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सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



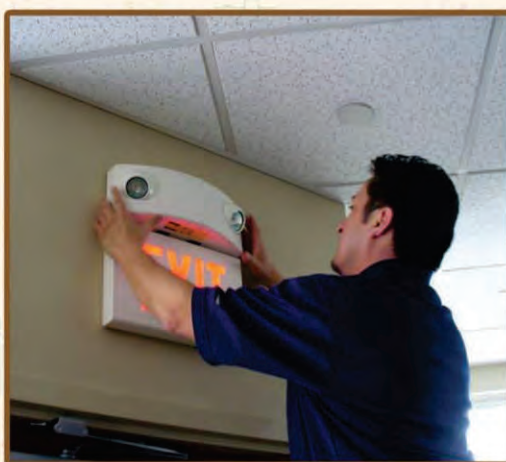
N S D C
National
Skill Development
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Transforming the skill landscape



Skilling India in Electronics

Facilitator Guide



Sector
Electronics

Sub-Sector
LED Lighting

Occupation
LED Light Testing and Quality Assurance

Reference ID: ELE/Q9302, Version 1.0

NSFQ Level: 4

LED Light Repair Technician



Shri Narendra Modi
Prime Minister of India

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

Acknowledgements

The need for having a standard curriculum for the Job Role based Qualification Packs under the National Skills Qualification Framework was felt necessary for achieving a uniform skill based training manual in the form of a Participant Handbook.

I would like to take the opportunity to thank everyone who contributed in developing this Handbook for the QP LED Light Repair Technician.

The Handbook is the result of tireless pursuit to develop an effective tool for imparting the Skill Based training in the most effective manner.

I would like to thank the team of KontentEdge for their support to develop the content, the SME and the team at the ESSCI along with the industry partners for the tireless effort in bringing the Handbook in the current format.

CEO

Electronics Sector Skills Council of India

About this Book

This Participant Handbook is designed to enable training for the “LED Light Repair Technician” Qualification Pack (QP). Each National Occupational (NOS) is covered across Unit/s.

Key Learning Objectives for the “LED Light Repair Technician” NOS mark the beginning of the Unit/s for that NOS. The symbols used in this book are described below.

Symbols Used



Ask



Demonstrate



Facilitation Notes



Learning Outcomes



Notes



Objectives



Practical



Team Activity



Do



Explain



Say



Resources



Activity



Summary



Role Play



Example

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1. Basics of Electronics and LED

Unit 1.1 – Basics of Electronic Components and Electricity

Unit 1.2 – Basics of Electricity

Unit 1.3 – Manual Soldering

Unit 1.4 – LED Basics

Unit 1.5 – Basic Parameters of LED

Unit 1.6 – LED Power Sources

Unit 1.7 – Thermal Management of LEDs

Unit 1.8 – LED Configuration



ELE/N9302

Key Learning Outcomes

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

- Identify basic electronic components and its functions
- List the uses of current, voltage, power and energy in LED Lighting products
- Demonstrate the process of soldering
- Explain about LED working principle
- List the parameter which affect the overall life of LED
- Identify the LED power sources
- Describe series and parallel connection of LED
- Explain the passive thermal design and heat transfer procedure in an LED
- Describe constant current of LED Driver

UNIT 1.1: Basics of Electronic Components and Electricity

Unit Objectives

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

- Identify basic electronic components
- Explain the function of electronic components

Resources to be Used

- Available objects such as a duster, pen, notebook and so on
- Electronic components such as a diode, capacitors, resistors, transistors and so on

Ask

- Ask the participants if they can tell a few examples of electronic devices.

Explain

- Explain to the participants about electronic components.
- Explain the different types of electronic components.

Notes for Facilitation

- Start the session by telling the participants that electronics is a branch of science which deals with electrical circuits involving active and passive electronic components.
- Tell them that electronic components are the fundamental building blocks of the electronic or electrical circuit.
- Tell them that active components depend on a source of energy to perform their functions and passive components don't require external source of energy to perform their functions.
- Tell them about the basic active and passive components with the help of the following figure and show some of the components to them.

Active Components	Passive Components
<ul style="list-style-type: none"> • Diodes • Transistors • Integrated Circuit(IC) • Light Emitting Diode (LED) • Power Sources • Solenoid 	<ul style="list-style-type: none"> • Transformer • Resistor • Capacitor • Inductor • Thermistor

Fig 1.1.1: Active and passive components

- Explain to them about active components using the following points:
 - Active components are those components which generate energy in the form of voltage or current are called as active components.
 - In very simple words, it can be said that active components are energy donors.
- Next, explain to the participants about passive components using the following points:
 - Passive components are those components which do not require any power source to perform their specific functions.
 - These components are not capable of controlling current.

Ask

- Ask the participants if they have heard about resistor colour coding.
- Ask the participants if they know how capacitor is constructed.

Explain

- Explain to the participants about colour coding of a resistor.
- Explain the construction of capacitors.
- Explain
 - Inductors
 - Diodes
 - LED
 - Transistor
 - ICs

Notes for Facilitation

- Tell them that a resistor resists the flow of current in a circuit.
- Explain fixed and variable resistors and draw the symbols of them on the whiteboard:



Fig 1.1.2: Fixed and variable resistors

- Explain colour coding of a resistor and how to calculate them.
- Explain that a capacitor is a passive electronic component that stores electrical energy as a static electric field.
- Tell them that a capacitor is made up of two parallel metal plates separated by an insulator known as dielectric.

- Explain polarized and non-polarized capacitors and draw the symbols of them on the whiteboard:

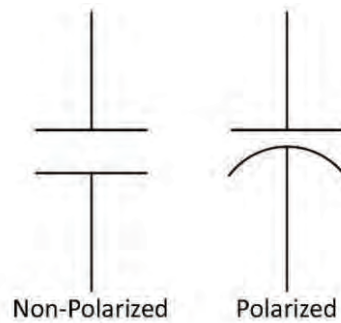


Fig 1.1.3: Polarized and non-polarized capacitors

- Inform them that in addition to being a storing device, capacitors are also used as timing devices, tuning devices, smoothing devices and signal decoupling and coupling devices.
- Explain to them how capacitors are constructed.
- Explain to them an inductor is a passive electrical component made up of a coil of wire around a central core.
- Explain that when current is passed through an inductor, it stores energy in the form of magnetic field.
- Inform them that Inductors are denoted by series of looped coils, as shown in the following figure:



Fig 1.1.4: Looped coils

- Tell them that the inductance of an inductor depends on:
 - Radius of coil
 - Number of turns of coil
 - Material of the core
- Inform them that inductors are used in filters, sensors, transformers, motors and so on.
- Show them different types of inductors:



Air Core Inductor



Variable Inductor



Ferromagnetic Core Inductor

Fig 1.1.5: Type of inductors

- Tell them about diodes, LED, transistors and ICs.

- Inform them that the IC is represented by a rectangle, with pins connected to the sides. Each pin must be labelled with a number and its function, as shown in the following figure:

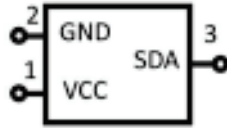


Fig 1.1.6: IC representation

- Further, tell the applications of different components with the help of the following table:

Components	Application
Resistor	<ul style="list-style-type: none"> In a low-noise amplifier or a pre-amplifier In heavy-duty industrial high-current
Capacitor	<ul style="list-style-type: none"> For energy storage In digital memory In pulsed power and weapons In power conditioning
Inductors	<ul style="list-style-type: none"> For energy storage In analog circuits and signal processing
IC	<ul style="list-style-type: none"> In an oscillator In an amplifier In a timer In a counter, a microprocessor or computer memory
Transistors	<ul style="list-style-type: none"> As an amplifier As a switch
LED	<ul style="list-style-type: none"> In aviation lighting In automobile headlamps In general lighting In traffic signals In camera flashes In lighted wallpaper

Fig 1.1.7: Application of different components

UNIT 1.2: Basic of Electricity

Unit Objectives

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

- Identify the use of current, voltage, power and energy in LED Lighting products
- Explain the difference between AC and DC

Resources to be Used

- Available objects such as a duster, pen, notebook and so on

Ask

- Ask the participants to tell what comes to their mind when they think of electricity.
- Ask the participants if they can tell the difference between electrical and electronic devices.

Notes for Facilitation

- Start the session by telling the participants why it is important for them to know about electricity, after the participants share what they think of electricity.
- Tell them that the difference between electronic and electrical devices lies in how the devices manipulate electricity to do their work.
- Explain that electrical devices take the energy of the electric current and transform it in simple ways into some other form of energy; most likely light, heat, or motion.
- Give example that:
 - The heating elements in a toaster turn electrical energy into heat that allows toasting of bread.
 - The motor in a vacuum cleaner turns electrical energy into motion that drives a pump, which then sucks the dust out of the carpet.
- Tell that the electronic devices, instead of just converting electrical energy into heat, light, or motion, are designed to manipulate the electrical current into doing interesting and useful things.
- Give example that:
 - Audio electronic devices add sound information to electric current, which then allows someone to listen to music or talk on a cell phone.
 - Video devices add images to electric current so that one can watch movies.
- Tell them that there is no clear-cut demarcation between electric and electronic devices. Electrical devices often include some electronic components in them and vice-versa.
- Give example that:
 - A toaster may contain an electronic thermostat that attempts to keep the heat at

- just the right temperature to make a perfect toast.
- The remote control of a TV set is a complicated little electronic device that contains simple electrical devices such as batteries.
- Explain the various terms associated with electricity, such as current, voltage, power, energy.
- Tell them that electricity is a natural force that comes into existence whenever there is a flow of electric charge between any two components.
- Explain that:
 - Voltage is the difference between the charges at two points. It is measured in Volts and is denoted by the symbol, 'V'.
 - Current is the rate of flow of charge. It is measured in Ampere and is denoted by the symbol, 'A'.
- Explain how to calculate the rate of flow of current or the rate at which electric energy is transferred.
- Tell them that the flow of current can be seen in simple mechanisms used in our day-to-day life such as switching on a fan or a light bulb.
- Explain Ohm's law with the help of the diagram.
- Draw the following diagram to explain how to calculate the current if voltage (V) and resistance (R) are given:

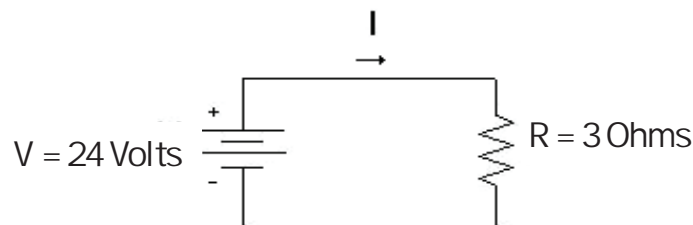


Fig 1.21: Calculation of current

- Tell them, if V is 24 volts, R is 3 ohms, then I can be calculated as:

$$V=IR$$

$$I=V/R$$
 The current, I, flowing in the circuit will be $24/3 = 8 \text{ A}$.
- Then tell them about the linear relation of current and voltage with the help of the following graph, where X axis represents current and Y axis represents voltage.

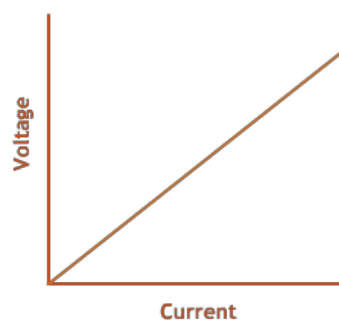


Fig 1.22 Linear relation of current and voltage

- Explain to them that power is the rate at which electrical energy is consumed in a circuit.
- Explain that power depends on voltage and current and is measured in watts.
- Tell them that electric power can also be defined as the work done by an electric current in a unit time.
- Explain that the power consumed within a structure is measured with the help of electricity meters provided by the power company such as the one shown in the following figure:



Fig 1.2.3: Electricity meter

- Explain that the consumers are charged for electricity by the amount they use.
- Explain that the unit of measurement of power consumed is watt-hour, that is the consumer pays for:

$$\text{Watt-hour} = \text{Total watts consumed} \times \text{time in hours}$$

Ask

- Ask the participants if they have heard of the terms, AC and DC.
- Ask them if they know what these terms stand for.

Explain

- Explain to the participants about electric circuit, AC and DC.

Notes for Facilitation

- Tell the participants that a circuit is a closed loop through which electricity can flow. A circuit is a path which starts and stops at the same place.
- Explain that an electrical circuit is an interconnection of the following:
 - Power source, such as a battery which provides energy for the current to flow through the circuit.
 - Load, which is any device that draws power from the circuit such as a light bulb, a TV, a computer and so on.
 - Electronic components such as resistors, capacitors and so on.
 - Wires that connect various components.

- Explain that a circuit is of two types
 - Closed circuit: Allows uninterrupted flow of electricity from the source to the load and then back to the starting point.
 - Open circuit: Does not conduct electricity as the circuit is not complete and the flow of current gets broken.
- Explain the concept of closed and open circuits with the help of the following diagram:

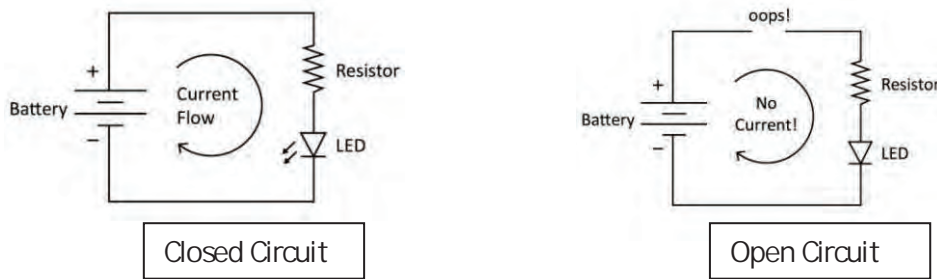


Fig 1.2.4: Closed and open circuit

- Inform them that there is another type of circuit called short circuit. It refers to a circuit which does not have a load. However, the current in a short circuit can flow at very high levels and can damage electronic components or even cause a fire.
- Explain that in a series circuit, the load, which is depicted by lamps, is connected to one after another, as shown in the following image:



Fig 1.2.5: Connection of lamp in series

- Further, tell them that in a parallel circuit, both the lamps are connected to the source, parallel to each other, as shown in the following image:



Fig 1.2.6: Connection of lamp in parallel

- Explain that there are two types of currents
 - AC or alternating current
 - DC or direct current

- Explain AC and DC currents with the help of following diagrams:

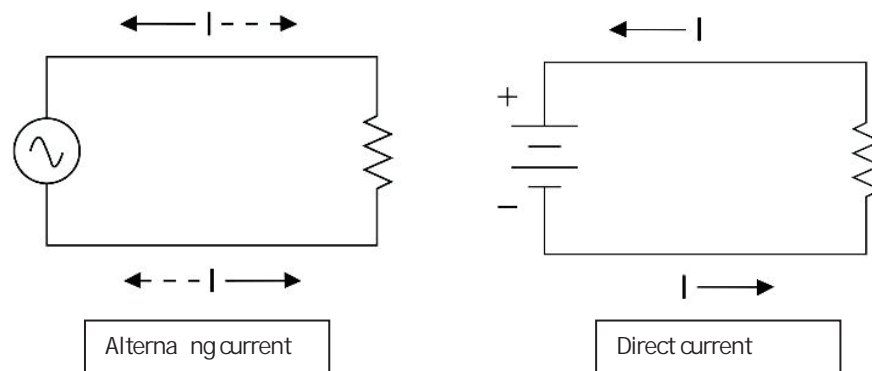


Fig 1.2.7: AC and DC current

- Further, explain the difference between the features of AC and DC currents with the help of the following table:

Parameter	AC	DC
Direction	It reverses its direction while flowing in a circuit.	It flows in one direction in the circuit.
Current	It is the current of magnitude varying with time.	It is the current of constant magnitude.
Obtained from	A.C Generator and mains.	Cell or Battery.
Passive Parameters	Impedance	Resistance
Power Factor	Between 0 and 1	It is always 1
Types	Sinusoidal, Trapezoidal, Triangular, Square	Pure and pulsating

Fig 1.2.8: Difference between AC and DC

UNIT 1.3: Manual Soldering

Unit Objectives

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

- Explain the process of soldering
- Identify the types of solder and flux
- Describe the working of solder iron
- List the selection criteria of a suitable pipe

Resources to be Used

- Available objects such as a duster, pen, notebook and so on

Ask

- Ask the participants if they know the importance of soldering.
- Ask them, if they know about types of solder.
- Ask them, if they know about use of sponge in soldering process.

Explain

- Explain soldering.
- Explain the use of solder.
- Explain the use of correct iron pipes.
- Explain:
 - Wand
 - Base
 - Stand
 - Sponge.

Notes for Facilitation

- Start the session by telling the participants that soldering is done to join two or more items (generally metal) by melting a filler metal into the joint.
- Explain that the filler metal is called solder and it has melting point lower than the adjoining items.
- Tell them about two types of solder:
 - Tin-Lead solder
 - Lead free solder, for example tin-zinc, cadmium-silver and zinc-aluminium.

- Explain the specification of tin-lead solder with the help of following chart:

% of Tin-Lead	Melting Point
63-37	183 °C (361 °F)
60-40	183-190 °C (361-374 °F)
50-50	183-215 °C (361-419 °F)

Fig 1.3.1: Specification of tin-lead solder

- Explain the applications of different types of lead free solder with the help of following chart:

Type	Application
Tin-Zinc	Joining aluminium
Cadmium-Silver	For providing strength at high temperatures
Zinc-Aluminium	Aluminium and corrosion resistance
Tin-Silver	Electronics manufacturing
Tin-Bismuth	Electronics manufacturing

Fig 1.3.2: Application of type of lead free solder

- Tell them that lead-free solders are becoming popular because of environmental reasons.
- Explain different parts of a soldering iron:



Fig 1.3.3: Parts of soldering iron

- Tell them about a few types of iron tips used in soldering, such as:

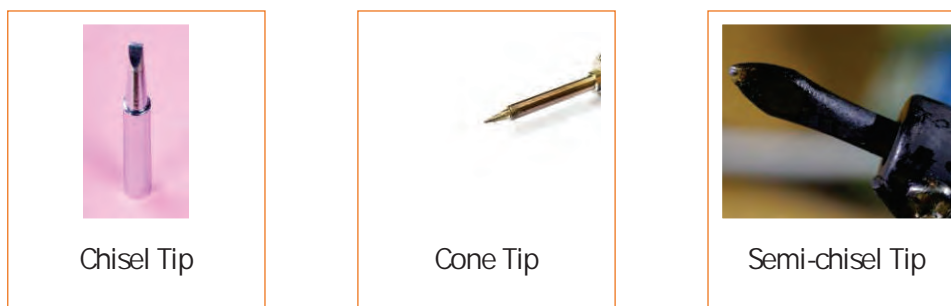


Fig 1.3.4: Types of iron tips

- Briefly explain about the different types of wands and bases.

- Explain the use of stand and sponge in soldering.
- Explain the importance of selecting the correct flux for soldering process with the help of the following diagram:

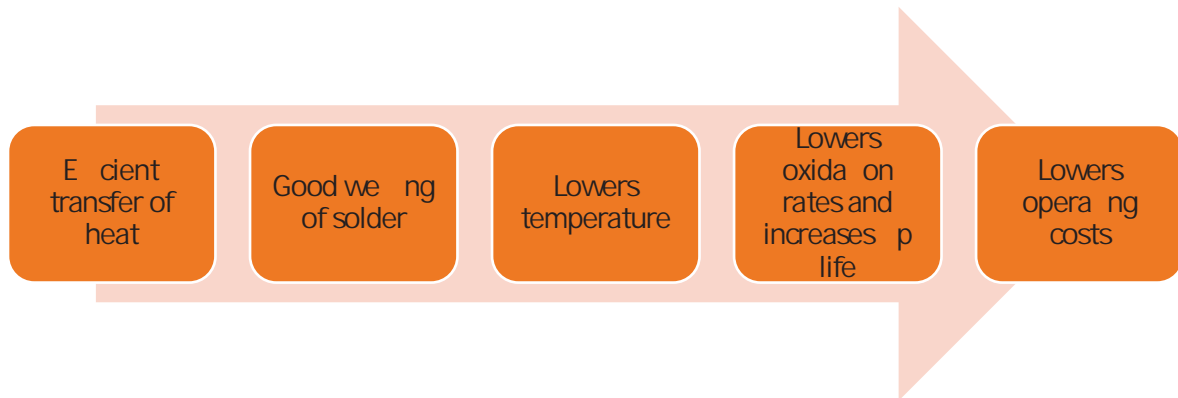


Fig 1.3.5: Importance of selecting correct flux for soldering process

Ask

- Ask the participants if they have heard about flux.
- Ask them whether they have ever seen the process of soldering.

Explain

- Explain selection of flux.
- Explain the process of soldering.

Notes for Facilitation

- Explain the function of flux with the help of the following figure:

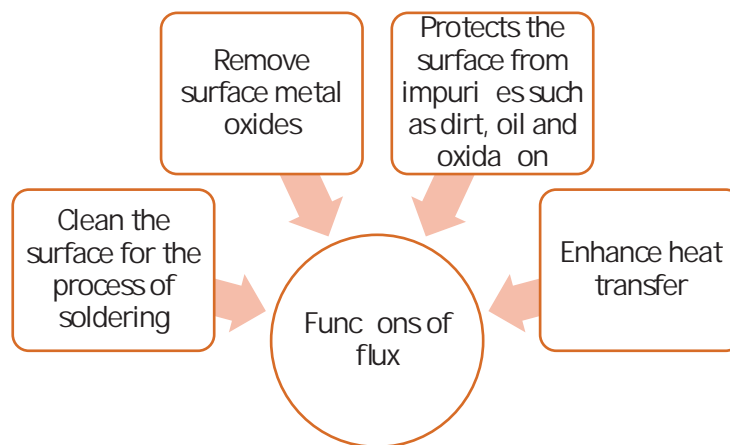


Fig 1.3.6: Function of flux

- Tell them there are three different types of flux:
 - Clean (Rosin Mildly Activated or RMA)
 - No-Clean
 - OA (Aqueous)

- Explain that the selection of flux depends on:
 - Flux performance
 - Flux characteristics that include:
 - ^a Materials of composition (Rosin, Resin, Organic and Inorganic)
 - ^a Flux type
 - ^a Flux form (Solid, Paste and Liquid).
- Explain the process of soldering.
- Briefly explain the do's and don'ts of the soldering process with the help of the following table:

Do's	Don'ts
Return the soldering iron to the stand when idle.	Leave the soldering iron unattended
Keep the tips clean and wipe them off to keep them shiny and minimize build-up.	A dirty rusty surface will not transfer the heat.
Use damp sponge with de-ionized water for cleaning the iron.	Use sandpaper, files or normal water for cleaning the iron tip.
	Use excessive active flux.

Fig 1.3.7: Dos and don'ts of soldering process

UNIT 1.4: LED Basics

Unit Objectives

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

- Explain the evolution of High Power LED
- Demonstrate LED working principle
- List the parameter which affect the overall life of LED
- Identify various types of LED
- List the advantages of LED light product

Resources to be Used

- Available objects such as a duster, pen, notebook and so on
- Different colours of LEDs

Ask

- Ask the participants if they know how LED works.
- Ask them, if they can tell a few advantages of LED technology.

Do

- Show the participants LEDs of different colours.



Fig 1.4.1: LEDs of different colour

Explain

- Briefly explain the history of LED.
- Explain working principle of an LED.
- Explain the advantages of LED technology.
- Explain different types of LED and the factors affecting the life of an LED.

Notes for Facilitator on

- Start the session by showing LEDs to the participants.
- Explain the history of LED with the help of following timeline:

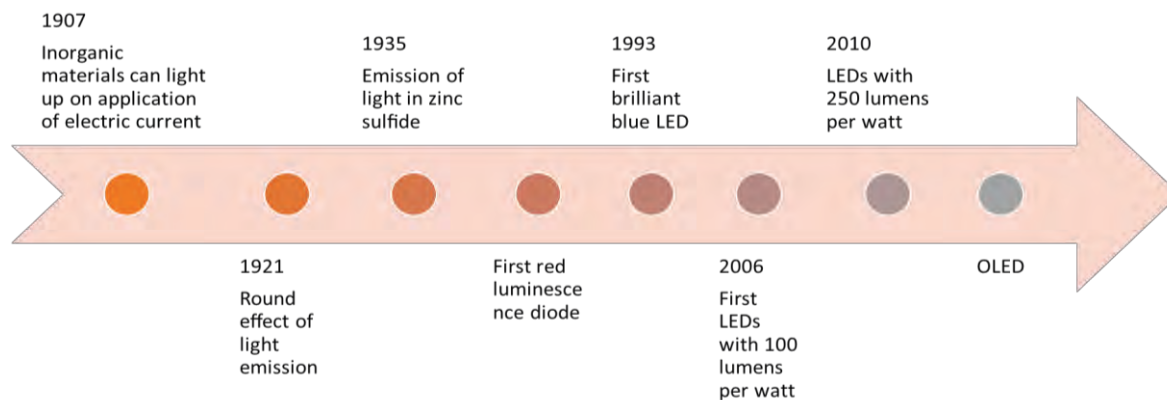


Fig 1.4.1: History of LED

- Explain different parts of an LED:

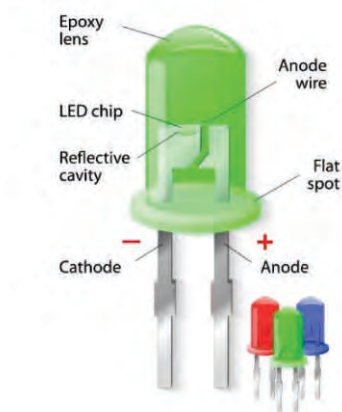


Fig 1.4.2 Different parts of LED

- Briefly explain working of an LED.
- Tell them about the advantages of using LED technology.
- Tell them about different types of LEDs such as:
 - Indicator Type
 - Illuminator Type
 - Chip on board (COB)

- Explain that in addition to these three, there are other types of LEDs such as:
 - LED Strips: LED strips contain high-powered LEDs which are placed on a thin PCB on a flexible strip. The back of the strip is covered with an adhesive. When power is supplied to the LED strip, the strip LEDs light up over the strip. These strips are simple to install and very economical.



Fig 1.4.2 LED strips

Some types of LED strip lights include are as follows:

- RGB LED strip- Digital
- Flashing lights- Rhythm following
- LED strip- Flexible
- SMD LED strip- Waterproof
- Self- adhesive LED strip- Decora ve blue- coloured
- Self- adhesive LED strip- Decora ve red- coloured
- Self- adhesive LED strip- Decora ve white- coloured
- Hit lights ribbon LED strip- Red flexible
- Miniature LED: These are usually single LEDs utilized as indicators. They are available in sizes ranging from 2mm to 8mm and come in hole and surface mount packaging. They often do not utilize any separate heat sink. The usual current ranges from 1Ma to over 20Ma. The tiny size of the LEDs helps set the upper limit on the power consumption by itself because of the heat generated by high current density and the requirement of a heat sink. The shape of the packages can be:
 - Round with a dome shaped or flat top
 - Rectangular having flat top
 - Triangular or square having a flat top.
- To enhance the viewing angle and contrast, clear or tinted encapsulation might be provided.
- High Power LED: High-power LEDs (HP-LEDs) or high-output LEDs (HO-LEDs) have the capability to be driven at high currents ranging from mA to an ampere. They have tremendous output and come in various shapes and sizes. These LEDs require heat sinks due to heat dissipation. They can function for more than 60,000 hours.

They are utilized in various ways, as shown in the following figure:



Street lights



Home appliances



Table lamps



Different types of lightings

Fig 1.4.3: Utilization of LED in various devices

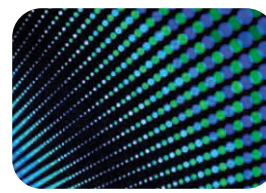
- Application Specific LED: Application specific LEDs are made for a specific application only, such as:



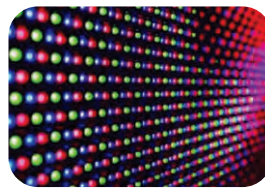
Digital billboards



Digital display boards



Bi-colour LEDs



Tri-colour LEDs

Fig 1.4.4: Application specific LEDs

- A bi-colour LED includes a solitary frame with two pins and two diodes mounted on it. One of the pins is anode and the other is cathode. This LED can give out two colours, depending on whether it is in a forward bias or reverse bias condition.
- A tri-colour LED also has a solitary frame with two diodes mounted on it but there are three pins.

- Explain the factors that affect the life of an LED such as:
 - Current
 - Temperature
 - Radiation and light
 - Dampness
 - Mechanical influence
 - Chemical influence

UNIT 1.5: Basic Parameters of LED

Unit Objectives

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

- List the basic parameters of LEDs
- Describe the importance of CCT and CRI in LED products

Resources to be Used

- Available objects such as a duster, pen, notebook and so on

Ask

- Ask the participants if they have heard about Colour Rendering Index (CRI) and Correlated Colour Temperature (CCT).

Explain

- Explain importance of Colour Rendering Index and Correlated Colour Temperature.

Notes for Facilitation

- Start the session by telling the participants that two important parameters of lights are:



Fig 1.5.1: Important parameters of light

- Tell them that CRI is used to measure the ability of a light source to accurately reproduce the true colours of an object when compared to a natural light source. The greater the CRI value, the better the capacity of a LED to render colour.

- Show them CRI for different types of lamps:

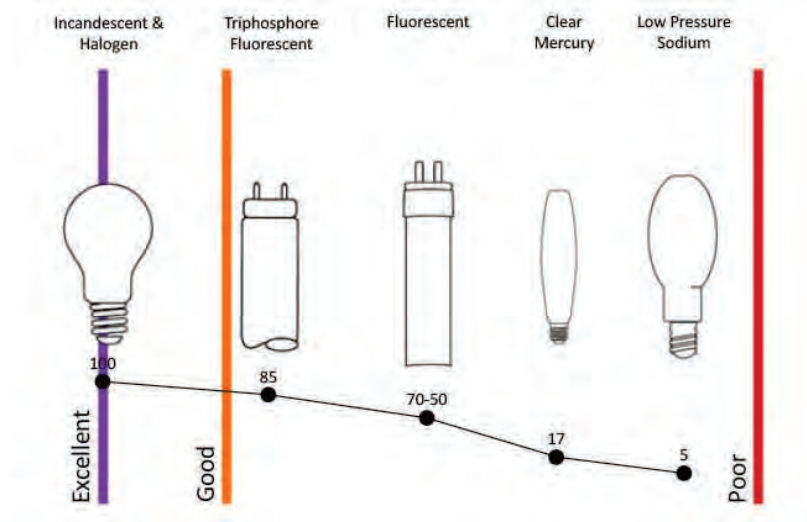


Fig 1.5.2 CRI for different lamps

- Tell them that CCT is used to define the colour appearance of a white LED and refers to the tone or shade of white light.
- Tell them that CCT of a:
 - Warm light is approximately 2700K
 - Neutral white is approximately 4000K
 - Cool white is at 5000K or more.
- Explain the range of CCT with the help of the following diagram:

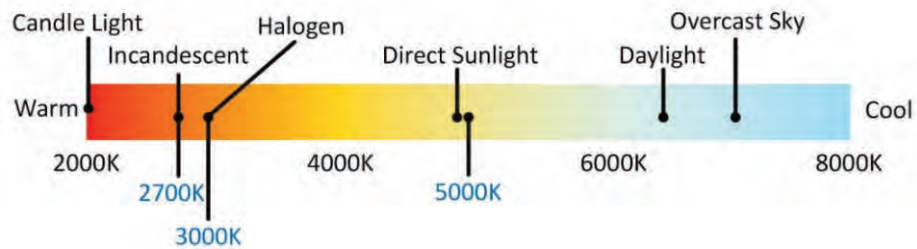


Fig 1.5.3 Ranges of CCT

- Also, tell them about the different colour temperature LED lighting used in different places such as:
 - Public applications
 - Hotel lighting
 - Office lighting
 - Warehouse lighting
 - Shopping mall lighting

UNIT 1.6: LED Power Sources

Unit Objectives

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

- Identify the LED power sources
- List components used in power supply
- Describe series and parallel connection of LED

Resources to be Used

- Available objects such as a duster, pen, notebook and so on

Ask

- Ask the participants if they can tell about the unit of light output.

Explain

- Explain different types of LED power sources.
- Explain the types of LED connection in a circuit.

Notes for Facilitation

- Start the session by explaining to the participants, the difference between powering an LED and other electronics product.
- Tell them the characteristics of LED power sources.
- Draw the following diagram and tell them that in order for a LED to turn on, a voltage must be applied across its leads, from anode to cathode. This voltage is known as forward voltage (V_F).

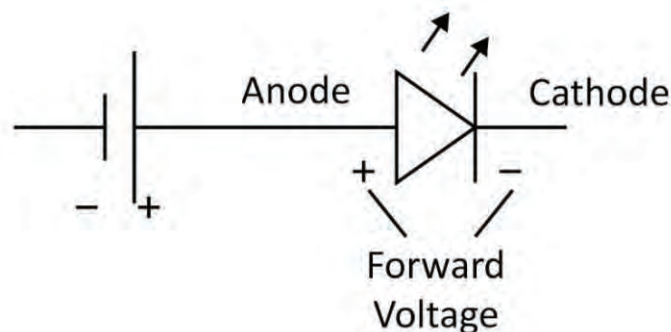


Fig 1.6.1: Forward voltage

- Also, tell them that typical V_{LED} values are:

Type	Voltage (V)
Non-high-brightness red	1.7
High-brightness low-current red	1.9
Orange and yellow	2
Green	2.1
Bright white and blue	3.4 to 3.6

Fig 1.6.2: Voltage for different type of LED

- Briefly explain the working of LED power sources.
- Explain that the LEDs can either be connected in series or parallel.
- Explain the advantages and disadvantages to connecting LEDs in series and in parallel in a circuit.

UNIT 1.7: Thermal Management of LEDs

Unit Objectives

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

- Explain the heat transfer procedure in an LED
- Describe the passive thermal design
- Identify the use of heat sink

Resources to be Used

- Available objects such as a duster, pen, notebook and so on

Explain

- Explain heat transfer procedure in a LED Luminary.

Notes for Facilitation

- Start the session by telling the participants about the heat transfer mechanism:
 - Conduction
 - Convection
 - Radiation
- Explain the three mechanisms with the help of the following diagram

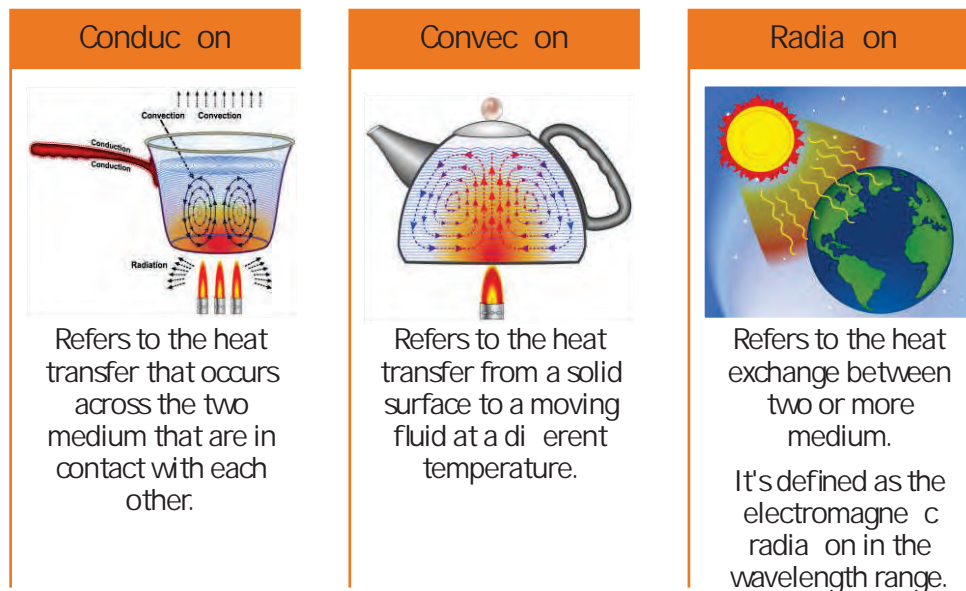


Fig 1.7.1: Heat transfer mechanism

- Explain the process of transfer of heat from LED to atmosphere with the help of the following figure:

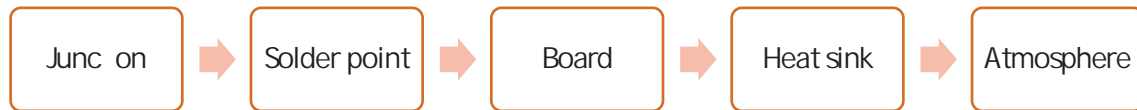


Fig 1.7.2: Process of transfer of heat

- Explain the importance of keeping the junction temperature low.
- Tell them about passive thermal designs for ensuring efficient thermal management of high power LED application.
- Explain that the passive thermal designs include:
 - Adhesive
 - Heat sink
 - Heat Pipe
- Explain heat radiation with the help of following image:



Fig 1.7.3: Heat radiation

- Also, show them the following image of heat sink and explain how the following characteristics of heat sink affect the efficiency of heat transfer:
 - Material
 - Shape
 - Surface Finish
 - Method of Mounting

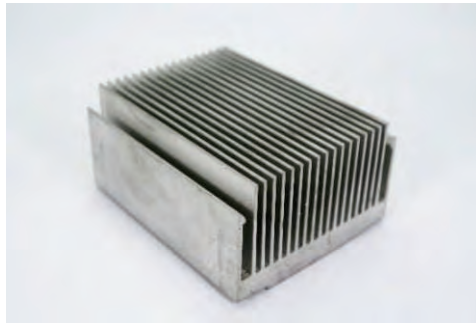


Fig 1.7.4: Heat Sink

- Tell them about heat pipes and vapour chambers.
- Tell them about Metal Core PCBs.

UNIT 1.8: LED Configurations

Unit Objectives

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

- Describe constant current of LED Driver
- Identify the needs of LED Driver parameters

Resources to be Used

- Available objects such as a duster, pen, notebook and so on

Explain

- Explain different LED configurations.

Notes for Facilitation

- Start the session by introducing two types of LED drivers to the participants, as shown in the following figure:

Constant current LED driver

Constant voltage LED driver

Fig 1.8.1: Type of LED drivers

- Tell them that constant current LED drivers are used for a fixed output current and a range of output voltages. This type of driver varies the voltage across the circuit allowing a constant current across the device.
- Also, tell them that the current beyond the rating of the LED is known as thermal-runaway and it leads to reduced life-span of the LED and premature burn out.
- Tell them that these are generally used for commercial LED displays, signs and back-lighting as consistent brightness as well as constant level of current are maintained.

- Explain the series and parallel configuration of LEDs with the help of the following figure:

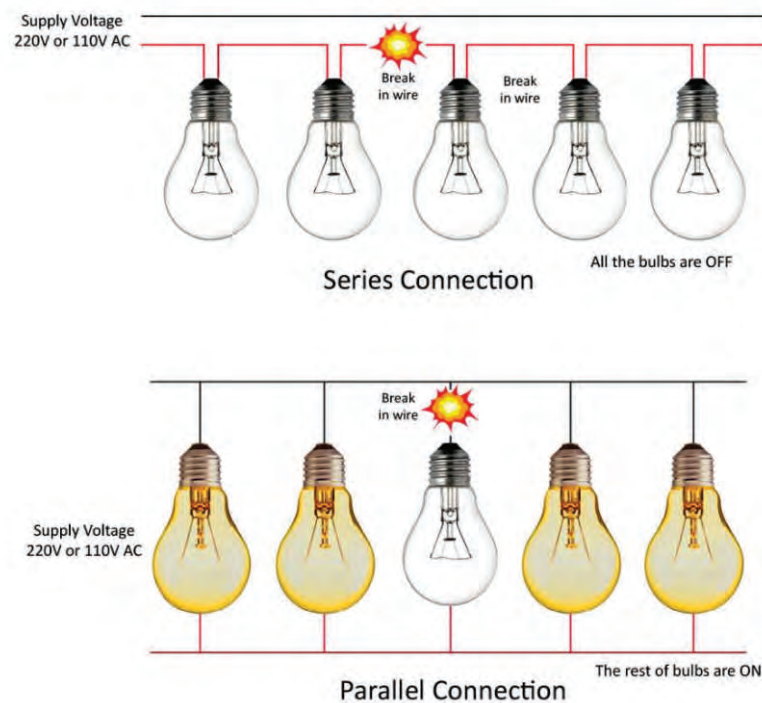


Fig 1.8.2: Configuration of LEDs

- Tell them that in a parallel circuit it is easier to connect and disconnect a new element, without affecting the other elements in the circuit.
- Also, tell them that, if a fault occurs in any string, the current is passed through different paths across the circuit.
- Explain the advantages and disadvantages of series and parallel configuration of LEDs.
- Briefly explain the structure of an LED matrix and its advantages and disadvantages.
- Also, show them an LED matrix, such as the one shown in the following image:

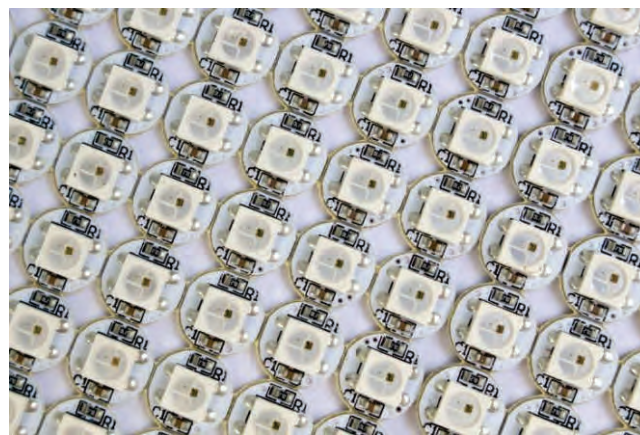


Fig 1.8.3: LED matrix



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2. LED Luminary Assembly

Unit 2.1 – LED Luminary Assembly

Unit 2.2 – Selection of LED Drivers

Unit 2.3 – Diagnose and Repair LED Light



ELE/N9302

Key Learning Outcomes

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

- Demonstrate basic knowledge of product assembly
- Identify the tools required for LED product assembly
- Explain different types of drivers
- Demonstrate driver selection according to the LED

UNIT 2.1: LED luminary Assembly

Unit Objectives

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

- Demonstrate basic knowledge of product assembly
- Identify the tools required for LED product assembly
- List the materials used in LED product assembly

Resources to be Used

- Available objects such as a duster, pen, notebook and so on

Ask

- Ask the participants if they can tell a few components of LED luminaire assembly.

Explain

- Explain the components of an LED assembly.
- Explain the assembly of different LED products.

Notes for Facilitation

- Start the session by telling the participants that a transparent material such as silicone or epoxy is used to encapsulate LEDs. A blue LED in a broadband, white appearing spectrum is converted into a white LED by adding phosphor.
- Explain the process flow of LED luminary assembly with the help of following diagram:

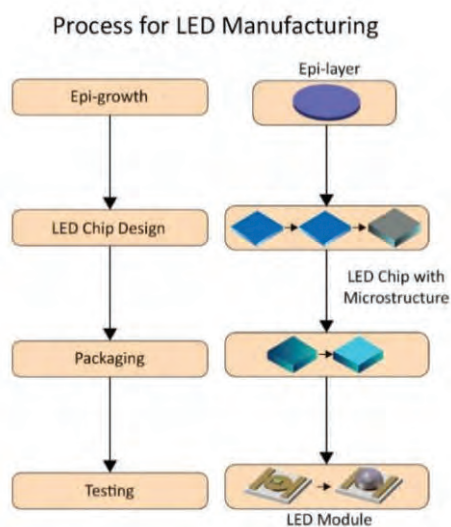


Fig 2.1.1: Process flow of LED assembly

- Also, show the different types of LED packaging available:

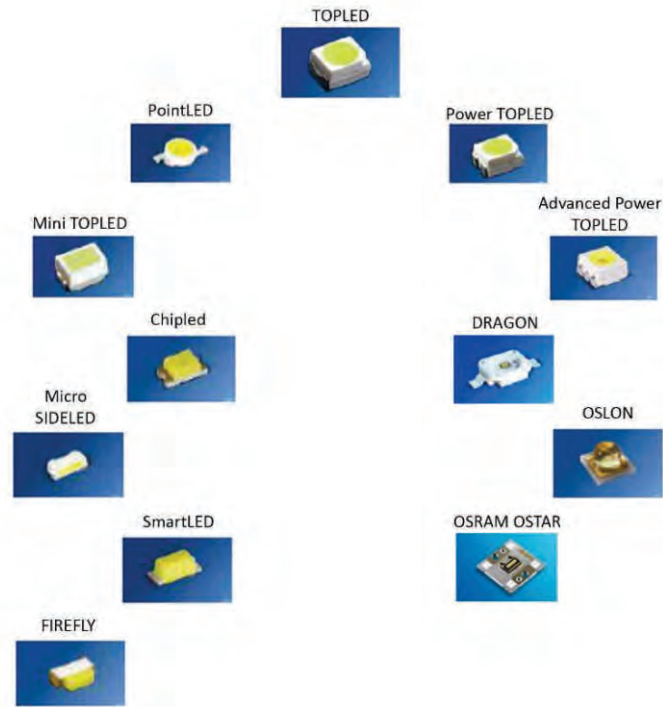


Fig 21.2 Type of LED packaging

- Show them different parts of an LED assembly:

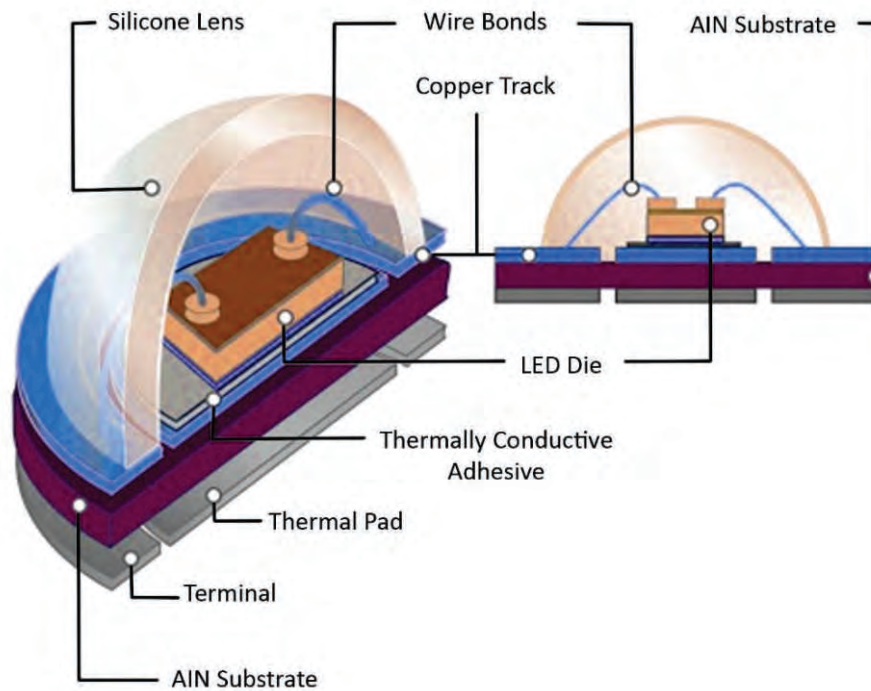


Fig 21.3: Parts of LED assembly

- Explain different components of a luminaire assembly with the help of the following figure:

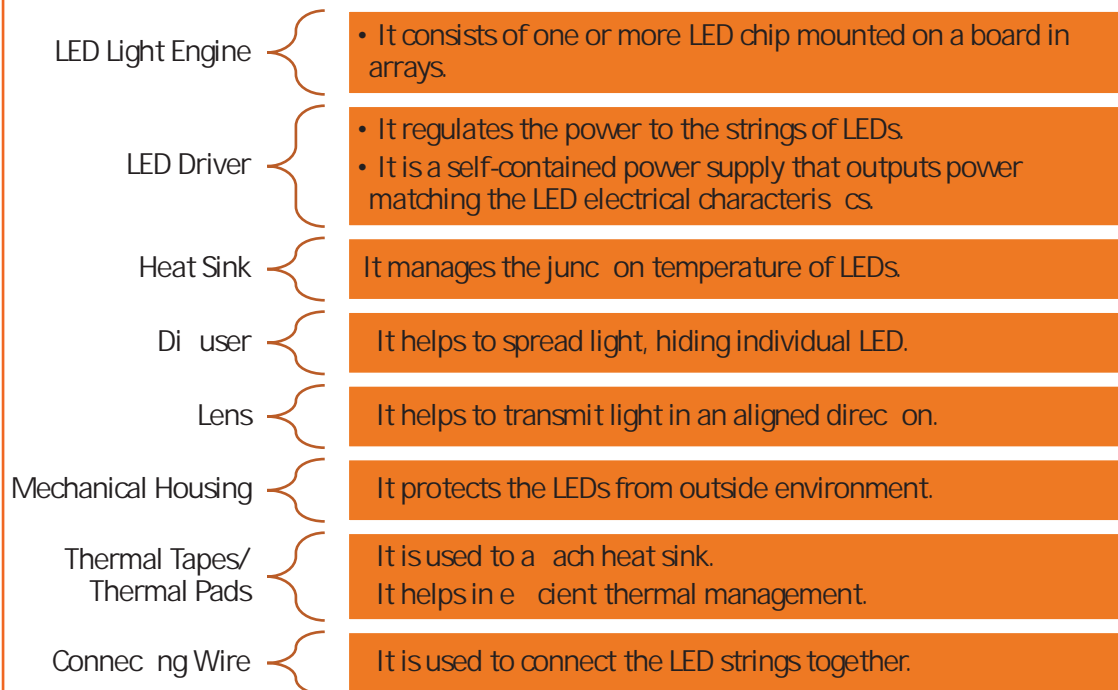



Fig 2.1.4: Components of luminary assembly

- # Tell them about various thermal interface materials that facilitate heat dissipation:
 - Thermal grease: It eliminates air gaps that act as thermal insulator, between two parts, and maximizes heat transfer.
 - Thermal glue: It allows a bond line between two parts like grease, but unlike the grease it also provides mechanical strength to the joint after curing.
 - Thermal gap filler: It allows a bond line, thicker than the thermal grease after curing. But, it allows easy disassembly since it has limited adhesiveness.
 - Thermal pad: Thermal pads are soft and solid and are made of silicone or silicone-like material. It requires higher force to press the heat sink on the heat source to conform to the bonded surfaces.
 - Thermal adhesive: It is like a thermal pad that has adhesive properties.
- Tell them about different tools required for luminaire assembly:

Tool and equipment	Description	Image
Needle-nose pliers	<ul style="list-style-type: none"> • Used to bend, reposition and snip wire • Help in reaching areas where fingers or any other tool/instrument is less likely to reach 	





Wire strippers	Used to strip the insulation part from electric wires	
Wire cutter	Used for cutting wires	
Screw driver	Used to turn or remove screws	
Spanner	Used to grip and turn a nut or a bolt	

Fig 2.1.5: Different tools required for luminaire assembly

- Explain the steps of different LED products assembly.
- Tell them that basic steps of the luminaire assembly are as follows:



Fig 2.1.6: Basic steps of luminaire assembly

- Explain the spotlight assembly steps one by one.

- Explain the LED bulb assembly steps one by one:

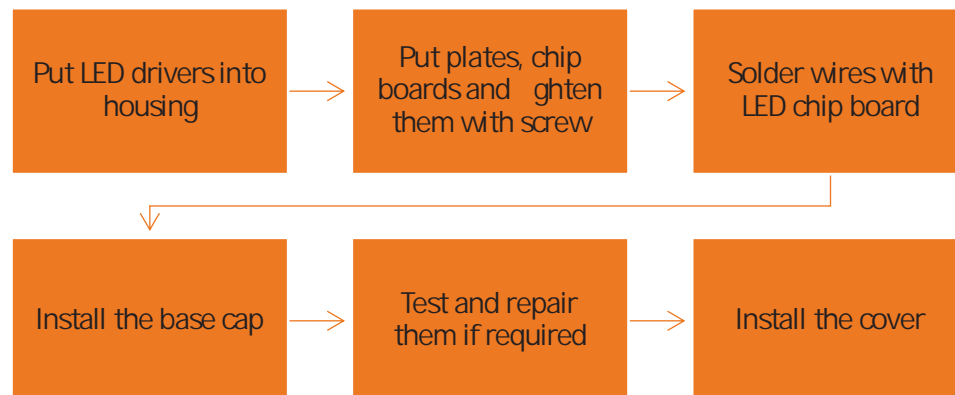


Fig 2.1.7: Steps of LED bulb assembly

- Tell them about LED tube light assembly and show them an assembly if possible:

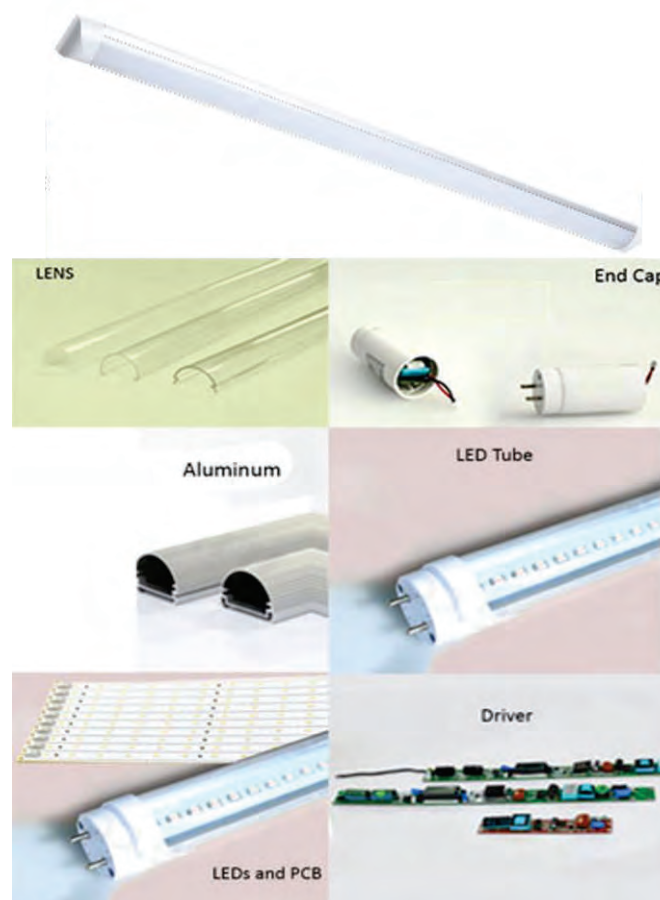


Fig 2.1.8: LED tube light assembly

- Explain the steps for LED down light assembly.
- Briefly explain how to assemble LED street lights.

- Tell them that the burn-in test is done to test electronic components.
- Explain the steps for round panel assembly and square panel light assembly.
- Tell them that, during burn-in test, the system components are exercised before they are assembled or placed in service. This process will force certain failures of the components under supervised conditions so that load capacity of the product can be estimated.
- Also, tell them that burn-in is conducted for electronic components at elevated temperature and voltage.
- Explain IP code or IP rating to the participants.
- Tell them what the digits and letters in the code actually mean.

UNIT 2.2: Selection of LED Drivers

Unit Objectives

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

- Explain different types of drivers
- Demonstrate driver selection according to the LED

Resources to be Used

- Available objects such as a duster, pen, notebook and so on

Ask

- Ask the participants if they can remember the types of LED drivers.

Explain

- Explain the criteria for the selection of LED driver.
- Explain constant current and constant voltage driver.

Notes for Facilitation

- Start the session by telling the participants that LED drivers are the source of power for LEDs
- Explain the features of LED drivers with the help of the following figure:

Isolate the lighting systems from high voltage

Minimize the shock hazard

Regulate system power to face line-voltage fluctuations that can damage the LEDs

Fig 2.21: Features of LED drivers

- Tell them the selection of LED drivers is based on the criteria shown in the following figure:

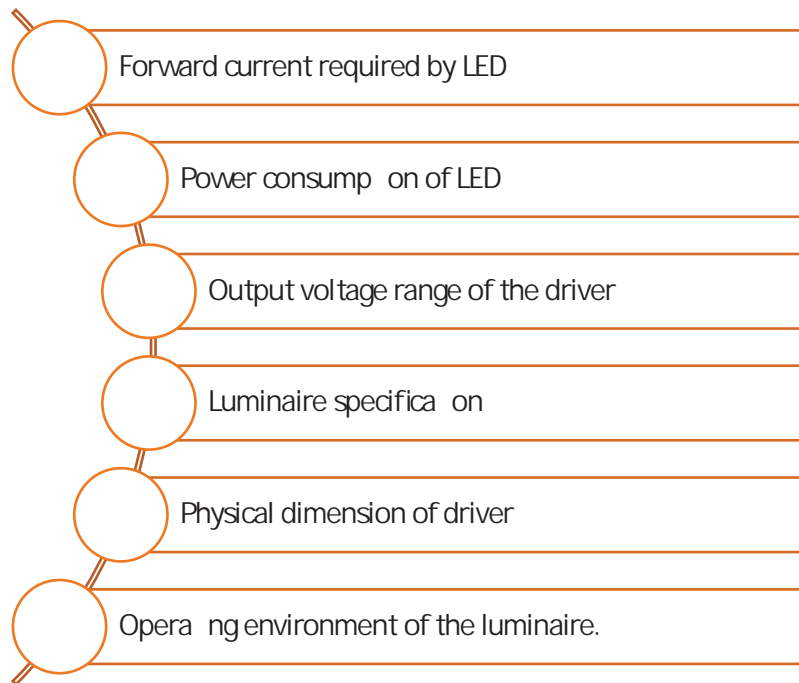


Fig 2.2.2: Selection of LED drivers

- Explain that the LED drivers can be categorized into the following types:
 - Constant current drivers (CC)
 - Constant voltage drivers (CV)

UNIT 2.3: Diagnose and Repair LED Light

Unit Objectives

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

- Explain different types of drivers.

Resources to be Used

- Available objects such as a duster, pen, notebook and so on

Ask

- Ask the participants if they can remember the major components of an LED light.

Explain

- Explain the reasons for LED failure.
- Explain different LED failure modes.

Notes for Facilitation

- Start the session by telling the participants that the major components of LED lights are as follows:
 - LED source
 - Optics
 - Thermal management
 - Controller
 - Driver
- Tell them about the reasons of LED failures as shown in the following figure:

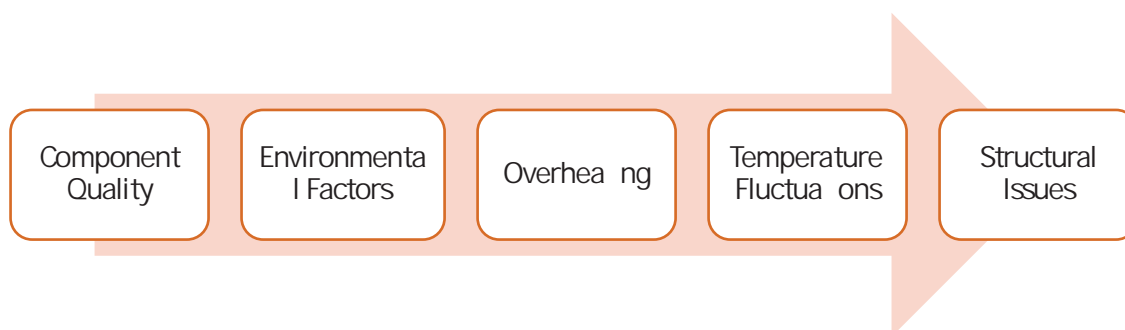


Fig 2.3.1: Reason of LED failure

- Also, tell them that LED failure may occur due to efficiency droop. It refers to the decrease in luminous efficiency of LEDs with increase in current. When a LED lamp is switched on, the electrical current running through the LEDs increases. This leads to a

drop of up to 20% in the luminous efficacy of the LEDs. So, higher the amount of electricity running through LED lamp, higher is the impact on the efficiency droop.

- Explain the different failure modes of LED luminaire assembly shown in the following figure:

Packaging related failure

Metal and semiconductor related failure

Stress-related failure such as thermal runaway

Secondary Optics failure

Thermal Management System failure

Driver failure

Fig 2.3.2: Failure mode of LED luminaire assembly

- Tell them that the optical performance of LEDs decreases gradually with time because of growing defects in the epitaxy layers.
- Also, tell them that a 30% or 50% decrease in performance may be expected, while the expected operation life is 20,000-100,000h.
- Briefly explain that the following adverse factors can result in loss in LED efficiency within a period lower than estimated life time:
 - Low quality of epitaxy layers
 - Excess junction temperature
 - Penetration of humidity or other contaminants
 - Latent Electro Static Discharge (ESD) damage
 - Instable power supply.
- Tell them that any obstruction in the path of the current causes frequent failures that reduce light emission.
- Tell them that during soldering, thermal overload can cause cracks, detachments or delamination across the joints as a result of different expansion rates of the materials.
- Tell them that failure analysis is done to find the possible root cause and to show a way to avoid it.

- Tell them that the failure analysis is done using the following methods:

Measurements of wavelength and colour, current/voltage curves, radiation characteristics and intensity of light

Physical analysis using external electron beam, laser beam, emission microscopy, cathode luminescence

Destructive analysis by cross-sectioning or opening the package

Non-destructive analysis using x-ray, scanning acoustic microscopy and light optical microscopy

Fig 2.3.3: Failure analysis methods

- Explain the various types of errors that are detected and the root cause analysis that is carried out in each case, with the help of the following table:

Detection of Error	Analysis
Impurities of the light emitting area	Radiation characteristics
Problems in thermal coupling	Measurements of thermal resistance
Detachment of bond wire	X-ray microscope
Delamination on the interface layer	Scanning acoustic microscopy
Localise failures inside the LED	Cross-sectioning of encapsulation materials
Failures at the interfaces	Optical or Scanning electron microscope (SEM) microscopy
Impurities in corrosion effects	Material analysis with Energy Dispersive X-Ray (EDX)
Reveal dark spots or dark lines and other defective areas on the chip	Cathode luminescence by localized stimulation of light emission, Electron Beam-Induced Current (EBIC) or Optical Beam-Induced Current (OBIC)
Light emitted leakage current	Emission microscopy
Detail analysis of epitaxy layer failures	Transmission Electron Microscopy (TEM) and Focused Ion Beam (FIB)

Fig 2.3.4: Various type of errors

- Explain the connection and working of LED driver.
- Briefly explain the steps for diagnosing LED faults.
- Tell them that to diagnose the fault, they should know:
 - Operating environment of the LED/Module
 - The driving mode used
 - For how long the LEDs were operating

- Tell them that if the voltage increases in the forward direction, it points to a disturbance in the current path. Further, if there is an increase in current leakage in reverse bias, it points to a severe disorder in the epitaxy layers, caused, for example, by ESD.
- Explain that they need to compare the structures of the current/voltage curve between failed and working LEDs to be able to differentiate between the various causes of errors.



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3. Safety Standards

Unit 3.1 – Electro Static Discharge (ESD)

Unit 3.2 – Safety Standards

Unit 3.3 – Importance of 5S on Productivity & Management



ELE/N9921

Key Learning Outcomes

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

- Interpret basic knowledge of ESD
- How to prevent ESD Damage
- Balancing an ESD Control Plan

UNIT 3.1: Electro Static Discharge (ESD)

Unit Objectives

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

- Interpret basic knowledge of ESD
- Explain how to prevent ESD Damage
- Describe balancing of an ESD Control Plan

Resources to be Used

- Available objects such as a duster, pen, notebook and so on

Ask

- Ask the participants if they can tell what ESD is.

Explain

- Explain to the participants about ESD.
- Explain ESD related damages.

Notes for Facilitation

- Start the session by telling the participants that, while manufacturing electronic products, ESD is one of the issues that arise as it can cause damage to the electronic devices and components.
- Tell them that ESD is the sudden build-up of static electricity when two differently charged objects are brought together.
- Tell them that ESD may occur when an electrically charged object is kept near a conductive object which is isolated from the ground.
- Explain the reasons of ESD with the help of the following figure:

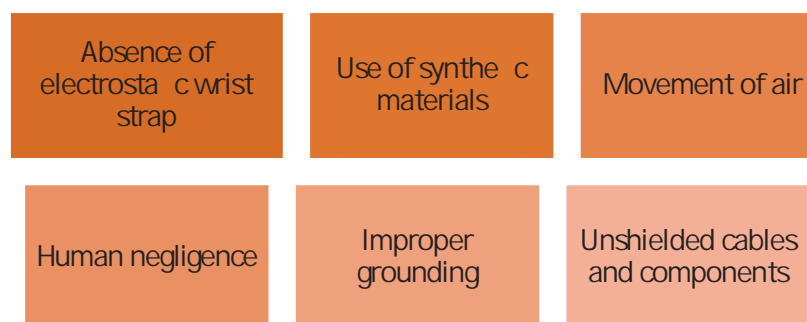


Fig 3.1.1: Reason of ESD

- Tell them that ESD protection is essential for sensitive components, during and after

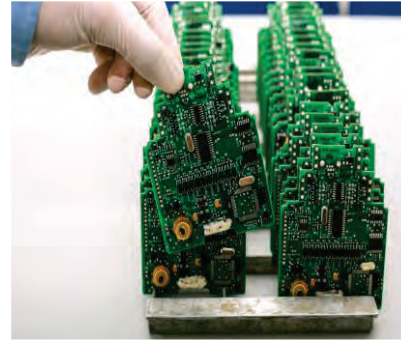
production, while shipping, during assembly of the device and in the finished device.

- Also, tell them about the safety gears for ESD protection:
 - Wire Strap
 - Gloves
 - Safety Clothes
- Tell them about ESD sensation level of a human being.
- Tell them a few examples of ESD in daily life, such as:
 - Rubbing a balloon against a sweater
 - Walking on a rug
 - Removing plastic packaging
 - Rubbing comb against dry hair
 - Rapid movement of air near electronic devices
- Tell them that ESD can cause severe damage to components such as microchips. Grounding is imperative for ESD prevention. An ESD Simulator having special output circuit called human body model (HBM), is generally utilized to test the vulnerability of electronic devices to ESD from human contact.
- Tell them that ESD damage can occur due to any of the three causes:
 - Discharge to the device
 - Discharge from the device
 - Charge transfers from electrostatic fields.
- Explain the types of ESD failures:
 - Catastrophic damage causes the device to stop functioning immediately. The device is permanently damaged. This type of failure is usually found during the testing process.
 - Parametric failure alters the parameters of a device, such as resistance of resistors, which causes a shift in the required tolerance.
 - Latent defect causes undetectable damage to the device, and the device seems to function properly. But over time, it may affect the expected life of the device or its functioning. This failure passes testing process, but the device may fail at customer site.

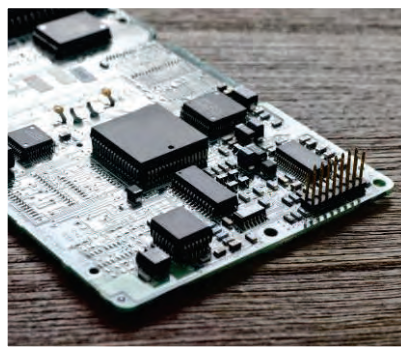
- Tell them that the following figure represents some of the ESD prevention guidelines that must be followed to reduce the risk of ESD damage to the components:



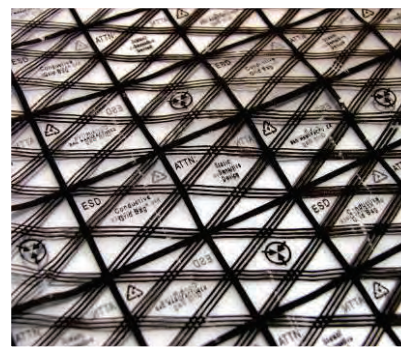
Hold the integrated circuit or IC by its body and not by the pins.



Hold the printed circuit board or PCB by its edges.



Never place components on a metal surface.



Leave all the electronic components in their ESD-safe packaging if they are not in use.

Fig 3.1.2: ESD prevention guidelines

- Explain the measures that should be taken to minimize the risk of ESD.
- Explain the steps of ESD process control in assembly environment.
- Explain ESD control plan along with the following steps:
 - Define the devices to be protected.
 - Become familiar with standards for ESD control.
 - Select a bonding system for grounding.
 - Determine personnel grounding method for operators.
 - Identify and Set up & ESD Protected Area (s) – EPA (s).
 - Choose ESD control items to be used in the EPA.
 - Develop Packaging Plan for handling and storing ESD materials.
 - Use proper labels for ESD susceptible items, system or packaging.
 - Ensure that a Compliance Verification Plan is in place.
 - Develop Training Plan.
 - Ensure that the ESD Control Plan is an integral part of internal quality system requirements.

UNIT 3.2: Safety Standards

Unit Objectives

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

- Identify ESD causes and safety gear
- Identify company rules on PPE
- Explain precautions for ESD product testing

Resources to be Used

- Available objects such as a duster, pen, notebook and so on

Ask

- Ask the participants if they remember the causes of ESD.
- Ask them if they remember the safety gears used for ESD protection.

Explain

- Explain to the participants about ESD.
- Explain ESD related damages.

Notes for Facilitation

- Start the session by asking the participants about ESD. After they come with answers, make a recap of the causes and safety gears for protection.
- Tell them about precautions to be taken to avoid ESD.
- Also, tell them that they should use ESD-protective floor mats, ESD-protective packaging and handling material to avoid ESD damage.
- Tell them to keep the synthetic materials more than 4 inches away from electronic components.

- Tell them to follow the safety precautions as shown in the following figure:

Stay away from water to avoid an electric shock while working with electricity.

Never touch any electrical equipment with wet hands.

Avoid using equipment with damaged insulation or broken parts.

Always check for any warning signs while working with electrical equipment.

Follow the safety rules provided by the local electrical code.

Use insulated rubber gloves and safety goggles while working on electrical circuit.

Avoid working on any energized equipment.

Connect all the metallic components that are not carrying current to earth.

Fig 3.2.1: Safety precautions

UNIT 3.3: Importance of 5S on Productivity & Management

Unit Objectives

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

- Recognize 5S work standards

Resources to be Used

- Available objects such as a duster, pen, notebook and so on

Ask

- Ask the participants if they have heard about 5S.
- Ask them if they remember the safety gears used for ESD protection.

Explain

- Explain 5S.
- Explain ESD related damages.

Notes for Facilitation

- Start the session by telling the participants about work standard.
- Tell them that it should be ensured that work standard should be implemented in every sphere of the organization.
- Also, tell that, 5S and Kaizen are two standards which ensure or enable improvement of the work process.
- Explain to them that following 5S helps to:
 - organize a workplace efficiently and effectively
 - maintain the work area
 - identifying the items used
 - store the items in proper place and so on.
- Briefly explain the elements of 5S:
 - Sorting (Seiri)
 - Systematic Arrangement (Seiton)
 - Shining (Seiso)
 - Standardizing (Seiketsu)
 - Sustaining (Shitsuke)
- Tell the participants that the Japanese word 'Kaizen' is made up of two words – 'kai' which means change and 'zen' which means good.
- It is a way of thinking and not a project to complete. It focuses on involving everyone in making continuous small improvements in their job role.

- Tell them about that kaizen cycle – Plan ‘ Do’ Check’ Act (PDCA).
- Tell them that kaizen can also be used in their personal life.
- Tell that kaizen also involves training of employees to achieve the specific standards and maintain their improvement to manage those standards.
- Explain the activities of Kaizen with the help of the following figure:

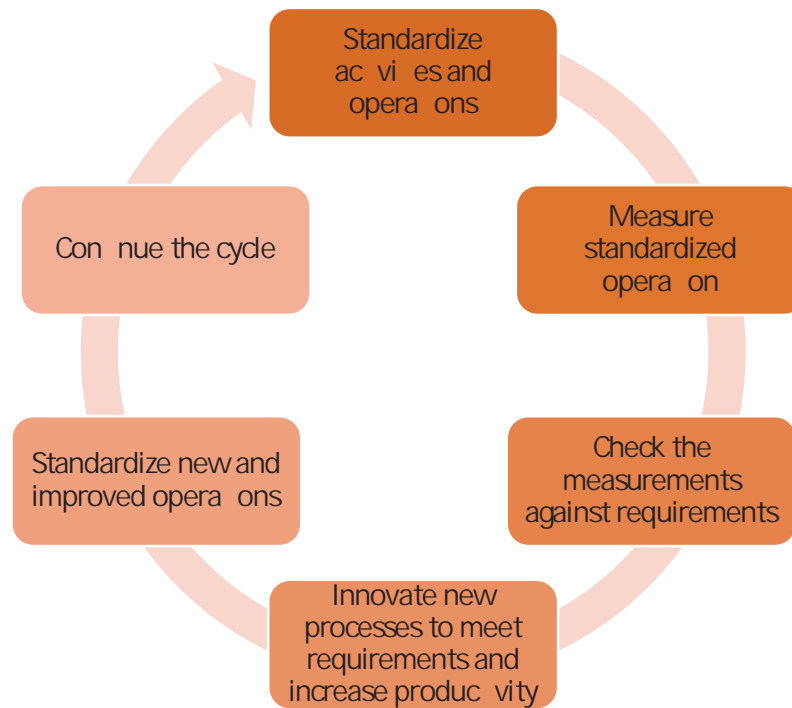


Fig 3.3.1: Activities of Kaizen

- Also, tell them the following key elements of Kaizen:

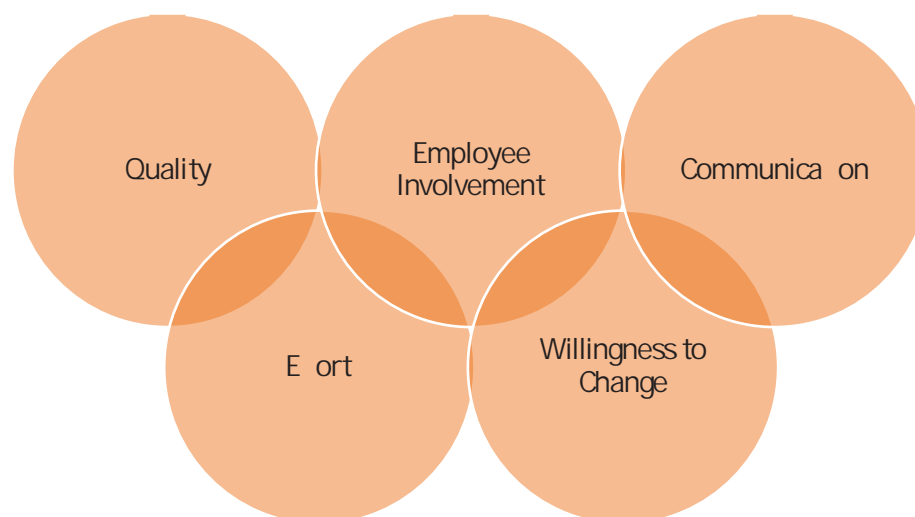


Fig 3.3.2 Key elements of Kaizen

- Tell them how they can contribute to improving workplace.





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& ENTREPRENEURSHIP



N · S · D · C
National
Skill Development
Corporation

Transforming the skill landscape



4. So Skills

Unit 4.1 – Interaction with Superior, Company Policies and Safety Procedures



ELE/N9919

Key Learning Outcomes

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

- Interact with supervisor
- Interact with colleagues
- Know safety procedures and safety measures of an organization
- Know reporting structure of an organization
- Understand organizational safety policies
- Understand organizational work policies

UNIT 4.1: Interaction with Superior, Company Policies and Safety Procedures

Unit Objectives

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

- Interact with supervisor
- Interact with colleagues
- Know safety procedures and safety measures of an organization
- Know reporting structure of an organization
- Understand organizational safety policies
- Understand organizational work policies

Resources to be Used

- Available objects such as a duster, pen, notebook and so on.
- Various personal protective equipment such as gloves, goggles, helmet and jacket

Ask

- Ask the participants if they can tell about the importance of interacting with superiors.
- Ask them if they can tell about team work and work policies of organization.

Role Play

- Ask the two participants to enact a role play.
- One of them is LED repair technician and the second one is his superior.
- The situation is that the technician has recently joined and has approached the superior to understand his work requirement.
- Ask them to enact the interaction between the two of them.

Time

- Set five minutes as the time limit of the role play.
- Ensure that the role play finishes within time.

Activity

- Divide the participants in four groups
- Group A Topic ' Internal communication with colleagues
 - Situation ' You have to hand over a repair work to your colleague in between.

- What information will you share with him?
- Group B Topic Archiving information
 - Situation Your superior has asked you to put all old case files in order. How will you do it?
- Group C Topic Email and Internet
 - Situation A new joiner does not know how to send email. What will you do?
- Group D Topic Encouraging internal communication with colleagues
 - Situation What will you do to encourage colleagues to share information among them?

Time

- Set five minutes as the time limit of the activity.
- Ensure that the activity finishes within time.

Explain

- Explain the factors of work ethics one by one and relate them to the work environment of a LED repair technician.
- Explain the importance of maintaining right interaction with superior.
- Explain the reporting structure.
- Explain the importance of maintaining right interaction with colleagues.
- Explain electrical safety measures.
- Explain fire safety measures and mechanical safety.
- Explain to them some jobsite safety measures that should be followed.
- Explain that using PPE is important as it provides:
 - Skin protection
 - Eye Protection
 - Hearing Protection
 - Foot Protection
- Explain the meaning of the term 'incident reporting procedure'.
- Explain the types and the procedure of incident reporting.
- Further, explain that they must promptly inform their supervisor in case of any safety incident and follow the proper reporting procedure.
- Introduce the topic of communication skill.
- Explain the importance of good communication skill.

Do 

- Write the following points on the whiteboard and explain the core skills of team work and multi-tasking:



Fig 4.1.1: Core skills of team work

- Draw the following diagram on the whiteboard and explain the various safety precautions that should be taken while working.

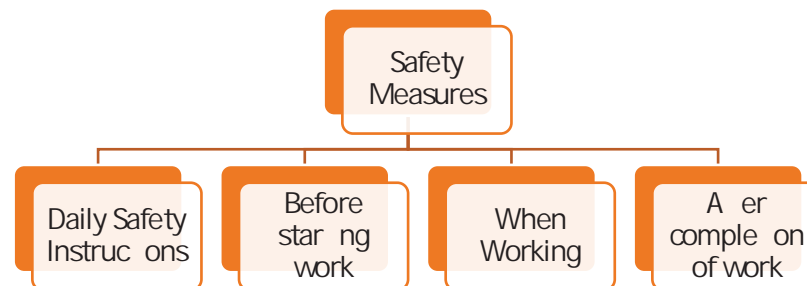


Fig 4.1.2 Safety measures

Notes for Facilitation 

- Tell the participants the importance of interacting with the supervisor and colleagues.
- Tell them they should maintain a good relationship with supervisors and colleagues to maintain a healthy work environment.
- At the end of the role play, have a discussion about proper interaction with superior.
- Explain in detail the two components of the interaction:
 - Understanding work requirement
 - Understanding standard operating procedures
- At the end of the activity, have a discussion on proper interaction with colleagues.
- Explain in detail the four components of the interaction:
 - Internal communications
 - Archiving information

- Email and internet
- How to encourage internal communication
- Explain the importance of working as a team.
- Explain general work policies and processes of an organization.
- Write the terms on the white board and tell them that they need to understand the factors of work requirements that include:



Fig 4.1.3: Work requirements

- Tell them that they must understand the work requirements and standard operating procedures of the organization to achieve quality and productivity. They need to understand the following:

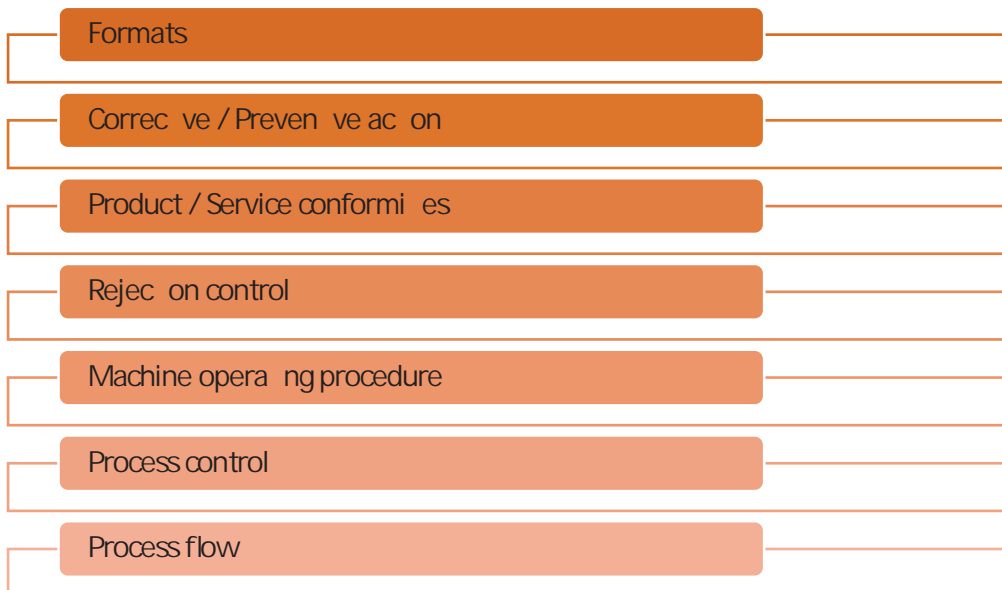


Fig 4.1.4: Standard operating procedure of organization

- Tell them the importance of reporting structure and briefly explain the basic reporting structure of an organization. Tell that reporting structure depends on the business type and size used.
- Tell that the workplace safety is important to ensure reduction of accidents and improvement of work performance.
- Say that they should know about the work area, equipment involved and usage of tools, forms of personal protection, safety hazards information.
- Draw the following diagram on the whiteboard and explain the various types of hazards

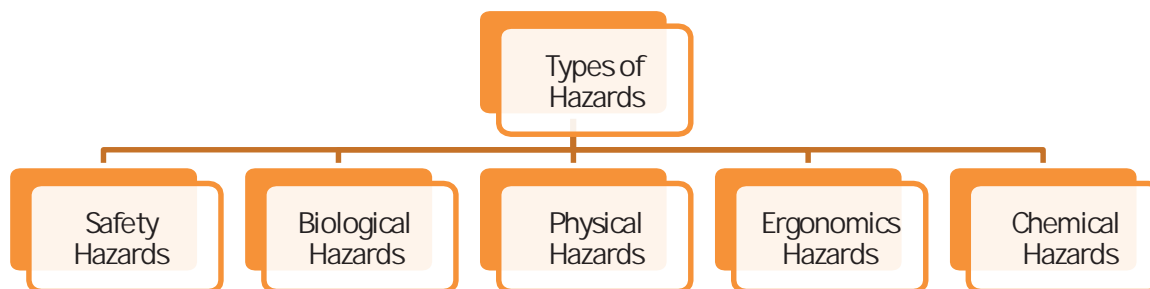


Fig 4.1.5: Type of hazards

- Explain sources of potential hazards and briefly explain each one of them.
- Explain the organization safety policies.
- Explain the responsibilities of the safety committee.
- Explain the responsibilities of the managers with regard to the employee health and safety.
- Explain different types of hazards and their sources.
- Write on the white board and tell the participants that the policies followed in an organization are:
 - Environmental Management System (EMS)
 - Environment, Health and Safety (EHS)
 - Health and Safety (H & S)
- Briefly explain about the policies.
- Tell them that the safety committee, the employers and the employees have their own responsibilities towards organizational safety policies.
- Tell them that they should abide by the general safety guidelines to ensure workplace safety.
- Tell them that misuse and improper maintenance of hand and power tools can cause potential hazards.
- Also explain that power tools are extremely hazardous when used or maintained improperly. Workers using hand and power tools may be exposed to several hazards, including:
 - Objects that are abrasive, or splash
 - Harmful dusts, fumes, mists, vapours, and gases

- Frayed or damaged electrical cords
- Hazardous connections and improper grounding.
- Also tell them that eye protection is usually always required. All hand and power tools and similar equipment, whether furnished by the employer or the employee, should be maintained in a safe condition. All power tools must be fitted with factory guards and safety switches, and hand-held power tools must be equipped with a constant pressure switch or on-off switch.
- Tell them about various safety gears and the responsibilities of employees and employers towards it.
- Also tell them that for hand they should use:
 - Durable gloves made of mesh, leather or high-performance materials to protect from cuts, burns and heat.
 - Chemical-resistant rubber gloves to protect from burns and irritation.
 - Electrical insulating gloves for exposure to live voltages.
- Explain that to be effective, their communication should include:
 - What they saw
 - What they heard
 - What they felt
 - What they want
 - What will be the result?



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5. Employability & Entrepreneurship Skills

Unit 5.1 – Personal Strengths & Value Systems

Unit 5.2 – Digital Literacy: A Recap

Unit 5.3 – Money Matters

Unit 5.4 – Preparing for Employment & Self-Employment

Unit 5.5 – Understanding Entrepreneurship

Unit 5.6 – Preparing to be an Entrepreneur



Introduction: Employability and Entrepreneurship Skills

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

Icebreaker

- You can begin the module with the following icebreaker:

Five of Anything Ice Breaker Steps:

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

Expectation Mapping

During the first session and after ice breaker session, ask the participants to answer the following question: "What do I expect to learn from this training?"

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

expect from the session and what are the areas that will not get covered.

Defining Objectives

1. Defining the objectives in the beginning of the unit sets the mood for the unit.
2. To begin with the end in mind sets the expectations of the participants as what could be the important takeaways from the session.
3. It is also a way of making participants take responsibility of their own learning process.
4. For the facilitator, the objectives decide a designed path to progress on so that the learning stays aligned and on track.
5. Read the objectives slowly, one by one, and ask the participants to explain what they think it means.
6. At the end of the session, you could again revisit the objectives to find out from the participants about how many objectives have been achieved.

In order to effectively facilitate this workshop:

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

General instructions for role playing:

1. You are not being asked to be an actor or to entertain. The purpose of the role play is to

provide a situation in which you can practice certain skills.

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

UNIT 5.1: Personal Strengths & Value Systems

Key Learning Outcomes

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

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

UNIT 5.1.1: Health, Habits, Hygiene: What is Health?

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

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

Say

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

Ask

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

Say

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

Role Play

- Conduct a small skit with volunteers from the class. Consider one of the villagers has been appointed as a health representative of the village, what measures will you as a health representative suggest to the common villagers to prevent common health issues discussed.
- You will need at least 4 volunteers (Narrator, Health Representative, Head of the Village,

Doctor).

- Explain the health concerns of the village to the Narrator. The Narrator will brief the class about the skit.
- Give the group of volunteers, 5 minutes to do discuss.
- At the end of 5 minutes, ask the group to present the skit to the class assuming them as the villagers.
- The class can ask questions to the group as a common villager.

Summarize

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

Say

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

Activity

- Health Standard Checklist from the Participant Handbook.

Ask

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

Say

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

Do

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

Summarize

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

Ask

Discuss:

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

Say

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

Activity

- Health Standard Checklist: Hygiene

Say

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

Do

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

Ask

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

Summarize

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

Ask

- What is a habit?

Say

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

Summarize

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

UNIT 5.1.2: Safety

Unit Objectives

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

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

Resources to be Used

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

Say

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

Team Activity

Safety Hazards

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

PART 1		
Hazard	What could happen?	How could it be

Ask

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

Say

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

Do

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

Say

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

Do

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

Ask

De-briefing

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

Summarize

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

UNIT 5.1.3: Self-Analysis- Attitude, Achievement Motivation: What is Self-Analysis?

Unit Objectives

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

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

Resources to be Used

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

Activity

This is a paper pencil activity.

What are the three sentences that describe you the best?
--

What do you need to live happily?

What are your strengths and weaknesses?

Do

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

Say 

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

Team Activity 

Tower building

- Each group will create tower using the old newspapers.

Do 

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

Ask 

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

Say 

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

Ask 

- Is your attitude positive or negative?

Say 

- Let me tell you a story:

It's Little Things that Make a Big Difference.

There was a man taking a morning walk at the beach. He saw that along with the morning tide came hundreds of starfish and when the tide receded, they were left behind and with the morning sun rays, they would die. The tide was fresh, and the starfish were alive. The

man took a few steps, picked one and threw it into the water. He did that repeatedly. Right behind him there was another person who couldn't understand what this man was doing. He caught up with him and asked, "What are you doing? There are hundreds of starfish. How many can you help? What difference does it make?" This man did not reply, took two more steps, picked up another one, threw it into the water, and said, "It makes a difference to this one." What difference are we making? Big or small, it does not matter. If everyone made a small difference, we'd end up with a big difference, wouldn't we?

Ask

- What did you learn from this story?

Activity

What Motivates You?

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

Do

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

Say

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

Summarize

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

UNIT 5.1.4: Honesty & Work Ethics

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

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

Say

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

Do

- Divide the class into four groups of maximum six participants depending on the batch size.
- Give one case study to each group.
- Instruct them to read the case carefully.

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

Team Activity

Case Study Analysis

Scenario 1

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

Scenario 2

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

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

Scenario 3

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

Scenario 4

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

Say 

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

Do 

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

Summarize 

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

UNIT 5.1.5: Creativity and Innovation

Unit Objectives

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

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

Resources to be Used

- Participant Handbook
- Chart papers
- Marker pens

Ask

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

Say

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

A.P.J. Abdul Kalam

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

Water filter/purifier at source

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

Inspiration behind the idea: Most people today prefer to use a water filter/purifier at their home. Both the children have given idea to have filter/purifier at the source of water so that everyone has access to clean water without having to make an investment in purchasing a filter/purifier.

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

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

Solar seeder

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

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

Looms for physically challenged

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

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

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

Ask 

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

Say 

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

Team Activity 

- This is a group activity.

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

Activity De-brief

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

Do

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

Summarize

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

Notes for Facilitation

- Source for stories on innovations:

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

UNIT 5.1.6: Time Management

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

Does this sound like you?

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

Example

- Let's look at these two examples:

Example 1:

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

Example 2:

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

Ask

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

Activity

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

Say

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

Ask

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

Say

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

Activity

Effective Time Management

- This activity has two parts:

Part 1 To Do List

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

PART 2
URGENT-IMPORTANT GRID

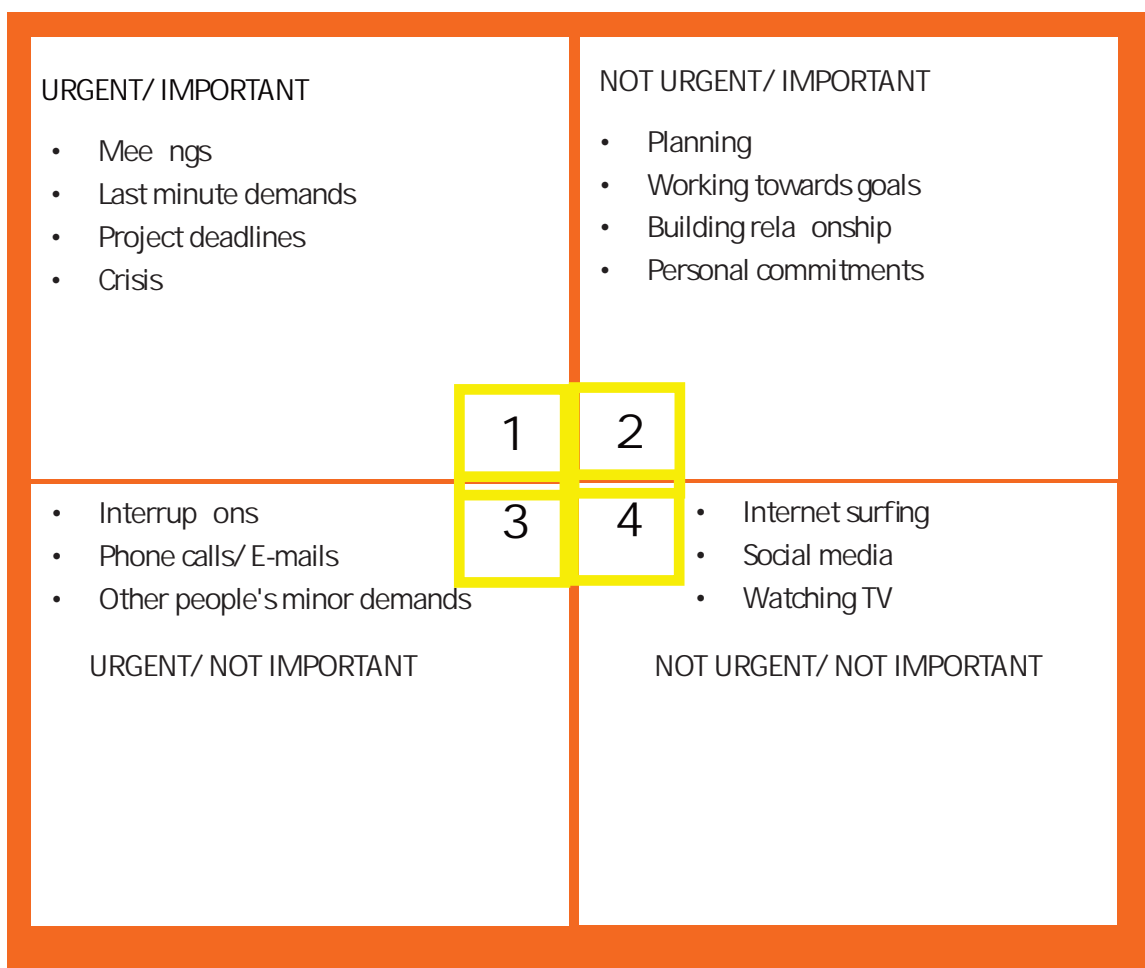
- You have to make a grid as shown on the board here.
- This grid has four boxes. As you can see, each box has a different heading.
- At the heart of the urgent-important grid, are these two questions:
 - Is this task important?
 - Is this task urgent?
- Now, you have to think about each activity that you have written in your to-do list and put it into one of the four categories.
- What do these categories depict?
- Category 1: Urgent/Important
 - This category is for the highest priority tasks. They need to get done now.
- Category 2: Not Urgent/Important
 - This is where you want to spend most of your time.
 - This category allows you to work on something important and have the time to do it properly.
 - This will help you produce high quality work in an efficient manner.
 - The tasks in this category are probably the most neglected ones, but also the most crucial ones for success.
 - The tasks in this category can include strategic thinking, deciding on goals or general direction and planning – all vital parts of running a successful business.
- Category 3: Urgent/Not Important
 - This is where you are busy but not productive. These tasks are often mistaken to be important, when they're most often busywork.
 - Urgent but not important tasks are things that prevent you from achieving your goals.
 - However, some may be activities that other people want you to do.
- Category 4: Not Important and Not Urgent
 - This category doesn't really include tasks, but rather habits that provide comfort, and a refuge from being disciplined and rigorous with your time management.
 - Some may be activities that other people want you to do.
 - These might include unplanned leisure activities as well.

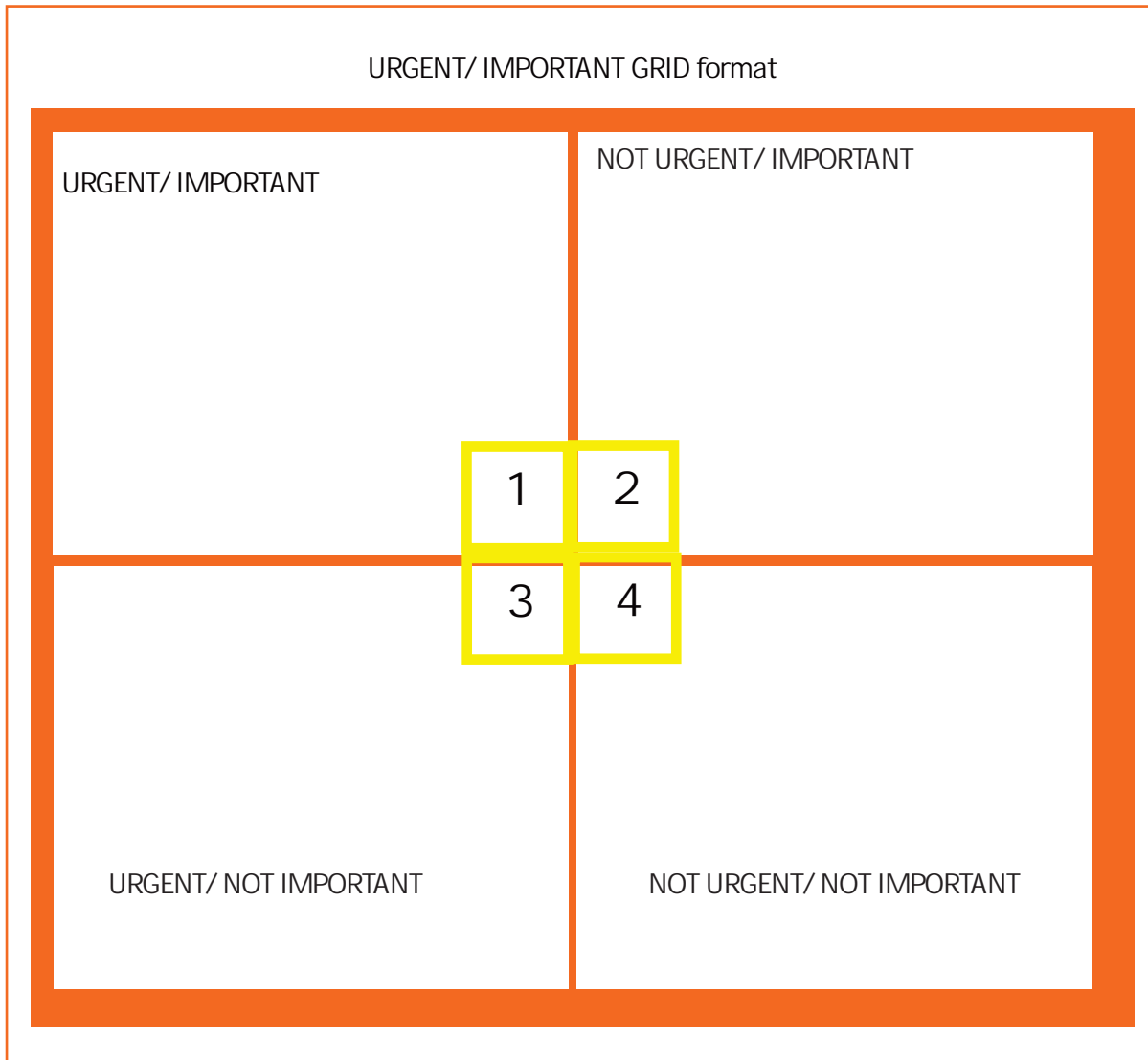
To – Do List Format

1	
2	
3	
4	
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7	
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14	
15	

URGENT-IMPORTANT GRID





Do

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

Say

Activity De-brief:

How can we balance tasks between the four categories? How to manage time through this grid?

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

Summarize

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

Notes for Facilitation

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

UNIT 5.1.7: Anger Management

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

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

Say

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

Do

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

Activity

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

Ask 

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

Say 

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

Do 

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

Activity 

Trigger points and Anger Management Techniques Activity

Anger Triggers

List of triggers that make you angry:
Someone says you did something wrong.
You want something you can't have now.
You get caught doing something you shouldn't have been doing.
You are accused of doing something you didn't do.
You are told that you can't do something.

Someone doesn't agree with you.

Someone doesn't do what you tell him to do.

Someone unexpected happens that messes up your schedule.

Result of your anger:

Write the techniques that you use to manage your anger:

Anger Management Techniques

Say

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

Do

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

Ask

De-brief questions:

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

Summarize

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

Notes for Facilitation

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

UNIT 5.1.8: Stress Management: What is stress?

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

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

Say

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

Ask

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

Say

- When we feel overloaded or unsure of our ability to deal with certain challenges, we feel stressed.
- Discuss about stress, causes of stress, and symptoms of stress as discussed in the Participant Handbook.
- Let's understand the causes of stress and how to deal with them with the help of some case scenarios.

- You will be given some cases.
- You have to analyse the case scenario and then find an appropriate solution to the problem.
- This will be a group activity.

Do

- Divide the class into four groups of 5- 6 participants (depending on the batch size).
- Assign one case scenario to each group.
- Instruct them to read the case carefully.
- The group is expected to analyse and discuss the case amongst them and find a solution to the given problem.
- Explain their discussion should result in getting answers for the following questions:
 - What was/were the cause(s) of stress?
 - Was the stress avoidable or manageable under the given circumstances?
 - If yes, how do you think that the stress could be avoided (managed)?
 - If no, then why not?
- Give the class 10-12 minutes to discuss the case and note down their solutions.
- At the end of 12 minutes, the team should present their case solution to the larger group.
- Ask the group to select a group leader for their group.
- The group leader to discuss and assign roles to the group members for the presentation.

Team Activity

Case Study Analysis

Scenario 1

Akash's alarm doesn't go off and he gets late getting out of the house. He hits traffic and ends up 15 minutes late to work, which his boss notices. He gets to his desk and finds he has to complete 2 reports in next one hour. Just when he is about to begin work, a message pops up "Telecon with the client begins in 10 minutes. Please be in the conference room in 5 minutes." He is not prepared for the call. He is stressed. He does not want to speak to his boss about this. He is stressed, feeling uncomfortable and sick. Not in a position to attend the call or finish the reports on time.

Scenario 2

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

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

Scenario 3

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

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

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

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

Scenario 4

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

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

Ask

De-brief questions:

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

Say

- Now, let's discuss the problem and solution with the larger group.
- The group will first briefly describe the case to the class.

- Then discuss the issue identified and the proposed solution.
- Post presentation, the other groups may ask questions to the group that has presented.

Do 

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

Say 

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

De-brief:

Scenario 1

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

Scenario 2

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

Scenario 3

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

Scenario 4

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

Do 

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

Scenario 5

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

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

Say 

De-brief:

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

Summarize 

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

Notes for Facilitation

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

UNIT 5.2: Digital Literacy: A Recap

Key Learning Outcomes

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

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

UNIT 5.2.1: Computer and Internet Basics: Basic Parts of a Computer

Unit Objectives

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

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

Resources to be Used

- Participant Handbook
- Computer Systems with the required applications

Say

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

Explain

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

Ask

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

Say

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

Summarize

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

- Close the discussion by summarizing the importance of computer and internet for entrepreneurs.

Practical

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

Do

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

UNIT 5.2.2: MS Office and Email: About MS Office

Unit Objective

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

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

Resources to be Used

- Participant Handbook
- Computer Systems with the required applications

Ask

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

Say

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

Explain

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

Ask

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

Say

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

Do

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

Demonstrate

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

Practical

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

Summarize

- Ask the participants what they have learnt from this exercise/activity.
- Ask if they have

UNIT 5.2.3: E-Commerce

Unit Objective

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

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

Resources to be Used

- Computer Systems with internet connection
- Participant Handbook

Ask

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

Say

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

Ask

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

Say

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

Team Activity

E-commerce examples

- Instruct the participants to list some of the payment gateways that they have used for e-commerce activities.

- Give them 5 minutes to make this list.
- Discuss payment gateways and transaction through payment gateways.
- Conclude the discussion by mentioning how important e-commerce has become in our day to day transactions.

Say

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

Do

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

Say

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

Explain

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

Say

- Now let us discuss how to sell a product using E-commerce.
- Every product has to be sold on a platform on the internet. Think of it as a shop that you have to sell your product. Now this shop can be your own or shared or rented. If the shop is your own or rented there will be only your products in that shop. If the shop is shared, there will be products of multiple sellers in that shop. A common example is a departmental store which has products from multiple brands in the shop.

- Similarly, in E-commerce the shop is the website where your products are displayed. If it is your own website it will exclusively showcase your products. In this case the cost that you will incur will be:
 - Developing the website
 - Hosting the website
 - Maintenance of the website
- If you rent a website it will also showcase your own products but the development, hosting and maintenance parts goes to the owner. This saves time and the cost to manage these activities.
- Smaller companies usually go for renting a website and the bigger ones develop their own website.
- The concept of shared platforms has become very popular in recent times. In this platform, the sellers have to register and then they can sell their goods on a common platform. Among the most popular of these are Amazon, Myntra, Flipkart, etc.

Role Play

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

Ask

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

Say

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

Do 

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

Ask 

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

Say 

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

Summarize 

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

UNIT 5.3: Money Matters

Key Learning Outcomes

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

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

UNIT 5.3.1: Personal Finance – Why to Save?

Unit Objective

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

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

Resources to be Used

- Participant Handbook

Ask

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

Example

- Let's look at these two examples:

Example 1:

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

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

Example 2:

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

Ask

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

Say

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

Ask

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

Say

- Discuss “Benefits of Saving” with the participants as given in the Participant Handbook.
- Now let us continue with Suhani's story. Suhani has told her family not to worry and that she has about 50,000, which she has saved over the months. The family is happy about Suhani's decision of saving money, which will be of great help for them now. Suhani is going to the hospital today to pay the first instalment for the treatment. Suddenly finds only 35,000 in her cash box when she counts and does not remember using it. She has not kept any record and now she is upset.

Ask

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

Say

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

Team Activity

Personal Finance- Why to save

- This activity has two parts:

PART 1

WAYS TO SAVE MONEY

- You are earning 30,000/- per month. You have recently changed your job and have to move to a metropolitan city. You are now living as a paying guest paying 8,000/- per month. Your other estimated expenditures like travel, food, recreation would be around Rs. 17,000 per month.
- Make a list of different ways to save money.

PART 2

HOW WILL YOU USE THE MONEY?

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

Do

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

Activity De-brief

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

Say

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

Summarize

You can summarize the session by discussing:

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

UNIT 5.3.2: Types of Bank Accounts, Opening a Bank Account

Unit Objective

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

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

Resources to be Used

- Account opening sample forms
- Participant Handbook

Ask

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

Example

- Let's look at the given example:

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

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

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

Ask

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

Say 

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

Ask 

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

Say 

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

Team Activity 

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

Activity De-brief

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

Say 

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

Ask 

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

Say 

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

Team Activity

Opening a Bank Account

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

PART 1

FILLING A BANK ACCOUNT OPENING FORM

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

Activity De-brief

How did you design the form?

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

Do

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

Summarize

Note:

- You can summarize the unit through a role play.
 - A person wanting to open an account in the bank.
 - What is the procedure that he will go through?
 - Discuss the key points of different types of bank accounts.
 - How to select the type of account
 - How to fill the account opening form.

- A sample account opening form is given in the following page for reference. Use it for the activity in the class.

Sample Bank Account Opening form.

XXX Bank

Photograph

SAVING BANK ACCOUNT OPENING FORM

Account No.: _____ Date: _____

Name of the Branch			
Village/Town			
Sub District / Block			
District			
State			
SSA Code / Ward No.			
Village Code / Town Code	Name of Village / Town		

Applicant Details:

Full Name	Mr./Mrs./Ms.	First	Middle	Last Name
Marital Status				
Name of Spouse/Father				
Address				
Pin Code				
Tel No. Mobile			Date of Birth	
Aadhaar No.			Pan No.	
MNREGA Job Card No.				
Occupation/Profession				
Annual Income				
No. of Dependents				

Detail of Assets	Owning House <input type="checkbox"/> Y/N	Owning Farm <input type="checkbox"/>		
	Y/N			
	No. of Animals <input type="checkbox"/>	Any other <input type="checkbox"/>		
Existing Bank A/c. of family members / household	Y / N	If yes, No. of A/cs. _____		
Kisan Credit Card	Whether Eligible	Y / N		
I request you to issue me a Rupay Card .				
I also understand that I am eligible for an Overdraft after satisfactory operation of my account after 6 months of opening my account for meeting my emergency/ family needs subject to the condition that only one member from the household will be eligible for overdraft facility. I shall abide by the terms and conditions stipulated by the Bank in this regard.				
Declaration:				
I hereby apply for opening of a Bank Account. I declare that the information provided by me in this application form is true and correct. The terms and conditions applicable have been read over and explained to me and have understood the same. I shall abide by all the terms and conditions as may be in force from time to time. I declare that I have not availed any Overdraft or Credit facility from any other bank.				
Place:				
Date:		Signature / LTI of Applicant		
Nomination:				
I want to nominate as under				
Name of Nominee	Relationship	Age	Date of Birth in case of minor	Person authorised in case to receive the amount of deposit on behalf of the nominee in the event of my /minor(s) death.
Place:				
Date:				
Signature / LTI of Applicant				
Witness(es)*				
1. _____				
2. _____				
*Witness is requires only for thumb impression and not for signature				

UNIT 5.3.3: Costs: Fixed vs. Variables: What are Fixed and Variable Costs?

Unit Objective

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

- Differentiate between fixed and variable costs

Resources to be Used

- Participant Handbook
- Blank sheets of paper
- Pens

Ask

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

Say

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

Team Activity

Identify the type of cost

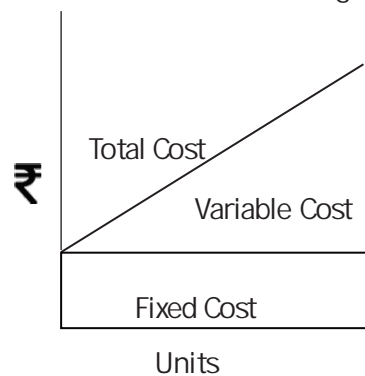
1. Rent
2. Telephone bill
3. Electricity bill
4. Machinery
5. Insurance
6. Office supplies/Raw materials
7. Employee salaries
8. Commission percentage given to salesperson for every unit sold
9. Credit card fees
10. Vendor bills

Do

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

Say

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



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

Team Activity

Fixed vs. Variable Costs

- This is a group activity.

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

Activity De-brief

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

Do 

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

Summarize 

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

Notes for Facilitation 

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

UNIT 5.3.4: Investments, Insurance and Taxes

Unit Objective

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

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

Resources to be Used

- Participant Handbook

Ask

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

Example

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

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

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

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

Say

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

Ask

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

Say

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

Say

- We will have a quiz today.

Team Activity

- The activity is a quiz.

Do

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

Summarize

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

Notes for Facilitation

Questions for the quiz

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

Money Back Life Insurance

2. What are bonds?

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

3. Who issues the bonds?

Private and public companies issue the bonds

4. Why are bonds issued?
To raise large amount of money as it cannot be borrowed from the bank.
5. Who is the buyer of stocks and equities?
The general public is the buyer.
6. What types of scheme is the Sukanya Samriddhi Scheme?
Small Saving Scheme
7. What is the difference between mutual and hedge funds?
Mutual funds are professionally managed financial instruments that invest the money in different securities on behalf of investors. Hedge funds invest in both financial derivatives and/or publicly traded securities.
8. Why is a loan taken from the bank to purchase real estate?
To lease or sell to make profit on appreciated property price.
9. Name the two types of insurances?
Life Insurance and Non-life or general insurance
10. Which insurance product offers financial protection for 15-20 years?
Term Insurance
11. What is the benefit of taking an endowment policy?
It offers the dual benefit of investment and insurance.
12. What are the two benefits of a Whole Life Insurance?
It offers the dual benefit of investment and insurance
13. Which policy covers loss or damage of goods during transit?
Marine Insurance
14. After what duration is the income tax levied?
One financial year
15. What is long term capital gain tax?
It is the tax payable for investments held for more than 36 months.
16. Name the tax that is added while buying shares?
Securities Transaction Tax
17. What is the source of corporate tax?
The revenue earned by a company.
18. Name the tax whose amount is decided by the state?
VAT or Value Added Tax
19. You have bought a T.V. What tax will you pay?
Sales Tax
20. What is the difference between custom duty and OCTROI?
Custom duty is the charges payable when importing or purchasing goods from another country. OCTROI is levied on goods that cross borders within India.

UNIT 5.3.5: Online Banking, NEFT, RTGS, etc.

Unit Objective

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

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

Resources to be Used

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

Ask

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

Say

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

Do

- Show them how they can use the internet banking.
- Use the computer system and show the demo videos on how to use internet banking provided on most banking sites. the computer system.
- Tell the class the various features of online banking:
 - Through their website set-up your online account.

- Choose a secure username and password.
- Set-up your contact information.
- Once your information is verified, you are good to go.
- Once you enter the portal explore all the features and learn your way through the portal.

Say

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

Do

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

Summarize

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

UNIT 5.4: Preparing for Employment & Self-Employment

Key Learning Outcomes

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

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

UNIT 5.4.1: Interview Preparation: How to Prepare for an Interview?

Unit Objective

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

- Discuss the steps to follow to prepare for an interview

Resources to be Used

- Participant Handbook

Ask

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

Say

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

Activity 1

- Introducing Yourself

Do

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

Ask

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

Say

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

Do

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

Activity 2

- Planning the right attire

Do

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

Summarize

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

UNIT 5.4.2: Preparing an Effective Resume: How to Create an Effective Resume?

Unit Objective

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

- Discuss the steps to create an effective Resume

Resources to be Used

- Participant Handbook
- Blank Papers
- Pens

Ask

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

Say

- Resume is not just a sheet of paper with your qualifications printed on it.
- It is a selling tool that will help the employer to see how and what you can contribute for company.
- Talk about the steps involved in creating an effective/a attractive resume discussed in the Participant Handbook.
- Now let's prepare a resume to understand the process in a better way.

Do

- This is an individual activity.
- Give the details of the activity.
- Instruct them to read the activity carefully.
- The participant is expected to make an attractive resume based on the information provided.
- Give the class 25-30 minutes to study the case and create a resume.
- At the end of 30 minutes, the participants should exchange the resume with the person sitting next to him or her.
- Every participant will evaluate the resume prepared with their fellow participants.

Say

- Do you think the candidate should apply for the job position described in the advertisement?
- We have already discussed the steps involved in creating an effective/ attractive resume.
- Now let's prepare a resume for the candidate details given in the activity.

Activity

Case Study Analysis

- In the first section of the activity, you are being given the information about a candidate who is applying for a particular job.
- In the second section, you are being given the detailed description of the job position. Create a resume for the candidate to apply for the job position.
- Use the information that has been provided about the candidate to create this resume

Candidate Details

Nipesh Singla was born on 20th April, 1988 in Chandigarh, India. He currently resides at 1XX7, Sector XX D, Chandigarh –160018. His mobile number is 988XXXXX01, and e-mail address is nxxxxxxxxla@gmail.com. Nipesh attended middle and senior school at Government Boys Senior Secondary School, Sector 15, Chandigarh. He has been a very talented boy since school. He was fond of painting and watching old Hindi movies. As part of a school charity program, he volunteered at the children's hospital during his senior years.

In July 2007, he joined Westwood School of Hotel Management, Zirakpur to pursue a diploma course in Hotel Management and Catering. After completing this course, he joined XYZ Group of Hotels as a Housekeeping intern in June 2010 for six months. In this role, he was responsible for cleanliness and maintenance of one floor in the hotel. Taking advantage of his strong interpersonal skills, he also got opportunities to make housekeeping arrangements for corporate meetings. While pursuing education, he gained working knowledge of Microsoft Word, Excel, Access and PowerPoint.

Nipesh is detail-oriented, flexible and adaptable. He has successfully worked with a diverse workforce. He gelled well with his peers, both in college and during his internship. After completing the internship, his objective has been to find a job opportunity where he can use his skills and experience. Backed by experience, he is confident about his skills as housekeeping assistant.

Job Posting

*Do you see yourself as a HOUSEKEEPING SUPERVISOR?

What's your passion? Whether you're into cricket, reading or hiking, at IHG we are interested in YOU. At IHG, we employ people who apply the same amount of care and passion to their jobs as they do in their hobbies people who put our guests at the heart of everything they do. And we're looking for more people like this to join our friendly and professional team.

THE LOCATION:

At the moment, we are looking for HOUSEKEEPING SUPERVISOR to join our youthful and dynamic team at Holiday Inn Amritsar, Ranjit Avenue in Amritsar, Punjab (India). Holiday Inn Amritsar is ideally located in Amritsar's commercial district on Ranjit Avenue with the world famous Golden Temple located only a short distance away. Sparkling chandeliers mark an incomparable arrival experience as you escape to the welcoming environment that is, Holiday Inn Amritsar. The fresh international brand to celebrate and explore Amritsar.

Salary: Negotiable

Industry: Travel / Hotels / Restaurants / Airlines / Railways

Functional Area: Hotels, Restaurants

Role Category: Housekeeping

Role: Housekeeping Executive/Assistant.

Desired Candidate Profile

Friendly, pleasant personality, Service-oriented.

You should ideally be Graduate/ Diploma holder in HM and at least 2 years of experience as a supervisor in good brand with good communication skills, English is a must.

In return we'll give you a competitive financial and benefits package. Hotel discounts worldwide are available as well as access to wide variety of discount schemes and the chance to work with a great team of people. Most importantly, we'll give you the room to be yourself.

*Please get in touch and tell us how you could bring your individual skills to IHG. Education-

UG: Any Graduate/Diploma holder

PG: Post Graduation Not Required

Say 

- Now, let's share the resume with the fellow participant sitting next to you and evaluate each other's effort.

Do

- Congratulate each participant for making their first attempt towards creating an effective resume.
- As a follow-up activity, you can suggest them to prepare their own resume and show it to you the next day.

Summarize

- Close the discussion by showing some effective resume samples to the candidates.
- Ask the participants what they have learnt from this activity.
- Ask if they have any questions related to what they have talked about so far.

Notes for Facilitation

- Keep printed copies of the activity ready for the session.
- Put down the suggested format of the resume on the board while explaining the steps in preparing a resume.
- Do check the participants' resume and suggest necessary changes.
- Suggested example for the case presented:

Nipesh Singla

#1XX7, Sector XX-D

Chandigarh-160018

Mobile No: 91-988XXXXX01

E-mail: nxxxxxxxxla@gmail.com

Objective: Seeking an opportunity to use my interpersonal skills and experience to contribute to your company's growth, profitability and objectives.

Professional strengths:

- Proficient in housekeeping
- Experienced in and capable of working with a diverse work force
- Team player and friendly in nature
- Successful working in a multi-cultural environment
- Detail oriented, flexible, and adaptable
- Knowledge of Microsoft Word, Excel, Access and PowerPoint

Educational background

- Diploma in Hotel Management and Catering, Westwood School of Hotel Management, Zirakpur
- High School, Government Boys Senior Secondary School, Sector 15, Chandigarh

Professional internships:

- Housekeeping Intern, XYZ Group of Hotels, New Delhi (June 2010– August 2010)
 - o Responsible for cleanliness and maintenance of one floor in the hotel.
 - o Got opportunities to make housekeeping arrangements for corporate meetings.

Volunteer Work:

- Student volunteer at children's hospital in Chandigarh.

Nipesh Singla

UNIT 5.4.3: Interview FAQs

Unit Objective

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

- Discuss the most frequently asked interview questions
- Discuss how to answer the most frequently asked interview questions

Resources to be Used

- Participant Handbook

Say

- Tell the participants you will provide them with interview situation and questions and they have to try to answer them.
- Tell them you will also explain the different ways to approach these questions.

Do

- Divide the class in pairs and ask the participants to perform a role play.
- One partner will play the role of the interviewer while the other will play the role of the interviewee.
- Tell them the interviewer can start the interview by asking the interviewee to introduce himself/herself.
- Call all the pairs one by one in front of the class to enact the role play.
- Follow the same pattern for all other situations.
- Time allowed for each situation is 8-10 minutes.
- Congratulate each participant for giving their input.
- Ask the class to applaud each time a team has completed their role play.
- Keep a check on time.

Role Play

Conduct a role play for the situation given.

Situation 1

- The interviewer will start by asking the interviewee a few generic questions such as:
 - What is your name?
 - Tell me something about yourself?
 - Can you tell me something about your family?

- Then, the interviewer will bluntly ask the following questions:
 - How do you explain this huge time gap in your resume?
 - What is the reason for this?
 - Weren't you looking for a job or is it that no one selected you?

Say

De-brief:

- When you put information on your resume, you should be prepared to answer any questions about it.
- Be present and focused on the questions being asked to you.
- One way of tackling the blunt questions is to tell the interviewer you did not come across an opportunity where you were sufficiently satisfied with both the remuneration offered as well as the profile. Therefore, you waited for the right opportunity to come along while looking for an ideal job.

Role Play

Conduct a role play for the situation given.

Role Play – Situation 2

- The interviewer will start by asking the interviewee a few generic questions such as:
 - What is your name?
 - Tell me something about yourself?
 - Can you tell me something about your family?
- Then, at the end of the interview, ask the interviewee:
 - There are over 200 people who have applied for this job, some with excellent work experience. Why should I hire you?

Say

De-brief:

- There is nothing wrong with stating your strengths and achievements. However, do not come across as arrogant or too boastful.
- You need show the interviewee that you have unique skills or talents to contribute to the company. The interviewer needs to know how you stand apart from the rest of the crowd.
- Tell the interviewer you are looking forward to working with the company and that you are a hard-working individual.

Role Play

Conduct a role play for the situation given.

Role Play – Situation 3

- The interviewer will start by asking the interviewee a few generic questions such as
 - What is your name?
 - Tell me something about yourself?
 - Can you tell me something about your family?
- Then, lean forward, clasp your hands on the table and in a soft voice ask the interviewee:
 - Did you ever experience any neglect or disregard from your previous office? In other words, did you ever suffer because your office or team displayed favouritism?

Say

De-brief:

- Keep this in mind: Do not criticize anyone during an interview.
- You are free to express your opinion, however, your language, answers, body language, and the tone of your voice should remain constructive and neutral.
- Since criticism will show you in negative light, you should keep your answers honest yet diplomatic.
- You can tackle such questions by saying, “I got along well with most of my faculty and peers.”

Role Play

Conduct a role play for the situation given.

Role Play – Situation 4

- The interviewer will start by asking the interviewee a few generic questions such as
 - What is your name?
 - Tell me something about yourself?
 - Can you tell me something about your family?
- Then very bluntly ask the interviewee:
 - How long do you plan to stay with this company if you are selected?
- After the candidate responds, ask sarcastically:
 - Do you seriously mean that?

Say

De-brief:

- Don't provide unreal and idealistic answers.
- Your answers should be honest yet diplomatic. In a situation like this, the interviewer does not expect you to provide a specific timeline.

- You can say something like, "I would like to stay with the company as long as I can contribute constructively and develop as an employee, within the organization, professionally and financially."

Role Play

Conduct a role play for the situation given.

Role Play – Situation 5

- The interviewer will start by asking the interviewee a few generic questions such as:
 - What is your name?
 - Tell me something about yourself?
 - Can you tell me something about your family?
- Ask him/her how important he/she thinks it is to be punctual in the corporate world.
- After he/she answers, look up sternly at the interviewee and in a crisp voice, say:
 - You were late for this interview by 10 minutes. That surely does not seem to be in line with what you just said?

Say

De-brief:

- Politely apologize for being late.
- You can add something such as, "I assure you this is not a habit". All your future actions should be in line with this statement.
- Avoid giving any excuses.
- You might feel obligated to provide a justification for your tardiness, but the interviewer is not interested in that.
- Do not over apologize. Once this response is out of the way, turn your focus back to the interview.

Role Play

Conduct a role play for the situation given.

Role Play – Situation 6

- The interviewer will start by asking the interviewee a few generic questions such as:
 - What is your name?
 - Tell me something about yourself?
 - Can you tell me something about your family?
- After asking a few academic or job-related questions, ask the interviewee:
 - If you get this job, what salary package do you expect us to give you?

Say

De-brief:

- If there is no way for you to avoid this question, respond to the interviewer by providing a reasonable and well-thought-out salary range.

Role Play

Conduct a role play for the situation given.

Role Play – Situation 7

- The interviewer will start by asking the interviewee a few generic questions such as:
 - What is your name?
 - Tell me something about yourself?
 - Can you tell me something about your family?
- Then, bringing the interview to a close, ask the interviewee:
 - Do you have any questions for me?

Say

De-brief:

- Ask relevant questions.
- Don't bombard the interviewer with questions.
- If you have questions about the result of the interview, you can limit your questions to 1 or 2. Keep them short and relevant like:
 - When will I be informed about the results of the interview?
 - What are the working hours?
 - Will the job require me to travel?

Explain

- Tell the participants to be prepared for answering different types of questions in an interview.
- Stay calm and focused and take a moment to think about how you should respond. Always maintain a confident tone.
- Even if you don't intend to, your body language conveys your level of discomfort with a particular question.
- Try to keep your actions, tone, and gestures neutral.
- Maintain your composure while answering personal questions.

Do

- Tell all the participants to form pairs again.
- Tell them to use the following list of frequently asked interview questions to conduct mock interviews.

- They will use all or some of these questions to conduct mock interviews with their partners.
- One partner will play the role of the interviewer while the other will play the role of the interviewee.
- After they are through asking and answering the questions, the roles will be reversed.
- The same list of questions will be used again.
- After each mock interview ask the interviewer to provide feedback and clear any doubts that may arise.
- Time allowed for each situation is 30-35 minutes.

Activity



Mock Interview Questions

Mock Interview Questions
Tell me something about your family.
What qualities would you look for in a Manager or a Supervisor?
Why did you apply for this job?
What do you know about this company?
How do you deal with criticism?
How do you plan to strike a good work-life balance?
Where do you see yourself five years from now?
Have you applied for jobs in other companies?
What kind of salary do you expect from this job?
Do you have any questions for me?

Summarize



- Close the discussion by discussing the questions in the both activities.
- Ask the participants what they have learned from this activity.
- Ask if they have any questions related to what they have talked about so far.

UNIT 5.4.4: Work Readiness – Terms and Terminology

Unit Objective

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

- Identify basic workplace terminology

Resources to be Used

- Participant Handbook
- Chart papers
- Blank sheets of paper
- Pens

Ask

- What do you understand by workplace terminology?
- Are offer letter and contract of employment the same?

Say

- Let's start this unit with an activity.

Team Activity

Workplace terminology

- This is a group activity conducted in three parts.

Part 1

Sheila received a call from the recruiter of MND Company. Before she is recruited by the company, think of the recruitment process she will have to go through. Start from the telephone call to signing her letter of acceptance. Write down all the words that come to your mind.

Activity De-brief

- Have the participants read out the words they have written
- Encourage all the participants to participate in the activity

Do 

- Divide the class into small groups of 4 or 6.
- Instruct the participants that they will be doing a brainstorming activity.
- Give them one chart paper each. Tell them to divide the chart in two parts.
- Instruct them that they have to use one half of the chart paper now. The other half will be used later.
- The participants have to write all the words that come to their mind related to the recruitment process.
- Give them 10 minutes to do the activity.
- Tell them that there are no right or wrong answers.
- Keep a track of the time.

Say 

- You all know quite a few words related to the terms used in the office.
- Let us talk about some new terms that have been missed out.
- Discuss "Work Readiness – Terms and Terminology" with the participants as given in the Participant Handbook.

Ask 

- Why is it important to know the workplace terms?
- How do they help?
- Can the words be categorised further?

Say 

- Let's now continue the activity.

Team Activity 

Terms and Terminology

- This is again a group activity. The members of the group remain the same as in Activity 1.

Part 2

- With the help of the new terms you have learned, make a flowchart of the hiring process of MND Company.

Activity De-brief

- Ask the groups to share the flowcharts and the new terms they added while preparing the flowchart.

Do 

- Instruct the participants that they have to use the 2nd half of the same chart they had used before.
- Using the new terminology and the terms they had previously written on the chart, they have to make a flow chart of the hiring process of the MND Company.
- Give them 10 minutes for this activity.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Say 

- Let's go ahead with the activity.

Team Activity 

Terms and Terminology

- The activity continues with the same group members.

Part 3

Sheila now works for the MND Company. She is not aware of the company culture and policies. She goes to the HR Department to get her doubts clarified. Can you think of the terms for which she wants clarity? Make a list of those words.

Activity De-brief

- Ask the groups to share their list of words. Some of the words are benefits, compensation, deduction, employee training, holidays, lay-off, leave, maternity leave, mentor, notice, paternity leave, and time sheet.

Do 

- Instruct the participants to identify the key terms an employee of a company should know. They can use the same chart paper for this activity.
- Give them 5 minutes for this activity.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Summarize 

- Note: You can either summarize the key points of the unit or have a role play where an employee has just joined a company and the HR Manager explains the terms of employment.

UNIT 5.5: Understanding Entrepreneurship

Key Learning Outcomes

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

1. Discuss the concept of entrepreneurship
2. Discuss the importance of entrepreneurship
3. Describe the characteristics of an entrepreneur
4. Describe the different types of enterprises
5. List the qualities of an effective leader
6. Discuss the benefits of effective leadership
7. List the traits of an effective team
8. Discuss the importance of listening effectively
9. Discuss how to listen effectively
10. Discuss the importance of speaking effectively
11. Discuss how to speak effectively
12. Discuss how to solve problems
13. List important problem-solving traits
14. Discuss ways to assess problem-solving skills
15. Discuss the importance of negotiation
16. Discuss how to negotiate
17. Discuss how to identify new business opportunities
18. Discuss how to identify business opportunities within your business
19. Explain the meaning of entrepreneur
20. Describe the different types of entrepreneurs
21. List the characteristics of entrepreneurs
22. Recall entrepreneur success stories
23. Discuss the entrepreneurial process
24. Describe the entrepreneurship ecosystem
25. Discuss the purpose of the Make in India campaign
26. Discuss key schemes to promote entrepreneurs
27. Discuss the relationship between entrepreneurship and risk appetite
28. Discuss the relationship between entrepreneurship and resilience
29. Describe the characteristics of a resilient entrepreneur
30. Discuss how to deal with failure

UNIT 5.5.1: Concept Introduction (Characteristics of an Entrepreneur, types of firms/ types of enterprises)

Unit Objectives

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

- Discuss the concept of entrepreneurship
- Discuss the importance of entrepreneurship
- Discuss the characteristics of an entrepreneur
- Describe the different types of enterprises

Resources to be Used

- Participant Handbook

Say

- Let's start this session with some interesting questions about Indian entrepreneurs.

Team Activity

Quiz Questions

1. Who is the founder of Reliance Industries?
Dhirubhai Ambani
2. Who is the Chairman of Wipro Limited?
Azim Premji
3. Who launched e-commerce website Flipkart?
Sachin Bansal and Binny Bansal
4. Who is the founder of Paytm?
Vijay Shekhar Sharma
5. Who is CEO of OLA Cabs?
Bhavish Aggarwal
6. Who is the founder of Jugnoo?
Samar Singla (autorickshaw aggregator)
7. Who is the founder of OYO Rooms?
Bhavish Aggarwal

Do 

- Tell them that you will ask them few questions about a few entrepreneurs.
- Divide the class in to two groups.
- In turns ask the quiz questions to the groups.
- If the answer is incorrect pass the question to the other group.
- Share the answer if the groups are not able to answer.
- Congratulate the participants who answered correctly.

Ask 

- What do you understand by entrepreneurs?
- What is the importance of entrepreneurship in today's scenario?
- What do you think are the characteristics of successful entrepreneurs?
- What are different types of enterprises that an entrepreneur in India can own and run?

Say 

- Talk about entrepreneurs, importance of entrepreneurship, characteristics of successful entrepreneurs, and different types of enterprises in India as discussed in the Participant Handbook.
- Tell the participants, stories of successful Indian entrepreneurs - their struggles, the moments of heartbreak, the perseverance and triumph.
- Ask them if they know of any such entrepreneur.

Summarize 

- Close the discussion by summarizing about the opportunities for entrepreneurs in India.

Notes for Facilitation 

- Check out different Government schemes for small entrepreneurs. Share the information with the participants.
- You can tell them about the government websites like Start Up India, mudra.org.in etc.
- Discuss about various schemes and policies by the Government of India for entrepreneurs.

UNIT 5.5.2: Leadership and Teamwork

Unit Objectives

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

- List the qualities of an effective leader
- Discuss the benefits of effective leadership
- List the traits of an effective team

Resources to be Used

- Participant Handbook
- Blank sheets of paper
- Pens

Do

- Show the picture given below to the class.
- Ask them to quickly write on a piece of paper what comes to their mind after seeing the picture.
- Now ask them, "What do you understand from this picture?"
- Encourage participants to share their thoughts.



Fig 7.5.1: Encouraging participants

Say

- This picture depicts the qualities of a leader and the difference between a leader and a boss.
- A boss focuses on structure and inspires fear whereas a leader follows vision and generates enthusiasm.
- A boss blames employee for the breakdown whereas a leader fixes breakdown.
- A boss depends on authority whereas a leader depends on goodwill.
- A boss says "I" and a leader says "We."
- A boss drives employee whereas a leader coaches them.
- A boss takes credit whereas a leader gives credit.

Say 

- Talk about leadership and leadership qualities for an entrepreneur as discussed in the Participant Handbook.

Ask 

- Why is it important for a leader to be effective? How does it help the organization?

Say 

- Let us discuss benefits of effective leadership as discussed in the Participant Handbook.
- “Out-of-the-box thinking” is one of the new leadership styles. It means thinking differently and from a new perspective.

Ask 

- Do you consider yourself a team player?

Team Activity 

Long Chain

- This is a group activity.

Do 

- Divide the class into 2 teams.
- Ask each team to create a chain using materials they have in class such as shoe laces, belts, paper, handkerchief, ribbons, etc.
- The team that creates the longest chain wins the game.
- Observe if the participants are interacting with their team or working in isolation.
- Share your observations with the class.

Say 

De-brief:

- What did the winning team do differently?
- Who was responsible for the winning team's success?
- How does this activity explain the role of teamwork in entrepreneurial success?

Say 

- Tell the class that both the teams performed well.

- Discuss that the objective of this activity was to open communication channels and how this has been achieved.
- The participants should aim to keep the communication channels open when interacting with their peers and team members.
- It will set the pace and enthusiasm required for all the ensuing teamwork activities.
- Talk about teamwork and importance of teamwork in entrepreneurial success as discussed in the Participant Handbook.

Summarize

- Close the discussion by summarizing about the importance of teamwork for employees.
 - Teamwork helps in reducing stress for the employees.
 - Teamwork helps employers in generating more number of solutions to a problem and developing improved communication amongst employees.
- Ask the participants what they have learned from these exercises.
- Ask if they have any questions related to what they have talked about so far.

UNIT 5.5.3: Communication Skills: Listening & Speaking: The Importance of Listening Effectively

Unit Objectives

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

- Discuss the importance of listening effectively
- Discuss how to listen effectively
- Discuss the importance of speaking effectively
- Discuss how to speak effectively

Resources to be Used

- Participant Handbook

Activity

Activity – Chinese Whisper

Step 1: Form a circle.

Step 2: Start a whisper chain. Any one participant will whisper a message into his/her neighbor's ear. No one else must hear the message. The message can be serious or downright silly.

Step 3: The next person who first heard the message should whisper the message very quickly to the person sitting next to them.

Step 4: The game goes on until the last person says whatever they heard out loud and the first person reveals the real message.

Compare them and have a great laugh!

Ask

De-brief questions:

- Was the original message the same as the message that is communicated at the end of the game?
- Why do you think there was a difference in the messages?

Say

- No, the original message was not same at the end of game.
- The barriers to communication like language, disturbance and noise, poor listening skills, boredom, poor speaking skills, etc. are the potential reasons this happens.

- There are various aspects to communication. Speaking skills and listening skills are two major components to any communication. There is always some room for improvement in the way we communicate.
- It is important to accept the reality of miscommunication and work to minimise its negative impacts.

Say

- Communication is a two-way process where people exchange information or express their thoughts and feelings
- It involves effective speaking and effective listening.
- If I go to the store to get bread, I exchange money for the bread. I give something and get something in return.
- Communication takes place in the same manner. You have to provide and receive information for communication to take place.

Ask

- How often do you hear these statements?
 - "You're not listening to me!"
 - "Why don't you let me finish what I'm saying?"
 - "You just don't understand!"
- What do you think the other person is trying to convey to you through these sentences?
- We will not talk about the importance of listening effectively as discussed in the Participant Handbook.

Say

- Let's play a game to understand effective listening process better.

Do

- This is a class activity.
- The participants need to answer the questions they hear.
- Instruct them to listen carefully.
- You will read it at a stretch and if need be repeat it once more.
- Tell the participants to raise their hand if they know the answer to the question asked.
- Keep a check on me.

Activity



Riddles:

Is there any law against a man marrying his widow's sister?

If you went to bed at eight o'clock at night and set the clock's alarm to ring at nine o'clock, how many hours of sleep would you get?

Do they have a 26th of January in England?

If you had only one match and entered a dark room that had a kerosene lamp, oil heater, and a wood stove, what would you light first?

The Delhi Daredevils and the Chennai Super Kings play five IPL matches. Each wins three matches. No match was a tie or dispute. How is this possible?

There was an airplane crash. Every single person died, but two people survived. How is this possible?

If an airplane crashes on the border of two countries, would unidentified survivors be buried in the country they were travelling to or the country they were travelling from?

A man builds an ordinary house with four sides except that each side has a southern exposure. A bear comes to the door and rings the doorbell. What is the colour of the bear?

Answers:

There's no law against a man marrying his widow's sister, but it would be the neatest trick in the book since to have a widow, the man would have to be dead.

You'd get one hour's sleep since alarm clocks do not know the difference between morning and night.

Oh, yes. They have a 26th of January in England. They also have a 27th, a 28th, and so on.

First of all, you would light the match.

Who said the Delhi Daredevils and the Chennai Super Kings were playing against each other in those games?

Every SINGLE person died, but those two were married.

You can't bury survivors under any law especially if they still have enough strength to object.

The bear that rang the doorbell would have to be a white bear. The only place you could build a house with four southern exposures is at the North Pole where every direction is in South.

Ask



De-brief question:

- What were the barriers that came into your way of listening?
- How can you overcome barriers to listening?

Say

- There is a difference between hearing and listening.
- If you don't listen properly, the message may be misunderstood.
- Be open-minded while listening to someone.
- It is important to listen effectively and carefully without making assumptions.

Activity

Elevator Pitch:

You are in the lobby of a hotel and you bumped into your former client who is a famous businessman. He has financed a lot of small business ventures and can finance your new start-up too. After exchanging pleasantries, he asks you what your new company does. You open your mouth, and then pause. Where do you even begin?

Then, as you try to organize your thoughts, his meeting is called, and he is on his way. If you would have been better prepared, you're sure that he would have stayed long enough to schedule a meeting with you too.

If you were given another chance, what would you have said to this person?

Do

- Start off the task by providing a beginning sentence to get the story started, and then go around the classroom getting each one to add a new sentence to keep the story going.
- This task should be done spontaneously allowing only a little time to think (30 seconds).
- For example: There was once a student who was looking for a job after graduation.

Notes for Facilitation

- Tell the participants to follow these steps to create a great pitch, but bear in mind that you'll need to vary your approach depending on what your pitch is about.
 1. Identify Your Goal: Start by thinking about the objective of your pitch. For instance, do you want to tell the potential clients about your organization? Do you have a great new product idea that you want to pitch to an executive or do you want a simple and engaging speech to explain what you do for a living?
 2. Explain What You Do: Start your pitch by describing what your organization does. Focus on the problems that you solve and how you help people. Ask yourself this question as you start writing: what do you want your audience to remember most about you? Keep in mind that your pitch should excite you first. After all, if you don't get excited about what you're saying neither will your audience. People may not remember everything that you say, but they will likely remember your enthusiasm.
 3. Communicate Your USP: Your elevator pitch also needs to communicate your unique selling proposition or USP. Identify what makes you, your organization or

your idea unique. You'll want to communicate your USP after you've talked about what you do.

4. Engage with a Question: After you communicate your USP, you need to engage your audience. To do this, prepare open-ended questions (questions that can't be answered with a "yes" or "no" answer) to involve them in the conversation. Make sure that you're able to answer any questions that he or she may have.
5. Put it all Together: When you've completed each section of your pitch, put it all together. Then, read it aloud and use a stopwatch to time how long it takes. It should be no longer than 20-30 seconds. Remember, the shorter it is, the better!

Example:

Here's show your pitch could come together:

"My company deals with cloth retail online business and we use various e-commerce platforms to sell our products. This means that you can do shopping with ease and spend time on other important tasks. Unlike other similar companies, we have a strong feedback mechanism to find out exactly what people need. This means that, on average, 95 percent of our clients are happy with our products. So, how can you help us in creating our own web portal?"

6. Practice: Like anything else, practice makes perfect. Remember, how you say it is just as important as what you say. If you don't practice, it's likely that you'll talk too fast, sound unnatural or forget important elements of your pitch. Set a goal to practice your pitch regularly. The more you practice, the more natural your pitch will become. Practice in front of a mirror or in front of colleagues until the pitch feels natural.

Summarize

- Close the discussion by summarizing how to speak effectively as discussed in the Participant Handbook.

UNIT 5.5.4: Problem Solving & Negotiation Skills

Unit Objectives

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

- Discuss how to solve problems
- List the important problem-solving traits
- Discuss ways to assess problem solving skills
- Discuss the importance of negotiation
- Discuss how to negotiate

Resources to be Used

- Participant Handbook

Ask

- What is a 'problem'?
- What do you think are the problems you may face in the process of becoming a successful entrepreneur?

Say

- Discuss the definition of problem as given in the Participant Handbook.
- In a hurdle race the hurdles are the obstacles on the way to reach your goal.
- Similarly, obstacles are the hurdles you may face while reaching your goal i.e. to set-up your own business.
- Your goal will be to reach the finishing line after crossing these hurdles.

Ask

- What do you do when you face a problem?
- How do you resolve it? You can pick examples from the questions asked previously 'the problems they are likely to face in the process of becoming a successful entrepreneur'.

Say

- Discuss how to solve problems as given in the Participant Handbook.

Team Activity

- This is a group activity.
- The groups will solve the problem and come up with the best solution in each case.

1. Unable to arrange for some extra finance for setting up a beauty parlour. The loan sanctioned and disbursed is not enough. You have tried all your contacts, friends and relatives. But unable to manage the extra amount. Bank will not sanction more amount as you have used up the complete sanction limit.
2. You have rented a space for your business and all arrangements are done. You will be operating from the office space rented in two days. Now the owner comes up to you and says he wants to sell the place and wants you to vacate in 15 days.
3. You have just set up your business and need extra human resource. You have tried inviting a few also reached up with an agency for getting the right candidate. But you are unable to get the right candidate. If the candidate is good, you cannot offer the salary demanded. If the candidate agrees to the salary, he/she has other demands like working hours to be reduced, leaves etc. which may not work for your set up.

Do 

- Divide the class into three groups. Give one scenario to each group.
- Explain the purpose and duration of the activity.
- Ask the groups to build on the scenario and present their solution as a role play.

Say 

De-brief questions:

1. What was the problem?
2. Is there any other alternative solution?
3. Is this the best solution presented?

Ask 

- Try to think of some people around you who are able to solve problems very easily. Even you or your friends might be approaching them when there is a problem. What qualities do they have? What personality traits do such people possess?

Say 

- Discuss the important traits for problem-solving as given in the Participant Handbook.

Ask 

- In order to build a successful organization, you need to hire people who possess good problem-solving skills.
- How would you assess the level of problem solving skills of potential candidates before hiring them?

Say

- Discuss how to assess for problem-solving skills as given in the Participant Handbook.

Summarize

- Ask the participants the things that they have learnt so far.
- Ask if they have any questions related to what they have talked about so far.
- Summarize the discussion on problem solving.

Activity

- The activity is to organise an election event. Select three volunteers from the group. They have to give a speech on their election manifesto to the class. They have to negotiate with the fellow participants and convince them to vote for them. The best negotiator will win the election.

Do

- Ask three participants to volunteer for the activity.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Ask

- Out of the three contestants, whom would you support? Why? What did they say or do which convinced you to make your decision?
- Have you ever tried to negotiate in your personal or professional life?
- Ask the class to share some of their experiences where they have been able to strike a deal by negotiating.

Say

- Discuss "What is Negotiation?" as given in the Participant Handbook.

Ask

- Why is it important to negotiate? As an entrepreneur, where do you think that negotiation skills will be needed?

Say

- Discuss the importance of negotiation while starting a business as given in the Participant Handbook.

Say

- Discuss the important steps to negotiate as given in the Participant Handbook.

Role Play

- Conduct a role play activity.
- Ask the participants to assemble together.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

Do

- Divide them into groups of four (4) (depending on the batch size).
- Give them the hand-outs for role play scenarios.
- Two groups to be given scenarios on problem solving.
- Other two groups to be given scenarios on negotiation.
- The groups will build on the scenarios and prepare for the role play.
- Give the groups at least 5 mins to discuss and be ready with the role play.
- Invite each group one by one to come and present their role play.

Problem solving Scenario 1

Avinash has a Mobile Repair Store in Allahabad. His outlet is one of the most popular one in the vicinity and he has great rapport with his customers. He is always well-dressed, jovial and full of energy.

It's around 11 AM, when a customer barges in to the shop and starts shouting at Avinash for giving her back the instrument which is still not working. The screen of her mobile is also cracked from one side. Avinash remembered thoroughly checking the handset before handing it over to the customer. The customer threatens to sue the company and to go to Consumer Court for cheating her.

Problem solving Scenario 2

You are running a successful small scale business, Shreeji Aggarbais. Your staff members do door to door selling and organise marketing campaigns in local markets. Your brand has established its name in last few years.

Recently, lot of customers have been coming to you and lodging complaints that your staff members indulge in malpractices. Few of them informed you that a staff member engaged them in a friendly conversation. In the meanwhile, the other gave them lesser packets of aggarbais than they paid for.

Another set of customers lodged complaint about the misconduct and rude behaviour of a particular staff member. You often hear from your customers that the orders don't get delivered on time or wrong products get delivered. You have already been struggling with shortage of staff and such complaints are a serious concern as it is hampering your brand image. What strategies will you adopt to solve this problem?

Negotiation Scenario 1 You
 You have interviewed a prospective new employee who could be a key member of your new entrepreneurial venture. The new person is demanding a salary that is 20% higher than you thought based on your business plan. Finances are tight, yet you believe this person could make a significant impact on future profits. If you paid the required salary for the new person, then you would have to restructure your entire business plan. You've been searching for an individual with this skill level for three months. The candidate is waiting for your response. Now you have to call him in to make the final negotiations.

Negotiation Scenario 2
 You are a young entrepreneur who has just registered his start up project and applied for a bank loan accordingly. You receive a letter saying that your loan application has been rejected as your start up idea did not appeal to the bank and they think that it is not a revenue generating model. You have taken an appointment to meet the manager and show your negotiation skills to get your loan approved.

Notes for Facilitation

Facilitating Role Plays

Preparing for the activity

1. Carefully review the details of the scenario and the character descriptions.
2. Become familiar with the key issues being addressed in the scenario.
3. Study the provided material so that you are ready to address issues related to the situations depicted in the role-plays.
4. Anticipate and know how to address issues participants might raise during the activity.

Conducting the activity

1. Introduce the activity. Emphasize that role-playing provides participants with an opportunity to apply their new knowledge, skills, and tools in situations that simulate actual interactions with customers.
2. Ask participants to form pairs. Direct the members of each group to choose who will play the roles. Remind the groups that each participant should be given the opportunity to play/practice the different roles.
3. Conduct a demonstration so that participants become familiar with the expectations related to the roles and support materials.
4. Give the pairs/groups 10 to 15 minutes to conduct the role-play (depending on the duration of the session).
5. After all the groups have finished with the role-play, conduct a debriefing session on each role-play.
6. Ask the groups to take five minutes to talk about what happened during the role-play. The groups should discuss the questions given in the debriefing for each role-play.

Encourage participants to provide constructive criticism during their discussions.

Summarize

- Wrap the unit up after summarizing the key points and answering questions.

UNIT 5.5.5: Business Opportunity Identification: Entrepreneurs and Opportunities

Unit Objectives

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

- Discuss how to identify new business opportunities
- Discuss how to identify business opportunities within their business

Resources to be Used

- Participant Handbook
- Blank sheets of paper
- Pens

Ask

- How does an entrepreneur identify an opportunity?
- What do you think are the common queries or concerns faced by entrepreneurs?
- How can you identify new business opportunity?

Say

- Let's talk about opportunity, common queries or concerns faced by entrepreneurs, idea as an opportunity, factors to consider when looking for opportunities, ways to identify new business, and opportunity analysis as discussed in Participant Handbook.
- Let's do an activity to understand ways to identify business opportunities within your business.

Do

- Tell the class that this is an individual activity.
- Tell the participants to create a matrix on their notebooks.
- There will be four boxes in your matrix.
- Strength, Weakness, Opportunity and Threats will be the four headings of the matrix. This is called the SWOT matrix.
- Read out the questions to them and tell the participants they need to answer the questions asked in each matrix.
- Tell them they can also use their own understanding of themselves to fill the SWOT matrix.

Activity

Do your SWOT analysis

<p>Strength What are your strengths? What unique capabilities do you possess? What do you do better than others? What do others perceive as your strengths?</p>	<p>Weakness What are your weaknesses? What do your competitors do better than you?</p>
<p>Opportunity What trends may positively impact you? What opportunities are available to you?</p>	<p>Threat Do you have solid financial support? What trends may negatively impact you?</p>

Do

- Congratulate everyone for the class activity.
- Ask the audience to applaud for themselves.
- Allot the participants sufficient time to complete this activity but do keep a check on time.
- Ask de-brief questions to cull out information from the participants.

Ask

De-brief questions:

- What are your weaknesses according to your SWOT analysis?
- Do you think you can change your weakness into strength? How?
- Do you think you can work on your threats? How?

Summarize

- Close the discussion by summarizing ways to identify business opportunities within your business.
- Ask the participants what they have learned from this exercise.
- Ask if they have any questions related to what they have talked about so far.

UNIT 5.5.6: Entrepreneurship Support Eco-System

Unit Objectives

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

- Explain the meaning of entrepreneur
- Describe the different types of entrepreneurs
- List the characteristics of entrepreneurs
- Recall entrepreneur success stories
- Discuss the entrepreneurial process
- Describe the entrepreneurship ecosystem
- Discuss the purpose of the 'Make in India' campaign
- Discuss the key schemes to promote entrepreneurs

Resources to be Used

- Participant Handbook
- Chart papers
- Marker pens
- Pencils
- Colour pencils
- Scale
- Eraser
- Other requisite stationery material

Ask

- Do you think that entrepreneurs need support?
- What do you think is an eco-system?
- What do you think 'entrepreneurship support eco-system' means?

Say

- Let's learn what entrepreneurship support eco-system means.
- Discuss 'Entrepreneurship Support Eco-System' as given in the Participant Handbook

Ask

- Can you define entrepreneurship support eco-system?
- What are the key domains of the support eco-system?

Say 

- Let's learn more about these domains by conducting an activity.
- You have to make a poster showing the components of the six main domains of entrepreneurship support eco-system.

Team Activity 

- Making a poster showing the entrepreneurship support eco-system.

Do 

- Divide the class into groups of four or six.
- Hand out chart paper and coloured pens.
- Explain the purpose and duration of the activity.
- Go around checking the progress of each group.
- Set guidelines pertaining to discipline and expected tasks.

Activity De-brief

Ask each group to display their poster and explain the key domains of entrepreneurship support eco-system.

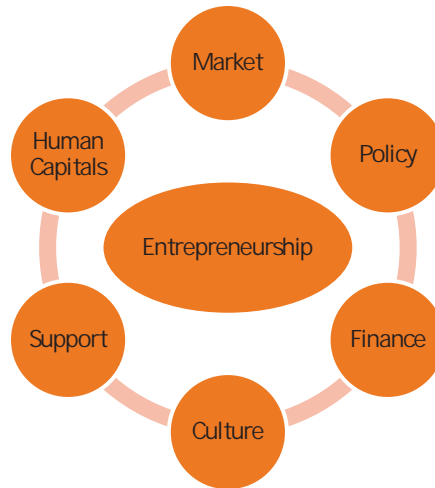


Fig 5.5.2: Key domains of entrepreneurship

Ask 

- What kind of government support eco-system is available for entrepreneurs in India?

Say 

- Discuss 'Make in India' campaign as given in the Participant Handbook.

Team Activity

- Presentation on key schemes to promote entrepreneurs

Do

- Divide the class into pairs.
- Number each pair from 1-15.
- Assign a scheme, same as their group number, to each group.
- Ask them to read the scheme carefully and present it to the class.
- Explain the purpose and duration of the activity.
- Go around checking the progress of each group.
- Set guidelines pertaining to discipline and expected tasks.

Activity De-brief

- Ask each group to explain the scheme offered by government to promote entrepreneurs.

Summarize

- Summarize the unit by discussing the key points and answering questions the participants may have.

UNIT 5.5.7: Risk Appraisal & Resilience



Unit Objectives

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

- Discuss the relationship between entrepreneurship and risk appraisal
- Discuss the relationship between entrepreneurship and resilience
- Describe the characteristics of a resilient entrepreneur

Resources to be Used

- Participant Handbook
- Chart papers
- Blank sheets of paper
- Pens
- Marker pens

Ask

- Can you define risk or explain what constitutes a risk?
- What do you people mean when they say, "This may be a risky proposition"?
- What risks are they talking about?

Example

- Let's have a look at these two examples:

Rohit and his family were travelling by car from Delhi to Nainital. It was their second trip there. Rohit was familiar with the road. His friends told him that the highway after Rampur was in a bad condition. They advised him to take a shortcut and turn left from Moradabad and take the Kaladhungi road. This road is in a better condition.

Since he was going with his family, and did not want to take the risk of getting lost, he left early. He took the Kaladhungi road and reached Nainital well in time.

Suresh and his family too were travelling by car from Delhi to Nainital. It was their second trip there. His friends too advised him to take a shortcut and turn left from Moradabad and take the Kaladhungi road as this road was in a better condition.

Suresh too decided to take the Kaladhungi road but he left Delhi in the afternoon. It was dark by the time he reached Kaladhungi, and he was sure that he was taking the correct turn. As it was late, he could not find anyone to give him directions. He ended up being in an unknown place that was scarcely inhabited.

Say

- Let's see what type of risks Rohit and Suresh took.
- Discuss 'Risk Appraisal and Resilience' with the participants as given in the Participant Handbook.

Say

- Let's learn more about risk appraisal and resilience with the help of an activity.

Team Activity

Risk Appraisal

- This is a group activity.
- In the previous unit, you read success stories of Mr Dhirubhai Ambani and Dr Karsanbhai Patel.
- Mr Ambani left his job and started his company Reliance with just Rs. 50,000/-.
- Dr Patel kept his job, went door-to-door to sell Nirma, and only when the brand started gaining popularity did he start his own company.
- What types of risk did both of them take?
- What risk factors, do you think, did they keep in mind before launching their company?
- Write the Risk Appraisal Statement of both the companies.

Activity De-brief

- Who took a greater risk?
- What are the differences between the Risk Appraisal Statement of both the companies?

Do

- Instruct the participants that this is group work.
- Divide the class into small groups of 4.
- Give each group a chart paper.
- Tell the participants that they have to evaluate the risks taken by Mr Dhirubhai Ambani and Dr Karsanbhai Patel.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Ask

- Do you think all entrepreneurial ventures are successful?
- What happens if the first venture is not successful?

- Should the entrepreneur stop when faced with challenges or face them?

Example

- Let's have a look at the following example:

Vijay Shekhar Sharma is the founder of Paytm, which is a giant Indian e-commerce. He was born in a middle-class family in Uttar Pradesh. He started his first job at an MNC. He quit after six months and built a company One97 with his friends. As One97 grew bigger, it needed more money because it was running more servers, bigger teams, and had to pay royalty. At that time, the tech bubble popped and technology companies were running in losses. Finally, money ran out. So One97 took loans and then more loans at higher rates of interest, as high as 24 per cent, and became caught in a vicious cycle.

In 2014, Paytm was launched with online wallet services after which, the company enabled online payment transactions. The company got licenses from RBI in 2016 to launch India's first ever payment bank. Moreover, the main motive of Paytm was to transform India into a cashless economy.

After demonetization came into effect, Vijay Shekhar Sharma started promoting online and digital transactions to deal with the cash crunch. In fact, the service of the company's mobile wallet is accepted across India. The logo of Paytm is now popular almost everywhere from tea stalls to major companies.

Say

- Let's see what qualities made Vijay Shekhar Sharma a resilient entrepreneur.
- Discuss Entrepreneurship and Resilience with the participants as given in the Participant Handbook.

Say

- Let's learn more about entrepreneurship and resilience with the help of an activity.

Team Activity

Entrepreneurship and Resilience

- This is a group activity.
- Think of some entrepreneurship ventures that faced challenging times, but later resulted in success stories.
- Who is the founder of that company?
- What challenging times did it face?
- How did it overcome those challenges?
- List the resilient characteristics of the entrepreneur.

Activity De-brief

- Each group to give their presentation.
- Why did you choose this company?
- What is the success story of the company?

Do 

- Instruct the participants that this is group work.
- Divide the class into small groups of 4.
- Give each group a chart paper.
- Tell the participants that they have to think of an entrepreneur who faced challenging times, but eventually succeeded.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Summarize 

- You can summarize the key points of the unit.
- Ask the participants what they learned from the activities.
- Clarify any questions or doubts they might have.

UNIT 5.5.8: Success and Failures

Unit Objectives

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

- Discuss how to deal with failure

Resources to be Used

- Participant Handbook

Ask

- Have you heard the quote 'nothing is impossible'?
- What do you think it means?
- Do you think that all successful entrepreneurs became famous overnight or did they have to struggle or face failure before succeeding?

Example

- Let's have a look at this example.

Shah Rukh Khan, also known as, SRK or King Khan is a force to reckon with. Did he achieve stardom overnight?

Shah Rukh Khan, who has seen many struggles in his life – he has slept on streets, struggled to support himself and his sister at a very young age, and lost his parents very early in life, which led to his sister seeking mental health support. Amidst all the chaos and challenges, he kept pushing himself, and today he stands tall as the 'Badshah of Bollywood'. Certainly, those years were not easy for him.

When he was young, he stood at Marine Drive and said, "I will rule this city one day". Failure was not just his companion during or before his stardom, it is still a substantial part of his life. Success does not come easy. What made him a star was his acceptance of failure and the urge to improve.

Say

- How do you define success and failure?
- What is fear?
- Discuss "success and failure" with the participants as given in the Participant Handbook.

Ask

- Have you felt or experienced fear?
- What led you to feel that emotion?
- How did you handle it?

Say

- Let's learn the about success and failure with the help of an activity.

Team Activity

- Divide the class into groups of four.
- Instruct them to think of one scenario where they have to interview a successful entrepreneur.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.
- They have to choose one person from the group as the interviewee and one as the interviewer.
- Go around and make sure they have understood what is to be done and are discussing the roles properly.
- Check that everyone understands their role. Give clarifications if needed. Give the participants about 5 minutes to discuss and decide their roles.
- Ask the groups to stop the discussion as soon as the time is over.
- Invite each group one by one to come and present their interview as a role play.

Notes for Facilitation

Facilitating Role Plays Preparing for the activity

1. Carefully review the details of the scenario and the character descriptions.
2. Become familiar with the key issues being addressed in the scenario.
3. Study the provided material so that you are ready to address issues related to the situations depicted in the role plays.
4. Anticipate potential questions that might be raised by the participants and be ready to address them.

Conducting the activity

1. Introduce the activity. Emphasize that role playing provides participants with an opportunity to apply their new knowledge, skills, and tools in situations that simulate actual interactions with customers.
2. Ask participants to form pairs. Direct the members of each group to choose who will play the roles. Remind the groups that each participant should be given the opportunity to play/practice the different roles.

3. Conduct a demonstration so that participants become familiar with the expectations related to the roles and support materials.
4. To maintain spontaneity of the interactions during the role play, ask the participants not to discuss the details of their roles prior to the role play.
5. Give the pairs 15-20 minutes to conduct the role play.
6. Circulate among the groups to answer any questions that may arise and provide guidance as needed.
7. After all the pairs have finished with the role play, conduct a debriefing session on each role play.
8. Ask the groups to take five minutes to talk about what happened during the role play. The groups should discuss the questions given in the debriefing for each role play. Encourage participants to provide constructive criticism during their discussions.
9. Conclude the activity by asking participants to think about whether and how they might use scripted role plays in their real life.

Summarize

- Wrap the unit up after summarizing the key points and answering questions.

UNIT 5.6: Preparing to be an Entrepreneur

Key Learning Outcomes

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

1. Discuss how market research is carried out
2. Describe the 4 Ps of marketing
3. Discuss the importance of idea generation
4. Recall basic business terminology
5. Discuss the need for CRM
6. Discuss the benefits of CRM
7. Discuss the need for networking
8. Discuss the benefits of networking
9. Discuss the importance of setting goals
10. Differentiate between short-term, medium-term and long-term goals
11. Discuss how to write a business plan
12. Explain the financial planning process
13. Discuss ways to manage your risk
14. Describe the procedure and formalities for applying for bank finance
15. Discuss how to manage their own enterprise
16. List the important questions that every entrepreneur should ask before starting an enterprise

UNIT 5.6.1: Market Study/ The 4Ps of Marketing/ Importance of an IDEA: Understanding Market Research

Unit Objectives

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

- Discuss how market research is carried out
- Describe the 4Ps of marketing
- Discuss the importance of idea generation

Resources to be Used

- Participant Handbook
- Chart papers
- Markers/pens
- Blank sheets of paper

Ask

- Suppose, you want to open a restaurant, what are the factors you will consider?
- How will you promote your restaurant?

Example

- Let's have a look at this example.
Arjun was an MBA working in a company. But he wanted to start a low-cost budget hostel for foreign tourists coming to India. He did a lot of market research before starting the project. Based on the information he gathered, he made his business plan. His hostel is now flourishing, and he is thinking of expanding to other tourist destinations.

Say

- Discuss "Market Study" with the participants. Refer to the Participant Handbook.
- Let's learn about market study and research with the help of an activity.

Team Activity

Market Study

- This is a group activity.
- You want to start your own tuition centre.
- What type of research will you do?

Activity De-brief

- Ask each group to come forward and give a brief presentation.
- Encourage other groups to be interactive and ask questions.
- What factors did you keep in mind while doing your research?
- Based on our research would you go ahead and open a tuition centre?

Do 

- Instruct the participants that this is group work.
- Divide the class into small groups of 4 or 6.
- Give each group a chart paper.
- Tell the participants that they have to start their own tuition centre.
- Give the participants 10 minutes to discuss and write the research work they need to do.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Say 

- By opening a tuition centre you are offering a service.

Ask 

- What factors will you keep in mind before opening it?

Say 

- Discuss "The 4Ps of Marketing" with the participants as given in the Participant Handbook.

Say 

- Let's learn about the 4Ps of Marketing with the help of an activity.

Team Activity 

4Ps of Marketing

- This is a group activity.
- You have to sell a pen to four different segments:
 1. Rural villagers
 2. Rural middle class
 3. Urban middle class
 4. Upper end rich people (Niche market)

Keeping the 4Ps of Marketing in mind, what marketing strategy will you design to sell the pen?

Activity De-brief

- Ask each group to present their strategy.
- Encourage other groups to be interactive and ask questions.

Do

- Instruct the participants that this is group work.
- Divide the class into four groups.
- Give each group a chart paper.
- Assign each group a target audience for selling the pens:
 1. Rural villagers
 2. Rural middle class
 3. Urban middle class
 4. Upper end rich people
- Tell the participants that they have to design a marketing strategy keeping the 4Ps of Marketing in mind.
- Give the participants 20 minutes to discuss and come up with their strategy.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Activity De-brief

- Ask each group to come forward and give a brief presentation.
- Ask each group what they kept in mind while designing their marketing strategy.
- Encourage other groups to be interactive and ask questions.

Say

- Each entrepreneur has an idea of what he wants to sell. It may be a service or a product.
- Discuss "Importance of an IDEA" as given in the Participant Handbook.

Summarize

- Summarize the key points of the unit.
- Ask the participants what they learnt from the activities.
- Encourage them to ask if they have any doubts.

UNIT 5.6.2: Business Entity Concepts

Unit Objectives

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

- Recall basic business terminology

Resources to be Used

- Participant Handbook

Say

- Let's recall some basic business terminology.
- Discuss the Business Entity Concepts as given in the Participant Handbook.
- Let's learn some basic business terminology by having an activity.
- We will have a quiz today.

Activity

- The activity is a quiz.

Do

- Divide the class in two groups and give a name to each group.
- Explain the rules of the quiz. For each correct answer the group gets 1 mark.
- If the group is unable to answer the question is passed to the next group.
- Explain the purpose and duration of the activity.
- Ask the questions of the quiz.
- Keep a score of the groups.
- Set guidelines pertaining to discipline and expected tasks.

Summarize

- Summarize the unit by discussing the key points.

Notes for Facilitation

QUESTIONS FOR THE QUIZ

1. What does B2B mean?

Business to business

2. What is a financial report?
A comprehensive account of a business' transactions and expenses
3. Who is a sales prospect?
A potential customer
4. How is working capital calculated?
Current assets minus current liabilities
5. What is an estimation of the overall worth of a business called?
Valuation
6. You are buying a house. What type of transaction is it?
Complex transaction
7. How will you calculate the net income?
Revenue minus expenses
8. How is Return on Investment expressed?
As percentage
9. How will you calculate the cost of goods sold?
Cost of materials minus cost of outputs
10. 10. What is revenue?
Total amount of income before expenses are subtracted.
11. What is a Break-Even Point?
This is the point at which the company will not make a profit or a loss. The total cost and total revenues are equal.
12. What is the formula used to calculate simple interest?
 *$A = P(1 + rt)$; $R = r * 100$*
13. What are the three types of business transactions?
Simple, Complex and Ongoing Transactions
14. The degrading value of an asset over time is known as
Depreciation
15. What are the two main types of capital?
Debt and Equity

UNIT 5.6.3: CRM & Networking

Unit Objectives

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

- Discuss the need for CRM
- Discuss the benefits of CRM
- Discuss the need for networking
- Discuss the benefits of networking

Resources to be Used

- Participant Handbook

Ask

- Can your business run without customers/buyers?
- Who is the most important entity in any business?

Say

- The key to every successful business lies on understanding the customer's expectations and providing excellent customer service.
- Discuss about CRM and its benefits. Refer to the Participant Handbook.
- Providing excellent customer service entails:
 - Treating your customers with respect.
 - Be available as per their need/schedule.
 - Handling complaints effectively.
 - Building long-lasting relationships.
 - Collecting regular feedback.
- Handle customer complaints proactively. Ask "what happened", "why it happened", "how can it be avoided next time", etc.
- Collecting feedback from the customers regularly will enable you to improve your good/service.
- "Let's understand it better with the help of some case scenarios. You will be given some cases within your groups. You have to analyse the case scenario that has been given to you and then find an appropriate solution to the problem."

Do

- Divide the class into four groups of maximum six participants depending on the batch size.
- Give one case study to each group.

- Instruct them to read the case carefully.
- The group is expected to analyse and discuss the case amongst them and find a solution to the given problem.
- Put down the discussion points (de-brief questions) on the board. Give the class 5-10 minutes to discuss the case and note down their solutions.
- At the end of 10 minutes, the team should present their case solution to the class.

Team Activity

Case Study Analysis

Raju runs a business of wooden furniture. He has a huge list of customers on Facebook and WhatsApp who give him orders regularly. Ankita is one of his old and regular customers. She placed an order for a new chester and TV cabinet via WhatsApp and requested Raju to send them as soon as possible. When the parcel reached Ankita through courier she found that chester was broken and the TV unit was chipped from the bottom. Ankita was heartbroken. It was a complete waste of money. She sent a message to Raju on WhatsApp, expressing her anger and disappointment. Raju might lose an old customer forever if he doesn't satisfy the customer. What should Raju do to retain his customer?

Scenario 2

Rajni runs a boutique shop. She sells suits and sarees. She is one of the most successful designers in her city. Rajni swears that all the clothes in her boutique have unique designs. Smita has to attend her cousin's wedding; she goes to Rajni's boutique to buy a saree. Smita wanted a unique designer saree. Rajni customized a saree for her and sent it over the courier. When Smita had a look at the saree she realised her two friends had the same design sarees. She sent a message to Rajni on WhatsApp, expressing her anger and disappointment. Did Rajni make a false promise? Were her designs copied? What could happen to Rajni's image after this incident? What would you do if you were in Rajni's place?

Scenario 3

Shama is a beautician who offers parlour services to ladies by making home visits. Recently, Shama got her name registered on an e-commerce website. Two days earlier, she got a message from Mrs Sushma. The appointment was fixed for next day, 11:00 am and the remuneration for the services was decided beforehand. When Shama reached there at 10:50 am, Mrs Sushma was not at home. When Shama called her, she asked her to wait for a while. Mrs Sushma reached home at 11:45 am. Meanwhile, Shama had to reschedule her next appointment. After availing Shama's services, Mrs Sushma refused to pay the requisite amount and started finding faults in the services provided by her. Who was at fault in this scenario? What should you do in case the customer behaves unreasonably? What would you do if you were in Shama's place?

Scenario 4

Shailender is the manager of a car showroom. He proactively takes part in all the transactions that happen in his showroom. Vinita wants to buy a new car. She has chosen a car from Shailender's showroom. The salesperson has given her a very good discount and has also promised free service for one year. Vinita goes to the showroom and asks to complete all the formalities to purchase the car. When she sees the final bill she realizes that she has not received the promised discount neither was there any mention of the free services. She immediately demands to see the Shailender. When Shailender's head asks how much discount Vinita was promised, he realized the discount will make the sale in loss. The car showroom owner might lose a customer and deal due to false commitments made by his manager. Besides, the customer might tell this to other people, creating a bad name and image for the showroom. If you owned that showroom, how would you have convinced your customer?

Say 

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

Do 

- Congratulate each group for the presentation/role play.
- Ask the audience to applaud for them.
- Keep a check on time. Tell the group to wind up the discussion quickly if they go beyond the given time limit.

Say 

- If your customers are happy with you they will give referrals which will help to grow your business.
- One more way of growing business is 'Networking'.
- Discuss Networking and its benefits. Refer to the Participant Handbook.

Activity 

Group Discussion

- Conduct a group discussion in the class on how they can do networking for their business.

Summarize

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

UNIT 5.6.4: Business Plan: Why Set Goals?

Unit Objectives

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

- Discuss the importance of setting goals
- Differentiate between short-term, medium-term and long-term goals
- Discuss how to write a business plan
- Explain the financial planning process
- Discuss ways to manage your risk

Resources to be Used

- Participant Handbook
- Chart papers
- Blank papers
- Marker pens
- Ruler

Ask

- Remember we had written SMART Goals in a previous session? Let's try and recall why it is important to set goals?
- While framing SMART goals, we talked about 'T' in SMART, which was 'Time Bound'? What do we mean by time bound goals?
- What time limit did you set for your goal - 3 weeks, 3 years, 10 years?

Say

- Talk about short term, long term and medium-term goals, as discussed in the Participant Handbook.

Ask

- As you are planning to become an entrepreneur, you must have thought of an idea for a start-up. What is your business idea?

Do

- Ask few participants to share their business ideas.

Ask 

- Have you created a business plan for your business idea?
- Do you think it is important to have a business plan in place? Why/ why not?

Say 

- Talk about 'Why Create a Business Plan' as discussed in the Participant Handbook.
- Let's understand it better with the help of an activity.

Team Activity 

Writing a business Plan

- This is a group activity.
- Give the groups the required resources such as chart paper and markers.
- This activity is divided into two parts:
 1. Create a business idea
 2. Develop a business plan
- The group will discuss and come up with a new business idea and present their idea to the class.
- In the second part of the activity the group will develop a business plan for the business idea.
- The business plan prepared will be presented by the groups to the class.

MY BUSINESS PLAN
Executive Summary: What is your Mission Statement?
Business Description: What is the nature of your business?
Market Analysis: What is your target market?
Organization and Management: What is your company's organizational structure?
Service or Product Line: What is the lifecycle of your product/ service?
Marketing and Sales: How will you advertise and sell your products?
Funding Request: How much fund is required and from where?

Say

- Teams will need to brainstorm for this part of the activity.
- Use the blank papers for the second part of this activity
- Make your business plan on a chart paper based on the following parameters:
 1. Executive Summary
 2. Business Description
 3. Market Analysis
 4. Organization and Management
 5. Service or Product Line
 6. Marketing and Sales
- Explain each parameter in detail as done in the Participant Handbook.
- Discuss each parameter with the business idea examples of the groups.
- Groups will discuss and develop the business plan for their business idea.

Say

- Now, let's share our plan with the class.
- Each group will briefly describe the plan to the class.
- Post presentation, the other groups may ask questions to the group who have presented their plan.

Do

- Congratulate each group for sharing their points.
- Ask the audience to applaud for them.
- Keep a check on time. Tell group to wind up the discussion quickly if they go beyond the given time limit.

Say

- Along with a business plan, you need to create a financial plan and evaluate the risk involved with your start up.
- Discuss 'Financial Planning' and 'Risk Management' in detail as given in the Participant Handbook.

Summarize

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

Notes for Facilitation

- Keep the business plan format ready in a flipchart to display it during the activity.

UNIT 5.6.5: Procedures and Formalities for Bank Finance

Unit Objectives

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

- Discuss the importance of setting goals
- Differentiate between short-term, medium-term and long-term goals
- Discuss how to write a business plan
- Explain the financial planning process
- Discuss ways to manage your risk

Resources to be Used

- Participant Handbook
- Bank loan/finance form sample

Ask

- While preparing a business plan in the last session, we discussed financial planning to arrange financial resources for your start-up. Therefore, how will you collect funds to start your business?

Say

- While most entrepreneurs think 'product' is the most difficult thing to decide for a business, start-up capital poses an even a bigger obstacle. Though there are various ways of funding the business, to convince investors to invest money is the most challenging.
- Some of the funding options available in India are:
 - Bootstrapping: Also called self-financing is the easiest way of financing
 - Crowd funding: Funds are collected by consumers pre-ordering or donating for starting the business.
 - Angel investors: Individual or group of investors investing in the company
 - Venture capitalists: Venture capitals are professionally managed funds who invest in companies that have huge potential. They usually invest in a business against equity.
 - Bank loans: The most popular method in India.
 - Microfinance Providers or NBFCs
 - Government programmes
- Let us know discuss the most popular method i.e. bank finance in detail here.

Do

- Discuss the list of documents that are required to apply for a loan like letter of introduction, business brochure, references of other banks, and financial statements.
- Explain the details to be filled in a loan application form.
- Divide the class into groups. Give each group a loan application form.
- Ask the groups to discuss and fill the form.

Summarize

- Close the discussion by summarizing the important documents needed for bank loan.
- Ask the participants if they have any questions related to what they have talked about so far.

Notes for Facilitation

- Checklist of documents is provided as resources for the session.
- You can make some copies and distribute it during the group activity.
- Download sample loan application forms from any nationalised bank's website. Print sufficient copies to circulate it amongst the groups.

CHECKLIST OF DOCUMENTS TO BE SUBMITTED ALONG WITH LOAN APPLICATION (Common for all banks)

1. Audited financial statements of the business concern for the last three years
2. Provisional financial statements for the half - year ended on _____
3. Audited financial statements of associate concern/s for the last three years
4. Copy of QIS II for the previous quarter ended on _____
5. Operational details in Annexure I
6. CMA data for the last three years, estimates for current year and projection for the next
7. Term loan/DPG requirements in Annexure II
8. List of machinery in respect of machinery offered as security in Annexure III
9. Additional details for export advances furnished in Annexure IV
10. Property statements of all directors/partners/proprietor/guarantors
11. Copies of ITAO of the company for the last three years
12. Copies of ITAOs/WTAOs of the directors/partners/proprietor and guarantors
13. Copies of certificate from banks and financial institutions certifying the latest liability with
14. Copy of board resolution authorizing the company to apply to your bank for the credit facilities mentioned in application

15. Copy of memorandum and article of association (in case of limited company)/partnership deed (in case of partnership firm)

16. Cash budget for the current year and next year in case of contractors and seasonal industries.

UNIT 5.6.6: Enterprise Management – An Overview: How to Manage Your Enterprise?

Unit Objectives

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

- Discuss how to manage their own enterprise

Resources to be Used

- Participant Handbook

Ask

- Having set up a business, do you think it is possible to do everything on your own?
- Does one require trained persons for help?
- What does management mean?

Say

- Let's have a look at this example:

Kapil had a small business that was beginning to pick up pace. He wanted to expand his business, and therefore employed few more people. One day, as he was walking past Ramesh, one of his new employees, he overheard Ramesh talking rudely to a customer on the phone. This set him thinking. Kapil realised that he should have regular team meetings to motivate his employees and speak with them about any problems they might be facing during work. He should also conduct training sessions on new practices, so skills, and technology, and develop work ethics manual for managing his enterprise.

Say

- Was Kapil correct in his approach or he should have scolded Ramesh instantly in front of his other employees?
- Discuss "Enterprise Management – An Overview" with the participants as given in the Participant Handbook.

Say

- Let's learn how to effectively manage an enterprise or business through an activity.

Team Activity

Enterprise Management

- This is a group activity.
- Design a matrix listing the topics and key words that are needed to run an enterprise effectively and smoothly.

Activity De-brief

- Have each group present their matrix.
- Encourage participants of the other groups to ask questions about each other's presentation.

Do

- Instruct the participants that this is group work.
- Divide the class into small groups of 4.
- Give each group a chart paper and coloured pen.
- Tell the participants that they have to make a matrix they need to fill.
- They have to write the main topics and key words that will help them effectively manage their enterprise.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Summarize

- Ask the participants what they have learned from this exercise/activity.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the importance of effective management to run an enterprise as given in the Participant Handbook.

UNIT 5.6.7: 20 Questions to Ask Yourself before Considering Entrepreneurship

Unit Objectives

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

- List the important questions that every entrepreneur should ask before starting an enterprise

Resources to be Used

- Participant Handbook
- Blank sheets of paper
- Pens

Ask

- Why do you want to become an entrepreneur?

Say

- It is very important to know why you want to become an entrepreneur. Your personal goals for becoming an entrepreneur play a key role in the success of your business. Your goals should be clear well before you start your business.
- Apart from the goals, the other aspects of business that you need to bear in mind are the potential problems that you may face to set-up, your areas of interest, and all the other dimensions of the business.
- Let's understand it better with the help of some questions that every entrepreneur should ask before starting their own business.
- Open the Participant Handbook section named '20 Questions to Ask Yourself Before Considering Entrepreneurship'. You have to answer the questions individually.
- Then, we will have a class discussion on all the questions.

Do

- Read out the questions one by one in front of all the participants.
- Participants have to answer all the one by one questions.
- Give the class 10-15 minutes to note down their answers.
- At the end of 15 minutes, open the discussion for all the questions.
- Moderate the discussion by focusing on the relevant points.

- Keep a check on time and don't let the discussion get sabotaged or lose track of time. Ensure all the questions are covered and discussed.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Summarize

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



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& ENTREPRENEURSHIP



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Corporation

Transforming the skill landscape



6. Annexures

Annexure 1 – Training Delivery Plan

Annexure 2 – Assessment Criteria

Annexure I

Training Delivery Plan

Training Delivery Plan			
Program Name:	Certificate Course in LED Light Repair Technician		
Qualification Pack Name & Ref. ID	LED Light Repair Technician (ELE/Q9302)		
Version No.	V1.0	Version Update Date	07-12-2015
Minimum Educational Qualification	ITI		
Maximum Educational Qualification	Diploma		
Training Outcomes	<p>By the end of this program, the participants will be able to:</p> <ol style="list-style-type: none"> 1. Find and repair component-level fault 2. Find and repair LED strip-level fault 3. Achieve productivity and quality standards 4. Interact with supervisor or superior 5. Coordinate with colleagues 6. Understand potential sources of accidents 7. Use safety gear to avoid accidents 8. Understand the safety procedures followed by the company 		

Sl. No	Module Name	Session Name	Session Objectives	NOS Reference	Methodology	Training Tools/Ads	Duration
1	Basic Electronics	Introduction to basic electronics	<ul style="list-style-type: none"> Understand company's various policies like Health and Hygiene, environment, quality, fire and safety, child labour, incentives, personnel management, work flow, individual's role in organization, organization structure, profile of customer etc Identify the circuit components Understand the electrical properties of different components Calculate resistance by identifying the colour code. Understand the functionality of coil. Perform winding of coil., Biasing of transistor. Understand working of Current 	ELE/N9302 PC1, PC2, PC3, PC5, PC6, PC7, PC8, PC9, PC10, PC11, PC12, KA5, KB1,KB2	Facilitator-led – Discussion	<ul style="list-style-type: none"> Multimeter Diode Resistor Capacitor Transistor (BJT, FET) 	5 hrs

			<ul style="list-style-type: none"> amplification on circuit. Perform designing of filter. Identify types of LED 				
2	Employability skills	Team coordination	<ul style="list-style-type: none"> Perform planning, Problem Solving, team coordination, Decision Making, Reflective thinking, Critical Thinking, multitasking, process disruption and delays, Improving work process Interact with Supervisor and Colleagues Follow Safety Standards 	ELE/N9302 PC19, PC20, KA3, KA4, KA5, KB3, KB4, SA3, SA4, SA5, ELE/N9919 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, PC11, PC12, KB1, KB2, SB1, SB2,	Facilitator-led – Discussion Demonstration	<ul style="list-style-type: none"> Breadboard Veroboard Inductor Resistor Capacitor Transistor (BJT, FET) Transformer Soldering Iron Soldering wire Desoldering pump 	6 hrs
3	Measuring tools and instruments	Introduction to multimeter	<ul style="list-style-type: none"> Understand the functionality of multimeter Explain different modes of testing in multimeter Ensure the probes of the multimeter is connected properly before any particular test. Handle regulated power supply unit. Follow proper safety methods before attaching a 	ELE/N9302 PC7, PC8, PC9, PC11, SB3, SB6 ELE/N9921 PC8, PC9, PC15, PC16, PC19, KA1, KB1, KB2, KB5, KB6, KB7, SA6, SA7	Facilitator-led – Discussion Demonstration	<ul style="list-style-type: none"> AC to DC regulated power supply Ammeter Voltmeter Multimeter Power meter. 	6 hrs

			<p>light for testing.</p> <ul style="list-style-type: none"> Understand precautions dealing with AC & DC current 				
4	Assembly Section	Soldering Process and ESD	<ul style="list-style-type: none"> Understand operation of SMT machine in case of replacement. Perform soldering of semiconductor devices following safety measures. Understand use of ESD gloves while dealing with LED's. 	ELE/N9302 PC2, PC3, PC4, PC5, PC6, PC7, KA5, KB4 ELE/N9921 PC7, PC5, PC12, PC19, SA6,	Facilitator-led – Discussion Demonstration	<ul style="list-style-type: none"> SMT machine Reflow oven Manual screen printer PCB Soldering Iron Soldering ware Desoldering pump 	7 hrs
5	Test and Measurement 1	Introduction to testing of assembled circuit	<ul style="list-style-type: none"> Find the required test point while checking of a assembled circuit. Check proper connectivity while testing the driver circuit Select proper temperature for soldering of components while using temperature controlling solder iron Discuss with senior about any kind of major failure in a circuit. 	ELE/N9302 PC5, PC6, PC7, PC8, PC9, PC10, PC11, PC12, PC14, PC16, PC17, PC18, PC19, KB3, KB4, A3, SA4, SB1, SB2 ELE/N9919 PC7, PC8, SB1, SB2	Facilitator-led – Discussion Demonstration	<ul style="list-style-type: none"> AC to DC regulated power supply AC to AC regulated power supply LED Driver Tester Stripper Cu er Screw driver set 	7 hrs

			<ul style="list-style-type: none"> Complete Base Assembly, Comple ng Heat Sink Assembly, Joining base assembly with heat sink assembly 				
6	Test and Measurement 2	Introduction to tes ng of assembled circuit	<ul style="list-style-type: none"> Explain the principal of illumination from a LED. Explain the proper es of LED e.g lumen, Flux, e cacy, CRI etc. Perform tes ng of the above men oned parameter s using a lamp analysis system. Replace a malfunctioning LED iden fying the reason of the malfunctioning. 	ELE/N9302 PC5, PC6, PC7, PC8, PC9, PC10, PC11, PC12, PC14, PC16, PC17, PC18, PC19, KB3, KB4, A3, SA4, SB1, SB2	Demonstration	<ul style="list-style-type: none"> Stripper Cu er Screw driver set Mul me ter AC to DC regulated power supply AC to AC regulated power supply Integrating Sphere Spectroradiometer LUX meter Power meter 	6 hrs
7	Service and Maintenance	Fault analysis	<ul style="list-style-type: none"> Explain various blocks of a LED light driving circuit. Analyze the fault by approaching each block. Select alternate spare in case of unavailability of components. 	ELE/N9302 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, PC11, PC12, PC13, PC14, PC15, PC16, PC17, PC18, SA3, SA4, SA5, SB2, SB4, SB5	Facilitator-led – Discussion Demonstration	<ul style="list-style-type: none"> Stripper Cu er Screw driver set Plier Mul me ter Soldering pump Soldering iron 	6 hrs

			<ul style="list-style-type: none"> • Ensure the fault before demounting any element from the circuit • Continue the test process until the every test process is checked properly. • Ensure that the repaired lighting system is ok before sending it to mechanical assembling 				
8	Basic reading and writing skills	Documentation process	<ul style="list-style-type: none"> • Document the number of PCB, processed, components processed inwards and outwards, to have basic co-ordinate geometry for understanding X-Y coordinates on PCB, to deliver frame to next work process, read feeder charts and board designs, understanding BOM, to improve overall work process. 	ELE/N9302 SA1, SA2	Facilitator-led – Discussion Demonstration		4 hrs
9	Interaction with customers and colleagues, concept of	Communication process.	<ul style="list-style-type: none"> • Understand the requirements. • Communicate effectively. Understand building of team 	ELE/N9919 PC1, PC5, PC7, PC8, PC11, PC12, KA3, KA4, KB1, KB2, SB1, SB2	Facilitator-led – Discussion Demonstration	<ul style="list-style-type: none"> • Projector • Laptop 	5 hrs

	team work		coordina o n. • Take feedback of customer sa sfac on				
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Annexure II

Assessment Criteria

CRITERIA FOR ASSESSMENT OF TRAINEES

Assessment Criteria for "LED Light Repair Technician"	
Job Role	LED Light Repair Technician
Qualification Pack	ELE/Q9302
Sector Skill Council	Electronics Sector Skills Council of India
<p>Guidelines for Assessment</p> <ol style="list-style-type: none"> Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC. The assessment for the theory part will be based on knowledge bank of questions created by the SSC. Individual assessment agencies will create unique question papers for theory and skill practical part for each candidate at each examination/training centre. SSC will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria. To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS. 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. In case of unsuccessful completion, the trainee may seek reassessment on the qualification pack. 	

NOS	Assessment Strategy Performance criteria	Marks Allocation		
		Total	Theory	Practical
1. ELE/N9302 Diagnose and repair fault in LED Light	PC1. connect the non-functional LED Light with the AC source and switch it on	2	1	1
	PC2. check that there is no loose, de-soldered wires and connections if the light does not switch on	2	1	1
	PC3. solder wires and make connections in case of loose, de-soldered wires and connections to make the light operational again	2	1	1
	PC4. dismantle the LED light if no loose, de-soldered wires and connections are found externally	2	1	1
	PC5. check the LED light engine with DC supply as per the voltage / current requirements of the product	2	1	1
	PC6. replace the LED light engine if it is found faulty	3	1	2

	PC7. check the supply unit with AC supply / mul meter to find out the voltage / current output in case LED light Engine is not found defective	3	1	2
	PC8. check voltage / current output at different sections of the supply unit with mul meter to find out its damaged section in case of no voltage / current output found in supply unit	2	1	1
	PC9. check the components with mul meter individually of the section where voltage output is found to be less than desired / no output	3	1	2
	PC10. repair / replace the damaged components / SMPs	3	1	2
	PC11. check output voltage/current of the supply unit again with mul meter	3	1	2
	PC12. reassemble the LED light if repaired / replaced supply unit is found okay	3	1	2
	PC13. connect the non-functional LED Light with the AC source and switch it on	5	2	3
	PC14. check how many LED strips are non-functional / damaged from the array of LED strips in the light	5	3	2
	PC15. remove the glass shell from the LED light	5	2	3
	PC16. replace the burnt out / damaged LED strips	5	2	3
	PC17. check the LED array after connecting it with AC source and switching it on	5	2	3
	PC18. replace the glass shell on the LED Light and close it if all the strips are found operational	5	2	3
	PC19. correctly find the root cause of non-functional LED light and repair it in minimum possible time	8	3	5
	PC20. document the fault diagnosis and repair process as per SOP	8	3	5
	PC21. assemble all the parts as per the product design to create LED luminaire	8	3	5
	PC22. assemble the product right first time so that rework is not required	8	3	5
	PC23. meet 100% daily target of defect free assembled LED luminaires	8	3	5
	Total	100	40	60
	PC1. understand work requirements by receiving instructions from reporting supervisor	6	2	4
	PC2. understand standard operating procedure of the company	6	2	4
	PC3. escalate problems that cannot be handled including repetitive PCB defects, machine failures, potential hazards, process disruptions, repairs and maintenance of machine	6	2	4
	PC4. report work completed and receive feedback on work done	6	2	4
	PC5. resolve personnel issues	7	3	4

2. ELE/N9919 Work with superiors and colleagues	PC6. rectify errors as per feedback and minimize mistakes to zero in future	7	3	4
	PC7. communicate about process flow improvements, quality of output, product defects received from previous process, repairs and maintenance of tools and machinery as required and find technical solutions on specific issues	7	3	4
	PC8. handover completed work and deliver the work of expected quality despite constraints	7	3	4
	PC9. collect required spares and raw materials from tool room or stores	8	3	5
	PC10. deposit unused or faulty materials, parts and tools to stores	8	3	5
	PC11. assist colleagues where necessary and as per capability	8	3	5
	PC12. resolve conflicts with colleagues at work to achieve smooth workflow	8	3	5
	PC13. complete rework in time based on feedback from quality or process departments	8	4	4
	PC14. put team over individual goals	8	4	4
Total		100	40	60
3. ELE/N9921 Follow safety standards	PC1. spot and report potential hazards on time	5	2	3
	PC2. follow company policy and rules regarding hazardous materials	5	2	3
	PC3. avoid accidents related to use of potentially dangerous chemicals, gases, sharp tools and hazards from machines which involves exposure to possible injuries such as cuts, bites, stings, minor burns, etc.	5	2	3
	PC4. Handle with care when using an electrical drill and sharp cutting objects	5	2	3
	PC5. understand which safety gear must be used for a particular task	6	3	3
	PC6. eye, respiratory and hearing protection as per company policy	7	3	4
	PC7. use safety gear such as respirator, mask, skull caps, gloves, goggles, jacket, etc., as prescribed for the job	7	3	4
	PC8. comply with standard health and safety procedure followed in the company while handling an equipment and hazardous materials and tools or situations	10	4	6
	PC9. understand and follow the evacuation procedure properly such as fire drills, emergency evacuation procedures, first aid to self and others, etc., which help in case of an emergency	10	4	6
	PC10. take adequate safety measures while on work to prevent accidents	4	2	2
	PC11. ensure zero accidents in work	4	2	2
	PC12. avoid damage of components due to negligence in ESD procedures	4	2	2

PC13. ensure no loss for company due to safety negligence	4	2	2
PC14. ensure proper machine maintenance, work process achieving quality outputs as per the company standard	4	2	2
PC15. improve process flow to reduce anticipated or repetitive hazards	4	1	3
PC16. report on mishandling of tools, machines or hazardous materials and on electrical problems that could result in accident	4	1	3
PC17. escalate about any hazardous materials or things found in the premises	4	1	3
PC18. report about any breach of safety procedure in the company	4	1	3
PC19. follow electrostatic discharge (ESD) measures for electronic component safety	4	1	3
Total	100	40	60

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.

Notes



Lined area for taking notes, enclosed in a thin orange border. The area contains 22 horizontal lines for writing.



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