Facilitator Guide

Mill Operator

Sector
Rubber

Sub-Sector
1. Tyre 2. Non-Tyre

Occupation
Mixing

Reference ID: RSC/Q 0101, Version 1.0
NSQF level: 4
Skilling is building a better India. If we have to move India towards development then Skill Development should be our mission.

Shri Narendra Modi
Prime Minister of India
Acknowledgement

Rubber Skill Development Council (RSDC) acknowledges the contribution of all the individuals and organizations who have contributed in the preparation of this manual.

We would like to acknowledge the efforts of our Governing Council members and RSDC Content Committee members as well as our Industry Partners who guided preparation of the manual.

Sincere appreciation is extended to all experts who had provided subject matter inputs and reviewed the individual modules. The efforts of Team Talento is specially appreciated for supporting the development of the manual.

The preparation of this manual would not have been possible without the strong support of Rubber industry, there extremely valuable feedback and inputs.

We are grateful to organizations like; Rajarshi Rubber Producer Society, Gitanjali Rubber Producer Society, PS Para Rubber Producer Society, CMC Para Rubber Producer Society, Santaram Para Rubber Producer Society and Rangmala Rubber Producer Society for their efforts in reviewing and endorsing this Participant Manual.
About this Guide

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

Key Learning Objectives for the specific NOS mark the beginning of the Unit/s for that NOS.

- Rubber plantation development and maintenance
- Natural Resource Management
- Providing feedback to higher authorities

Symbols Used

- Steps
- Time
- Tips
- Notes
- Objectives
- Do
- Ask
- Explain
- Elaborate
- Field Visit
- Practical
- Lab
- Demonstrate
- Exercise
- Team Activity
- Facilitation Notes
- Learning Outcomes
- Say
- Resources
- Activity
- Summary
- Role Play
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1. Introduction

Unit 1.1 – Rubber Sector in India
Unit 1.2 – Roles and Responsibilities of Mill Operator
Key Learning Outcomes

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

- Learn about current state of Rubber Industry in India
- Recognize types of Rubber used in Industry
- Familiarise with role of Compression Moulding Operator
- Familiarise with the process the Rubber Manufacturing
UNIT 1.1: Rubber Sector In India

Unit Objectives

At the end of the unit, students will be able to:
• Learn about current state of Rubber Industry in India
• Recognize types of Rubber used in Industry

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
• Copies of handouts, Participants Handbook

Do

Welcome the participants to the program
• Introduce yourself to the participants mentioning about you, your name and work experience.
• Before starting the session tell them what they are going to learn in this program

Say

• Tell them now they will learn about – Rubber Sector and Institutional Support for Rubber Sector.
• Tell them – India is the 4th largest producer and 2nd largest consumer of natural rubber in the world. The rubber industry comprises of tyre and non-tyre industries with a turnover of Rs. 63,000 crores in 2011-12 with a Compounded Annual Growth Rate (CAGR) of 10% for last 3 years. The Indian rubber industry consists of around 5,500 units and is dotted with the presence of many small and tiny units.

Elaborate

• Tell them – India is the 4th largest producer and 2nd largest consumer of natural rubber in the world. The rubber industry comprises of tyre and non-tyre industries with a turnover of Rs. 63,000 crores in 2011-12 with a Compounded Annual Growth Rate (CAGR) of 10% for last 3 years. The Indian rubber industry consists of around 5,500 units and is dotted with the presence of many small and tiny units.
• The rubber industry across the globe has majority of its production concentrated in the Asian continent, particularly in India, Malaysia, Thailand and China. The table below shows the global Natural Rubber (NR) production. Thailand is the top natural rubber producing country.
The rubber industry in India is:
- Ranked 6th globally in terms of area under rubber plantations
- Ranked fourth in the world natural rubber production
- Ranked second in the consumption of natural rubber, behind China
- Ranked first globally in terms of productivity

**Say**

- Now tell participants about the Institutional Support for Rubber Sector

**Elaborate**

The institutional support for the rubber sector is driven by following organizations:
- Ministry of Commerce.
- The Rubber Board.
- All India Rubber Industries Association (AIRIA).
- Automotive Tyre Manufacturers Association (ATMA).
- Rubber Skill Development Council (RSDC).
- Indian Rubber Institute (IRI).

**Notes for Facilitation**

Ask participants about their expectations from this program.
- Tell participants to complete the questions at the end of the sub unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
UNIT 1.2: Roles and Responsibilities of Mill Operator

Unit Objectives

At the end of the unit, students will be able to:
1. Paraphrase the roles and responsibilities of Mill Operator
2. Describe the job of a Mill Operator

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
- Copies of handouts, Participants Handbook

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about the roles and responsibilities of Mill operator in this unit

Say

- Give them the description for the job of Mill Operator

Elaborate

Job description for Mill Operator:
- **Roles Description:** The Mill Operator is in charge for feeding the rubber into the two roll mixing machine and carry out mixing and warming of rubber as per cycle times.
- **Personal Attributes:** This job needs the individual to work independently and be comfortable in performing laborious work. He must be result oriented and positive in attitude. The individual needs to be willing to work in the factory environment.
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Say

• Tell the participants about the Roles and Responsibilities of Mill Operator

Elaborate

• Opens breech-lock head on extruder, using wrenches.
• Removes foreign matter from equipment, using hot hoe and picket tamper.
• Turns hand wheel to regulate space between rollers on hot mill to get rid of moisture and to manage thickness of product on rollers.
• Observes color and surface characteristics of rubber to work out degree of dryness.
• Turns valves on steam lines to take care of temperatures.
• Turns handwheels to regulate mill knives.
• Cuts samples of product for laboratory tests and cleans wet rubber from rollers for remilling, using knife.
• Inspects machinery for lubrication and to detect mechanical malfunction.

Notes for Facilitation

Summarize the main points of this unit and also the previous unit.
• Ask Participants if they have any doubt. Encourage them to ask questions
• Answer their queries satisfactorily
• Ask them to answer the questions at the end of unit given in the participant’s manual.
• Ensure that every participants answer all questions.
2. Prepare Mixing Mill and Accessories

Unit 2.1 – Mixing Mills
Unit 2.2 – Internal Mixers
Unit 2.3 – Safety Aspects
### Key Learning Outcomes

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

1. Paraphrase mixing mills in rubber processing
2. Operate mixing mill
3. Use internal mixers
4. Familiarise with the functioning of internal mixers and mixing methods
5. Recognise pre-mixer and post-mixer area equipment and their parts
6. Recognise the different safety aspects at workplace
7. Work safely with different milling machines
8. Choose and put on the PPEs
UNIT 2.1: Mixing Mills

Unit Objectives
At the end of the unit, students will be able to:
1. Paraphrase mixing mills in rubber processing
2. Operate mixing mill

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.
- Mill Guide
- Mill Rolls
- Blender Rolls
- Participant Manual
- Copies of Handouts.

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about the Mixing Mills in rubber processing and Mixing Mill operations.

Say
- Tell them that the Mills are probably the oldest rubber processing machinery. Since the time of invention that rubber property can be manipulated by addition of suitable ingredients, probably mills were in use and of course, with refinements as time passed.
- Also discuss about the functional parts of a Mill and simultaneously see how these mechanisms are taking place during the mixing of the compound.
Elaborate

• Mills are probably the oldest rubber processing machinery. Since the time of invention that rubber property can be manipulated by addition of suitable ingredients, probably mills were in use and of course, with refinements as time passed.

• Functionally, mills help to incorporate the compounding ingredients into the basic matrix which is the rubber itself when it is used for mixing. It also does the job of warming up stocks, holding the warmed up compound, feeds the warmed up compound to the main equipment etc.

Let’s familiarise with the functional parts of a Mill and simultaneously see how these mechanisms are taking place during the mixing of the compound.

• Rolls
• Roll Bearings
• Mill Frame
• The Mill Nip and Control
• Mill Guides
• Mill Tray or Mill Pan
• Mill Drive Train

Say

• Tell participants now they will learn about Mill Operations. The mills are operated by working on the front roll. It is the slower roll near which the Mill Operator stands. As a rule in all the mills where there is a manual intervention, the gear system is organized to give the front roll as the slow roll. It is on this roll that the stock forms the band (carpet) and the Mill Operator works. The front rolls therefore will have to be plain facilitating cutting and cross feeding the stock that is being worked. The rear roll can be either plain or serrated depending on the application.

• Also tell participants about the job role of a Mill man.

Elaborate

• Tell them now that the mill man does the following jobs on the mill:

**Mills - Operation**

The mills are operated by working on the front roll. It is the slower roll near which the Mill Operator stands. As a rule in all the mills where there is a manual intervention, the gear system is organised to give the front roll as the slow roll. It is on this roll that the stock forms the band (carpet) and the Mill Operator works. The front rolls therefore will have to be plain facilitating cutting and cross feeding the stock that is being worked. The rear roll can be either plain or serrated depending on the application.
**The mill man does the following jobs on the mill:**

- Banding the compound on the mill
- Adding of ingredients to the stock (Only for mixing)
- Cutting and re-feeding
- Lateral overlap
- Homogenisation
- Sheet out / Batch off

**Say**

- Tell participants about the Categorization of Mills. Mills are used for various purposes by the industry, and mixing is just one of them. Of late the mixing for reasons that we will see in the next session, is being discontinued from mills and internal mixers are used instead. However, to handle the discharge of the internal mixers, mills are used. Likewise there are several applications of mills in the industry, and we will try familiarising with a few of them.
- Now tell them about the Mixing Mills.

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 17 and explain trainees the concept.

**Elaborate**

- Tell them – Mill mixing is a manual operation to create a homogeneous rubber compound with uniform properties at all parts of the compound. It is done by making a band of the rubber compound on the mill roll and adding the ingredients as specified by the formula one by one into the rubber compound. Finer aspects of mixing using a mill will be covered in another session. Since used for mixing, they need to be provided with sufficiently high capacity motor a relatively high friction ratio to facilitate the mixing process and provision for good cooling of the mill rolls.
- Typical values for these variables could be as follows approximately:

**Mixing Mills**

Mill mixing is a manual operation to create a homogeneous rubber compound with uniform properties at all parts of the compound. It is done by making a band of the rubber compound on the mill roll and adding the ingredients as specified by the formula one by one into the rubber compound. Finer aspects of mixing using a mill will be covered in another session. Since used for mixing, they need to be provided with sufficiently high capacity motor a relatively high friction ratio to facilitate the mixing process and provision for good cooling of the mill rolls.

**Typical values for these variables could be as follows approximately:**

<table>
<thead>
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<th>Variable</th>
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<tr>
<td>Mill size</td>
<td>24X60 inches to 26X84 inches</td>
</tr>
<tr>
<td>Motor and Gear Box HP</td>
<td>125 to 200 HP depending on the type of stock</td>
</tr>
<tr>
<td>Surface Speed</td>
<td>25 MPM to 40 MPM</td>
</tr>
<tr>
<td>Friction Ratio</td>
<td>1.00:1.08 to 1.0:1.10</td>
</tr>
<tr>
<td>Cooling water requirement</td>
<td>150-200LPM approx (Water at ambient temp)</td>
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**Say**

- Tell participants about the Sheeting out (Batch of Mills). These are mills that are used underneath mixers such as internal mixers and kneaders which discharge the output in a junk form. It is important to sheet the stock immediately to facilitate cooling and also proper storage and handling of the material.

**Elaborate**

- Explain - These are mills that are used underneath mixers such as internal mixers and kneaders which discharge the output in a junk form. It is important to sheet the stock immediately to facilitate cooling and also proper storage and handling of the material.

**Sheeting out (Batch off Mills)**

These are mills that are used underneath mixers such as internal mixers and kneaders which discharge the output in a junk form.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 17 and explain trainees the concept.

**Say**

- Tell participants about the Warm up Mills or Cracker Mills or Breakdown Mills. In the second phase of rubber goods making, we have seen that the rubber compounds need to be shaped into a suitable form. To shape the compound using processes such as extrusion and calendaring they need to be pre-warmed and the general practice of the industry is to make use of mills to do this activity. Such mills used to warm up the stocks to make it suitable to be fed to the extruders and calenders, is called a warm up mills or cracker mills.

**Elaborate**

- Tell them - The cracking rate often affects the productivity of the calender or the extruder. Therefore cracking mills are provided with special features such serrated rolls to enhance the speed at which it cracks or warms the compound. Serrated or fluted rolls are rolls that have a fluted roll surface as seen in the picture below. They offer extraordinary grip on the compound and makes the breakdown or warming of the compound faster. The compound will have to be cut and cross fed in the mill while being warmed up which is not possible with a serrated roll., Therefore only the rear rolls will be fluted, and the front roll will be a plain roll.

- In many factories, warm up mills are placed either in tandem or parallel to enhance the cracking rates.

**Warm up Mills or Cracker Mills or Breakdown Mills**
Now the participants will learn about the Hold Mills or Blending Mills.

Elaborate

- Now tell them - In a process that uses warmed stock for the next operation, some mills are used to hold the warm compound for a short while enroute to the main machine. Such mills are called Hold mills. This arrangement of mills is used when the amount of compound to be handled is fairly large, depending on the end requirement. It facilitates an additional blending of the stocks from different warm up mills so that the feed material is more uniform. Hold mills where ‘forced-blending’ of stocks also is a desired activity, are provided with blender rolls which are designed to continuously cross feed materials on the mill. In hold mills the input stocks are received on one end of the mill and the take away or the output is extracted from the other end. One or more strips are cut and fed to the other end of the mill using the blender rolls. Many a times, blender are also provided with moving carriages which travel parallel to the axial line of the blender rolls. It delivers the stock distributed on the other parts of the mill in a back and forth movement between the two ends of the mill.

- The mill features are more or less similar to the warm up mills
UNIT 2.2: Internal Mixers

Unit Objectives

At the end of the unit, students will be able to:
1. Use internal mixers
2. Familiarise with the functioning of internal mixers and mixing methods
3. Recognise pre-mixer and post-mixer area equipment and their parts

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.
- Mill Guide
- Mill Rolls
- Blender Rolls
- Participant Manual
- Copies of Handouts.

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about the internal mixers.

Say

- Tell them that the first equipment to mix compound was the mill. However owing to the productivity, safety and quality concerns that were associated with the mill operations, they were subsequently the concept of internal mixing came up.
- Also discuss about the development of Internal Mixers.
Elaborate

Tell them - ‘Internal mixing’ was a revolutionary new concept in mixing. In most simple terms, it was adding a rugged cover over and underneath the two rolls of a mill, so that the ingredients of the mix were well contained inside the cover. However the mixing could have only become more inefficient in such an arrangement. The mixing can happen only if the material is moved around the roll and re-fed into the nip. In mill mixing this is carried out by the mill man during the mixing operation. This fact would have led to the development of rotors that are capable of moving the stock around it and re-feeding the mix back to the nip.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 21 and explain trainees the concept.

Say

Tell the participants about the Functional parts of Internal Mixer. Now, that we have understood the design concept or philosophy of internal mixers, let’s examine the features of the two major designs of the internal mixers. Whatever is the design of internal mixers, based on the function that they do, the essential parts of the machine are the same and the difference is in the design details of those components.
Elaborate

- Describe - Based on the concept, we may list the parts of the machine as:
  - Hopper door for feeding of the stock inside
  - Floating weight that holds the rubber firmly into the locus of the rotors.
  - Chamber of holding the stock inside
  - Rotors that work on the stock.
  - Discharge door for discharging the stock from the chamber
  - Dust stop seals.
  - Motors and Gearbox for driving the rotors
  - Temperature Control Units (TCU)
- The Hopper
- The floating weight (Ram or Plunger)
- The Mixing Chamber
- The Rotors
- The Discharge Door
- The Dust Stop Seals
- The Motor and Gearbox
- The Temperature Control Unit

Say

- Tell the participants they will learn about the Mixing Mechanism in Internal Mixers. In mill mixing the effort by the mill man was to predominantly lead the compounds to the centre of the mill (nip) and to make it participate in the mixing action that takes place at the nip. In internal mixers also, the basic philosophy of working on the compound remained the same except that more opportunities of creating such interfaces for compound working were designed in the mixer.

- Tell them they will now see how are the various manual actions by the mill man have been emulated in the internal mixers. Please remember Banbury® mixers use the interfacing of the rotor tip and the wall to create the nip action, where as in Intermix®, the nip action as in the mills is between the rotors. Accordingly the rotors of the former has very active rotor edges or wing tips, and the portion leading to the wing tip is designed to effect the characteristic rolling and longitudinal shear elongation as it happens in the ‘catchment’ area of the mill nip.
Elaborate

Describe – The mixing in tangential rotor internal mixers can be visualized as taking place through the following basic mechanisms.

- Milling
- Kneading
- Longitudinal Cut-back
- Lateral Overlap

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 29 and explain trainees the concept.

Say

- Tell the participants about the Mixing Methods in Internal Mixers. Depending on the sequence of addition of ingredients the mixing technologist can arrive at a variety of mixing methods and decide on the most suitable one considering the process aspects of motor capability, cycle time, ease of handling on mill, and the performance aspects of dispersion, physical properties etc.

Elaborate

- Describe them three identified mixing methods using an internal mixer as:

  **Conventional Method:** Developed originally for Natural rubbers, consists of adding the elastomer first followed by the dry ingredients and finally the liquid ingredients, once the dry materials are well dispersed. This is in alignment to the general principle in internal mixing – ‘Stiff materials mix better’.

  The advantage is that this method achieves dispersion and distribution of all ingredients, including fillers of very small particle size. And the disadvantage is it usually a longer mixing cycle because of the difficulty in incorporating liquid ingredients once the dry materials have been dispersed in the rubber matrix. Significant amount of slippage and therefore loss of efficiency occurs inside the chamber till the time the oil is incorporated.

  **Early oil addition method:** This method calls for the addition of elastomer first and the dry ingredients at the earliest. After 0.5–1.0 minute all liquids are added together. In this method dispersion is improved if the additions of liquids are delayed slightly, however this will extend the mixing cycles. This method is used for compounds containing large volumes of liquid plasticizers. This is also a method to handle mixing of stocks if the motor HP capacities are constrained and it is crucial to maintain the mixing load relatively lower.

  **Upside-down mix method:** Upside down method is the simplest and fastest way of mixing. This is helpful for compounds containing large volumes of liquid plasticizers and large particle size fillers. This method involves adding all ingredients into the mixer before lowering the ram and commencement of mixing. All dry ingredients are added to the mixer first, then the liquids, and finally the elastomer on the top.
Elaborate

• Discuss with the participants about the other parameters:
  » Rotor Speed:
  » Ram Pressure:
  » Chamber Filling

Say

• Discuss with the participants about the Discharge Criteria in Internal Mixing. Time was obviously the first discharge criteria. However it suffered from the serious disadvantage of causing variations within a set of batches, since the time taken from the first to last batch varied on account of the mixing efficiency as the metal parts became hot as a result of the mixing action.

Elaborate

• Temperature was the second option which also failed for the reason that the first batch few batches varied from the balance because of the fact that the temperature build up in the first set of batch was lower owing to the heat that has been used to warm up the metal parts of the mixer. This gave rise to a non desirable phenomenon termed ‘First batch effect’.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 32 and explain trainees the concept.

Say

• Now tell the participants about the Multistage Mixing in Internal Mixing. As you came to know through the deliberations of the current topics, it is imperative to put in a high amount of energy to plasticise the raw rubber, incorporate and disperse the ingredients into the rubber matrix, and also to distribute and homogenize the mix thereafter. This makes the batch temperature to go up as the mixing action proceeds.
Elaborate

• Tell them - The temperature of the mix was optimally controlled during the mixing process not to let the stock to become too hot, and not hot very fast. The cooling also was in a controlled manner because it was not advisable to cool the stock excessively to lose the advantage of thermal plasticisation. The dump temperatures of a mix therefore were in the range 155 to 170°C.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 33 and explain trainees the concept.

Say

• Tell the participants about the Internal Mixer – Pre and Post mixer Arrangements. Additional equipments are required to support the functioning of internal mixers. These are required for various technological and operational aspects, and to have a full picture of these various equipments supporting the main mixer, let’s see the flow chart a mixing room.

Elaborate

• Tell them - We have seen in the earlier section that internal mixers are preferred by the industry for the various advantages that these mixers offer. All these mixers that we have discussed so far are batch process machines and they need to be periodically filled in with materials for a fresh batch, when the processing of one batch is over and is discharged.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 34 and explain trainees the concept.

Say

• Now explain the participants about the Equipment’s in the Pre-Mixer Area.

Elaborate

• Describe – Equipment’s in the Pre-Mixer Area:
  • Bale Cutters
  • Weighing arrangements for chemicals
  • Weighing arrangements for bulk fillers
  • Weighing arrangements for oils and liquid ingredients
  • Weighing and feeding devices for rubbers and compounds.
Now explain the participants about the Equipment’s in the Post – Mixer Area.

Describe – Equipment’s in the Post – Mixer Area:

- Discharge Dump Mill
- Twin Screw Sheeter (TSC)
- Blender Mills
- Batch off Mills
- Slab Dip
- Cool Rack
- Stackers

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 37 and explain trainees the concept.

Tell the participants about the Tandem Mixing – A new Ancillary Combination in Internal Mixing. Multiple stages mixing shall be avoided as much as possible – for better productivity.

Describe – As you are aware, multistage mixing calls for energy centric efforts to cool the batch and also to warm it up to the required extent for addition of ingredients. Why not add the sulphur and accelerator in one stage itself without encountering the negative aspects of high temperature? This thought drove mix designers to a concept called tandem mixing. Let’s examine the tandem mixing process in greater details.

**Tandem Mixing – A new Ancillary Combination in Internal Mixing**

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 38 and explain trainees the concept.
Now explain the participants about the Temperature Control Unit. The modern TCU are multi-cell units and are capable of supplying water at multiple specified temperatures, so that various parts of the machine can run with separate temperatures if required. While so much of variations of temperatures are not tried, keeping the drilled side around 10oC is proved to be useful in increasing the mixing efficiency.

Now tell the participants about the Lubrication. The machine requires oil to run. Changing the oil on regular basis is the single most crucial thing you can do to prolong the life of your engine. When your car is at rest, the oil slops around in a container located at the bottom of the crankcase, the oil pan. When the car is running, oil is pumped by an Oil Pump through holes and channels in the engine where the oil helps cool and clean the engine and offers a nice slippery surface that keeps moving parts (like pistons) from grinding into one another.

Also tell the participants about the functions of Lubrication.

Describe – Different functions of Lubrication.

» Oil cools the engine

» Oil keeps the engine clean (it collects the abrasions from the engine, which is why it needs to be changed regularly)

» Oil cuts down on friction

» Oil retards corrosion

» Oil Pressure

» Dipstick

» Oil in Air intake

» Valve cover air tubing

Tell the participants about the Pre-Weighted material. In the last 20 years, there has been a trend within the rubber industry to utilize pre-weighed blends of several of the powdered compounding ingredients in special dispersible poly baggage, prepared either in-house or from an outside supplier, in order to increase and improve productivity and quality whereas decreasing dust within the factory.
**Activity**

- Divide the class into two equal groups and name them Group A and Group B.
- Now give Group A and Group B the topics Mixer with Tangential Rotors and Mixer with Intermeshing Rotors respectively.
- Tell the participants they have to give a presentation on their respective topics.
- Tell them they would be given a time of 30 minute for preparation. The time for presentation for each group should not exceed 30 minutes per group.
- Once the presentations are complete appreciate the efforts made by the group and summarize the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain about the Mixer with tangential Rotors and Mixer with Intermeshing Rotors</td>
<td>2 Hours</td>
<td>Charts</td>
</tr>
</tbody>
</table>

**Notes for Facilitation**

- Summarize the main points
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
UNIT 2.3: Safety Aspects

Unit Objectives

At the end of the unit, students will be able to:
1. Recognise the different safety aspects at workplace
2. Work safely with different milling machines
3. Choose and put on the PPEs

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
- Safety Helmet
- Safety Shoes
- Safety Gloves
- Safety Ear Plug
- Participant Manual
- Copies of handouts

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about the Safety aspects at workplace with different milling machines. Also, they will get to know about the PPEs.

Say

- Tell participants they will learn about the safety aspects.
**Elaborate**

- Tell them – Safety Aspects includes the following risks:
  - Main Mechanical hazards
  - Feeding ingredients & collecting compound.
  - The principal dangers & safeguards on a banbury type internal mixer.
  - The rotor, via the feed opening (contact with rotors or falling in) on larger machines.

**Say**

- Tell participants about the Grinding Machine Safety precautions. To avoid injuries one must follow the safety precautions mentioned below. Wear goggles for all grinding machine operations.

**Elaborate**

- Goal of Health, Safety and environment (HSE) is to safeguard workers, the public, the surroundings and to go with applicable laws and protect the Company’s name. HSE departments, of some firms are accountable for environmental protection, occupational health and safety at work. According to C. Stephan, EHS management deals with two general objectives: prevention of incidents or accidents which may result from abnormal operating conditions on the one hand and reduction of adverse effects that result from traditional operating conditions on the opposite hand.

  Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 43 and explain trainees the concept.

**Say**

- Tell participants about the Hazard Assessment. The hazard assessment should begin with a walk-through survey of the facility to develop a list of potential hazards.
- Also tell them about the different basic categories of hazards.

**Elaborate**

- Basic categories of hazard:
  - Impact,
  - Penetration,
» Compression (roll-over),
» Chemical,
» Heat/cold,
» Harmful dust,
» Light (optical) radiation, and
» Biologic.

- Now tell participants how to select PPEs. For Eye and Face Protection: ANSI Z87.1-1989. For hand protection, there is no ANSI standard for gloves however osha suggests that choice be based mostly upon the tasks to be functioned and also the performance and construction characteristics of the glove material. for protection against chemicals, glove choice must be supported the chemicals encountered, the chemical resistance and also the physical properties of the glove material.
- Also tell the participants about training employees in the proper use of PPEs.

- Elaborate

- Explain - Employers are required to train each employee who must use PPE. Employees must be trained to know at least the following:
  » When PPE is necessary.
  » What PPE is necessary.
  » How to properly put on, take off, adjust and wear the PPE.
  » The limitations of the PPE.
  » Proper care, maintenance, useful life and disposal of PPE.

- Say

- Tell the participants about the Eye and Face Protection. Several occupational eye problems occur because workers are working without any eye protection while others result from wearing improper or poorly fitting eye protection. Employers must ensure that their employees wear suitable face and eye protection and that the selected form of protection is suitable to the work being performed and properly fits each worker exposed to the hazard.
- Also tell the participants about the different PPEs for eyes and face protection.
Elaborate

- Explain - OSHA requires employers to ensure that employees have appropriate eye or face protection if they are exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, potentially infected material or potentially harmful light radiation.
- Tell participants about the different PPEs for eyes and face protection.

Types of Eye Protection
- Safety spectacles
- Goggles
- Welding shields
- Laser safety goggles
- Face shields

Say

- Tell the participants about the Welding Operations. The intense light associated with welding operations can cause serious and sometimes life-long eye damage if Mill Operators are not wearing proper eye protection. The intensity of light or radiant energy produced by welding, cutting or brazing operations differs according to numerous of factors including the task producing the light, the electrode size and the arc current.

Elaborate

- Explain – The following table shows the minimum protective shades for a variety of welding, cutting and brazing operations in general industry and in the shipbuilding industry.
  » Hard Hats
  » Foot and Leg Protection
  » Special Purpose Shoes
  » Hand and Arm Protection
  » Protective Gloves
  » Body Protection
  » Hearing Protection
**Activity**

- Divide the class into five equal groups.
- Write the name of five PPEs on 5 pieces of papers and then fold them. Name of the five PPEs should be Eye protection, Face protection, Foot and Leg protection, Hand and Arm protection, and Hearing Protection PPE.
- Now ask each group to pick one folded paper. Tell the participants they have to explain the right way of using that PPE and what damage can happen if they will not wear the proper PPEs and also give some examples of mishaps.
- Tell them they would be given a time of 30 minute for preparation. The time for presentation for each group should not exceed 20 minutes per group. Once the presentations are complete appreciate the efforts made by the group and summarize the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain the way of using PPEs and give examples of mishaps</td>
<td>3 Hours</td>
<td>All PPEs mentioned in chapters</td>
</tr>
</tbody>
</table>

**Notes for Facilitation**

- Summarize the main points
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
3. Mix Raw Material to Prepare Rubber Compound

Unit 3.1 - Mix Raw Material to Prepare Rubber Compound
Key Learning Outcomes

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

1. Mix the raw material
2. Prepare the rubber compound
3. Familiarise with the different mixers.
4. Maintain and lubricate the mixers
UNIT 3.1: Mix Raw Material to Prepare Rubber Compound

Unit Objectives

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

• Mix the raw Material
• Prepare the rubber compound
• Know about the different mixers
• Maintain and lubricate the mixer

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
• Personal Protective Equipment
• Participant Manual
• Copies of handouts

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.
• Acknowledge their responses and clear their doubts if any.
• Tell them they will learn about the Mix raw material. Also, they will get to know about the different mixers.

Say

• Tell participants about mix the raw material. The goal in mixing is to provide compositions having useful properties and suitable processability with as high a level of consistency as possible. In almost all applications there are criteria for the attributes that characterise whether a composition is suitably mixed; the criteria may vary, but they exist nonetheless. It is almost always the case that these criteria must be met with optimum efficiency, i.e., with the maximum output per expenditure of capital and energy.
Elaborate

• Tell them – In order to know the reasons for the techniques and kinds of machinery used in mixing, one must have some familiarity with raw materials, their physical forms, functions in the compound, and behavior throughout process. Several primary classes of ingredients are sometimes distinguished.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 53 and explain trainees the concept.

Say

• Tell participants now they will learn about the mixing machinery for rubber.

Elaborate

• Tell them about the mixing machinery for rubber.

Two-roll Mills

Every mixer should offer two primary functions, both equally essential—acceptable dispersion (dispersive or intensive mixing) and high uniformity (distributive or extensive mixing). The equipment utilized most often by the rubber technologist is the two-roll lab mill—a device for preparing small quantities of mixed compound. This mixing device is generally set for a ratio of roll surface frictional speed of about 1.25:1.

<table>
<thead>
<tr>
<th>Face length (L)</th>
<th>Roll length (mill sizes expressed as D x L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roll gap</td>
<td>Distance between rolls</td>
</tr>
<tr>
<td>Sank size</td>
<td>Material sitting above gap</td>
</tr>
<tr>
<td>Banded roll</td>
<td>Roll which material follows</td>
</tr>
<tr>
<td>Front roll</td>
<td>Roll on Mill Operator’s side</td>
</tr>
<tr>
<td>Slow roll</td>
<td>Roll rotating at slowest speed</td>
</tr>
<tr>
<td>Fast roll</td>
<td>Roll rotating at fastest speed</td>
</tr>
<tr>
<td>Friction ratio</td>
<td>Separating Force</td>
</tr>
<tr>
<td>Friction ratio</td>
<td>Resultant force exerted by material in roll gap</td>
</tr>
</tbody>
</table>

Fig.3.1.1: Roll Nomenclature

Fig.3.1.1: Two-roll Mills
Mill Operator

Say

- Tell the participants about the internal batch mixer. The Banbury internal mixer was originally manufactured to replace the two-roll mill. The original nomenclature indicated the approximate variety of 60” mills that a particular Banbury size might equal in output.
- Also tell the participants about the Advantages and disadvantages of the internal batch mixer.

Elaborate

- The primary design of the machine includes two rotors that operate at a small speed differential. The rotors are non-interlocking. Cutting or mixing action occurs between the rotors and therefore the sides of the mixer and between the rotors themselves. The mixer is top loaded through an opening massive enough to accommodate bales of elastomers (as well as the other ingredients). Pressure is exerted on the batch employing a ram that closes the feed opening. Discharge of the batch happens at the bottom of the mixing chamber. The rotor design is such material within the chamber is constantly being displaced, corresponding to the cross-blending action of the Mill Operator cutting the batch on a two-roll mill. The compound is subjected to the shearing action of the rotors against the sides and therefore the action of the rolling bank between the rotors.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 55 and explain trainees the concept.

Say

- Tell participants about the Continuous Mixers - Compared to thermoplastics, continuous mixing of rubber compounds is a relatively new concept.

Elaborate

Explain – The machinery available ranges from simple single screw extruders to twin rotor, multistage machines. All of these mixing extruders place a common demand upon materials; the ingredients require to be available in a free-flowing form capable of being continuously weighed and metered to the mixer. The continuous mixer receives the compound ingredients and disperses them to the extent required to develop target physical properties. The needed extent of mixing can be directly related to the ease or difficulty experienced with the same compound in batch mixing. Ingredients like powders and liquids generally involve no undue problems in accurate continuous metering. The polymer, on the other hand, is often supplied in bales, needing grinding or pelletising to offer a form appropriate for continuous feeding. Recent de mand has caused some polymer producers to provide a range of elastomers in pellets or powder form, thereby improving the option of continuous mixing. The advent of powdered rubber could revolutionize mixing. The advantage is that most or all of the distribution could be accomplished by utilizing low power high intensity blenders. The resultant blend could then be fed to a simple relatively low horsepower mixer to masticate the compound and render it useful for fabrication. Vulcanisate properties often appear to depend upon a specific level of work input during mixing. In general, it is probably not relevant whether this work is offered by a sequence of many machines or by a single mixer although the properties of all polymeric compositions are path-dependent to some degree.
Trainer's Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 56 and explain trainees the concept.

Say

• Tell participants now they will learn about the development of the Banbury Mixer. The Banbury internal mixer was introduced to the rubber industry in 1917; the first mixers were supplied to Goodyear for mixing tyre compounds. For several years these mixers bore numerical designations for varied sizes. These numbers approximated the quantity of 22" X 60" in mills that a specific Banbury mixer could replace. Soon after the first internal mixers were introduced, increases in speed, power and ram pressure made this relationship no longer meaningful.

Elaborate

• Tell them - The earliest mixers had the same basic fundamentals of operation as those which are in service today. A ram is necessary to push raw materials into the mixing chamber, two counter rotating rotors perform the mixing action, and a door at the bottom discharges the completed batch to a secondary piece of machinery. Improvements continued to increase the value of the design for mixing applications, despite changes in materials and in expectations.

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 58 and explain trainees the concept.

Say

• Tell participants about the Operating Variables - The major variables in mixer operation are ram pressure, charging procedure, rotor speed, and batch size and coolant temperature. With a properly designed and well-maintained mixer, some selection of these variables will optimize the mixing of almost every rubber compound yet devised.

• Also tell participants about the Ram Pressure. The major purpose for application of pressure to the ram is to drive the raw materials into the mixing chamber and to prevent their upward exit during mixing. Increasing ram pressure beyond this point is often found in practice, from a folkloric belief that it will speed the mixing action or otherwise improve it. In fact, it usually has the opposite effect. Too high a pressure can impede rotor action needed for extensive mixing.

Elaborate

• Tell them - Somewhat less popular is the double, gable V-bottom which facilitates addition of powder or liquid ingredients over the ram while it is in the down or mixing position. This procedure is not suggested as it enhances wear and maximizes hang-up of the compound from one batch to the next. It is in exactly the same category as dumping the batch with the ram in the down position. Nevertheless, both procedures retain popularity with those more interested in saving a few seconds of mix time than in machine life or batch to batch contamination. The flat-bottomed ram may still be found in older machines.
Because of the variation in air cylinder diameters, ram pressure must not be obtained from a pressure gauge on the supply line, but measured directly on the batch. Such data can then be transferred from one mixer to another. High ram pressure is helpful in charging the mixing chamber, but a lower pressure is more desirable during the actual mixing. This has led to the development of multiple-ram pressure control systems. Two or three zones are pre-set with individual regulators to specific pressure levels. This may be automated or controlled by the mixer Mill Operator. It can include provision for relief of ram pressure if certain limits on power draw are exceeded, or even if the change in power draw indicates a likelihood that such limits may be reached. This is particularly helpful in moderating power surges with upside-down and sandwich mixes. It also offers the means for staying below certain power plateaus that, in some locations, strongly affect plant utility costs.

Tell participants about the Rotor Speed. Nearly all new Banbury mixers are now equipped with variable-speed rotors but they are seldom used to vary the rotor speed during the mix. Instead the optimum rotor speed for a particular batch is determined. Output power draw and temperature all rise sharply with increasing rotor speed.

Automated control systems have been developed to introduce minor variations in rotor speed during the batch to achieve a specific programmed time temperature relationship to compensate for batch to batch variation in raw materials.
Trainer's Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 62 and explain trainees the concept.

Say

• Now tell participants about the Unit operations in Mixing. Mixing is customarily divided into the operations of wetting (or incorporation); distribution of ingredients to a more or less visually homogeneous state; dispersion, the reduction of agglomerates into smaller particles; reduction of compound viscosity; plus any chemical reactions or heat interactions that may result from mixing.

• Also tell the participants about the steps involved in mixing process.

Elaborate

Steps in the Mixing Process

• STEP 1: Wetting of the ingredients
• STEP 2: Distribution of ingredients
• STEP 3: Dispersion of agglomerates Reduction of viscosity
• STEP 4: Reactions and interactions.

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 63 and explain trainees the concept.

Say

• Tell the participants now they will learn about the factors affecting the distribution. Wetting of ingredients is also greatly assisted by pressure and temperature within certain limits and of course, by increased mixing time. The limiting factor on the substitution of rotor speed pressure and batch temperature for mixing time—the most expensive input—is the molecular weight (MW) of polymer. If the MW is low-enough for Newtonian viscosity to apply (e.g., low-MW PE), the intensity of mixing can be increase almost to the onset of cavitation without inducing substantial degradation, as in the high speed mixing of plastic colour concentrates.

• Discuss with the participants about the Single – Pass Versus Multiple – Pass Mixing. Single-pass mixing predominates in the United States while two-pass mixing is much more common in Western Europe.
Elaborate

- Explain - There are several reasons for using more than a single-pass (Table 8). If substantial dispersive work is needed, temperatures may well exceed the safe limits at which curatives can be added. Alternatively, further processing may require a cure system too active to be added to the first-pass, even if intense dispersion is not required. And there are numerous cases where unaccelerated compound is preferred, for reasons of shipment of storage or to facilitate screening out of discrete impurities in critical applications (roll covers, wire Insulations, printing blankets, etc.). Furthermore, it may be desired to use one master batch with several cure systems or to blend several to achieve a final compound. The products of such operations may provide a better balance of properties than simply using a lower viscosity grade of the same polymer (but probably not as often as thought. this should be checked by relevant experiments).

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 65 and explain trainees the concept.

Say

- Tell the participants about the Quality Control and the Mixing of Raw Material. Some of the factors that repeatedly enter into the mixing of rubber compounds are relatively straight forward – the raw material used must be consistent, the same mix procedure must be followed, with the same heat and shear history throughout the process, contamination must be avoided. Other factors are less obvious, but nevertheless important –the compound should be formulated so as to minimise the chances of errors in composition. The type of mixing procedure should be appropriate to the formulation of the ingredients and to minimise the dependency of compound properties on small process variations.

- Discuss about the Testing of Raw materials. Consistent mixed compound cannot be obtained without testing each lot of every raw material. The consequences of not testing inevitably prove to be more expensive. Every raw material should be examined visually. This will eliminate most cases of contamination (except for inadvertent contamination caused later on).

Elaborate

- Explain the participants about the Elastomers as Raw Materials. Incoming polymers should have their certification carefully checked for values of ash and volatiles. Unusually high values should be questioned. High ash should not reflect incursions of dirt or grit. High levels of volatiles may correlate with a moisture content great enough to make filler incorporation difficult. If in doubt, sample the polymer and run a test batch in the laboratory under close observation.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 67 and explain trainees the concept.

Say

- Now tell the participants about the Mixer Maintenance and Lubrication.
**Elaborate**

- Tell the participants about the Mixer Maintenance and Lubrication.
  - Each time the mixer is started
  - Once per shift
  - Once per day
  - Once per week
  - Once per month
  - Every six months

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 67 and explain trainees the concept.

**Activity**

- Divide the class into three equal groups. Give each group one of these topics; a. Internal Batch Mixer, b. Continuous Mixer, c. Development of the Bunbury Mixer.

- Tell the participants they have to explain their topics. Also tell them to talk about the advantages and disadvantages of mixer. Tell them they would be given a time of 30 minute for preparation. The time for presentation for each group should not exceed 30 minutes per group.

- Once the presentations are complete appreciate the efforts made by the group and summarize the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain about the mixers</td>
<td>3 Hours</td>
<td>Charts</td>
</tr>
</tbody>
</table>
4. Undertake Post – Mixing Mill Activities

Unit 4.1 – Mix Raw Material to Prepare Rubber Compound
Key Learning Outcomes

At the end of this module, you will be able to:
1. Illustrate the tyre manufacturing process
2. Define milling
3. Dispose of the waste
4. Do the coding and marking
UNIT 4.1: Mix Raw Material to Prepare Rubber Compound

Unit Objectives

At the end of the unit, students will be able to:
1. Illustrate the tyre manufacturing process
2. Define milling
3. Dispose of the waste
4. Do the coding and marking

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
• Personal Protective Equipment
• Participant Manual
• Copies of handouts

Do

• Greet and Welcome the participants to the next unit of the program
• Before starting the unit ask them do they have any doubts pertaining to the previous unit.
• Acknowledge their responses and clear their doubts if any.
• Tell them they will learn about the Mix raw material. Also, they will get to know about the different mixers.

Say

• Tell participants about milling and tyre manufacturing process. The milling process shapes the rubber into flat, long strips by forcing it through two set rolls rotating in different directions at different with varied directions at varied Mill Operators are usually concerned with safety hazards associated with the open operation of the turning rolls.
Say

- Tell participants about the health and safety concerns. Occupational health and safety concerns in tyre manufacturing facilities have always been and continue to be of the utmost importance.

Elaborate

- Describe - Often the impact of serious workplace injuries overshadows the devastation associated with illnesses which may be linked to workplace exposures. Due to extended latency periods, some diseases do not become apparent until after the worker has left the job. Also, several diseases which may be associated with tyre plant occupational exposures are never diagnosed as being occupation-related. But diseases like cancer continue to be prevalent among rubber workers in tyre manufacturing facilities.
Trainer's Note: These are supporting content to the Participant Manual, please adhere to the participant manual, page no. 75 and explain trainees the concept.

Say 🎙️

• Tell participants about the Hazards and Precautions. Rubber processing hazards include exposure to hot surfaces, pressurized steam, solvents, processing aids, curing fumes and noise. Dusting agents include stearates, talc, mica and corn starch. Finishing adds a variety of hazards such as punching, cutting, grinding, printing ink solvents and alkaline or acidic surface treatment washes. Microwave, electron beam and ultrasonic vulcanization are being developed to generate heat within the rubber instead of transferring it inefficiently from outside to inside. The industry is working hard to eliminate or find safer substitutes for lead, dusting agents and volatile organic solvents and to improve compounds for better and safer properties in processing and use.

• Also tell them about the Material Disposal.

Elaborate 🌸

• Explain - All rubber products start as the ‘rubber compound’. It all start with a rubber polymer, which can be natural or one of the various synthetic polymers, fillers, plasticizers, anti-oxidants, process aids, activators, accelerators and curatives. Many chemical ingredients are classified as toxicant or dangerous and a few is also listed as carcinogens. During the handling and processing of these chemicals bring about both environmental and safety issues.

  » Hazardous Waste
  » Air Pollution
  » Ground and Water Pollution
  » Waste Rubber
  » Incineration of Scrap Rubber

Say 🎙️

• Now tell participants they will learn about the Coding and Batch Making Machine.
Elaborate

- Explain – There are varied types of coding systems, coding ink, batch coding ink, industrial coding ink, blister ink, hot ink roller, batch printing machine includes batch printer, code printer, Code printing machine, date code printer, Coding Rollers, blister pack cartridge, industrial inkjet printer, label printer, marking system, Plywood Marking Machines, self inking stamp, dry coding machine, Carton Coding Machines, Date Code Printer Machines, inking cartridge & consumable, pharma roller, coding ink machine for various coding systems.

- The marketing coding which are statutory information such as batch number, manufacturing and expiry date, maximum retail prices, etc. The range of coding inks are food grade and non-toxic and are exported in international markets as well. The range of coding inks offer excellent performance under various common applications like with adhesion and contrast on a wide range of rubber products.

Notes for Facilitation

- You could ask the students about their learnings from the sessions covered so far.
- Invite students to participate. List the experiences on the whiteboard.
- Give the students a brief overview of what all will be covered in the session.
5. Health and Safety

Unit 5.1 - First Aid and CPR
At the end of this module, you will be able to:
1. Identify different methods of first aid.
2. Perform first aid.
3. Understand CPR.
4. Perform CPR in case of emergency.
Unit 5.1: First Aid and CPR

Unit Objectives

At the end of the unit, students will be able to:
1. Identify different methods of first aid.
2. Perform first aid.
3. Understand CPR.
4. Perform CPR in case of emergency.

Notes for Facilitation

- You could ask the students about the expectations from the course.
- Invite students to participate. List the expectations on the whiteboard.
- Give the students a brief overview of what all will be covered in the program.

Say

- First aid is the assistance given to any person suffering a sudden illness or injury, with care provided to preserve life, prevent the condition from worsening, and/or promote recovery. First aid is generally performed by the layperson, with many people trained in providing basic levels of first aid, and others willing to do so from acquired knowledge.
- We will learn how to perform CPR and give First Aid Help.

Do

- Explain the importance of being aware of CPR and other First Aid methods

Demonstrate

- Show them the CPR process on a dummy
- Show them the contents of a First Aid Box
Activity

- Conduct a skill practice activity.
- Ask the students to assemble together.
- Explain the purpose and duration of the activity

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Practice CPR on a dummy</td>
<td>1 hour</td>
<td>Dummy</td>
</tr>
</tbody>
</table>
6. Housekeeping

Unit 6.1 – Introduction to housekeeping
Unit 6.2 – Pre-housekeeping activities
Unit 6.3 – Housekeeping activities
Unit 6.4 – Post housekeeping activities
At the end of this module, you will be able to:
1. Familiarise with housekeeping and its importance in Compression Moulding
2. Do Preparation for housekeeping activities
3. Carry out housekeeping activities
4. Do Post housekeeping activities
5. Perform pre-housekeeping activities
6. Identify the reasons and principles of doing cleaning
7. Clean material, cleaning equipment and its maintenance
8. Do inspection and how to select of cleaning method
9. Plan housekeeping activity
10. Identify signs of poor housekeeping
11. Improve housekeeping at your workplaces
12. Do recommended housekeeping practices
13. Follow the cleaning methods
14. Identify the elements of effective housekeeping program
15. Deal with accidental damage
16. Deal with accidental damage, if any, caused while carrying out the work
17. Report the appropriate person any difficulties in carrying out your work
18. Identify and report to the appropriate person any additional cleaning required that is outside one's responsibility or skill
19. Perform Post housekeeping activities
20. Do equipment and supplies maintenance
UNIT 6.1: Introduction to Housekeeping

Unit Objectives

At the end of the unit, students will be able to:
1. Perform Housekeeping activities
2. Familiarise with the importance and purpose of Housekeeping
3. Identify the Benefits of Good Housekeeping
4. Recognize the concept of ‘5S’

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
- Personal Protective Equipment (PPE)
- Respiratory Protective Equipment (RPE)

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about introduction to housekeeping in this unit.

Say

- Tell them housekeeping refers to the activities carried out to keep the things in order at workplace. It includes keeping area clean and tidy. Housekeeping must ensure that no rubber compound, rubber uncured or cured product is lying on the floor. All usable rubber material should be on pallet/table properly identified and covered at the end of the shift.
- Now explain the importance of housekeeping with the participants as follows: Effective housekeeping can eliminate some workplace hazards and help get a job done safely and properly.
• Explain - Housekeeping is not just cleanliness. It includes keeping work areas neat and orderly, maintaining halls and floors free of slip and trip hazards; and removing of waste materials (e.g., paper, cardboard) and other fire hazards from work areas. Housekeeping ensures all usable rubber compounds are free of any contaminations.

**Elaborate**

• Explain the purpose of the workplace housekeeping. Poor housekeeping can be a cause of accidents, such as:
  » Tripping over loose objects on floors, stairs and platforms
  » Being hit by falling objects
  » Slipping on greasy, wet or dirty surfaces
  » Striking against projecting, poorly stacked items or misplaced material
  » Can be the cause of production delays and defective cured product
• Discuss with the participants that in order to avoid these hazards, a workplace must "maintain" order throughout a workday.

**Demonstrate**

• Demonstrate the benefits of good housekeeping practices - Effective housekeeping results in:
  » Reduced handling to ease the flow of materials
  » Fewer tripping and slipping accidents in clutter-free and spill-free work areas
  » Decreased fire hazards
  » Lower worker exposures to hazardous substances (e.g. dusts, vapours)
  » Better control of tools and materials, including inventory and supplies
  » More efficient equipment cleanup and maintenance
  » Better hygienic conditions leading to improved health
  » More effective use of space
  » Reduced property damage by improving preventive maintenance
  » Less janitorial work
  » Improved morale
  » Improved productivity (tools and materials will be easy to find)
Elaborate

• Explain the 5S concept to the participants. Tell them – '5S' is a system of steps and procedures that can be used by individuals and teams to arrange work areas in the best manner to optimize performance, comfort, safety, and cleanliness.

• Explain the 5S in detail with the help of the table.

<table>
<thead>
<tr>
<th>Japanese 'S'</th>
<th>Translation</th>
<th>English 'S'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seiri</td>
<td>Organization</td>
<td>Sorting</td>
</tr>
<tr>
<td>Seiton</td>
<td>Neatness</td>
<td>Simplifying Access</td>
</tr>
<tr>
<td>Seiso</td>
<td>Cleaning</td>
<td>Sweeping</td>
</tr>
<tr>
<td>Seitetsu</td>
<td>Standardization</td>
<td>Standardization</td>
</tr>
<tr>
<td>Shitsuke</td>
<td>Discipline</td>
<td>Self-Discipline</td>
</tr>
</tbody>
</table>

*Fig. 6.1.1: 5S acronym of five Japanese words*

Notes for Facilitation

• Summarise the main points of the unit.

• Ask participants if they have any doubts. Encourage them to ask questions.

• Answer their queries satisfactorily.

Activity

• Tell participants they have to go and visit a rubber factory and observe the housekeeping practices being performed in the factory.

• Tell them they need to observe these details very minutely and they need to prepare and present a report on the same.

• Give ten minutes to every participant for their report presentation.

• Once presentations are complete appreciate the efforts made by the group and summarise the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory Visit and Report Presentation on Housekeeping practices in a rubber factory</td>
<td>8 Hours</td>
<td>Charts</td>
</tr>
</tbody>
</table>
UNIT 6.2: Pre-housekeeping Activities

Unit Objectives

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

1. Perform pre-housekeeping activities
2. Identify the reasons and principles of doing cleaning
3. Clean material, cleaning equipment and its maintenance
4. Do inspection and how to select of cleaning method
5. Plan housekeeping activity
6. Identify signs of poor housekeeping
7. Improve housekeeping at your workplaces
8. Do recommended housekeeping practices

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
- Personal Protective Equipment (PPE)
- Respiratory Protective Equipment (RPE)
- Cleaning Material
- Cleaning Equipment

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about pre housekeeping activities in this unit.
Say

- Tell them about pre housekeeping activities include accessing area for housekeeping, selection of cleaning method and cleaning equipment and planning for housekeeping.
- Discuss the reasons for doing cleaning in detail with the participants.
- Explain the basic principles of cleaning that they need to follow in any type of cleaning they need to perform irrespective of the surface or the soil as:
  » All soil should be removed
  » Soil should be removed without harming the surface being cleaned or the surrounding surfaces
  » The surface should be restored to its original state after the cleaning process
  » The simplest method should be tried first using the mildest cleaning agent

Elaborate

- Describe cleaning material and equipment to them with examples in detail as:
  » Cleaning agents are substances, usually liquids, powders, sprays and granules that are used to remove dirt, including dust, stains, bad smells and clutter on surfaces.
  » Acidic washing agents are mainly used for removal of inorganic deposits like scaling to unblock clogged pipes by dissolving greases, proteins and even carbohydrate-containing.
  » Alkaline washing agents contain strong bases like sodium hydroxide and/or potassium hydroxide. The alkali also dissolves grease, oils, fats, and protein-based deposits.
  » Neutral washing agents are pH-neutral and based on non-ionic surfactants that disperse different types of dirt.
  » Degreaser Cleaning agents specially made for removal of grease are called degreasers.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 102 and explain trainees’ the concept.

Demonstrate

- Show all the manual cleaning equipment to the participants mentioned in the table.

<table>
<thead>
<tr>
<th>Cleaning Equipment</th>
<th>Types</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brushes</td>
<td>Hard Brushes</td>
<td>Hard brushes have bristles that are fairly stiff and well-spaced out. They are most suitable for removal of heavy soil and litter from carpets and for cleaning rough surfaces. – Example: deck scrubber for floors</td>
</tr>
<tr>
<td></td>
<td>Soft Brushes</td>
<td>Soft brushes have bristles that are fairly flexible and set close together. They help to remove loose soil and litter on hard and smooth surfaces. Such brushes may be designed to dust carpets and furniture, especially those that are made of cane and wicker e.g. – upholstery brush</td>
</tr>
</tbody>
</table>
**Facilitator Guide**

<table>
<thead>
<tr>
<th>Broom</th>
<th>Soft bristled broom</th>
<th>These brooms are made of corn-fiber, grass and are used for smooth floors.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard broom</td>
<td>These brooms are made of coconut fiber and are used for coarse surface, especially outdoors.</td>
<td></td>
</tr>
<tr>
<td>Wall broom</td>
<td>These are ceiling brooms called Turk's head. These brooms are used to remove cobwebs or dust from ceiling, and high edges.</td>
<td></td>
</tr>
<tr>
<td>Box sweeper</td>
<td>These are also called as carpet sweepers and are used for sweeping up the dust from smooth floor coverings such as rugs and carpets. A box sweeper consists of a friction brush that revolves when the equipment is pushed manually over the carpet or floor. The dust gets collected into the built in dust pans.</td>
<td></td>
</tr>
</tbody>
</table>

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 104 and explain trainees’ the concept.

**Do**

- Ask participants if they have understood the concepts discussed with them.
- Ask them to come up with their doubts, if they have any pertaining to previous concepts.
- Clear their doubts and answer their queries satisfactorily.
- Revise the concepts if you feel it is necessary.

**Say**

- Tell them now they learn about planning housekeeping activity.
- Explain the importance of planning to them. A good housekeeping program plans and manages the orderly storage and movement of materials from point of entry to exit. It includes a material flow plan to ensure minimal handling. The plan also ensures that work areas are not used as storage areas by having workers move materials to and from work areas as needed.
- Also discuss with them that worker training is an essential part of any good housekeeping program. Workers need to know how to work safely with the products they use. They also need to know how to protect other workers such as by posting signs (e.g., "Wet - Slippery Floor") and reporting any unusual conditions.
- Illustrate that Housekeeping order is "maintained" not "achieved." Cleaning and organization must be done regularly, not just at the end of the shift. Integrating housekeeping into jobs can help ensure this is done.
Elaborate

- Share with them that pre housekeeping activity checklist is an important tool to ensure that cleaning is happening as per schedule or not.
- Discuss the sample checklist mentioned in the participant manual with them in detail.

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 105 and explain trainees' the concept.

Say

- Tell them about the signs of the poor housekeeping activity.
- Also discuss the impact of the same with the participants with relevant examples.
- Share some tips with them to improve housekeeping in their workplace. Tell them Good housekeeping requires effort and teamwork, but it's worth it.
- Also share some recommended housekeeping practices with the participants.

Notes for Facilitation

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

Activity

- Divide the class into four equal groups.
- Tell them they need to demonstrate cleaning equipments discussed in the unit.
- Tell them they will get 45 minutes for preparation and 15 minutes for demonstration.
- Once presentations are complete appreciate the efforts made by the group and summarise the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstration of Cleaning Equipments</td>
<td>3 Hours</td>
<td>• Charts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Moulding Machine</td>
</tr>
</tbody>
</table>
UNIT 6.3: Housekeeping Activities

Unit Objectives

At the end of the unit, students will be able to:
1. Follow the cleaning methods
2. Identify the elements of effective housekeeping program
3. Deal with accidental damage
4. Deal with accidental damage, if any, caused while carrying out the work
5. Report the appropriate person any difficulties in carrying out your work
6. Identify and report to the appropriate person any additional cleaning required that is outside one’s responsibility or skill

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
- Cleaning Material
- Cleaning Equipment
- Personal Protective Equipment (PPE)
- Respiratory Protective Equipment (RPE)

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about housekeeping activities in this unit.
Say

- Tell participants about different cleaning methods which includes:
  - Manual sweeping and mopping
  - Machine assisted sweeping and mopping
  - Cleaning the carbon deposits on electrical points with a piece of cloth
  - Mopping the area around the coolant water tank
  - Removing the waste around the machine by sweeping and collecting in the container
  - Cleaning the oil, grease and the other materials fallen around the machine with a cloth
  - Cleaning the control and display part of the machine

Demonstrate

- Discuss with them the elements of effective housekeeping program and practically show all these processes in detail to the participants.
- Tell them first thing in the list is dust and dirt removal. Vacuum cleaners are suitable for removing light dust and dirt. Special-purpose vacuums are useful for removing hazardous substances. Compressed air should not be used for removing dust, dirt or chips from equipment or work surfaces.
- Demonstrate this activity practically to them.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 110 and explain trainees’ the concept.

Say

- Tell participants it very important to deal with an accidental damage. In case of an accidental damage the following should be kept into consideration:
  - It is necessary to ensure that no damage occurs to the equipment during housekeeping.
  - Electrical supply to the machines should be total cut off whenever machine cleaning is involved.
  - In case any damage occurs, it should be reported to the supervisor immediately. In case it is proved that it is absolutely due to the negligence of the housekeeper, appropriate action will be taken by the HR as per the estimate of damage from the supervisor and finance.
  - In case it is proved that it is because of the defective equipment, action will be taken against the concerned and repairs will be carried out by the maintenance department to avoid reoccurrence.
  - Facilities department and safety personnel in case of injury/accident will also study the reason for damage and implement changes in the cleaning procedure.
  - The trainer will explain to you the SOP followed in your company.
Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.

Activity

- Divide the class into four equal groups.
- Tell them they need to demonstrate elements of housekeeping activities discussed in the unit.
- Tell them they will get 45 minutes for preparation and 15 minutes for demonstration.
- Once presentations are complete appreciate the efforts made by the group and summarise the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstration of housekeeping activities</td>
<td>3 Hours</td>
<td>Cleaning Equipment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cleaning Material</td>
</tr>
</tbody>
</table>
UNIT 6.4: Post Housekeeping Activities

Unit Objectives
At the end of the unit, students will be able to:
1. Perform Post housekeeping activities
2. Do equipment and supplies maintenance

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
- Cleaning Material
- Cleaning Equipment
- Personal Protective Equipment (PPE)
- Respiratory Protective Equipment (RPE)

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about post housekeeping activities in this unit.

Say
- Tell them about post housekeeping activities include post housekeeping inspection.
Elaborate

- Discuss with the participants the important points to consider while performing post housekeeping inspection:
  » The floor is dry
  » Areas surrounding the compression moulding machine are free from waste
  » No oil stains and grease stains on the floor
  » Display and controls on the compression moulding machine are free from dust and muck.
  » Check whether the cleaning equipment is clean and all the cleaning materials and tools are returned to their proper places.
  » All usable compound for moulding is well covered, placed on pallet/skid/table and in ready to use condition.

Say

- Explain to them that equipment and supplies maintenance is an important part of the post housekeeping activities. Replenishment of the consumables used for cleaning is very critical. In case of breakdown it is necessary to inform the breakdown of the equipment to the maintenance department regularly.

Elaborate

- Share equipment care tips with the participants as follows:
  » All staff should know the correct methods of careful cleaning and storage.
  » The correct equipment should be selected for each task and used correctly.
  » All equipments should be cleaned after use.
  » Manufacturer's instructions for operation and maintenance should be followed.
  » Equipment should be stored correctly.
  » All equipments must be inspected before and after use and all defects should be reported.
  » Follow equipment manual /sop on machine cleaning to protect from dust/carbon particles.

Say

- Now tell participants about the safety measures to taken post housekeeping activity regarding electrical appliances, wirings and fittings.
- Share some tips with the participants regarding post housekeeping activities which will make the work of compression moulding operator more effective.
Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.

Activity

- Divide the class into four equal groups.
- Tell participants they need to create a role play on the post housekeeping activities.
- Tell them they need to act the same scenario as they working in a factory.
- They will get 15 minutes time to prepare for the same and each group will be given 20 minutes to present their activity.
- Once presentations are complete appreciate the efforts made by the group and summarise the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role Play – Post Housekeeping Activity</td>
<td>3 Hours</td>
<td>• Charts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cleaning Equipment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cleaning Material</td>
</tr>
</tbody>
</table>
7. Reporting and Documentation

Unit 7.1 – Reporting and Documentation
Key Learning Outcomes

At the end of this module, you will be able to:
1. Report data/problems/incidents as applicable by following company reporting procedures
2. Do documentation within stipulated time according to company procedure
3. Respond to requests for information in an appropriate manner whilst following organizational procedures
UNIT 7.1: Reporting and Documentation

Unit Objectives

At the end of the unit, students will be able to:
1. Report data/problems/incidents as applicable by following company reporting procedures
2. Do documentation within stipulated time according to company procedure
3. Respond to requests for information in an appropriate manner whilst following organizational procedures

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
- Production status report format
- Maintenance request format
- Daily production report format
- Incident report format
- Request for information

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about reporting and documentation in this unit.

Say

- Tell them - Timely reporting is extremely important to keep a track of production and other activities carried out at the different stages of production. It ensures the desired rate of production and initiation of the corrective actions at the earliest. Urgent reports are to be first conveyed orally to the immediate supervisor/ the person to whom who is identified for reporting.
Elaborate

• Discuss a daily production plan in detail with the participants. Tell them if there are any concerns these should be immediately reported to the supervisor.

<table>
<thead>
<tr>
<th>Product Code/Part NO</th>
<th>Batch Code</th>
<th>No. of Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>xxxx-100 MI-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Type of Compound</td>
<td>Code</td>
</tr>
<tr>
<td>1</td>
<td>Butyl Rubber</td>
<td>IIR</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>xxxx-101 MI-002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Type of Compound</td>
<td>Code</td>
</tr>
<tr>
<td>1</td>
<td>Chloroprene Rubber</td>
<td>CR</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fig.6.1.1: Production Plan for the day

Demonstrate

• Tell participants there are defined formats for reports and documentation which they need to use while preparing a report. Share the formats mentioned in the participant’s manual and discuss these in detail with the class as:
  » Production status format
  » Maintenance request form
  » Daily production report
  » Incident report
  » Request for information format

• Also share these formats with all the participants and make sure every participant should fill these formats completely.

• Check and see if they require any assistance in completing these. If required revise the main points of the concept shared with them.

Say

• Tell participants about the importance of record keeping.
• Explain - all the documents similar to the above are to be filed immediately in the file or stored in the PC. All
the documents similar to the above are to be filed immediately in the file or stored in the PC. The files can be maintained separately for the following:

» Production
» Safety
» Maintenance
» Quality
» House Keeping
» Administration

**Elaborate**

- Tell participants that records are extremely important for the profitability and reputation of the company. Some other reasons for the significance are mentioned under:
  » For procurement of quality materials by avoiding the sources which supplied the low quality ingredients.
  » For rectification of the machines and accessories which when are in operation, the defects have occurred.
  » For retraining the operators who were operating the machine when the defects occurred.
  » To change the SOP to avoid re-occurrence of the same defects.
  » Strategize the sales of the final product based on the pace of production.
  » To plan for adaptation of new processes and plan the equipment.

**Say**

- Share some tips for the effective reporting and documentation.

**Notes for Facilitation**

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.
Activity

- Divide participants into five equal groups
- Allocate one format to each group as Production status report format, Maintenance request format, Daily production report format, Incident report format, Request for information
- Tell them they need fill the specific format assigned to them. They will be given 20 minutes for preparation.
- Give 20 minutes to every group for their report presentation.
- Once presentations are complete appreciate the efforts made by the group and summarise the highlights of the activity.
- Also highlight the shortcoming or any points they missed during their presentation.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
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<td>Filling and presenting reporting formats</td>
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<td>• Production status report format</td>
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<td>• Incident report format</td>
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<td>• Request for information</td>
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<td>• Participant Manual</td>
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8. Quality

Unit 8.1 – To Carry out Quality Check
Key Learning Outcomes

At the end of this module, you will be able to:
1. Identify activities and standards set by the company involved in Quality check
2. Recognise the quality methodologies and standard set by company.
3. Analyze the need of quality checks and determines the appropriate method and procedure to meet the standards
UNIT 8.1: To Carry out Quality Check

Unit Objectives

At the end of the unit, students will be able to:
1. Identify activities and standards set by the company involved in Quality check
2. Recognise the quality methodologies and standard set by company.
3. Analyze the need of quality checks and determines the appropriate method and procedure to meet the standards

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
- Vernier caliper,
- Micrometer
- Plug gauge
- Profile projector
- Magnification glass
- Final inspection report format
- Dimension report format

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn to carry out quality checks in this unit.
Say

- Tell them quality checks are performed in a setup through inspections. The instruments used to perform inspection are: Vernier calliper, micrometer, plug gauge, profile projector, magnification glass etc.
- Besides instrumental checkups inspection can also performed by non instrument checks as running finger to check for defect check.
- Discuss the significance of quality control procedures with the participants.
- Also tell them in case of non conformance to quality standards can result in product failure, product recall and even loss of market share.
- In case of non conformities a detailed analysis is made. On the basis of root causes or "5WHY" analysis, the action needed to prevent the recurrence of non-conformities should be arrived at. Corrective action should be reviewed periodically (monthly/quarterly) to be sure about the effectiveness of the corrective action.

Demonstrate

- Discuss the reporting of the quality inspection. Quality inspection data should be discussed with the section supervisor and QC in charge as soon as possible so that appropriate actions only are initiated within reasonable time limits. All action taken should be recorded for follow up later on.
- Discuss the quality reporting formats with the participants in detail as: final inspection report, dimension report format.

Say

- Share tips with the participant how to ensure effective quality check on moulded part.

Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.
**Activity**

- Divide participants into five equal groups.
- Tell them that they need to perform a role play demonstrating quality checks in mould rubber. Give 20 minutes to prepare the role play and 20 minutes per group would be given for presenting role play.
- Once presentations are complete appreciate the efforts made by the group and summarise the highlights of the activity.
- Also highlight the shortcoming or any points they missed during their presentation.

<table>
<thead>
<tr>
<th>Skill Practice</th>
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<td>• Dimension report format</td>
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9. Problem Identification and Escalation

Unit 9.1 – Problem Identification, Necessary Action and Escalation
Key Learning Outcomes

At the end of this module, you will be able to:
1. Discuss various problems and issues related to raw materials, rubber products, equipment, and any other (such as administration, HR etc)
2. Analyze problem related to raw material, procedures, moulding process, rubber compounds, rubber products, machines etc. to identify the appropriate solution
3. Follow escalation matrix whenever necessary
UNIT 9.1: Problem Identification, Necessary Action and Escalation

Unit Objectives

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

1. Discuss various problems and issues related to raw materials, rubber products, equipment, and any other (such as administration, HR etc)
2. Analyze problem related to raw material, procedures, moulding process, rubber compounds, rubber products, machines etc. to identify the appropriate solution
3. Follow escalation matrix whenever necessary

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about problem identification, necessary action and escalation in this unit.

Say

- Tell them - The operator is the center of all the activities in compression moulding. As such pro-active behavior from the operator to identify the problems related to the materials, products, and the equipment, is going to benefit the company.
Elaborate

- The operator should look out for the following with reference to materials:
  - Signs of contamination
  - Condition of the containers in which the materials are supplied for loading
  - Condition of weighing machines in the weighing room
  - Condition of storing arrangement for the materials in stores
  - Condition of materials on receipt
  - Proof for random checking of the raw materials
  - Change of suppliers
  - Moisture condensing on the raw materials
  - Whether the reports indicate that the specifications are met at the maximum and minimum limits
  - Shelf life of the raw materials
  - Good housekeeping of the materials around the machine and in the storage areas

- Explain that- Problems related to raw materials, products and equipment need continuous identification and solution for profitable operation of the compression moulding machine with minimum rejections and rework.

Say

- Tell them once problem is identified the next step is to find solution to the existing problem.

Elaborate

- Describe the actions to be taken for common problem during moulding areas under:
  - Blistering/ heavy section: Whenever you encounter a blistering/ heavy section ensure that you increase the cure, and slow close.
  - Porosity: When you notice porosity immediately increase the pressure, reduce the temperature and increase stop duration.
  - Mould sticking: When you come across mould sticking, it is very crucial to raise the mould temperature and increase stop duration.
  - War page: Upon noticing war page: necessary action to be taken right away is to ensure that uniform mould temperature is maintained.
  - Burned marks: To overcome burned marks, reduce the stop and the mould temperature.
  - Dull surface: Dull surfaces can be taken care of by adjusting the mould temperature and extending stop.
» Heavy flash: When heavy flash is noticed: immediately check the material flow.
» Dimpled surface: Necessary action to be taken to overcome dimpled surfaces include: slower closing, lowering temperature and increasing the charge.
» Pitted surface: Problems with pitted surfaces can be solved by simply using stiffer material and increasing the stop duration.
» Contamination: Contamination is the most common problem encountered
• Explain that at his level operator may consider applicable corrections and formulate corrective action with respect to the identified problem during the compression moulding. It is important to consider following for corrective action:
  » Report/documentation problem and corrective action in an appropriate manner
  » Monitor corrective action
  » Evaluate implementation of corrective action taken to determine if the problem has been resolved

Say

• Tell participants it is very important to inform your superior authority, Quality personnel and production personnel as soon as the problem is identified.
• Share some tips with the participants regarding problem identification, necessary action and escalation.

Notes for Facilitation

• Summarise the main points of the unit.
• Ask participants if they have any doubts. Encourage them to ask questions.
• Answer their queries satisfactorily.
• Ask them to answer the questions at the end of unit given in the participant’s manual.
• Ensure that every participant answer all questions.
Facilitator Guide

Activity

- Divide participants into five equal groups.
- Tell them that they need to perform a role play reporting problem to a supervisor and solving the problem. Give 20 minutes to prepare the role play and 20 minutes per group would be given for presenting role play.
- Once presentations are complete appreciate the efforts made by the group and summarise the highlights of the activity.
- Also highlight the shortcoming or any points they missed during their presentation.

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10. Soft Skills And Communication Skills

Unit 10.1 - Introduction to the Soft Skills
Unit 10.2 - Effective Communication
Unit 10.3 - Grooming and Hygiene
Unit 10.4 - Interpersonal Skill Development
Unit 10.5 - Social Interaction
Unit 10.6 - Group Interaction
Unit 10.7 - Time Management
Unit 10.8 - Resume Preparation
Unit 10.9 - Interview Preparation
Key Learning Outcomes

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

1. Familiarise with the art of Effective Communication.
2. Able to handle effective Communication with co-workers and their Family.
3. Able to handle effective Communication with Peers/colleagues using medical terminology in communication.
4. Maintain health and hygiene
5. Develop interpersonal skills
6. Develop effective social interaction
7. Manage time effectively
8. Prepare for interviews
UNIT 10.1: Introduction to the Soft Skills

Unit Objectives

At the end of the unit, students will be able to:
1. Describe the basic meaning of Soft Skills, their components and their benefits.
2. Familiarise with work readiness and its significance.

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

10.1.1 What is a Soft Skill?

Say

- Employees are a crucial part of an organization, understanding them personally can be helpful in various aspects. There is much more to their identity than merely their skills. This brings into light, the concept of ‘soft skills’.
- Soft skills are personal attributes that describes an individual’s ability to interact with others. It includes the cluster of personality traits, social graces, communication language, personal habits, friendliness and optimism that characterize relationship with other people.
- Soft skills have more to do with who we are than what we know.
- Soft Skills complement hard skills which are occupational requirements of a job and many other activities.
- According to a survey, the long term success in job is 75 % due to soft skills and 25 % due to technical knowhow.

Activity

- Ask the students to form a circle.
- Starting from a one person, ask each of them to tell something about themselves. This should necessarily include their strengths and weaknesses.
- This will give them a better chance of knowing each other.
Explain

• Discuss what helps in keeping you happy in your school - academic knowledge or company of friends.

10.1.2 Components of Soft Skills

Say

Soft skills essentially relate to the personality of a person. There are certain components that relate a person to the rest of the group and on which communication depends largely. This largely ensures how a person gets along with other people:

• Adaptability: It is about how quickly and efficiently a person is able to blend in and get productive in an altered environment.

• Emotional Strength: An emotionally strong person succeeds in directing his moods and emotions such as anger, frustration, and excitement.

• Leadership Quality: How one manages conflict in personal and professional situations and convinces people reflects upon his leadership quality.

• Team Playing Ability: It is the ability to manage different types of people and make them work harmoniously with each other.

• Decision Making: This reflects upon how one manages his time and other resources in an efficient and productive manner.

• Interpersonal Communication: This is an individual’s ability to communicate effectively with others and create a positive image of him.

• Negotiation Skills: This is how one negotiates with others and reduces the level of stress in work, professional, and personal environment.

Activity

• Ask students to sit in a circle.

• Blindfold a student and give him a packet of biscuit.

• Ask the other students to come one by one and ask for the packet and make an attempt to convince him as to why he should be given the packet.

• The blindfolded person has the authority to refuse to give to the people who fail to convince him and give it only to the person who succeeds in convincing him.

• At the end of the game, we would be able to have an insight as to which person possesses the best communication skills, negotiation skills, etc.
Explain

- On the basis of the activity, discuss what corrective steps could the other people take to improve their communication/negotiation skills.

10.1.3 Benefits of Soft Skills

Say

A person who interacts well with others gets added advantages other than personal satisfaction. Also, personal traits like decision making, leadership ability are not only related to the concerned person himself but they affect others to whom the person interacts. Some of these benefits include:

- Increased credibility with customers
- Increased customer satisfaction
- More productive employees
- Recognition from the industry, employer and peers.

In short, they aid in the personal growth of a person.

Activity

- Ask the students to sit separately.
- Ask them to write whether they buy grocery products from one shop daily or prefer to go to any shop selling such products.
- If they go to one shop, ask them to give reason for their loyalty. Is it the good behavior of the shopkeeper that keeps them loyal?
- Also, ask the people who do not have any such preference, reasons for this behaviour.

10.1.4 Work Readiness

Say

How do employees differ from each other? What makes an inexperienced person more successful than a previously working person? On being asked, the answer to this question could be right attitude. Merely performing a task is not the requirement. A person should do it with the right kind of attitude to get the best results. This can include:
• An enthusiastic attitude to the employer.
• A clear interest in the work being done.
• The ability to communicate appropriately in an adult working environment.
• The capacity to acknowledge customers and provide the assistance recommended by the employer.
• A commitment to maintaining their reliability and punctuality for the whole of the period spent in the workplace.

**Activity**

• Ask the students to form a group.
• Ask them about their interest: painting, dancing, etc. people might come up with different interests.
• Based on it, ask the entire group to do an activity say painting.
• Observation can show that people who like doing a particular task say painting are likely to show more zeal than others who do not have much interest in it.
• Also, such people are more likely to have an active participation throughout the activity and enjoy it rather than taking it as a burden.

**Explain**

• Based on the results, discuss why some student’s/ groups were able to get better results. This could be due to difference of interests, enthusiasm, confidence, etc.
UNIT 10.2: Effective Communication

Unit Objectives

At the end of the unit, students will be able to:
1. Do public speaking.
2. Describe his/her likes and dislikes for five minutes in the classroom.
3. Basic etiquette during a conversation with another person, overcome shyness etc.

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

Say

- Communication is a tool that connects us with other human beings. An effective communication not only helps in developing a sense of belonging but also facilitates better working, improves relationships, reduces stress.

Say

- Communication is the process of exchange of words, ideas, feelings. It is the meaningful exchange of information between two or more participants.
- Communication requires a sender, a message, a medium and a recipient.
- Communication process is complete only when a receiver understands the sender message.

The Communication Process

![Communication Process Diagram](image)

*Fig.10.2.1: Communication Process*
Elements Of Communication

Communication seems effortless but it essentially involves different stages in which information gets passed from the person who wants to share something with someone. These elements are as follows:

- **Message**: The speaker/communicator might want to share thoughts, feelings, information, etc. Message relates to the content that is intended to be communicated.

- **Encoding**: A message won’t be of much use and would not be called message in the first place if it stays in the mind of the speaker and is not intended to be communicated (except in intra-personal communication). For conveying a message, it has to be communicated using signs, symbols, words, etc.

- **Decoding**: Communication process would not be completed if the receiver doesn’t understand the message conveyed by the speaker/initiator in the intended way. He/she tries to understand the meaning of the message as expected by the speaker.

Understanding whether a message has been effectively conveyed and understood by the receiver can be done with the help of a feedback. It is a feedback that brings out the success or failure of a communication process.

Activity

- Call 2 students.
- Ask them to have a casual conversation.
- With respect to their conversation, explain who is the speaker, what is the message.
- Also explain encoding, decoding and feedback with respect to the conversation.

Explain

- Discuss the importance of tone of voice, gestures, etc. in a communication process.

Say

Communication is not merely restricted to exchange of ideas and information verbally. In fact, it extends far beyond that. Even a newspaper is a mode of communication. It can be categorized into three basic types:

- **Verbal Communication**: It involves communication of ideas verbally. It is the most common used means of communication in our day-to-day lives. Verbal communication has the advantage of immediate feedback, are best for conveying emotions and can involve storytelling and crucial conversations.

- **Written Communication**: They include letters, books, newspapers are printed messages. They are generally used for formal communication as in case of a notice in an institution. Also, these days mass communication mediums like newspapers are gaining popularity among the educated.

- **Non Verbal Communication**: Ever seen people widening their eyes or using their hands while trying to explain something? Their gestures too communicate a lot and aid them in conveying the meaning of the message or intensity. Generally, non-verbal communication is used alongside verbal communication.

According to a study only 7% of a receiver’s comprehension of a message is based on sender’s actual words, 38% is based on paralanguage (tone, pace and volume of speech) and 55% is based on nonverbal cues.
**Activity**

- Ask 2 students to explain the process of communication.
- Pay attention to the way they explain.
- Categorize the various types of communication used by them.

**Explain**

- Discuss the situations in which each of them is used.

**Say**

- Communication may not always be carried on without hurdles. There might be many hurdles that might prevent from reaching the message to the receiver effectively.
- The most common barrier known in communication is ‘noise’. It not only creates a sense of irritation but may affect the intensity of effect of the message.
- Apart from this, there are certain other barriers that affect communication/exchange of ideas between the sender and receiver. They are as shown in the figure:
- Some of the barriers can be overcome- using simple language, active listening can be of great help.

![Fig. 10.2.2: Communication](image-url)
**Activity**

- Organize students into groups of 2.
- Give one of the students, an article about a totally unknown topic.
- Give him 10 mins. Time to read it.
- Let him explain to the class by the end of the time, what is the topic all about and crucial details in it.
- Ask the students what they have understood.
- Discuss about problems in understanding (if any) faced by the rest of students.

**Explain**

- On the basis of the activity above, discuss the barriers in communication.
- Also, discuss how these barriers can be taken care of.

**Say**

By now, we know that communication is a two-way process. It is not merely about the way a speaker communicates an information but equally about how the receiver receives it. In verbal communication, most of the problems can be taken care of if the listener is listening actively.

- An active listening involves all the attention on the receiver/listener’s part to what the speaker is saying.
- It can not only help to deal with certain communication barriers but also help to avoid uneasy situations between the two and reduce chances of misunderstanding.

**Activity**

- Call 3 students.
- Give a student a written piece. Ask him to read it out loudly to the other 2 students.
- Provide one student with earphones to listen to music while listening to the information.
- Let the other person listen to it without any distraction.
- At the end of the reading, ask both the student to tell what has been read out.
- As a matter of fact we would find out that the person who has put all his attention in listening would yield better results in comparison to the other one.
Most of the people are not good listeners. Not listening carefully can land a person into various unfavourable situations. However, this habit can be improved. Some tips are as follows:

- Concentrate what the person is talking about and not on noise or other external distractions.
- Understand his emotions and you get it all right. Is the speaker angry, happy or plainly inquisitive?
- When the speaker is saying or telling something, don’t break the chain of his thoughts.
- Don’t avoid completing sentences of the speaker. Let them speak and speak only after they finish.

**Activity**

- Ask the students to sit forming a circle.
- A student to start saying counting, the next one should follow saying the consecutive number.
- At the gap of multiples of 5, the respective student is expected to clap instead of saying the number.
- The student who fails to do this, would be disqualified for the game. The others would proceed.
- At the end the one who wins the game would be considered the best listener.

**Explain**

- Discuss with the students the importance of being an active speaker in a debate where counter-questioning is allowed.
UNIT 10.3: Grooming and Hygiene

Unit Objectives

At the end of the unit, students will be able to:
1. Maintain cleanliness and hygiene.
2. Keep their dress clean and tidy.
3. Maintain positive body language while speaking.
4. Enable to perform more of the do’s than the don’ts.
5. Leant about good eating habit and their impact on health.
6. Avoiding bad things such as gutkha and alcohol.
7. Learn about AIDS and its prevention.

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

Say

- The first impression that a person has on others is generally based on the way he/she looks. This doesn’t include the physical beauty of a person but the way he carries himself.
- Personal grooming not only makes us presentable to other people but good personal hygiene is essential for good health. Taking care of one’s personal cleanliness - bathing, dressing according to the work environment, etc. form crucial part in creating impression about a person.
- Every employee in an organization represents it in a certain way.
- The personal appearance of each employee should be in accordance with the work environment.
- Uniform/personal clothes should be neat and clean, ironed and well-buttoned.
- Shoes should be well polished.
- Emphasis should also be laid on having a decent hairstyle and neat nails.
Communication is the process of exchange of words, ideas, feelings. It is the meaningful exchange of information between two or more participants.
Communication requires a sender, a message, a medium and a recipient.
Communication process is complete only when a receiver understands the sender message.

Activity

- Show the students a chart having 2 girls- one dressed in a shabby way and another dressed decently.
- Ask the students which one they would prefer to be associated with in real life.
- Ask them to give reasons.

Explain

- Discuss the importance of bathing daily, wearing neat clothes, etc. as they have learn from society.
- Also discuss whether one's appearance (in terms of clothes, cleanliness) affects the way people behave with them.

Say

There are certain norms as to how one should dress in a work arena. A decent appearance should be maintained. This includes:
- Neat and ironed uniform
- A decent hairstyle should be adopted. Women with long hair should tie them.
- Nails should be neat, clean and well-trimmed.
- Flashy and noisy jewellery should be avoided.

Activity

- Ask the students to write about why one's uniform should be neat, clean and ironed.

Explain

- Ask the students to discuss the importance of uniform in school.
- Also ask them to discuss about incidents when they formed an opinion about others based on their dress.
**Say**

- The body posture of a person tells a lot about his personality. Also, the posture and gestures of a person convey about what is his attitude towards his work, display his seriousness, etc. Maintaining the right body posture generally involves the following do’s and don’ts:
  - Maintain straight & upright posture on the shop floor.
  - Slouching on the floor, hands in pockets, hands on the hips are not courteous to the customer & hence should be avoided
- Apart from a good body posture, a person should
  - Be on time
  - Be courteous and attentive
  - Be positive

**Explain**

- Why are students advised to keep their hands at the back while talking to a teacher or while walking in a line?

**Say**

- Body language plays a great role in conveying about a person. A positive body language is very important for conveying information positively. Certain do’s and don’t’s in this regard are as follows:
  - Avoid your pockets. Keep your hands out of your pocket. Hand in pocket shows we are uncomfortable and unsure of ourselves. Keeping our hand in open indicates confidence and show that people has nothing to hide.
  - Don’t Fidget. Fidgeting is a clear sign of nervousness. An individual who can’t keep still is an individual who is worried, tense and not confident. Keep your gesture calm and under control.
  - Keep your eyes forward. This indicates that you are interested in communication with other.
  - Stand up straight with your shoulders back. It communicates confidence.
  - Take wide steps. It makes you seem purposeful and suggest a personal tranquillity and denotes confidence.
  - Firm handshake. Grip other persons hand firmly and confidently instead of getting a palm full of dead fish. Firmness adds warmth and enthusiasm to the handshake. But make sure that you don’t crush the other person’s hand and don’t hold on too long.
  - Don’t cross your arms when meeting other persons. Crossing your arms is a protective posture. Relax and keep your arms uncrossed.
  - Use contact to show appreciation.
**Activity**

- Call 5-7 students. Ask them to enact different gestures like- one is told to stand up straight, other is told to enact the movements of shaky hands.
- Ask the rest of the class to judge the body language and the possible implications it could have on the viewer.

**Explain**

- Why is so much attention laid at school level on making children stand straight?

**Say**

- Personal Hygiene is the set of practices to follow to keep oneself healthy. Personal hygiene is directly related to the health of employees.
- The following figure lists various activities that aid in keeping a person healthy.

*Fig.10.3.1: Personal Hygiene*
**Explain**

- Why is maintaining personal hygiene considered important?
- If an employee doesn’t maintain personal hygiene, can it have any effect on the people around him or the impression he makes on them?

**Say**

Physical fitness is very important for doing work effectively and efficiently. It can be maintained by different exercises like cycling, weight-lifting, jogging.
- It maintains optimal body weight.
- It reduces risk of diseases.
- It boosts confidence and self-esteem.
- It reduces stress, anxiety and depression

If employees are free from such danger of diseases due to various factors like sitting for long hours, etc. They can stay fit and this will eventually help in increasing productivity.

**Healthy Eating**

Eating food just for its taste wouldn’t be of much good to our body. Excessively eating junk, over-consuming fried food, etc. can be detrimental to our health. Unhealthy eating habits can considerably affect the level of energy, concentration, etc.

For staying healthy, one should:
- Always try to eat home-made food
- Avoid oily food
- Always cook and eat fresh food
- Avoid junk food like burgers, carbonated drinks etc.
- Eat fruits regularly
- Drink lot of water

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 151 and explain trainees’ the concept.

**Activity**

- Ask the students to make posters like- SAY NO TO SMOKING, etc. and ask them to wave them around the school.
- Also ask them to speak about the harmful effects of these bad habits on health.
Explain

• How can smoking effect the productivity of a worker?
• The intake of alcohol, cigarettes is increasing in India. What steps can be taken to handle minimize their use?

Say

• AIDS stands for Acquired Immunodeficiency Syndrome. It is caused by HIV-human immunodeficiency virus. 
• There is a general notion that it is caused merely by unprotected sexual relationships. However, it is not true. There are other ways of its transmission as well:
  » Contaminated blood transfusion
  » Hypodermic Needles
  » From infected mother to child
• As per studies in India HIV/AIDS is largely due to unsafe sex worker interactions. About 86 % HIV incidents in the country is from unprotected sex.
• A survey has shown gender based difference. Out of the total population of 0.29% females are suffering from AIDS while in males it accounts to 0.43 %.
• AIDS is not a disease like cancer or malaria, but is a condition that weakens a person’s ability to fight diseases (immune system).
• There are no medicines or vaccines for AIDS so far. The treatment and medicines which are available in the market are expensive and have side effects.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 153 and explain trainees’ the concept.

Activity

• To judge the understanding of the students, randomly pick up any of them and ask about topics like symptoms of AIDS.

Explain

• Discuss with the students if they have known anybody suffering from aids and noticed any social discrimination experienced by that person.
• Discuss the importance of spreading awareness about AIDS.
UNIT 10.4: Interpersonal Skill Development

Unit Objectives
At the end of the unit, students will be able to:
1. Develop a positive attitude and behaviour.
2. Understanding Goal Setting.
3. Motivated for team participation at work.
4. Manage relations.
5. Learn about Stress and anger management skills.
6. Develop leadership qualities.

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

Say
- Interpersonal skill development is the blend of different traits of day to day life that play an important role in creating our impression in other’s mind. It starts from inside. The role of interpersonal skill development is to help us understand how to make choices about our attitudes and actions.
- One can learn to control over many aspects of our job and their environment by making appropriate choices and responses. These include various traits like:
  » Positive Attitude
  » Motivation
  » Goal Setting
  » Team Work
  » Managing Relations
  » Etiquette
  » Stress and Anger Management
  » Conflict Resolution
The attitude of a person includes various aspects like our approach, our outlook towards situations and others, the emotions we express towards others.

A positive attitude has the ability to deal with even the most difficult situations.

A positive attitude manifests in:
- Positive thinking
- Constructive things
- Creative thinking
- Optimism
- The motivation and energy to do things to accomplish goals
- An attitude of happiness

Positivity not only affects a person to get the desired results in workplace but attracts people to his positive energy.

Make 5-7 slips stating a difficult situation, for instance—there is an annual event in the school. Due to some reason the tent house people could not manage to come there and carry out the tent and other decoration work. The event is just 1hr away. How would you manage the situation?

After everybody has received a chit, give the students a time of 2-4mins. to think over the situation and write a possible solution.

Collect the slips of the people who have got same situations. Compare them in terms of practical application, positivity, etc.
• Suggest other possible solutions.
• Applaud the students whose answers show the correct attitude and will to deal with the situation using their creativity.

Explain

• An embroider who doesn’t know how to carry out phulkari embroidery has been assigned the task of carrying it out due to labour shortage. Can he succeed in his work?

Explain

• Explain the following story to the students to explain them better about positive attitude.

Raju works as a Supervisor in a factory. He is not happy with his job. One day he spoke about his dejection to his elderly friend, Prashant, who runs a small canteen for the factory workers.

“Prashant I am not satisfied with my job. There are so many problems in the factory. If I solve one, another one crops up. The problems seem to be never ending. I am quite fed up and wish to quit.”

Prashant said nothing. He quietly put three pots with water on the stove. He put some carrots into one pot, some eggs into another and coffee beans into the third pot. The water in the pots began to boil.

Raju wondered what was going on! “Oh, here I am with my tale of woes, and this illiterate cook goes about his business!”

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 158 and explain trainees’ the concept.

Say

• Give examples of various successful people like Rajnikanth, Dhirubai Ambani who had a humble background but succeeded in achieving their goals.

Say

Goals provide a person a way of fulfilling his aspirations about ideal future. For achieving an overall career goal, it is important for a person to set up small terms goal. This not only helps in timely completion of work in the company where the employee is working but also aids in personal growth of the individual.

Goals should be SMART in nature.
• S: Specific
• M: Measurable
• A: Attainment
• R: Relevant
• T: Time bound

Having goals is not just important in terms of an organization but it aids an individual more than an organization. For an individual, goals render a helping hand for future because:
• Goals narrow attention and direct efforts to goal related activities.
• Goals lead to more effort.
• One works through setbacks if he is pursuing a goal.
• It develops and changes individual’s behaviour.

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 160 and explain trainees’ the concept.

**Activity**

• Ask the students to write about different types of goals in their life.

**Explain**

• Discuss about the importance of setting goals in life.
• Discuss the importance of setting up short-term goals.

**Say**

• People working in an organization belong to different backgrounds, social setting, etc. They might be different in terms of their aspirations. However, within an organization, they have to join hands and work as one to achieve the organizational goals. In doing so, their personal goals take a back step.
• Unity becomes the guiding way to achieve them.
• A dynamic gets created between team members due to their dependence on each other for success.

Following aspects help in keeping the team spirit:
• Cooperation
• Trust worthiness
• Dependability
• Tolerance

For teamwork, the following things need to be kept in mind:
• A single person cannot achieve a big task single handedly.
• Big and difficult tasks can be accomplished only through collective effort, through teams.
• In a team, the team members stand by each other during good and bad times alike.
• Work together towards a common goal.
• Divide the task and share the burden.
• Help and accept help from others.

Activity

• Ask the students to divide themselves in groups of 7-8.
• Give each group the task of solving a series of riddles to reach the final destination that has different objects for different groups like needle for one, cloth for other and so on.
• While solving a riddle, the group members should not be standing with the other who is solving the riddle.
• In fact, the person who is solving it should give the clue obtained as an answer to the riddle and then the other should do the same. This would continue till the series of riddles is solved and the final object is reached.
• This gives a chance of teamwork, trustworthiness, etc. between the team members.

Explain

• Discuss the importance of team dynamics in a badminton doubles match.

Say

• Explain to the students the following story in order to make them understand the importance of coordination and teamwork without which an organization would not be able to work well.

Once there was a shoal of tiny red fish living in the sea. One among them was a little different. His name was Swimmy and he was black in colour. Swimmy was the fastest swimmer in the shoal. The fish would swim around in the sea looking for food. One day when they were busy searching for lunch, Swimmy who was far ahead of the others saw a big fish coming in their direction. The big fish was also looking for his lunch—smaller fish. Swimmy was scared! If the big fish would spot his shoal, all of them would be eaten up. Swimmy thought hard of a way out and quickly came up with a plan. He quickly swam back to his shoal and told all the fish about the big fish and also explained his plan to escape from being eaten.

When the big fish came closer he was shocked to see an even bigger fish swimming in his direction with its huge jaws wide open. Frightened that he would get eaten up, the big fish swam away. If he had looked carefully, he would have realised that the huge fish was actually all the tiny red fish swimming very closely together in such a way that they looked like one big fish. And little black Swimmy, being different, became the eye of the ‘huge’ fish!
Say

- Since human beings are social beings, they cannot remain alone. They meet people around them and form relations with them. Talking to other people and developing relationships with them helps us to feel comfortable in a place.
- Building relations and talking to people not only helps us to feel comfortable in a place but help in performing our job better. 70% of the workplace learning is informal, when people talk to each other at work they actually are learning to do their job better.
- Also, friendlier workers are effective communicators, more productive and trusted more by employers and co-workers.
- Tips for improving relations with people around us:
  » Observe how you react to people such as do you reach to a conclusion before knowing all the facts.
  » Introspect honestly about how you think and interact with other people.
  » Look at the work environment and behave accordingly.
  » Accept your weaknesses courageously and work on them.
  » Take responsibility for your actions.
  » If you hurt someone’s feeling apologize directly.

Activity

- Give the students a topic to discuss.
- Ask them to discuss about all possible aspects in the topic-negative and positive.
- Ask 2 students having opposing opinions to come forward and have a healthy debate.
- At the end of it, ask them what they have learnt from each other.

Explain

- Ask from the students whether they have ever felt awkward on a day when their friend was absent.
- Discuss the possible implications.

Say

Different people have different personalities. Their basic nature, the way they respond to others, etc. may not be same. In fact, this is what makes them different from others. However, in an official and public setting, a person doing simply what he wants may be uncomfortable for others around him/her. This brings into light, the importance of etiquettes.
Etiquettes are the customs or rules governing behaviour regarded as correct or acceptable in social and official life. Certain etiquettes that should be kept in mind are as follow:

- Stand straight, make eye contact and turn towards people when they are speaking and genuinely smile at people.
- Follow the dress code prescribed by the organization.
- Limit personal calls especially when you are working in a manufacturing unit.
- Eat and smoke to the designated areas only otherwise it may disturb other people.
- Apart from certain etiquettes, certain ethics are also expected to be followed by the employees of an organization. Ethics are basic rules regarding how people of a particular profession/professional setting are supposed to work. Certain work ethics include:
  - **Discipline**: It is important in each and every activity of an employee from completing work on target, following dress code to talking to seniors.
  - **Commitment to work**: This is very important for an employee. Commitment to work helps in timely completion of goals, motivates a person to learn new things, reach office on time, etc.
  - **Punctuality**: Being punctual gives a sense of professionalism and commitment.
  - **Ownership and responsibility**: An employee should carry on all the responsibilities that he has with utmost care. He should take responsibility for his actions.
  - **Striving to excel**: A person who wants to excel should make an attempt to learn new skills, techniques, methods required to uplift his career.

**Activity**

- Ask the students to narrate instances when they have been scolded by their school teachers/ elders for behaving inappropriately-like dragging one’ feet while walking, etc.
- Look for other such instances.

**Explain**

- To test what the students have understood, discuss with them various etiquettes that need to be taken care of in a school.

**Say**

- In the modern era, our lives have got so busy that stress and anger have become common.
- Anger is a normal and healthy emotion. However, managing anger can be a problem for some people.
- There are many health issues related to a unresolved anger such as high blood pressure, heart attack, depression, anxiety, colds and flu and problems related with digestion.
- Signs of anger include faster heartbeat, quick breathing, tension in shoulder or clinching fists.
Mill Operator

» Express your feelings instead of boiling them up.
» Accept the things you can’t change.
» Learn to forgive.
» ANGER is only one letter away from DANGER.
» Anger can destroy lives, destroy relationships.

Do’s
• Postpone for a few seconds whatever you wish to say or do.
• Take a deep breath.

Activity
• Ask the students about situations when they realized that their stress/anger disabled them from performing their best.

Explain
• Discuss the problem of increasing levels of stress and anger among the youth.
• Also discuss the ways to manage anger and stress.

Say
A conflict is a situation that is difficult to understand, a problem between people having opposing opinions, etc.
• It is important to solve a conflict otherwise it could have grave results.
• It could result in negative feelings between the concerned people.
• It could also increase misunderstandings.

Such situation can hamper the smooth flow of work within the employees. This would eventually show in terms of non-fulfillment of organizational goals.

Conflicts can be managed if following things are kept in mind:
• 1. STOP . . . before you lose control of your temper and make the conflict worse.
• 2. SAY . . . what you feel is the problem. What is causing the disagreement? What do you want?
• 3. LISTEN . . . to the other person’s ideas and feelings.
• 4. THINK . . . of solutions that will satisfy both of you.
**Activity**

- Call out a student randomly.
- Ask them to narrate an incident when they had a fight with their friend and it resulted in further problems in school, became a cause for mental stress.

**Explain**

- Discuss the importance of resolving conflicts for a person’s mental peace, maintaining order and healthy environment in workplace.

**Say**

- An organization involves a large number of people. How about if everybody works according to their own convenience and there is nobody to take care of who will do what and assign deadlines?
- A leader has to take care of all these responsibilities.
- Generally, an organization cannot function with a single leader. It needs many. There might be a leader department-wise who is responsible for assigning duties and is accountable for their performance. Or simply, a senior in an organization could act like a leader.
- The ability to lead effectively is based on a number of key skills like:
  - **Honesty:** A leader who is honest will arise a feeling of trust amongst other employees.
  - **Ability to delegate:** Assigning who should do what depending on their strengths.
  - **Good communications skills:** Being able to communicate clearly is quite important.
  - **Confidence:** Keeps morale of the team high even in the tough times.
  - **Commitment:** If you expect your team to work hard and produce quality content then you should lead by example.
  - **Positive Attitude:** Keeping teams motivated towards continued success of the company.
  - **Creativity:** During the critical situations it is important to think out of the box solutions than to prefer the set course of action.
  - **Be decisive:** He should be able to decide between different alternatives available and handle conflicts.
  - **Focus on the big picture:** Planning long term strategies for your department helps in the accomplishment of organizational goals.
- For becoming a leader, a person needs to grab opportunities, think out-of-box, take initiative in solving problems, be innovative in approach and have good relations with others.
**Activity**

- Ask students to arrange themselves in group of 7-8.
- Assign each group the task of selling products of companies (enactment).
- Ask the group members to choose a leader.
- Ask the leader to coordinate different activities of his team members to create a collective campaign for the brand.
- Give them 20 mins. Time for doing this.
- See the performance of different groups.
- Seeing the performance of each group, assess whether the leader has carried out his responsibilities well.
- Suggest changes, if necessary in the practices/ attitude of the leader.

**Explain**

- Discuss the role of a team leader in terms of team's performance.
UNIT 10.5: Social Interaction

Unit Objectives

At the end of the unit, students will be able to:
1. Describe the social interaction and its behaviours.
2. Give a brief description about himself/herself in public.
3. Follow daily duties.
4. Cooperate with peers, family and other members in society.

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

Say

- A person is judged good or bad from the way he behaves with other people.
- Social interaction is the process by which we act and react to those around us.
- Social interaction includes a large number of behaviours:
  - **Exchange:** Exchange is the most basic type of social interaction. It’s a social process by which social behaviour is exchanged for some type of reward for equal or greater value.
  - **Competition:** It can lead to psychological stress, a lack of cooperation in social relationship, inequality and even conflict.
  - **Cooperation:** It’s a process in which people work together to achieve shared goals. No group can complete its task without cooperation.
  - **Conflict:** Social conflict is the struggle for agency or power within a society to gain control of scarce resources. It occurs when two or more people oppose one another in social interaction to attain incompatible goals.
  - **Coercion:** Individuals or groups are forced to give in to the will of other individuals or groups.
People tend to form an impression about as even before we have a conversation with them (based on our body language, gestures). However, the way we present ourselves in front of people is the real indicator of our personality. Self-introduction is an activity in which a person introduces himself (generally in front of strangers or people who don’t know him much).

It is generally based on a person’s thinking about self—his strengths and weaknesses, his personality traits, etc.

Generally introduction about self is in the form of a speech that may vary from 3-5 mins.

It has a great impact on one’s self-esteem and self-confidence.

Also, it gives others a chance of knowing each other’s likes and dislikes but also facilitates traits like cooperation, coordination while having fun.

• Explain to the larger group that in a moment they will be dividing into smaller groups according to some commonality. For example “Divide yourselves into groups according to your favorite season!” At this time, all the people who enjoy summer get into a group, and so on.

• Once groups are formed, the facilitator points to each group and asks them to shout in unison what group they have formed. If another group has the same category, have the two groups merge and celebrate together.

• After all groups have been identified, the facilitator shouts out another type of division.

• This activity not only gives a chance to the students of knowing each other’s likes and dislikes but also facilitates traits like cooperation, coordination while having fun.

Discuss the difference between a setting where people know each other well, are ready to cooperate and coordinate with a situation where people are not ready to resolve differences, etc.

• People tend to form an impression about as even before we have a conversation with them (based on our body language, gestures). However, the way we present ourselves in front of people is the real indicator of our personality. Self-introduction is an activity in which a person introduces himself (generally in front of strangers or people who don’t know him much).

• It is generally based on a person’s thinking about self—his strengths and weaknesses, his personality traits, etc.

• Generally introduction about self is in the form of a speech that may vary from 3-5 mins.

• It has a great impact on one’s self-esteem and self-confidence.

• Also, it gives others a chance of knowing oneself aiding in making friends, feeling in control, etc.

• Points that should be included in self-introduction are:
  » **Wishes:** A “good morning my dear friends” helps in capturing the attention of the listeners and maintains an immediate relation with the, -not an imposed one. It has to be done keeping in regard the time.
  » **Purpose:** We have to tell the purpose of coming in front of the audience. We can say “I have come here to tell you about myself”.
  » **Name:** Here you tell about your name. To grab the attention of the audience, one has to present his/her name differently. This can be done by telling its meaning and connecting it with one’s personality.
  » **Family and Location:** Telling someone about one’s family makes them feel trustworthy and also gives them a chance to understand the background to which he/she belongs.
  » **Profession:** Tell what you have been doing till then/ at present.
  » **Life Aim and Achievements:** This allows others to have a peep in what the person wants to do in his/her life and what he is doing to succeed.
» **Strengths and Weaknesses:** This renders a personal touch to the introduction.

» **People you like and dislike:** This could include one’s role models, a type of people that one’s hates say, dominant people.

» Telling about a turning point in your life will help in them to understand why you are the way you are at present.

- Improvement in one’s self-introduction can be done by introspection which can include:
  » Listening to what you are saying to yourself
  » Monitoring your self-talk
  » Changing your introduction

### Activity

- Randomly call out 3-4 students.
- Ask them to give an introduction of self.
- Suggest changes, if necessary in the way introduction has to be done/ information conveyed.

### Explain

- Discuss the importance of a confident self-introduction.
- Also, discuss whether boasting about oneself while introducing is right.

### Say

- Being the citizen of India, citizens not only have certain rights but certain duties as well. According to Indian constitution, a total of 11 duties exist. These duties include:
  » To abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem.
  » To cherish and follow the noble ideals which inspired our national struggle for freedom.
  » To uphold and protect the sovereignty, unity and integrity of India.
  » To defend the country and render national service when called upon to do so
  » To develop the scientific temper, humanism and the spirit of inquiry and reform.
  » To safeguard public property and to abjure violence.
- Apart from constitutional duties, in a workplace, a person has certain duties and responsibilities as an employee as well. This may include- being honest to one’s work, completing work on time, being respectful towards others, etc.
Activity

- Divide the students into groups of 7-8.
- Assign each group to come up with duties that are to be taken care of in different areas—say workplace, home, school, etc.

Explain

- Discuss what would be the situation if people do not follow their respective duties and responsibilities in different areas.

Say

- Imagine what be the situation when people work in their own way and do not care about the convenience of others.
- Cooperation is the process of groups of people working or acting together for their mutual benefit.
- It is the backbone of any society.
- In a family setting, cooperation might involve planning together and sharing responsibilities.

Effective peer support can be in form of:

- Social Support: In form of positive psychological interactions with others with whom there is mutual trust and concern.
- Experiential Knowledge: contributes to solving problems and improving quality of life.
- Emotional support: Esteem, attachment and reassurance
- Instrumental Support: Material goods and services

- A person cannot merely expect others to be cooperative. For others to behave in a cooperative way with him, he needs to be cooperative with them too. This might involve:
  - Share when you have something that others would like to have.
  - Take Turns when there is something that nobody wants to do, or when more than one person wants to do the same thing.
  - Compromise when you have a serious conflict.
  - Do your part the very best that you possibly can. This will inspire others to do the same.
  - Show appreciation to people for what they contribute.
  - Encourage people to do their best.
  - Don’t isolate or exclude anyone. Everybody has something valuable to offer, and nobody likes being left out.
Activity

- Ask the students to choose a partner for themselves.
- Now, give each team a task of carrying out different types of stitches on different types of clothes.
- Ask them to divide the work between themselves and carry it out within a time span of 20mins (One can fetch the materials needed from other room from time to time, other could carry out the task of doing the actual stitch).
- Assess the performance of students.

Explain

- Based on the above activity, discuss the problems faced while doing the task.
- Also discuss what could have been the possible solutions to it.
UNIT 10.6: Group Interaction

Unit Objectives

At the end of the unit, students will be able to:
1. Participate in group discussions in the class.
2. Give speech in the public.
3. Describe the importance of team building and team work.

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

10.6.1 Group Interaction

Say

- In an organization, most activities need to be done in a group. For carrying out the activities in a smooth manner and avoid any duplication of work, misunderstanding or communication gap, group interaction is very important.
- For a successful and positive group interaction these steps needs to be followed:
  » Put your mobile phone away or place in silent mode.
  » Greet everyone.
  » Be friendly with everyone in the group.
  » Show an interest in others by paying someone a compliment and listen carefully to what is being discussed.
  » Be proactive and introduce yourself to others in the group.
  » Sit up straight. Poor body posture is an indication of low self-esteem.
  » Focus your attention on the person talking.
  » Consider everyone’s comment. Remember everyone is different and have different the ability to think.
» Think before you speak. Don’t be too quick to jump into the conversation.
» Be a respect listener and observer.
» Include everyone when talking. Be sure to share eye contact with each person in the group.
» Don’t start or participate in a side conversation.
» Make sure to smile shake hands and embrace and use each person’s name during discussion.

**Activity**

- Give the class a topic to have a healthy discussion, say Effects of Modernization on Environment.
- Encourage them to come up with different points and all possible aspects.
- Ask people to support or negate a point according to their perspective.

**Explain**

- Observe students during the activity.
- If you find any of the persons flouting norms of a group interaction, guide him accordingly.
- Also discuss how does not complying with norms affect the ongoing/effect of a group interaction.

**Say**

Group interaction not only serves the purpose of carrying out a task efficiently but also serves to be useful as:

- It helps to understand a subject more deeply.
- It improves the ability to think critically.
- It helps in solving a particular problem.
- It helps the group to make a particular decision.
- It gives the chance to hear other students’ ideas.
- It increases your confidence in speaking.

As a moderator a group interaction helps in understanding ones attitude, selecting a perspective candidate in a perspective methodology.

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 173 and explain trainees’ the concept.
Activity

- Try games like telephone, where you sit in a circle and one person whispers a scenario into the ear of the next person, such as how an important report was not delivered to the president in time.
- The “telephone” chain continues until the last person, who announces what he or she heard. Generally, by the end of the chain the story has been altered substantially.
- This gives employees a chance to discuss how the story changed along the way and methods they could use in the future to improve communication.

Explain

- Discuss the importance of interaction among your family members.

Say

- A good team is the one that motivates its members to have a positive attitude, perform better.
- Team work is a very important part of working life. They can have a big impact on the profitability of an organization, team and individual performance, company reputation, etc.
- Team building is important because:
  » Facilitates better communication
  » Motivates employees
  » Promotes creativity
  » Develops problem-solving skills
  » Breaks the barrier
- Maintaining a team is not an easy job since there are a variety of people involved having different strengths and weaknesses. This task can be made easier by following certain do’s and don’ts
  » **Don’t argue in public:** If you have a disagreement with someone in the team find a neutral place to discuss the situation.
  » **Do encourage each other:** When things get tough the tough gets going. Contribute to the team in trying situation.
  » **Don’t talk behind the backs:** If you have trouble with some team member don’t share with others. Go directly to the person in a kind and compassionate manner and share what is in your mind.
  » **Do lend a hand:** If a team members is asking for help don’t hesitate in helping him.
  » **Don’t be the weakest link:** Live up to your responsibilities, meet team expectations and communicate effectively in the team.
  » **Give and receive feedback:** As a part of growing team give and receive feedback respectfully and graciously.
**Activity**

- Ask students to organize themselves in a team of 7-8.
- Assign them the task of giving a presentation on different types of stitches.

**Explain**

- On the basis of the activity, ask the students to judge who was the best team member.
- Discuss the qualities of this person so that other people can improve themselves and cooperate and be more effective in future.
UNIT 10.7: Time Management

Unit Objectives

At the end of the unit, students will be able to:
1. Describe the importance of time management.
2. Develop time management skills.
3. Learn about effective time planning.

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

Say

- In a professional arena, deadlines should be met for creating goodwill. Since activities in an organization are complex, time has to be managed as to how activities would be carried out within a definite time span.
- Time management is the act of process of planning and exercising conscious control over the amount of time spent on specific activities, especially to increase effectiveness, efficiency or productivity.
- It is an activity with the goal to maximize the overall benefit of a set of activities within the boundary condition of a limited amount of time.
- Activities that aid in time management are:
  » Delegate tasks.
  » Identify time wasters.
  » Combine activities – Plan for them.
  » Break down big tasks down to the smallest task possible.
  » Accomplish them one by one.
  » At the end of the day conduct a simple analysis to see which activity took time.

Fig.10.7.1: Time Management
**Activity**

- Ask the students to assemble in groups of 9-10 in ground.
- Organize a race that is broken into various stages like lemon race, followed by one-leg race and balloon race.
- Ask the team members to decide among themselves who will do what.
- The team that would be able to complete the task within a time of 4mins/ at the earliest would be the winner.

**Explain**

- On the basis of the activity, discuss the factors that caused the team members lag behind and which factors enabled them to carry it within the assigned time.
- Relate it to the wider arena- that is to time management (when more than 1 person is involved) in general sense.

**Say**

- Although employees try their best to be efficient, still there are certain activities that pop and therefore result in the wastage of time.
- Time robbers are those activities which create interruption at the workplace. These activities create a deviation from the objectives which needs to be achieved. Time Robbers could be:
  - Poor personal planning and scheduling.
  - Interruptions by people without appointments.
  - Poor delegation.
  - Poor use of the media: Telephone, Mobile, e-mail, and fax, etc.
  - Reading junk mail.
  - Lack of concern for good time management.
  - Lack of clear priorities
- However, time robbers are not inevitable. They can be kept in check. The Time Robbers can be avoided by:
  - Being active all the time
  - Developing and maintaining an organized personal activity schedule
  - Setting priorities
  - Proper delegation
  - Utilizing modern technical media
Activity

• Divide students into groups of 3-4.
• Ask them to choose a fabric of their choice, cut it in a particular shape and perform any embroidery of their choice.
• Give them a time limit of around 30mins.

Explain

• On the basis of the activity, discuss what factors caused delay in time (if any).
• Also discuss what can be done in future to avoid such wastage of time.

Say

• Not only is the completion of task important, equally important is finishing it on time. A task that is not completed on time may lead to decline in goodwill, decrease in productivity and consequent losses, etc.
• There are several ways of doing a task. One needs to opt for the smart way that is the one which involves minimum work and therefore requires less time without compromising the quality. If one uses complex ways then it will be time consuming. One should always try to find out alternate ways to complete a task.
• According to this 80% of the tasks can be completed in 20% of the time. The remaining 20 % of the tasks take 80 % of your time. And the task which should fall in first category should be given a higher priority.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 176 and explain trainees’ the concept.

Activity

• Ask each student to name the activities he engages in after going back to home.
• Ask him to categorize them as ‘most important’, ‘important’ or ‘least important’.
• Discuss the list.
• Compare answers of different students.

Explain

• Discuss the importance of categorization of tasks in terms of time management.
UNIT 10.8: Resume Preparation

Unit Objectives

At the end of the unit, students will be able to:
1. Describe the different sections of a resume.
2. Learn how to prepare a resume.

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

Say

• It is a matter of fact that all people are not suitable for all types of jobs. Imagine all sorts of people (fit and unfit for that particular designation) applying for a particular job! What would be the condition of the interviewer if he/she would have to take the interview of all the applicants? He would be exhausted and irritated.
• To avoid this situation, a resume is needed. A resume is a self-advertisement that, when done properly shows how your skills, experience and achievements match the requirement of the job you want.
• It convinces the employer that you have what it takes to be a successful in the new career or position.

Remember that...
• Your resume is to get you an interview not a job
• Your resume will be screened by an employer for just 15-20 seconds. That’s all the time your resume has to make an impact.
• Every point in your resume should be specific and must be supported by a number of factual information.
• Use action verbs in all your points. They catch attention immediately and make your sentences clear.
• Use bullets not paragraphs.
• Do not mention your responsibilities mention what you have accomplished.
• A common mistake we make while constructing the resume is to copy the format from our friends resume and built it based on that.
Say

It includes basic details that are used to identify/contact a person in case he has to be called for the interview.

• Do not include your photo.
• Do not write your resume as a heading to the file
• Do not occupy much space to fill insignificant information like marital status, etc.

Say

It includes basic details that are used to identify/contact a person in case he has to be called for the interview.

• The objective of every job is different although eventually to reach the overall objective of the company.
• It is crucial to convey to your employer what your goal is. It should be aimed towards getting a particular position in a specific industry.
• Your objective should include the following:
  » Position wanted
  » Functional area
• Keep the employers requirement in mind while writing the objective. The objective is not what you desire from the company, it’s about company’s need.
• Be specific and restrict it to minimum words.
• One’s objective should be different to each role one applies to.

Say

The educational qualifications of a person matter a great degree to the nature of work for which a person is required. For instance, for the field of engineering certain subjects and specialization would be required. Write all educational qualifications from class 10 till present.

• For class 10 and 12 – include school/college name, Board, Stream/Specialization (If any), year study, Marks.
• For undergraduate – include college name, University name, Degree and Specialization, year of study.
• Write all your qualifications in reverse chronological order, i.e. the latest qualification on top.
• You may write the educational qualifications in a tabular format or in a simple one after the other order.

Say

What will give insight to the employer about your achievements, interests? The projects, internships one has undertaken reflect a great deal about the person’s interests.

• This is a critical component of resume, as it reflects the initiatives one has taken apart from curriculum.
• It not only reflects one’s real potential but helps in differentiating one’s resume from peers.
• The heading should be – title / project name, role, company/organisation name, -2 lines description about the specific time period.
• Time period is must.
• The entries under each heading must be in reverse chronological order
• Be very specific on what you have accomplished. Add numbers and facts wherever possible.

**Say**

All the jobs might not pay much important to educational qualifications and internships. After all there are skills required to carry on a particular job that are required in a practical setting.
• List your skill and add a point which supports your skill the best.
• Make specific points. Add numbers and facts wherever possible.
• Pick only three to four soft skills that describes you the best.
• Dig your past to discover the best of these skills you possess and the best instance you can quote to support it.

One can have multiple headings under skills. Common heading can include:
• **Soft Skills**: Must include, they showcase your personality traits.
• **Core occupational skills**: Optional include if you possess any core skills. These are skills you possess relevant to the role you are applying for.
• **IT Skills**: Optional, Advisable to include this if you are applying for IT/software related roles.

**Say**

One’s interests tell a great deal about the way a person is. They might also aid in some way in revealing the basic nature of a person. While writing about one’s interests, one should keep in mind to:
• List interests which are meaningful and display some learning.
• Support the interest you have listed
• Make points specific and add supporting fact to it.
• Do not just list random cluster of interests like: adventure, guitar, reading, environment
• Never include interests like partying, watching movies etc. they create wrong impression.
Before selecting a candidate, an employer would like to know about the candidate’s previous professional dedication. This might aid/be negative immensely because it is this behavior that the person would exhibit in the work arena. Skills, etc. can be acquired through training but an employee should be hard working, trustworthy, responsible, etc.

- The proof of all this can be best obtained from previous employers, teachers, etc.
- The last thing on your resume should be a list of 2-4 professional references.
- Include the name of the reference, their relationship to you, mailing address, e-mail and phone number.
- The place where one is applying may contact these people, so one should always call them in advance to let them know that you are using them for a reference and are currently applying for a job.

Since resume is the first thing that would make an impression in front of the employer, one should make sure that it is professional enough in appearance. For ensuring this, certain things should be kept in mind:

Make sure that the length of your resume does not exceed 2 pages.
- Do a thorough recheck and make sure there are absolutely no errors in your resume. No grammatical errors, no spelling mistakes, no punctuation errors.
- Run through your resume time and again for to make improvements and wording sentences better.
- Choose a professional font in a size 11 or 12. You can use multiple fonts for different parts of resume, but try to limit it maximum of two fonts. Instead of changing between fonts, try making specific sections bold or italicized instead.
- The font size of your header and the introduction to a section may be a size 14 or 16.
- Your text should always be printed in solid black ink. Make sure to deactivate any hyperlinks so that they don’t print in blue or other contrasting colour.
- Your page should have one inch margin all the way around with 1.5 or 2 point line spacing. The body of your resume should align left and your header should be centered at the top of the page.

Activity

- Ask the students to prepare their resume.
- Guide them, if necessary.
**Explain**

- Discuss with the students the type of language and font that should be used in a resume.
- Also, discuss why a long resume should be avoided.

**Summarize**

- Give the students a summary of do's and don’t's while making a resume.
UNIT 10.9: Interview Preparation

Unit Objectives

At the end of the unit, students will be able to:
1. Describe the procedure of interview.
2. Go thorough mock interviews.
3. Present self during an interview.
4. Motivated to work after the training period is over.

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

Say

• Once the recruiter finds an applicant’s resume in par with the requirements, he is called for an interview to know about him in person. Also, it helps to know about the personality traits of a person—confidence, patience, etc.

• An interview is a conversation between two or more people (the interviewer(s) and the interviewee) where questions are asked by the interviewer to obtain information from the interviewee.

Common Types of Interview

• **Traditional HR Interview:** Most interviews are face to face. The most traditional is a one-on-one conversation with the HR Executive. Maintaining a good eye contact, listening keenly and giving prompt answers is advised.

• **Panel Interview:** In this situation, there is more than one interviewer. A panel ranging from two to ten members may conduct this part of the selection process. This might be scary for most people. However, it helps in showcasing how a person can deal with pressure confidently and patiently without losing his calmness.

• **Technical interview:** The objective of this interview is to basically evaluate technical knowledge. Majority of the questions will be based on the skills sets mentioned in the candidate’s resume.

• **Telephone Interview:** Telephone interviews may also be used as a preliminary interview for candidates who live far away from the job site.

An interview could be a nightmare and may not fetch favourable results if the interviewee is not well acquainted to the

• Company- What does it do basically and what are its goals.
• Job description- A person should have an idea about the job role he is applying to. He can answer to the questions of the interviewer accordingly.
Apart from knowing about the company and job role, a person should know about himself. He should not be afraid otherwise he would not be able to bring out his best. He should be free from all sorts of doubts about himself/herself and be
• Confident
• Relaxed
• Sure of yourself
• Prepared
• Before, during and after the interview, it is important for you to be prepared.
• Dress Professionally
• Choose your words properly
• Maintain an eye contact
To have a good impression and convey one’s level of seriousness, formal attire, minimalistic jewellery and clean and simple shoes are advised.

Say

• Certain etiquettes need to taken care of while giving an interview. This is because they are responsible for forming a favourable/unfavourable impression on the interviewer.

Activity

• Ask the students to answer. Discuss why each of the activity falls in a ‘do’ or ‘don’t’ category.

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Do’s</th>
<th>Don’ts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be yourself</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burp while talking!!!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Just out from a ‘powder factory’ ( worn too much make-up)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reach just about the right time for the interview</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Just barge in the cabin/ office</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forget to greet the receptionist/ don’t respond</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Think before you speak</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do your homework- Visit the company website</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take time to think (TTTT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wear bright colour clothes on the D-day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphasis on your strengths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argue/ Debate with the interviewer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chew gum during the interview.
Review your educational and work experiences
See your documents flying out of the file (Being clumsy)
Thank the interviewer
Have the ‘they need me’ attitude
Maintain eye contact and good body language
Only give monosyllabic answers (depends on the kind of questions asked... in-between)
Carry a copy of your resume

**Explain**

- Discuss with the students whether telling lies about oneself during the interview is right or wrong.

**Say**

- Apart from the content of one’s answers (choice of one’s words, etc.), the tone at which one presents himself is of considerable importance.
- Also, one should be fully aware about what he has written in the resume and have proper reasons for writing it and should not write anything shallow.
- While, undergoing an interview, following things should be kept in mind:
  - Be confident, not arrogant
  - Sell yourself - Keep your energy up
  - Maintain your posture
  - Be positive, don’t complain

**Activity**

- While conducting mock interviews in pairs, notice the body language, tone, etc. of students minutely.
- Give suggestions, if necessary.

**Explain**

- Discuss the importance of maintaining an eye contact with the interviewer.
**Say**

- While undergoing an interview, it is really important that the interviewee employees his full attention to the questions posed by the interviewer.
- If his mind gets diverted, he would not be able to answer appropriately.
- Also, in terms of selection, this could act as a big hurdle.

**Activity**

- Read out a passage to students.
- While reading, intentionally mispronounce certain words.
- Ask the students to stop you as soon as you mispronounce a word.
- Ask the students to carry it among themselves whenever they get free time.
- This would aid a great deal in knowing and developing their active listening skills.

**Explain**

- Discuss the importance of active listening on the part of students when a teacher is explaining a topic.

**Activity**

- Also, ask them to conduct mock interviews in groups of 2.
11. IT Skills

Unit 11.1 - Introduction to Computer
Unit 11.2 - Basic Computer Knowledge
Unit 11.3 - Components of Computer
Unit 11.4 - Concept of Operating System
Unit 11.5 - MS Word
Unit 11.6 - MS PowerPoint
Unit 11.7 - MS Excel
Unit 11.8 - Internet Concepts
At the end of this module, you will be able to:
1. Familiarise with computers
2. Identify and use basic uses of a computer
3. Familiarise with a computer motherboard
4. Familiarise with a computer operating system
5. Use Microsoft Word, Excel and Powerpoint
6. Familiarise with Internet and use e-mails
Unit 11.1: Introduction to Computer

Unit Objectives
At the end of the unit, students will be able to:
1. Define the computer.
2. Recognise its various parts.
3. Differentiate the advantages and disadvantages of computer.

Resources to be Used
- Participant Manual
- Computer Lab

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about introduction to computer in this unit.

Say
- Tell participants about the computer. Computer plays a very important role in our personal and professional lives. It has become an integral part of our lives.
- Tell them about important characteristics and application of a computer.

Notes for Facilitation
- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.
Activity

• Tell participants to demonstrate the parts of computer.
• Give them 15 minutes to prepare.
• Tell them each participant will be given 10 minute to demonstrate the same.
• Once presentations are complete appreciate the efforts made by the group and summarise the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstration of Computer</td>
<td>4 Hours</td>
<td>• Participant Manual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Computer Lab</td>
</tr>
</tbody>
</table>
Unit 11.2: Basic Computer Knowledge

Unit Objectives

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

- Use computer.
- Explain the web, email services.

Resources to be Used

- Participant Manual
- Computer Lab

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about basic computer knowledge in this unit.

Say

- Tell participants about the application of the computer in daily life. In the workplace, many people use computers to keep records, analyze data, do research, and manage projects. At home, you can use computers to find information, store pictures and music, track finances, play games, and communicate with others—and those are just a few of the possibilities. Tell them about important characteristics and application of a computer.
- Now explain the concept of web. The World Wide Web is a gigantic storehouse of information. The web is the most popular part of the Internet, partly because it displays most information in a visually appealing format.
- Tell them about the application part of the web and introduce them with the use of different applications as email, instant messaging, picture music and movies with them.

Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
• Answer their queries satisfactorily.
• Ask them to answer the questions at the end of unit given in the participant’s manual.
• Ensure that every participant answer all questions.

**Activity**

• Tell participants to prepare an online report using web.
• Tell them they can choose any topic of their interest. Give them one hour to prepare.
• Tell them each participant will be given 10 minute to present their report to the class.
• Once presentations are complete appreciate the efforts made by the group and summarise the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
</table>
| 1. Prepare Online report | 4 Hours | • Participant Manual
                                 |       | • Computer Lab with internet |
Unit 11.3: Components of Computer

Unit Objectives

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

- Recognise the different parts and components of computer.
- Describe the CPU, RAM and BIOS.

Resources to be Used

- Participant Manual
- Personal Protective Equipment (PPE)

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about the components of the computer in this unit.

Say

- Tell them about different parts of the computer.
- Explain them about different parts of motherboard in detail.

Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.
**Activity**

- Tell participants to demonstrate the motherboard.
- Tell them they will get 30 minutes to prepare and each student will have to demonstrate for the same.
- Once presentations are complete, appreciate the efforts made by the group and summarise the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstration of Motherboard</td>
<td>4 Hours</td>
<td>• Participant Manual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Computer Lab</td>
</tr>
</tbody>
</table>
Unit 11.4: Concept of Operating System

Unit Objectives
At the end of the unit, students will be able to:
• Familiarise with the concept of operating system.
• Work on Windows 8 and 8.1.
• Add or Remove desktop icons, make or delete a folder etc.

Resources to be Used
• Participant Manual
• Computer System

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.
• Acknowledge their responses and clear their doubts if any.
• Tell them they will learn about operating system in this unit.

Say
• Tell them about windows XP. And explain that Windows XP let you use different types of applications or software on the operating system.
• Familiarise them with the different versions of Windows.

Demonstrate
• Explain tools and parts of an operating system with the participants.
• Show them all these parts practically on the computer system.
• Then explain add or delete desktop shortcut from the desktop.
• Also explain how to create a new folder.
• Tell all participants to create a folder on computer.
• Then explain how to work on multiple windows.
• Now demonstrate the keyboard to the participants and tell them the correct way to use the keyboard.
Say

- Discuss common window commands with the participants.
- Explain the table to the participants given in the Handbook.

**Trainer's Note:** These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 202 and explain trainees' the concept.

Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.

Activity

- Give one news paper cutting to each student and tell them they need to type the same.
- Tell them they have to use correct fingers on key board and make sure work is free from errors.
- Give them one hour for typing practice and ensure that each participant is typing.
- Finally share some tips for correct typing and summarise the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Typing Practice</td>
<td>2 Hours</td>
<td>• News paper</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Computer Systems</td>
</tr>
</tbody>
</table>

Trainer's Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 202 and explain trainees' the concept.
Unit 11.5: MS Word

Unit Objectives

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

- Learn the concept of and practice MS-Word.
- Format a document.
- Print a document etc.

Resources to be Used

- Participant Manual
- Computer System with MS Word

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about MS Word in this unit.

Say

- Tell them about concept of word processing. Word processing skills allow us to prepare text documents such as letters, memos, and other correspondence.

Demonstrate

- Tell them to open MS Word in their respective systems.
- Show them how to create a word document in MS word software.
- Practically demonstrate how to perform different operations on MS Word document as:
  - Saving a Document
  - Change Font Type and Size
  - Create Headers and Footers by Inserting Texts
Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.

Activity

- Give one newspaper cutting to each student and tell them they need to type this in MS Word and perform different operations like saving documents, Saving a Document, Change Font Type and Size, Create Headers and Footers by Inserting Texts, Indents and Spacing
- Tell them they have to use correct fingers on keyboard and make sure work is free from errors.
- Give them one hour for typing practice and ensure that each participant is typing.
- Finally share some tips for correct typing and summarise the highlights of the activity

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typing and Formatting – MS Word</td>
<td>3 Hours</td>
<td>News paper, Computer Systems</td>
</tr>
</tbody>
</table>
Unit 11.6: MS PowerPoint

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

• Practice MS-Powerpoint.
• Make a new presentation.
• Format a slide as well

Resources to be Used
• Participant Manual
• Computer System with MS Office

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.
• Acknowledge their responses and clear their doubts if any.
• Tell them they will learn about MS Word in this unit.

Say
• Tell them about the power point. PowerPoint is the presentation graphics software in the Microsoft Office suite. PowerPoint has predefined layouts, themes, and templates to create dynamic and professional presentations.

Demonstrate
• Tell them to open MS power-point in their respective systems.
• Show them how to create a power point in MS Power-point software.
• Practically demonstrate how to perform different operations on MS Power-point presentation as:
  » Saving a Powerpoint
  » Working with slides
  » View tabs
Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.

Activity

- Tell participants they have to prepare a power-point presentation on MS Powerpoint Software.
- Tell them they need to perform following operations while working on this software, Saving a Powerpoint, View tabs, Animating text and Images and inserting Charts.
- Give them one and half hour to prepare the same.
- Finally share some tips for correct typing and summarise the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
</table>
| 1. Presentation on MS Powerpoint | 4 Hours | • Participant Manual  
• Computer Lab |
Unit 11.7: MS Excel

Unit Objectives

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

- Work on MS-Excel
- Format cells and cell content
- Use formulas
- Make Charts and Pivot Table.

Resources to be Used

- Participant Manual
- Computer System

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about Ms Excel in this unit.

Say

- Tell them about the power point. MS Excel stands for - Microsoft Excel is one of the most popular electronic spreadsheet applications supported by both Mac and PC platforms. As with a paper spreadsheet, you can use Excel to organize your data into rows and columns and to perform mathematical calculations.
- Discuss the application of Excel with the participants.

Demonstrate

- Tell them to open MS Excel in their respective systems.
- Show them how to create a spread sheet in MS Excel software.
- Practically demonstrate how to perform different operations on MS Excel as:
Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.

Activity

- Tell participants they have to prepare a spread sheet on MS Excel Software.
- Share data of a class with the participants in which participants name, height, weight and age is given.
- Tell them they need to perform following operations while working on, Add Command to the quick access tool bar, Change the default excel options, Cell Addresses, Move Across a worksheet using key board, Formatting, Calculation and Analysis, Change page orientation
- Give them one and half hour to prepare the same.
- Finally share some tips for correct data typing and summarise the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preparing Spread Sheet on MS Excel</td>
<td>4 Hours</td>
<td>• Participant Manual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Computer Lab with MS Office Software</td>
</tr>
</tbody>
</table>
Unit 11.8: Internet Concepts

Unit Objectives

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

- Understand internet concepts.
- Recognise the different types of URLs.
- Use MS-Outlook.

Resources to be Used

- Participant Manual
- Computer with Internet

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about internet concept in this unit.

Say

- Tell them about internet and its uses.
- Explain the concept of URL. The full form of URL is Uniform Resource Locator. It is the global address of documents and other resources on the World Wide Web. The URL is divided into two different parts. The first part of the URL is called a protocol identifier as it helps us identifying what protocol to use.
- Now tell them about different types of URLs.
**Notes for Facilitation**

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.

**Activity**

- Tell participants they have send emails to other participants with an attachment.
- Tell them first they need to create a word, excel or power point. They can choose between any three of the formats.
- Give 2 hours for each participant for this entire activity.
- Once activity is complete share some tips of e-mail etiquette with them and summarise the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Send e-mail with attachment</td>
<td>2 Hours</td>
<td>• Computers with Internet</td>
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</tbody>
</table>
12. Employability and Entrepreneurship Skills

Unit 12.1 – Personal Strengths & Value Systems
Unit 12.2 – Digital Literacy: A Recap
Unit 12.3 – Money Matters
Unit 12.4 – Preparing for Employment & Self Employment
Unit 12.5 – Understanding Entrepreneurship
Unit 12.6 – Preparing to be an Entrepreneur
Key Learning Outcomes

At the end of this module, you 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. Understand 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. Understand 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 how to maintain a positive attitude
15. Discuss the role of attitude in self-analysis
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
32. Identify the basic parts of a computer
33. Identify the basic parts of a keyboard
34. Recall basic computer terminology
35. Recall basic computer terminology
36. Recall the functions of basic computer keys
37. Discuss the main applications of MS Office
38. Discuss the benefits of Microsoft Outlook
39. Discuss the different types of e-commerce
40. List the benefits of e-commerce for retailers and customers
41. Discuss how the Digital India campaign will help boost e-commerce in India
42. Explain how you will sell a product or service on an e-commerce platform
43. Discuss the importance of saving money
44. Discuss the benefits of saving money
45. Discuss the main types of bank accounts
46. Describe the process of opening a bank account
47. Differentiate between fixed and variable costs
48. Describe the main types of investment options
49. Describe the different types of insurance products
50. Describe the different types of taxes
51. Discuss the uses of online banking
52. Discuss the main types of electronic funds transfers
53. Discuss the steps to prepare for an interview
54. Discuss the steps to create an effective Resume
55. Discuss the most frequently asked interview questions
56. Discuss how to answer the most frequently asked interview questions
57. Discuss basic workplace terminology
58. Discuss the concept of entrepreneurship
59. Discuss the importance of entrepreneurship
60. Describe the characteristics of an entrepreneur
61. Describe the different types of enterprises
62. List the qualities of an effective leader
63. Discuss the benefits of effective leadership
64. List the traits of an effective team
65. Discuss the importance of listening effectively
66. Discuss how to listen effectively
67. Discuss the importance of speaking effectively
68. Discuss how to speak effectively
69. Discuss how to solve problems
70. List important problem solving traits
71. Discuss ways to assess problem solving skills
72. Discuss the importance of negotiation
73. Discuss how to negotiate
74. Discuss how to identify new business opportunities
75. Discuss how to identify business opportunities within your business
76. Understand the meaning of entrepreneur
77. Describe the different types of entrepreneurs
78. List the characteristics of entrepreneurs
79. Recall entrepreneur success stories
80. Discuss the entrepreneurial process
81. Describe the entrepreneurship ecosystem
82. Discuss the government’s role in the entrepreneurship ecosystem
83. Discuss the current entrepreneurship ecosystem in India
84. Understand the purpose of the Make in India campaign
85. Discuss the relationship between entrepreneurship and risk appetite
86. Discuss the relationship between entrepreneurship and resilience
87. Describe the characteristics of a resilient entrepreneur
88. Discuss how to deal with failure
89. Discuss how market research is carried out
90. Describe the 4 Ps of marketing
91. Discuss the importance of idea generation
92. Recall basic business terminology
93. Discuss the need for CRM
94. Discuss the benefits of CRM
95. Discuss the need for networking
96. Discuss the benefits of networking
97. Understand the importance of setting goals
98. Differentiate between short-term, medium-term and long-term goals
99. Discuss how to write a business plan
100. Explain the financial planning process
101. Discuss ways to manage your risk
102. Describe the procedure and formalities for applying for bank finance
UNIT 12.1: Personal Strengths & Value Systems

Unit Objectives

At the end of the unit, students 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. Understand 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. Understand 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
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20. Discuss how to foster a good work ethic
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22. List the characteristics of highly innovative people
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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
Say

• Tell the participants about the Health, Habits and Hygiene. What is Health? As per the World Health Organization (WHO), health is a “State of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity.”

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.
• Acknowledge their responses and clear their doubts if any.
• Tell them they will learn about Personal Strengths and value systems.

Elaborate

Explain – This means being healthy does not simply mean not being unhealthy – it also means you need to be at peace emotionally, and feel fit physically. For example, you cannot say you are healthy simply because you do not have any physical ailments like a cold or cough. You also need to think about whether you are feeling calm, relaxed and happy.

Common Health Issues

Some common health issues are:

• Allergies
• Asthma
• Skin Disorders
• Depression and Anxiety
• Diabetes
• Cough, Cold, Sore Throat
• Difficulty Sleeping
• Obesity

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.
• Copies of Handouts.
• Give participants some tips to prevent health issues.

**Elaborate**

Explain – Taking measures to prevent ill health is always better than curing a disease or sickness. You can stay healthy by:

• Eating healthy foods like fruits, vegetables and nuts
• Cutting back on unhealthy and sugary foods
• Drinking enough water everyday
• Not smoking or drinking alcohol
• Exercising for at least 30 minutes a day, 4-5 times a week
• Taking vaccinations when required
• Practicing yoga exercises and meditation

How many of these health standards do you follow? Tick the ones that apply to you.

• Get minimum 7-8 hours of sleep every night.
• Avoid checking email first thing in the morning and right before you go to bed at night.
• Don’t skip meals – eat regular meals at correct meal times.
• Read a little bit every single day.
• Eat more home cooked food than junk food
• Stand more than you sit.
• Drink a glass of water first thing in the morning and have at least 8 glasses of water through the day.
• Go to the doctor and dentist for regular checkups.
• Exercise for 30 minutes at least 5 days a week.
• Avoid consuming lots of aerated beverages.

**Say**

• Tell the participants what is hygiene. As per the World Health Organization (WHO), “Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases.” In other words, hygiene means ensuring that you do whatever is required to keep your surroundings clean, so that you reduce the chances of spreading germs and diseases.
Elaborate

Explain – For instance, think about the kitchen in your home. Good hygiene means ensuring that the kitchen is always spick and span, the food is put away, dishes are washed and dustbins are not overflowing with garbage. Doing all this will reduce the chances of attracting pests like rats or cockroaches, and prevent the growth of fungus and other bacteria, which could spread disease.

How many of these health standards do you follow? Tick the ones that apply to you.

- Have a bath or shower every day with soap – and wash your hair with shampoo 2-3 times a week.
- Wear a fresh pair of clean undergarments every day.
- Brush your teeth in the morning and before going to bed.
- Cut your fingernails and toenails regularly.
- Wash your hands with soap after going to the toilet.
- Use an anti-perspirant deodorant on your underarms if you sweat a lot.
- Wash your hands with soap before cooking or eating.
- Stay home when you are sick, so other people don’t catch what you have.
- Wash dirty clothes with laundry soap before wearing them again.
- Cover your nose with a tissue/your hand when coughing or sneezing.

See how healthy and hygienic you are, by giving yourself 1 point for every ticked statement! Then take a look at what your score means.

Your Score

- 0-7/20: You need to work a lot harder to stay fit and fine! Make it a point to practice good habits daily and see how much better you feel!
- 7-14/20: Not bad, but there is scope for improvement! Try and add a few more good habits to your daily routine.
- 14-20/20: Great job! Keep up the good work! Your body and mind thank you.

Say

- Tell the participants about the Swatch Bharat Abhiyan. The ‘Swachh Bharat Abhiyan’ (Clean India Mission) launched by Prime Minister Shri Narendra Modi on 2nd October 2014, believes in doing exactly this. The aim of this mission is to clean the streets and roads of India and raise the overall level of cleanliness. Currently this mission covers 4,041 cities and towns across the country. Millions of our people have taken the pledge for a clean India. You should take the pledge too, and do everything possible to keep our country clean!
- Also tell the participants about the habits.
Elaborate

Explain – A habit is a behaviour that is repeated frequently. All of us have good habits and bad habits. Keep in mind the phrase by John Dryden: “We first make our habits, and then our habits make us.” This is why it is so important that you make good habits a way of life, and consciously avoid practicing bad habits.

Some good habits that you should make part of your daily routine are:

- Always having a positive attitude
- Making exercise a part of your daily routine
- Reading motivational and inspirational stories
- Smiling! Make it a habit to smile as often as possible
- Making time for family and friends
- Going to bed early and waking up early

Some bad habits that you should quit immediately are:

- Skipping breakfast
- Snacking frequently even when you are not hungry
- Eating too much fattening and sugary food
- Smoking, drinking alcohol and doing drugs
- Spending more money than you can afford
- Worrying about unimportant issues
- Staying up late and waking up late

Do

Give participants some safety tips to design a safe workplace. Every employer is obligated to ensure that his workplace follows the highest possible safety protocol. When setting up a business, owners must make it a point to:

- Use ergonomically designed furniture and equipment to avoid stooping and twisting
- Provide mechanical aids to avoid lifting or carrying heavy objects
- Have protective equipment on hand for hazardous jobs
- Designate emergency exits and ensure they are easily accessible
- Set down health codes and ensure they are implemented
- Follow the practice of regular safety inspections in and around the workplace
- Ensure regular building inspections are conducted
- Get expert advice on workplace safety and follow it
Say

- Tell the participants about the Negotiable Employee Safety Habits.

Elaborate

Tell them – Every employer is obligated to ensure that his workplace follows the highest possible safety protocol. When setting up a business, owners must make it a point to:

- Immediately report unsafe conditions to a supervisor
- Recognize and report safety hazards that could lead to slips, trips and falls
- Report all injuries and accidents to a supervisor
- Wear the correct protective equipment when required
- Learn how to correctly use equipment provided for safety purposes
- Be aware of and avoid actions that could endanger other people
- Take rest breaks during the day and some time off from work during the week

Say

- Tell the participants about the Self Analysis. To truly achieve your full potential, you need to take a deep look inside yourself and find out what kind of person you really are. This attempt to understand your personality is known as self-analysis. Assessing yourself in this manner will help you grow, and will also help you to identify areas within yourself that need to be further developed, changed or eliminated.

- Tell the participants about the motivation. Very simply put, motivation is your reason for acting or behaving in a certain manner. It is important to understand that not everyone is motivated by the same desires – people are motivated by many, many different things. We can understand this better by looking at Maslow’s Hierarchy of Needs.

- Also tell the participants about the Maslow’s Hierarchy of needs.

Elaborate

Tell them – Famous American psychologist Abraham Maslow wanted to understand what motivates people. He believed that people have five types of needs, ranging from very basic needs (called physiological needs) to more important needs that are required for self-growth (called self-actualization needs). Between the physiological and self-actualization needs are three other needs – safety needs, belongingness and love needs, and esteem needs. These needs are usually shown as a pyramid with five levels and are known as Maslow’s Hierarchy of Needs.
As you can see from the pyramid, the lowest level depicts the most basic needs. Maslow believed that our behaviour is motivated by our basic needs, until those needs are met. Once they are fulfilled, we move to the next level and are motivated by the next level of needs. Let’s understand this better with an example:

“Rupa comes from a very poor family. She never has enough food, water, warmth or rest. According to Maslow, until Rupa is sure that she will get these basic needs, she will not even think about the next level of needs – her safety needs. But, once Rupa is confident that her basic needs will be met, she will move to the next level, and her behaviour will then be motivated by her need for security and safety. Once these new needs are met, Rupa will once again move to the next level, and be motivated by her need for relationships and friends. Once this need is satisfied, Rupa will then focus on the fourth level of needs – her esteem needs, after which she will move up to the fifth and last level of needs – the desire to achieve her full potential.”

Say

- Tell the participants about the Achievements Motivation. We now know that people are motivated by basic, psychological and self-fulfilment needs. However, certain people are also motivated by the achievement of highly challenging accomplishments. This is known as Achievement Motivation, or ‘need for achievement’.

Elaborate

Tell them – The level of motivation achievement in a person differs from individual to individual. It is important that entrepreneurs have a high level of achievement motivation – a deep desire to accomplish something important and unique. It is equally important that they hire people who are also highly motivated by challenges and success.

**Characteristics of Entrepreneurs with Achievement Motivation**

- Entrepreneurs with achievement motivation can be described as follows:
- Unafraid to take risks for personal accomplishment
- Love being challenged Future-oriented Flexible and adaptive
- Value negative feedback more than positive feedback
- Very persistent when it comes to achieving goals
- Extremely courageous
- Highly creative and innovative
- Restless - constantly looking to achieve more
- Feel personally responsible for solving problems

**Think about it:**

- How many of these traits do you have?
- Can you think of entrepreneurs who display these traits?
Tell the participants how to cultivate a positive attitude. The good news is attitude is a choice. So it is possible to improve, control and change our attitude, if we decide we want to!

Tell them – The following tips help foster a positive mindset:

- Remember that you control your attitude, not the other way around
- Devote at least 15 minutes a day towards reading, watching or listening to something positive
- Avoid negative people who only complain and stop complaining yourself
- Expand your vocabulary with positive words and delete negative phrases from your mind
- Be appreciative and focus on what’s good in yourself, in your life, and in others
- Stop thinking of yourself as a victim and start being proactive
- Imagine yourself succeeding and achieving your goals

Tell the participants about the attitude. Now that we understand why motivation is so important for self-analysis, let’s look at the role our attitude plays in better understanding ourselves. Attitude can be described as your tendency (positive or negative), to think and feel about someone or something.

Tell them – Attitude is the foundation for success in every aspect of life. Our attitude can be our best friend or our worst enemy. In other words:

“The only disability in life is a bad attitude.”

When you start a business, you are sure to encounter a wide variety of emotions, from difficult times and failures to good times and successes. Your attitude is what will see you through the tough times and guide you towards success. Attitude is also infectious. It affects everyone around you, from your customers to your employees to your investors. A positive attitude helps build confidence in the workplace while a negative attitude is likely to result in the demotivation of your people.
Say:

• Tell the participants about the Honesty and Work Ethics. Honesty is the quality of being fair and truthful. It means speaking and acting in a manner that inspires trust.

Elaborate:

Tell them – A person who is described as honest is seen as truthful and sincere, and as someone who isn’t deceitful or devious and doesn’t steal or cheat. There are two dimensions of honesty – one is honesty in communication and the other is honesty in conduct. Honesty is an extremely important trait because it results in peace of mind and builds relationships that are based on trust. Being dishonest, on the other hand, results in anxiety and leads to relationships full of distrust and conflict.

Say:

• Tell the participants about the Qualities of Honesty People.

Elaborate:

Tell them – Honest individuals have certain distinct characteristics. Some common qualities among honest people are:

• They don’t worry about what others think of them. They believe in being themselves – they don’t bother about whether they are liked or disliked for their personalities.
• They stand up for their beliefs. They won’t think twice about giving their honest opinion, even if they are aware that their point of view lies with the minority.
• They are think skinned. This means they are not affected by others judging them harshly for their honest opinions.
• They forge trusting, meaningful and healthy friendships. Honest people usually surround themselves with honest friends. They have faith that their friends will be truthful and upfront with them at all times.

They are trusted by their peers. They are seen as people who can be counted on for truthful and objective feedback and advice.

• **Honesty and employees:** When entrepreneurs build honest relationships with their employees, it leads to more transparency in the workplace, which results in higher work performance and better results.
• **Honesty and investors:** For entrepreneurs, being honest with investors means not only sharing strengths but also candidly disclosing current and potential weaknesses, problem areas and solution strategies. Keep
in mind that investors have a lot of experience with startups and are aware that all new companies have problems. Claiming that everything is perfectly fine and running smoothly is a red flag for most investors.

- **Honesty with oneself**: The consequences of being dishonest with oneself can lead to dire results, especially in the case of entrepreneurs. For entrepreneurs to succeed, it is critical that they remain realistic about their situation at all times, and accurately judge every aspect of their enterprise for what it truly is.

**What are Work Ethics?**

Being ethical in the workplace means displaying values like honesty, integrity and respect in all your decisions and communications. It means not displaying negative qualities like lying, cheating and stealing. Workplace ethics play a big role in the profitability of a company. It is as crucial to an enterprise as high morale and teamwork. This is why most companies lay down specific workplace ethic guidelines that must compulsorily be followed by their employees. These guidelines are typically outlined in a company’s employee handbook.

**Say**

- Tell the participants about the Elements of Work Ethics.

**Elaborate**

Tell them – An entrepreneur must display strong work ethics, as well as hire only those individuals who believe in and display the same level of ethical behavior in the workplace. Some elements of a strong work ethic are:

- **Professionalism**: This involves everything from how you present yourself in a corporate setting to the manner in which you treat others in the workplace.

- **Respectfulness**: This means remaining poised and diplomatic regardless of how stressful or volatile a situation is.

- **Dependability**: This means always keeping your word, whether it’s arriving on time for a meeting or delivering work on time.

- **Dedication**: This means refusing to quit until the designated work is done, and completing the work at the highest possible level of excellence.

- **Determination**: This means embracing obstacles as challenges rather than letting them stop you, and pushing ahead with purpose and resilience to get the desired results.

- **Accountability**: This means taking responsibility for your actions and the consequences of your actions, and not making excuses for your mistakes.

- **Humility**: This means acknowledging everyone’s efforts and hard work, and sharing the credit for accomplishments.
Say

• Tell the participants how to foster a good work ethic. As an entrepreneur, it is important that you clearly define the kind of behavior that you expect from each and every team member in the workplace.

Elaborate

Tell them – You should make it clear that you expect employees to display positive work ethics like:

• **Honesty:** All work assigned to a person should be done with complete honesty, without any deceit or lies.
• **Good attitude:** All team members should be optimistic, energetic, and positive.
• **Reliability:** Employees should show up where they are supposed to be, when they are supposed to be there.
• **Good work habits:** Employees should always be well groomed, never use inappropriate language, conduct themselves professionally at all times, etc.
• **Initiative:** Doing the bare minimum is not enough. Every team member needs to be proactive and show initiative.
• **Trustworthiness:** Trust is non-negotiable. If an employee cannot be trusted, it’s time to let that employee go.
• **Respect:** Employees need to respect the company, the law, their work, their colleagues and themselves.
• **Integrity:** Each and every team member should be completely ethical and must display above board behaviour at all times.
• **Efficiency:** Efficient employees help a company grow while inefficient employees result in a waste of time and resources.

Say

• Tell the participants about the creativity and innovation.

Elaborate

**What is Creativity?**

Creativity means thinking outside the box. It means viewing things in new ways or from different perspectives, and then converting these ideas into reality. Creativity involves two parts: thinking and producing. Simply having an idea makes you imaginative, not creative. However, having an idea and acting on it makes you creative.
Characteristics of Highly Creative People

Some characteristics of creative people are:

- They are imaginative and playful
- They see issues from different angles
- They notice small details
- They have very little tolerance for boredom
- They detest rules and routine
- They love to daydream
- They are very curious

What is Innovation?

There are many different definitions of innovation. In simple terms, innovation means turning an idea into a solution that adds value. It can also mean adding value by implementing a new product, service or process, or significantly improving on an existing product, service or process.

Characteristics of Highly Innovative People

Some characteristics of highly innovative people are:

- They embrace doing things differently
- They don’t believe in taking shortcuts
- They are not afraid to be unconventional
- They are highly proactive and persistent
- They are organized, cautious and risk-averse

Say

Tell the participants about the Time Management. Time management is the process organizing your time, and deciding how to allocate your time between different activities. Good time management is the difference between working smart (getting more done in less time) and working hard (working for more time to get more done).

Elaborate

Tell them – Effective time management leads to an efficient work output, even when you are faced with tight deadlines and high pressure situations. On the other hand, not managing your time effectively results in inefficient output and increases stress and anxiety.

Benefits of Time Management

Time management can lead to huge benefits like:

- Greater productivity
• Higher efficiency  
• Better professional reputation  
• Reduced stress  
• Higher chances for career advancement  
• Greater opportunities to achieve goals  

Not managing time effectively can result in undesirable consequences like:  
• Missing deadlines  
• Inefficient work output  
• Substandard work quality  
• Poor professional reputation  
• Stalled career  
• Increase in stress and anxiety

**Do**

Discuss with the participants about the Traits of effective Time Managers. Some traits of effective time managers are:  
• They begin projects early  
• They set daily objectives  
• They modify plans if required, to achieve better results  
• They are flexible and open-minded  
• They inform people in advance if their help will be required  
• They know how to say no  
• They break tasks into steps with specific deadlines  
• They continually review long term goals  
• They think of alternate solutions if and when required  
• They ask for help when required  
• They create backup plans

**Say**

• Tell the participants about the effective time management techniques.
Elaborate

Tell them – You can manage your time better by putting into practice certain time management techniques. Some helpful tips are:

- Plan out your day as well as plan for interruptions. Give yourself at least 30 minutes to figure out your time plan. In your plan, schedule some time for interruptions.
- Put up a “Do Not Disturb” sign when you absolutely have to complete a certain amount of work.
- Close your mind to all distractions. Train yourself to ignore ringing phones, don’t reply to chat messages and disconnect from social media sites.
- Delegate your work. This will not only help your work get done faster, but will also show you the unique skills and abilities of those around you.
- Stop procrastinating. Remind yourself that procrastination typically arises due to the fear of failure or the belief that you cannot do things as perfectly as you wish to do them.
- Prioritize. List each task to be completed in order of its urgency or importance level. Then focus on completing each task, one by one.
- Maintain a log of your work activities. Analyze the log to help you understand how efficient you are, and how much time is wasted every day.
- Create time management goals to reduce time wastage.

Say

- Now tell the participants about the Anger Management.

Elaborate

Tell them – Anger management is the process of:

- Learning to recognize the signs that you, or someone else, is becoming angry
- Taking the best course of action to calm down the situation in a positive way. Anger management does not mean suppressing anger.

Importance of Anger Management

Anger is a perfectly normal human emotion. In fact, when managed the right way, anger can be considered a healthy emotion. However, if it is not kept in check, anger can make us act inappropriately and can lead to us saying or doing things that we will likely later regret.

Extreme anger can:

- Hurt you physically: It leads to heart disease, diabetes, a weakened immune system, insomnia, and high blood pressure.
- Hurt you mentally: It can cloud your thinking and lead to stress, depression and mental health issues.
• Hurt your career: It can result in alienating your colleagues, bosses, clients and lead to the loss of respect.
• Hurt your relationships: It makes it hard for your family and friends to trust you, be honest with you and feel comfortable around you.

This is why anger management, or managing anger appropriately, is so important.

**Say**

• Tell the participants about the Anger Management Strategies.

**Elaborate**

Tell them – Here are some strategies that can help you control your anger:

**Strategy 1:** Relaxation
**Strategy 2:** Cognitive Restructuring
**Strategy 3:** Problem Solving
**Strategy 4:** Better Communication
**Strategy 5:** Changing Your Environment

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 267 and explain trainees’ the concept.

**Say**

• Tell the participants about the Stress Management. We say we are ‘stressed’ when we feel overloaded and unsure of our ability to deal with the pressures placed on us. Anything that challenges or threatens our well-being can be defined as a stress.

**Elaborate**

Tell them – It is important to note that stress can be good and bad. While good stress keeps us going, negative stress undermines our mental and physical health. This is why it is so important to manage negative stress effectively.

**Causes of Stress**
Stress can be caused by internal and external factors.
Internal causes of stress:
• Constant worry
Elaborate

Tell them – Stress can manifest itself in numerous ways. Take a look at the cognitive, emotional, physical and behavioral symptoms of stress.

<table>
<thead>
<tr>
<th>Cognitive Symptoms</th>
<th>Emotional Symptoms</th>
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<tbody>
<tr>
<td>Memory problems</td>
<td>Depression</td>
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<tr>
<td>Concentration issues</td>
<td>Agitation</td>
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<tr>
<td>Lack of judgement</td>
<td>Irritability</td>
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<tr>
<td>Pessimism</td>
<td>Loneliness</td>
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<td>Anxiety</td>
<td>Anxiety</td>
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<td>Constant worrying</td>
<td>Anger</td>
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<tr>
<td>Aches and pain</td>
<td>Increase or decrease in appetite</td>
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<td>Diarrhea or constipation</td>
<td>Over sleeping or not sleeping enough</td>
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<tr>
<td>Nausea</td>
<td>Withdrawing socially</td>
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<tr>
<td>Dizziness</td>
<td>Ignoring responsibilities</td>
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<tr>
<td>Chest pain and/or rapid heartbeat</td>
<td>Consumption of alcohol or cigarettes</td>
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<tr>
<td>Frequent cold or flu like feelings</td>
<td>Nervous habits like nail biting, pacing etc.</td>
</tr>
</tbody>
</table>
Give participants Tips for managing Stress. The following tips can help you manage your stress better:

- Note down the different ways in which you can handle the various sources of your stress.
- Remember that you cannot control everything, but you can control how you respond.
- Discuss your feelings, opinions and beliefs rather than reacting angrily, defensively or passively.
- Practice relaxation techniques like meditation, yoga or tai chi when you start feeling stressed.
- Devote a part of your day towards exercise.
- Eat healthy foods like fruits and vegetables. Avoid unhealthy foods especially those containing large amounts of sugar.
- Plan your day so that you can manage your time better, with less stress.
- Say no to people and things when required.
- Schedule time to pursue your hobbies and interests.
- Ensure you get at least 7-8 hours of sleep.
- Reduce your caffeine intake.
- Increase the time spent with family and friends.

Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.

Activity

- Divide the class into two equal groups.
- Tell the participants they have to give a presentation on Work Ethics and Innovation.
- Tell them they would be given a time of 20 minute for preparation. The time for presentation for each group should not exceed 20 minutes per group.
- Once the presentations are complete appreciate the efforts made by the group and summarize the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Presentation on work ethics</td>
<td>2 Hours</td>
<td>Charts and markers</td>
</tr>
</tbody>
</table>
UNIT 12.2: Digital Literacy: A Recap

Unit Objectives

At the end of the unit, students 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 basic computer terminology
5. Recall the functions of basic computer keys
6. Discuss the main applications of MS Office
7. Discuss the benefits of Microsoft Outlook
8. Discuss the different types of e-commerce
9. List the benefits of e-commerce for retailers and customers
10. Discuss how the Digital India campaign will help boost e-commerce in India
11. Describe how you will sell a product or service on an e-commerce platform

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.
• Copies of Handouts.

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.
• Acknowledge their responses and clear their doubts if any.
• Tell them they will learn about Digital Literacy.

Say

• Tell the participants about the basic parts of a Computer.
Elaborate

- **Central Processing Unit (CPU):** The brain of the computer. It interprets and carries out program instructions.
- **Hard Drive:** A device that stores large amounts of data.
- **Monitor:** The device that contains the computer screen where the information is visually displayed.
- **Desktop:** The first screen displayed after the operating system loads.
- **Background:** The image that fills the background of the desktop.
- **Mouse:** A hand-held device used to point to items on the monitor.
- **Speakers:** Devices that enable you to hear sound from the computer.
- **Printer:** A device that converts output from a computer into printed paper documents.
- **Icon:** A small picture or image that visually represents something on your computer.
- **Cursor:** An arrow which indicates where you are positioned on the screen.
- **Program Menu:** A list of programs on your computer that can be accessed from the Start menu.
- **Taskbar:** The horizontal bar at the bottom of the computer screen that lists applications that are currently in use.
- **Recycle Bin:** A temporary storage for deleted files.

Do

Discuss with the participants about the basic internet terms.

- **The Internet:** Avast, international collection of computer networks that transfers information.
- **The World Wide Web:** A system that lets you access information on the Internet.
- **Website:** A location on the World Wide Web (and Internet) that contains information about a specific topic.
- **Homepage:** Provides information about a website and directs you to other pages on that website.
- **Link/Hyperlink:** A highlighted or underlined icon, graphic, or text that takes you to another file or object.
- **Web Address/URL:** The address for a website.
- **Address Box:** A box in the browser window where you can type in a web address.

Say

- Tell the participants about the basic computer keys.
  - **Arrow Keys:** Press these keys to move your cursor.
  - **Space bar:** Adds a space.
  - **Enter/Return:** Moves your cursor to a new line.
  - **Shift:** Press this key if you want to type a capital letter or the upper symbol of a key.
» Caps Lock: Press this key if you want all the letters you type to be capital letters. Press it again to revert back to typing lowercase letters.

» Backspace: Deletes everything to the left of your cursor.

• Also tell the participants about the MS office and Email.

Elaborate

Tell them – MS Office or Microsoft Office is a suite of computer programs developed by Microsoft. Although meant for all users, it offers different versions that cater specifically to students, home users and business users. All the programs are compatible with both, Windows and Macintosh.

Most Popular Office Products

Some of the most popular and universally used MS Office applications are:

1. **Microsoft Word**: Allows users to type text and add images to a document.
2. **Microsoft Excel**: Allows users to enter data into a spreadsheet and create calculations and graphs.
3. **Microsoft PowerPoint**: Allows users to add text, pictures and media and create slideshows and presentations.
4. **Microsoft Outlook**: Allows users to send and receive email.
5. **Microsoft OneNote**: Allows users to make drawings and notes with the feel of a pen on paper.
6. **Microsoft Access**: Allows users to store data over many tables.

Why Choose Microsoft Outlook

A popular email management choice especially in the workplace, Microsoft Outlook also includes an address book, notebook, web browser and calendar. Some major benefits of this program are:

• Integrated search function: You can use keywords to search for data across all Outlook programs.
• Enhanced security: Your email is safe from hackers, junk mail and phishing website email.
• Email syncing: Sync your mail with your calendar, contact list, notes in One Note and…your phone!
• Offline access to email: No Internet? No problem! Write emails offline and send them when you’re connected again.

Say

• Tell the participants about the E-Commerce. E-commerce is the buying or selling of goods and services, or the transmitting of money or data, electronically on the internet. E-Commerce is the short form for “electronic commerce.”
Elaborate

Tell them – Followings are the examples of E-Commerce:

- Online shopping
- Online auctions
- Online ticketing
- Electronic payments
- Internet banking

Types of E-Commerce

E-commerce can be classified based on the types of participants in the transaction. The main types of e-commerce are:

- **Business to Business (B2B):** Both the transacting parties are businesses.
- **Business to Consumer (B2C):** Businesses sell electronically to end-consumers.
- **Consumer to Consumer (C2C):** Consumers come together to buy, sell or trade items to other consumers.
- **Consumer-to-Business (C2B):** Consumers make products or services available for purchase to companies looking for exactly those services or products.
- **Business-to-Administration (B2A):** Online transactions conducted between companies and public administration.
- **Consumer-to-Administration (C2A):** Online transactions conducted between individuals and public

The e-commerce business provides some benefits for retailers and customers.

**Benefits for retailers:**

- Establishes an online presence
- Reduces operational costs by removing overhead costs
- Increases brand awareness through the use of good keywords
- Increases sales by removing geographical and time constraints

**Benefits for customers:**

- Offers a wider range of choice than any physical store
- Enables goods and services to be purchased from remote locations
- Enables consumers to perform price comparisons

Do

- Discuss with the participants about the Digital India Campaign. Prime Minister Narendra Modi launched the Digital India campaign in 2015, with the objective of offering every citizen of India access to digital services, knowledge and information. The campaign aims to improve the country’s online infrastructure and increase internet connectivity, thus boosting the e-commerce industry.
- Currently, the majority of online transactions come from tier 2 and tier 3 cities. Once the Digital India campaign is in place, the government will deliver services through mobile connectivity, which will help deliver internet
to remote corners of the country. This will help the e-commerce market to enter India’s tier 4 towns and rural areas.

E-Commerce Activity
Choose a product or service that you want to sell online. Write a brief note explaining how you will use existing e-commerce platforms, or create a new e-commerce platform, to sell your product or service.

Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.

Activity

- Divide the class into two equal groups.
- Tell the participants they have to demonstration the steps of opening a Bank account and on online banking.
- Tell them they would be given a time of 20 minute for preparation. The time for presentation for each group should not exceed 20 minutes per group.
- Once the presentations are complete appreciate the efforts made by the group and summarize the highlights of the activity.

<table>
<thead>
<tr>
<th>Skill Practice</th>
<th>Time</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstrate the process of opening a bank account and how to use online banking</td>
<td>2 Hours</td>
<td>Charts and markers</td>
</tr>
</tbody>
</table>
UNIT 12.3: Money Matters

Unit Objectives

At the end of the unit, students 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 transfers

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.
- Copies of Handouts.

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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about Money Matters.

Say

- Tell the participants about the Personal Finance. We all know that the future is unpredictable. You never know what will happen tomorrow, next week or next year. That’s why saving money steadily through the years is so important.
Say

- Tell the participants about the Types of Bank Accounts.

Elaborate

Tell them – In India, banks offer four main types of bank accounts. These are:

- **Current Accounts**
- **Savings Accounts**
- **Recurring Deposit Accounts**
- **Fixed Deposit Accounts**

**Current Accounts**

Current accounts offer the most liquid deposits and thus, are best suited for businessmen and companies. As these accounts are not meant for investments and savings, there is no imposed limit on the number or amount of transactions that can be made on any given day. Current account holders are not paid any interest on the amounts held in their accounts. They are charged for certain services offered on such accounts.
Savings Accounts
Savings accounts are meant to promote savings, and are therefore the number one choice for salaried individuals, pensioners and students. While there is no restriction on the number and amount of deposits made, there are usually restrictions on the number and amount of withdrawals. Savings account holders are paid interest on their savings.

Recurring Deposit Accounts
Recurring Deposit accounts, also called RD accounts, are the accounts of choice for those who want to save an amount every month, but are unable to invest a large sum at one time. Such account holders deposit a small, fixed amount every month for a pre-determined period (minimum 6 months). Defaulting on a monthly payment results in the account holder being charged a penalty amount. The total amount is repaid with interest at the end of the specified period.

Fixed Deposit Accounts
Fixed Deposit accounts, also called FD accounts, are ideal for those who wish to deposit their savings for a long term in return for a high rate of interest. The rate of interest offered depends on the amount deposited and the time period, and also differs from bank to bank. In the case of an FD, a certain amount of money is deposited by the account holder for a fixed period of time. The money can be withdrawn when the period expires. If necessary, the depositor can break the fixed deposit prematurely. However, this usually attracts a penalty amount which also differs from bank to bank.

Say

- Tell the participants about Opening a Bank Accounts.

Elaborate

Tell them – Opening a bank account is quite a simple process. Take a look at the steps to open an account of your own:

**Step 1: Fill in the Account Opening Form**
This form requires you to provide the following information:

- Personal details (name, address, phone number, date of birth, gender, occupation, address)
- Method of receiving your account statement (hard copy/email)
- Details of your initial deposit (cash/cheque)
- Manner of operating your account (online/mobile banking/traditional via cheque, slip books) Ensure that you sign wherever required on the form.

**Step 2: Affix your Photograph**
Stick a recent photograph of yourself in the allotted space on the form.
Step 3: Provide your Know Your Customer (KYC) Details

KYC is a process that helps banks verify the identity and address of their customers. To open an account, every individual needs to submit certain approved documents with respect to photo identity (ID) and address proof. Some Officially Valid Documents (OVDs) are:

• Passport
• Driving License
• Voters’ Identity Card
• PAN Card
• UIDAI (Aadhaar) Card

Step 4: Submit All your Documents

Submit the completed Account Opening Form and KYC documents. Then wait until the forms are processed and your account has been opened!

Say

• Tell the participants about Fixed and variable costs.

Elaborate

Tell them — Fixed costs and variable costs together make up a company’s total cost. These are the two types of costs that companies have to bear when producing goods and services. A fixed cost does not change with the volume of goods or services a company produces. It always remains the same. A variable cost, on the other hand, increases and decreases depending on the volume of goods and services produced. In other words, it varies with the amount produced.

Differences between Fixed and Variable Costs

Let’s take a look at some of the main differences between fixed and variable costs:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Fixed Costs</th>
<th>Variable Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning</td>
<td>A cost that stays the same, regardless of the output produced.</td>
<td>A cost that changes when the number of units produced.</td>
</tr>
<tr>
<td>Incurred</td>
<td>Incurred irrespective of units being produced.</td>
<td>Incurred only when units are produced.</td>
</tr>
<tr>
<td>Unit cost</td>
<td>Inversely proportional to the number of units produced.</td>
<td>Remains the same, per unit.</td>
</tr>
<tr>
<td>Examples</td>
<td>Depreciation, rent, salary, insurance, tax etc.</td>
<td>Material consumed, wages, commission on sales, packing expenses, etc.</td>
</tr>
</tbody>
</table>
Say

• Tell the participants about the investment, insurance and taxes.

Elaborate

Tell them – Investment means that money is spent today with the aim of reaping financial gains at a future time. The main types of investment options are as follows:

• Bonds
• Stocks
• Small Savings
• Mutual Funds
• Fixed Deposits
• Real Estate
• Hedge Funds
• Private Equity
• Venture Capital

Insurance

There are two types of insurance:

1. Life Insurance
2. Non-Life or General Insurance.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 278 and explain trainees’ the concept.

Say

• Tell the participants about the online banking, NEFT, RTGS etc.

Elaborate

Tell them – Internet or online banking allows account holders to access their account from a laptop at any location. In this way, instructions can be issued. To access an account, account holders simply need to use their unique customer ID number and password.
Internet banking can be used to:

- Find out an account balance
- Transfer amounts from one account to another
- Arrange for the issuance of cheques
- Instruct payments to be made
- Request for a cheque book
- Request for a statement of accounts
- Make a fixed deposit

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 281 and explain trainees’ the concept.

Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.
UNIT 12.4: Preparing for Employment & Self Employment

Unit Objectives

At the end of the unit, students will be able to:
1. Discuss the steps 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. Discuss basic workplace terminology

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.
• Copies of Handouts.

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.
• Acknowledge their responses and clear their doubts if any.
• Tell them they will learn about Employment and Self Employment.

Say

• Tell the participants about the Interview Preparation. The success of your getting the job that you want depends largely on how well your interview for that job goes. Therefore, before you go in for your interview, it is important that you prepare for it with a fair amount of research and planning.
Elaborate

Tell them – Take a look at the steps to follow in order to be well prepared for an interview:

• Research the organization that you are having the interview with.
• Think about whether your skills and qualifications match the job requirements.
• Go through the most typical interview questions asked, and prepare your responses.
• Plan your attire for the interview.
• Ensure that you have packed everything that you may require during the interview.
• Remember the importance of non-verbal communication.
• Make a list of questions to end the interview with.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 284 and explain trainees’ the concept.

Say

• Tell the participants how to prepare an effective resume. A resume is a formal document that lists a candidate’s work experience, education and skills. A good resume gives a potential employer enough information to believe the applicant is worth interviewing. That’s why it is so important to create a résumé that is effective.

Elaborate

Tell them – Take a look at the steps to create an effective resume:

Step 1: Write the Address Section
Step 2: Add the Profile Summary Section
Step 3: Include Your Educational Qualifications
Step 4: List Your Technical Skills
Step 5: Insert Your Academic Project Experience
Step 6: List Your Strengths
Step 7: List Your Extracurricular Activities
Step 8: Write Your Personal Details

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 286 and explain trainees’ the concept.
**Tell the participants about the interview FAQs.**

**Elaborate**

Tell them – Take a look at some of the most frequently asked interview questions, and some helpful tips on how to answer them.

**Can you tell me a little about yourself?**
Tips to answer:
- Don’t provide your full employment or personal history.
- Offer 2-3 specific experiences that you feel are most valuable and relevant.
- Conclude with how those experiences have made you perfect for this specific role.

**How did you hear about the position?**
Tips to answer:
- Tell the interviewer how you heard about the job – whether it was through a friend (name the friend), event or article (name them) or a job portal (say which one).
- Explain what excites you about the position and what in particular caught your eye about this role.

**What do you know about the company?**
Tips to answer:
- Don’t recite the company’s About Us page.
- Show that you understand and care about the company’s goals.
- Explain why you believe in the company’s mission and values.

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 288 and explain trainees’ the concept.

**Tell the participants about the work readiness.**
Elaborate

Tell them – Every employee should be well versed in the following terms:

- **Annual leave**: Paid vacation leave given by employers to employees.
- **Background Check**: A method used by employers to verify the accuracy of the information provided by potential candidates.
- **Benefits**: A part of an employee’s compensation package.
- **Breaks**: Short periods of rest taken by employees during working hours.
- **Compensation Package**: The combination of salary and benefits that an employer provides to his/her employees.
- **Compensatory Time (Comp Time)**: Time off in lieu of pay.
- **Contract Employee**: An employee who works for one organization that sells said employee’s services to another company, either on a project or time basis.

**Trainer’s Note**: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 290 and explain trainees’ the concept.

Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.
UNIT 12.5: Understand Entrepreneurship

Unit Objectives

At the end of the unit, students 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. Understand 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 government’s role in the entrepreneurship ecosystem
26. Discuss the current entrepreneurship ecosystem in India
27. Understand the purpose of the Make in India campaign
28. Discuss the relationship between entrepreneurship and risk appetite
29. Discuss the relationship between entrepreneurship and resilience
30. Describe the characteristics of a resilient entrepreneur
31. Discuss how to deal with failure
**Facilitator Guide**

**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.
- Copies of Handouts.

**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.
- Acknowledge their responses and clear their doubts if any.
- Tell them they will learn about Entrepreneurship.

**Say**

- Tell the participants about the Entrepreneurship. Anyone who is determined to start a business, no matter what the risk, is an entrepreneur. Entrepreneurs run their own start-up, take responsibility for the financial risks and use creativity, innovation and vast reserves of self-motivation to achieve success.
- Tell the participants about the importance and characteristics of Entrepreneurship.

**Elaborate**

Tell them – Entrepreneurship is very important for the following reasons:

- It results in the creation of new organizations
- It brings creativity into the marketplace
- It leads to improved standards of living
- It helps develop the economy of a country

**Characteristics of Entrepreneurs**

All successful entrepreneurs have certain characteristics in common.

They are all:

- Extremely passionate about their work
- Confident in themselves
- Disciplined and dedicated
• Motivated and driven
• Highly creative
• Visionaries
• Open-minded
• Decisive

**Entrepreneurs also have a tendency to:**
• Have a high risk tolerance
• Thoroughly plan everything
• Manage their money wisely
• Make their customers their priority
• Understand their offering and their market in detail
• Ask for advice from experts when required
• Know when to cut their losses

**Say**

• Tell the participants about the types of enterprises.

**Elaborate**

Tell them – As an entrepreneur in India, you can own and run any of the following types of enterprises:

**Sole Proprietorship**

In a sole proprietorship, a single individual owns, manages and controls the enterprise. This type of business is the easiest to form with respect to legal formalities. The business and the owner have no separate legal existence. All profit belongs to the proprietor, as do all the losses - the liability of the entrepreneur is unlimited.

**Partnership**

A partnership firm is formed by two or more people. The owners of the enterprise are called partners. A partnership deed must be signed by all the partners. The firm and its partners have no separate legal existence. The profits are shared by the partners. With respect to losses, the liability of the partners is unlimited. A firm has a limited life span and must be dissolved when any one of the partners dies, retires, claims bankruptcy or goes insane.

**Limited Liability Partnership (LLP)**

In a Limited Liability Partnership or LLP, the partners of the firm enjoy perpetual existence as well as the advantage of limited liability. Each partner’s liability is limited to their agreed contribution to the LLP. The partnership and its partners have a separate legal existence.
Tell the participants about the Leadership and team Work. Leadership means setting an example for others to follow. Setting a good example means asking someone to do something that you wouldn’t willingly want to do yourself. Leadership is about figuring out what to do in order to win as a team, and as a company. Leaders believe in doing the right things.

Also tell the participants about the Leadership qualities that all entrepreneurs need.

Tell them – Building a successful enterprise is only possible if the entrepreneur in charge possesses excellent leadership qualities. Some critical leadership skills that every entrepreneur must have are:

- **Pragmatism:** This means having the ability to highlight all obstacles and challenges, in order to resolve issues and reduce risks.
- **Humility:** This means admitting to mistakes often and early, and being quick to take responsibility for your actions. Mistakes should be viewed as challenges to overcome, not opportunities to point blame.
- **Flexibility:** It is critical for a good leader to be very flexible and quickly adapt to change. It is equally critical to know when to adapt and when not to.
- **Authenticity:** This means showing both, your strengths and your weaknesses. It means being human and showing others that you are human.
- **Reinvention:** This means refreshing or changing your leadership style when necessary. To do this, it’s important to learn where your leadership gaps lie and find out what resources are required to close them.
- **Awareness:** This means taking the time to recognize how others view you. It means understanding how your presence affects those around you.

Discuss with the participants about the teamwork and teams. Teamwork occurs when the people in a workplace combine their individual skills to pursue a common goal. Effective teams are made up of individuals who work together to achieve this common goal. A great team is one who holds themselves accountable for the end result.

Also tell the participants about the importance of team work in entrepreneurial success.
Tell them – For an entrepreneurial leader, building an effective team is critical to the success of a venture. An entrepreneur must ensure that the team he builds possesses certain crucial qualities, traits and characteristics. An effective team is one which has:

- **Unity of purpose:** All the team members should clearly understand and be equally committed to the purpose, vision and goals of the team.
- **Great communication skills:** Team members should have the ability to express their concerns, ask questions and use diagrams, and charts to convey complex information.
- **The ability to collaborate:** Every member should feel entitled to provide regular feedback on new ideas.
- **Initiative:** The team should consist of proactive individuals. The members should have the enthusiasm to come up with new ideas, improve existing ideas, and conduct their own research.
- **Visionary members:** The team should have the ability to anticipate problems and act on these potential problems before they turn into real problems.
- **Great adaptability skills:** The team must believe that change is a positive force. Change should be seen as the chance to improve and try new things.
- **Excellent organizational skills:** The team should have the ability to develop standard work processes, balance responsibilities, properly plan projects, and set in place methods to measure progress and ROI.

**Say**

- Tell the participants about the communication skills. Listening is the ability to correctly receive and understand messages during the process of communication. Listening is critical for effective communication. Without effective listening skills, messages can easily be misunderstood. This results in a communication breakdown and can lead to the sender and the receiver of the message becoming frustrated or irritated.
- Also tell the participants how to listen effectively.

**Elaborate**

Tell them – To listen effectively you should:

- Stop talking
- Stop interrupting
- Focus completely on what is being said
- Nod and use encouraging words and gestures
- Be open-minded
- Think about the speaker’s perspective
- Be very, very patient
• Pay attention to the tone that is being used
• Pay attention to the speaker’s gestures, facial expressions and eye movements
• Do not try and rush the person
• Do not let the speaker’s mannerisms or habits irritate or distract you

**How to Listen Effectively**

How successfully a message gets conveyed depends entirely on how effectively you are able to get it through. An effective speaker is one who enunciates properly, pronounces words correctly, chooses the right words and speaks at a pace that is easily understandable. Besides this, the words spoken out loud need to match the gestures, tone and body language used.

What you say, and the tone in which you say it, results in numerous perceptions being formed. A person who speaks hesitantly may be perceived as having low self-esteem or lacking in knowledge of the discussed topic. Those with a quiet voice may very well be labelled as shy. And those who speak in commanding tones with high levels of clarity, are usually considered to be extremely confident. This makes speaking a very critical communication skill.

**Say**

• Tell the participants how to speak effectively.

**Elaborate**

Tell them – To speak effectively you should:

• Incorporate body language in your speech like eye contact, smiling, nodding, gesturing etc.
• Build a draft of your speech before actually making your speech.
• Ensure that all your emotions and feelings are under control.
• Pronounce your words distinctly with the correct pitch and intensity. Your speech should be crystal clear at all times.
• Use a pleasant and natural tone when speaking. Your audience should not feel like you are putting on an accent or being unnatural in any way.
• Use precise and specific words to drive your message home. Ambiguity should be avoided at all costs.
• Ensure that your speech has a logical flow.
• Be brief. Don’t add any unnecessary information.
• Make a conscious effort to avoid irritating mannerisms like fidgeting, twitching etc.
• Choose your words carefully and use simple words that the majority of the audience will have no difficulty understanding.
• Use visual aids like slides or a whiteboard.
Say

Tell the participants about the problem solving and negotiation skills. As per The Concise Oxford Dictionary (1995), a problem is, “A doubtful or difficult matter requiring a solution”. All problems contain two elements:

- Goals
- Obstacles

The aim of problem solving is to recognize the obstacles and remove them in order to achieve the goals.

- Also tell the participants how to solve the problems.

Elaborate

Tell them – Solving a problem requires a level of rational thinking. Here are some logical steps to follow when faced with an issue:

- **Step 1:** Identify the problem
- **Step 2:** Study the problem in detail
- **Step 3:** List all possible solutions
- **Step 4:** Select the best solution
- **Step 5:** Implement the chosen solution
- **Step 6:** Check that the problem has really been solved

Do

Discuss with the participants about the important traits for problem solving. Highly developed problem solving skills are critical for both, business owners and their employees. The following personality traits play a big role in how effectively problems are solved:

- Being open minded
- Asking the right questions
- Being proactive
- Not panicking
• Having a positive attitude
• Focusing on the right problem

Say

Tell the participants about the negotiation. Negotiation is a method used to settle differences. The aim of negotiation is to resolve differences through a compromise or agreement while avoiding disputes. Without negotiation, conflicts are likely to lead to resentment between people.

Elaborate

Tell them – Good negotiation skills help satisfy both parties and go a long way towards developing strong relationships.

Why Negotiate

Starting a business requires many, many negotiations. Some negotiations are small while others are critical enough to make or break a startup. Negotiation also plays a big role inside the workplace. As an entrepreneur, you need to know not only how to negotiate yourself, but also how to train employees in the art of negotiation.

How to Negotiate

Take a look at some steps to help you negotiate:

• Step 1: Pre-Negotiation Preparation: Agree on where to meet to discuss the problem, decide who all will be present and set a time limit for the discussion.
• Step 2: Discuss the Problem: This involves asking questions, listening to the other side, putting your views forward and clarifying doubts.
• Step 3: Clarify the Objective: Ensure that both parties want to solve the same problem and reach the same goal.
• Step 4: Aim for a Win-Win Outcome: Try your best to be open minded when negotiating. Compromise and offer alternate solutions to reach an outcome where both parties win.
• Step 5: Clearly Define the Agreement: When an agreement has been reached, the details of the agreement should be crystal clear to both sides, with no scope for misunderstandings.
• Step 6: Implement the Agreed Upon Solution: Agree on a course of action to set the solution in motion.

Say

• Now tell the participants about the Business opportunities Identification.
Tell them – The ability to identify business opportunities is an essential characteristic of an entrepreneur.

**What is an Opportunity?**

The word opportunity suggests a good chance or a favourable situation to do something offered by circumstances. A business opportunity means a good or favourable change available to run a specific business in a given environment, at a given point of time.

**Common Questions Faced by Entrepreneurs**

A critical question that all entrepreneurs face is how to go about finding the business opportunity that is right for them.

Some common questions that entrepreneurs constantly think about are:

- Should the new enterprise introduce a new product or service based on an unmet need?
- Should the new enterprise select an existing product or service from one market and offer it in another where it may not be available?
- Should the enterprise be based on a tried and tested formula that has worked elsewhere?

It is therefore extremely important that entrepreneurs must learn how to identify new and existing business opportunities and evaluate their chances of success.

**Trainer's Note:** These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 301 and explain trainees' the concept.

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**Say**

- Now tell the participants about the Entrepreneurship Support eco-system.

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**Elaborate**

Tell them – An entrepreneur is a person who

- Does not work for an employee
- Runs a small enterprise
- Assumes all the risks and rewards of the enterprise, idea, good or service

**Types of Entrepreneurs**

There are four main types of entrepreneurs:

- The Traditional Entrepreneur
- The Growth Potential Entrepreneur
• The Project-Oriented Entrepreneur
• The Lifestyle Entrepreneur

**Characteristics of an Entrepreneur**

• Successful entrepreneurs have the following characteristics
• They are highly motivated
• They are creative and persuasive
• They are mentally prepared to handle each and every task
• They have excellent business skills – they know how to evaluate their cash flow, sales and revenue
• They are willing to take great risks
• They are very proactive – this means they are willing to do the work themselves, rather than wait for someone else to do it
• They have a vision – they are able to see the big picture
• They are flexible and open-minded
• They are good at making decisions

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 303 and explain trainees’ the concept.

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**Do**

Discuss with the participants about the Entrepreneur Success Stories.

**Dhiru Bhai Ambani**

*Dhirubhai Ambani began his entrepreneurial career by selling “bhajias” to pilgrims in Mount Girnar on weekends. At 16, he moved to Yemen where he worked as a gas-station attendant, and as a clerk in an oil company. He returned to India with Rs. 50,000 and started a textile trading company. Reliance went on to become the first Indian company to raise money in global markets and the first Indian company to feature in Forbes 500 list.*

**Dr. Karsanbhai Patel**

*Karsanbhai Patel made detergent powder in the backyard of his house. He sold his product door-to-door and offered a money back guarantee with every pack that was sold. He charged Rs. 3 per kg when the cheapest detergent at that time was Rs.13 per kg. Dr. Patel eventually started Nirma which became a whole new segment in the Indian domestic detergent market.*

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**Say**

• Now tell the participants about the Entrepreneurial Process.
Elaborate

Tell them – Let’s take a look at the stages of the entrepreneurial process.

- **Stage 1:** Idea Generation. The entrepreneurial process begins with an idea that has been thought of by the entrepreneur. The idea is a problem that has the potential to be solved.
- **Stage 2:** Germination or Recognition. In this stage a possible solution to the identified problem is thought of.
- **Stage 3:** Preparation or Rationalization. The problem is studied further and research is done to find out how others have tried to solve the same problem.
- **Stage 4:** Incubation or Fantasizing. This stage involves creative thinking for the purpose of coming up with more ideas. Less thought is given to the problem areas.
- **Stage 5:** Feasibility Study: The next step is the creation of a feasibility study to determine if the idea will make a profit and if it should be seen through.
- **Stage 6:** Illumination or Realization. This is when all uncertain areas suddenly become clear. The entrepreneur feels confident that his idea has merit.
- **Stage 7:** Verification or Validation. In this final stage, the idea is verified to see if it works and if it is useful.

Take a look at the diagram below to get a better idea of this process.

Say

- Now tell the participants about the Entrepreneur. The entrepreneurship support ecosystem signifies the collective and complete nature of entrepreneurship. New companies emerge and flourish not only because of the courageous, visionary entrepreneurs who launch them, but they thrive as they are set in an environment or ‘ecosystem’ made of private and public participants.

Elaborate

Tell them – These players nurture and sustain the new ventures, facilitating the entrepreneurs’ efforts.

**An entrepreneurship ecosystem comprises of the following six domains:**

- **Favourable Culture:** This includes elements such as tolerance of risk and errors, valuable networking and positive social standing of the entrepreneur.
- **Facilitating Policies & Leadership:** This includes regulatory framework incentives and existence of public research institutes.
- **Financing Options:** Angel financing, venture capitalists and micro loans would be good examples of this.
- **Human Capital:** This refers to trained and untrained labour, entrepreneurs and entrepreneurship training programmes, etc.
- **Conducive Markets for Products & Services:** This refers to an existence or scope of existence of a market for the product/service.
- **Institutional & Infrastructural Support:** This includes legal and financing advisers, telecommunications, digital and transportation infrastructure, and entrepreneurship networking programmes.
These domains indicate whether there is a strong entrepreneurship support ecosystem and what actions should the government put in place to further encourage this ecosystem. The six domains and their various elements have been graphically depicted.

Every entrepreneurship support ecosystem is unique and all the elements of the ecosystem are interdependent. Although every region’s entrepreneurship ecosystem can be broadly described by the above features, each ecosystem is the result of the hundred elements interacting in highly complex and particular ways.

Entrepreneurship ecosystems eventually become (largely) self-sustaining. When the six domains are resilient enough, they are mutually beneficial. At this point, government involvement can and should be significantly minimized. Public leaders do not need to invest a lot to sustain the ecosystem. It is imperative that the entrepreneurship ecosystem incentives are formulated to be self-liquidating, hence focusing on sustainability of the environment.

**Say**

- Now tell the participants about the Government’s role in the Entrepreneurship Ecosystem. Encouraging new ventures is a major focus for policymakers. Governments across the world are recognizing that new businesses flourish in distinctive types of supportive environments.

**Elaborate**

Tell them – Policymakers should study the scenario and take into account the following points whilst they formulate policies and regulations that enable successful entrepreneurship support ecosystems.

- Policymakers should avoid regulations that discourage new entrants and work towards building efficient methods for business startups. Policies and regulations that favour existing, dominant firms over entrepreneurial ventures restrict competition and obstruct entry for new companies.
- Instead of developing policies conceptually intended to correct market failures, policymakers should interact with entrepreneurs and understand the challenges faced by them. The feedback should be used to develop policies that incite idea exploration, product development and increased rates of deal flow.
- Entrepreneurial supporters should create a database that enables identifying who the participants in the ecosystem are and how they are connected. These ecosystem maps are useful tools in developing engagement strategies.
- Disruptions are unavoidable in economic and social life. However, it’s important to note that economic disruption gives rise to entrepreneurial opportunities. Architects of the entrepreneurship ecosystems (entrepreneurs, mentors, policymakers and consumers,) should anticipate these dips, thus capitalizing on the opportunities they create.

The need for effective strategies to enable local entrepreneurship support ecosystems is a practical one. Better understanding of the actual ecosystems provides a framework within which policy makers can ask relevant questions, envisage more efficient approaches, and assess ensuing outcomes.
Now tell the participants about the Snapshot of the Entrepreneurship Ecosystem in India. Entrepreneurship has earned a newfound respect in India. Many Indians, with exposure to the world of business, who traditionally would have opted for a job, are setting up their own ventures. Many elements of the entrepreneurship ecosystem are beginning to come together. For example, increase in venture capitalists, government schemes and incubators, academia industry linkages, and emerging clusters and support to rural economy.

Policymakers should study the scenario and take into account the following points whilst they formulate policies and regulations that enable successful entrepreneurship support ecosystems.

- We need to review our attitude towards failures and accept them as learning experiences.
- We must encourage the educated to become entrepreneurs and provide students in schools and colleges with entrepreneurship skills.
- Universities, research labs and the government need to play the role of enablers in the entrepreneurship support ecosystem.
- Policymakers need to focus on reducing the obstacles such as corruption, red tape and bureaucracy.
- We need to improve our legal systems and court international venture capital firms and bring them to India.
- We must devise policies and methods to reach the secondary and tertiary towns in India, where people do not have access to the same resources available in the cities.

Today, there is a huge opportunity in this country to introduce innovative solutions that are capable of scaling up, and collaborating within the ecosystem as well as enriching it.

Now tell the participants about the Make in India Campaign.

Every entrepreneur has certain needs. Some of their important needs are:

- To easily get loans
- To easily find investors
- To get tax exemptions
- To easily access resources and good infrastructure
• To enjoy a procedure that is free of hassles and is quick
• To be able to easily partner with other firms

The Make in India campaign, launched by Prime Minister Modi aims to satisfy all these needs of young, aspiring entrepreneurs. Its objective is to:
• Make investment easy
• Support new ideas
• Enhance skill development
• Safeguard the ideas of entrepreneurs
• Create state-of-the-art facilities for manufacturing goods

**Say**

• Now tell the participants about the Risk Appetite and Resilience.

**Elaborate**

**Entrepreneurship and Risk**

Entrepreneurs are inherently risk takers. They are path-makers not path-takers. Unlike a normal, cautious person, an entrepreneur would not think twice about quitting his job (his sole income) and taking a risk on himself and his idea.

An entrepreneur is aware that while pursuing his dreams, assumptions can be proven wrong and unforeseen events may arise. He knows that after dealing with numerous problems, success is still not guaranteed. Entrepreneurship is synonymous with the ability to take risks. This ability, called risk-appetite, is an entrepreneurial trait that is partly genetic and partly acquired.

**What is Risk Appetite?**

Risk appetite is defined as the extent to which a company is equipped to take risk, in order to achieve its objectives. Essentially, it refers to the balance, struck by the company, between possible profits and the hazards caused by changes in the environment (economic ecosystem, policies, etc.). Taking on more risk may lead to higher rewards but have a high probability of losses as well. However, being too conservative may go against the company as it can miss out on good opportunities to grow and reach their objectives.

The levels of risk appetite can be broadly categorized as “low”, “medium” and “high.” The company’s entrepreneur(s) have to evaluate all potential alternatives and select the option most likely to succeed. Companies have varying levels of risk appetites for different objectives. The levels depend on:

• The type of industry
• Market pressures
• Company objectives
For example, a startup with a revolutionary concept will have a very high risk appetite. The startup can afford short term failures before it achieves longer term success. This type of appetite will not remain constant and will be adjusted to account for the present circumstances of the company.

**Trainer’s Note:** These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 309 and explain trainees’ the concept.

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**Say**

- Now tell the participants about the Success and Failures. Understanding Successes and Failures in Entrepreneurship.

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**Elaborate**

Tell them – Shyam is a famous entrepreneur, known for his success story. But what most people don’t know, is that Shyam failed numerous times before his enterprise became a success. Read his interview to get an idea of what entrepreneurship is really about, straight from an entrepreneur who has both, failed and succeed

**Interviewer:** Shyam, I have heard that entrepreneurs are great risk-takers who are never afraid of failing. Is this true?

**Shyam:** Ha ha, no of course it’s not true! Most people believe that entrepreneurs need to be fearlessly enthusiastic. But the truth is, fear is a very normal and valid human reaction, especially when you are planning to start your own business! In fact, my biggest fear was the fear of failing. The reality is, entrepreneurs fail as much as they succeed. The trick is to not allow the fear of failing to stop you from going ahead with your plans. Remember, failures are lessons for future success!

**Interviewer:** What, according to you, is the reason that entrepreneurs fail?

**Shyam:** Well, there is no one single reason why entrepreneurs fail. An entrepreneur can fail due to numerous reasons. You could fail because you have allowed your fear of failure to defeat you. You could fail because you are unwilling to delegate (distribute) work. As the saying goes, “You can do anything, but not everything!” You could fail because you gave up too easily – maybe you were not persistent enough. You could fail because you were focusing your energy on small, insignificant tasks and ignoring the tasks that were most important. Other reasons for failing are partnering with the wrong people, not being able to sell your product to the right customers at the right time at the right price… and many more reasons!

**Interviewer:** As an entrepreneur, how do you feel failure should be looked at?

**Shyam:** I believe we should all look at failure as an asset, rather than as something negative. The way I see it, if you have an idea, you should try to make it work, even if there is a chance that you will fail. That’s because not trying is failure right there, anyway! And failure is not the worst thing that can happen. I think having regrets because of not trying, and wondering ‘what if’ is far worse than trying and actually failing.

**Interviewer:** How did you feel when you failed for the first time?

**Shyam:** I was completely heartbroken! It was a very painful experience. But the good news is, you do recover from the failure. And with every subsequent failure, the recovery process gets a lot easier. That’s because you start to see each failure more as a lesson that will eventually help you succeed, rather than as an obstacle that you cannot overcome. You will start to realize that failure has many benefits.
Interviewer: Can you tell us about some of the benefits of failing?

Shyam: One of the benefits that I have experienced personally from failing is that the failure made me see things in a new light. It gave me answers that I didn’t have before. Failure can make you a lot stronger. It also helps keep your ego in control.

Interviewer: What advice would you give entrepreneurs who are about to start their own enterprises?

Shyam: I would tell them to do their research and ensure that their product is something that is actually wanted by customers. I’d tell them to pick their partners and employees very wisely and cautiously. I’d tell them that it’s very important to be aggressive — push and market your product as aggressively as possible. I would warn them that starting an enterprise is very expensive and that they should be prepared for a situation where they run out of money.

I would tell them to create long term goals and put a plan in action to achieve that goal. I would tell them to build a product that is truly unique. Be very careful and ensure that you are not copying another startup. Lastly, I’d tell them that it’s very important that they find the right investors.

Interviewer: That’s some really helpful advice, Shyam! I’m sure this will help all entrepreneurs to be more prepared before they begin their journey! Thank you for all your insight!

Notes for Facilitation

- Summarise the main points of the unit.
- Ask participants if they have any doubts. Encourage them to ask questions.
- Answer their queries satisfactorily.
- Ask them to answer the questions at the end of unit given in the participant’s manual.
- Ensure that every participant answer all questions.
UNIT 12.6: Preparing to be an Entrepreneur

Unit Objectives

At the end of the unit, students 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. Understand 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 your own enterprise
16. List important questions that every entrepreneur should ask before starting an enterprise

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.
• Copies of Handouts.

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.
• Acknowledge their responses and clear their doubts if any.
• Tell them they will learn about Preparing to be an Entrepreneur.
Say

• Tell the participants about the market study.

Elaborate

Understanding Market Research
Market research is the process of gathering, analyzing and interpreting market information on a product or service that is being sold in that market. It also includes information on:

• Past, present and prospective customers
• Customer characteristics and spending habits
• The location and needs of the target market
• The overall industry
• Relevant competitors

Market research involves two types of data:

• Primary information. This is research collected by yourself or by someone hired by you.
• Secondary information. This is research that already exists and is out there for you to find and use.

Primary research
Primary research can be of two types:

• Exploratory: This is open-ended and usually involves detailed, unstructured interviews.
• Specific: This is precise and involves structured, formal interviews. Conducting specific research is the more expensive than conducting exploratory research.

Secondary research
Secondary research uses outside information. Some common secondary sources are:

• Public sources: These are usually free and have a lot of good information. Examples are government departments, business departments of public libraries etc.
• Commercial sources: These offer valuable information but usually require a fee to be paid. Examples are research and trade associations, banks and other financial institutions etc.
• Educational institutions: These offer a wealth of information. Examples are colleges, universities, technical.

Say

• Tell the participants about the 4 Ps of marketing.
Tell them – The 4 Ps of marketing are:

- **Product,**
- **Price,**
- **Promotion,** and
- **Place.**

Let’s look at each of these 4 Ps in detail.

**Product**

A product can be:

- A tangible good
- An intangible service

Whatever your product is, it is critical that you have a clear understanding of what you are offering, and what its unique characteristics are, before you begin with the marketing process.

Some questions to ask yourself are:

- What does the customer want from the product/service?
- What needs does it satisfy?
- Are there any more features that can be added?
- Does it have any expensive and unnecessary features?
- How will customers use it?
- What should it be called?
- How is it different from similar products?
- How much will it cost to produce?
- Can it be sold at a profit?

**Price**

Once all the elements of Product have been established, the Price factor needs to be considered. The Price of a Product will depend on several factors such as profit margins, supply, demand and the marketing strategy.

Some questions to ask yourself are:

- What is the value of the product/service to customers?
- Do local products/services have established price points?
- Is the customer price sensitive?
- Should discounts be offered?
- How is your price compared to that of your competitors?

**Promotion**

Once you are certain about your Product and your Price, the next step is to look at ways to promote it. Some key elements of promotion are advertising, public relations, social media marketing, email marketing, search engine marketing, video marketing and more.
Some questions to ask yourself are:

- Where should you promote your product or service?
- What is the best medium to use to reach your target audience?
- When would be the best time to promote your product?
- How are your competitors promoting their products?

**Place**

According to most marketers, the basis of marketing is about offering the right product, at the right price, at the right place, at the right time. For this reason, selecting the best possible location is critical for converting prospective clients into actual clients.

Some questions to ask yourself are:

- Will your product or service be looked for in a physical store, online or both?
- What should you do to access the most appropriate distribution channels?
- Will you require a sales force?
- Where are your competitors offering their products or services?
- Should you follow in your competitors’ footsteps?
- Should you do something different from your competitors?

**Importance of an IDEA**

Ideas are the foundation of progress. An idea can be small or ground-breaking, easy to accomplish or extremely complicated to implement. Whatever the case, the fact that it is an idea gives it merit. Without ideas, nothing is possible. Most people are afraid to speak out their ideas, out for fear of being ridiculed. However, if you are an entrepreneur and want to remain competitive and innovative, you need to bring your ideas out into the light.

**Some ways to do this are by:**

- Establishing a culture of brainstorming where you invite all interested parties to contribute
- Discussing ideas out loud so that people can add their ideas, views, opinions to them
- Being open minded and not limiting your ideas, even if the idea who have seems ridiculous
- Not discarding ideas that you don’t work on immediately, but instead making a note of them and shelving them so they can be revisited at a later date.

**Say**

- Tell the participants about the Business entity concepts. If your aim is to start and run a business, it is crucial that you have a good understanding of basic business terms.
Tell them – Every entrepreneur should be well versed in the following terms:

- **Accounting**: A systematic method of recording and reporting financial transactions.
- **Accounts payable**: Money owed by a company to its creditors.
- **Accounts Receivable**: The amount a company is owed by its clients.
- **Assets**: The value of everything a company owns and uses to conduct its business.
- **Balance Sheet**: A snapshot of a company’s assets, liabilities and owner’s equity at a given moment.
- **Bottom Line**: The total amount a business has earned or lost at the end of a month.
- **Business**: An organization that operates with the aim of making a profit.
- **Business to Business (B2B)**: A business that sells goods or services to another business.
- **Business to Consumer (B2C)**: A business that sells goods or services directly to the end user.
- **Capital**: The money a business has in its accounts, assets and investments. The two main types of capital are debt and equity.
- **Cash Flow**: The overall movement of funds through a business each month, including income and expenses.
- **Cash Flow Statement**: A statement showing the money that entered and exited a business during a specific period of time.
- **Contract**: A formal agreement to do work for pay.
- **Depreciation**: The degrading value of an asset over time.
- **Expense**: The costs that a business incurs through its operations.
- **Finance**: The management and allocation of money and other assets.
- **Financial Report**: A comprehensive account of a business’ transactions and expenses.
- **Fixed Cost**: A one-time expense.
- **Income Statement (Profit and Loss Statement)**: Shows the profitability of a business during a period of time.
- **Liabilities**: The value of what a business owes to someone else.
- **Marketing**: The process of promoting, selling and distributing a product or service.
- **Net Income/Profit**: Revenues minus expenses.
- **Net Worth**: The total value of a business.
- **Payback Period**: The amount of time it takes to recover the initial investment of a business.
- **Profit Margin**: The ratio of profit, divided by revenue, displayed as a percentage.
- **Return on Investment (ROI)**: The amount of money a business gets as return from an investment.
- **Revenue**: The total amount of income before expenses are subtracted.
- **Sales Prospect**: A potential customer.
- **Supplier**: A provider of supplies to a business.
- **Target Market**: A specific group of customers at which a company’s products and services are aimed.
- **Valuation**: An estimate of the overall worth of the business.
Say

• Tell the participants about the CRM. CRM stands for Customer Relationship Management. Originally the expression Customer Relationship Management meant managing one’s relationship with customers. However, today it refers to IT systems and software designed to help companies manage their relationships.

Elaborate

The Need for CRM
The better a company can manage its relationships with its customers, the higher the chances of the company’s success. For any entrepreneur, the ability to successfully retain existing customers and expand the enterprise is paramount. This is why IT systems that focus on addressing the problems of dealing with customers on a daily basis are becoming more and more in demand.

Customer needs change over time, and technology can make it easier to understand what customers really want. This insight helps companies to be more responsive to the needs of their customers. It enables them to modify their business operations when required, so that their customers are always served in the best manner possible. Simply put, CRM helps companies recognize the value of their clients and enables them to capitalize on improved customer relations.

Benefits of CRM
CRM has a number of important benefits:
• It helps improve relations with existing customers which can lead to:
  • Increased sales
  • Identification of customer needs
  • Cross-selling of products
  • It results in better marketing of one’s products or services
  • It enhances customer satisfaction and retention
  • It improves profitability by identifying and focusing on the most profitable customers

Say

• Tell the participants about the Networking. In business, networking means leveraging your business and personal connections in order to bring in a regular supply of new business. This marketing method is effective as well as low cost. It is a great way to develop sales opportunities and contacts.

Elaborate

Tell them – Networking can be based on referrals and introductions, or can take place via phone, email, and social and business networking websites.
**The Need for Networking**

Networking is an essential personal skill for business people, but it is even more important for entrepreneurs. The process of networking has its roots in relationship building. Networking results in greater communication and a stronger presence in the entrepreneurial ecosystem. This helps build strong relationships with other entrepreneurs.

Business networking events held across the globe play a huge role in connecting like-minded entrepreneurs who share the same fundamental beliefs in communication, exchanging ideas and converting ideas into realities. Such networking events also play a crucial role in connecting entrepreneurs with potential investors. Entrepreneurs may have vastly different experiences and backgrounds but they all have a common goal in mind – they all seek connection, inspiration, advice, opportunities and mentors. Networking offers them a platform to do just that.

**Benefits of Networking**

Networking offers numerous benefits for entrepreneurs. Some of the major benefits are:

- Getting high quality leads
- Increased business opportunities
- Good source of relevant connections
- Advice from like-minded entrepreneurs
- Gaining visibility and raising your profile
- Meeting positive and enthusiastic people
- Increased self-confidence
- Satisfaction from helping others
- Building strong and lasting friendships

**Tell them – Short-Term Goals**

- These are specific goals for the immediate future. Example: Repairing a machine that has failed. Medium-Term Goals
- These goals are built on your short term goals.
- They do not need to be as specific as your short term goals.

Example: Arranging for a service contract to ensure that your machines don’t fail again.
Long-Term Goals
These goals require time and planning. They usually take a year or more to achieve.
Example: Planning your expenses so you can buy new machinery

Why Create a Business Plan
A business plan is a tool for understanding how your business is put together. It can be used to monitor progress, foster accountable and control the fate of the business. It usually offers a 3-5 year projection and outlines the plan that the company intends to follow to grow its revenues. A business plan is also a very important tool for getting the interest of key employees or future investors.
A business plan typically comprises of eight elements.

Say

- Tell the participants about the Elements of a Business Plans. The executive summary follows the title page. The summary should clearly state your desires as the business owner in a short and businesslike way. It is an overview of your business and your plans. Ideally this should not be more than 1-2 pages.

Elaborate

Tell them – Your Executive Summary should include:
- The Mission Statement: Explain what your business is all about.
- Example: Nike’s Mission Statement
  Nike’s mission statement is “To bring inspiration and innovation to every athlete in the world.”
- Company Information: Provide information like when your business was formed, the names and roles of the founders, the number of employees, your business location(s) etc.
- Growth Highlights: Mention examples of company growth. Use graphs and charts where possible.
- Your Products/Services: Describe the products or services provided.
- Financial Information: Provide details on current bank and investors.
- Summarize future plans: Describe where you see your business in the future.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 318 and explain trainees’ the concept.

Say

- Tell the participants what Information Should Entrepreneurs Offer Banks for Funding. When approaching a bank, entrepreneurs must have a clear idea of the different criteria that banks use to screen, rate and process loan applications. Entrepreneurs must also be aware of the importance of providing banks with accurate and correct information.
Tell them – It is now easier than ever for financial institutions to track any default behaviour of loan applicants. Entrepreneurs looking for funding from banks must provide banks with information relating to their general credentials, financial situation and guarantees or collaterals that can be offered.

**General Credentials**

This is where you, as an entrepreneur, provide the bank with background information on yourself. Such information includes:

- **Letter(s) of Introduction**: This letter should be written by a respected business person who knows you well enough to introduce you. The aim of this letter is set across your achievements and vouch for your character and integrity.
- **Your Profile**: This is basically your resume. You need to give the bank a good idea of your educational achievements, professional training, qualifications, employment record and achievements.
- **Business Brochure**: A business brochure typically provides information on company products, clients, how long the business has been running for etc.
- **Bank and Other References**: If you have an account with another bank, providing those bank references is a good idea.
- **Proof of Company Ownership or Registration**: In some cases, you may need to provide the bank with proof of company ownership and registration. A list of assets and liabilities may also be required.

**Financial Situation**

Banks will expect current financial information on your enterprise. The standard financial reports you should be prepared with are:

- Balance Sheet
- Profit-and-Loss Account
- Cash-Flow Statement
- Projected Sales and Revenues
- Business Plan
- Feasibility Study

**Guarantees or Collaterals**

Usually banks will refuse to grant you a loan without security. You can offer assets which the bank can seize and sell off if you do not repay the loan. Fixed assets like machinery, equipment, vehicles etc. are also considered to be security for loans.

**Say**

- Tell the participants about the landing criteria of banks.
Elaborate

Tell them – Your request for funding will have a higher chance of success if you can satisfy the following lending criteria:

• Good cash flow
• Adequate shareholders’ funds
• Adequate security
• Experience in business
• Good reputation

The Procedure

To apply for funding the following procedure will need to be followed.

• Submit your application form and all other required documents to the bank.
• The bank will carefully assess your credit worthiness and assign ratings by analyzing your business information with respect to parameters like management, financial, operational and industry information as well as past loan performance.
• The bank will make a decision as to whether or not you should be given funding.

Say

• Tell the participants about the Enterprise Management. To manage your enterprise effectively you need to look at many different aspects, right from managing the day-to-day activities to figuring out how to handle a large scale event.

Elaborate

Tell them – Let’s take a look at some simple steps to manage your company effectively.

Step 1: Use your leadership skills and ask for advice when required.
Step 2: Divide your work amongst others – realize that you cannot handle everything yourself.
Step 3: Hire the right people for the job.
Step 4: Motivate your employees and train them well.
Step 5: Train your people to handle your customers well.
Step 6: Market your enterprise effectively.

Trainer’s Note: These are supporting content to the Participant Manual, please adhere to the Participant Manual, Page No. 323 and explain trainees’ the concept.
Say

Tell the participants about Considering Entrepreneurship.

Elaborate

Tell them – Questions to Ask Yourself before Considering Entrepreneurship:

• Why am I starting a business?
• What problem am I solving?
• Have others attempted to solve this problem before? Did they succeed or fail?
• Do I have a mentor or industry expert that I can call on?
• Who is my ideal customer?
• Who are my competitors?
• What makes my business idea different from other business ideas?
• What are the key features of my product or service?
• Have I done a SWOT analysis?
• What is the size of the market that will buy my product or service?
• What would it take to build a minimum viable product to test the market?
• How much money do I need to get started?
• Will I need to get a loan?
• How soon will my products or services be available?
• When will I break even or make a profit?
• How will those who invest in my idea make a profit?
• How should I set up the legal structure of my business?
• What taxes will I need to pay?
• What kind of insurance will I need?
• Have I reached out to potential customers for feedback

Notes for Facilitation

• Summarise the main points of the unit.
• Ask participants if they have any doubts. Encourage them to ask questions.
• Answer their queries satisfactorily.
• Ask them to answer the questions at the end of unit given in the participant’s manual.
• Ensure that every participant answer all questions.
12. Annexures

Annexure I: Training Delivery Plan
Annexure II: Assessment Criteria
# Training Delivery Plan

<table>
<thead>
<tr>
<th>Training Delivery Plan</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Name:</strong></td>
<td>Mill Operator</td>
</tr>
<tr>
<td><strong>Qualification</strong></td>
<td>RSC/Q0101</td>
</tr>
<tr>
<td><strong>Pack Name &amp; Ref. ID</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Version No.</strong></td>
<td>V1.0</td>
</tr>
<tr>
<td><strong>Version Update Date</strong></td>
<td>As per QP</td>
</tr>
<tr>
<td><strong>Pre-requisites to Training</strong></td>
<td>Training on operation of machinery</td>
</tr>
</tbody>
</table>
| **Training Outcomes** | By the end of this program, the participants would have achieved the following competencies:  
  • Prepare mixing mill & accessories  
  • Mix raw material in mixing mill to prepare rubber compound  
  • Undertake post mixing mill activities  
  • To carry out housekeeping  
  • To carry out reporting & documentation  
  • To carry out quality checks  
  • To carry out problem identification & escalation |
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Module Name</th>
<th>Session Name</th>
<th>Session Objectives</th>
<th>NOS Reference</th>
<th>Methodology</th>
<th>Tools/Aids</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction &amp; Orientation</td>
<td>Rubber sector in India</td>
<td><strong>Theory:</strong> &lt;br&gt;• Learn about current state of Rubber Industry in India &lt;br&gt;• Recognize types of Rubber used in Industry</td>
<td>Bridge Module</td>
<td>Facilitator-led Discussion Demonstration</td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
<td>1:00 hr.</td>
</tr>
<tr>
<td></td>
<td>Roles &amp; responsibilities of Mill Operator</td>
<td></td>
<td><strong>Theory:</strong> &lt;br&gt;• Paraphrase the roles and responsibilities of Mill Operator &lt;br&gt;• Describe the job of a Mill Operator</td>
<td></td>
<td></td>
<td></td>
<td>1:00 hr.</td>
</tr>
<tr>
<td>2</td>
<td>Prepare Mixing Mill &amp; Accessories</td>
<td>Mixing Mills</td>
<td><strong>Theory:</strong> &lt;br&gt;• Introduction to mixing mills &lt;br&gt;• Paraphrase mixing mills in rubber processing &lt;br&gt;• Operate mixing mill</td>
<td>RSC/N0101 PC1-PC15 KA1-KA17 KB1-KB11</td>
<td>Power-point Presentation Facilitator-led Discussion Audio-visuals Images</td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
<td>8:00 hrs.</td>
</tr>
<tr>
<td></td>
<td>Practical: Demonstrate Rolls Roll Bearings Mill Frame</td>
<td>Practical: Demonstrate Mill Nip &amp; Control Mill tray or Mill pan Mill drive train</td>
<td>RSC/N0101 PC1-PC15 KA1-KA17 KB1-KB11</td>
<td>Practical Lab Note Pad, Pen, charts</td>
<td></td>
<td>5:00 hrs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Practical: Demonstrate Perform Mill operations</td>
<td>Practical: Demonstrate Mills – Categorization</td>
<td>RSC/N0101 PC1-PC15 KA1-KA17 KB1-KB11</td>
<td>Practical Lab Note Pad, Pen, charts</td>
<td></td>
<td>5:00 hrs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Practical: Demonstrate Internal Mixers</td>
<td></td>
<td><strong>Theory:</strong> &lt;br&gt;• Learn to use internal mixers. &lt;br&gt;• Familiarise with the functioning of internal mixers &lt;br&gt;• Learn about mixing mechanisms in Internal mixers &lt;br&gt;• Learn about mixing methods in internal mixing &lt;br&gt;• Identify variable parameters in Internal Mixing</td>
<td>RSC/N0101 PC1-PC15 KA1-KA17 KB1-KB11</td>
<td>Power-point Presentation Facilitator-led Discussion Audio-visuals Images</td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
<td>8:00 hrs.</td>
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<td></td>
</tr>
<tr>
<td>• Learn about discharge criteria in Internal Mixing</td>
<td>• Functional parts of internal Mixers</td>
<td>• Recognize the different safety aspects at workplace.</td>
<td>• Mix the raw material</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Identify multistage mixing in Internal Mixing</td>
<td>• Mixing Mechanism in Internal Mixers</td>
<td>• Work safely with different milling machines.</td>
<td>• Learn about mixing machinery of rubber</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Recognize pre-mixer and post-mixer area equipment and their parts.</td>
<td>• Mixing methods in Internal Mixing</td>
<td>• Choose and put on the PPEs.</td>
<td>• Describe internal batch mixers &amp; Continuous Mixers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ensure that mixing mill is clean</td>
<td>• Discharge criteria in Internal Mixing</td>
<td>• Keep all hand tools like mixing knife, cooling rack etc. ready</td>
<td>• Presentations: Power-point presentation, Facilitator-led discussion, Audio-visuals images</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Set parameters for the equipment (mixing cycle time, roll temperature and nip gap), as per company’s SOP</td>
<td>• Pre &amp; post mixer arrangements</td>
<td>• Ensure that raw material to be fed is approved by laboratory as per SOP</td>
<td>• Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>• Learn about Tandem mixing</td>
<td>• Equipment in the pre &amp; post mixer area</td>
<td></td>
<td>• Mix Raw Material to Prepare Rubber Compound</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Learn about temperature control unit, lubrication &amp; Pre-weighed material</td>
<td>• Tandem mixing</td>
<td></td>
<td>• Theory:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Theory:
- Mix the raw material
- Learn about mixing machinery of rubber
- Describe internal batch mixers & Continuous Mixers

### Practical:
- Demonstrate
  - Functional parts of internal Mixers
  - Mixing Mechanism in Internal Mixers
  - Mixing methods in Internal Mixing
  - Pre & post mixer arrangements
  - Equipment in the pre & post mixer area
  - Tandem mixing

### Safety Aspects:
- Recognize the different safety aspects at workplace.
- Work safely with different milling machines.
- Choose and put on the PPEs.
- Keep all hand tools like mixing knife, cooling rack etc. ready.
- Ensure that raw material to be fed is approved by laboratory as per SOP.

### Available Objects:
- Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.
<table>
<thead>
<tr>
<th>Time</th>
<th>Theory</th>
<th>Practical</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 hrs.</td>
<td><strong>Theory:</strong>&lt;br&gt;• Development of Banbury Mixer&lt;br&gt;• Add rubber and other ingredients in the mixing mill in the specified quantity and sequence as per company's SOP&lt;br&gt;• Check and adjust cooling water flow rate as per SOP&lt;br&gt;• Learn about Ram Pressure</td>
<td><strong>Practical:</strong> Demonstrate&lt;br&gt;• Mixing Machinery for Rubber&lt;br&gt;• Internal batch mixers&lt;br&gt;• Continuous mixer</td>
</tr>
<tr>
<td></td>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
</tr>
<tr>
<td>8:00 hrs.</td>
<td><strong>Theory:</strong>&lt;br&gt;• Learn about rotor speed&lt;br&gt;• Ensure maturation time for Master batch and Final batch before next usage.</td>
<td><strong>Practical:</strong> Demonstrate&lt;br&gt;• Banbury mixer&lt;br&gt;• Ram pressure</td>
</tr>
<tr>
<td></td>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
</tr>
<tr>
<td>8:00 hrs.</td>
<td><strong>Theory:</strong>&lt;br&gt;• Learn about mixing cycles &amp; procedures&lt;br&gt;• Learn about elastomers as raw materials&lt;br&gt;• Learn about mixer maintenance &amp; Lubrication</td>
<td><strong>Practical:</strong> Demonstrate&lt;br&gt;• Rotor speed&lt;br&gt;• Mixing cycle &amp; procedures&lt;br&gt;• Mixer maintenance &amp; lubrication</td>
</tr>
<tr>
<td></td>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
</tr>
<tr>
<td>3:00 hrs.</td>
<td><strong>Theory:</strong>&lt;br&gt;• Adhere to all safety norms&lt;br&gt;like wearing protective gloves, shoes safety glasses etc.</td>
<td><strong>Practical:</strong> Demonstrate&lt;br&gt;• Possible causes of common mixing problems &amp; their remedies&lt;br&gt;• Implications of overheating during mixing and adopting measures</td>
</tr>
<tr>
<td></td>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
</tr>
<tr>
<td>8:00 hrs.</td>
<td><strong>Theory:</strong>&lt;br&gt;• Power-point presentation&lt;br&gt;• Facilitator- led - discussion&lt;br&gt;• Audio- visuals Images</td>
<td><strong>Practical:</strong> Demonstrate&lt;br&gt;• Power-point presentation&lt;br&gt;• Facilitator- led - discussion&lt;br&gt;• Audio- visuals Images</td>
</tr>
<tr>
<td></td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
</tr>
<tr>
<td>8:00 hrs.</td>
<td><strong>Theory:</strong>&lt;br&gt;• Power-point presentation&lt;br&gt;• Facilitator- led - discussion&lt;br&gt;• Audio- visuals Images</td>
<td><strong>Practical:</strong> Demonstrate&lt;br&gt;• Mixing cycle &amp; procedures&lt;br&gt;• Mixer maintenance &amp; lubrication</td>
</tr>
<tr>
<td></td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
</tr>
<tr>
<td>3:00 hrs.</td>
<td><strong>Theory:</strong>&lt;br&gt;• Power-point presentation&lt;br&gt;• Facilitator- led - discussion&lt;br&gt;• Audio- visuals Images</td>
<td><strong>Practical:</strong> Demonstrate&lt;br&gt;• Possible causes of common mixing problems &amp; their remedies&lt;br&gt;• Implications of overheating during mixing and adopting measures</td>
</tr>
<tr>
<td></td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
</tr>
<tr>
<td>8:00 hrs.</td>
<td><strong>Theory:</strong>&lt;br&gt;• Power-point presentation&lt;br&gt;• Facilitator- led - discussion&lt;br&gt;• Audio- visuals Images</td>
<td><strong>Practical:</strong> Demonstrate&lt;br&gt;• Power-point presentation&lt;br&gt;• Facilitator- led - discussion&lt;br&gt;• Audio- visuals Images</td>
</tr>
<tr>
<td></td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
</tr>
<tr>
<td>8:00 hrs.</td>
<td><strong>Theory:</strong>&lt;br&gt;• Power-point presentation&lt;br&gt;• Facilitator- led - discussion&lt;br&gt;• Audio- visuals Images</td>
<td><strong>Practical:</strong> Demonstrate&lt;br&gt;• Possible causes of common mixing problems &amp; their remedies&lt;br&gt;• Implications of overheating during mixing and adopting measures</td>
</tr>
<tr>
<td></td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
</tr>
</tbody>
</table>
### 4. Undertake Post-Mixing Mill Activities

<table>
<thead>
<tr>
<th>Mix Raw Materials to Prepare Rubber Compound</th>
<th>Practical: Demonstrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSC/N0102 PC1-PC18 KA1-KA22 KB1-KB20</td>
<td>Practical Lab</td>
</tr>
<tr>
<td>Note Pad, Pen, charts</td>
<td>5:00 hrs.</td>
</tr>
</tbody>
</table>

### Theory:

<table>
<thead>
<tr>
<th>Illustrate the tyre manufacturing process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define milling</td>
</tr>
<tr>
<td>RSC/N0103 PC1-PC12 KA1-KA18 KB1-KB9</td>
</tr>
<tr>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
</tr>
</tbody>
</table>

### Theory:

| Ensure that the electrical devices that may be exposed to carbon black dust are sealed |
| Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters remain within limits. |
| RSC/N0103 PC1-PC12 KA1-KA18 KB1-KB9      | Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc. | 5:00 hrs. |

### Theory:

| Learn to handover the equipment to the next operator in clean and good condition. |
| Identify different Health & Safety concerns |
| Identify different hazards & precautions |
| RSC/N0103 PC1-PC12 KA1-KA18 KB1-KB9      | Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc. | 7:00 hrs. |

### Theory:

| Dispose of the waste |
| Learn to do the coding and marking of machine |
| RSC/N0103 PC1-PC12 KA1-KA18 KB1-KB9      | Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc. | 7:00 hrs. |

### Practical: Demonstrate

| Tyre Manufacturing process |
| Milling process |
| RSC/N0103 PC1-PC12 KA1-KA18 KB1-KB9 | Practical Lab |
| Note Pad, Pen, charts | 8:00 hrs. |

### Practical: Demonstrate

| Health & Safety concerns |
| Material Disposal |
| RSC/N0103 PC1-PC12 KA1-KA18 KB1-KB9 | Practical Lab |
| Note Pad, Pen, charts | 5:00 hrs. |

### Practical: Demonstrate

| Batch making techniques |
| Types of defects leading to rejections |
| RSC/N0103 PC1-PC12 KA1-KA18 KB1-KB9 | Practical Lab |
| Note Pad, Pen, charts | 8:00 hrs. |

### Practical: Demonstrate

| Response to emergencies e.g. Power failures, fire and system failures |
| RSC/N0103 PC1-PC12 KA1-KA18 KB1-KB9 | Practical Lab |
| Note Pad, Pen, charts | 4:00 hrs. |
### Mill Operator

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Code</th>
<th>Material</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5. Health &amp; Safety</strong></td>
<td><strong>First Aid and CPR</strong></td>
<td></td>
<td></td>
<td>5:00 hrs.</td>
</tr>
<tr>
<td><strong>Practical:</strong> Demonstrate</td>
<td>Types of defects leading to rejections, indicators, reasons and possible solutions</td>
<td>RSC/N0103 PC1-PC12 KA1-KA18 KB1-KB9</td>
<td>Practical Lab</td>
<td>Note Pad, Pen, charts</td>
</tr>
<tr>
<td><strong>Theory:</strong></td>
<td></td>
<td></td>
<td>Power-point presentation</td>
<td>Available objects such as a book, pen, duster, white board, marker, computer, projector etc.</td>
</tr>
<tr>
<td></td>
<td>• Apply first aid on an injured person</td>
<td></td>
<td>Facilitator-led discussion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Understand the procedures of doing CPR</td>
<td></td>
<td>Audio-visuals images</td>
<td></td>
</tr>
<tr>
<td><strong>Practical:</strong> Demonstrate</td>
<td>Perform CPR using AED</td>
<td>RSC/N5001 PC1 – PC24 KB1 – KB18</td>
<td>Practical Lab</td>
<td>Note Pad, Pen, charts</td>
</tr>
<tr>
<td><strong>Theory:</strong></td>
<td></td>
<td></td>
<td>Power-point presentation</td>
<td>Available objects such as a book, pen, duster, white board, marker, computer, projector etc.</td>
</tr>
<tr>
<td></td>
<td>• Perform Housekeeping activities</td>
<td></td>
<td>Facilitator-led discussion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Familiarise with the importance and purpose of Housekeeping</td>
<td></td>
<td>Audio-visuals images</td>
<td></td>
</tr>
<tr>
<td><strong>Practical:</strong> Demonstrate</td>
<td>Benefits of good housekeeping</td>
<td>RSC/N5001 PC1 – PC24 KB1 – KB18</td>
<td>Practical Lab</td>
<td>Note Pad, Pen, charts</td>
</tr>
<tr>
<td><strong>Theory:</strong></td>
<td></td>
<td></td>
<td>Power-point presentation</td>
<td>Available objects such as a book, pen, duster, white board, marker, computer, projector etc.</td>
</tr>
<tr>
<td></td>
<td>• Perform pre-housekeeping activities</td>
<td></td>
<td>Facilitator-led discussion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Identify the reasons and principles of doing cleaning</td>
<td></td>
<td>Audio-visuals images</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Clean material, cleaning equipment and its maintenance</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Do inspection and how to select of cleaning method</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Plan housekeeping activity</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Identify signs of poor housekeeping</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>• Improve housekeeping at your workplaces</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>• Do recommended housekeeping practices</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Pre Housekeeping Activities</strong></td>
<td></td>
<td></td>
<td>Practical Lab</td>
<td>Note Pad, Pen, charts</td>
</tr>
<tr>
<td><strong>Practice:</strong> Demonstrate</td>
<td>Cleaning material, equipment &amp; its maintenance</td>
<td>RSC/N5001 PC1 – PC24 KB1 – KB18</td>
<td></td>
<td>3:00 hrs.</td>
</tr>
<tr>
<td></td>
<td>Inspection &amp; Selection of Cleaning methods</td>
<td></td>
<td>Practical Lab</td>
<td>Note Pad, Pen, charts</td>
</tr>
<tr>
<td><strong>Practice:</strong> Demonstrate</td>
<td>Cleaning Manual Equipment</td>
<td>RSC/N5001 PC1 – PC24 KB1 – KB18</td>
<td></td>
<td>1:00 hrs.</td>
</tr>
<tr>
<td></td>
<td>Cleaning mechanical equipment</td>
<td></td>
<td>Practical Lab</td>
<td>Note Pad, Pen, charts</td>
</tr>
<tr>
<td><strong>Practice:</strong> Demonstrate</td>
<td>Plan housekeeping activity</td>
<td>RSC/N5001 PC1 – PC24 KB1 – KB18</td>
<td></td>
<td>1:00 hrs.</td>
</tr>
<tr>
<td></td>
<td>Housekeeping practices</td>
<td></td>
<td>Practical Lab</td>
<td>Note Pad, Pen, charts</td>
</tr>
<tr>
<td>Housekeeping Activities</td>
<td>Theory:</td>
<td>RSC/N5001 PC1 – PC24 KB1 – KB18</td>
<td>Power-point presentation</td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
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<tr>
<td></td>
<td>• Follow the cleaning methods</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Identify the elements of effective housekeeping program</td>
<td></td>
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<tr>
<td></td>
<td>• Deal with accidental damage</td>
<td></td>
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<tr>
<td></td>
<td>• Deal with accidental damage, if any, caused while carrying out the work</td>
<td></td>
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<tr>
<td></td>
<td>• Report the appropriate person any difficulties in carrying out your work</td>
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<tr>
<td></td>
<td>• Identify and report to the appropriate person any additional cleaning required that is outside one’s responsibility or skill</td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Practical: Demonstrate</th>
<th>RSC/N5001 PC1 – PC24 KB1 – KB18</th>
<th>Practical Lab Note Pad, Pen, charts</th>
<th>5:00 hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Elements of effective housekeeping program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cleaning methods</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Post Housekeeping Activities</th>
<th>Theory:</th>
<th>RSC/N5001 PC1 – PC24 KB1 – KB18</th>
<th>Power-point presentation</th>
<th>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</th>
<th>1:00 hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Perform Post housekeeping activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Do equipment and supplies maintenance</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Practical: Demonstrate</th>
<th>RSC/N5001 PC1 – PC24 KB1 – KB18</th>
<th>Practical Lab Note Pad, Pen, charts</th>
<th>5:00 hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Equipment &amp; supply maintenance</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Equipment care</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Safety tips</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting &amp; Documentation</th>
<th>Theory:</th>
<th>RSC/N5002 PC1 – PC10 KA1 – KA14</th>
<th>Power-point presentation</th>
<th>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</th>
<th>8:00 hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Report data/problems/incidents as applicable by following company reporting procedures</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>• Do documentation within stipulated time according to company procedure</td>
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<tr>
<td></td>
<td>• Respond to requests for information in an appropriate manner whilst following organizational procedures</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Practical: Demonstrate</th>
<th>RSC/N5002 PC1 – PC10 KA1 – KA14</th>
<th>Practical Lab Note Pad, Pen, charts</th>
<th>5:00 hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Reporting</td>
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</table>

<table>
<thead>
<tr>
<th>Practical: Demonstrate</th>
<th>RSC/N5002 PC1 – PC10 KA1 – KA14</th>
<th>5:00 hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Incident report</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Request for information</td>
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</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Practical: Demonstrate</th>
<th>RSC/N5002 PC1 – PC10 KA1 – KA14</th>
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<tbody>
<tr>
<td></td>
<td>• Record keeping</td>
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</table>
### Mill Operator

<table>
<thead>
<tr>
<th>8. Quality</th>
<th>To carry out quality check</th>
<th>Theory:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Identify activities and standards set by the company involved in Quality check</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Recognise the quality methodologies and standard set by company.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Analyze the need of quality checks and determines the appropriate method and procedure to meet the standards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RSC/N5003 PC1 – PC15 KB1 – KB13</td>
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<tr>
<td></td>
<td></td>
<td>• Power-point presentation</td>
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<tr>
<td></td>
<td></td>
<td>• Facilitator-led discussion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Audio-visuals Images</td>
</tr>
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<td></td>
<td></td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
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<table>
<thead>
<tr>
<th>Theory:</th>
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</thead>
<tbody>
<tr>
<td>• Importance of quality control procedures</td>
</tr>
<tr>
<td>• Proper procedure for selecting the material/product and performing quality checks without affecting the material</td>
</tr>
<tr>
<td>• Importance of maintain accurate up-to-date records</td>
</tr>
<tr>
<td>• Implications (impact on internal/external customers) of defective products, materials or components</td>
</tr>
<tr>
<td>RSC/N5003 PC1 – PC15 KB1 – KB13</td>
</tr>
<tr>
<td>• Power-point presentation</td>
</tr>
<tr>
<td>• Facilitator-led discussion</td>
</tr>
<tr>
<td>• Audio-visuals Images</td>
</tr>
<tr>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
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<td>7:00 hrs.</td>
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### Practical: Demonstrate

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<thead>
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<th>To carry out quality check</th>
<th>Theory:</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>• Inspections</td>
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<tr>
<td></td>
<td></td>
<td>RSC/N5003 PC1 – PC15 KB1 – KB13</td>
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<tr>
<td></td>
<td></td>
<td>• Practical Lab</td>
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<td>Note Pad, Pen, charts</td>
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### Practical: Demonstrate

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<tr>
<th>8. Quality</th>
<th>To carry out quality check</th>
<th>Theory:</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>• Analysis</td>
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<td></td>
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<td>RSC/N5003 PC1 – PC15 KB1 – KB13</td>
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<td>• Practical Lab</td>
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### Practical: Demonstrate

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<th>8. Quality</th>
<th>To carry out quality check</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>• Reporting</td>
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<td>RSC/N5003 PC1 – PC15 KB1 – KB13</td>
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### 9. Problem Identification, Necessary Action & Escalation

<table>
<thead>
<tr>
<th>9. Problem Identification, Necessary Action &amp; Escalation</th>
<th>Problem Identification, Necessary Action &amp; Escalation</th>
<th>Theory:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Discuss various problems and issues related to raw materials, rubber products, equipment, and any other (such as administration, HR etc.)</td>
</tr>
<tr>
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<td></td>
<td>RSC/N5004 PC1 – PC24 KB1 – KB15</td>
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<td>• Power-point presentation</td>
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<td></td>
<td></td>
<td>• Facilitator-led discussion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Audio-visuals Images</td>
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<td></td>
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<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
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### Theory: |

<table>
<thead>
<tr>
<th>9. Problem Identification, Necessary Action &amp; Escalation</th>
<th>Problem Identification, Necessary Action &amp; Escalation</th>
<th>Theory:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Analyze problem related to raw material, procedures, moulding process, rubber compounds, rubber products, machines etc. to identify the appropriate solution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Follow escalation matrix whenever necessary</td>
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<td></td>
<td>RSC/N5004 PC1 – PC24 KB1 – KB15</td>
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<tr>
<td></td>
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<td>• Power-point presentation</td>
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<td>• Facilitator-led discussion</td>
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<td>• Audio-visuals Images</td>
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<td></td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
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### Theory: |

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<tr>
<th>9. Problem Identification, Necessary Action &amp; Escalation</th>
<th>Problem Identification, Necessary Action &amp; Escalation</th>
<th>Theory:</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>• Identify defects/indicators of problems</td>
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<td>• Identify practices that may impact the final product quality</td>
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<td></td>
<td></td>
<td>• Evaluate implementation of corrective action taken to determine if the problem has been resolved</td>
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<tr>
<td></td>
<td></td>
<td>RSC/N5004 PC1 – PC24 KB1 – KB15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Power-point presentation</td>
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<td>• Facilitator-led discussion</td>
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<td></td>
<td>• Audio-visuals Images</td>
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<tr>
<td></td>
<td></td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
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<td>5:00 hrs.</td>
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### Practical: Demonstrate

<table>
<thead>
<tr>
<th>9. Problem Identification, Necessary Action &amp; Escalation</th>
<th>Problem Identification, Necessary Action &amp; Escalation</th>
<th>Theory:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Problem identification</td>
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<td></td>
<td></td>
<td>RSC/N5004 PC1 – PC24 KB1 – KB15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Practical Lab</td>
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<td></td>
<td></td>
<td>Note Pad, Pen, charts</td>
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<tr>
<td></td>
<td></td>
<td>7:00 hrs.</td>
</tr>
<tr>
<td>Practical: Demonstrate</td>
<td>Theory</td>
<td>Bridge Module</td>
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</tr>
<tr>
<td>Practical: Demonstrate</td>
<td>Problem escalation</td>
<td>RSC/N5004 PC1 – PC24 KB1 – KB15</td>
</tr>
</tbody>
</table>

10. Soft Skills & Communication Skills

**Introduction to Soft Skills**

- Understand the basic meaning of Soft Skills, their components and their benefits.
- Understand Work Readiness and its significance.

**Effective Communication**

- Do public speaking.
- Describe likes and dislikes of a person.
- Know basic etiquette of conversation.

**Grooming & Hygiene**

- Maintain cleanliness and hygiene.
- Keep their dress clean and tidy.
- Maintain positive body language while speaking.
- Enable to perform more of the do’s than the don’ts.
- Learn about good eating habit and their impact on health.
- Avoiding bad things such as gutkha and alcohol.
- Learn about AIDS and its prevention.

**Interpersonal Skill Development**

- Develop a positive attitude and behaviour.
- Understanding Goal Setting.
- Motivated for team participation at work.
- Learn how to manage relations.
- Learn about Stress and anger management skills.
- Learn to develop leadership qualities.

**Social Interaction**

- Understand what is social interaction and what are social interaction behaviour.
- Give a brief description about himself/herself in public.
- Follow daily duties.
- Cooperate with peers, family and other members in society.

**Group Interaction**

- Participate in group discussions in the class.
- Give speech in the public.
- Understand the importance of team building and team work.
<table>
<thead>
<tr>
<th>Time Management</th>
<th>Theory:</th>
<th>Bridge Module</th>
<th>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</th>
</tr>
</thead>
</table>
|                  | • Understand the importance of time management.  
|                  | • Develop time management skills.  
|                  | • Learn about effective time planning. | • Power-point presentation  
|                  |                          | • Facilitator-led discussion  
|                  |                          | • Audio-visuals Images  

<table>
<thead>
<tr>
<th>Resume Preparation</th>
<th>Theory:</th>
<th>Bridge Module</th>
<th>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</th>
</tr>
</thead>
</table>
|                   | • Understand the importance of resume.  
|                   | • Learn how to prepare a resume. | • Power-point presentation  
|                   |                          | • Facilitator-led discussion  
|                   |                          | • Audio-visuals Images  

<table>
<thead>
<tr>
<th>Interview Preparation</th>
<th>Theory:</th>
<th>Bridge Module</th>
<th>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</th>
</tr>
</thead>
</table>
|                       | • Understand the procedure of interview.  
|                       | • Go thorough mock interviews.  
|                       | • Understand how to present themselves during an interview.  
|                       | • Motivated to work after the training period is over. | • Power-point presentation  
|                       |                          | • Facilitator-led discussion  
|                       |                          | • Audio-visuals Images  

<table>
<thead>
<tr>
<th>11. IT Skills</th>
<th>Introduction to Computer</th>
<th>Theory:</th>
<th>Digital Literacy</th>
<th>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</th>
</tr>
</thead>
</table>
|              | • Define the computer.  
|              | • Recognise its various parts.  
|              | • Differentiate the advantages and disadvantages of computer. | • Power-point presentation  
|              |                          | • Facilitator-led discussion  
|              |                          | • Audio-visuals Images  

<table>
<thead>
<tr>
<th>Basic Computer Knowledge</th>
<th>Theory:</th>
<th>Digital Literacy</th>
<th>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</th>
</tr>
</thead>
</table>
|                          | • Use computer.  
|                          | • Explain the web, email services. | • Power-point presentation  
|                          |                          | • Facilitator-led discussion  
|                          |                          | • Audio-visuals Images  

<table>
<thead>
<tr>
<th>Components of Computer</th>
<th>Theory:</th>
<th>Digital Literacy</th>
<th>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</th>
</tr>
</thead>
</table>
|                        | • Know the different parts and components of computer. | • Power-point presentation  
|                        |                          | • Facilitator-led discussion  
|                        |                          | • Audio-visuals Images  

<table>
<thead>
<tr>
<th>Concept of Operating System</th>
<th>Theory:</th>
<th>Digital Literacy</th>
<th>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</th>
</tr>
</thead>
</table>
|                           | • Familiarise with the concept of operating system.  
|                           | • Work on Windows 8 and 8.1.  
|                           | • Add or Remove desktop icons, make or delete a folder etc. | • Power-point presentation  
|                           |                          | • Facilitator-led discussion  
|                           |                          | • Audio-visuals Images  

<table>
<thead>
<tr>
<th>MS Word</th>
<th>Theory:</th>
<th>Digital Literacy</th>
<th>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</th>
</tr>
</thead>
</table>
|         | • Learn the concept of and practice MS-Word.  
|         | • Format a document.  
|         | • Print a document etc. | • Power-point presentation  
|         |                          | • Facilitator-led discussion  
|         |                          | • Audio-visuals Images  


<table>
<thead>
<tr>
<th>MS Power Point</th>
<th><strong>Theory:</strong></th>
<th>Digital Literacy</th>
<th><strong>Theory:</strong></th>
<th>Power-point presentation</th>
<th>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice MS – Power point.</td>
<td>Make a new presentation.</td>
<td>Format a slide as well</td>
<td>Make a new presentation.</td>
<td>Facilitator-led discussion</td>
<td>Audio-visuals Images</td>
</tr>
<tr>
<td>MS Excel</td>
<td><strong>Theory:</strong></td>
<td>Digital Literacy</td>
<td><strong>Theory:</strong></td>
<td>Power-point presentation</td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
</tr>
<tr>
<td>Work on MS-Excel</td>
<td>Format cells and cell content</td>
<td>Use formulas</td>
<td>Make Charts and Pivot Table</td>
<td>Facilitator-led discussion</td>
<td>Audio-visuals Images</td>
</tr>
<tr>
<td>Internet Concepts</td>
<td><strong>Theory:</strong></td>
<td>Digital Literacy</td>
<td><strong>Theory:</strong></td>
<td>Power-point presentation</td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
</tr>
<tr>
<td>Understand internet concepts</td>
<td>Recognise the different types of URLs</td>
<td>Use MS-Outlook</td>
<td>Make a new presentation.</td>
<td>Facilitator-led discussion</td>
<td>Audio-visuals Images</td>
</tr>
<tr>
<td>13. Employability and Entrepreneurship skills</td>
<td>Personal Strengths &amp; Value Systems</td>
<td><strong>Theory:</strong></td>
<td>Bridge Module</td>
<td>Power-point presentation</td>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
</tr>
<tr>
<td>Explain the meaning of health</td>
<td>List common health issues</td>
<td>Discuss tips to prevent common health issues</td>
<td>Explain the meaning of hygiene</td>
<td>Understand the purpose of Swacch Bharat Abhiyan</td>
<td>Explain the meaning of habit</td>
</tr>
<tr>
<td>List the characteristics of entrepreneurs with achievement motivation</td>
<td>Discuss ways to set up a safe work environment</td>
<td>Discuss critical safety habits to be followed by employees</td>
<td>Understand motivation with the help of Maslow's Hierarchy of Needs</td>
<td>Discuss the importance of self-analysis</td>
<td>Discuss the meaning of achievement motivation</td>
</tr>
<tr>
<td>Discuss the different factors that motivate you</td>
<td>Discuss how to maintain a positive attitude</td>
<td>Discuss the role of attitude in self-analysis</td>
<td>List your strengths and weaknesses</td>
<td>Discuss the qualities of honest people</td>
<td>Describe the importance of honesty in entrepreneurs</td>
</tr>
<tr>
<td>Discuss how to foster a good work ethic</td>
<td>List the characteristics of highly creative people</td>
<td>List the characteristics of highly innovative people</td>
<td>List the characteristics of highly creative people</td>
<td>List the characteristics of highly innovative people</td>
<td>List the characteristics of highly creative people</td>
</tr>
</tbody>
</table>
### Mill Operator

- Discuss the benefits of time management
- List the traits of effective time managers
- Describe effective time management technique
- Discuss the importance of anger management
- Describe anger management strategies
- Discuss tips for anger management
- Discuss the causes of stress
- Discuss the symptoms of stress
- Discuss tips for stress management

---

### Digital Literacy: A Recap

**Theory:**
- Identify the basic parts of a computer
- Identify the basic parts of a keyboard
- Recall basic computer terminology
- Recall basic computer terminology
- Recall the functions of basic computer keys
- Discuss the main applications of MS Office
- Discuss the benefits of Microsoft Outlook
- Discuss the different types of e-commerce
- List the benefits of e-commerce for retailers and customers
- Discuss how the Digital India campaign will help boost e-commerce in India
- Describe how you will sell a product or service on an e-commerce platform

**Bridge Module**
- Power-point presentation
- Facilitator-led discussion
- Audio-visuals
- Images

**Available Objects**
- Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.

---

### Money Matters

**Theory:**
- Discuss the importance of saving money
- Discuss the benefits of saving money
- Discuss the main types of bank accounts
- Describe the process of opening a bank account
- Differentiate between fixed and variable costs
- Describe the main types of investment options
- Describe the different types of insurance products
- Describe the different types of taxes
- Discuss the uses of online banking
- Discuss the main types of electronic funds transfers

**Bridge Module**
- Power-point presentation
- Facilitator-led discussion
- Audio-visuals
- Images

**Available Objects**
- Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.
<table>
<thead>
<tr>
<th>Preparing for Employment and Self Employment</th>
<th>Theory:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Discuss the steps to prepare for an interview</td>
<td></td>
</tr>
<tr>
<td>• Discuss the steps to create an effective Resume</td>
<td></td>
</tr>
<tr>
<td>• Discuss the most frequently asked interview questions</td>
<td></td>
</tr>
<tr>
<td>• Discuss how to answer the most frequently asked interview questions</td>
<td></td>
</tr>
<tr>
<td>• Discuss basic workplace terminology</td>
<td></td>
</tr>
<tr>
<td>Bridge Module</td>
<td>• Power-point presentation</td>
</tr>
<tr>
<td></td>
<td>• Facilitator- led - discussion</td>
</tr>
<tr>
<td></td>
<td>• Audio- visuals</td>
</tr>
<tr>
<td></td>
<td>• Images</td>
</tr>
<tr>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Understanding Entrepreneurship</th>
<th>Theory:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Discuss the concept of entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>• Discuss the importance of entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>• Describe the characteristics of an entrepreneur</td>
<td></td>
</tr>
<tr>
<td>• Describe the different types of enterprises</td>
<td></td>
</tr>
<tr>
<td>• List the qualities of an effective leader</td>
<td></td>
</tr>
<tr>
<td>• Discuss the benefits of effective leadership</td>
<td></td>
</tr>
<tr>
<td>• List the traits of an effective team</td>
<td></td>
</tr>
<tr>
<td>• Discuss the importance of listening effectively</td>
<td></td>
</tr>
<tr>
<td>• Discuss how to listen effectively</td>
<td></td>
</tr>
<tr>
<td>• Discuss the importance of speaking effectively</td>
<td></td>
</tr>
<tr>
<td>• Discuss how to speak effectively</td>
<td></td>
</tr>
<tr>
<td>• Discuss how to solve problems</td>
<td></td>
</tr>
<tr>
<td>• List important problem solving traits</td>
<td></td>
</tr>
<tr>
<td>• Discuss ways to assess problem solving skills</td>
<td></td>
</tr>
<tr>
<td>• Discuss the importance of negotiation</td>
<td></td>
</tr>
<tr>
<td>• Discuss how to negotiate</td>
<td></td>
</tr>
<tr>
<td>• Discuss how to identify new business opportunities</td>
<td></td>
</tr>
<tr>
<td>• Discuss how to identify business opportunities within your business</td>
<td></td>
</tr>
<tr>
<td>• Understand the meaning of entrepreneur</td>
<td></td>
</tr>
<tr>
<td>• Describe the different types of entrepreneurs</td>
<td></td>
</tr>
<tr>
<td>• List the characteristics of entrepreneurs</td>
<td></td>
</tr>
<tr>
<td>• Recall entrepreneur success stories</td>
<td></td>
</tr>
<tr>
<td>• Discuss the entrepreneurial process</td>
<td></td>
</tr>
<tr>
<td>• Describe the entrepreneurship ecosystem</td>
<td></td>
</tr>
<tr>
<td>• Discuss the government’s role in the entrepreneurship ecosystem</td>
<td></td>
</tr>
<tr>
<td>• Discuss the current entrepreneurship ecosystem in India</td>
<td></td>
</tr>
<tr>
<td>• Understand the purpose of the Make in India campaign</td>
<td></td>
</tr>
<tr>
<td>Bridge Module</td>
<td>• Power-point presentation</td>
</tr>
<tr>
<td></td>
<td>• Facilitator- led - discussion</td>
</tr>
<tr>
<td></td>
<td>• Audio- visuals</td>
</tr>
<tr>
<td></td>
<td>• Images</td>
</tr>
<tr>
<td>Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc.</td>
<td></td>
</tr>
</tbody>
</table>
| Preparing to be an Entrepreneur | Theory:  
Discuss how market research is carried out  
Describe the 4 Ps of marketing  
Discuss the importance of idea generation  
Recall basic business terminology  
Discuss the need for CRM  
Discuss the benefits of CRM  
Discuss the need for networking  
Discuss the benefits of networking  
Understand 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  
Describe the procedure and formalities for applying for bank finance  
Discuss how to manage your own enterprise  
List important questions that every entrepreneur should ask before starting an enterprise | Bridge Module  
Power-point presentation  
Facilitator-led discussion  
Audio-visuals  
Images | Available Objects such as a book, pen, duster, white board, marker, Computer, Projector etc. |
Annexure II

Assessment Criteria

CRITERIA FOR ASSESSMENT OF TRAINEES

### Assessment Criteria for Bamboo Basket Maker

<table>
<thead>
<tr>
<th>Job Role</th>
<th>Mill Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification Pack</td>
<td>RSC/Q 0101</td>
</tr>
<tr>
<td>Sector Skill Council</td>
<td>Rubber Skill Development Council</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Guidelines for Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned mark</td>
</tr>
<tr>
<td>2</td>
<td>Each NOS will be assessed both for theoretical knowledge and practical</td>
</tr>
<tr>
<td>3</td>
<td>The assessment will be based on knowledge bank of questions created by the SSC.</td>
</tr>
<tr>
<td>4</td>
<td>Individual assessment agencies will create unique question papers for theory and skill practical part for each candidate at each examination/training center</td>
</tr>
<tr>
<td>5</td>
<td>To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS</td>
</tr>
<tr>
<td>6</td>
<td>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.</td>
</tr>
</tbody>
</table>

### Assessment Strategy

<table>
<thead>
<tr>
<th>NOS</th>
<th>Performance Criteria</th>
<th>Marks Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>1. RSC/ N0101</td>
<td>(Prepare mixing mill and accessories)</td>
<td>4</td>
</tr>
<tr>
<td>PC1.</td>
<td>Ensure functioning of safety features of mixing mill (e.g. safety pad, safety bar)</td>
<td>4</td>
</tr>
<tr>
<td>PC2.</td>
<td>Ensure that the mixing mill is clean</td>
<td>4</td>
</tr>
<tr>
<td>PC3.</td>
<td>Set parameters for the equipment (mixing cycle time, roll temperature and nip gap)</td>
<td>14</td>
</tr>
<tr>
<td>PC4.</td>
<td>Keep all accessories (like cooling water, hydraulic system, temperature control unit (TCU), lubrication system) and stock blender (if available) ready</td>
<td>4</td>
</tr>
<tr>
<td>PC5.</td>
<td>Keep all hand tools like mixing knife, cooling rack etc. ready</td>
<td>3</td>
</tr>
<tr>
<td>PC6.</td>
<td>Ensure availability of pre-weighed, approved rubber and other ingredients to be fed as per recipe and batch size</td>
<td>9</td>
</tr>
<tr>
<td>PC7.</td>
<td>Ensure that raw material to be fed is approved by laboratory as per SOP</td>
<td>8</td>
</tr>
<tr>
<td>PC8.</td>
<td>Match the batch code of each raw material with the batch code on the job schedule given by the planning department</td>
<td>9</td>
</tr>
<tr>
<td>PC9. Ensure that all raw materials have been assembled/organized (in correct sequence, as per SOP) to be fed into mixing mill</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>PC10. Ensure housekeeping and safety in the Mixing mill area</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>PC11. Ensure that electrical devices that may be exposed to carbon black dust are sealed.</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>PC12. Periodically blow the electrical devices with clean/dry compressed air.</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>PC13. Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters within limits as per SOP</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>PC14. Adhere to all safety norms (like wearing protective gloves, shoes, Safety Glasses, etc.)</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>PC15. Comply with health, safety, environment guidelines, regulations etc. in accordance with international/national standards or organizational SOP</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>50</td>
</tr>
</tbody>
</table>

2. RSC/ N0102
(Mix raw material in mixing mill to prepare rubber compound)

| PC1. Handle the rubber compound to avoid contamination | 3 | 3 | 0 |
| PC2. Ensure that batch size of rubber mix is as per company’s SOP | 0 | 0 | 0 |
| PC3. Ensure that identified & approved materials are used. | 7 | 3 | 4 |
| PC4. Ensure that the sequence in shift is based on raw material availability to maximize output | 7 | 3 | 4 |
| PC5. Add rubber and other ingredients in the mixing mill in the specified quantity and sequence as per company’s SOP | 7 | 3 | 4 |
| PC6. Receive mixed batch dumped from intermix on the mill and form sheet.  
   a. Allow the entire compound to pass through the nip gap of the rolls.  
   b. Form a band on the front roll.  
   c. Cut the compound and re-roll for at least three times.  
   d. Pass the compound over the blender bar for better cooling and blending.  
   e. Let out compound from mill in continuous sheet form and pass through cooling festoon and wig wag for stacking. | 25 | 10 | 15 |
<p>| PC7. Check and adjust cooling water flow rate as per SOP | 0 | 0 | 0 |
| PC8. Ensure proper rolling bank while mixing | 8 | 3 | 5 |</p>
<table>
<thead>
<tr>
<th>PC</th>
<th>Activity</th>
<th>Rating</th>
<th>Rating</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC9</td>
<td>Use stock blender, if available for better dispersion</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>PC10</td>
<td>Control mixing process and completion as per SOP (temperature or time or energy as programmed / specified)</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PC11</td>
<td>Identify the batch as per SOP</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PC12</td>
<td>Ensure maturation time for Master batch and Final batch before next usage</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PC13</td>
<td>Ensure housekeeping and safety in the Mixing mill area</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>PC14</td>
<td>Ensure that the electrical devices that may be exposed to carbon black dust are sealed.</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>PC15</td>
<td>Periodically blow the electrical devices with clean/dry compressed air.</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>PC16</td>
<td>Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters remain within limits as per SOP.</td>
<td>7</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>PC17</td>
<td>Adhere to all safety norms (like wearing protective gloves, shoes, safety glasses etc)</td>
<td>7</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>PC18</td>
<td>Comply with health, safety, environment guidelines, regulations etc in accordance with international/national standards or organizational SOP.</td>
<td>7</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>50</td>
<td>50</td>
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<td>---</td>
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<td></td>
</tr>
<tr>
<td><strong>Mill Operator</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PC10.</strong> Ensure that the exhaust systems are used to maintain the concentration levels of various particulate matters remain within limits.</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>PC11.</strong> Adhere to all safety norms (like wearing protective gloves, shoes, safety glasses etc)</td>
<td>15</td>
<td>5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>PC12.</strong> Comply with health, safety, environment guidelines, regulations etc in accordance with international/national standards or organizational SOP</td>
<td>15</td>
<td>5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td><strong>PC1.</strong> Inspect the area while taking into account various surfaces</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>PC2.</strong> Identify the material requirements for cleaning the areas inspected, by considering risk, time, efficiency and type of stain</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>PC3.</strong> Ensure that the cleaning equipment is in proper working condition</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>PC4.</strong> Select the suitable alternatives for cleaning the areas in case the appropriate equipment and materials are not available and inform the appropriate person</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>PC5.</strong> Plan the sequence for cleaning the area to avoid re-soiling clean areas and surfaces</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>PC6.</strong> Inform the affected people about the cleaning activity</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>PC7.</strong> Display the appropriate signage for the work being conducted</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>PC8.</strong> Ensure that there is adequate ventilation for the work being carried out</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>PC9.</strong> Wear the personal protective equipment required for the cleaning method and materials being used</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>PC10.</strong> Use the correct cleaning method for the work area, type of soiling and surface</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>PC11.</strong> Carry out cleaning activity without disturbing others</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>PC12.</strong> Deal with accidental damage, if any, caused while carrying out the work</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>PC13.</strong> Report to the appropriate person any difficulties in carrying out your work</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>PC14.</strong> Identify and report to the appropriate person any additional cleaning required that is outside one’s responsibility or skill</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>PC15. Ensure that there is no oily substance on the floor to avoid slippage</td>
<td>8</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>PC16. Ensure that no scrap material is lying around</td>
<td>8</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>PC17. Maintain and store housekeeping equipment and supplies</td>
<td>8</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>PC18. Follow workplace procedures to deal with any accidental damage caused during the cleaning process</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>PC19. Ensure that, on completion of the work, the area is left clean and dry and meets requirements</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>PC20. Return the equipment, materials and personal protective equipment that were used to the right places making sure they are clean, safe and securely stored</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>PC21. Dispose the waste garnered from the activity in an appropriate manner</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>PC22. Dispose of used and un-used solutions according to manufacturer’s instructions, and clean the equipment thoroughly</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>PC23. Maintain schedules and records for housekeeping duty</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>PC24. Replenish any necessary supplies or consumables</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>65</strong></td>
<td><strong>35</strong></td>
<td></td>
</tr>
</tbody>
</table>

5. RSC/ N5002 (To carry out reporting and documentation)

<p>| PC1. Report data/problems/incidents as applicable in a timely manner | 20 | 10 | 10 |
| PC2. Report to the appropriate authority as laid down by the company | 15 | 10 | 5 |
| PC3. Follow reporting procedures as prescribed by the company | 15 | 10 | 5 |
| PC4. Identify documentation to be completed relating to one’s role | 5 | 5 | 0 |
| PC5. Record details accurately an appropriate format | 10 | 10 | 0 |
| PC6. Complete all documentation within stipulated time according to company procedure | 15 | 10 | 5 |
| PC7. Ensure that the final document meets with the requirements of the persons who requested it or make any amendments accordingly | 5 | 5 | 0 |
| PC8. Make sure documents are available to all appropriate authorities to inspect | 0 | 0 | 0 |
| PC9. Respond to requests for information in an appropriate manner whilst following organizational procedures | 10 | 10 | 0 |
| PC10. Inform the appropriate authority of requests for information received | 5 | 5 | 0 |</p>
<table>
<thead>
<tr>
<th>6. RSC/ N5003 (To carry out quality checks)</th>
<th></th>
<th>100</th>
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<tr>
<td>PC1. Ensure that total range of checks are regularly and consistently performed</td>
<td>10</td>
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<td>PC2. Use appropriate measuring instruments, equipment, tools, accessories etc, as required</td>
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<tr>
<td>PC3. Identify non-conformities to quality assurance standards</td>
<td>5</td>
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<td>PC4. Identify potential causes of non-conformities to quality assurance standards</td>
<td>10</td>
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<td>PC5. Identify impact on final product due to non-conformance to company standards</td>
<td>10</td>
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<tr>
<td>PC6. Evaluating the need for action to ensure that problems do not recur</td>
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<tr>
<td>PC7. Suggest corrective action to address problem</td>
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<td>PC8. Review effectiveness of corrective action</td>
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<td>PC9. Interpret the results of the quality check correctly</td>
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<tr>
<td>PC10. Take up results of the findings with QC in charge/appropriate authority</td>
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<td>PC11. Take up the results of the findings within stipulated time</td>
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<td>PC12. Record of results of action taken</td>
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<tr>
<td>PC13. Record adjustments not covered by established procedures for future reference</td>
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<tr>
<td>PC14. Review effectiveness of action taken</td>
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<tr>
<td>PC15. Follow reporting procedures where the cause of defect cannot be identified</td>
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<td>Total</td>
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<tr>
<th>7. RSC/ N5004 (To carry out problem identification and escalation)</th>
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<tbody>
<tr>
<td>PC1. Identify defects/indicators of problems</td>
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<td>PC2. Identify any wrong practices that may lead to problems</td>
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<td>PC3. Identify practices that may impact the final product quality</td>
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<td>PC4. Identify if the problem has occurred before</td>
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<td>PC5. Identify other operations that might be impacted by the problem</td>
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<tr>
<td>PC6. Ensure that no delays are caused as a result of failure to escalate problems</td>
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<tr>
<td>PC7. Take appropriate materials and sample, conduct tests and evaluate results to establish reasons to confirm suspected reasons for non-conformance (where required)</td>
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<td>PC8. Consider possible reasons for identification of problems</td>
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<td>PC</td>
<td>Description</td>
<td>Theory</td>
<td>Skills</td>
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<tr>
<td>PC9</td>
<td>Consider applicable corrections and formulate corrective action</td>
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<tr>
<td>PC10</td>
<td>Formulate action in a timely manner</td>
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<tr>
<td>PC11</td>
<td>Communicate problem/remedial action to appropriate parties</td>
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<td>PC12</td>
<td>Take corrective action in a timely manner</td>
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<td>PC13</td>
<td>Take corrective action for problems identified according to the company procedures</td>
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<tr>
<td>PC14</td>
<td>Report/document problem and corrective action in an appropriate manner</td>
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<td>PC15</td>
<td>Monitor corrective action</td>
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<td>PC16</td>
<td>Evaluate implementation of corrective action taken to determine if the problem has been resolved</td>
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<td>PC17</td>
<td>Ensure that corrective action selected is viable and practical</td>
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<td>PC18</td>
<td>Ensure that correct solution is identified to an identified problem</td>
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<td>PC19</td>
<td>Take corrective action for problems identified according to the company procedures</td>
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<td>PC20</td>
<td>Ensure that no delays are caused as a result of failure to take necessary action</td>
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<td>PC21</td>
<td>Escalate problem as per laid down escalation matrix</td>
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<td>PC22</td>
<td>Escalate the problem within stipulated time</td>
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<td>PC23</td>
<td>Escalate the problem in an appropriate manner</td>
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<td>PC24</td>
<td>Ensure that no delays are caused as a result of failure to escalate problems</td>
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</table>

**Do**

- Explain each Guideline for Assessment in detail
- Explain the score that each trainee needs to obtain
- Recapitulate each NOS one-by-one and take participants through the allocation of marks for Theory and Skills Practical.
- Explain the Allocation of Marks. Explain that they will be assessed on Theory and Skills Practical.