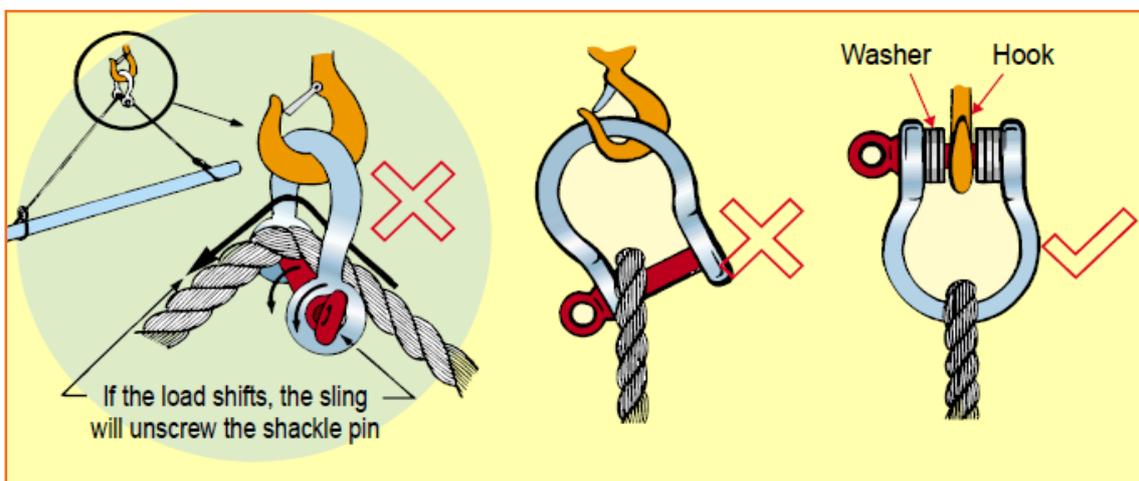


Fig. 4.2.3: Safe use of shackle

Ask

- You could ask about the types of shackles.
- You could ask from the students about the technique to use shackles.

Activity

- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.
- Demonstrate the proper use of shackles

Skill Practice	Time	Resources
Use of shackles	1 hour	Shackle

Do

- Ask them to get into pairs for practice.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

4.2.2: Eye bolts

Say



- A screw which has threads on one end and loop on the opposite end is known as eye bolts.
- For the attachment of cables to objects eye bolts are mainly used.

Do



- Show the eye bolts to the students.
- Demonstrate the eye bolts installation and applications

Elaborate



There are four basic types are regular eye bolts:

- **Regular and Shoulder Eye bolts:** They are basically the exact similar part with the only clear exclusion being the shoulder. To the base of the eye the shoulder feature provides more stability and creates it the suggested selection for angular loading so regular eye bolts are not optional for angular loading. Both are UNC type threads.
- **Screw Eye bolts:** For screwing into wood the screw eye bolts are designed. Due to this it doesn't have a operational load limit allotted to them because to determine the several conditions and densities of the wood the eye bolts are screwed into is not possible.
- **Machinery Eye bolts:** For angular loading they are designed with a shoulder. The shank and threads of the machinery eye bolt do not protrude through the base metal is the difference between machinery eye bolts and regular and shoulder type eye bolts. The threads contain all the holding strength of the machinery eye bolt.

Safety measures using eye bolt

- The slings are in line with the position the eye bolt. The eye bolt may bend in case if the load is applied sideways.
- For the confirmation of the eye bolt firmly contacts the surface the washers is pack between the load surface and the shoulder. Confirm that the nut is correctly torqued.
- While using washers or shims always involve at least 90% of threads in a delivery hole.
- For each eye bolt attach only one sling leg.



Fig. 4.2.4: Regular eye bolt



Fig. 4.2.5: Screw eye bolt



Fig. 4.2.6: Machinery eye bolt

- The hole and threads should be clean and inspect.
- Properly seat and all the way down the screw in the eye bolt.
- A lowest deepness of one-and-a-half times the bolt diameter is required to tapped hole for a screw eye bolt (body bolts).
- The shoulder must be installed at right angles to the axis of the hole. The surface of the object being lifted must be in full contact with the shoulder.
- To preserve the lift angle at 90° to the horizontal utilized a spreader bar with regular (non-shoulder) eye bolts.
- At a horizontal angle larger than 45° use an eye bolts. Sling strength is 71% of vertical sling capacity at 45° .
- 30% of vertical lifting capacity is drop down the eye bolt strength at 45° horizontal angle.
- For angled lifts always use a swivel hoist ring. The swivel hoist ring will regulate to any sling angle by the hoisting eye pivots 180° and rotating around the bolt.
- Through a pair of eye bolts never utilized a sling

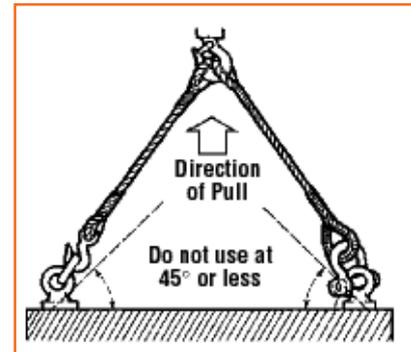


Fig. 4.2.7: Correct use of eye bolt

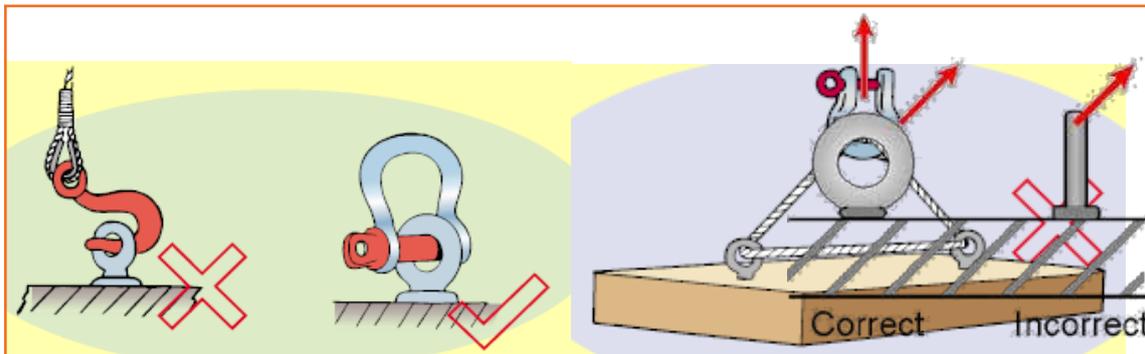


Fig. 4.2.8: Safe use of eye bolt

Explain

Eye Bolt Installation and Applications

To take the load in the plane of the eye the shoulder eye bolts must always be situated. Each eye bolt will have less capacity if it “turned to the side” and may knowledge injury and disaster when a load is elevated.

1. Minimum 30° angle is required to be loaded or permitted by the manufacturer.
2. For vertical loads a non-shoulder eye bolts are only designed. Break or bend is possible if loaded at angle.
3. Eye bolts must be tightened securely, torqued if required by the manufacturer.

4. At the time of angular lifts, the shoulder must be flat and making full connection with the load. Otherwise, vertical lifts are permissible.

Selection of Right Eye Bolt

Always select the exact eyebolt based on its capacity and type for the lift you are directing.

- For vertical loading always use regular or plain eye bolts (non-shoulder) or ring bolts. Bend or break is possible in case of angle loading on non-shoulder bolts.
- For angle or vertical loading always use shoulder eye bolts. The safety of load is reducing while lifting eye bolts at an angle.
- In case of angle loading follow the manufacturer's recommended method.

Ask



- You could ask about the types of eye bolts
- You could ask about the safety measures using eye bolt.

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

4.2.3: Anchors

Say

- Anchor means a designated point for the purpose of attaching a working line, safety line or other fall protection system. It is safe and practical method.
- If chokers or cable loops methods are not available then it is practical and safe methods of anchoring to concrete.
- For weaken anchors and the compassion of epoxy anchors to heat and vibration the special equipment is required.

Do

- Show the different types of anchors to the students.
- Demonstrate the installation of anchor.
- Explain the anchor applications.

Elaborate

Types of anchors

Undercut Anchor Bolts

- This is a complicated device that needs to make a straight hole in the concrete and then implanting a unusual bit that expands the hole near its bottom.
- The undercut anchor bolt is then implanted and for the duration of the tightening method, prongs spread out from the body of the bolt that involve and bear on the surface of the distended hole.
- This creates a very constructive anchor; it is not rest on on friction between the hole and the bolt.

Expansion Bolts: There are two types of Torque controlled anchors;

- Sleeve and Wedge Anchors. Both consist of an undercut shaft that is introduced into the sleeve device and hole or the wedge and at the time when the fastener is tightened that enlarges as at the end of the shaft the cone is pulled through it.
- The same size of sleeve anchors has lesser tension strength than wedge anchors. To use in hollow concrete block the sleeve anchor is the only anchor bolt that can be safely be used.
- Accurate hole size is very essential since the sleeve or wedge must grow excessive friction against the edges of the hole.
- These anchors are loaded in tension as they develop more friction, since additional enlargement happens as the pull on the shaft origins the cone to extent the wedges or sleeve with bigger force against the side of the hole.

- To pull-out or pull-through of a concrete cone is the disaster mode for this type of anchor.

Expansion Shields

- Are movement precise anchors that enlarge by earnings of driving the steel shield over a cone using a hammer and the tool which fits to the shoulder of the shield is a special driving tool.
- They are not endorsed for critical search and rescue operations and susceptible to huge holes.

Epoxy Anchors

- The threaded rods usually exist that are set in cleaned, drilled holes that have been earlier filled with a correctly mixed epoxy adhesive.
- For the installation at closer space these anchors are induce because of no expansion forces in the concrete.
- They are not as sensitive to strength drop from cracked concrete, but by the time the strength is developed.
- In masonry and concrete this method can create dependable anchors, by using depths greater than twelve times the anchor diameter the strength and reliability can enhanced.
- At temperatures over 80 deg F the epoxy installations lose strength, and at 160 deg they have only about 25% of their strength.

Concrete Screws

- The low strength (100 to 600 lbs.) fasteners are there in these anchors and have 1/4" and 3/16" diameters.
- A pre-drilled hole is used for driven screws and the installation needs the usage of setting tool and the manufactures drill bit.

Through Bolts

- A standard machine piece of threaded rod or bolt can be stretched completely through the concrete in situation when both sides of a concrete slab are easily reached.
- A trustworthy anchor is created if a bolt head (or double nuts) and big washer tolerates in contradiction of the distant side of the slab.
- For both through bolt and expansion bolt, the permissible tension value same of the similar size with embedment the same as the thickness of the slab that the bolt projects through.

Demonstrate



Installation of anchor

- The size and depth of drilled holes should be proper. A premature pull-out is created by dull bits because of large hole.
- To locate existing rebar a metal detector is used, so that it can be evaded.
- Oversize of hole is possible if hitting rebar with the bit and a dull bit which will carry on creating oversized holes.
- All loose material should be removed from holes (especially for epoxy anchors).

1. For the cleaning of holes a brush plus compressed air is used. A piece of small rebar can be used in place of brush to dislodge material and a compressed air will usually clean a hole.
 2. If a compressor is not accessible then the equipment cache should include some cans of compressed air.
 3. A 12" length of 3/8 inch copper pipe is suitable to put on the air to the end of the hole.
- As discussed previously the expansion bolts need to be tightening up with a calibrated torque wrench.
 1. Get reasonable confidence at the time of installation by these tests and "preloads" the anchor.
 2. See table on following page for compulsory torque values and anchor strength.
 - In order to develop enough friction between the hole size expansion shields and the expanded shield bottom that should be implanted in clean holes of correct size.
 1. If installed properly by using the manufacturer's setting tool these anchors are consistent.
 2. By put on a tension load straight to the anchor they can only be tested.
 - Previously clean hole get inserted by Epoxy anchors after the epoxy has occupied the hole about 3/4 full.
 1. An epoxy can be place by a coaxial cartridge dispenser with an extended tube that extents to the bottom of the hole.
 2. To move out all the bubbles insert the threaded rod with a twisting motion.
 3. The fastest setting epoxies need at least one hour at 70 degrees F (20o C) to develop working load.
 4. At 40 degrees F (5o C) this time can be increased to 12 hours.
 5. A minimum of 24 hours at 60o F (15o C) and above is required for normal setting epoxy.
 - By using manufacturers provided setting tool and drill bit the concrete screws can be installed.
 - The cleaning of holes is not needs because the threads cut their way into the concrete and the screws can be driven into the holes.

Ask



- You could ask the different types of anchors like undercut anchor bolts, expansion bolts, expansion shields, concrete screws etc.
- Ask about the anchor applications.
- Ask about how to installation of anchor.

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

4.2.4: Hooks

Say



- Most hooks are constructed from forged alloy steel and are stamped with their rated safe working loads (SWLs).
- Common types of hooks are eye hooks, shank hooks, Clavis hooks, sister hooks, etc.

Do



- Show the hooks to the students.
- Demonstrate the use of hooks.

Elaborate



Pre-use inspection

- Always check for misrepresentations such as twisting or bending more than 10 degrees from the plane of the unbent hook.
- Regular check for rise in throat opening more than 15% of original throat opening. A punch mark is considered as reference points in most of hooks.
- The load area of the hook must be review. The hook is consider as out of service if wear exceeding 10% of the original dimension.
- Proper check for gouges, severe nicks and cracks. The performance of hook depend more on transverse cracks than longitudinal cracks.
- Always look for the hook attachment and safeguarding means for flaws.
- Rigging hooks shall be examined as a portion of the slings to which they are connected.

Tips



Tips for using hooks

- The rated load of the chain wire rope, or other suspension member to which it is attached; SWL should be equal to orexceed the rate of load of the chain wire rope. When the load is applied in the load of the hook the designed SWL can only implement.
- In case of two or more sling eyes are utilized on a hook it is a decent practice to use a shackle. The load with full capacity to be centralized on the hook. Never tip load a hook



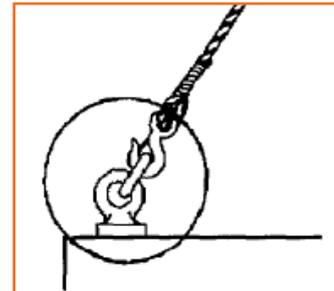
Fig. 4.2.9: Using hooks

- The manufacturer's identification shall be die-stamped or forged on a non-wearing and low-stress area of the hook.
- The weakest member of lifting equipment is load hook, so it will twist if overloaded before any other piece of equipment flops.
- To stop the release of load lines, to bridge the throat opening the hooks shall be given with a safety latch.
- A safety latch is not available in remote "in cell" cranes or other applications that make the latch unworkable.
- Always the tip of the hook should be pointed out and away from the load to guarantee when slack is engaged up the hook will not tip load.



The safety latch helps prevent release of the load.

Fig. 4.2.10: Hook safety latch



Hook tips should point out and away from the load

Fig. 4.2.11: Correct use of hook

Ask



- Ask about the pre use inspection of hooks.
- Ask about the tips for using hooks.

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

4.2.5: Wire rope clips

Say



- They are used in the field to make an eye on wire rope.
- Clips (clamps) shall be legibly and permanently marked with size and the manufacturer's identifying mark.
- Different types of clips are- U Bolt, Fist Grip and Collet connection

Do



- Show the wire rope clips to the students.
- Demonstrate the method of installing wire rope clips.
- Explain the use of wire rope clips

Elaborate



Operation Practices

1. Assure clips are orientated correctly.
2. Always remember to put the saddle on the live end of the rope while using single grip clips.
3. Be sure to torque clips to proper specification.
4. Check torque after use and re-torque after use if necessary.
5. Follow the proper procedure when installing clips.
 - From dead end of wire rope put on first clip one base width. For the recommendation of torque tighten nuts evenly.
 - The second clip is implemented adjacent the loop. Do not tighten but can turn evenly.
 - In between the first two clips, put on all other clips set apart similarly in between the first two. For the recommendation of torque tighten nuts and apply tension.
 - After the utilization always recheck torque.

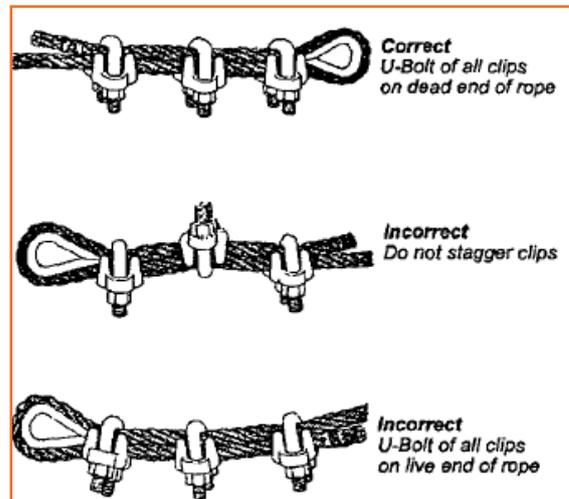


Fig. 4.2.12: Correct use of clips

Demonstrate



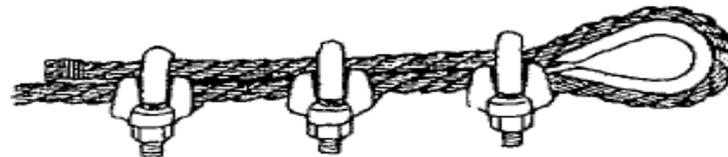
Method of Installing Wire Rope Clips



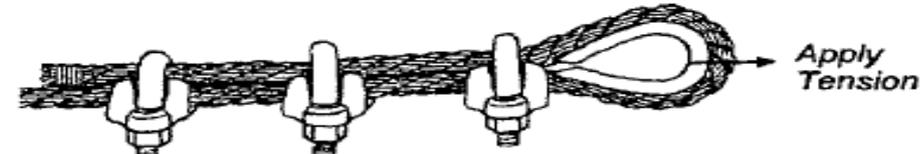
Apply first clip - one base width from dead end of wire rope - U-Bolt over dead end. Tighten nuts evenly to recommended torque.



Apply second clip - nearest loop as possible - U-Bolt over dead end. Turn on nuts firm but do not tighten.

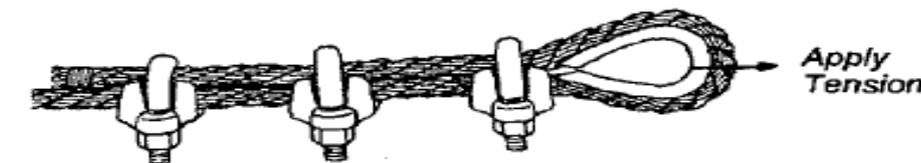


All other clips - space equally between first two.



Apply Tension

Apply tension and tighten all nuts to recommended torque.



Apply Tension

Recheck nu torque after rope has been in operation.

Fig. 4.2.13: Installation of clips

Ask



- You could ask the different types of clips.
- You could ask the operation practices of wire rope clips.
- You could ask the method of installing wire rope clips.

Activity



- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.
- Demonstrate the method of installing wire rope clips

Skill Practice	Time	Resources
Use of wire rope clips	30 Mins	Wire rope clips

Do



- Ask them to do the practice.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

4.2.6: Turnbuckles

Say



- In rigging system the turnbuckles are used otherwise should be avoided, a qualified engineer must be approved, analyzed and designed that system.
- In rigging operations and hoisting the turnbuckles is used shall be made-up from forged alloy steel. If vibration is present then a turnbuckle is used in an application, to prevent them from loosening and turning, the frame can be lock by wires or pins the end fittings can be secured.
- A permanent identification tag must be fixed before introduction turnbuckles in lifting service.

Elaborate



Before using the turnbuckles must be inspected for damage. Following inspection is required for turnbuckles:

1. Bends and cracks and in the frame.
2. Bent rods and thread damage.
 - The unit can be disqualify if bent frame or damaged threads are exists.

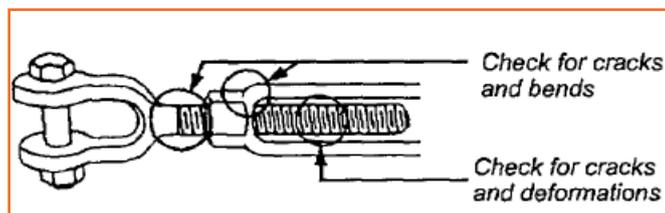


Fig. 4.2.14: Inspection of turnbuckles

Ask



- Ask about turnbuckles
- Ask about how the turnbuckles inspected for damage before each use.

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

4.2.7: Chain hoists

Say



- The lifting capacities, shapes, types, diverse features/controls and sizes are the variety of chain hoists.
- The person can lift heavy loads (multiple tons) these are manually operated hoisting devices. A mechanical advantage is possible by consuming a series of reduction gears and thereby decreases the quantity of power (muscle energy) desirable to lift a load.
- The pulling of hand chain is not enough for the operation of a hand operated chain hoist. The use of these hoists is subject to certain hazards that cannot be met by mechanical means.

Elaborate



Common Types of hand operated chain hoists

1. **Differential Hoist:** This is working with multiple sheaves, to fit in chain links each with pockets cut out. For the movement of chain faster one sheave has extra pockets than the other so as it revolves of the same shaft.
2. **Screw-Gear Hoist:** The pinion and worm arrangement of block is the inside mechanism. The mechanism is rotated by hand chain which is an endless loop. The load chain derives straight from the block.
3. **Spur-Gear Hoist:** A sun and planetary gear set is used a gear arrangement. The sun gear is coupled with the hand wheel. The whole group of planetary gears slowly revolves if the sun gear turns. The sun gear rotates much faster than the load wheel, as long as the decrease in speed essential for the hoist to operate.

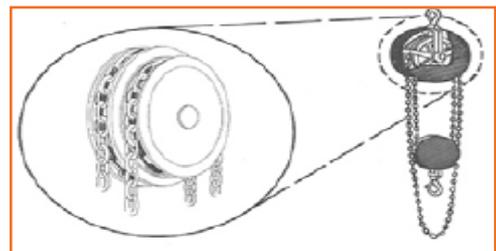


Fig. 4.2.15: Differential hoist

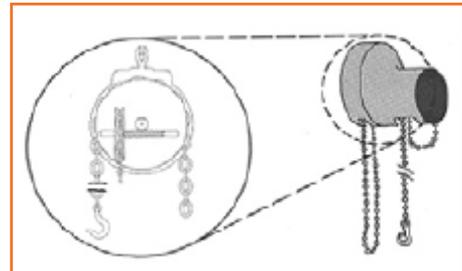


Fig. 4.2.16: Screw-gear hoist

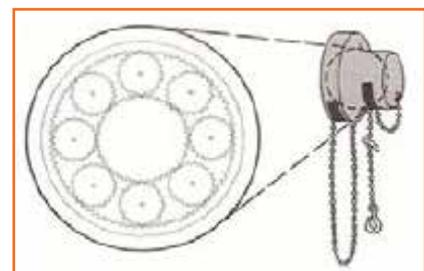


Fig. 4.2.17: Spur-gear hoist

Pre-Use Inspection Requirements

- The designated person will decide whether situations found a hazard or more complete inspection is essential.
- In case of frequent inspections the records are not mandatory.
- Examine daily before and during use.

Hoist Operations

- A load should not be wrapped around by hoist chain or rope.
- The chains should not be twisted or kinked around each other before the movement of load.
- Chain or rope should be seated properly on the sprockets, sheaves or drum to operate the hoist.
- It shouldn't be worked without centered over the load, except when certified by a trained person.
- The operator is not allowed to pull a load in additional of the rated load bearing ability on the load block or hoist, except at the time of pre-engineered lifts or approved tests.
- To measure the maximum load to be lifted a hoist overload limiting devices should not be used.
- Every time a load approaching load ability is controlled, the operator shall inspect hoist brake action by lifting the load just clear of supports and ongoing only after confirming the brake system is functioning properly.
- Except a lower limit device is delivered, the load should not be pull down under the point where less than two wraps of rope continue on the anchorage of the hoist drum.

Ask



- Ask about the types of hand-operated chain hoists used in rigging.
- Ask about the requirements of pre use inspection of chain hoists.
- Ask about the hoist operations

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

4.2.8: Lifting beams, spreaders and frames

Say



- Spreader Beams are used to support long loads during lifts.
- They eliminate the hazard of the load tipping, sliding or bending as well as the possibility of low sling angles and the tendency of the sling to crush the load.

Do



- Show the spreader beam to the students

Elaborate



Pre-use inspection

Spreader Beams shall be inspected at the beginning of each shift for the following deficiencies:

- Check every part of the lifter that excessive wears, cracks, structural deformation on any part of the lifter.
- Name plates, covers, missing or loose guards, fasteners, stops.
- All useful automatic hold and operating mechanisms and release mechanisms for mis-adjustments interfering with operations.

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 4.2.9: Sheave and cargo blocks

Say



- Sheaves are used to change travel direction of the wire ropes.
- A block is a frame that encloses one or more sheaves and is provided with a hook or some other means that allows attachment to cargo or to a fixed anchor point.
- There are three basic types of blocks: crane, snatch and wire rope (construction or fixed) blocks.
- For safe block operation several basic inspection points must be checked.
 - o Inspect the blocks for excessive wear on the becket, center pin, sheave bearings and end connections. For proper rotation inspect the sheaves.
 - o Cable keepers (guards) should be in place.
 - o Confirm that sheave grooves are smooth.
 - o Check for signs of enlarged hook throat, elongated links, overloading, links or center pin or bent shackles.
- Two basic methods exist for rigging the rope through a set of blocks. First, during reviving the upper and lower blocks are rotated 90 degrees from each other. Second, during lacing, normally two small sheave crane blocks are rigged up.

Elaborate



Three basic types of blocks: snatch, crane and wire rope (construction or fixed) blocks.

- To snatch or jerk their load over comparatively short distances the snatch blocks is refer which is a group of intermittent service blocks. Snatch blocks are categorized by a side-opening plate that helps threading the wire rope through the block.
- For continuous service conditions in long lift a crane block is essential. These blocks are categorized by lengthy service life sheaves, various huge diameters and the addition of cheek plate weights to the block side frames to rise overhaul weight.
- Construction or fixed blocks are usually used as upper blocks in multi-part reviving provisions in material or derricks hoists. They required the additional cheek plate weights required for overhaul but they have huge diameter multiple sheaves like crane blocks.

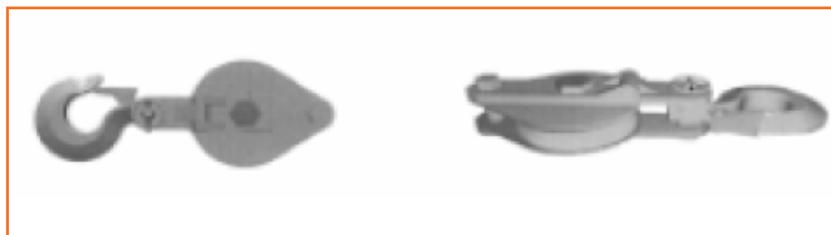


Fig. 4.2.18: Cargo blocks

Sheaves and blocks should be inspected:

- a) for corrosion
- b) for deformation
- c) for sheave and pin wear
- d) to ensure the sheave freely turns
- e) to ensure that the snatch block retaining pins correctly retains the gate assembly.

Ask



- You could ask the types of blocks.
- You could ask how sheaves and blocks should be inspected.

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

4.3: Knots and hitches

Unit Objectives

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

1. Discuss about various types of knots.
2. Discuss about hitches
3. Know about various types of hitches

Resources to be Used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster.
- PC with LCD Projector or Flip Chart
- Participant Manual

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.

Say

- For lifting light material and lowering tools the knots are more efficient and practical than other rigging methods.
- A rope consists of three parts for tying knot:
 - The end defines the part where to tie the knot.
 - The standing part is inactive.
 - The bight is center part of rope.
- To support the load a hitch is the manner of using the sling. A hitch is any of several knots utilized to form a temporary noose in a rope or to protect a rope around a timber, post or pipe so that it will grip provisionally but can be eagerly uncompleted.

Elaborate



There are different types of knots used in rigging:

- **Bowline:** when correctly tied never slips or jams. A universal knot if properly untied and tied. For the joining of two ropes the two interlocking bowlines is used. Single bowlines can be utilized for hitching or hoisting straight around a ring.
- **Bowline on the Bight:** For the lifting of pipe used to make a set of double-leg spreaders or to tie a bowline in the middle of a line.
- **Square Knot:** The rope of same diameter can be tying by square knot. For slippery or wet ropes it is unsuitable and it unties easily when either free end is jerked. At the same side both dead ends and live of the rope must come out of the loops.
- **Two Half Hitches:** It is used for any general work; it can rapidly tie and are reliable.
- **Running Bowline:** for hanging objects with ropes of different diameters it is largely utilized. Tension can be determined by the weight of the object necessary for the knot to grip.

Create an overhand loop with the end of the rope:

1. Grip the loop with fingers and thumb and bring the vertical part of the rope back so that it lies behind the loop.
 2. Proceed with the end of the rope in behindhand the standing part, pass it up and feed it through the loop
 3. Pass it behind the standing part at the top of the loop and bring it back down through the loop.
- **Figure-Eight Knot:** For the temporarily save the strands from unlaying this knot is tied at the end of a rope. It will not jam easily like the overhand knot and can be knotted quickly and simply. The rope fiber will not harm and also stronger, larger. This knot is helpful to prevent the end of a rope from sliding an eye or through a block.

The figure-eight knot can be tie by create an underhand loop:

1. Over the standing part bring the end around
 2. Pass the end under and then through the loop
 3. Tightly drawn up.
- **Butterfly Knot:** Use the butterfly knot is to pull taut a high line, handline, tread rope for foot bridges, or similar installations. In the absence of mechanical means the knot delivers the competence to make tighter a fixed rope. The butterfly knot will not jam if a stick is placed between the two upper loops.

The types of hitches are as:

1. **Suspended Load:** Regardless of the use of spreader bars number of slings or the type of hitches used, the center of gravity of a suspended load always lies directly beneath the point of attachment

to the lifting device (crane hook). To achieve the required stability, the desired orientation of the hanging load (for example, level orientation), and desired rope factor of security the hitches and slings must be selected.

2. **Single Vertical Hitch:** It is also called a direct connection hitch. At the time of spin it doesn't afford the best load protection or control. It is operative when two or more attachment points are given on the load or when utilize in multiples with spreader bars.
3. **Choker Hitch:** The load is wrapped around by the sling and connected to a sliding choker hook or one end is looped through the other end. The load should be large enough to prevent kinking or crimping of the sling or fittings.
4. **Single Choker Hitch:** The volume of the sling should be compact by one-quarter less than the SWL for a single vertical hitch rating. Angle of choke is higher than 45°
5. **Double Choker Hitch:** This Hitch facilitates equalization of the loading on the sling legs over the lifting hardware. Its work load limit is double then work load limit of single Choker Hitch.
6. **Basket Hitch:** This can be used when is well balanced and sling has to pass through the opening of the load. It has double work load limit then a single vertical sling. It has two legs which form an angle with load and this reduces the sling capacity.

The following symbols represent load or support surfaces:

- This symbol shows that diameter of curvature of contact is double then rope diameter, which is used for making of the sling.
- This symbol shows that diameter of curvature of contact is eight times of the rope diameter, which is used for making of the sling.
- It shows that load has rotary force and rope has slippage with the contact of load. Load curvature diameter has to be double then the rope diameter.

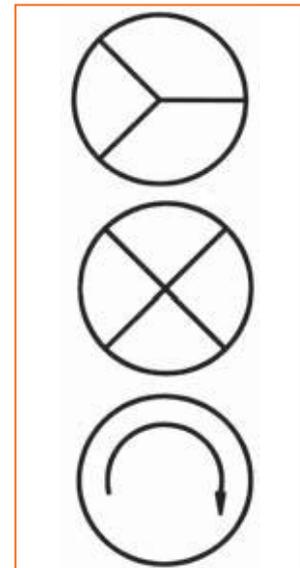


Fig. 4.3.1: Load representation symbols

Ask



- You could ask the types of knots used in rigging.
- You could ask the types of hitches
- You could ask about the symbols represent load or support surfaces.
- You could ask about the concept of bridle hitches.

Activity

- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Skill Practice	Time	Resources
Forming different types of knots and hitches	2 hours	Rope

Do

- Tell each trainee has to perform task individually.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 4.4: Auxiliary devices and tools required

Unit Objectives

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

1. Discuss about rigging tools and devices.

Resources to be Used

- Available objects such as black or white Board, chalk pieces, white board marker pens, duster and available devices and tools.
- PC with LCD Projector or Flip Chart
- Participant Manual

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.

Say

- The use of many devices and tools such as hoists, rollers, jacks, and winches comes under rigging operations.
- To work and maintain the equipment correctly the rigger must be read and follow all the instructions.
- Different types of pulley systems are fixed, movable and compound.

Elaborate

Various rigging devices

1. **Jacks:** Most commonly used jack in industry is the ratchet jack and heavy duty hydraulic jack. For the capacities under of 20 ton the ratchet jacks are used because of the physical energy necessary to increase such a load.

2. Blocking and Cribbing: Blocking or cribbing must

- be enough to backing load
- be set on floor, firm or level ground
- be near together
- be free of grease and dry
- no higher than the length of the timbers used be stacked
- The jacking process should be follow
- To deliver constancy allot load over enough area.

3. Rollers: For the movement of loads on slight inclines or horizontally the rollers can be used, if the surface is even and firm. Steel or aluminum round stock, a manufactured caster unit or heavy steel pipe creates rollers.

For little distances or where the load will have to negotiate corners the cylinder rollers are used.

4. Winches: For several rigging and hoisting operations the base-mounted winches or tuggers are used as they are versatile and compact tool. The area where a mobile crane is not accessible or not enough headroom for a crane then winches are particularly used.**5. Pulleys:** A pulley is a wheel on a hub or shaft that is intended to help movement and alter of course of a rigid link or belt along its perimeter. Pulleys are utilized as a part of an assortment of approaches to lift loads, apply power, and to transmit force.

These are distinctive sorts of pulley frameworks:

- Fixed
- Movable
- Compound

Ask

- You could ask about the rigging tools
- You could ask about the various rigging devices

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.



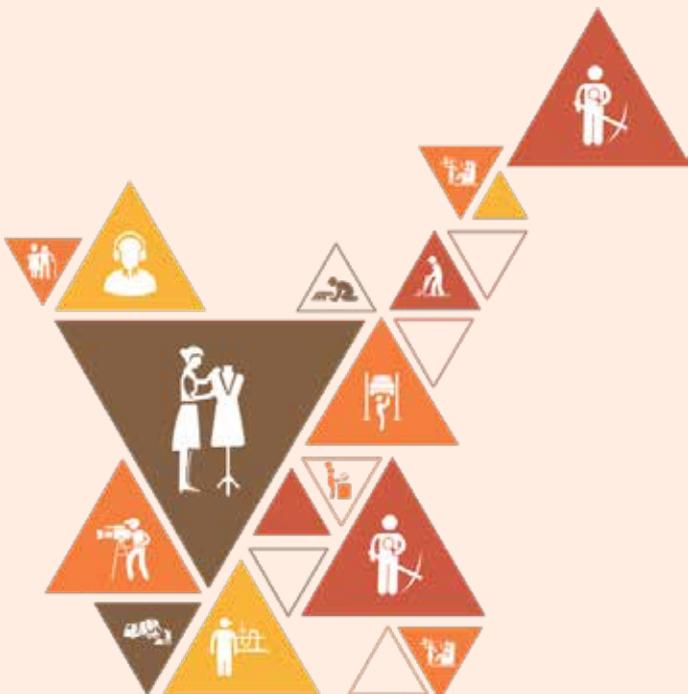
5. Basics of rigging

Unit 5.1 – Rigging fundamentals

Unit 5.2 – Pre inspection of rigging equipments

Unit 5.3 – Rigging hand signals

Unit 5.4 – Good and bad rigging practices



Key Learning Outcomes

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

1. Discuss about safety requirements for rigging
2. Know about how calculation of center of gravity
3. Discuss about load and volume calculations
4. Know about friction and equilibrium concept
5. Discuss about pre inspection requirements.
6. Know about pre-inspection checklist of various rigging equipments
7. Know about hand signals
8. Know about good and bad rigging practices

UNIT 5.1: Levelling

Unit Objectives

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

1. Discuss about safety requirements for rigging
2. Discuss about Center of Gravity.
3. Know about how calculation of center of gravity
4. Discuss about load and volume calculations
5. Know about friction and equilibrium concept

Resources to be Used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster.
- PC with LCD Projector or Flip Chart
- Participant Manual

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- Load-lifting rigging is a hazardous activity. Only trained and experienced personnel should be permitted to undertake rigging activities.
- Gravity effects such evolutions as:
 - a) Lifting
 - b) Lowering
 - c) Stabilizing
- Load's weight is perfectly balanced or distributed around the center of gravity.
- Force found between two surfaces area of the contact.
- Force acts parallel to those surfaces toward a direction contradicting the relative movement between them.

- The more prominent the weight (power of gravity) of an object, the more friction power
- Every object resting on earth is said to be “at rest” and in a state of Static Equilibrium. All objects seek a state of equilibrium.

Elaborate

The following general safety requirements should be followed:

- Keep inexperienced personnel clear of loads swinging overhead, bights of slack rope, lead and snatch blocks, anchorages, or other possible danger points.
- Be sure of the weight to be handled, where it is to be placed, and the capabilities of the gear to handle it.
- Decide the method of slinging and check that suitable slings are on hand.
- Check that the swing area is clear of power lines or other obstructions.
- Prepare or select anchorage points if these are required for tie-backs.
- Once preparations for a lift are complete, proceed with the lift without stopping.
- Lifting equipment should be attached to the load by a competent person and the immediate areas cleared in preparation for the lift.
- Before starting the lifting process audible and visual alarms are suggested to notify people to clear the area.
- Exclusion zones shall cover the area directly underneath the operating and lifting area of the crane or lifting appliance.
- The designated person can only pass standard signals. “Stop” commands can be given by anyone, and should be obeyed instantly.
- Ropes spooling onto winches should be guided by a piece of wood or similar, not by the hands. Hands should be kept clear of moving ropes, especially near blocks, and kept clear of sling eyes as the load is lifted.
- Under any situations should anyone stand or pass below a suspended load.

Explain

The operator should take all practicable steps to establish the weight of any load.

Step 1: Determine volume

To determine the volume measure the object to get dimensions (length, width & height).

Volume formulas:

Rectangle/square: V (Volume) = (L) Length x (W) Width x (H) Height

Hollow cylinder: Volume = $3.14 \times (L)$ Length x Wall thickness x (Diameter wall thickness)

Step 2: Determine the material of the object

Calculate the weight of material as per unit volume.

Step 3: Determine weight of object

Multiply the weight per unit volume times the figured volume to get the calculated objects weight.

Example: Rectangular Load

Object to be lifted: Concrete block, 8 feet long x 4 feet wide x 6 feet high

- Volume of a rectangle is its length width and height:

$$V = L \times W \times H = 8 \text{ ft} \times 4 \text{ ft} \times 6 \text{ ft} = 192 \text{ cu ft}$$

- Since concrete weighs 150 pounds per cu ft (see table on previous page), the load will weigh approximately:

$$\text{Block weight} = 192 \text{ cu ft} \times 150 \text{ lbs/cu ft} = 28,800 \text{ lbs}$$

Center of gravity (CG)

CG of a solid substance is situated in three planes or directions:

- o X axis = Horizontal, side to side
- o Y axis = Vertical axis
- o Z axis = Horizontal, front to back

The crane hook needs to be directly over the centre of gravity for the load to be steady.

The load is not steady. The hooks are below the centre of gravity, and the centre of gravity is above the hooks.

This top part of load is heavy so it could overturn while being craned.

This load is stable. The hook is right over the load's centre of gravity.

Lifting a load with the centre of gravity offset will reason the load to move until a balance is repaired

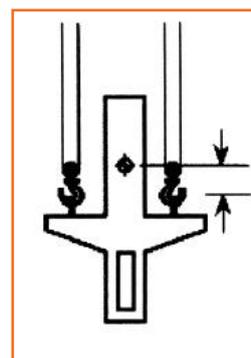


Fig. 5.1.1: Stable load

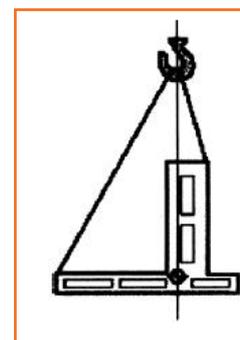


Fig. 5.1.2: Stable load

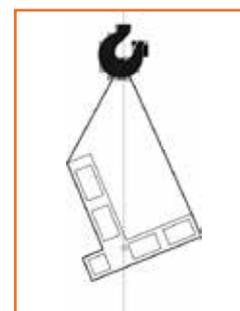


Fig. 5.1.3: Unstable load

- The hook is not over the center of gravity.
- The Load will shift until the center of gravity is below the hook.
The crane operation will face major problems for landing the load.

Friction and resistance force

- More the two contact surfaces are smoother, the less the erosion between those surfaces
- Friction can be reduced between two surfaces by using liquids (unless a lot of surface pressure is created)
- Materials with adjusted surfaces that break the contact between objects will most probably reduces friction
- Reducing the surface area between two objects may lessens the measure of friction present, particularly if the contact surfaces are harsh:
- Lifting operations regularly include lifting just a single side of the object which lessen the weight on the contact surface and therefore diminishes the friction power.

Equilibrium

Each object lying on earth is said to be “very still” and in a province of Static Equilibrium. All objects Little outside power/exertion at the object highest most point can change it’s condition to unstable equilibrium from static:

- Object “balance point” of Static equilibrium can be move with delicate push or wind.
- With regular force changes into a condition of unsteady equilibrium.
- Static equilibrium of object will move into different position.

Demonstrate



Symmetrical loads

- The focal point of gravity of a symmetrical, rectangular load can be established by assessment.
- Rectangle each side needs to be measured.
- Divide each side into equal parts to find the focal point of gravity for that side.
- After, join the outcomes to decide the general focal point of gravity.

Asymmetric loads

- The convenient way for finding the focal point of gravity of an asymmetrical load is to divide object into rectangles and decide the focal point of gravity for every initially, as appeared at right.
- For the case here, the right-side rectangle calculates 5 feet by 10 feet while the left rectangle calculates 5 feet by 5 feet.
- Since the right-hand rectangle is twice as size of the left, and since both are made of a similar material, 1/3 of the weight is assembled at the left focal point of gravity (marked "A"), while 2/3 is aggregated at the right (marked "B").
- Draw a line associating the two centers of gravity as appeared and measure 2/3 of the route from focal point of gravity A to focal point of gravity B, as appeared by the red line at right. That is the area of the last, joined focal point of gravity for the block.

Other shapes

- To locate the focal point of gravity of a triangle, measure 1/3 the range from the base and in addition 1/3 of the base from the steepest edge, as appeared at right.
- The focal point of gravity of a circle of identical weight is found precisely at the middle.
- Figure explain how the gravity's focal point or center point of a semi-circle can be determined.

Ask

- Ask general safety requirements for rigging.
- Ask from the students how to evaluate the load
- Ask about the symmetrical and asymmetrical loads for centre of gravity
- Ask to calculate the center of gravity of a steel plate 4 ft wide x 10 ft long x 1/2 inch thick.
- Ask about the meaning of equilibrium

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 5.2: Pre inspection of rigging equipments

Unit Objectives

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

1. Discuss about pre inspection requirements.
2. Know about pre-inspection checklist of various rigging equipments

Resources to be Used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster.
- PC with LCD Projector
- Participant Manual

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.

Say

- It is necessary to pre-inspect the various rigging equipments like wire rope slings, synthetic web sling, hook, shackle and eye bolt.
- The Sling Angle Factor is a multiplier used to determine the required sling size when angle formed between sling and load is less than 90°.
- At the point when a wire rope sling is utilized as a part of a basket hitch, the width of the load where the sling contacts the load can diminish sling limit. The technique used to decide the loss of strength or effectiveness is known as the D/d Ratio. The “D” alludes to the breadth of the load being lifted, while the “d” alludes to the measurement of the wire rope sling, as appeared in the figure at the upper right.
- All eye bolts must be forged, cast, or die stamped with the name or trademark of the manufacturer, size or capacity, and grade (alloy eye bolts only). This information shall not be missing and must be legible.
- Follow the manufacturer instructions when installing hoist rings.

Elaborate



Wire rope slings pre-inspection checklist

Slings must be removed from service when any of the below listed substandard conditions exist.

- Shock stacking is disallowed
- Wires in rope lay broken
- One or more broken wire at an end association
- Reduction in rope distance across
- Severe limited wear, scraped spot or scratching
- Heat damage evidence
- End connections that are broken, disfigured or worn
- Latches or hooks disfigured or harmed
- Rope corrosion or end connections
- Each wire rope sling should be set apart to appear: Name or trademark of manufacturer, diameter or size and Rated load capacity for the types of hitches, and the angle upon which it is based

Synthetic web slings-pre use inspection checklist

Inspect slings daily before use and frequently during use.

- Knots, obstacles, openings, tears, or cuts
- Extensive rough wear
- Scorching or melting of any piece of the sling surface
- Excessive wear shows visible red yarns or strings
- Stitches worn or broken
- Chemical harm including corrosive or harsh copies, fragile or solid territories, and staining of any sort
- Corrosive staining or other harm to fittings.
- Inadequate, illegible or missing sling distinguishing proof.

Hooks-Pre use inspection checklist

Inspect hooks daily before use and frequently during use. Remove from service when any of the following conditions exist:

- Manufacturer identification missing or illegible
- Scratches, gouges or cracks
- Damage due to heat
- Repairs in unauthorized ways

- Locking of self-locking hook and improper operations.
- Any contort from plane of un bowed hook
- Distortion or wear – any expansion in throat opening of 5% not to surpass ¼ inch, or wear surpassing 10% of actual measurement

Shackles-Pre use inspection checklist

Remove from service when any of the following conditions exist:

- Heat damage including weld spatter or curve strikes
- Excessive erosion
- 10% diminish of the actual or list measurement anytime around the body or pin
- Body spread including: bowed, contorted, twisted, extended, lengthened, split, or broken load-bearing parts
- Excessive scratches or gouges
- Incomplete engagement of pin, shoulder of pin is not flush with shackle body
- Excessive string harm
- Unapproved welding

Eye bolt pre-use inspection checklist

Inspect eye bolts daily before use and frequently during use.

- Twist, gouges, nicks or mutilated eye, or shank
- Obvious wear (10% diminished of unique/index measurement anytime)
- Worn, consumed or potentially contorted strings
- Indications of damage due to heat including weld scatter or circular strikes
- Any adjustment or repair to eye bolts, for example, pounding, machining, welding, indenting, stamping, and so forth is not admissible.

Hoist rings pre-use inspection checklist

Inspect daily before use and frequently during use.

- Manufacturer name or trademark, limit and torque esteems is missing
- Bail is bowed, curved, or lengthened
- Received holes are unclean, harmed, or don't fit appropriately or threads on shank
- Damaged or corrosion
- Tapped getting holes must be cleaned and reviewed for tread wear and weakening
- Any proof of adjustment or repair to hoist rings, for example, pounding, machining, welding, scoring, stamping, grinding and so on.

- Heat damage including weld scatter or bend strikes
- Bail movement should be free (it should turn 180° and swivel 360°)

Ask

- Ask about the pre-inspection checklist of various rigging equipments like wire rope slings, synthetic web sling, hook, shackle and eye bolt.

Activity

- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Skill Practice	Time	Resources
Pre inspection of rigging equipments	2 hours	Sling, shackle, eyebolt, hook, hoist ring

Do

- Ask them to get practice the activity in pairs.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 5.3: Rigging hand signals

Unit Objectives

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

1. Know about various rigging hand signals

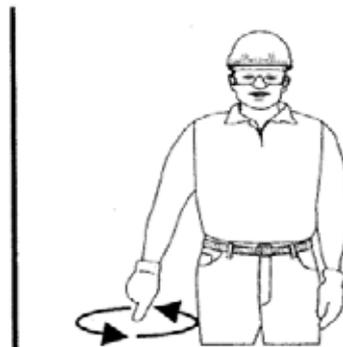
Do

- Show the various rigging hand signals

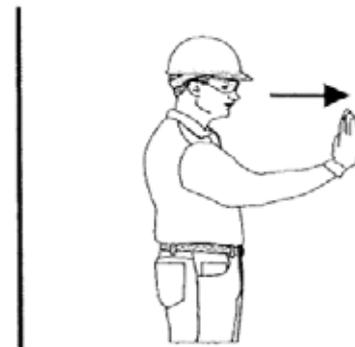
Elaborate



HOIST



LOWER



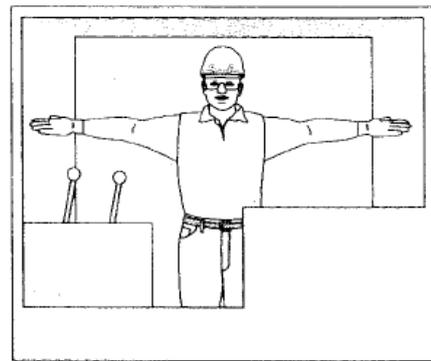
BRIDGE TRAVEL



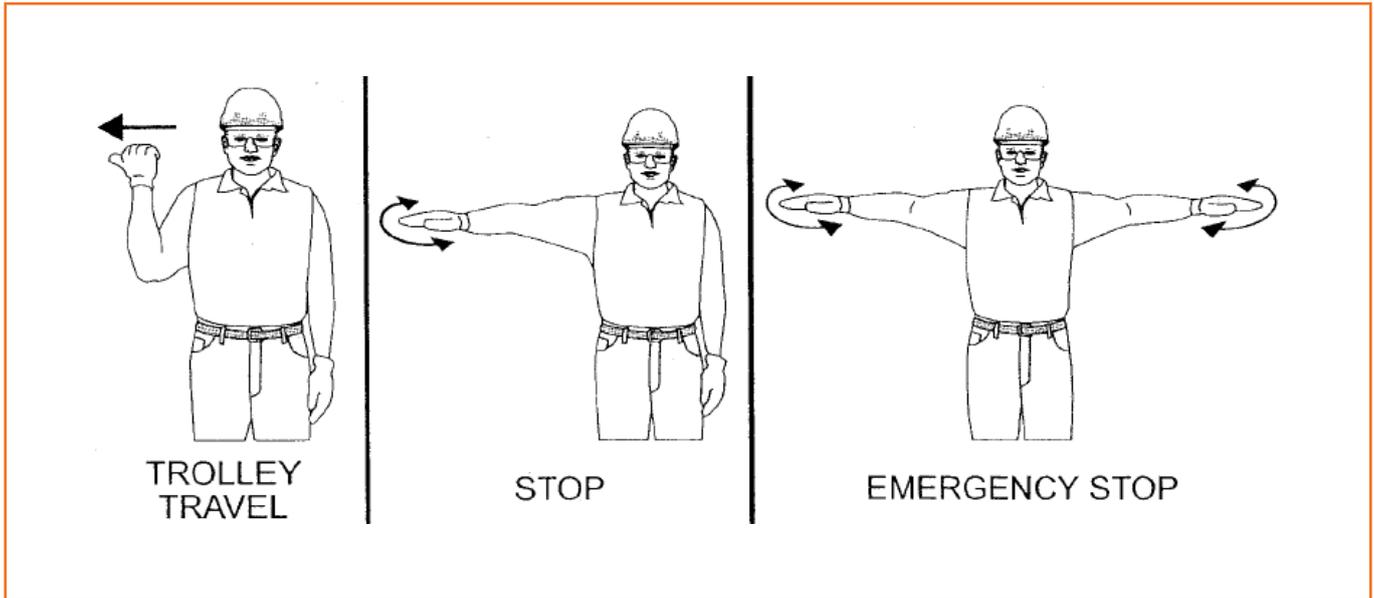
MULTIPLE
TROLLEYS



MOVE SLOWLY
(i.e. HOIST SLOWLY)



MAGNET IS DISCONNECTED



Ask



- Ask to identify various rigging hand signals

Activity



- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Skill Practice	Time	Resources
Pre inspection of rigging equipments	2 hours	Sling, shackle, eyebolt, hook, hoist ring

Do



- Call a student and tell him to demonstrate the hand signals.
- Tell other students to identify the hand signal and give the answer.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

UNIT 5.4: Good and bad rigging practices

Unit Objectives

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

1. Know about good and bad rigging practices

Do

- To show the correct use of choker hitches
- To show the correct way to balance a shackle load
- To show correct hook-up methods
- To show correct rigging method
- To show Hook up unused slings
- To show correct loading method
- To show use paddings during lifting
- To show use tag line to control movement of the load
- To show correct method of unloading

Field Visit

- You could visit the Iron and steel producing company and show the good and bad rigging practices.

Activity

- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Skill Practice	Time	Resources
Demonstrating good and bad rigging habits	2 hours	Rigging equipments and accessories

Do

- Call each student one by one in front of class.
- Tell them to pick and equipment and accessory and demonstrate the good and bad rigging habit in front of class.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Notes for Facilitation

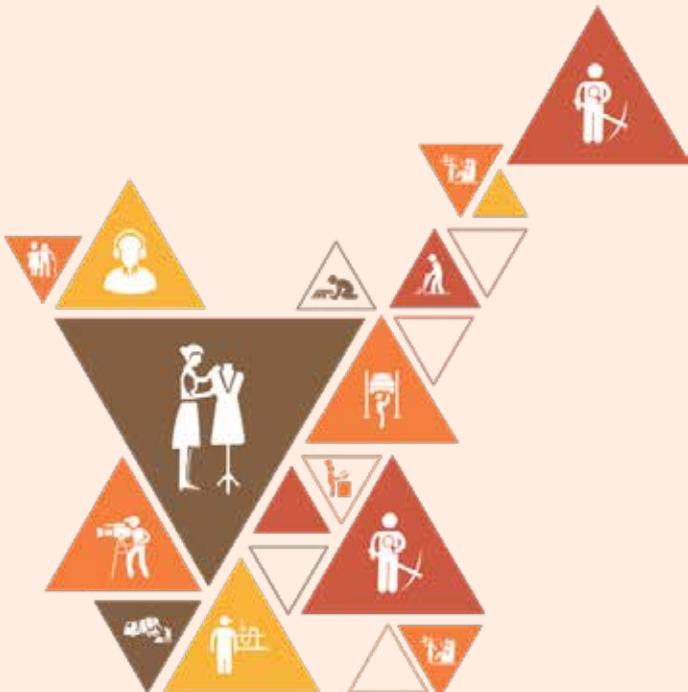
- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.



6. Rigging operations

Unit 6.1 – Lifting and moving loads

Unit 6.2 – Rigging and lifting practices



Key Learning Outcomes

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

1. Know about handling asymmetrical loads
2. Know about handling symmetrical loads
3. Know about moving load through vertical and horizontal openings
4. Know about moving load over obstacles
5. Know about rigging and lifting practices

UNIT 6.1: Lifting and moving load

Unit Objectives

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

1. Know about handling asymmetrical loads
2. Know about handling symmetrical loads
3. Know about moving load through vertical and horizontal openings
4. Know about moving load over obstacles

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Resources to be Used

- Available objects such as a duster, pen, notebook, loading equipments etc.

Say

- The challenging task is to passing a load through vertical, floor hole or a shaft. Due to the length of the opening or the tight clearances causes challenging task. An assistant with help guide is not possible to pass through the load.
- The key to an effective operation is the overall load footprint, the exact balance point and determining the size of the opening.
- Liable on the location of work, it might be essential to lift a load around or above an obstacle that is in between the travel lane. When it happens, determine the potential effect on the load it can be damaged or otherwise dropped as a result of a collision or fall.
- Liable on the location of work, it might be possible to lift a load near stationary objects that is in between the travel lane. When it happens, determine the potential effect on the load it can be damaged or nearby equipment as a result of a collision or fall.

Do



Handling asymmetrical and symmetrical loads

1. Before working on crane always check all crane functions that should be up-to-date and in proper operating condition.
2. Check the travel route for lifting the load and ensure there is sufficient clearance so as to avoid any accidents.
3. Check the designated area for placing the load, the area should be properly cleared and floor strength is adequate to support the load.
4. Calculate and determine the center of gravity of the load.
5. Assign chains/slings/wire ropes above the center of gravity of load as stated on the Lift Plan.
 - a. Stabilize the load using taglines incase existing connection points are below the center of gravity.
6. Balance Load on multiple leg slings.
7. Avoid equipment and the load rigging from sharp surfaces and damage them.
8. Lift the Load slowly so as to see if there is any imbalance or tilt in the load.
 - a) If the situation arises if the load tilts then bring it back to its place on ground and check for if there is any flaw in the procedure.
 - b) Repeat the test again, if problem still persist stop the lift and reexamine the recommendations for the location of the load's center of gravity as well as the lifting rigging equipment.
9. By the help of facility's notification system warning must be given to each one in the zone of the imminent i.e sounding an alarm etc. once the load is balanced correctly.
10. The load should move slowly by lifting to its last stop.
 - a) Keep the load at low level while lifting.
 - b) Use attendants to walk along the load if needed to keep it safe from other objects or people.
11. Now lower the load slowly and always sure that it lines up properly with support devices, timbers, or other any blocks.
12. Detach the rigging from the equipment & check for any damages.

Handling symmetrical loads

1. Following checklist of below points to confirm that all is up-to-date and in proper working condition earlier to crane operation:
 - a) Tag or certificate of Annual overhead crane inspection
 - b) Crane main switch working

- c) Supporting structure and rails to be checked properly for loose fasteners or unusual wear and tear.
 - d) All operating mechanism and controls (damage to pendant controls, feeder cable strain relief and loose fasteners).
 - e) Lubrication Block.
 - f) Hooks for wear and safety latch, damage, cracks, deformation, throat spread.
 - g) Hoist rope for significant wear, bird-caging, broken wires, corrosion, kinks and crushing.
 - h) Hoist chain for arc strikes, gouges, wear, nicks, distortion and corrosion.
 - i) For proper operation always hook latch.
 - j) Always check for excess grease or fluid leakage on floor.
 - k) Inspect for deficits that can origin any hazard.
 - l) To save from noise use main hoisting gear system.
 - m) The upper-limit switch is used for hoist.
 - n) Auxiliary hoist.
 - o) Suitable spooling of drums.
 - p) Bridge travel - both directions.
 - q) Trolley travel - both directions
 - r) Mechanical stop (both directions) or bridge limit switch.
 - s) Bridge brakes.
 - t) Look for any other shortage that may create a hazard
 - u) Trolley limit switch, or mechanical stop - both directions
 - v) Load brakes
2. The travel route should be clear to sure there is sufficient permission for the load to be lifted.
 3. Check the designated area for dropping the load for satisfactory permission as well as for satisfactory floor power once it is placed down to support the load safely.
 4. Attach wire/chains/slings ropes above the center of gravity of load as stated on the Lift Plan.
 - Stabilize the load using taglines incase existing attachment points are below the center of gravity.
 5. Balance Load on multiple leg slings.
 6. Avoid equipment and the load rigging from sharp surfaces and damage them.
 7. Lift the Load slowly so as to see if there is any imbalance or tilt in the load.
 - Always check for any flaws in the process by bring it back to place if the load is tilts.
 - Repeat the test again, if problem still persist stop the lift and reexamine the recommendations for the location of the load's center of gravity as well as lifting rigging equipment.
 8. By the help of facility's notification system warning must be given to each one in the zone of the

imminent i.e sounding an alarm etc. once the load is balanced correctly. Lift and move the load slowly to its destination.

9. The load should move slowly by lifting to its last stop.
 - Keep the loads heights at a low level while lifting.
 - Use attendants to walk along the load if needed to keep it safe from other objects or people.
10. Now lower the load slowly and always sure that it lines up properly with support devices, timbers, or other any blocks.
11. Detach the rigging from the equipment & check for any damages.

Moving Loads through Vertical Openings

1. Always sure all crane functions are up-to-date and in appropriate working situation before operating on crane.
2. Check the travel route for lifting the load and confirm there is enough clearance so as to avoid any accidents.
3. Check the selected area for placing the load, the floor power and area should be suitably cleared to backing the load.
4. Calculate and determine the center of gravity of the load.
5. Attach chains/slings/wire ropes above the center of gravity of load as stated on the Lift Plan.
 - a) Stabilize the load using taglines incase existing attachment points are under the center of gravity.
6. Balance Load on multiple leg slings.
7. Avoid equipment and the load rigging from shrill surfaces and damage them.
8. Lift the Load slowly so as to see if there is any imbalance or tilt in the load.
 - a) In the situation of load tilts first bring it back to its position on ground then check for flaw in the process.
 - b) Repeat the test again, if problem still persist stop the lift and reexamine the recommendations for the location of the load's center of gravity as well as lifting rigging equipment.
9. By the help of facility's notification system warning must be given to each one in the zone of the imminent i.e sounding an alarm etc. once the load is balanced correctly.
10. The load should move slowly by lifting to its last stop.
 - a) Keeps the loads height at a low level while lifting?
 - b) Use attendants to walk along the load if needed to keep it safe from other objects or people.
11. Now lower the load slowly and always sure that it lines up properly with support devices, timbers, or other any blocks.
12. Detach the rigging from the equipment & check for any damages.

Moving Loads through Horizontal Openings

1. Review each crane functions are up-to-date and in correct working situation before operating on crane.
2. Always check the travel path for lifting the load and confirm there is enough permission so as to avoid any accidents.
3. Check the designated area for placing the load, the area should be properly cleared and floor strength is adequate to support the load.
4. The center of gravity of the load should determine and calculate.
5. Attach wire ropes/chains/slides above the center of gravity of load as stated on the Lift Plan.
 - a) Stabilize the load using taglines incase existing attachment points are under the center of gravity.
6. Balance Load on multiple leg slings.
7. Avoid the load rigging and equipment from sharp surfaces and damage them.
8. Catch equipment like a second crane or rollers should be utilized at the other side.
9. Lift the Load slowly so as to see if there is any imbalance or tilt in the load.
 - a) In the situation of load tilts first bring it back to its position on ground then check for flaw in the process.
 - b) Repeat the test again, if problem still persist stop the lift and reexamine the recommendations for the location of the load's center of gravity as well as lifting rigging equipment.
10. By the help of facility's notification system warning must be given to each one in the zone of the imminent i.e sounding an alarm etc. once the load is balanced correctly.
11. The load should move slowly by lifting to its last stop.
 - a) Keeps the loads height at a low level while lifting?
 - b) Use attendants to walk along the load if needed to keep it safe from other objects or people.
12. Guide the assistant to ensure that it is lined up perfectly with the catching equipments after the load is partially passed through the receiving devices.
13. On the basis of load's center of gravity and shape, halt the lift to assign rigging devices on the delivery side.
14. Continue the lift till the load is not received & taken in full control by the rigging apparatus on other side.
15. Transfer the load to its desired position.

Moving loads around or over obstacles

1. Always check the travel path for lifting the load and confirm there is enough permission so as to avoid any accidents.
2. Check the designated area for placing the load, the area should be properly cleared and floor strength is adequate to support the load.

3. Calculate and determine the center of gravity of the load.
4. Attach chains/slings/wire ropes above the center of gravity of load as stated on the Lift Plan.
 - a) Stabilize the load using taglines incase existing attachment points are under the center of gravity.
5. Balance Load on multiple leg slings.
6. Avoid equipment and the load rigging from sharp surfaces and damage them.
7. Lift the Load slowly so as to see if there is any imbalance or tilt in the load.
 - a) In the situation of load tilts first bring it back to its position on ground then check for flaw in the process.
 - b) Repeat the test again, if problem still persist stop the lift and reexamine the recommendations the location of the load's center of gravity as well as lifting rigging equipment.
 - c) By the help of facility's notification system warning must be given to each one in the zone of the imminent i.e sounding an alarm etc. once the load is balanced correctly.
 - d) The load should move slowly by lifting to its last stop.
 - e) Keep the load at a low level while lifting.
 - f) Use attendants to walk along the load if needed to keep it safe from other objects or people.
 - g) Guide the assistant to ensure that it is lined up perfectly with the catching equipments after the load is partially passed through the receiving devices.
 - h) If the load is capture by catching device then lower the load.
 - i) Now lower the load slowly and always sure that it lines up properly with support devices, timbers, or other any blocks.
 - j) Transfer the load to its desired location.

Moving loads in close proximities

1. Review all crane functions are up-to-date and in suitable working situation before operating on crane.
2. Always check the travel path for lifting the load and confirm there is enough permission so as to avoid any accidents.
3. Check the designated area for placing the load, the area should be properly cleared and floor strength is adequate to support the load.
4. Calculate and determine the center of gravity of the load.
5. Attach chains/slings/wire ropes above the center of gravity of load as stated on the Lift Plan.
6. Stabilize the load using taglines incase existing attachment points are under the center of gravity.
7. Balance Load on multiple leg slings.
8. Avoid equipment and the load rigging from sharp surfaces and damage them
9. Lift the Load slowly so as to see if there is any imbalance or tilt in the load.

10. In the situation of load tilts first bring it back to its position on ground then check for flaw in the process.
11. Repeat the test again, if problem still persist stop the lift and reexamine the recommendations for the location of the load's center of gravity as well as lifting rigging equipment.
12. By the help of facility's notification system warning must be given to each one in the zone of the imminent i.e. sounding an alarm etc. once the load is balanced correctly.
13. The load should move slowly by lifting to its last stop.
 - a) Keeps the loads height at a low level while lifting?
 - b) Move slowly towards other equipments.
 - c) Use attendants to walk along or tag lines for the load if needed to keep it safe from other objects or people.
14. Now lower the load slowly and always sure that it lines up properly with support devices, timbers, or other any blocks

Ask



- You could ask the important points to be remember for handling asymmetrical and symmetrical loads.
- You could ask the distinct points of moving loads through horizontal opening.
- You could ask about the moving loads in close proximities.

Field Visit



- You could visit the Iron and steel producing company and show the good and bad rigging practices.

Activity



- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Skill Practice	Time	Resources
Moving loads	3 hours	Crane
		Rigging setup
		Load

Do

- Call each student one by one and tell them to operate crane and move the load
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

UNIT 6.2: Rigging and lifting practices

Unit Objectives

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

1. Know about handling asymmetrical loads
2. Know about handling symmetrical loads

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Resources to be Used

- Available objects such as a duster, pen, notebook, etc.

Say

- The safest method for a rigger to control a load suspended from a hook is with a tagline or a restraining device.
- By the help of a restraining device or a tagline can control a load suspended from a hook by the rigger. It provides rigger the space he requires if the load moves or shifts to a different side.
- The path of the load should be clear by all crew members when moving or placing the equipment or the machinery as it is being planned into location

Elaborate

Operator rules

1. Operating characteristics of the crane or hoist should be clear to the operator.
2. To prevent anyone from being crushed or struck by the crane the mobile cranes barricade reachable areas within the fluctuate radius of the rear of the spinning superstructure of the crane.
3. Hardware can be overloaded only for test purposes otherwise rigging hardware, hoist or no crane shall be loaded beyond the rated capacity.

4. The PIC is liable for confirming that the entire load is correctly determined earlier the lift and will not surpass the equipment's rated volume for critical lifts.
5. Two persons are required for rigging and hoisting for ordinary lifts one is an operator and a rigger with an elected leader.

Demonstrate



- Demonstrate the steps of how to moving the load

Steps



Moving the load

1. At the time of directing the lift the signal person (or single operator is not utilize) should ensure following:
 - Always be sure before lifted more than a few inches the load is balanced and well secured and in the lifting or sling device.
 - The obstructions should not be there in the load path.
2. The operator should follow conditions before starting to lift:
 - Hoist chain or rope is not kinked.
 - Multiple-part lines should not be twisted respectively.
 - In case of slack (chain or rope), make sure that the line seats on the sprockets, sheaves etc., as the slack is detached.
 - See that the load line is perpendicular to avoid side pull. Two degrees out of perpendicular is taken as too much.
3. At the time of hoist operation or crane travel sure that the hook or load is not allowed to swing. The wind speed should be considered for outdoor equipment. A qualified person evaluates the wind speeds in excess of 25 mph to decide if the weight, size and shape of the load can be lifted without harm.
4. At the time of power hoisting, engage the load in a deliberate manner and controlled and guarantee there is no unexpected deceleration or acceleration of the load. To double the load tension on the rigging equipment, hoist, crane and a shock load can very simply cause the load.
5. To check the sling rigging hardware and load balance integrity during first load application lift the load only a few inches at which time brake function. During this stop there shouldn't be downward drift of the load.
6. Do not carry loads over people.
7. In the path of load all belonging together with the rigger should be clear. To control load use a tag line.
8. Never raise the load higher than necessary.

Tips

- When moving or placing machinery, it is advisable for all crew members to stay out of the path of the load as it is being maneuvered into position.

Ask

- You could ask about the operator rules of handling asymmetrical loads.
- You could ask what are the conditions are met by the operator before starting to lift.
- You could ask the steps of how to moving the load.
- You could ask about the tag lines.

Field Visit

You could show how to move the load in nearby any iron and steel industry.

Notes for Facilitation

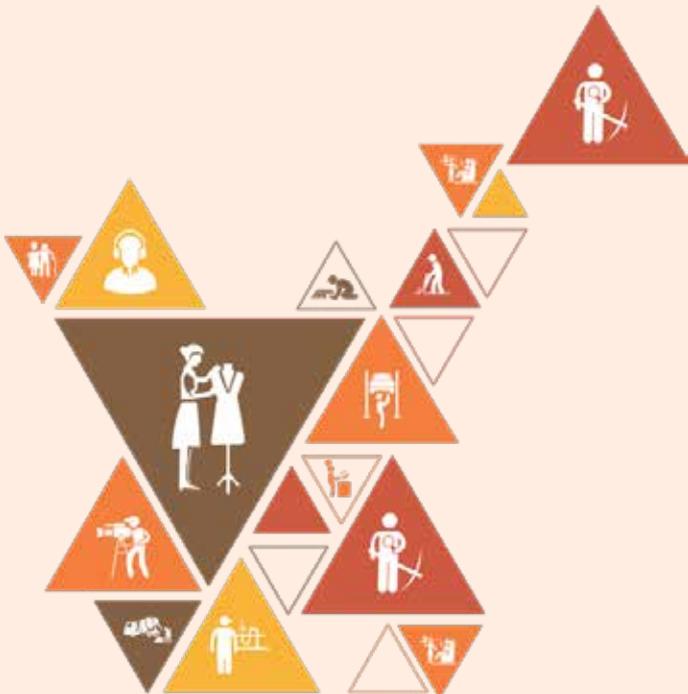
- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.



7. Reporting and Documentation

Unit 7.1 – Documentation for health and safety

Unit 7.2 - Documentation of defects



Key Learning Outcomes

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

1. Know about reporting and documentation requirements
2. Know about accident reporting
3. Know about reporting of defective tools

UNIT 7.1: Documentation for health and safety

Unit Objectives

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

1. Discuss about accident and incident reporting
2. Know about how to write reports properly
3. Know about how to escalate the issues properly

Resources to be used

- Available objects such as a duster, pen, notebook etc.

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- It is of utmost importance to inform about the accidents and incidence straightaway, irrespective of the impact of it.
- Hazard reports can take a number of different forms:
 - o the standard hazard report used by workers for all hazards
 - o reports of infections
 - o near-miss incident reports
 - o reports of damage and faulty tools, equipments and machines
 - o routine inspection reports
 - o Behavior incident reports.
- Reporting of incidents and accidents is required under the Work Health and Safety (WHS) legislation
- Always report an accident to management immediately. There should be a form at each workplace that you (or the person involved) and any witnesses can fill out, where possible, otherwise it can be completed by a health and safety representative (HSR) if necessary.

Elaborate



The form should cover the following areas:

- Description of the occurrence – what was the event that occurred, which required this report to be completed?
- Nature of injury or disease – select the most appropriate description from a range of options.
- What injury or disease happened as a result of the occurrence?
- First aid, medical treatment or hospital admission – this section asks for a description of what was done to treat the injury or disease.
- Part of the body affected – tick off which part or parts of the body were affected as a result of the occurrence.
- Source of injury – what actually caused the person to be injured or acquire a disease? This could be a piece of machinery or other hazardous materials for example.
- Probable cause or causes of injury – how was the source listed above actually responsible for the injury?
- Investigation – this asks a series of questions that seek to find out why the person has been injured or has acquired a disease.
- Notification checklist – this checklist makes sure that everyone who should have been contacted regarding the matter has been contacted and asks whether appropriate action has been taken by the authorities.
- Preventative action – this asks whether or not any action has been taken to prevent the occurrence from happening again.
- Witness details – this part is to be filled out if someone saw the occurrence happen. It is essential if any sort of legal action is to be taken.

Ask



- You could ask the areas covered in form
- You could ask the suggestions for completing appropriate report

Notes for Facilitation



- You could ask the students why reporting and documentation is necessary.
- You could ask from the students about the important things to remember filling reports and documents.
- Assume you got an accident at work place on your knees. File a report and inform the management about the accident.

Activity



- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.
- Make the fire accident report

Skill Practice	Time	Resources
Fire accident report	1 hour	Checklist

Do



- Ask them to get into pairs for practice.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

UNIT 7.2: Documentation of defects

Unit Objectives

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

1. Know about reporting of faulty and damage tools

Say

- Like accident or incident reporting, reporting of faulty and damaged machine, tools and equipments is also necessary.
- Any damaged, faulty or malfunctioning tools, equipment should be immediately withdrawn from use and addressed according to organizational policies and procedures
- You should have to check the following details before doing reporting or providing any repair suggestions:
 - o Last date of inspection
 - o Last date of repair and which part was repaired.
 - o Life cycle of the tool, equipment or machine

Elaborate

In machine or equipment faulty or damage report you have to provide following details:

- Name of the tool or machine
- Registration details of machine
- Who does the inspection of toll and machine before the use
- Trouble or hazard from the defective tool or machine
- Defective part name or number
- Remedial action - Tool or machine has to be discontinue or need repair
- Which process is going to affect due to the faulty machine or tool
- Report whether the machine or tool is performing accurately or precisely.
- Report that there limits, fits and tolerances are set or not according to industrial standards.

Ask



- You could ask the details before doing reporting or providing any repair suggestions
- You could ask the details which are to be required In machine or equipment faulty or damage report

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.

Notes



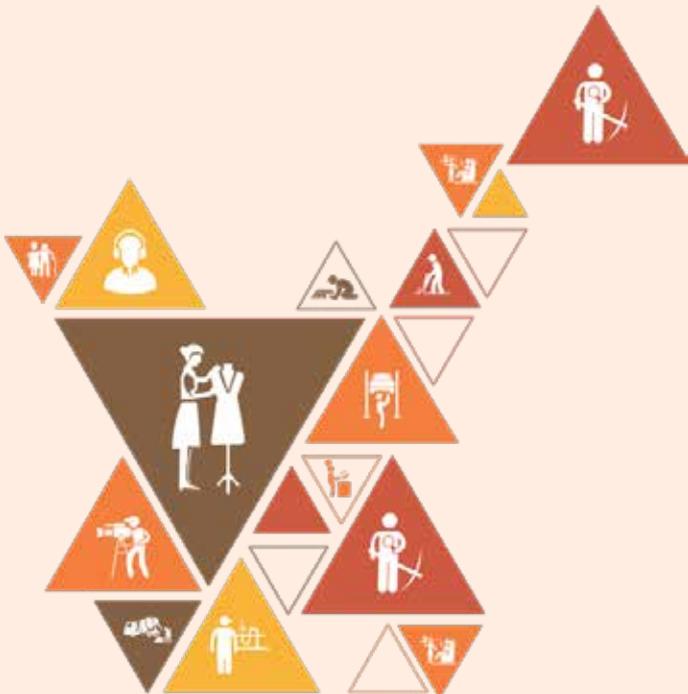
A large rectangular area with a thin orange border, containing 25 horizontal lines for writing notes.



8. Problem identification and escalation

Unit 8.1 – Risk management

Unit 8.2 – Escalation matrix



Key Learning Outcomes

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

1. Know about identification of problem
2. Know about risk management process
3. Know about escalation matrix and problem escalation process

UNIT 8.1: Risk Management

Unit Objectives

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

1. Discuss about risk management process
2. Know about inspecting controlling and controlling the problems

Resources to be used

- Available objects such as a duster, pen, notebook etc.

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- Risk Management consists of methodical steps for handling hazards in the workplace.
- One major component of risk management is workplace safety inspections. Inspections are a major tool in ensuring that a workplace remains safe.

Elaborate

One major component of risk management is Workplace Safety Inspections. Inspections are at major tool in ensuring that a workplace remains safe. They help to identify and address new problems or unsafe conditions. Do the inspection according to the inspection checklist made by the organization according to their norms and standards.

After inspection, make an inspection report, which includes the following information:

1. Fill in the name of the area inspected if not already indicated on the sheet, the date and inspectors' names in the area provided. Make sure all pages are attached and kept together with the front page.

2. Check either yes or no according to the situation or item listed, or put a check next to each listed control. If you can't check off the presence of a control, or answer no to any of the questions, this indicates action is needed. To better prioritize action, evaluate the hazard's severity.
3. Record suggested remedial action in the comments for the identified action items. State what needs to be or should be done to correct and better control the hazardous situation.

Demonstrate



- Explain the benefits of workplace inspection.
- Demonstrate the process of risk assessment

Steps – Risk assessment



Risk management is the process of:



Fig 8.1.1: Risk management process

- Step 1: Identifying** any anticipated problem – Anything that could lead to any harm to any person in the work place, e.g. machine moving, poisonous chemicals, and jobs requiring physical interference.
- Step 2: Evaluating** the issues – Assessing the problem on the basis of their impact, e.g. can it cause a severe injury, sickness or fatality and how likely is this to take place?
- Step 3: Control** the problem or if it's not feasible, controlling the threat arising out of the problem – putting in to practice such strategies that can eradicate or manage the problem, e.g. designing

the equipments differently, putting in machine guards at place, using harmless chemicals, placing heavy objects lifting equipments to reduce manual weight lifting or PPE or inform to supervisor or seniors.

Step 4: Analyzing risk evaluation - to keep a check on control measures and adding better control measures. Also need to discover secure ways of doing things.

Ask



- You could ask how to control the problems
- You could ask from the students risk management process

Notes for Facilitation



- You could ask the students what are the important information make an inspection report

Activity



- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.
- Make the checklist of inspection according to norms and standards and Conduct the inspection of workplace

Skill Practice	Time	Resources
Inspection	1 hour	Checklist

Do



- Ask them to get into pairs for practice.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

UNIT 8.2: Escalation Matrix

Unit Objectives

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

1. Discuss about problem management process
2. Know about escalation matrix

Resources to be Used

- Available objects such as black or white Board, chalk pieces or white board marker pens, duster.
- PC with LCD Projector or Flip Chart
- Participant Manual

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- For escalating issues to the concerned department, every organization follows a specific procedure. This procedure is based on escalation matrix.
- Escalation matrix is a complaint logging system (complaint box) allows you to specify multiple user contacts to be notified in the event of issues.
- By using escalation matrix you can notify the right people at the right time about critical alerts irrespective of the business hours. The escalation matrix is time zone specific and it is available 24X7.

Elaborate

- **Key features of escalation matrix are as follows:**
 - The escalation levels are based on schedules.
 - The service is available 24X7 and schedules are allocated accordingly.

- The schedules are –me zone specific.
- A matrix can be defined at multiple levels ranging from senior management to lower management.

Problem management process

1. Identify problems as described earlier
2. Logging problems – Log the complaint report to the concerned person via email or procedure specified by organization.
3. Categorize problems – categorize the problems into hazards, accidents, faulty tools or equipments and general problems.
4. Prioritization of problem – prioritize the problem according to its impact or severity into high, low, moderate and critical.
5. Initially diagnosis the problem and collect data and information regarding that.
6. Escalate the problem to the management through the escalation procedure.
7. Review the remedial action taken by the management to resolve the situation
8. If found any problem again, then notify the management again about the problem and also suggest the remedial action required for it.
9. Close the complaint after solution of problem.

Demonstrate



- Explain the benefits of workplace inspection.
- Demonstrate the process of risk assessment

Steps - Escalation Matrix



Step 1: Complaint of a given category will by default be assigned and notified by email to the Level 1 department of that category.

Step 2: It defines which an issue has to be raised to whom and within which time frame.

Step 3: If the complaint is not resolved within X number of days (X is the time defined for Level 1 department to resolve the issue), the complaint will be escalated to Level 2 department.

Step 4: If the complaint is not resolved within Y number of days (Y is the time defined for Level 2 department to resolve the issue), the complaint will be escalated to Level 3 department.

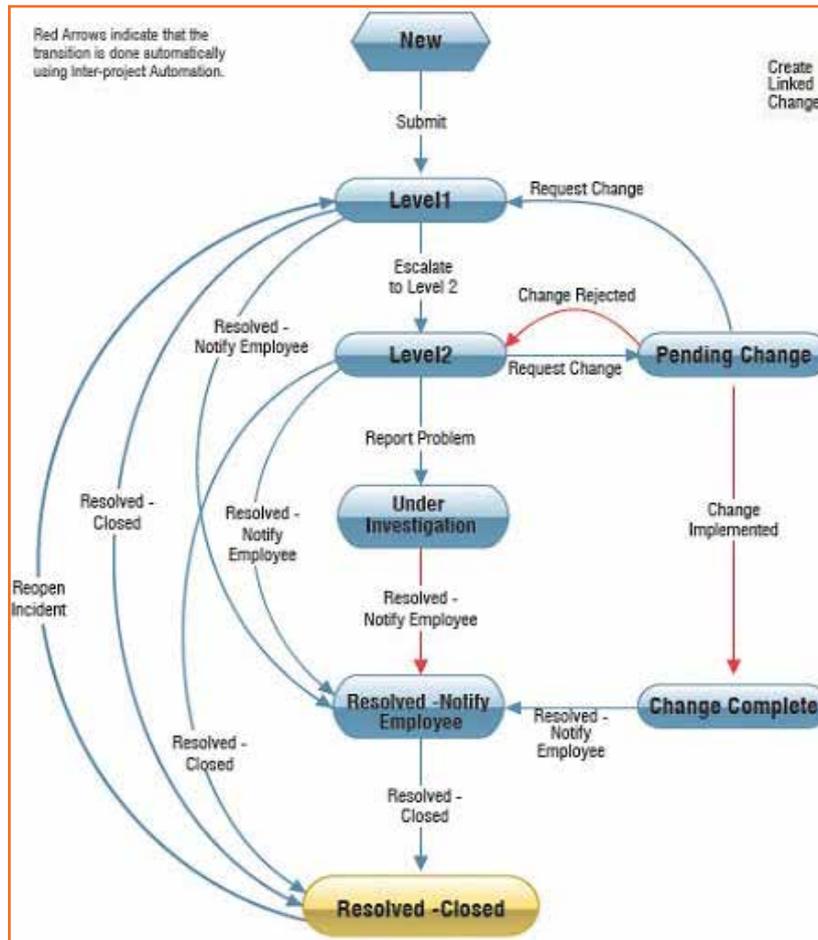


Fig 8.2.1: Escalation matrix

Ask



- You could ask what is escalation matrix and its features
- You could ask the process of problem management
- You could ask how does escalation matrix work for complaints

Notes for Facilitation



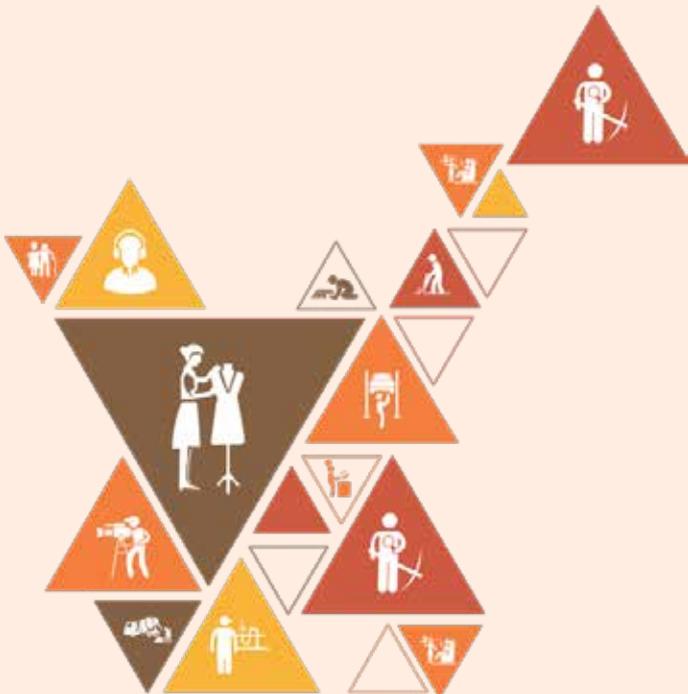
- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.



9. Work effectively with others

Unit 9.1 – Ensure appropriate communication with others

Unit 9.2 – Workplace etiquettes



Key Learning Outcomes

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

1. Know about effective communication with colleagues
2. Know about workplace etiquettes

UNIT 9.1: Ensure appropriate communication with others

Unit Objectives

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

1. Know about how to communicate effectively with colleagues
2. Know about effective communication

Resources to be used

- Available objects such as a duster, pen, notebook etc.

Do

- Welcome and greet the participants. Revise the learnings of the previous sessions and ask them if they have any doubts.

Say

- The success of the organization depends on each colleague.
- For success of organization learn your co-workers' names and learn them quickly because people loves hear their names.
- It doesn't matter a person is more or less significant because of his/her designation. You should respect every employee.

Notes for Facilitation

- You could ask the students what are the ways of effective communication with colleagues

Team Activity



- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Skill Practice	Time	Resources
Effective communication between 2 persons	1 hour	Communication tools

Do



- Ask them to get into pairs for practice.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

UNIT 9.2: Workplace Etiquettes

Unit Objectives

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

1. Know about organization policies and procedures
2. Know about workplace etiquettes

Say

- Workplace etiquettes are also important aspect of organization policies and procedures.
- Work station should be professional and well-ordered with suitable private touches! It reflects good impression on the team mates.
- Make a Positive impression, cooperate with colleagues and work space savvy are some important tips to help you succeed on the job.
- Work station should be professional and well-ordered with suitable private touches! It reflects good impression on the team mates.

Elaborate

Organization policies and procedures while working with colleagues:

- Never use abusive words with the colleagues
- Follow work etiquettes
- Never share secret or confidential information with your colleagues
- Help your colleague in case of emergency or difficult situations
- Coach your colleagues in case of problems and about organization policies and procedures.
- Communicate with them properly.

Notes for Facilitation

- You could ask the role of colleagues in the success of the organization
- You could ask the students how to make a good impression on the job



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& ENTREPRENEURSHIP



N · S · D · C
National
Skill Development
Corporation

Transforming the skill landscape



10. Employability & Entrepreneurship Skills

Unit 10.1 – Personal Strengths & Value Systems

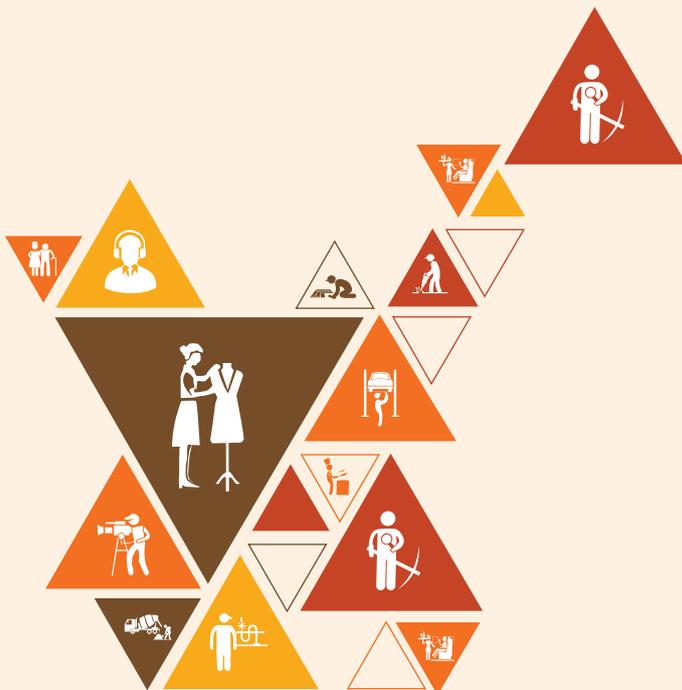
Unit 10.2 – Digital Literacy: A Recap

Unit 10.3 – Money Matters

Unit 10.4 – Preparing for Employment & Self Employment

Unit 10.5 – Understanding Entrepreneurship

Unit 10.6 – Preparing to be an Entrepreneur



Introduction: Employability and Entrepreneurship Skills

This Facilitator's guide includes various activities which will help you as a facilitator to make the sessions participative and interactive.

Ice breaker

- You can begin the module with the following ice breaker:

Five of Anything Ice Breaker Steps:

- Divide the participants into groups of four or five by having them number off. (You do this because people generally begin a meeting by sitting with the people they already know best.)
- Tell the newly formed groups that their assignment is to share their five favourite movies of all time, their five favourite novels or their five least liked films. The topic can be five of anything - most liked or disliked.
- This ice breaker helps the group explore shared interests more broadly and sparks lots of discussion about why each person likes or dislikes their selected five.
- Tell the groups that one person must take notes and be ready to share the highlights of their group discussion with the class upon completion of the assignment.

Expectation Mapping

1. During the first session and after ice breaker session, ask the participants to answer the following question: "What do I expect to learn from this training?"
2. Have one of the participants write their contributions on a flip chart sheet.
3. Write down your own list of covered material in the training on another flip chart sheet.
4. Compare the two sheets, commenting on what will and what will not be covered during the training.
5. Set some ground rules for the training sessions. Ask the participants to put these rules on a flipchart and display it in the class.
6. You may get back to those sheets once again at the end of the last session of the training.
7. Benefits of doing this activity:
 - Participants feel better as their opinions are heard.
 - Participants get to know what they should expect from the training.
 - The facilitator gets to know which points to emphasize, which to leave out, and which to add during the training.
8. Expectations from the participants:
 - Must sign the attendance sheet when they arrive for class.
 - Conduct themselves in a positive manner
 - Be punctual, attentive, and participative
9. Explain the contents that are going to get covered one by one and connect it with the expectation mapping done earlier.
10. By the end of this exercise, the participants should have a clear understanding of what to expect from the session and what are the areas that will not get covered.

Defining Objectives

1. Defining the objectives in the beginning of the units sets the mood for the unit.
2. To begin with the end in mind sets the expectations of the participants as what could be the important takeaways from the session.
3. It is also a way of making participants take responsibility of their own learning process.
4. For the facilitator, the objectives decide a designed path to progress on so that the learning stays aligned and on track.

5. Read the objectives slowly, one by one, and ask the participants to explain what they think it means.
6. At the end of the session, you could again revisit the objectives to find out from the participants about how many objectives have been achieved.

In order to effectively facilitate this workshop:

1. You must have thorough knowledge of the material in the Participant Handbook, and be prepared to answer questions about it.
2. You may also wish to read other material to enhance your knowledge of the subject.
3. There may be issues raised with which you are not able to deal, either because of lack of time or knowledge. You can either state that you will obtain answers and get back to the participants with the information. In case the query can be turned to an assignment to the class, do so. You can work with the the participants on the assignment.
4. You must have a very clear understanding of what the participants want to accomplish by the end of the workshop and the means to guide the participants.
5. As the facilitator, it is your responsibility to make sure that all logistical arrangements are made for the workshop. This may involve doing it yourself or confirming that someone else has made all necessary arrangements associated with the workshop. Assume nothing and check everything before the workshop begins.
6. To break the monotony and boredom during sessions, introduce mini breaks in the form of stretching exercises, jokes, some group songs or games.
7. Invite discussion from the participants.
8. Probe the participants further and lead them to come to affirmative conclusions.
9. Let the participants answer. No answer is incorrect.
10. Ask one participant to write all the points on the whiteboard.
11. Build the sessions from the answers provided by the class.
12. Prepare for the sessions in advance so that the resources like flipcharts, handouts, blank sheets of paper, marker pens, etc. can be kept ready.
13. Ensure that resources like board, markers, duster etc. is available before your session starts.

General instructions for role playing:

1. You are not being asked to be an actor or to entertain. The purpose of the role play is to provide a situation in which you can practice certain skills.
2. When you read the brief, try to imagine yourself in the situation described and behave in a way you feel to be natural – but be conscious of the fact that your role may require a different approach from that which you might normally use.
3. You (and others) may benefit from the change in approach and behaviour. Therefore, try to use the approach you feel to be most appropriate for the circumstances described in your brief.
4. The brief is just the starting point. It simply sets the scene and the tone of session or activity. Try not to keep referring to the brief as this will affect the spontaneity of the meeting. Allow the role play to develop as you think it might in real life and change your reactions in line with the behaviour and responses of others involved.
5. If you find that you have too little information to answer questions or to describe what has happened in the situation, do feel free to add your own thoughts and ideas. Try to keep these within the framework of the role you are taking and try to make your improvisations as realistic as possible.

UNIT 10.1: Personal Strengths & Value Systems

Key Learning Outcomes



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

1. Explain the meaning of health
2. List common health issues
3. Discuss tips to prevent common health issues
4. Explain the meaning of hygiene
5. Discuss the purpose of Swacch Bharat Abhiyan
6. Explain the meaning of habit
7. Discuss ways to set up a safe work environment
8. Discuss critical safety habits to be followed by employees
9. Explain the importance of self-analysis
10. Discuss motivation with the help of Maslow's Hierarchy of Needs
11. Discuss the meaning of achievement motivation
12. List the characteristics of entrepreneurs with achievement motivation
13. List the different factors that motivate you
14. Discuss the role of attitude in self-analysis
15. Discuss how to maintain a positive attitude
16. List your strengths and weaknesses
17. Discuss the qualities of honest people
18. Describe the importance of honesty in entrepreneurs
19. Discuss the elements of a strong work ethic
20. Discuss how to foster a good work ethic
21. List the characteristics of highly creative people
22. List the characteristics of highly innovative people
23. Discuss the benefits of time management
24. List the traits of effective time managers
25. Describe effective time management technique
26. Discuss the importance of anger management
27. Describe anger management strategies
28. Discuss tips for anger management
29. Discuss the causes of stress
30. Discuss the symptoms of stress
31. Discuss tips for stress management

UNIT 10.1.1: Health, Habits, Hygiene: What is Health?

Unit Objectives

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

- Explain the meaning of health
- List common health issues
- Discuss tips to prevent common health issues
- Explain the meaning of hygiene
- Discuss the purpose of Swachh Bharat Abhiyan
- Explain the meaning of habit

Resources to be Used

- Participant Handbook

Ask

- What do you understand by the term “Health?”
- According to you, who is a healthy person?

Say

- Discuss the meaning of health and a healthy person as given in the Participant Handbook.

Ask

- When did you visit the doctor last? Was it for you or for a family member?

Say

- Discuss the common health issues like common cold, allergies etc. Refer to the Participant Handbook.
- Let us do a small activity. I will need some volunteers.

Role Play

- Conduct a small skit with volunteers from the class. Consider one of the villagers has been appointed as a health representative of the village, what measures will you as a health representative suggest to the common villagers to prevent common health issues discussed.
- You will need at least 4 volunteers (Narrator, Health Representative, Head of the Village, Doctor).
- Explain the health concerns of the village to the Narrator. The Narrator will brief the class about the skit.
- Give the group of volunteers, 5 minutes to do discuss.
- At the end of 5 minutes, ask the group to present the skit to the class assuming them as the villagers.
- The class can ask questions to the group as a common villager.

Summarize

- Through this activity we got some tips on how can we prevent these common health issues.

Say 

- Let us now see how many of these health standards we follow in our daily life.

Activity 

- Health Standard Checklist from the Participant Handbook.

Ask 

- How many of you think that you are healthy? How many of you follow healthy habits?

Say 

- Let's do an exercise to find out how healthy you are.
- Open your Participant Handbook section 'Health, Habits, Hygiene: What is Health?', and read through the health standards given.
- Tick the points which you think are true for you.
- Try to be as honest as possible as this test is for your own learning.

Do 

- Ensure that all the participants have opened the right page in the Participant Handbook.
- Read aloud the points for the participants and explain if required.
- Give them 5 minutes to do the exercise.
- At the end of 5 minutes, ask the participants to check how many ticks have they got.

Summarize 

- Tell them that they need to follow all the tips given in this checklist regularly in order to remain healthy and fit.

Ask **Discuss:**

- Is it necessary to practice personal hygiene every day? Why?
- How does a person feel when they do not practice good personal hygiene? Why?
- Can good personal hygiene help a person feel good about his/her self? How?

Say 

- Discuss the meaning of hygiene as given in the Participant Handbook.

Activity 

- Health Standard Checklist: Hygiene

Say 

- Let's do an exercise to find out if we maintain good hygiene habits or not.
- Open the Participant Handbook and read through the Health Standard checklist given.
- Tick the points which you think are true for you.
- Try to be as honest as possible as this test is for your own learning.

Do 

- Ensure that all the participants have opened the right page in the Participant Handbook.
- Read aloud the points for the participants and explain if required.
- Give them 5 minutes to do the exercise. .
- At the end of 5 minutes, ask the participants to check how many ticks have they got.
- Ask them to calculate their score.
- Tell them what each score indicates by reading aloud what has been mentioned in the Participant Handbook.

Ask 

- How many of you have heard about “Swachh Bharat Abhiyan”?
- Can you tell the class what it is about?

Summarize 

- Tell them about Swachh Bharat Abhiyan as given in the Participant Handbook and request them to take a pledge to keep our country clean.

Ask 

- What is a habit?

Say 

- Discuss some good habits which can become a way of life.

Summarize 

- Tell them about good and bad habits and the reasons to make good habits a way of life.

UNIT 10.1.2: Safety

Unit Objectives

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

- Discuss ways to set up a safe work environment
- Discuss critical safety habits to be followed by employees

Resources to be Used

- Participant Handbook
- Safety signs and symbols
- Safety equipments
- Blank papers
- Pens

Say

- There are many common safety hazards present in most workplaces at one time or another. They include unsafe conditions that can cause injury, illness and death.
- Safety Hazards include:
 - Spills on floors or tripping hazards, such as blocked aisles or cords running across the floor.
 - Working from heights, including ladders, scaffolds, roofs, or any raised work area.
 - Unguarded machinery and moving machinery parts; guards removed or moving parts that a worker can accidentally touch.
 - Electrical hazards like cords, missing ground pins, improper wiring.
 - Machinery-related hazards (lockout/tag out, boiler safety, forklifts, etc.)

Team Activity

Safety Hazards

- There are two parts to this activity.
- First part will cover the potential safety hazards at work place.
- Second part will cover a few safety signs, symbols and equipments at work place.
- Use this format for the first part of the activity.

PART 1		
Hazard	What could happen?	How could it be corrected?

Ask

- How could you or your employees get hurt at work?

Say

- Let's understand it better with the help of an activity. You will be given a handout within your groups. You have to think about the possible hazards of your workplace, what damage these hazards could cause and about the corrective action.

Do

- Divide the class into five to six groups of four participants each.
- Put the format on the board for the activity.
- Give blank papers and pens to each group.
- The group is expected to think and discuss the potential safety hazards in the workplace.
- Ask the group to discuss and fill the format using the blank sheet.
- Give the groups 5 minutes for the activity.
- For the second part of the activity, show the class some pictures of safety signs, symbols and equipments.
- Now they will put down a few safety symbols, signs or equipment against the safety hazards identified.
- Give them 5 to 10 minutes to discuss and draw/note it.
- At the end of 10 minutes the groups will present their answers to the class.

Say

- Now, let's discuss the answers with the class.
- All the groups will briefly present their answers.

Do

- Ask the audience to applaud for the group presentation.
- Ask de-brief questions to cull out the information from each group.
- Keep a check on time.
- Tell the group to wind up the discussion quickly if they go beyond the given time limit.

Ask

De-briefing

- What did you learn from the exercise?
- As an entrepreneur, is it important to ensure the safety of your employees from possible hazards? Why?

Summarize

- Ask the participants what they have learnt so far.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the tips to design a safe workplace and non-negotiable employee safety habits.

UNIT 10.1.3: Self Analysis- Attitude, Achievement Motivation: What is Self Analysis?

Unit Objectives

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

- Explain the importance of self- analysis
- Discuss motivation with the help of Maslow's Hierarchy of Needs
- Discuss the meaning of achievement motivation
- List the characteristics of entrepreneurs with achievement motivation
- List the different factors that motivate you
- Discuss the role of attitude in self- analysis
- Discuss how to maintain a positive attitude
- List your strengths and weaknesses

Resources to be Used

- Participant Handbook
- Old newspapers
- Blank papers
- Pencils/ pens

Activity

- This is a paper pencil activity.

What are the three sentences that describe you the best?
What do you need to live happily?
What are your strengths and weaknesses?

Do

- Write the three questions on the board/ flipchart before the session begins.
- Give plain papers and pencils/ pens to each participant.
- Tell participants to write the answer for the three questions on the paper.
- Tell them the purpose of this activity is not to judge anyone but to understand more about self.

Say

- Discuss the concept of Self Analysis and motivation with reference to Maslow's Hierarchy of Needs as discussed in the Participant Handbook.

Team Activity

Tower building

- Each group which will create tower using the old newspapers.

Do 

- Divide the class into groups.
- Give them some old newspapers.
- The task is to create a tower out of the newspapers.
- The group which will create the highest tower standing on its own will be considered the winning group.
- Groups can use as many newspapers as they want to and in any way they want.

Ask 

- What did the winning group do differently?
- If you were given a chance, how would you have made the tower differently?
- How did you feel while making the tower?
- Did you feel motivated?

Say 

- Discuss the concept of achievement motivation and characteristics of entrepreneurs with achievement motivation as discussed in the Participant Handbook.

Ask 

- Is your attitude positive or negative?

Say 

- Let me tell you a story :

It's Little Things that Make a Big Difference.

There was a man taking a morning walk at the beach. He saw that along with the morning tide came hundreds of starfish and when the tide receded, they were left behind and with the morning sun rays, they would die. The tide was fresh and the starfish were alive. The man took a few steps, picked one and threw it into the water. He did that repeatedly. Right behind him there was another person who couldn't understand what this man was doing. He caught up with him and asked, "What are you doing? There are hundreds of starfish. How many can you help? What difference does it make?" This man did not reply, took two more steps, picked up another one, threw it into the water, and said, "It makes a difference to this one." What difference are we making? Big or small, it does not matter. If everyone made a small difference, we'd end up with a big difference, wouldn't we?

Ask 

- What did you learn from this story?

Activity **What Motivates You?**

- This is an individual activity.
- It is an exercise given in the Participant Handbook.

Do 

- Ask the class to open their Participant Handbook and complete the exercise given in the section What Motivates You?
- Ensure that the participants have opened the correct page for the activity.
- Give the class 5 minutes to complete the activity.

Say



- Discuss the concept of attitude and how to cultivate a positive attitude as discussed in the Participant Handbook.

Summarize



- Close the discussion by summarizing how self-analysis, knowledge about what motivates you and your positive attitude can help in your business as well in life.

UNIT 10.1.4: Honesty & Work Ethics

Unit Objectives

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

- Discuss the qualities of honest people
- Describe the importance of honesty in entrepreneurs
- Discuss the elements of a strong work ethic
- Discuss how to foster a good work ethic

Resources to be Used

- Participant Handbook

Ask

- What do you understand by honesty?
- Why is it important for entrepreneurs to be honest?
- Do you remember any incident where your honesty helped you in gaining confidence?
- Do you remember any incident where someone lost business due to dishonesty?

Say

- Talk about honesty, qualities of an honest person, and the importance of honesty in entrepreneurs as discussed in the Participant Handbook.
- “Let's understand it better with the help of some case scenarios. You will be given some cases within your groups. You have to analyse the case scenario that has been given to you and then find an appropriate solution to the problem.
- Keep your discussion focussed around the following:
 - What went wrong?
 - Who was at fault?
 - Whom did it impact- the customer or the businessman?
 - How would it impact the business immediately? What would be the long term impact?
 - What could be done?
 - What did you learn from the exercise?

Do

- Divide the class into four groups of maximum six participants depending on the batch size.
- Give one case study to each group.
- Instruct them to read the case carefully.
- Put down the de-brief questions on the board and ask the groups to focus their discussion around these questions.
- The group is expected to analyse and discuss the case amongst them and find a solution to the given problem. Give the class 5-10 minutes to discuss the case and note down their solutions.
- At the end of 10 minutes the team should present their case solution to the class. The presentation can be a narration or a role play.
- Ask the group to select a group leader for their group. The group leader to discuss and assign roles to the group members for the presentation.

Team Activity

Case Study Analysis

Scenario 1

Aakash has a small mobile retail sales and repair shop in Allahabad. He has one of the most popular outlets and has great rapport with his customers.

It's around 11 AM when a customer barges in to the shop and starts shouting at Aakash for giving her a faulty instrument. The screen of her mobile is cracked from one side. Aakash remembered thoroughly checking the handset before handing it over to the customer. The customer threatens to sue him and to go to Consumer Court for cheating her. Now, the problem occurred somewhere outside the shop but as other customers were listening to the conversation, it might impact his business. The situation needs to be managed very sensitively. What would you do if you were in Aakash's place?

Scenario 2

Rajni does beautiful Phulkari embroidery on suits and sarees. She has a small home-based business. She has a huge list of customers on Facebook and WhatsApp who give her orders regularly. Smita is one of her old and regular customers. As her sister-in-law's wedding was around the corner, Smita wanted to buy few handcrafted Phulkari duppatta. She placed an order for three duppattas via WhatsApp and requested Rajni to send them as soon as possible. When the parcel reached Smita through courier she found that out of the three duppattas, only one was hand embroidered and the other two had machine embroidery on them. Even the length and the quality of the material was not as desired. Smita was heartbroken. It was a complete waste of money and moreover she couldn't wear what she had planned to during the wedding functions. She sent a message to Rajni on WhatsApp, expressing her anger and disappointment.

Smita has also sent a feedback and expressed her disappointment on the social media... this will directly affect Rajni's business. What would you do if you were in Rajni's place?

Scenario 3

Shankar is a tattoo artist who has a small tattoo showroom in a big, reputed mall in New Delhi. Mr Saksham had an appointment for today, at 11:00 am but he reached at 11:50 am. Meanwhile, Shankar had to reschedule his next appointment. After availing Shankar's services, Mr Saksham started yelling in an abusive language, refusing to pay the requisite amount, and finding faults in the services provided by him. Who was at fault in this case? What should Shankar do? Should he confront Saksham or give in to the demands of the client?

Scenario 4

Shailender is an online cloth reseller who does business through social networking sites such as Facebook and WhatsApp. Priyanka made online payment for a dress to Shailender. But she did not receive the dress for a month. When she asked for a cancellation, Shailender started misleading her. For almost 45 days, he kept promising her that he will pay the amount today, tomorrow, day after etc. Even after repeated calls and messages when she did not receive the payment or the dress, she decided to write a post against him on a popular social media platform. As a result, Shailender lost lots of customers and his flourishing business faced a major crisis. How could this situation have been managed?

Say

- Now, let's discuss the problem and solution with the larger group.
- The group will first briefly describe the case to the class.
- Then discuss the issue identified and the proposed solution.
- Once the presentation is over, the class can ask their questions.

Do 

- Congratulate each group for the group presentation.
- Ask the audience to applaud for them.
- Ask de-brief questions to cull out the information from each group.
- Keep a check on time. Tell the group to wind up the discussion quickly if they go beyond the given time limit.

Summarize 

- Ask the participants what they have learnt from the exercise/ activity.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the importance of honesty and work ethics for entrepreneurs.

UNIT 10.1.5: Creativity and Innovation

Unit Objectives

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

- List the characteristics of highly creative people
- List the characteristics of highly innovative people

Resources to be Used

- Participant Handbook
- Chart papers
- Marker pens

Ask

- You must be aware of the term 'Rags to riches' and heard stories related to the term.
- What do these stories tell us?
- What was so special about these people?

Say

- Let's have a look at these stories.
- There are some inspiring stories about people which I would like to share with you.
- Narrate these stories to the class.

A.P.J. Abdul Kalam

Who has not heard of A.P.J. Abdul Kalam: Avul Pakir Jainulabdeen Abdul Kalam hailed from a very humble background. His father was a boat owner. To help his family, Kalam would work as a newspaper vendor. With limited resources, he graduated in Physics and studied aerospace engineering. He was instrumental in India's step towards nuclear energy. In 2002, he became the 11th President of India.

Water filter/purifier at source

Two young boys studying in classes 4 and 5, from Lingzya Junior High School, Sikkim designed a simple innovative low cost water purifier.

Inspiration behind the idea: Most people today prefer to use a water filter/purifier at their home.

Both the children have given idea to have filter/purifier at the source of water so that everyone has access to clean water without having to make an investment in purchasing a filter/purifier.

Spring's idea is to have a centralised purification system at the point of distribution like water tank while Subash's idea is to have such purifiers attached to public taps.

Source: <http://www.rediff.com/getahead/report/achievers-top-31-amazing-innovations-from-young-indians/20151208.htm>

Solar seeder

This is a story of a innovative solar seeder and developed by Subash Chandra Bose, a class 8, student from St Sebastiyar Matriculation School, Pudukkottai, Tamil Nadu. Subash has developed a solar powered seed drill, which can undertake plantation for different size of seeds at variable depth and space between two seeds.

Source: <http://www.rediff.com/getahead/report/achievers-top-31-amazing-innovations-from-young-indians/20151208.htm>

Looms for physically challenged

Now this is really inspiring of two sisters, Elakkiya a Class 6 student and Pavithra a Class 9 student of SRC Memorial Matriculation, Erode, Tamil Nadu.

The two sisters have come up with loom for lower limbed physically challenged. In their loom they have replaced the pedal operated system with a motor and a gearbox attached to a pulley mechanism.

Source: <http://www.rediff.com/getahead/report/achievers-top-31-amazing-innovations-from-young-indians/20151208.htm>

Ask 

- If they can, why can't you?
- Discuss concepts related to 'Creativity and Innovation' with the participants as given in the Participant Handbook.

Say 

- Recall the stories on motivation.
- What is the inner drive that motivates people to succeed?
- Let's learn more about such creative and innovative entrepreneurs with the help of an activity.

Team Activity 

- This is a group activity.

- Think of any one famous entrepreneur and write a few lines about him or her.

Activity De-brief

- Why did you choose this particular entrepreneur?
- What is his/her brand name?
- What creativity does he/she possess?
- What was innovative about their ideas?

Do 

- Instruct the participants that this is group work.
- Divide the class into small groups of 4 or 6 depending on the batch size.
- Give each group a chart paper.
- Tell the participants they have to write a few lines about any one famous entrepreneur.
- Give the participants 10 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.
- Ask each group to read out what they have written.
- Ask the de-brief questions.

Summarize



- Summarize the unit by asking participants if they know of some people who are highly creative and innovative in their approach.
- Ask them to share some experiences about these people with the class.

Notes for Facilitation



- Source for stories on innovations:
<http://www.rediff.com/getahead/report/achievers-top-31-amazing-innovations-from-young-indians/20151208.htm>

UNIT 10.1.6: Time Management

Unit Objectives

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

- Discuss the benefits of time management
- List the traits of effective time managers
- Describe effective time management techniques

Resources to be Used

- Participant Handbook

Ask

Does this sound like you?

- I can never get enough time to finish what I am doing in a day.
- I have so many things to do that I get confused.
- I want to go for a walk and exercise, but I just do not have the time.
- I had so much to do, so I could not deliver that order on time.
- I would love to start my dream business; but, I just do not have the time.

Example

- Let's look at these two examples:

Example 1:

Ankita works from home as a freelance writer. She says she can easily put in 8 hours of dedicated work in a day. Because she works from home, she saves money on travel and has a comfortable work routine. But there is a challenge and it is distraction. As she works from home, she can easily just get up and sit down on the sofa to watch TV, wasting valuable time. She may have chores to do, errands to run and bills to pay. She ends up working only two to three hours a day and the result is, her work gets piled up. She is unable to take on more work due to this. Even though her quality of work is appreciated her clients are not very happy about the delay in submission.

Example 2:

Javed has started a successful online selling company from home and makes a good living from his sales. He has set up a small office space in his living room. As both his parents are working full-time, he also has the role of taking care of his two younger siblings. He almost spends half of his day with the younger kids. He does not mind it but it means taking time away from the work. He is still able to manage his online business with these commitments. He wants to spend some more dedicated hours so as to increase his profits. He also wants to look into new business avenues. What should he be doing.

Ask

- Does this happen with you too?
- Do you find it difficult to prioritize your work?
- Are you able to manage your time effectively?

Activity



- Conduct a group discussion based on the above examples.
- Direct the discussion on how to prioritize work and manage time effectively.

Say



- Time management is not only about how hard you work but also about how smart you work.
- Discuss “What is Time Management” with the participants as given in the Participant Handbook.

Ask



- Why is it important to manage time? How does it help?
- What happens when you don't manage your time effectively?
- Do you find it difficult to prioritize your work?

Say



- Discuss the benefits of time management given in the Participant Handbook.
- Let's learn effective time management with the help of an activity.

Activity



Effective Time Management

- This activity has two parts:

PART 1

TO-DO LIST

- You have to make a to-do list.
- List all of the activities/ tasks that you have to do.
- Try to include everything that takes up your time, however unimportant it may be.
- If they are large tasks, break them into action steps, and write this down with the larger task.
- You can make one list for all your tasks or have separate to-do lists for personal and professional tasks.

PART 2

URGENT-IMPORTANT GRID

- You have to make a grid as shown on the board here. .
- This grid has four boxes. As you can see, each box has a different heading.
- At the heart of the urgent-important grid, are these two questions:
 - ♦ Is this task important?
 - ♦ Is this task urgent?
- Now, you have to think about each activity that you have written in your to-do list and put it into one of the four categories.
- **What do these categories depict?**
- **Category 1: Urgent/Important**
 - ♦ This category is for the highest priority tasks. They need to get done now.

- **Category 2: Not Urgent/Important**
 - This is where you want to spend most of your time.
 - This category allows you to work on something important and have the time to do it properly.
 - This will help you produce high quality work in an efficient manner.
 - The tasks in this category are probably the most neglected ones, but also the most crucial ones for success.
 - The tasks in this category can include strategic thinking, deciding on goals or general direction and planning – all vital parts of running a successful business.
- **Category 3: Urgent/Not Important**
 - This is where you are busy but not productive. These tasks are often mistaken to be important, when they're most often busywork.
 - Urgent but not important tasks are things that prevent you from achieving your goals.
 - However, some may be activities that other people want you to do.
- **Category 4: Not Important and Not Urgent**
 - This category doesn't really include tasks, but rather habits that provide comfort, and a refuge from being disciplined and rigorous with your time management.
 - Some may be activities that other people want you to do.
 - These might include unplanned leisure activities as well.

TO- DO list format

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	

URGENT-IMPORTANT GRID

<p>URGENT/ IMPORTANT</p> <ul style="list-style-type: none"> • Meetings • Last minute demands • Project deadlines • Crisis 	<p>NOT URGENT/ IMPORTANT</p> <ul style="list-style-type: none"> • Planning • Working towards goals • Building relationship • Personal commitments 				
<table border="1"> <tr> <td style="width: 40px; height: 40px; text-align: center; vertical-align: middle;">1</td> <td style="width: 40px; height: 40px; text-align: center; vertical-align: middle;">2</td> </tr> <tr> <td style="width: 40px; height: 40px; text-align: center; vertical-align: middle;">3</td> <td style="width: 40px; height: 40px; text-align: center; vertical-align: middle;">4</td> </tr> </table>	1	2	3	4	
1	2				
3	4				
<ul style="list-style-type: none"> • Interruptions • Phone calls/ E-mails • Other people's minor demands <p>URGENT/ NOT IMPORTANT</p>	<ul style="list-style-type: none"> • Internet surfing • Social media • Watching TV <p>NOT URGENT/ NOT IMPORTANT</p>				

URGENT/ IMPORTANT GRID format

<p>URGENT/ IMPORTANT</p>	<p>NOT URGENT/ IMPORTANT</p>				
<table border="1"> <tr> <td style="width: 40px; height: 40px; text-align: center; vertical-align: middle;">1</td> <td style="width: 40px; height: 40px; text-align: center; vertical-align: middle;">2</td> </tr> <tr> <td style="width: 40px; height: 40px; text-align: center; vertical-align: middle;">3</td> <td style="width: 40px; height: 40px; text-align: center; vertical-align: middle;">4</td> </tr> </table>	1	2	3	4	
1	2				
3	4				
<p>URGENT/ NOT IMPORTANT</p>	<p>NOT URGENT/ NOT IMPORTANT</p>				

Do

- Put down the formats for the to-do list and the urgent/important grid on the board.
- Instruct the participants to prepare their to-do list first.
- Give the participants 10 minutes to prepare the list.
- Once done, instruct them to divide the tasks in to-do list into the four categories.
- Explain the four categories to the participants giving examples specific to their context.
- As you explain the categories fill the grid with the type of tasks.
- Give the participants 40 minutes to fill the grid.
- Then explain how to balance the tasks between the four categories.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Say

Activity De-brief:

How can we balance tasks between the four categories?

How to manage time through this grid?

- **Category 1: Urgent/Important**
 - ♦ Try to keep as few tasks as possible here, with the aim to eliminate.
 - ♦ If you spend too much of your time in this category, you are working solely as a trouble shooter, and never finding time to work on longer-term plans.
- **Category 2: Not Urgent/Important**
 - ♦ Plan these tasks carefully and efficiently as they are most crucial ones for success.
 - ♦ If necessary, also plan where you will do these tasks, so that you're free from interruptions.
 - ♦ Include strategic thinking, deciding on goals or general direction and planning in your planning process.
- **Category 3: Urgent/Not Important**
 - ♦ Ask yourself whether you can reschedule or delegate them.
 - ♦ A common source of such activities is other people. Sometimes it's appropriate to say "no" to people politely, or to encourage them to solve the problem themselves.
- **Category 4: Not Important and Not Urgent**
 - ♦ You also want to minimize the tasks that you have in this category.
 - ♦ These activities are just a distraction – avoid them if possible.
 - ♦ You can simply ignore or cancel many of them.
 - ♦ Politely say "no" to work assigned by others, if you can, and explain why you cannot do it.
 - ♦ Schedule your leisure activities carefully so that they don't have an impact on other important tasks.
- Discuss the traits of effective time managers and effective time management techniques as given in the Participant Handbook.

Summarize

- Discuss the traits of effective time managers and effective time management techniques as given in the Participant Handbook.

Notes for Facilitation

- Here is a short story. You can conclude the session narrating the story. To make it more interesting you can perform the demonstration described and discuss the short story.
 - ♦ One day an expert in time management was speaking to a group of students. As he stood in front of the group, he pulled out a large wide-mouthed glass jar and set it on the table in front of him. Then he took out a bag of about a dozen rocks and placed them, one at a time, into the jar. When the jar was filled to the top and no more rocks would fit inside, he asked, "Is this jar full?" Everyone in the class said, "Yes." Then he said, "Really?"
 - ♦ He reached under the table and pulled out a bucket of gravel (small stones). He dumped some gravel in and shook the jar causing pieces of gravel to work themselves down into the space between the rocks. Then he asked the group once more, "Is the jar full?" By this time, the class began to understand. "Probably not," one of them answered. "Good!" he replied.
 - ♦ He reached under the table and brought out a bucket of sand. He started dumping the sand in the jar and it went into all of the spaces left between the rocks and the gravel. Once more he asked the question, "Is this jar full?" "No!" the class shouted. Once again he said, "Good." Then he grabbed a jug of water and began to pour it in until the jar was filled to the brim. Then he looked at the class and asked, "What is the point of this illustration?" "One student raised his hand and said, "No matter how full your schedule is, if you try really hard you can always fit some more things in it!" "No," the speaker replied, "that's not the point. The truth this illustration teaches us is: If you don't put the big rocks in first, you'll never get them in at all." What are the 'big rocks' in your life? Your children; your loved ones; your education; your dreams; a worthy cause; teaching or mentoring others; doing things that you love; time for yourself; your health; your mate (or significant other). Remember to put these BIG ROCKS in first or you'll never get them in at all. If you sweat about the little stuff (the gravel, sand, and water) then you'll fill your life with little things you worry about that don't really matter, and you'll never have the time you need to spend on the big, important stuff (the big rocks).
- End the story with these lines...

So, tonight, or in the morning tomorrow, when you are reflecting on this short story, ask yourself this question: What are the 'big rocks' in my life? Then, put those in your jar first

UNIT 10.1.7: Anger Management

Unit Objectives

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

- Discuss the importance of anger management
- Describe anger management strategies
- Discuss tips for anger management

Resources to be Used

- Participant Handbook

Ask

- What is anger? Is anger good or bad?
- Is anger normal or an abnormal behaviour? How can anger harm you?
- Why is it important for entrepreneurs to manage their anger?

Say

- Talk about anger and the importance of anger management in entrepreneurs as discussed in the Participant Handbook.
- Let us do a small activity. This is an individual activity.
- Think of the incidents and situations that angered you and hurt you.

Do

- Instruct them to note down these situations under different categories (as given in the Activity).
- Give the class 3-5 minutes to think and note down their answers.
- At the end of 5 minutes, ask some participants to volunteer and present their answers.
- They can also share these situations with their fellow participants if they do not wish to share it with the entire class.

Activity

- Do you remember any incident which has hurt
 - ♦ you physically
 - ♦ you mentally
 - ♦ your career
 - ♦ your relationships.

Ask

- Do you ever get angry?
- What are the things that make you angry?
- Do you remember any incident where your anger management helped you in maintaining healthy relationship?
- Do you remember any incident where someone lost business/ friend/ relationship due to temper (anger)?

Say

- There are a few strategies which can help in controlling your anger. Let's do an activity to understand the anger management process better.
- This is an individual activity.
- Think of the incidents/ situations which trigger your anger (the cause).
- Then think what happened as a result of your anger (the effect).
- You need to come up with some techniques to manage your anger.

Do

- Give the class the anger triggers (the cause) as listed in the activity.
- Put down the activity format (Anger Triggers, Result of your Anger, Anger Management Techniques) on the board and instruct the class to write the answers under different categories.
- Give the class 3-5 minutes to think and note down their answers.
- At the end of 5 minutes, ask the participants who wish to volunteer and present their answers.

Activity

Trigger points and Anger Management Techniques Activity

Anger Triggers

List of triggers that make you angry:
Someone says you did something wrong.
You want something you can't have now.
You get caught doing something you shouldn't have been doing.
You are accused of doing something you didn't do.
You are told that you can't do something.
Someone doesn't agree with you.
Someone doesn't do what you tell him to do.
Someone unexpected happens that messes up your schedule.

Result of your anger:

--

Write the techniques that you use to manage your anger:

Anger Management Techniques

Say

- Now, let's discuss the problems and solution with all.
- The individual will first briefly describe trigger points to the class.
- Then discuss the result of the anger. Other participants are requested to remain quiet while one is making the presentation.
- Post presentation, other participants may ask questions.

Do

- Congratulate each individual for sharing their points.
- Ask the audience to applaud for them.
- Ask de-brief questions after the presentation to the class.
- Keep a check on the time. Ask the participants to wind up the activity quickly if they go beyond the given time limit.

Ask

De-brief questions:

- In the situation described by the presenter, who was at fault?
- How could you have handled this situation alternatively?

Summarize

- Close the discussion by summarizing the strategies and tips of anger management for entrepreneurs.
- Ask the participants what have they learnt from this exercise/ activity.
- Ask if they have any questions related to what they have talked about so far.

Notes for Facilitation

- Encourage the participants to share information about them while presenting the situations to the class.
- Keep the format of the Activity prepared in a chart paper so that it can be displayed during the session.

UNIT 10.1.8: Stress Management: What is stress?

Unit Objectives

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

- Discuss the causes of stress
- Discuss the symptoms of stress
- Discuss tips for stress management

Resources to be Used

- Participant Handbook

Ask

- You are waiting in the reception for an interview or a very important meeting, suddenly your legs are shaky, your hands are cold, you are feeling nervous. Have you ever been in this kind of situation?
- Have you had days when you had trouble sleeping?
- Have you ever been so worried about something that you ended up with a terrible headache?

Say

- You've probably heard people say, "I'm really stressed out" or "This is making me totally stressed."

Ask

- What do you understand by stress?
- What gives you stress?
- How do you feel when you are stressed or what are the symptoms of stress?
- How can stress harm you?
- Why is it important for entrepreneurs to manage stress?

Say

- When we feel overloaded or unsure of our ability to deal with certain challenges, we feel stressed.
- Discuss about stress, causes of stress, and symptoms of stress as discussed in the Participant Handbook.
- Let's understand the causes of stress and how to deal with them with the help of some case scenarios.
- You will be given some cases.
- You have to analyse the case scenario and then find an appropriate solution to the problem.
- This will be a group activity.

Do

- Divide the class into four groups of 5-6 participants (depending on the batch size).
- Assign one case scenario to each group.
- Instruct them to read the case carefully.
- The group is expected to analyse and discuss the case amongst them and find a solution to the given problem.
- Explain their discussion should result in getting answers for the following questions:

- What was/were the cause(s) of stress?
- Was the stress avoidable or manageable under the given circumstances?
- If yes, how do you think that the stress could be avoided (managed)?
- If no, then why not?
- Give the class 10-12 minutes to discuss the case and note down their solutions.
- At the end of 12 minutes, the team should present their case solution to the larger group.
- Ask the group to select a group leader for their group.
- The group leader to discuss and assign roles to the group members for the presentation.

Team Activity

Case Study Analysis

Scenario 1

Akash's alarm doesn't go off and he gets late getting out of the house. He hits traffic and ends up 15 minutes late to work, which his boss notices. He gets to his desk and finds he has to complete 2 reports in next one hour. Just when he is about to begin work, a message pops up "Telecon with the client begins in 10 minutes. Please be in the conference room in 5 minutes."

His is not prepared for the call. He is stressed. He does not want to speak to his boss about this. He is stressed, feeling uncomfortable and sick. Not in a position to attend the call or finish the reports on time.

Scenario 2

While paying his overdue bills, Rahul realised that it's the middle of the month and he has only Rs 500 left in his account. He has already asked all of his friends, and family for loans, which he hasn't paid back yet. He is still contemplating over the issue when his phone rings. His sister's birthday is due next week and she has seen a beautiful dress which she wants to buy but cannot tell the parents as it is a bit expensive. She wishes if Rahul could buy the dress for her. Rahul has promised to buy her the dress for her birthday.

Rahul is stressed, does not understand what to do. He is unable to concentrate on his work and unable to complete the tasks assigned. His team leader has already warned him of the delay.

Scenario 3

Sheela calls the cable company as she has unknown charges on her bill. She has to go through the automated voice mail menu three times and still can't get through to a customer care executive. After 15 minutes of repeated efforts, her call is answered. She explains the entire issue to the customer care executive but before the person could suggest a way out, the call drops.

Now Sheela has to call back and repeat the whole process all over again with a new customer care executive. She is very angry and calls again but cannot connect this time.

She has to leave to office so she decides to call from office and check. When she connects this time she is angry and argues with the executive on the call. All her co-workers around are looking at her as her volume has suddenly increased. She bangs the phone and ends the call.

Her co-worker Neelam enquires what has happened to her. She ignores her and just walks off. She has become irritable and her behaviour and tone with other co-workers is not acceptable.

Scenario 4

Arpit is a young entrepreneur who started doing business through Facebook few weeks back. He had always been into a job. Although Arpit has very few financial liabilities, it wasn't an easy decision to leave a comfortable job at once and look for newer pastures. Arpit's boss warned him of the consequences and the challenges of starting a business when nobody ever in his family had been in business.

He has not been able to get a good deal till now. This is an important life shift for him which comes with unknown variables. Arpit is nervous and is wondering if he has what it takes to fulfill the requirement of his new role, or the new experiences he's likely to face.

Ask**De-brief questions:**

- What was/ were the cause(s) of stress?
- Was the stress avoidable or manageable under the given circumstances?
- If yes, how do you think that the stress could be avoided (managed)?
- If no, then why not?

Say

- Now, let's discuss the problem and solution with the larger group.
- The group will first briefly describe the case to the class.
- Then discuss the issue identified and the proposed solution.
- Post presentation, the other groups may ask questions to the group that has presented.

Do

- Congratulate each group for sharing their points.
- Ask the audience to applaud for them.
- Ask de-brief questions to cull out the information from each group.
- Keep a check on time. Tell participants to wind up the discussion quickly if they go beyond the given time limit.

Say

- While it is common and normal to feel some tension. This feeling nervous and tensed can interfere with your thinking process and can have a negative impact on your performance.
- Stress can deplete the most vibrant of souls. It can have a negative effect on every aspect of a person's life including their health, emotional well-being, relationships, and career. However, one needs to understand the causes and types of stress before looking for ways to manage it.

De-brief:**Scenario 1**

The cause of stress was lack of time management and the habit of procrastinating. If Akash would have managed his time well, planned alternate ways to get up on time, finished prior tasks on time and planned for client meetings in advance then he wouldn't have faced stress.

Scenario 2

The cause of stress was lack of financial planning. Rahul should have planned his financial resources well in advance and saved some money for the rainy day. Also, differentiating between needs and wants and keeping a check on non-essential expenditure would have saved Rahul from this situation.

Scenario 3

Sometimes, stress is caused due to external factors instead of internal ones. In this case, the stress was unavoidable because we have no control over this customer care system. Every time, you will get in touch with a new executive and will have to explain all over again. This might cause stress but despite being frustrated and angry there is little that we can do about it. All Sheela could do was to find ways to calm herself down through some breathing exercises and meditation, reading some good book or listening to music and then start afresh.

Scenario 4

A positive, major life change can be a source of good stress. Regardless of how good the change is, it can be stressful. Stress caused by a positive and major life change can be beneficial because it causes a person to step out of their comfort zone and learn new skills. Here, Arpit may become a successful entrepreneur or learn new ways to do things differently.

Now let us see this scenario, can I have a volunteer to read out this case to the class.

Do 

- Ask one of the participant who can volunteer and read out this scenario to the class.

Scenario 5

Rakesh lives in Kathmandu with his wife and two beautiful daughters Sarah and Sanya. Nepal was hit by a massive earthquake and Rakesh's building collapsed during the earthquake. During evacuation, Rakesh realised that though his wife and Sarah were fine and suffered only minor bruises, Sanya was nowhere in the scene. Panic stricken, he started calling her name and searching her frantically. A little later, he heard a meek voice from beneath the debris. He quickly removed the rubble to find a huge bed. Rakesh was pretty sure that Sanya was trapped underneath. Though he was badly bruised, he gathered all his courage and with all his might, he lifted the several-ton bed to save Sanya's life. Everyone was relieved to see Sanya alive and also extremely surprised to see this father's ability to access superhuman strength.

- Ask the audience to applaud for the participant after the scenario is read completely.
- Discuss the scenario, ask de-brief questions:
 - ♦ What kind of stress was Rakesh undergoing in this case?
 - ♦ Was the stress avoidable or manageable under the given circumstances?
 - ♦ What was the result of the stress?

Say **De-brief:**

- Not all stress is harmful; good stress is actually energizing. This was a case of lifesaving stress, or hero stress, which is an important example of good stress. You may have heard stories in which a person performs an impossible feat of physical strength in order to save their life or the life of someone they love. This type of stress causing a surge of adrenaline is good for us.

Summarize



- Close the discussion by summarizing the tips to manage stress as given in the Participant Handbook.
- Ask the participants what they have learnt from this exercise/ activity.
- Ask if they have any questions related to what they have talked about so far.

Notes for Facilitation



- Keep printed copies of the activities/ scenarios ready for the session.
- Put down the de-brief questions on a flip chart so that it can be displayed in the class during the activity.
- Encourage participation and make the discussions interactive.

UNIT 10.2: Digital Literacy: A Recap

Key Learning Outcomes



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

1. Identify the basic parts of a computer
2. Identify the basic parts of a keyboard
3. Recall basic computer terminology
4. Recall the functions of basic computer keys
5. Discuss the main applications of MS Office
6. Discuss the benefits of Microsoft Outlook
7. Identify different types of e-commerce
8. List the benefits of e-commerce for retailers and customers
9. Discuss Digital India campaign will help boost e-commerce in India
10. Describe how you will sell a product or service on an e-commerce platform

UNIT 10.2.1: Computer and Internet Basics: Basic Parts of a Computer

Unit Objectives

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

- Identify the basic parts of a computer
- Identify the basic parts of a keyboard
- Recall basic computer terminology
- Recall the functions of basic computer keys

Resources to be Used

- Participant Handbook
- Computer Systems with the required applications

Say

- Let's take a quick recap of the basic computer parts.
- Discuss 'Basic Parts of Computer' and 'Basic Parts of a Keyboard' with the class as given in the Participant Handbook.

Explain

- Explain all the parts of the computer and the keyboard by demonstrating on the real system.

Ask

- Do you know about internet?
- Have you ever used internet?
- Why do you think internet is useful?
- What was the last task you performed on internet?

Say

- Let's look at some basic internet terms.
- Discuss 'Basic Internet Terms' with the participants as given in the Participant Handbook.

Summarize

- Ask the participants what they have learnt from this exercise/ activity.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the importance of computer and internet for entrepreneurs.

Practical

- Conduct a practical session.
- Ask the participants to assemble in the computer lab.
- Give some hands on practice exercises.

Do

- Group the participants for the activity depending on the batch size and the number of computer systems available in the lab.
- Explain the purpose and duration of the activity.
- Ensure the participants complete the practical exercises assigned.

UNIT 10.2.2: MS Office and Email: About MS Office

Unit Objectives

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

- Discuss the main applications of MS Office
- Discuss the benefits of Microsoft Outlook

Resources to be Used

- Participant Handbook
- Computer Systems with MS Office

Ask

- What is the most frequent activity that you do on the computer?
- Do you know how to make presentations on the computer?

Say

- Give a brief introduction of MS Office as given in the Participant Handbook.
- Discuss the most popular office products. Explain in brief their application, benefits and working.
- **Microsoft Word** is a word processing program that allows for the creation of documents. The program is equipped with templates for quick formatting. There are also features that allow you to add graphics, tables, etc.
- **Microsoft Excel** is a tool for accounting and managing large sets of data. It can also simplify analysing data. It is also used to create charts based from data, and perform complex calculations. A Cell is an individual data box which will have a corresponding Column and Row heading. This gives the cell a name, referred to as the Cell Reference. There can be multiple pages in each workbook. Each page, or sheet, is called a Worksheet. When you open a new Excel file, it automatically starts you with three worksheets, but you can add more.

Explain

- Explain the working and frequently used features of Office on a real system.

Ask

- What do you know about e-mails?
- Do you have an email id?
- How often do you check your e-mails?

Say

- Communication is vital for every business. The fastest and the safest way to communicate these days are through emails. MS Outlook helps to manage your emails in a better way and also offers a host of other benefits.
- Discuss “Why Choose Microsoft Outlook?” with the participants as given in the Participant Handbook.

Do 

- Ask the participants to assemble in the computer lab.
- Explain the working of Outlook on a real system..

Demonstrate 

- Demonstrate how to create email id.
- Demonstrate how to write new mails, send mails.
- Demonstrate how to use MS Office application to create a letter and send it as attachment in an email.
- Demonstrate how to use other MS Office applications.

Practical 

- Give some hands on practice exercises
- Group the participants for the activity depending on the batch size and the number of computer systems available in the lab.
- Explain the purpose and duration of the activity.

Summarize 

- Ask the participants what they have learnt from this exercise/ activity.
- Ask if they have any questions related to what they have talked about so far.

UNIT 10.2.3: E-Commerce

Unit Objectives

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

- Identify different types of e-commerce
- List the benefits of e-commerce for retailers and customers
- Discuss Digital India campaign will help boost e-commerce in India
- Describe how you will sell a product or service on an e-commerce platform

Resources to be Used

- Computer System with internet connection
- Participant Handbook

Ask

- How many of you have done shopping online?
- Can you name at least five shopping websites?
- What is the product that you most frequently buy online?
- Why do you do shopping online instead of going to the market?

Say

- Give a brief introduction of “What is E-commerce”. Refer to the Participant Handbook.
- E-commerce emerged in the early 1990s, and its use has increased at a rapid rate. Today, many companies sell their products online. Everything from food, clothes, entertainment, furniture and many other items can be purchased online.

Ask

- What other types of transactions have you performed on the internet other than buying products?

Say

- Give examples of e-commerce activities from Participant Handbook.

Team Activity

E-commerce examples

- Instruct the participants to list some of the payment gateways that they have used for e-commerce activities.
- Give them 5 minutes to make this list.
- Discuss payment gateways and transaction through payment gateways.
- Conclude the discussion by mentioning how important e-commerce has become in our day to day transactions.

Say

- E-commerce activities can be classified based on the types of participants in the transaction.
- Discuss “Types of E-commerce” from the Participant Handbook.

Do

- Discuss all types of E-commerce by giving examples and names of some popular websites which use them.
- Make the discussion interactive by asking the class to share some popular e-commerce sites of each type.

Say

- E-commerce activities bring a host of benefits for both, retailers and customers.
- Discuss benefits of E-commerce from the Participant Handbook.

Explain

- The majority of the population that uses E-commerce activities lives in tier-1 and tier-2 cities. To encourage the use of digital money in tier-3 and 4 areas, PM Mr. Modi launched the “Digital India Campaign”.
- Discuss “Digital India Campaign” from the Participant Handbook.
- By Digital India project the government will deliver services via mobile connectivity and in doing so, is expected to bring the internet and broadband to remote corners of the country. This connectivity will in turn enhance e-commerce activities also. Furthermore, the Indian Government is also modernizing India Post and aims to develop it as a distribution channel for e-commerce related services.

Say

- Now let us discuss how to sell a product using E-commerce.
- Every product has to be sold on a platform on the internet. Think of it as a shop that you have to sell your product. Now this shop can be your own or shared or rented. If the shop is your own or rented there will be only your products in that shop. If the shop is shared, there will be products of multiple sellers in that shop. A common example is a departmental store which has products from multiple brands in the shop.
- Similarly, in E-commerce the shop is the website where your products are displayed. If it is your own website it will exclusively showcase your products. In this case the cost that you will incur will be:
 - Developing the website
 - Hosting the website
 - Maintenance of the website
- If you rent a website it will also showcase your own products but the development, hosting and maintenance parts goes to the owner. This saves time and the cost to manage these activities.
- Smaller companies usually go for renting a website and the bigger ones develop their own website.
- The concept of shared platforms has become very popular in recent times. In this platform the sellers have to register and then they can sell their goods on a common platform. Among the most popular of these are Amazon, Myntra, Flipkart, etc.

Role Play

- Tell the participants to choose a product or service that they want to sell online.
- Tell them to write a brief note explaining how they will use existing e-commerce platforms, or create a new e-commerce platform to sell their product or service.

Ask 

- How much money are you carrying in your wallet?
- Do you have a credit/debit card?
- How do you make payments while doing online shopping?

Say 

- Demonetization has made carrying cash in the wallet very difficult. People either shop through cards or some other form of digital money.
- So what do you think is digital money?
- In this form the money is both paid and received digitally. There is no hard cash involved. It is an instant and convenient way to make payments.
- There are various types of digital payments. Let us discuss some of them in brief here.
- The first one is the most commonly used system i.e. the cards. Debit card, credit card, prepaid card, all fall under this category.
- Then is the e-wallet or the mobile wallet. This has become the most used form of digital money after demonetization. Examples are Paytm, state bank buddy, Freecharge, etc.
- Many other forms of digital money are also coming up in market like mobile apps, Aadhar card based payment, etc.

Do 

- Demonstrate how to make and receive payments through digital models like Paytm and state bank buddy.

Ask 

- Why do you think people have started using digital money instead of hard cash? Is demonetization the only reason?

Say 

- Digital money gives a lot of advantages over the conventional hard cash. Some of them are:
 - ♦ Digital payments are easy and convenient. You do not need to take loads of cash with you, a mobile phone or a card will suffice.
 - ♦ With digital payment modes, you can pay from anywhere anytime.
 - ♦ Digital payments have less risk.

Summarize 

- Ask the participants what they have learnt from this exercise/ activity.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the importance of e-commerce and digital money.

UNIT 10.3: Money Matters

Key Learning Outcomes

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

1. Discuss the importance of saving money
2. Discuss the benefits of saving money
3. Discuss the main types of bank accounts
4. Describe the process of opening a bank account
5. Differentiate between fixed and variable costs
6. Describe the main types of investment options
7. Describe the different types of insurance products
8. Describe the different types of taxes
9. Discuss the uses of online banking
10. Discuss the main types of electronic funds transfer

UNIT 10.3.1: Personal Finance – Why to Save?

Unit Objectives

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

- Discuss the importance of saving money
- Discuss the benefits of saving money

Resources to be Used

- Participant Handbook

Ask

- How many of you save money?
- Why do you feel the need to save it?
- Do you plan your savings?
- Where do you keep the money you save?
- How do you use the money that you have saved?

Example

- Let's look at these two examples:

Example 1:

Suhani works in a good company and earns Rs.30,000 month. She always saves 5000 per month and keeps it aside as a personal saving. She keeps the money at home and has saved quite a lot. One day her mother has a medical emergency and has to be taken to the hospital. Her family is worried about the amount they have to spend for the treatment. It will cost them atleast 40,000.

Suhani says tells her family not to worry and that she has about 50,000, which she has saved over the months.

Example 2:

Jasmeet works in the same company and earns the same as Suhani. She is very fond of shopping and spends most of her money on buying new clothes. At the end of the month, she is always asking her father for money as her pay is finished.

Ask

- Who do you identify with –Suhani or Jasmeet ?
- How do you think Suhani manages to save money which Jasmeet is unable to do?

Say

- We should always set aside some and save some money from our monthly pay. The future is unpredictable. Saving money not only gives you a sense of financial security but it can be used in case of emergencies.
- Discuss “Importance of Saving” with the participants as given in the Participant Handbook.

Ask

- What are the benefits of saving money?
- What does being financially independent mean to you?

Say

- Discuss “Benefits of Saving” with the participants as given in the Participant Handbook.
- Now let us continue with Suhani's story. Suhani has told her family not to worry and that she has about 50,000, which she has saved over the months. The family is happy about Suhani's decision of saving money, which will be of great help for them now.

Suhani is going to the hospital today to pay the first instalment for the treatment. Suddenly finds only 35,000 in her cash box when she counts and does not remember using it. She has not kept any record and now she is upset.

Ask

- Was it a good decision by Suhani to save a part of her earnings every month?
- Was it a wise decision to keep all her savings as cash in a cash box?
- Could she have managed to save money in a better and more effective manner?
- Do you want to learn how to save money and use it effectively?

Say

- Let's learn personal saving with the help of a group activity.

Team Activity

Personal Finance- Why to save

- This activity has two parts:

PART 1

WAYS TO SAVE MONEY

- You are earning 30,000/- per month. You have recently changed your job and have to move to a metropolitan city. You are now living as a paying guest paying 10,000/- per month. Your other estimated expenditures like travel, food, recreation would be around Rs. 17, 000 per month.
- Make a list of different ways to save money.

PART 2

HOW WILL YOU USE THE MONEY

- After a year how much have you been able to save?
- How will you use the money that you have saved?

Do

- Divide the class into groups of four.
- Instruct the participants to think and prepare a list of the various ways they can save money.
- Give the participants 10 minutes to prepare the list.
- Once done, instruct them to think of how they could use the money they have saved.
- Give the participants 10 minutes to prepare the list.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Activity De-brief

- What were the different ways you could save money?
- How much money were you able to save?
- How will you use the money you have saved in one year?

Say



- Discuss the importance of personal finance and why it is important to save money.

Summarize



You can summarize the session by discussing:

- The importance of saving money.
- Ways to save money.
- How the money saved can be used for different purposes.

UNIT 10.3.2: Types of Bank Accounts, Opening a Bank Account

Unit Objectives

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

- Discuss the main types of bank accounts
- Describe the process of opening a bank account

Resources to be Used

- Account opening sample forms
- Participant Handbook

Ask

- How many of you save money?
- Where do you keep the money you save?
- How many of you have a bank account?
- What type of account do you have?

Example

- Let's look at the given example:

Reena is in the third year of college but in the evening she gives tuitions for children living in her colony. She earns 15,000/- per month. As her students stay in different parts of the city, she has to walk a lot.

To save time, she decides to buy a second hand scooter for herself. But she has to save money for it. Her class mate advises her to open a recurring deposit account in the bank.

She goes to the bank close to her home. The personal manager gives her some forms to fill. She is confused as she has never done this before. Her elder sister has an account in the same bank. She asks for help from her sister. She goes to the bank the next day with her sister. The personal banker gives her a list of documents that she will need to submit with the form for opening an account. The banker advises her to open a 6 months recurring deposit.

Ask

- Do you try to save money monthly but have to spend it on unforeseen expenditure?
- Have you ever thought of depositing your savings in a bank?

Say

- Before opening a bank account, you need to know the types of accounts we have in India.
- Discuss “Types of Bank Accounts” with the participants as given in the Participant Handbook.

Ask

- Can someone say what are the different types of bank accounts?

Say

- Let's learn about the different types of bank accounts through an activity.

Team Activity

- Divide the class in four groups.
- Label the groups as savings account, current account, recurring account and fixed deposit.
- On a chart paper, ask them to write the key points of their account.

Activity De-brief

- Ask each group to present the key points of their account.

Say

- Now that you know about the four different types of accounts, let's learn how to open a bank account.
- Discuss "Opening a Bank Account" with the participants as given in the Participant Handbook.
- Discuss "Tips" that the participants should keep in mind while opening a bank account as given in the Participant Handbook.

Ask

- What are the main documents required for opening a bank account?
- What are some important points to ask the bank personnel while opening an account?

Say

- Mention officially valid KYC documents (refer to the Participant Handbook)
- Now, let's understand the procedure of opening a bank account through an activity.

Team Activity

Opening a Bank Account

- This activity is done in groups.
- Divide the class in groups of four or six.

PART 1

FILLING A BANK ACCOUNT OPENING FORM

- You have to fill a bank opening form.
- You can refer to the section "Opening a Bank Account" of your Handbook for reference.
- List all the steps that you will be required to fill in the form.
- List the documents that you needs for filling the form.
- Now fill in the form.

Activity De-brief

How did you design the form?

- What all details did you fill in the form?
- What were your KYC documents?
- How would this activity help you in future?

Do

- Instruct the participants to read the section "Opening a Bank Account" of the Participant Handbook.
- Give each group one sample account opening form.
- Give the participants 5 minutes to read the form.
- Give them 15 minutes to fill it.
- Assist them by explaining each category and how to fill it.
- Keep a check on time.
- Tell the group to wind up quickly if they go beyond the given time limit.

Summarize

Note:

- You can summarize the unit through a role play.
 - ♦ A person wanting to open an account in the bank.
 - ♦ What is the procedure that he will go through?
 - ♦ Discuss the key points of different types of bank accounts.
 - ♦ How to select the type of account
 - ♦ How to fill the account opening form.
- A sample account opening form is given in the following page for reference. Use it for the activity in the class.

Sample Bank Account Opening form.

Photograph	XXX Bank			
SAVING BANK ACCOUNT OPENING FORM				
Account No.: _____	Date: _____			
Name of the Branch				
Village/Town				
Sub District / Block Name				
District				
State				
SSA Code / Ward No.				
Village Code / Town Code	Name of Village / Town			
Applicant Details:				
Full Name	Mr./Mrs./Ms.	First	Middle	Last Name
Marital Status				
Name of Spouse/Father				
Name of Mother				
Address				
Pin Code				
Tel No. Mobile				Date of Birth
Aadhaar No.				Pan No.
MNREGA Job Card No.				
Occupation/Profession				
Annual Income				
No. of Dependents				

Detail of Assets	Owning House : Y/N	Owning Farm :
	Y/N	
	No. of Animals :	Any other :
Existing Bank A/c. of family members / household	Y / N	If yes, No. of A/cs. _____
Kisan Credit Card	Whether Eligible Y / N	

I request you to issue me a **Rupay Card**.

I also understand that I am eligible for an Overdraft after satisfactory operation of my account after 6 months of opening my account for meeting my emergency/ family needs subject to the condition that only one member from the household will be eligible for overdraft facility. I shall abide by the terms and conditions stipulated by the Bank in this regard.

Declaration:

I hereby apply for opening of a Bank Account. I declare that the information provided by me in this application form is true and correct. The terms and conditions applicable have been read over and explained to me and have understood the same. I shall abide by all the terms and conditions as may be in force from time to time. I declare that I have not availed any Overdraft or Credit facility from any other bank.

Place:

Date:

Signature / LTI of Applicant

Nomination:

I want to nominate as under				
Name of Nominee	Relationship	Age	Date of Birth in case of minor	Person authorised in case to receive the amount of deposit on behalf of the nominee in the event of my /minor(s) death.

Place:

Date:

Signature / LTI of Applicant

Witness(es)*

1. _____

2. _____

*Witness is requires only for thumb impression and not for signature

UNIT 10.3.3: Costs: Fixed vs. Variables: What are Fixed and Variable Costs?

Unit Objectives

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

- Differentiate between fixed and variable costs

Resources to be Used

- Participant Handbook
- Blank sheets of paper
- Pens

Ask

- What is cost?
- Will a telephone bill fall under the category of a fixed or variable cost?

Say

- Discuss: Fixed and Variable cost with examples. Let us do a small activity.

Team Activity

Identify the type of cost

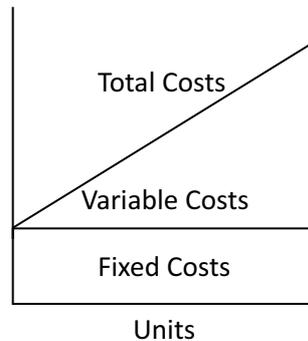
1. Rent
2. Telephone bill
3. Electricity bill
4. Machinery
5. Insurance
6. Office supplies/ Raw materials
7. Employee salaries
8. Commission percentage given to sales person for every unit sold
9. Credit card fees
10. Vendor bills

Do

- Divide the class into two groups. Read out the list of costs given in the activity.
- Read out each item from the cost list and ask the groups in turns to identify whether it is a fixed or variable cost.

Say

- We saw that your utility bills like rent, electricity, telephone etc. are all fixed costs because you have to pay it every month.
- Variable costs is an expense which varies with production output or volume. For example commission, raw material etc.
- Discuss “Cost: Fixed vs. variables” with the participants as given in the Participant Handbook.
- Illustrate the relation between the costs with a graph.



- Let's learn the difference between fixed and variable cost with the help of an activity.

Team Activity

Fixed vs. Variable Costs

- This is a group activity.

- You want to start your own entrepreneur business.
- State the type of business you want to start.
- List down all the cost or requirements for your business.
- How will you differentiate between the fixed and variable cost.

Activity De-brief

- What is the total cost of your business?
- What are the fixed costs?
- What are the variable costs?
- How did you differentiate between the fixed and variable costs?

Do

- Instruct the participants that this is group work.
- Divide the class into small groups of 4 or 6.
- Give each group a sheet of paper.
- Tell the participants that they have to start their own entrepreneur business.
- Ask them the type of business they want to start.
- Instruct them to differentiate between the fixed and the variable costs of the business they want to start.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Summarize

- Note: You can summarize the unit either by having a role play between a consultant and a budding entrepreneur explaining the differences between fixed and variable costs or by discussing the key points of the unit.

Notes for Facilitation

- Answers for the activity - Identify the type of cost

1. Rent	(Fixed)
2. Telephone bill	(Fixed)
3. Electricity bill	(Fixed)
4. Machinery	(Fixed)
5. Insurance	(Fixed)
6. Office supplies/ Raw materials	(Variable)
7. Employee salaries	(Fixed)
8. Commission percentage given to sales person for every unit sold	(Variable)
9. Credit card fees	(Variable)
10. Vendor bills	(Variable)

UNIT 10.3.4: Investments, Insurance and Taxes

Unit Objectives

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

- Describe the main types of investment options
- Describe the different types of insurance products
- Describe the different types of taxes

Resources to be Used

- Participant Handbook

Ask

- Ask the participants- “What do you see first thing in when you get your mobile bill? Apart from the amount and due date do you have a look at the taxes you are being billed for?”
- Why do you think people get their cars insured or have a medical insurance?
- You have saved money and want to invest it, how would you decide what is the best investment for your money?

Example

- Let's have a look at a few scenarios.

Ranbir has sold his house and deposited the money in his bank. His Chartered Accountant tells him that he will have to re-invest the money otherwise he will have to pay capital tax. What is capital tax and how is it different from income tax?

Jasmeet and Anup are blessed with a baby girl. They decide to have an insurance policy that will mature when their daughter is ready to higher education.

Shivani is working in a corporate office and getting good pay. She will have to pay income tax so she decides to invest her money in tax saving schemes. She goes to the bank manager to discuss the best products in which she can invest.

Say

- Discuss the Investment, Insurance and Taxes as given in the Participant Handbook.

Ask

- How do investments, insurances and taxes differ from each other?

Say

- Let's learn the differences between the three by having an activity.

Say

- We will have a quiz today.

Team Activity

- The activity is a quiz.

Do

- Divide the class into groups of three and give a name to each group
- Explain the rules of the quiz. For each correct answer the group gets 1 mark. If the group is unable to answer the question is rolled over to the next group.
- Explain the purpose and duration of the activity.
- On the blackboard write the names of the groups.
- Ask the questions of the quiz.
- Keep a score for the groups.
- Set guidelines pertaining to discipline and expected tasks.

Summarize

- Summarize the unit by discussing the key points and answering question

Notes for Facilitation

Questions for the quiz

1. What are bonds?

Bonds are instruments used by public and private companies to raise large sums of money.

2. Who issues the bonds?

Private and public companies issue the bonds.

3. Why are bonds issued?

To raise large amount of money as it cannot be borrowed from the bank.

4. Who is the buyer of stocks and equities?

The general public is the buyer.

5. What types of scheme is the Sukanya Samriddhi Scheme?

Small Saving Scheme

6. What is the difference between mutual and hedge funds?

Mutual funds are professionally managed financial instruments that invest the money in different securities on behalf of investors. Hedge funds invest in both financial derivatives and/or publicly traded securities.

7. Why is a loan taken from the bank to purchase real estate?

To lease or sell to make profit on appreciated property price.

8. Name the two types of insurances?

Life Insurance and Non-life or general insurance

9. Which insurance product offers financial protection for 15-20 years?

Term Insurance

10. What is the benefit of taking an endowment policy?

It offers the dual benefit of investment and insurance.

11. Mr. Das gets monthly return on one of his insurance policies. Name the policy?

Money Back Life Insurance

12. What are the two benefits of a Whole Life Insurance?

It offers the dual benefit of investment and insurance

13. Which policy covers loss or damage of goods during transit?

Marine Insurance

14. After what duration is the income tax levied?

One financial year

15. What is long term capital gain tax?

It is the tax payable for investments held for more than 36 months.

16. Name the tax that is added while buying shares?

Securities Transaction Tax

17. What is the source of corporate tax?

The revenue earned by a company.

18. Name the tax whose amount is decided by the state?

VAT or Value Added Tax

19. You have bought a T.V. What tax will you pay?

Sales Tax

20. What is the difference between custom duty and OCTROI?

Custom duty is the charges payable when importing or purchasing goods from another country. OCTROI is levied on goods that cross borders within India.

UNIT 10.3.5: Online Banking, NEFT, RTGS, etc.

Unit Objectives

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

- Discuss the uses of online banking
- Discuss the main types of electronic funds transfer

Resources to be Used

- Participant Handbook
- Computer System with internet connection
- Debit card

Ask

- When was the last time you visited a bank?
- How do you pay your bill for electricity and telephone?
- Have you ever tried to transfer money from one bank account to another bank account using the online banking facility?

Say

- Most of us lead a busy life. Time has become more important than money. In this busy schedule no one has time to stand in bank queues. That's where Online Banking comes in. Online banking or internet banking means accessing your bank account and carrying out financial transactions through the internet.
- Discuss "What is online banking?" from the Participant Handbook.
- There are various advantages of online banking:
 - ♦ It saves time, as you need to visit the branch. .
 - ♦ You can conduct your banking transactions safely and securely without leaving the comfort of your home.
 - ♦ Online Banking also gives you round the clock access.
 - ♦ Online Banking makes it possible for you to pay your bills electronically.

Do

- Show them how they can use the internet banking.
- Use the computer system and show the demo videos on how to use internet banking provided on most banking sites. the computer system.
- Tell the class the various features of online banking:
 - ♦ Through their website set-up your online account.
 - ♦ Choose a secure username and password.
 - ♦ Set-up your contact information.
 - ♦ Once your information is verified, you are good to go.
 - ♦ Once you enter the portal explore all the features and learn your way through the portal.
- Discuss about maintaining the security of the online account.

Say

- One of the biggest advantage that online banking offers, as discussed earlier, is transferring money from one account to another. This transaction is called electronic funds transfer. Electronic transfers are processed immediately with the transferred amount being deducted from one account and credited to the other in real time, thus saving time and effort involved in physically transferring a sum of money.
- Discuss “Electronic Funds Transfer” from the Participant Handbook.

Do

- Discuss how to transfer money from one account to another using online banking (NEFT/ RTGS, etc.).
- Illustrate with an example.

Summarize

- Close the discussion by summarizing the about online banking.
- Ask the participants if they have any questions related to what they have talked about so far.

UNIT 10.4: Preparing for Employment & Self Employment

Key Learning Outcomes

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

1. Discuss the steps to follow to prepare for an interview
2. Discuss the steps to create an effective Resume
3. Discuss the most frequently asked interview questions
4. Discuss how to answer the most frequently asked interview questions
5. Identify basic workplace terminology

UNIT 10.4.1: Interview Preparation: How to Prepare for an Interview?

Unit Objectives

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

- Discuss the steps to follow to prepare for an interview

Resources to be Used

- Participant Handbook

Ask

- Have you ever attended an interview?
- How did you prepare before going for an interview?

Say

- An interview is a conversation between two or more people (the interviewer(s) and interviewee) where questions are asked by the interviewer to obtain information from the interviewee.
- It provides the employer with an opportunity to gather sufficient information about a candidate and help them select the ideal candidate.
- It also provides the interviewee with an opportunity to present their true potential to the employer, build confidence and help make a decision about the job by asking questions regarding designation, salary, perks, benefits, promotions, transfers, etc.
- Let's do an activity to understand how to prepare for interviews better.

Activity 1

- Introducing Yourself

Do

- Select a participant and ask him/her to answer the following questions: "What can you tell me about yourself?"
- Give the participant at least one minute to speak.
- Once he/she is done, ask the rest of the participant what they gathered about the participant who was providing information.
- Now repeat the exercise with five other participants.

Ask

- What information you should include when you are describing or introducing yourself in an interview?
- What information you should not include when you are describing or introducing yourself in an interview?

Say

- Tell the participants that when an interviewer asks you to say something about yourself, he/she is not asking you to present your life history.
- Introduction should be short and crisp, and should present you in a positive light. It should include the following points:
 - ♦ Any work experience that you might have
 - ♦ A brief summary of your educational qualifications
 - ♦ Your strengths and achievements
 - ♦ Any special projects that you might have been part of
- The following topics should be avoided during an introduction:
 - ♦ Detailed description of your family (unless you are specifically asked to do so)
 - ♦ Too much information about your weaknesses
 - ♦ Information that is not true

Do

- Congratulate each participant for sharing their points.
- Ask the audience to applaud for them.
- Ask de-brief questions to cull out the information from each group.
- Keep a check on time.

Activity 2

- Planning the right attire

Do

- Describe 2 individuals to the participants. One is wearing a casual t-shirt, jeans, and slippers. He has not combed his hair and neither has he trimmed or shaved his beard. The other individual is dressed formally with a shirt and pant, and is well-groomed. He has also worn formal shoes and a belt. Ask the participants which person would they prefer to hire in their organization and why?

Summarize

- Close the discussion by discussing 'how to prepare for an interview' as discussed in the Participant Handbook.
- You can add the following points to it:
 - ♦ Tell the participants to create a positive and good impression in an interview. It is important for them to prepare for an interview beforehand.
 - ♦ The interviewer analyses not only your technical knowledge in relation to the job, but also whether or not you are a fit for the organization.
 - ♦ Every employer looks at the whole package and not just one or two things in isolation. Therefore, the way you dress and the way you present yourself is also important along with your skills and talents.
 - ♦ The participants will get only one chance to create a good first impression.

UNIT 10.4.2: Preparing an Effective Resume: How to Create an Effective Resume?

Unit Objectives

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

- Discuss the steps to create an effective Resume

Resources to be Used

- Participant Handbook
- Blank papers
- Pens

Ask

- When preparing for an interview, what are the most important things that you need to do?
- What documents do you carry with you, when you go for an interview?
- What is a resume?
- Why do you need a resume?

Say

- Resume is not just a sheet of paper with your qualifications printed on it.
- It is a selling tool that will help the employer to see how and what you can contribute for company.
- Talk about the steps involved in creating an effective/attractive resumes discussed in the Participant Handbook.
- Now let's prepare a resume to understand the process in a better way.

Do

- This is an individual activity.
- Give the details of the activity.
- Instruct them to read the activity carefully.
- The participant is expected to make an attractive resume based on the information provided.
- Give the class 25-30 minutes to study the case and create a resume.
- At the end of 30 minutes, the participants should exchange the resume with the person sitting next to him or her.
- Every participant will evaluate the resume prepared with their fellow participants.

Say

- Do you think the candidate should apply for the job posting described in the advertisement?
- We have already discussed the steps involved in creating an effective/attractive resumes.
- Now let's prepare a resume for the candidate details given in the activity.

Activity

Case Study Analysis

- In the first section of the activity, you are being given the information about a candidate who is applying for a particular job.
- In the second section, you are being given the detailed description of the job posting. Create a resume for the candidate to apply for the job posting.
- Use the information that has been provided about the candidate to create this resume.

Candidate Details

Nipesh Singla was born on 20th April, 1988 in Chandigarh, India. He currently resides at 1XX7, Sector XX D, Chandigarh –160018. His mobile number is 988XXXXX01, and e-mail address is nxxxxxxxla@gmail.com. Nipesh attended middle and senior school at Government Boys Senior Secondary School, Sector 15, Chandigarh. He has been a very talented boy since school. He was fond of painting and watching old Hindi movies. As part of a school charity program, he volunteered at the children's hospital during his senior years.

In July 2007, he joined Westwood School of Hotel Management, Zirakpur to pursue a diploma course in Hotel Management and Catering. After completing this course, he joined XYZ Group of Hotels as a Housekeeping intern in June 2010 for six months. In this role, he was responsible for cleanliness and maintenance of one floor in the hotel. Taking advantage of his strong interpersonal skills, he also got opportunities to make housekeeping arrangements for corporate meetings. While pursuing education, he gained working knowledge of Microsoft Word, Excel, Access and PowerPoint.

Nipesh is detail-oriented, flexible and adaptable. He has successfully worked with a diverse work force. He gelled well with his peers, both in college and during his internship. After completing the internship, his objective has been to find a job opportunity where he can use his skills and experience. Backed by experience, he is confident about his skills as housekeeping assistant.

Job Posting

* Do you see yourself as a HOUSEKEEPING SUPERVISOR?

What's your passion? Whether you're into cricket, reading or hiking, at IHG we are interested in YOU. At IHG, we employ people who apply the same amount of care and passion to their jobs as they do in their hobbies - people who put our guests at the heart of everything they do. And we're looking for more people like this to join our friendly and professional team.

THE LOCATION:

At the moment, we are looking for HOUSEKEEPING SUPERVISOR to join our youthful and dynamic team at Holiday Inn Amritsar, Ranjit Avenue in Amritsar, Punjab (India). Holiday Inn Amritsar is ideally located in Amritsar's commercial district on Ranjit Avenue with the world famous Golden Temple located only a short distance away. Sparkling chandeliers mark an incomparable arrival experience as you escape to the welcoming environment that is, Holiday Inn Amritsar. The fresh international brand to celebrate and explore Amritsar.

Salary: Negotiable

Industry: Travel / Hotels / Restaurants / Airlines / Railways

Functional Area: Hotels, Restaurants

Role Category: Housekeeping

Role: Housekeeping Executive/Assistant.

Desired Candidate Profile

Friendly, pleasant personality, Service - oriented.

You should ideally be Graduate/ Diploma holder in HM and at least 2 years of experience as a supervisor in good brand with good communication skills, English is a must.

In return we'll give you a competitive financial and benefits package. Hotel discounts worldwide are available as well as access to wide variety of discount schemes and the chance to work with a great team of people. Most importantly, we'll give you the room to be yourself.

*Please get in touch and tell us how you could bring your individual skills to IHG.

Education-

UG: Any Graduate/ Diploma holder

PG: Post Graduation Not Required

Say

- Now, let's share the resume with the fellow participant sitting next to you and evaluate each other's effort.

Do

- Congratulate each participant for making their first attempt towards creating an effective resume.
- As a follow up activity, you can suggest them to prepare their own resume and show it to you the next day.

Summarize

- Close the discussion by showing some effective resume samples to the candidates.
- Ask the participants what they have learnt from this activity.
- Ask if they have any questions related to what they have talked about so far.

Notes for Facilitation

- Keep printed copies of the activity ready for the session.
- Put down the suggested format of the resume on the board while explaining the steps in preparing a resume.
- Do check the participants' resume and suggest necessary changes.
- Suggested example for the case presented:

Nipesh Singla

#1XX7, Sector XX-D

Chandigarh-160018

Mobile No: 91-988XXXXX01

E-mail: nxxxxxxxxla@gmail.com

Objective: Seeking an opportunity to use my interpersonal skills and experience to contribute to your company's growth, profitability and objectives.

Professional strengths:

- Proficient in housekeeping
- Experienced in and capable of working with a diverse work force
- Team player and friendly in nature
- Successful working in a multi-cultural environment

- Detail oriented, flexible, and adaptable
- Knowledge of Microsoft Word, Excel, Access and PowerPoint

Educational background:

- Diploma in Hotel Management and Catering, Westwood School of Hotel Management, Zirakpur
- High School, Government Boys Senior Secondary School, Sector 15, Chandigarh

Professional internships:

- Housekeeping Intern, XYZ Group of Hotels, New Delhi (June 2010 – August 2010)
 - ♦ Responsible for cleanliness and maintenance of one floor in the hotel.
 - ♦ Got opportunities to make housekeeping arrangements for corporate meetings.

Volunteer Work:

- Student volunteer at children's hospital in Chandigarh.

Nipesh Singla

UNIT 10.4.3: Interview FAQs

Unit Objectives

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

- Discuss the most frequently asked interview questions
- Discuss how to answer the most frequently asked interview questions

Resources to be Used

- Participant Handbook

Say

- Tell the participants you will provide them with interview situation and questions and they have to try to answer them.
- Tell them you will also explain the different ways to approach these questions.

Do

- Divide the class in pairs and ask the participants to perform a role play.
- One partner will play the role of the interviewer while the other will play the role of the interviewee.
- Tell them the interviewer can start the interview by asking the interviewee to introduce himself/herself.
- Call all the pairs one by one in front of the class to enact the role play.
- Follow the same pattern for all other situations.
- Time allotted for each situation is 8-10 minutes.
- Congratulate each participant for giving their input.
- Ask the class to applaud each time a team has completed their role play.
- Keep a check on time.

Role Play

Conduct a role play for the situation given.

Situation 1

- The interviewer will start by asking the interviewee a few generic questions such as:
 - ♦ What is your name?
 - ♦ Tell me something about yourself?
 - ♦ Can you tell me something about your family?
- Then, the interviewer will bluntly ask the following questions:
 - ♦ How do you explain this huge time gap in your resume?
 - ♦ What is the reason for this?
 - ♦ Weren't you looking for a job or is it that no one selected you?

Say

De-brief:

- When you put information on your resume, you should be prepared to answer any questions about it.
- Be present and focused on the questions being asked to you.
- One way of tackling the blunt questions is to tell the interviewer you did not come across an opportunity where you were sufficiently satisfied with both the remuneration offered as well as the profile. Therefore, you waited for the right opportunity to come along while looking for an ideal job.

Role Play

Conduct a role play for the situation given.

Role Play – Situation 2

- The interviewer will start by asking the interviewee a few generic questions such as:
 - What is your name?
 - Tell me something about yourself?
 - Can you tell me something about your family?
- Then, at the end of the interview, ask the interviewee:
 - There are over 200 people who have applied for this job, some with excellent work experience. Why should I hire you?

Say

De-brief:

- There is nothing wrong with stating your strengths and achievements. However, do not come across as arrogant or too boastful.
- You need show the interviewee that you have unique skills or talents to contribute to the company. The interviewer needs to know how you stand apart from the rest of the crowd.
- Tell the interviewer you are looking forward to working with the company and that you are a hard-working individual.

Role Play

Conduct a role play for the situation given.

Role Play – Situation 3

- The interviewer will start by asking the interviewee a few generic questions such as:
 - What is your name?
 - Tell me something about yourself?
 - Can you tell me something about your family?
- Then, lean forward, clasp your hands on the table and in a soft voice ask the interviewee:
 - Did you ever experience any neglect or disregard from your previous office? In other words, did you ever suffer because your office or team displayed favouritism?

Say

De-brief:

- Keep this in mind: Do not criticize anyone during an interview.
- You are free to express your opinion, however, your language, answers, body language, and the tone of your voice should remain constructive and neutral.
- Since criticism will show you in negative light, you should keep your answers honest yet diplomatic.
- You can tackle such questions by saying, “I got along well with most of my faculty and peers.”

Role Play

Conduct a role play for the situation given.

Role Play – Situation 4

- The interviewer will start by asking the interviewee a few generic questions such as:
 - ♦ What is your name?
 - ♦ Tell me something about yourself?
 - ♦ Can you tell me something about your family?
- Then very bluntly ask the interviewee:
 - ♦ How long do you plan to stay with this company if you are selected?
- After the candidate responds, ask sarcastically:
 - ♦ Do you seriously mean that?

Say

De-brief:

- Don't provide unreal and idealistic answers.
- Your answers should be honest yet diplomatic. In a situation like this, the interviewer does not expect you to provide a specific timeline.
- You can say something like, “I would like to stay with the company as long as I can contribute constructively and develop as an employee, within the organization, professionally and financially.”

Role Play

Conduct a role play for the situation given.

Role Play – Situation 5

- The interviewer will start by asking the interviewee a few generic questions such as:
 - ♦ What is your name?
 - ♦ Tell me something about yourself?
 - ♦ Can you tell me something about your family?
- Ask him/her how important he/she thinks it is to be punctual in the corporate world.
- After he/she answers, look up sternly at the interviewee and in a crisp voice, say:
 - ♦ You were late for this interview by 10 minutes. That surely does not seem to be in line with what you just said?

Say

De-brief:

- Politely apologize for being late.
- You can add something such as, “I assure you this is not a habit”. All your future actions should be in line with this statement.
- Avoid giving any excuses.
- You might feel obligated to provide a justification for your tardiness, but the interviewer is not interested in that.
- Do not over apologize. Once this response is out of the way, turn your focus back to the interview.

Role Play

Conduct a role play for the situation given.

Role Play – Situation 6

- The interviewer will start by asking the interviewee a few generic questions such as:
 - ♦ What is your name?
 - ♦ Tell me something about yourself?
 - ♦ Can you tell me something about your family?
- After asking a few academic or job-related questions, ask the interviewee:
 - ♦ If you get this job, what salary package do you expect us to give you?

Say

De-brief:

- If there is no way for you to avoid this question, respond to the interviewer by providing a reasonable and well-thought out salary range.

Role Play

Conduct a role play for the situation given.

Role Play – Situation 7

- The interviewer will start by asking the interviewee a few generic questions such as:
 - ♦ What is your name?
 - ♦ Tell me something about yourself?
 - ♦ Can you tell me something about your family?
- Then, bringing the interview to a close, ask the interviewee:
 - ♦ Do you have any questions for me?

Say

De-brief:

- Ask relevant questions.
- Don't bombard the interviewer with questions.
- If you have questions about the result of the interview, you can limit your questions to 1 or 2. Keep them short and relevant like:
 - ♦ When will I be informed about the results of the interview?
 - ♦ What are the working hours?
 - ♦ Will the job require me to travel?

Explain

- Tell the participants to be prepared for answering different types of questions in an interview.
- Stay calm and focused, and take a moment to think about how you should respond. Always maintain a confident tone.
- Even if you don't intend to, your body language conveys your level of discomfort with a particular question. Try to keep your actions, tone, and gestures neutral.
- Maintain your composure while answering personal question.

Do

- Tell all the participants to form pairs again.
- Tell them to use the following list of frequently asked interview questions to conduct mock interviews.
- They will use all or some of these questions to conduct mock interviews with their partners.
- One partner will play the role of the interviewer while the other will play the role of the interviewee.
- After they are through asking and answering the questions, the roles will be reversed.
- The same list of questions will be used again.
- After each mock interview ask the interviewer to provide feedback and clear any doubts that may arise.
- Time allotted for each situation is 30-35 minutes.

Activity

Mock Interview Questions

Mock Interview Questions
Tell me something about your family.
What qualities would you look for in a Manager or a Supervisor?
Why did you apply for this job?
What do you know about this company?
How do you deal with criticism?
How do you plan to strike a good work-life balance?
Where do you see yourself five years from now?
Have you applied for jobs in other companies?
What kind of salary do you expect from this job?
Do you have any questions for me?

Summarize

- Close the discussion by discussing the questions in the both activities.
- Ask the participants what they have learned from this activity.
- Ask if they have any questions related to what they have talked about so far.

UNIT 10.4.4: Work Readiness – Terms and Terminology

Unit Objectives

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

- Identify basic workplace terminology

Resources to be Used

- Participant Handbook
- Chart papers
- Blank sheets of paper
- Pens

Ask

- What do you understand by workplace terminology?
- Are offer letter and contract of employment the same?

Say

- Let's start this unit with an activity.

Team Activity

Workplace terminology

- This is a group activity conducted in three parts.

Part 1

Sheila received a call from the recruiter of MND Company. Before she is recruited by the company, think of the recruitment process she will have to go through. Start from the telephone call to signing her letter of acceptance. Write down all the words that come to your mind.

Activity De-brief

- Have the participants read out the words they have written
- Encourage all the participants to participate in the activity

Do

- Divide the class into small groups of 4 or 6.
- Instruct the participants that they will be doing a brainstorming activity.
- Give them one chart paper each. Tell them to divide the chart in two parts.
- Instruct them that they have to use one half of the chart paper now. The other half will be used later.
- The participants have to write all the words that come to their mind related to the recruitment process.
- Give them 10 minutes to do the activity.
- Tell them that there are no right or wrong answers.
- Keep a track of the time.

Say 

- You all know quite a few words related to the terms used in the office.
- Let us talk about some new terms that have been missed out.
- Discuss “Work Readiness – Terms and Terminology” with the participants as given in the Participant Handbook.

Ask 

- Why is it important to know the workplace terms?
- How do they help?
- Can the words be categorised further?

Say 

- Let's now continue the activity.

Team Activity **Terms and Terminology**

- This is again a group activity. The members of the group remain the same as in Activity 1.

Part 2

With the help of the new terms you have learned, make a flow chart of the hiring process of MND Company.

Activity De-brief

- Ask the groups to share the flow charts and the new terms they added while preparing the flow chart.

Do 

- Instruct the participants that they have to use the 2nd half of the same chart they had used before.
- Using the new terminology and the terms they had previously written on the chart, they have to make a flow chart of the hiring process of the MND Company.
- Give them 10 minutes for this activity.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Say 

- Let's go ahead with the activity.

Team Activity **Terms and Terminology**

- The activity continues with the same group members.

Part 3

Sheila now works for the MND Company. She is not aware of the company culture and policies. She goes to the HR Department to get her doubts clarified. Can you think of the terms for which she wants clarity? Make a list of those words.

Activity De-brief

- Ask the groups to share their list of words. Some of the words are benefits, comp. time, deduction, employee training, holidays, lay-off, leave, maternity leave, mentor, notice, paternity leave, and time sheet.

Do 

- Instruct the participants to identify the key terms an employee of a company should know. They can use the same chart paper for this activity.
- Give them 5 minutes for this activity.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Summarize 

- Note: You can either summarize the key points of the unit or have a role play where an employee has just joined a company and the HR Manager explains the terms of employment.

UNIT 10.5: Understanding Entrepreneurship

Key Learning Outcomes



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

1. Discuss the concept of entrepreneurship
2. Discuss the importance of entrepreneurship
3. Describe the characteristics of an entrepreneur
4. Describe the different types of enterprises
5. List the qualities of an effective leader
6. Discuss the benefits of effective leadership
7. List the traits of an effective team
8. Discuss the importance of listening effectively
9. Discuss how to listen effectively
10. Discuss the importance of speaking effectively
11. Discuss how to speak effectively
12. Discuss how to solve problems
13. List important problem solving traits
14. Discuss ways to assess problem solving skills
15. Discuss the importance of negotiation
16. Discuss how to negotiate
17. Discuss how to identify new business opportunities
18. Discuss how to identify business opportunities within your business
19. Explain the meaning of entrepreneur
20. Describe the different types of entrepreneurs
21. List the characteristics of entrepreneurs
22. Recall entrepreneur success stories
23. Discuss the entrepreneurial process
24. Describe the entrepreneurship ecosystem
25. Discuss the purpose of the Make in India campaign
26. Discuss key schemes to promote entrepreneurs
27. Discuss the relationship between entrepreneurship and risk appetite
28. Discuss the relationship between entrepreneurship and resilience
29. Describe the characteristics of a resilient entrepreneur
30. Discuss how to deal with failure

UNIT 10.5.1: Concept Introduction (Characteristic of an Entrepreneur, types of firms/ types of enterprises)

Unit Objectives

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

- Discuss the concept of entrepreneurship
- Discuss the importance of entrepreneurship
- Discuss the characteristics of an entrepreneur
- Describe the different types of enterprises

Resources to be Used

- Participant Handbook

Say

- Let's start this session with some interesting questions about Indian entrepreneurs.

Team Activity

Quiz Questions

1. Who is the founder of Reliance Industries?
Dhirubhai Ambani
2. Who is the Chairman of Wipro Limited?
Azim Premji
3. Who launched e-commerce website Flipkart?
Sachin Bansal and Binny Bansal
4. Who is the founder of Paytm?
Vijay Shekhar Sharma
5. Who is CEO of OLA Cabs?
Bhavish Aggarwal
6. Who is the founder of Jugnoo?
Samar Singla (autorickshaw aggregator)
7. Who is the founder of OYO Rooms?
Bhavish Aggarwal

Do

- Tell them that you will ask them few questions about a few entrepreneurs.
- Divide the class in to two groups.
- In turns ask the quiz questions to the groups.
- If the answer is incorrect pass the question to the other group.
- Share the answer if the groups are not able to answer.
- Congratulate the participants who answered correctly.

Ask

- What do you understand by entrepreneurs?
- What is the importance of entrepreneurship in today's scenario?
- What do you think are the characteristics of successful entrepreneurs?
- What are different types of enterprises that an entrepreneur in India can own and run?

Say

- Talk about entrepreneurs, importance of entrepreneurship, characteristics of successful entrepreneurs, and different types of enterprises in India as discussed in the Participant Handbook.
- Tell the participants, stories of successful Indian entrepreneurs- their struggles, the moments of heartbreak, the perseverance and triumph.
- Ask them if they know of any such entrepreneur.

Summarize

- Close the discussion by summarizing about the opportunities for entrepreneurs in India.

Notes for Facilitation

- Check out different Government schemes for small entrepreneurs. Share the information with the participants.
- You can tell them about the government websites like Start Up India, mudra.org.in etc.
- Discuss about various schemes and policies by the Government of India for entrepreneurs.

UNIT 10.5.2: Leadership and Teamwork

Unit Objectives

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

- List the qualities of an effective leader
- Discuss the benefits of effective leadership
- List the traits of an effective team

Resources to be Used

- Participant Handbook
- Blank sheets of paper
- Pens

Do

- Show the picture given below to the class.
- Ask them to quickly write on a piece of paper what comes to their mind after seeing the picture.
- Now ask them, “What do you understand from this picture?”
- Encourage participants to share their thoughts.



Say

- This picture depicts the qualities of a leader and the difference between a leader and a boss.
- A boss focuses on structure and inspires fear whereas a leader follows vision and generates enthusiasm.
- A boss blames employees for the breakdown whereas a leader fixes breakdowns.
- A boss depends on authority whereas a leader depends on goodwill.
- A boss says “I” and a leader says “We.”
- A boss drives employees whereas a leader coaches them.
- A boss takes credit whereas a leader gives credit.

Say

- Talk about leadership and leadership qualities for an entrepreneur as discussed in the Participant Handbook.

Ask

- Why is it important for a leader to be effective? How does it help the organization?

Say 

- Let us discuss benefits of effective leadership as discussed in the Participant Handbook.
- “Out-of-the-box thinking” is one of the new leadership styles. It means thinking differently and from a new perspective.

Ask 

- Do you consider yourself a team player?

Team Activity **Long Chain**

- This is a group activity.

Do 

- Divide the class into 2 teams.
- Ask each team to create a chain using materials they have in class such as shoe laces, belts, paper, handkerchief, ribbons, etc.
- The team that creates the longest chain wins the game.
- Observe if the participants are interacting with their team or working in isolation.
- Share your observations with the class.

Say **De-brief:**

- What did the winning team do differently?
- Who was responsible for the winning team's success?
- How does this activity explain the role of teamwork in entrepreneurial success?

Say 

- Tell the class that both the teams performed well.
- Discuss that the objective of this activity was to open communication channels and how this has been achieved.
- The participants should aim to keep the communication channels open when interacting with their peers and team members.
- It will set the pace and enthusiasm required for all the ensuing teamwork activities.
- Talk about teamwork and importance of teamwork in entrepreneurial success as discussed in the Participant Handbook.

Summarize 

- Close the discussion by summarizing about the importance of teamwork for employees.
 - Teamwork helps in reducing stress for the employees.
 - Teamwork helps employers in generating more number of solutions to a problem and developing improved communication amongst employees.
- Ask the participants what they have learned from these exercises.
- Ask if they have any questions related to what they have talked about so far.

UNIT 10.5.3: Communication Skills: Listening & Speaking: The Importance of Listening Effectively

Unit Objectives

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

- Discuss the importance of listening effectively
- Discuss how to listen effectively
- Discuss the importance of speaking effectively
- Discuss how to speak effectively

Resources to be Used

- Participant Handbook

Activity 1

Activity – Chinese Whisper

Step 1: Form a circle.

Step 2: Start a whisper chain. Any one participant will whisper a message into his/her neighbour's ear. No one else must hear the message. The message can be serious or downright silly.

Step 3: The next person who first heard the message should whisper the message very quickly to the person sitting next to them.

Step 4: The game goes on until the last person says whatever they heard out loud and the first person reveals the real message.

Compare them and have a great laugh!

Ask

De-brief questions:

- Was the original message the same as the message that is communicated at the end of the game?
- Why do you think there was a difference in the messages?

Say

- No, the original message was not same at the end of game.
- The barriers to communication like language, disturbance and noise, poor listening skills, boredom, poor speaking skills, etc. are the potential reasons this happens.
- There are various aspects to communication. Speaking skills and listening skills are two major components to any communication. There is always some room for improvement in the way we communicate.
- It is important to accept the reality of miscommunication and work to minimise its negative impacts.

Say

- Communication is a two-way process where people exchange information or express their thoughts and feelings
- It involves effective speaking and effective listening.
- If I go to the store to get bread, I exchange money for the bread. I give something and get something in return. Communication takes place in the same manner. You have to provide and receive information for communication to take place.

Ask

- How often do you hear these statements?
 - “You're not listening to me!”
 - “Why don't you let me finish what I'm saying?”
 - “You just don't understand!”
- What do you think the other person is trying to convey to you through these sentences?
- We will not talk about the importance of listening effectively as discussed in the Participant Handbook.

Say

- Let's play a game to understand effective listening process better.

Do

- This is a class activity.
- The participants need to answer the questions they hear.
- Instruct them to listen carefully.
- You will read it at a stretch and if need be repeat it once more.
- Tell the participants to raise their hand if they know the answer to the question asked.
- Keep a check on time.

Activity 2

Riddles:

Is there any law against a man marrying his widow's sister?

If you went to bed at eight o'clock at night and set the clock's alarm to ring at nine o'clock, how many hours of sleep would you get?

Do they have a 26th of January in England?

If you had only one match and entered a dark room that had a kerosene lamp, oil heater, and a wood stove, what would you light first?

The Delhi Daredevils and the Chennai Super Kings play five IPL matches. Each wins three matches. No match was a tie or dispute. How is this possible?

There was an airplane crash. Every single person died, but two people survived. How is this possible?

If an airplane crashes on the border of two countries, would unidentified survivors be buried in the country they were travelling to or the country they were travelling from?

A man builds an ordinary house with four sides except that each side has a southern exposure. A bear comes to the door and rings the doorbell. What is the colour of the bear?

Answers:

There's no law against a man marrying his widow's sister, but it would be the neatest trick in the book since to have a widow, the man would have to be dead.

You'd get one hour's sleep since alarm clocks do not know the difference between morning and night.

Oh, yes. They have a 26th of January in England. They also have a 27th, a 28th, and so on.

First of all, you would light the match.

Who said the Delhi Daredevils and the Chennai Super Kings were playing against each other in those games?

Every SINGLE person died, but those two were married.

You can't bury survivors under any law especially if they still have enough strength to object.

The bear that rang the doorbell would have to be a white bear. The only place you could build a house with four southern exposures is at the North Pole where every direction is in South.

Ask **De-brief question:**

- What were the barriers that came into your way of listening?
- How can you overcome barriers to listening?

Say 

- There is a difference between hearing and listening.
- If you don't listen properly, the message may be misunderstood.
- Be open-minded while listening to someone.
- It is important to listen effectively and carefully without making assumptions.

Activity 3 **Elevator Pitch:**

You are in the lift of a hotel and you bumped into your former client who is a famous businessman. He has financed a lot of small business ventures and can finance your new start-up too. After exchanging pleasantries, he asks you what your new company does. You open your mouth, and then pause. Where do you even begin?

Then, as you try to organize your thoughts, his meeting is called, and he is on his way. If you would have been better prepared, you're sure that he would have stayed long enough to schedule a meeting with you too.

If you were given another chance, what would you have said to this person?

Do 

- Start off the task by providing a beginning sentence to get the story started, and then go around the classroom getting each one to add a new sentence to keep the story going.
- This task should be done spontaneously allowing only a little time to think (30 seconds).
- For example: **There was once a student who was looking for a job after graduation.**

Notes for Facilitation



- Tell the participants to follow these steps to create a great pitch, but bear in mind that you'll need to vary your approach depending on what your pitch is about.
 1. **Identify Your Goal:** Start by thinking about the objective of your pitch. For instance, do you want to tell the potential clients about your organization? Do you have a great new product idea that you want to pitch to an executive or do you want a simple and engaging speech to explain what you do for a living?
 2. **Explain What You Do:** Start your pitch by describing what your organization does. Focus on the problems that you solve and how you help people. Ask yourself this question as you start writing: what do you want your audience to remember most about you? Keep in mind that your pitch should excite you first. After all, if you don't get excited about what you're saying neither will your audience. People may not remember everything that you say, but they will likely remember your enthusiasm.
 3. **Communicate Your USP:** Your elevator pitch also needs to communicate your unique selling proposition or USP. Identify what makes you, your organization or your idea unique. You'll want to communicate your USP after you've talked about what you do.
 4. **Engage with a Question:** After you communicate your USP, you need to engage your audience. To do this, prepare open-ended questions (questions that can't be answered with a "yes" or "no" answer) to involve them in the conversation. Make sure that you're able to answer any questions that he or she may have.
 5. **Put it all Together:** When you've completed each section of your pitch, put it all together. Then, read it aloud and use a stopwatch to time how long it takes. It should be no longer than 20-30 seconds. Remember, the shorter it is, the better!

Example:

Here's how your pitch could come together:

"My company deals with cloth retail online business and we use various e-commerce platforms to sell our products. This means that you can do shopping with ease and spend time on other important tasks. Unlike other similar companies, we have a strong feedback mechanism to find out exactly what people need. This means that, on average, 95 percent of our clients are happy with our products. So, how can you help us in creating our own web portal?"

6. **Practice:** Like anything else, practice makes perfect. Remember, how you say it is just as important as what you say. If you don't practice, it's likely that you'll talk too fast, sound unnatural or forget important elements of your pitch. Set a goal to practice your pitch regularly. The more you practice, the more natural your pitch will become. Practice in front of a mirror or in front of colleagues until the pitch feels natural.

Summarize



- Close the discussion by summarizing how to speak effectively as discussed in the Participant Handbook.

UNIT 10.5.4: Problem Solving & Negotiation Skills

Unit Objectives

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

- Discuss how to solve problems
- List the important problem solving traits
- Discuss ways to assess problem solving skills
- Discuss the importance of negotiation
- Discuss how to negotiate

Resources to be Used

- Participant Handbook

Ask

- What is a 'problem'?
- What do you think are the problems you may face in the process of becoming a successful entrepreneur?

Say

- Discuss the definition of problem as given in the Participant Handbook.
- In a hurdle race the hurdles are the obstacles on the way to reach your goal.
- Similarly, obstacles are the hurdles you may face while reaching your goal i.e. to set-up your own business. Your goal will be to reach the finishing line after crossing these hurdles.

Ask

- What do you do when you face a problem?
- How do you resolve it? You can pick examples from the question asked previously 'the problems they are likely to face in the process of becoming a successful entrepreneur'.

Say

- Discuss how to solve problems as given in the Participant Handbook.

Team Activity

- This is a group activity.
 - The groups will solve the problem and come up with the best solution in each case.
1. Unable to arrange for some extra finance for setting up a beauty parlour. The loan sanctioned and disbursed is not enough. You have tried all your contacts, friends and relatives. But unable to manage the extra amount. Bank will not sanction more amount as you have used up the complete sanction limit.
 2. You have rented a space for your business and all arrangements are done. You will be operating from the office space rented in two days. Now the owner comes up to you and says he wants to sell the place and wants you to vacate in 15 days.
 3. You have just set up your business and need extra human resource. You have tried inviting a few also tied up with an agency for getting the right candidate. But you are unable to get the right candidate. If the candidate is good, you cannot offer the salary demanded. If the candidate agrees to the salary, he/she has other demands like working hours to be reduced, leaves etc. which may not work for your set up.

Do 

- Divide the class into three groups. Give one scenario to each group.
- Explain the purpose and duration of the activity.
- Ask the groups to build on the scenario and present their solution as a role play.

Say **De-brief questions:**

1. What was the problem?
2. Is there any other alternative solution?
3. Is this the best solution presented?

Ask 

- Try to think of some people around you who are able to solve problems very easily. Even you or your friends might be approaching them when there is a problem. What qualities do they have? What personality traits do such people possess?

Say 

- Discuss the important traits for problem- solving as given in the Participant Handbook.

Ask 

- In order to build a successful organization, you need to hire people who possess good problem solving skills. How would you assess the level of problem solving skills of potential candidates before hiring them?

Say 

- Discuss how to assess for problem- solving skills as given in the Participant Handbook.

Summarize 

- Ask the participants the things that they have learnt so far.
- Ask if they have any questions related to what they have talked about so far.
- Summarize the discussion on problem solving.

Activity 

- The activity is to organise an election event. Select three volunteers from the group. They have to give a speech on their election manifesto to the class. They have to negotiate with the fellow participants and convince them to vote for them. The best negotiator will win the election.

Do 

- Ask three participants to volunteer for the activity.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Ask 

- Out of the three contestants, whom would you support? Why? What did they say or do which convinced you to make your decision?
- Have you ever tried to negotiate in your personal or professional life?
- Ask the class to share some of their experiences where they have been able to strike a deal by negotiating.

Say 

- Discuss “What is Negotiation?” as given in the Participant Handbook.

Ask 

- Why is it important to negotiate? As an entrepreneur, where do you think that negotiation skills will be needed?

Say 

- Discuss the importance of negotiation while starting a business as given in the Participant Handbook.

Say 

- Discuss the important steps to negotiate as given in the Participant Handbook.

Role Play 

- Conduct a role play activity.
- Ask the participants to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Do 

- Divide them into groups of four (4) (depending on the batch size).
- Give them the hand-outs for role play scenarios.
- Two groups to be given scenarios on problem solving.
- Other two groups to be given scenarios on negotiation.
- The groups will build on the scenarios and prepare for the role play.
- Give the groups atleast 5 mins to discuss and be ready with the role play.
- Invite each group one by one to come and present their role play.

Problem solving Scenario 1

Avinash has a Mobile Repair Store in Allahabad. His outlet is one of the most popular one in the vicinity and he has great rapport with his customers. He is always well-dressed, jovial and full of energy.

It's around 11 AM, when a customer barges in to the shop and starts shouting at Avinash for giving her back the instrument which is still not working. The screen of her mobile is also cracked from one side. Avinash remembered thoroughly checking the handset before handing it over to the customer. The customer threatens to sue the company and to go to Consumer Court for cheating her.

Problem solving Scenario 2

You are running a successful small scale business, Shreeji Aggarbattis,. Your staff members do door to door selling and organise marketing campaigns in local markets. Your brand has established it's name in last few years.

Recently, lot of customers have been coming to you and lodging complaints that your staff members indulge in malpractices. Few of them informed you that a staff member engaged them in a friendly conversation. In the meanwhile, the other gave them lesser packets of aggarbattis than they paid for.

Another set of customers lodged complaint about the misconduct and rude behaviour of a particular staff member.

You often hear from your customers that the orders don't get delivered on time or wrong products get delivered.

You have already been struggling with shortage of staff and such complaints are a serious concern as it is hampering your brand image. What strategies will you adopt to solve this problem?

Negotiation Scenario 1

You have interviewed a prospective new employee who could be a key member of your new entrepreneurial venture. The new person is demanding a salary that is 20% higher than you thought based on your business plan. Finances are tight, yet you believe this person could make a significant impact on future profits. If you paid the required salary for the new person, then you would have to restructure your entire business plan. You've been searching for an individual with this skill level for three months. to the candidate is waiting for your response. Now you have to call him in to make the final negotiations.

Negotiation Scenario 2

You are a young entrepreneur who has just registered his start up project and applied for a bank loan accordingly. You receive a letter saying that your loan application has been rejected as your start up idea did not appeal to the bank and they think that it is not a revenue generating model. You have taken an appointment to meet the manager and show your negotiation skills to get your loan approved.

Notes for Facilitation **Facilitating Role Plays****Preparing for the activity**

1. Carefully review the details of the scenario and the character descriptions.
2. Become familiar with the key issues being addressed in the scenario.
3. Study the provided material so that you are ready to address issues related to the situations depicted in the role-plays.
4. Anticipate and know how to address issues participants might raise during the activity.

Conducting the activity

1. Introduce the activity. Emphasize that role-playing provides participants with an opportunity to apply their new knowledge, skills, and tools in situations that simulate actual interactions with customers.
2. Ask participants to form pairs. Direct the members of each group to choose who will play the roles. Remind the groups that each participant should be given the opportunity to play/practice the different roles.
3. Conduct a demonstration so that participants become familiar with the expectations related to the roles and support materials.
4. Give the pairs/ groups 10 to 15 minutes to conduct the role-play (depending on the duration of the session).
5. After all the groups have finished with the role-play, conduct a debriefing session on each role-play.
6. Ask the groups to take five minutes to talk about what happened during the role-play. The groups should discuss the questions given in the debriefing for each role-play. Encourage participants to provide constructive criticism during their discussions.

Summarize 

- Wrap the unit up after summarizing the key points and answering questions.

UNIT 10.5.5: Business Opportunity Identification: Entrepreneurs and Opportunities

Unit Objectives

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

- Discuss how to identify new business opportunities
- Discuss how to identify business opportunities within their business

Resources to be Used

- Participant Handbook
- Blank sheets of paper
- Pens

Ask

- How does an entrepreneur identify an opportunity?
- What do you think are the common queries or concerns faced by entrepreneurs?
- How can you identify new business opportunity?

Say

- Let's talk about opportunity, common queries or concerns faced by entrepreneurs, idea as an opportunity, factors to consider when looking for opportunities, ways to identify new business, and opportunity analysis as discussed in Participant Handbook.
- Let's do an activity to understand ways to identify business opportunities within your business.

Do

- Tell the class that this is an individual activity.
- Tell the participants to create a matrix on their notebooks.
- There will be four boxes in your matrix.
- Strength, Weakness, Opportunity and Threats will be the four headings of the matrix. This is called the SWOT matrix.
- Read out the questions to them and tell the participants they need to answer the questions asked in each matrix.
- Tell them they can also use their own understanding of themselves to fill the SWOT matrix.

Activity

Do your SWOT analysis

Strength

What are your strengths?
What unique capabilities do you possess?
What do you do better than others?
What do others perceive as your strengths?

Weakness

What are your weaknesses?
What do your competitors do better than you?

Opportunity

What trends may positively impact you?
What opportunities are available to you?

Threat

Do you have solid financial support?
What trends may negatively impact you?

Do

- Congratulate everyone for the class activity.
- Ask the audience to applaud for themselves.
- Allot the participants sufficient time to complete this activity, but do keep a check on time.
- Ask de-brief questions to cull out information from the participants.

Ask

De-brief questions:

- What are your weaknesses according to your SWOT analysis?
- Do you think you can change your weakness into strength? How?
- Do you think you can work on your threats? How?

Summarize

- Close the discussion by summarizing ways to identify business opportunities within your business.
- Ask the participants what they have learned from this exercise.
- Ask if they have any questions related to what they have talked about so far.

UNIT 10.5.6: Entrepreneurship Support Eco-System

Unit Objectives

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

- Explain the meaning of entrepreneur
- Describe the different types of entrepreneurs
- List the characteristics of entrepreneurs
- Recall entrepreneur success stories
- Discuss the entrepreneurial process
- Describe the entrepreneurship ecosystem
- Discuss the purpose of the 'Make in India' campaign
- Discuss the key schemes to promote entrepreneurs

Resources to be Used

- Participant Handbook
- Chart papers
- Marker pens
- Pencils
- Colour pencils
- Scale
- Eraser
- Other requisite stationery material

Ask

- Do you think that entrepreneurs need support?
- What do you think is an eco-system?
- What do you think 'entrepreneurship support eco-system' means?

Say

- Let's learn what entrepreneurship support eco-system means.
- Discuss 'Entrepreneurship Support Eco-System' as given in the Participant Handbook.

Ask

- Can you define entrepreneurship support eco-system?
- What are the key domains of the support eco-system?

Say

- Let's learn more about these domains by conducting an activity.
- You have to make a poster showing the components of the six main domains of entrepreneurship support eco-system.

Team Activity

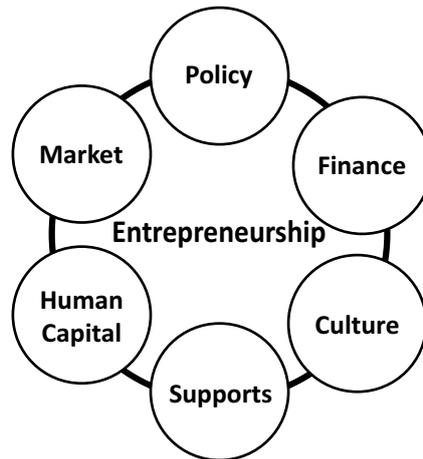
- Making a poster showing the entrepreneurship support eco-system.

Do

- Divide the class into groups of four or six.
- Hand out chart paper and coloured pens.
- Explain the purpose and duration of the activity.
- Go around checking the progress of each group.
- Set guidelines pertaining to discipline and expected tasks.

Activity De-brief

Ask each group to display their poster and explain the key domains of entrepreneurship support eco-system.



Ask

- What kind of government support eco-system is available for entrepreneurs in India?

Say

- Discuss 'Make in India' campaign as given in the Participant Handbook.

Team Activity

- Presentation on key schemes to promote entrepreneurs

Do

- Divide the class into pairs.
- Number each pair from 1-15.
- Assign a scheme, same as their group number, to each group.
- Ask them to read the scheme carefully and present it to the class.
- Explain the purpose and duration of the activity.
- Go around checking the progress of each group.
- Set guidelines pertaining to discipline and expected tasks.

Activity De-brief

- Ask each group to explain the scheme offered by government to promote entrepreneurs.

Summarize

- Summarize the unit by discussing the key points and answering questions the participants may have.

UNIT 10.5.7: Risk Appetite & Resilience

Unit Objectives

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

- Discuss the relationship between entrepreneurship and risk appetite
- Discuss the relationship between entrepreneurship and resilience
- Describe the characteristics of a resilient entrepreneur

Resources to be Used

- Participant Handbook
- Chart papers
- Blank sheets of paper
- Pens
- Marker pens

Ask

- Can you define risk or explain what constitutes a risk?
- What do you people mean when they say, “This may be a risky proposition”?
- What risks are they talking about?

Example

- Let's have a look at these two examples:

Rohit and his family were travelling by car from Delhi to Nainital. It was their second trip there. Rohit was familiar with the road. His friends told him that the highway after Rampur was in a bad condition. They advised him to take a shortcut and turn left from Moradabad and take the Kaladhungi road. This road is in a better condition.

Since he was going with his family, and did not want to take the risk of getting lost, he left early. He took the Kaladhungi road and reached Nainital well in time.

Suresh and his family too were travelling by car from Delhi to Nainital. It was their second trip there. His friends too advised him to take a shortcut and turn left from Moradabad and take the Kaladhungi road as this road was in a better condition.

Suresh too decided to take the Kaladhungi road but he left Delhi in the afternoon. It was dark by the time he reached Kaladhungi, and he was sure that he was taking the correct turn. As it was late, he could not find anyone to give him directions. He ended up being in an unknown place that was scarcely inhabited.

Say

- Let's see what type of risks Rohit and Suresh took.
- Discuss 'Risk Appetite and Resilience' with the participants as given in the Participant Handbook.

Say

- Let's learn more about risk appetite and resilience with the help of an activity.

Team Activity

Risk Appetite

- This is a group activity.

- In the previous unit, you read success stories of Mr Dhirubhai Ambani and Dr Karsanbhai Patel.
- Mr Ambani left his job and started his company Reliance with just Rs. 50,000/-.
- Dr Patel kept his job, went door-to-door to sell Nirma, and only when the brand started gaining popularity did he start his own company.
- What types of risk did both of them take?
- What risk factors, do you think, did they keep in mind before launching their company?
- Write the Risk Appetite Statement of both the companies.

Activity De-brief

- Who took a greater risk?
- What are the differences between the Risk Appetite Statement of both the companies?

Do

- Instruct the participants that this is group work.
- Divide the class into small groups of 4.
- Give each group a chart paper.
- Tell the participants that they have to evaluate the risks taken by Mr Dhirubhai Ambani and Dr Karsanbhai Patel.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Ask

- Do you think all entrepreneurial ventures are successful?
- What happens if the first venture is not successful?
- Should the entrepreneur stop when faced with challenges or face them?

Example

- Let's have a look at the following example:

Vijay Shekhar Sharma is the founder of Paytm, which is a giant Indian e-commerce. He was born in a middle-class family in Uttar Pradesh. He started his first job at an MNC. He quit after six months and built a company One97 with his friends. As One97 grew bigger, it needed more money because it was running more servers, bigger teams, and had to pay royalty. At that time, the tech bubble popped and technology companies were running in losses. Finally, money ran out. So One97 took loans and then more loans at higher rates of interest, as high as 24 per cent, and became caught in a vicious cycle.

In 2014, Paytm was launched with online wallet services after which, the company enabled online payment transactions. The company got licenses from RBI in 2016 to launch India's first ever payment bank. Moreover, the main motive of Paytm was to transform India into a cashless economy.

After demonetization came into effect, Vijay Shekhar Sharma started promoting online and digital transactions to deal with the cash crunch. In fact, the service of the company's mobile wallet is accepted across India. The logo of Paytm is now popular almost everywhere from tea stalls to major companies.

Say 

- Let's see what qualities made Vijay Shekhar Sharma a resilient entrepreneur.
- Discuss Entrepreneurship and Resilience with the participants as given in the Participant Handbook.

Say 

- Let's learn more about entrepreneurship and resilience with the help of an activity.

Team Activity **Entrepreneurship and Resilience**

- This is a group activity.
- Think of some entrepreneurship ventures that faced challenging times, but later resulted in success stories.
 - Who is the founder of that company?
 - What challenging times did it face?
 - How did it overcome those challenges?
 - List the resilient characteristics of the entrepreneur.

Activity De-brief

- Each group to give their presentation.
- Why did you choose this company?
- What is the success story of the company?

Do 

- Instruct the participants that this is group work.
- Divide the class into small groups of 4.
- Give each group a chart paper.
- Tell the participants that they have to think of an entrepreneur who faced challenging times, but eventually succeeded.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Summarize 

- You can summarize the key points of the unit.
- Ask the participants what they learned from the activities.
- Clarify any questions or doubts they might have.

UNIT 10.5.8: Success and Failures

Unit Objectives

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

- Discuss how to deal with failure

Resources to be Used

- Participant Handbook

Ask

- Have you heard the quote 'nothing is impossible'?
- What do you think it means?
- Do you think that all successful entrepreneurs became famous overnight or did they have to struggle or face failure before succeeding?

Example

- Let's have a look at this example.

Shah Rukh Khan, also known as, SRK or King Khan is a force to reckon with. Did he achieve stardom overnight? Shah Rukh Khan, who has seen many struggles in his life – he has slept on streets, struggled to support himself and his sister at a very young age, and lost his parents very early in life, which led to his sister seeking mental health support. Amidst all the chaos and challenges, he kept pushing himself, and today he stands tall as the 'Badshah of Bollywood'. Certainly those years were not easy for him.

When he was young, he stood at Marine Drive and said, "I will rule this city one day". Failure was not just his companion during or before his stardom, it is still a substantial part of his life. Success does not come easy. What made him a star was his acceptance of failure and the urge to improve.

Say

- How do you define success and failure?
- What is fear?
- Discuss "success and failure" with the participants as given in the Participant Handbook.

Ask

- Have you felt or experienced fear?
- What led you to feel that emotion?
- How did you handle it?

Say

- Let's learn the about success and failure with the help of an activity.

Team Activity

- Divide the class into groups of four.
- Instruct them to think of one scenario where they have to interview a successful entrepreneur.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.
- They have to choose one person from the group as the interviewee and one as the interviewer.
- Go around and make sure they have understood what is to be done and are discussing the roles properly.
- Check that everyone understands their role. Give clarifications if needed. Give the participants about 5 minutes to discuss and decide their roles.
- Ask the groups to stop the discussion as soon as the time is over.
- Invite each group one by one to come and present their interview as a role play.

Notes for Facilitation

Facilitating Role Plays

Preparing for the activity

1. Carefully review the details of the scenario and the character descriptions.
2. Become familiar with the key issues being addressed in the scenario.
3. Study the provided material so that you are ready to address issues related to the situations depicted in the role plays.
4. Anticipate potential questions that might be raised by the participants and be ready to address them.

Conducting the activity

1. Introduce the activity. Emphasize that role playing provides participants with an opportunity to apply their new knowledge, skills, and tools in situations that simulate actual interactions with customers.
2. Ask participants to form pairs. Direct the members of each group to choose who will play the roles. Remind the groups that each participant should be given the opportunity to play/practice the different roles.
3. Conduct a demonstration so that participants become familiar with the expectations related to the roles and support materials.
4. To maintain spontaneity of the interactions during the role play, ask the participants not to discuss the details of their roles prior to the role play.
5. Give the pairs 15-20 minutes to conduct the role play.
6. Circulate among the groups to answer any questions that may arise and provide guidance as needed.
7. After all the pairs have finished with the role play, conduct a de-briefing session on each role play.
8. Ask the groups to take five minutes to talk about what happened during the role play. The groups should discuss the questions given in the de-briefing for each role play. Encourage participants to provide constructive criticism during their discussions.
9. Conclude the activity by asking participants to think about whether and how they might use scripted role plays in their real life.

Summarize

- Wrap the unit up after summarizing the key points and answering questions.

UNIT 10.6: Preparing to be an Entrepreneur

Key Learning Outcomes



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

1. Discuss how market research is carried out
2. Describe the 4 Ps of marketing
3. Discuss the importance of idea generation
4. Recall basic business terminology
5. Discuss the need for CRM
6. Discuss the benefits of CRM
7. Discuss the need for networking
8. Discuss the benefits of networking
9. Discuss the importance of setting goals
10. Differentiate between short-term, medium-term and long-term goals
11. Discuss how to write a business plan
12. Explain the financial planning process
13. Discuss ways to manage your risk
14. Describe the procedure and formalities for applying for bank finance
15. Discuss how to manage their own enterprise
16. List the important questions that every entrepreneur should ask before starting an enterprise

UNIT 10.6.1: Market Study/ The 4Ps of Marketing/ Importance of an IDEA: Understanding Market Research

Unit Objectives

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

- Discuss how market research is carried out
- Describe the 4 Ps of marketing
- Discuss the importance of idea generation

Resources to be Used

- Participant Handbook
- Chart papers
- Markers pens
- Blank sheets of paper

Ask

- Suppose, you want to open a restaurant, what are the factors you will consider?
- How will you promote your restaurant?

Example

- Let's have a look at this example.

Arjun was an MBA working in a company. But he wanted to start a low cost budget hostel for foreign tourists coming to India. He did a lot of market research before starting the project. Based on the information he gathered, he made his business plan. His hostel is now flourishing and he is thinking of expanding to other tourist destinations.

Say

- Discuss “Market Study” with the participants. Refer to the Participant Handbook.
- Let's learn about market study and research with the help of an activity.

Team Activity

Market Study

- This is a group activity.
- You want to start your own tuition centre.
- What type of research will you do?

Activity De-brief

- Ask each group to come forward and give a brief presentation.
- Encourage other groups to be interactive and ask questions.
- What factors did you keep in mind while doing your research?
- Based on our research would you go ahead and open a tuition centre?

Do 

- Instruct the participants that this is group work.
- Divide the class into small groups of 4 or 6.
- Give each group a chart paper.
- Tell the participants that they have to start their own tuition centre.
- Give the participants 10 minutes to discuss and write the research work they need to do.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Say 

- By opening a tuition centre you are offering a service.

Ask 

- What factors will you keep in mind before opening it?

Say 

- Discuss “The 4Ps of Marketing” with the participants as given in the Participant Handbook.

Say 

- Let's learn about the 4Ps of Marketing with the help of an activity.

Team Activity **4 Ps of Marketing**

- This is a group activity.
- You have to sell a pen to four different segments:
 1. Rural villagers
 2. Rural middle class
 3. Urban middle class
 4. Upper end rich people (Niche market)

Keeping the 4Ps of Marketing in mind, what marketing strategy will you design to sell the pen?

Activity De-brief

- Ask each group to present their strategy.
- Encourage other groups to be interactive and ask questions.

Do 

- Instruct the participants that this is group work.
- Divide the class into four groups.
- Give each group a chart paper.
- Assign each group a target audience for selling the pens:
 1. Rural villagers
 2. Rural middle class
 3. Urban middle class

4. Upper end rich people

- Tell the participants that they have to design a marketing strategy keeping the 4Ps of Marketing in mind.
- Give the participants 20 minutes to discuss and come up with their strategy.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit

Activity De-brief

- Ask each group to come forward and give a brief presentation.
- Ask each group what they kept in mind while designing their marketing strategy.
- Encourage other groups to be interactive and ask questions.

Say

- Each entrepreneur has an idea of wants he wants to sell. It may be a service or a product.
- Discuss “Importance of an IDEA” as given in the Participant Handbook.

Summarize

- Summarize the key points of the unit.
- Ask the participants what they learnt from the activities.
- Encourage them to ask if they have any doubts.

UNIT 10.6.2: Business Entity Concepts

Unit Objectives

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

- Recall basic business terminology

Resources to be Used

- Participant Handbook

Say

- Let's recall some basic business terminology.
- Discuss the Business Entity Concepts as given in the Participant Handbook.
- Let's learn some basic business terminology by having an activity.
- We will have a quiz today.

Activity

- The activity is a quiz.

Do

- Divide the class in two groups and give a name to each group.
- Explain the rules of the quiz. For each correct answer the group gets 1 mark.
- If the group is unable to answer the question is passed to the next group.
- Explain the purpose and duration of the activity.
- Ask the questions of the quiz.
- Keep a score of the groups.
- Set guidelines pertaining to discipline and expected tasks.

Summarize

- Summarize the unit by discussing the key points.

Notes for Facilitation

QUESTIONS FOR THE QUIZ

1. What does B2B mean?
Business to business
2. What is a financial report?
A comprehensive account of a business' transactions and expenses
3. Who is a sales prospect?
A potential customer
4. How is working capital calculated?
Current assets minus current liabilities

5. What is an estimation of the overall worth of a business called?
Valuation
6. You are buying a house. What type of transaction is it?
Complex transaction
7. How will you calculate the net income?
Revenue minus expenses
8. How is Return on Investment expressed?
As percentage
9. How will you calculate the cost of goods sold?
Cost of materials minus cost of outputs
10. What is revenue?
Total amount of income before expenses are subtracted.
11. What is a Break-Even Point?
This is the point at which the company will not make a profit or a loss. The total cost and total revenues are equal.
12. What is the formula used to calculate simple interest?
 $A = P(1 + rt); R = r * 100$
13. What are the three types of business transactions?
Simple, Complex and Ongoing Transactions
14. The degrading value of an asset over time is known as .
Depreciation
15. What are the two main types of capital?
Debt and Equity

UNIT 10.6.3: CRM & Networking

Unit Objectives

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

- Discuss the need for CRM
- Discuss the benefits of CRM
- Discuss the need for networking
- Discuss the benefits of networking

Resources to be Used

- Participant Handbook

Ask

- Can your business run without customers/buyers?
- Who is the most important entity in any business?

Say

- The key to every success business lies on understanding the customer's expectations and providing excellent customer service.
- Discuss about CRM and its benefits. Refer to the Participant Handbook.
- Providing excellent customer service entails:
 - ♦ Treating your customers with respect.
 - ♦ Be available as per their need/ schedule.
 - ♦ Handling complaints effectively.
 - ♦ Building long lasting relationships.
 - ♦ Collecting regular feedback.
- Handle customer complaints proactively. Ask “what happened”, “why it happened”, “how can it be avoided next time”, etc.
- Collecting feedback from the customers regularly will enable you to improve your good/service.
- “Let's understand it better with the help of some case scenarios. You will be given some cases within your groups. You have to analyse the case scenario that has been given to you and then find an appropriate solution to the problem.”

Do

- Divide the class into four groups of maximum six participants depending on the batch size.
- Give one case study to each group.
- Instruct them to read the case carefully.
- The group is expected to analyse and discuss the case amongst them and find a solution to the given problem.
- Put down the discussion points (de-brief questions) on the board. Give the class 5-10 minutes to discuss the case and note down their solutions.
- At the end of 10 minutes, the team should present their case solution to the class.

Team Activity

Case Study Analysis

Raju runs a business of wooden furniture. He has a huge list of customers on Facebook and WhatsApp who give him orders regularly. Ankita is one of his old and regular customers. She placed an order for a new chester and TV cabinet via WhatsApp and requested Raju to send them as soon as possible. When the parcel reached Ankita through courier she found that chester was broken and the TV unit was chipped from the bottom. Ankita was heartbroken. It was a complete waste of money. She sent a message to Raju on WhatsApp, expressing her anger and disappointment. Raju might lose an old customer forever if he doesn't satisfy the customer. What should Raju do to retain his customer?

Scenario 2

Rajni runs a boutique shop. She sells suits and sarees. She is one of the most successful designer in her city. Rajni swears that all the clothes in her boutique have unique designs. Smita has to attend her cousin's wedding; she goes to Rajni's boutique to buy a saree. Smita wanted a unique designer saree. Rajni customized a saree for her and sent it over the courier. When Smita had a look at the saree she realised her two friends had the same design sarees. She sent a message to Rajni on WhatsApp, expressing her anger and disappointment. Did Rajni make a false promise? Were her designs copied? What could happen to Rajni's image after this incident? What would you do if you were in Rajni's place?

Scenario 3

Shama is a beautician who offers parlour services to ladies by making home visits. Recently, Shama got her name registered on an e-commerce website. Two days earlier, she got a message from Mrs Sushma. The appointment was fixed for next day, 11:00 am and the remuneration for the services was decided beforehand. When Shama reached there at 10:50 am, Mrs Sushma was not at home. When Shama called her, she asked her to wait for a while. Mrs Sushma reached home at 11:45 am. Meanwhile, Shama had to reschedule her next appointment. After availing Shama's services, Mrs Sushma refused to pay the requisite amount and started finding faults in the services provided by her. Who was at fault in this scenario? What should you do in case the customer behaves unreasonably? What would you do if you were in Shama's place?

Scenario 4

Shailender is the manager of a car showroom. He proactively takes part in all the transactions that happen in his showroom. Vinita wants to buy a new car. She has chosen a car from Shailender's showroom. The salesperson has given her a very good discount and has also promised free service for one year. Vinita goes to the showroom and asks to complete all the formalities to purchase the car. When she sees the final bill she realize that she has not received the promised discount neither was there any mention of the free services. She immediately demands to see the Shailender. When Shailender's head asks how much discount Vinita was promised, he realised the discount will make the sale in loss. The car showroom owner might lose a customer and deal due to false commitments made by his manager. Besides, the customer might tell this to other people, creating a bad name and image for the showroom. If you owned that showroom, how would you have convinced your customer?

Say

- Now, let's discuss the problem and solution with the class.
- The group will first briefly describe the case to the class.
- Then discuss the issue identified and the proposed solution.
- Present the solution as a role play.
- Post presentation, the other groups may ask questions from the group that has presented.

Do 

- Congratulate each group for the presentation/ role play.
- Ask the audience to applaud for them.
- Keep a check on time. Tell the group to wind up the discussion quickly if they go beyond the given time limit.

Say 

- If your customers are happy with you they will give referrals which will help to grow your business.
- One more way of growing business is 'Networking'.
- Discuss Networking and its benefits. Refer to the Participant Handbook.

Activity **Group Discussion**

- Conduct a group discussion in the class on how they can do networking for their business.

Summarize 

- Ask the participants what they have learnt from this exercise/ activity.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the importance of CRM and Networking for entrepreneurs.
- Close the discussion by summarizing the importance of CRM and Networking for entrepreneurs.

UNIT 10.6.4: Business Plan: Why Set Goals?

Unit Objectives

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

- Discuss the importance of setting goals
- Differentiate between short-term, medium-term and long-term goals
- Discuss how to write a business plan
- Explain the financial planning process
- Discuss ways to manage your risk

Resources to be Used

- Participant Handbook
- Chart papers
- Blank papers
- Marker pens
- Ruler

Ask

- Remember we had written SMART Goals in a previous session? Let's try and recall why it is important to set goals?
- While framing SMART goals, we talked about 'T' in SMART, which was 'Time Bound'? What do we mean by time bound goals?
- What time limit did you set for your goal- 3 weeks, 3 years, 10 years?

Say

- Talk about short term, long term and medium term goals, as discussed in the Participant Handbook.

Ask

- As you are planning to become an entrepreneur, you must have thought of an idea for a start-up. What is your business idea?

Do

- Ask few participants to share their business ideas.

Ask

- Have you created a business plan for your business idea?
- Do you think it is important to have a business plan in place? Why/ why not?

Say

- Talk about 'Why Create a Business Plan' as discussed in the Participant Handbook.
- Let's understand it better with the help of an activity.

Team Activity

Writing a business Plan

- This is a group activity.
- Give the groups the required resources such as chart paper and markers.
- This activity is divided into two parts:
 1. Create a business idea
 2. Develop a business plan
- The group will discuss and come up with a new business idea and present their idea to the class.
- In the second part of the activity the group will develop a business plan for the business idea.
- The business plan prepared will be presented by the groups to the class.

MY BUSINESS PLAN
Executive Summary: What is your Mission Statement?
Business Description: What is the nature of your business?
Market Analysis: What is your target market?
Organization and Management: What is your company's organizational structure?
Service or Product Line: What is the lifecycle of your product/ service?
Marketing and Sales: How will you advertise and sell your products?
Funding Request: How much fund is required and from where?

Say

- Teams will need to brainstorm for this part of the activity.
- Use the blank papers for the second part of this activity
- Make your business plan on a chart paper based on the following parameters:
 1. Executive Summary
 2. Business Description
 3. Market Analysis
 4. Organization and Management
 5. Service or Product Line
 6. Marketing and Sales
- Explain each parameter in detail as done in the Participant Handbook.
- Discuss each parameter with the business idea examples of the groups.
- Groups will discuss and develop the business plan for their business idea.

Say 

- Now, let's share our plan with the class.
- Each group will briefly describe the plan to the class.
- Post presentation, the other groups may ask questions to the group who have presented their plan.

Do 

- Congratulate each group for sharing their points.
- Ask the audience to applaud for them.
- Keep a check on time. Tell group to wind up the discussion quickly if they go beyond the given time limit.

Say 

- Along with a business plan, you need to create a financial plan and evaluate the risk involved with your start up.
- Discuss 'Financial Planning' and 'Risk Management' in detail as given in the Participant Handbook.

Summarize 

- Ask the participants what they have learnt from this exercise/ activity.
- Ask if they have any questions related to what they have talked about so far.

Notes for Facilitation 

- Keep the business plan format ready in a flipchart to display it during the activity.

UNIT 10.6.5: Procedures and Formalities for Bank Finance

Unit Objectives

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

- Describe the procedure and formalities for applying for bank finance

Resources to be Used

- Participant Handbook
- Bank loan/finance form sample

Ask

- While preparing a business plan in the last session, we discussed financial planning to arrange financial resources for your start-up. Therefore, how will you collect funds to start your business?

Say

- While most entrepreneurs think 'product' is the most difficult thing to decide for a business, start-up capital poses an even a bigger obstacle. Though there are various ways of funding the business, to convince investors to invest money is the most challenging.
- Some of the funding options available in India are:
 - **Bootstrapping:** Also called self-financing is the easiest way of financing
 - **Crowd funding:** Funds are collected by consumers pre-ordering or donating for starting the business.
 - **Angel investors:** Individual or group of investors investing in the company
 - **Venture capitalists:** Venture capitals are professionally managed funds who invest in companies that have huge potential. They usually invest in a business against equity.
 - **Bank loans:** The most popular method in India.
 - **Microfinance Providers or NBFCs**
 - **Government programmes**
- Let us know discuss the most popular method i.e. bank finance in detail here.

Do

- Discuss the list of documents that are required to apply for a loan like letter of introduction, business brochure, references of other banks, and financial statements.
- Explain the details to be filled in a loan application form.
- Divide the class into groups. Give each group a loan application form.
- Ask the groups to discuss and fill the form.

Summarize

- Close the discussion by summarizing the important documents needed for bank loan.
- Ask the participants if they have any questions related to what they have talked about so far.

Notes for Facilitation



- Checklist of documents is provided as resources for the session.
- You can make some copies and distribute it during the group activity.
- Download sample loan application forms from any nationalised bank's website. Print sufficient copies to circulate it amongst the groups.

CHECKLIST OF DOCUMENTS TO BE SUBMITTED ALONG WITH LOAN APPLICATION (Common for all banks)
1. Audited financial statements of the business concern for the last three years
2. Provisional financial statements for the half – year ended on _____
3. Audited financial statements of associate concern/s for the last three years
4. Copy of QIS II for the previous quarter ended on _____
5. Operational details in Annexure I
6. CMA data for the last three years, estimates for current year and projection for the next year
7. Term loan/DPG requirements in Annexure II
8. List of machinery in respect of machinery offered as security in Annexure III
9. Additional details for export advances furnished in Annexure IV
10. Property statements of all directors/partners/proprietor/guarantors
11. Copies of ITAO of the company for the last three years
12. Copies of ITAOs/WTAOs of the directors/partners/proprietor and guarantors
12. Copies of certificate from banks and financial institutions certifying the latest liability with them
14. Copy of board resolution authorizing the company to apply to your bank for the credit facilities mentioned in application
15. Copy of memorandum and article of association (in case of limited company)/partnership deed (in case of partnership firm)
16. Cash budget for the current year and next year in case of contractors and seasonal industries

UNIT 10.6.6: Enterprise Management – An Overview: How to Manage Your Enterprise?

Unit Objectives

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

- Discuss how to manage their own enterprise

Resources to be Used

- Participant Handbook

Ask

- Having set-up a business, do you think it is possible to do everything on your own?
- Does one require trained persons for help?
- What does management mean?

Say

- Let's have a look at this example:

Kapil had a small business that was beginning to pick up pace. He wanted to expand his business, and therefore employed few more people. One day, as he was walking past Ramesh, one of his new employees, he overheard Ramesh talking rudely to a customer on the phone. This set him thinking. Kapil realised that he should have regular team meetings to motivate his employees and speak with them about any problems they might be facing during work. He should also conduct training sessions on new practices, soft skills, and technology, and develop work ethics manual for managing his enterprise.

Say

- Was Kapil correct in his approach or he should have scolded Ramesh instantly in front of his other employees?
- Discuss “Enterprise Management – An Overview” with the participants as given in the Participant Handbook.

Say

- Let's learn how to effectively manage an enterprise or business through an activity.

Team Activity

Enterprise Management

- This is a group activity.
- Design a matrix listing the topics and key words that are needed to run an enterprise effectively and smoothly.

Activity De-brief

- Have each group present their matrix.
- Encourage participants of the other groups to ask question about each other's presentation.

Do

- Instruct the participants that this is group work.
- Divide the class into small groups of 4.
- Give each group a chart paper and coloured pen.
- Tell the participants that they have to make a matrix they need to fill.
- They have to write the main topics and key words that will help them effectively manage their enterprise.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Summarize

- Ask the participants what they have learned from this exercise/activity.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the importance of effective management to run an enterprise as given in the Participant Handbook.

UNIT 10.6.7: 20 Questions to Ask Yourself before Considering Entrepreneurship

Unit Objectives

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

- List the important questions that every entrepreneur should ask before starting an enterprise

Resources to be Used

- Participant Handbook
- Blank sheets of paper
- Pens

Ask

- Why do you want to become an entrepreneur?

Say

- It is very important to know why you want to become an entrepreneur. Your personal goals for becoming an entrepreneur play a key role in the success of your business. Your goals should be clear well before you start your business.
- Apart from the goals, the other aspects of business that you need to bear in mind are the potential problems that you may face to set-up, your areas of interest, and all the other dimensions of the business.
- Let's understand it better with the help of some questions that every entrepreneur should ask before starting their own business.
- Open the Participant Handbook section named '20 Questions to Ask Yourself Before Considering Entrepreneurship'. You have to answer the questions individually.
- Then, we will have a class discussion on all the questions.

Do

- Read out the questions one by one in front of all the participants.
- Participants have to answer all the one by one questions.
- Give the class 10-15 minutes to note down their answers.
- At the end of 15 minutes, open the discussion for all the questions.
- Moderate the discussion by focusing on the relevant points.
- Keep a check on time and don't let the discussion get sabotaged or lose track of time. Ensure all the questions are covered and discussed.

Summarize

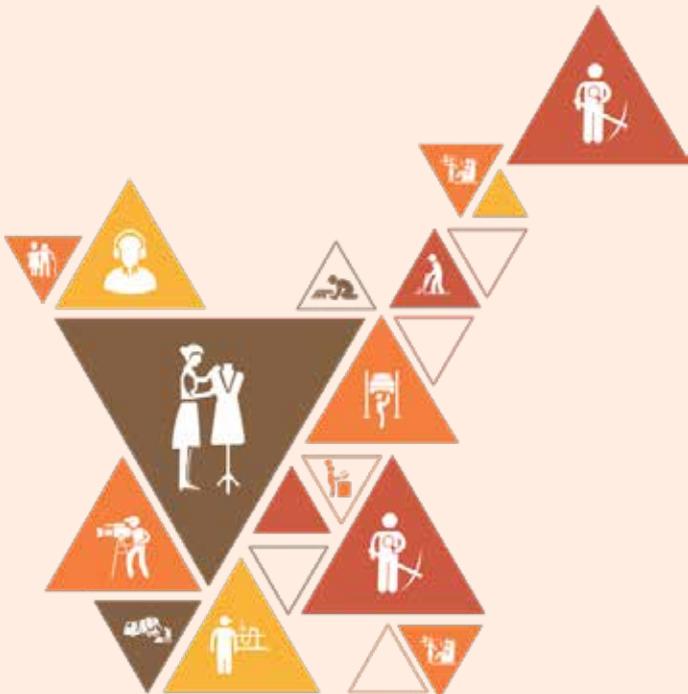
- Ask the participants what they have learned from this exercise/activity.
- Ask if they have any questions related to what they have talked about so far.



11. Annexures

Annexure I: Training Delivery Plan

Annexure II: Assessment Criteria



Annexure I

Training Delivery Plan

Training Delivery Plan			
Program Name:	Certificate Course in Rigger: Rigging of heavy material		
Qualification Pack Name & Ref. ID	Rigger: Rigging of heavy material, ISC/Q0908		
Version No.	1.0	Version Update Date	30-12-2015
Pre-requisites to Training (if any)	Minimum qualification – 10th standard		
Training Outcomes	<p>By the end of this program, the participants will be able to:</p> <ol style="list-style-type: none"> 1. Understand the given job of rigging 2. Carry out the required job of rigging 3. Use basic health and safety practices at the work place 4. Works effectively with others 		

Sl. No	Module Name	Session Name	Session Objectives	NOS Reference	Methodology	Training Tools/Aids	Duration
1	Over view of Iron & Steel Industry	Icebreaker	<ul style="list-style-type: none"> • Introduce each other • Build rapport with fellow students and the facilitator 		Group Activity: Passing the Parcel	Available objects such as a book, pen, duster etc.	0.5 hours
2	Over view of Iron & Steel Industry	Overview of steel industry and steel industries in India	<ul style="list-style-type: none"> • Understanding Iron & steel industry • Understanding types of Iron & Steel Industry • Understanding products of Iron & Steel industry • Activities in Iron & Steel Industry 	NA	Facilitator-led-discussion Videos	PPTs of Iron and steel manufacturing, Charts showing the same	3.5 hrs
3	5S & House keeping	5S safety system, waste management and housekeeping practices	<ul style="list-style-type: none"> • Identification of bottlenecks in functioning of work place • Various methods of housekeeping both pre-work & post-work as well 	ISC/N0008 PC10, PC11, PC12	<ul style="list-style-type: none"> • Facilitator-led-discussion • Skill Practice (Activity) 	PPTs of 5S, Display Charts of 5S, Audit Checklists of 5S	14 hrs

4	Understand the given job of rigging	Slings, rigging equipment, fitting equipment, auxiliary equipment	<ul style="list-style-type: none"> Understand assigned rigging job according given checklist and instructions Identify tools and tackles that are required for doing the assigned rigging work 	ISC/N0935 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, PC12, PC13, PC14 KB 1, KB2, KB3, KB4, KB5, KB6, KB7, KB8, KB9, KB10, KB11, KB12, KB13	<ul style="list-style-type: none"> Facilitator-led-discussion Skill Practice (Activity) 	Slings, wire ropes, knots, shackles, chain blocks,	58 hrs
5	Carry out the required job of rigging	Knots and hitches, rigging operation, handling loads	<ul style="list-style-type: none"> Plan the rigging operation based on actual load, equipment to be lifted and moved Execute rigging operations Complete post rigging activities 	ISC/Q0936 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, PC12, PC13, PC14, PC15, PC16, PC17, PC18, PC19, PC20 KB1, KB2, KB3, KB4, KB5, KB6, KB7	<ul style="list-style-type: none"> Facilitator-led-discussion Skill Practice (Activity) 	Slings, wire ropes, knots, shackles, chain blocks measuring instruments	144 hrs
6	Use basic health and safety practices at the workplace	Hazards at the site, control measures, PPE, safe working at heights and confined spaces, safe working practices	<ul style="list-style-type: none"> Understanding the Occupational health & Safety Understand What is hazard Working at Heights, confined spaces 	ISC/N0008 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, PC12, PC13 KB3, KB4, KB5, KB6, KB7, KB8, KB9, KB10, KB11, KB12, KB13	<ul style="list-style-type: none"> Facilitator-led-discussion Skill Practice (Activity) 	PPTs for OHAS related to Job Role, Display Material for PPEs related to Job Role, Safety Material	60 hrs
7	Use basic health and safety practices at the workplace	Problem escalation, escalation matrix, accident reporting	<ul style="list-style-type: none"> Documentation for Health and safety Problem escalation 	ISC/N0008 PC25, PC26 KB21, KB22	<ul style="list-style-type: none"> Facilitator-led-discussion Skill Practice (Activity) 	PPTs for OHAS related to Job Role, Display Material for PPEs related to Job Role, Safety Material	2 hrs

8	Use basic health and safety practices at the workplace	Fire safety, use of fire extinguisher, fire drill, emergency rescue and first aid techniques	<ul style="list-style-type: none"> • Health and safety procedures • Fire safety procedures • Emergencies, rescue and first aid procedures 	ISC/N0008 PC13, PC14, PC15, PC16, PC17, PC18, PC19, PC20, PC21, PC22, PC23, PC24, KB14, KB15, KB16, KB17, KB18, KB19, KB20	<ul style="list-style-type: none"> • Facilitator-led-discussion • Skill Practice (Activity) 	PPE, Different Type of Safety Sign, First Aid Box, Safety instrument and clothing, Step Ladder, Sample Accident reports, Fire Extinguishers, Items required for fire extinguisher and fire Safety	12 hrs
9	Work effectively with others	Effective communication, team work, workplace etiquettes	<ul style="list-style-type: none"> • Ensure appropriate communication with superiors, peers and others as applicable at work place • Demonstrate appropriate behaviour and etiquette at work place 	ISC/N0009 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, KA1, KA2, KA3, KA4	<ul style="list-style-type: none"> • Facilitator-led-discussion • Skill Practice (Activity) 	Communication skills PPTs, Posters Team management posters	16 hrs

Annexure II

Assessment Criteria

CRITERIA FOR ASSESSMENT OF TRAINEES

Assessment Criteria for Fitter – Levelling, balancing and alignment	
Job Role	Rigger: Rigging of Heavy Material
Qualification Pack	ISC/Q0908
Sector Skill Council	Indian Iron & Steel Sector Skill Council

Sr. No.	Guidelines for Assessment
1	Criteria for assessment for each Qualification Pack will be created 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 PC.
2	The assessment for the theory part will be based on knowledge bank of questions created by the SSC
3	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria.
5	To pass the Qualification Pack , every trainee should score a minimum of 60% in every NOS.
6	In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.

Assessment outcome (NOS Code and Description)	Assessment criteria (PC)	Total Marks	Assessment outcome (NOS Code and Description)	Marks Allocation	
				Assessment criteria (PC)	Total Marks
ISC/N0935: Understand the given job of rigging	PC1. Interpret the checklist and understand the rigging job requirements	250	20	10	10
	PC2. Identify the associated, risks and hazards		20	10	10

	PC3. Make a work plan to carry out the rigging job considering the area of work and floor load bearing capacity		20	10	10
	PC4. Identify tools, tackles & equipment required to perform the operation and inspect them before operation		20	5	15
	PC5. Identify and select knots based on the requirement e.g. Bowline knots, Slip knots, Butterfly knots etc.		20	5	15
	PC6. Use various types of rigging equipments and basic hitches and their applications		20	5	15
	PC7. Identify hitch configurations and capacities		20	5	15
	PC8. Identify appropriate anchors		20	5	15
	PC9. Identify appropriate slings, wire ropes, end terminations and tightness		20	5	15
	PC10. Identify appropriate chains, pulley required for the rigging job		20	5	15
	PC11. Understand wind force, temperature and visibility		20	5	15
	PC12. Asks helper to carry tools required to the desired work site (slings as required, different type of shackles, eyebolt, chain-block etc.)		15	5	10

	PC13. Report to stores in case of non-availability of tools & tackles or stock-out		15	5	10
	NOS Total Marks	Total	250	80	170
ISC/N0936: Carry out the required job of rigging	PC1. Understand the weight and volume of loads	500	30	10	20
	PC2. Estimate the centre of gravity of the load		30	10	20
	PC3. Identify the lift points of in the load		30	10	20
	PC4. Determine and select rigging based on loading		30	10	20
	PC5. Perform pre-use inspection of rigging and lift points		25	5	10
	PC6. Ensure hoisting/rigging activity is not performed under hazardous conditions e.g. close proximity to energised line		30	10	20
	PC7. Understand hazards related to the rigging job at hand		15	10	5
	PC8. Plan, in accordance with safety guidelines		15	5	10
	PC9. Verify that all slings and hardware are rated more than the expected load		30	10	20
	PC10. Use padding to protect synthetic slings from damage		30	10	20

	PC11. Attach pulleys and blocks to fix overhead structure e.g. beams, equipment assemblies, valves etc.		30	10	20
	PC12. Provide necessary support/tie the load to be handled		30	10	20
	PC13. Control movement of heavy loads during lifting through narrow openings/confined space to prevent any lateral damage and for safe working		30	10	20
	PC14. Provide signal / verbal direction for moving loads to co-workers		25	5	20
	PC15. Tilt, dip and turn suspended load to manoeuvre obstacles around the work place using multi point suspension techniques		30	10	20
	PC16. Identify false modes and carry out emergency damage control		30	10	20
	PC17. Remove tools and tackles, slings etc. from the working area after job is completed		15	5	10
	PC18. Remove hoisting equipment, crane, chain blocks, pull hoists etc. from the work place		15	5	10
	PC19. Ensure the work site is left in clean and safe condition		15	5	10
	PC20. Ensure all tools and tackles, slings, chain blocks etc. are returned to the department store		15	5	10

	NOS Total Marks	Total	500	165	335
ISC/N0008: Use basic health and safety practices at the workplace	PC1. Use protective clothing/ equipment for specific tasks and work conditions	150	9	4	5
	PC2. State the name and location of people responsible for health and safety in the workplace		6	1	5
	PC3. State the names and location of documents that refer to health and safety in the workplace		2	1	1
	PC4. Identify job-site hazardous work and state possible causes of risk or accident in the workplace		8	4	4
	PC5. Carry out safe working practices while dealing with hazards to ensure the safety of self and others state methods of accident prevention in the work environment of the job role		6	1	5
	PC6. State location of general health and safety equipment in the workplace		6	1	5
	PC7. Inspect for faults, set up and safely use steps and ladders in general use		6	1	5
	PC8. Work safely in and around trenches, elevated places and confined areas		6	1	5
	PC9. Lift heavy objects safely using correct procedures		6	1	5

	PC10. Apply good housekeeping practices at all times		2	1	1
	PC11. Identify common hazard signs displayed in various areas		6	5	1
	PC12. Retrieve and/or point out documents that refer to health and safety in the workplace		5	1	4
	Pc13. Use the various appropriate fire extinguishers on different types of fires correctly		9	4	5
	PC14. Demonstrate rescue techniques applied during fire hazard		8	4	4
	PC15. Demonstrate good housekeeping in order to prevent fire hazards		2	1	1
	PC16. Demonstrate the correct use of a fire extinguisher		6	1	5
	PC17. Demonstrate how to free a person from electrocution		6	1	5
	PC18. Administer appropriate first aid to victims as required e.g. in case of bleeding, burns, choking, electric shock, poisoning etc.		8	3	5
	PC19. Demonstrate basic techniques of bandaging		6	1	5
	PC20. Respond promptly and appropriately to an accident situation or medical emergency in real or simulated environments		7	2	5

	PC21. Perform and organize loss minimization or rescue activity during an accident in real or simulated environments		6	1	5
	PC22. Administer first aid to victims in case of a heart attack or cardiac arrest due to electric shock, before the arrival of emergency services in real or simulated cases		6	1	5
	PC23. Demonstrate the artificial respiration and the CPR Process		6	1	5
	PC24. Participate in emergency procedures		6	1	5
	PC25. Complete a written accident/incident report or dictate a report to another person, and send report to person responsible		4	1	3
	PC26. Demonstrate correct method to move injured people and others during an emergency		2	1	1
	NOS Total Marks	Total	150	45	105
ISC/N0009: Work effectively with others	PC1. Accurately receive information and instructions from the supervisor and fellow workers, getting clarification where required	100	10	5	5
	PC2. Accurately pass on information to authorized persons who require it and within agreed timescale and confirm its receipt		9	4	5

	PC3. Provide information to others clearly, at a pace and in a manner that helps them to understand		11	1	10
	PC4. Display helpful behaviour by assisting others in performing tasks in a positive manner, where required and possible		10	5	5
	PC5. Consult with and assist others to maximize effectiveness and efficiency in carrying out tasks		10	5	5
	PC6. Display appropriate communication etiquette while working		11	1	10
	PC7. Display active listening skills while interacting with others at work		11	1	10
	PC8. Use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism		8	3	5
	PC9. Demonstrate responsible and disciplined behaviours at the workplace		14	4	10
	PC10. Escalate grievances and problems to supervisor		6	1	5
	NOS Total Marks	Total	100	30	70



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