



Facilitator Guide



Sector
Automotive

Sub-Sector
Automotive Vehicle Service

Occupation
Technical Service Repair

Reference ID: **ASC/Q1417, Version 1.0**
NSQF Level: **3**

**Car Washer
and
Assistant
Service
Technician**

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Automotive Skills Development Council

Sector Skill Council Contact Details:

Address: Sat Paul Mittal Building, 1/6, Siri Institutional Area,, Khel Gaon Road, New Delhi, Delhi 110049

Email: info@asdc.org.in

Phone: 011 4186 8090

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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. ”



Certificate

COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

AUTOMOTIVE SKILLS DEVELOPMENT COUNCIL

for

SKILLING CONTENT : PARTICIPANT HANDBOOK

Complying to National Occupational Standards of

Job Role/Qualification Pack: 'Car Washer and Assistant Service Technician'

QP No. 'ASC/Q 1417 Nsqf Level 3,'

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'Valid up to' date mentioned above (whichever is earlier)

Sunil K. Chaturvedi
Chief Executive Officer, ASDC

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About this Guide

Indian Auto Industry is one of the largest in the world. The industry is expected to contribute 10% to India's GDP as per Automotive Mission Plan 2016-26 and create 65 million additional jobs. The sector offers big potential for jobs across the length and breadth of the country. In line with the rapid technological advancement in this field, there are exciting prospects for a fulfilling career in this industry.

This book is designed to enable a candidate to acquire skills that are required for employment. The content of this book is completely aligned to the National Occupation Standards QP/NOS and conform to the National Skills Qualification Framework (NSQF).

The Qualification pack of an Automotive Service Technician (2 & 3 Wheelers), Level-4 includes the following NOS's which have all been covered across the units:

1. ASC/ N 1420: Carry out routine servicing and minor repairs of aggregates of two and three wheelers
2. ASC/ N 0001: Plan and organise work to meet expected outcomes
3. ASC/ N 0002: Work effectively in a team
4. ASC/ N 0003: Maintain a healthy, safe and secure working environment

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

Happy learning !!

Symbols Used



Steps



Time



Tips



Notes



Objectives



Do



Ask



Explain



Elaborate



Field Visit



Practical



Lab



Demonstrat



Exercise



Team Activity



Facilitation Notes



Learning Outcomes



Say



Resources



Activity



Summary



Role Play



Example

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GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



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Transforming the skill landscape



1. Introduction

Unit 1.1 – Introduction to Automobiles

Unit 1.2 – Classification of Automobiles

Unit 1.3 – Invention of Automobiles

Unit 1.4 – Job role of Auto Service Technician



Key Learning Outcomes

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

1. Acquire knowledge of automobile history
2. Describe different types of automobile
3. Classify automobile industry
4. Explain service process of automobile workshop

UNIT 1.1: Introduction to Automobile

Unit Objectives

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

1. Acquire required knowledge of automobile industry
2. Describe type of automobile

Resources to be Used

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

Do

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

Notes for Facilitation

- Ask the students about the expectations from the course.
- Invite students to participate. List the expectations on the whiteboard.
- Give the students a brief overview of what all will be covered in the program.
- Start with a positive and happy note.

Say 

- What they understand by the word Automobile.
- We all are familiar with the word Automobile. Auto means Self & Mobile means movement/propelled) Self Movement.
- We do also understand the meaning of automobile, it could be a car, two wheeler, bus etc. having its own engine and move using wheels for goods transport or carry passengers.
- The automobile word has been taken from ancient Greek word which combine auto means self and mobile means movable thus we can define automobile as a vehicle which can move by itself.
- Car is a name of automobile also seems to be taken from Latin word carrum which means wheeled vehicle or from French word cart.
- Automobiles are of different types i.e.
 - o AutoRikshaw
 - o Auto car
 - o Car
 - o Motor car
 - o Motor coach
 - o Horseless carriage
 - o Moped
 - o Scooter
 - o Truck
 - o Earth Moving Equipment
 - o Automobile
 - o Auto buggy
 - o Motor
 - o Motor vehicle
 - o Motor wagon
 - o Quadri Cycle
 - o Motor Cycle
 - o Bus
 - o Tractor
 - o Tumtum

Ask



- Ask them about their understanding for automobile industry.
- Ask about classification criteria of automobiles
- Ask about different parameters consider or vehicle classification

Notes for Facilitation



- You could ask the students who get out during the game to be the music keepers. They can start and stop the music as the game progresses.
- Encourage shy students to provide information about themselves by prompting them with questions such as 'what do you enjoy doing the most', 'what is your favorite movie or book' etc.
- List of different type of automobiles

UNIT 1.2: Classification of Automobiles

Unit Objectives

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

1. Classify automobiles based on industry and other parameters

Resources to be Used

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

Do

- Greet and welcome the participants to the next session of the program.

Say

- Automobiles are classified in two categories: passenger vehicles and cargo vehicles.
- There are different parameters on which automobiles can be classified i.e.:
 - o Purpose of transportation
 - o Capacity
 - o Fuel used
 - o Number of wheels
 - o Drive of the vehicles
- **Normally Automobile are Specified as:**
 - o **Type:** Car, truck, scooter, motorcycle, bus, earthmoving equipment etc...
 - o **Capacity:** 5 ton, 3 ton, 1 ton, 4-seater, 6- seater, 30-seater, 45-seater (Load- Passenger / Goods).
 - o **Manufacturer or Make of the Vehicle:** Tata, Maruti, Suzuki, Ashok Leyland, Mahindra, Honda, Hyundai, Toyota, Ford, Fiat, Chevrolet, Audi, Mercedes, Isuzu, Skoda, Volkswagen
 - o **Drive:** LHD: Left hand drive, RHD : Right and drive, Two wheel drive, Four wheel drive, Six wheel drive
 - o **Model:** Year of manufacturing or chassis code number. The vehicle identification number is the identification code (VIN) marked on each and every automobile.

- The VIN number is unique in nature and two vehicles cannot have same VIN as it is used as unique identification mark for the vehicle.

Explain

- How to classify the automobiles
- Classification of vehicle on different parameters
- What is VIN number

Ask

- Ask about classification criteria of automobiles
- Ask about different parameters consider or vehicle classification
- Ask about each and every letter and numeral in VIN stand for.
- Ask about few VINs of Indian Cars.
- Ask the students to get some VIN numbers and decipher what those vehicles were.

Notes for Facilitation

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

UNIT 1.3: Invention of Automobiles

Unit Objectives

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

1. Explain the history of automobile
2. Describe recent development in automobile industry

Resources to be Used

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

Do

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

Say

- Post World War II, Automobile Industry started on rapid modernization in the 50s and 60s. Many new models of cars were introduced like Edsel, Chevrolet etc.
- The Big Three of the car industry namely General Motors, Ford & Chrysler set about to design big fast moving cars for the American roads. Edsel, Buick, Pontiac Firebird, Chevrolet Impala etc. were some of the big cars that came on American highways in the 50s and 60s. All this made owning and maintaining a car quite costly. Still, more and more Americans were buying these models. One very popular model from FORD was named 'MUSTANG'.
- Japan was developing cars for marketing worldwide, mainly in the USA. Actually, after the devastation of their country during the WW II, several Japanese companies came into existence like Toyota, Mazda, Mitsubishi, Suzuki etc.
- Cars like Mazda, were using American Technology. But, these companies were also developing their own research capabilities. As a result when the 1973 oil crisis occurred, these companies were very well positioned to roll out smaller, compact and economical models in USA.

- In 1983, Government of India started Maruti Udyog in collaboration with Suzuki of Japan. Maruti's first model called Maruti 800 became a big success. Within 5-6 years the company reached an annual production level of nearly 1,00,000 cars per year. They launched various models like 800, Gypsy, Omni van, Esteem, Zen, Baleno etc.
- By the end of 90s several other global multinational car makers also started manufacturing their models in India. Among them were, General Motors, Ford, Hyundai etc.
- Indian Auto industry started with import of cars in the 20s. Then the first manufacturing started in the 40s. With continued progress many Indian companies like Maruti, Tata, Mahindra have become very big global names. Now, they are not merely manufacturing European/American or Japanese designs, but they are doing so with their own research & development capabilities. As a result, Nano model was developed by TATA Motors.
- In India automotive industry is considered as one of the largest industry and also it is growing globally with a rapid speed. Indian automobile manufacturing industry in passenger car and commercial vehicle segment is on 6th position in the world having annual production more than 3.7 million. As per one of the report in passenger vehicle segment India is expected to surpass Brazil to become sixth largest producer in the world with a growth of 16 to 18 percent covering more than 3 million units.
- In passenger cars segment, during the year 2010 India became third largest exporter after Japan and Korea beating Thailand. As on year 2010, passenger vehicle population in India was having 40 million.
- In the year 2010 India produced more than 3.7 million automotive vehicle which reflect an increase of 33.9% and became second fastest growing automobile market in the world.
- Indian Automobile Manufacturers Society projected sales of vehicle around 5 million by the year 2015 and by 2020 it will go more than 9 million. It is expected that by the year 2050 India became top in car volume with around 611 million cars on Indian road.
- India's largest car manufacturer Maruti Suzuki is having its plant in Gurgaon and Manesar. Both these cities are part of Haryana and fall in northern cluster. Companies like General Motors, Volkswagen, Skoda, Mahindra and Mahindra, Tata Motors, Mercedes Benz, Land Rover, Fiat and Force Motors having assembly plants in Chakan corridor close to Pune falls in western cluster. Audi, Skoda and Volkswagen are based in Aurangabad which also a part of western cluster.

Explain



- Career opportunities in automobile industry in India
- List the name of car manufacturer's in India.

Ask



- Ask about major car manufacturers in India
- Ask about career opportunities in automobile industry in India

Notes for Facilitation



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

UNIT 1.4: Job Role of Auto Service Technician

Unit Objectives

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

1. Explain service process of automobile industry

Resources to be Used

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

Do

- Greet and welcome the participants to the next session of the program.
- On the basis of experience, ask 1-2 students to explain the job role of a car washer.
- If someone is experienced in the field, ask him/her to explain what has been their role so far.
- Also mention that a customer judges service quality on the basis of washing/cleanliness quality as this is the most visible aspect of service.

Say

- Automotive service technician is responsible for inspecting, maintaining, and repairing vehicles. Understand the issues on the vehicle from the Service Advisor / Front Desk/ Floor Supervisor and carry out necessary repairs /maintenance as described in the Job Card.
- The individual must be patient and have good listening ability with customer centric attitude is highly desirable to understand customer problem and also suggest preventive maintenance guidelines to customer like efficient fuel consumption, tyre life etc.
- The role of technician would primarily be to carry out repair jobs as communicated to them through the job cards, and any additional verbal instruction given by the Service Advisor.
- The Technicians Play an Important Role for the Workshop Profitably/ Efficiency/Productivity and Customer Satisfaction:
 - o A productive Workforce of technically sound people will ensure / customer satisfaction and retention.

- o A proper workshop has room for different work activities.
- o An organization chart defines the reporting structure of the workshop.
- o A well-defined service process ensures a smooth running of the workshop.
- Role of an Auto Service Technician
 - o **Vehicle Booking:** In this process the appointment is taken by the service advisor from the customer for the service job. When the customer calls for an appointment to service his vehicle the SA/Back Office will allot time and date for him to bring his vehicle to the workshop as per the work schedule.
 - o **Vehicle Receiving and job card opening:** the SA will receive booked vehicle and open a job order. The customer has to ensure that his vehicle details are correctly entered and the jobs and his vehicles problems are correctly recorded on the job card before signing the JC.
 - o **Job Allotment:** The workshop Supervisor allots the jobs to the technicians as per the schedule and priority and delivery commitments.
 - o **Work progress:** The technician's carries out the work as prescribed in the job order. On completion of the job the vehicle is sent for final inspection.
 - o **Final Inspection:** The quality tester will perform the final inspection of the vehicle. He ensures that the job requested by the customer is carried out and the reported problems in the vehicle are solved. He sent the vehicle to washing after his inspection.
 - o **Invoicing and vehicle Delivery:** After washing the vehicle comes to delivery section. The service Adviser will prepare an invoice mean final billing of the vehicle will be done. Service adviser will inform the customer about the vehicle readiness and upon arrival of customer the vehicle will be delivered to the customer after the bill amount is collected.
 - o **Post service Follow up:** The service adviser or the customer relation Executive (in some workshops) will call the customer after 3-4 days to take customer's feedback on the jobs done.

Explain



- The roles and responsibilities of a car washer and service technician.
- The career path of a car washer and service technician
- The remuneration and perks of a car washer and service technician.

Ask



- What are the role and responsibilities of a service technician
- What are the skills required for a service technician

Notes for Facilitation

- Summarize the main points.
- You could ask the students what they know about the need for car washer and service technician work.
- Give students some tips for how to become a successful car washer and service technician.
- Give the students a brief overview of what all will be covered in the program.
- Tell participants to complete the questions at the end of the unit.
- Ensure that every participant answer all the questions.



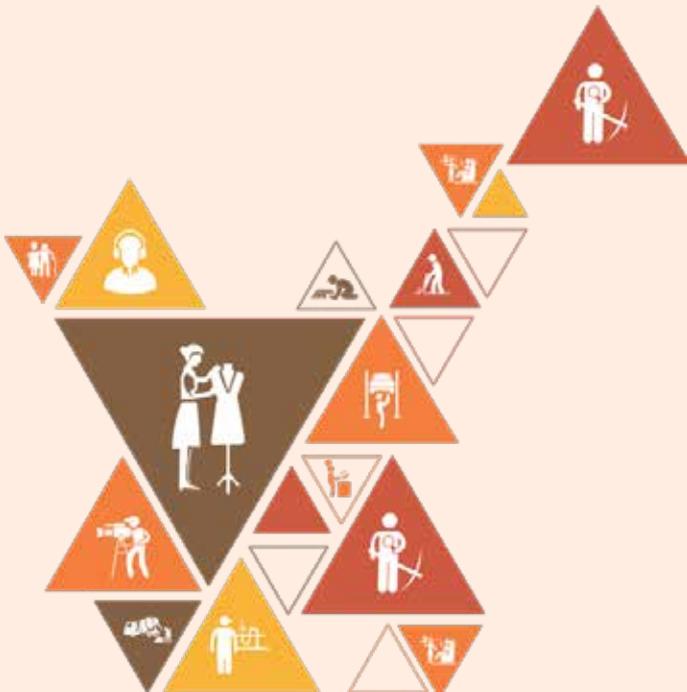
2. Assist in Service, Maintenance & Repair of the Vehicle

Unit 2.1 – Scope of Work & Job description

Unit 2.2 – Performance Criteria for Auto Service Technician

Unit 2.3 – Knowledge & Understanding: Auto Service Technician

Unit 2.4 – Skills: Automotive Technician



Key Learning Outcomes

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

1. Explain role of auto service technician in automobile service to meet required responsibilities
2. Explain the organizational context for the automobile service station
3. Operate various tools and equipment required for vehicle diagnostic
4. Operate various tools and equipment required for vehicle repair
5. Identify the various components of automobile
6. Explain the function of the major automobile components and subassembly
7. Demonstrate the working of the automobile major aggregates and sub-assemblies
8. Assist in diagnosing the defect and performance issues in various component / sub assemblies of the vehicle
9. Assist in routine servicing and maintenance requirements of the vehicles
10. Assist in repair job of major aggregates and sub assemblies of the vehicle
11. Help in preparing vehicle checklist
12. Help in preparing document for the repair work

UNIT 2.1: Learn Occupational Health & Safety

Unit Objectives

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

1. Explain the scope of work for an auto service technician
2. Perform the responsibility of auto service technician

Resources to be Used

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

Do

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

Say

- Assistant Auto Service Technician & Washer is also known as Helper, Mechanic's, Apprentice or Automotive Apprentice.
- **Brief Job Description:** An Assistant Auto Service Technician & Washer assists in service, maintenance and technical repair of vehicles (Other than Specialised jobs as well as highly trained skill requirement jobs such as AirBags, ECM, Immobilizer jobs etc.).
- **Personal Qualities:** The person working on this job profile must have the ability to communicate or interact well with other people and should be a team player also because nature of job involves coordination with other technicians.
- Automotive service technicians assist in inspecting, maintaining, and repair of the vehicle. They need to typically assist in following:
 - o Basic care and periodic maintenance, including changing oil, checking fluid levels and rotating tires
 - o Test parts and systems to ensure that they work properly

- o Identify problems in the vehicle, often by using computerized diagnostic equipment
- o Plan work procedures, using charts, technical manuals, and experience
- o Cross checking checklists to ensure that all critical parts are examined
- o Repair or replace worn parts, such as brake pads, wheel bearings, and sensors
- o Repairs to manufacturer and customer specifications
- **Your Role:** Assist in vehicle service, maintenance and technical repairs in a vehicle related to petrol, diesel, CNG, LPG, electric and hybrid vehicles.

UNIT 2.2: Performance Criteria for Auto Service Technician

Unit Objectives

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

1. Resolve customer queries for the repair requirements of the vehicle
2. Prepare vehicle check list as per organization SOPs
3. Assist in service process based on job card
4. Explain the organizational context for the automobile service station

Resources to be Used

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

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Bring actual Job card from some dealership and discuss each and every point / entry in it. What is to be noted where.

Say

- A job card is a sheet that contains details about the customer, vehicle, customer repairs requests, and instructions by service advisors, time and cost estimate, vehicle inventory and vehicle handover.
- On the Job Performance Criterion
 - o Securely park the vehicle at the proper designated place.
 - o Assist in organizing the secure parking area and moving vehicles around as directed by the supervisor.
 - o Place the vehicle on a suitable platform, before the repair work actually begins.
 - o Lift the raw materials, tools, finished products, and packed items, manually or using the hoists.

- o Study and understand the auto component manufacturer specifications, related to the various components / aggregates in the vehicle.
- o Be careful and ensure that service, maintenance and repair activities are carried out on the vehicle without causing damage to any other aggregate / component.
- o Be enthusiastic and quickly act on the directions given by your supervisor/ Sr. Technician like running errands and getting parts, tools, gauges, instruments, fixtures, workshop supplies, taking the vehicles to dealerships etc.
- o Assist in performing service or repair of vehicles under supervision of senior technician such as:
 - carrying out minor component repair or replacement
 - carrying out oil changes and lubrication
 - washing vehicles as per prescribed standard process
 - fetching correct materials or tools or gauges
 - mixing cleaning solutions, abrasive compositions, or other compounds
- o Dismantle aggregates like wheels, suspension system, steering column, braking system, engine assembly etc.
- o Check if all the issues raised by the customer and the points noted on the job card are attended.
- o If any issues are not attended, bring it to the notice of the supervisor and act to resolve the customer issues properly.
- o Count and report the serviced or repaired vehicles to determine if product orders are complete.
- o Assist in maintaining and managing the workshop, tools, equipment and machinery in required condition by:
 - Cleaning and lubricating equipment
 - Rinsing objects, tools and equipment and placing them on drying racks
 - Using cloth, squeegees or air compressors to dry surfaces
 - Cleaning and organizing the workshop
 - Placing tools on the shelf after use
 - Keeping workshop clean of debris
 - Diligently following the laid down 5-S Processes
- o Follow standard operating procedures specially vehicle service manuals for using workshop tools and equipment.
- o Ensure any malfunctions or repair requirements observed in vehicles (and beyond own scope of work) are reported to the concerned person.
- o Ensure any malfunctions observed in tools and equipment are reported to the concerned persons and assist in fitting and balancing the replaced and refitted parts.
- o Attend any trainings organized by the OEMs from time-to-time and upgrade yourself with the knowledge including the newly launched products and the modifications introduced by the OEMs. Be updated on the new Technical Bulletins / SOPS /Modifications received from OEM time

to time.

- Organizational Context
 - o SOP: Standard Operating Procedures of the organization / dealership for inspection, servicing and repair of vehicles.
 - o SOP: Standard Operating Procedures recommended by the dealership / suppliers / OEM for using tools and equipment, manufacturer instructions.
 - o Safety requirements for equipment and components / aggregates as prescribed by the OEM (e.g. preventing / dealing with oil spillage and inflammable materials).
 - o Documentation requirements for each procedure carried out, as part of roles and responsibilities as specified by OEM / autocomponent manufacturer.
 - o Organizational and professional code of ethics and standards of practice.
 - o Safety, health and environmental policies and regulations for the workplace, as well as for automotive trade in general (e.g. safe practices while working in pits/under vehicles).
 - o Workplace policies and schedules for housekeeping activities and equipment maintenance.

UNIT 2.3: Knowledge & Understanding - Auto Service Technician

Unit Objectives

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

1. Describe various automobile terminologies
2. Identify the various aggregate / subassemblies of automobile
3. Explain the function of the major automobile components and subassembly
4. Operate various tools and equipment required for vehicle diagnostic
5. Operate various tools and equipment required for vehicle repair
6. Demonstrate the working of the automobile major aggregates and sub-assemblies
7. Assist in diagnosing the defect and performance issues in various component / sub-assemblies of the vehicle
8. Assist in routine servicing and maintenance requirements of the vehicles
9. Assist in repair job of major aggregates and sub assemblies of the vehicle
10. Help in preparing vehicle checklist
11. Help in preparing document for the repair work

Resources to be Used

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

Do

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

2.3.1: Let us Study and Understand the Basic Functioning of Various Components and Aggregates of Vehicles

Resources to be Used



- Available objects like demo automobile, pen, duster, marker etc.

Say



Major systems and subsystems in a typical automobile are:

- Engines and fuel system (diesel, petrol, electrical, gas, hybrid etc.)
- Cooling system
- Air supply systems
- Emission and exhaust system
- Ignition systems
- Clutch assembly
- Clutch operating system
- Gearbox (manual and automatic)
- Drive lines and hubs
- Drive-train assembly and transmission systems (manual, automatic etc.)
- Steering system
- Suspension system
- Brake system (including regenerative braking systems)
- Tires and wheels (including wheel alignment)
- Radiator
- Batteries and power storage system
- Power-generating systems (including charging systems especially for electrical and hybrid vehicles)
- Electrical wire harness, lighting, ignition, electronic and air-conditioning systems etc.
- Energy recuperation systems, if applicable (e.g. in electric, gas and hybrid vehicles)
- Electronic systems including active and passive safety, media and other systems
- ECU : Electronic control unit
- Hydraulic and pneumatic system
- Various lubrication systems

Ask



- Ask about systems and subsystems available in an automobile.
- Ask about their understanding for the functioning of all systems and subsystems.

Do



- Show them all the systems and subsystems of automobile in workshop.
- Give them some brief about the working of all systems and subsystems of automobile with a demo.

Notes for Facilitation



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

2.3.2: Let us now Understand the Engine: “The Heart of the Automobile”

Resources to be Used



- Available objects like demo automobile petrol and diesel engine

Say



- Engine is the heart of an automobile.
- Engine is a machine having moving parts, which converts chemical energy of fuel to heat or thermal energy, and then to mechanical energy that is motion, which in turn moves the automobile.
- Engines are classified:
 - 1) Internal Combustion Engine
 - 2) External Combustion Engine
- Internal Combustion or IC Engines are divided into:
 - o Reciprocating Engine
 - o Rotary Engine
 - o Gas Turbine Engine
- Internal Combustion Engines are further divided into:
 - o Spark Ignition (Petrol Engine)
 - o Compression Ignition (Diesel Engine)
- Petrol engines can have carburetor, multi ports fuel injection, single point or multi point fuel injection.
- Diesel engines can have direct injection, indirect injection or Common rail direct injection system.
- Engines can be of various types, namely:
 - 1) Two stroke engine;
 - 2) Four stroke engine;
 - 3) Air cooled engines or water-cooled engines;
 - 4) Number of cylinders & arrangement of cylinders, like, Single Cylinder, Multi Cylinder, In-line Cylinder, V-type Cylinder, Opposed Pistons and Radial Piston Cylinder.

Elaborate



The main components of the engine are:

1. Cylinder block
2. Cylinder head
3. Piston
4. Piston rings
5. Connecting rod
6. Crank shaft
7. Fly wheel with ring
8. Cam shaft
9. Oil sump with oil pump
10. Crank & cam shaft gears

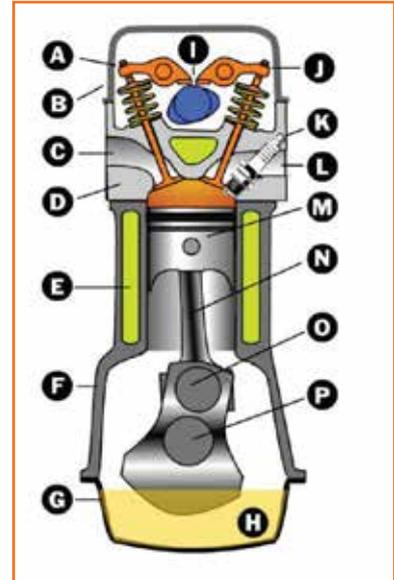


Fig: 2.3.1 Engine Cut Section to Show Internal Parts

Internal Combustion Engine

The internal combustion engine (IC Engine) is a type of heat engine. In IC engine combustion of fuel occurs in combustion chamber which is an integral part of the working fluid flow circuit.

External Combustion Engine

External Combustion Engine (EC engine) is a heat engine. In EC engine in an external source fuel is heated by combustion. The fluid, then, by expanding & acting on the mechanism of the engine, produces motion and usable work. Example: Steam.

Two Stroke Engine

Two-stroke, two-cycle, or 2-cycle engine is an example of IC engine. The two-stroke engine completes a power cycle in one crankshaft revolution with two strokes or we can also say piston movement in up and down direction.

Four Stroke Engine

A four-stroke engine which is also known as four-cycle is an IC engine. In four-stroke engine four separate strokes are completed which we are calling as compression, power and exhaust which take place during two separate revolutions of engine's crankshaft. It produces one single power stroke.

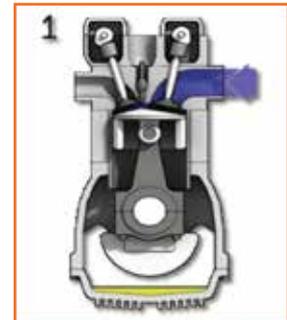


Fig: 2.3.2 Two Stroke Engine

Spark Ignition Engines

In spark-ignition engine, air-fuel mixture is ignited with the help of spark plug. The compression ratio of Spark Ignition engine is between six and ten. The Spark Ignition engine requires carburetor and an ignition system.

Diesel Engine

In this type of engine, air alone is compressed and self-ignition takes place when hot air comes in contact with a spray of a fuel with high pressure and high temperature.

The compression ratio of diesel is from 10 to 25. Diesel engine requires fuel injection pump and injectors.

Main Engine Terminology

Bore (measured in millimeters)	Inside diameter of the cylinder
TDC (Top Dead Centre)	Extreme position of the piston at the top of the cylinder
BDC (Bottom Dead Centre)	Extreme position of the piston at the bottom of the cylinder
Stroke length	Distance between TDC & BDC
Swept volume	Volume between TDC & BDC
Compression space	Space between piston & the cylinder head
Capacity, CC, Displacement	Capacity is indicated in liters
Clearance volume	Volume available above the piston, with the piston in top most point
Combustion (peak) pressure	Maximum pressure developed during combustion
Compression ratio	Ratio of volumes before & after compression

Table 2.3.1 Engine Terminology

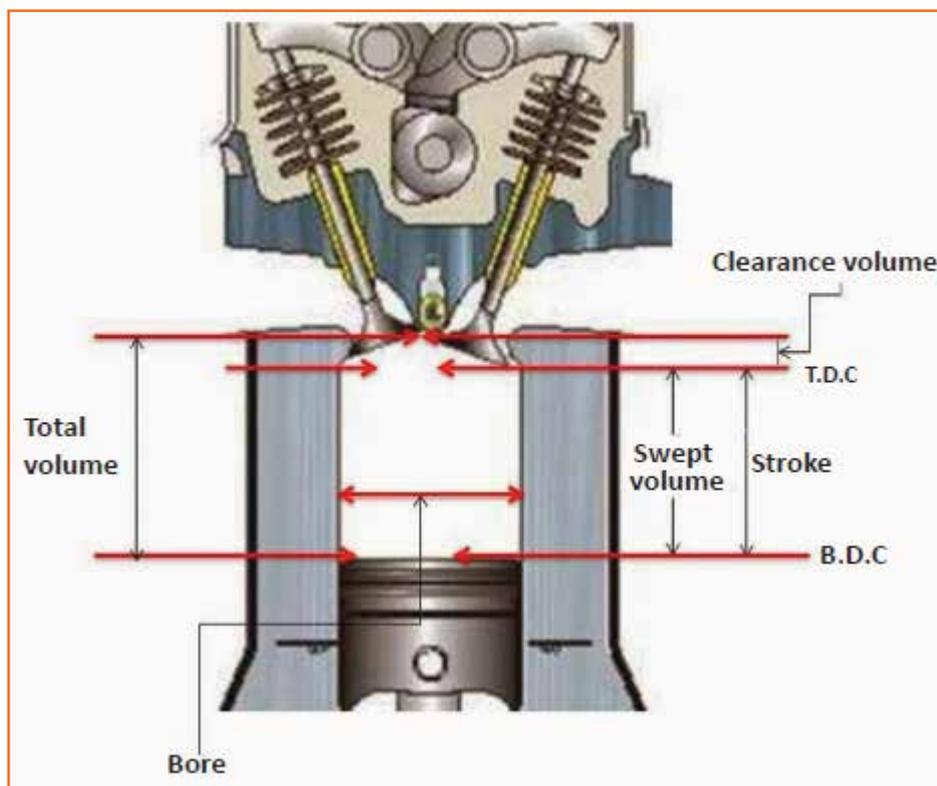


Fig: 2.3.3 Engine Terminology

Diesel Engine

Diesel engines are special type of internal-combustion engine. The main characteristic of diesel engines, which distinguishes them from other combustion engines, is the method of igniting the fuel. In a diesel engine the fuel is injected into the cylinder, which contains highly compressed air. During compression of the air in the engine cylinder the temperature of the air goes up so that when the fuel, in the form of fine spray, comes in contact with this hot air, gets ignited and as a result no other external means of ignition is required. For this reason diesel engines are also called compression-ignition engines.

Four-Stroke Diesel (Compression-Ignition) Engine Cycle

- **Induction:** The piston descends, drawing only air into the cylinder.
- **Compression:** The piston rises, compressing the air to a temperature well above the ignition temperature of the fuel, and the fuel ignites as it is sprayed in just before top dead centre (t.d.c.).
- **Power:** The high temperature of the burning fuel causes high gas pressures, which force the piston downward.
- **Exhaust:** The rising piston expels the exhaust gases.

Two Stroke Diesel Engine Cycle

- In this type of engine, a rotary blower is used outside the engine cylinder, which takes in the atmospheric air, compresses it slightly and feeds it to the engine cylinder through an air chamber and inlet port.
- When the piston is at bottom dead centre (b.d.c) the intake port and exhaust valve are open. Air enters the cylinder through the inlet port pushing the burnt gases out through the exhaust valve.
- When the piston moves up through, about one-fourth its stroke, the inlet port is covered and the exhaust valve is closed. With further movement of the piston upwards, the air is compressed. This compression continues till piston reaches t.d.c.
- Fuel is injected at this state and the heat of the air ignites it. The resulting gases expand and push the piston downward.
- The power stroke continues upto about three-fourths of the downward stroke of the piston, when the exhaust valve opens and burnt gases start to escape out of the cylinder.
- The inlet port is also opened by downward moving piston and fresh air entering the cylinder assists in exhausting the burnt gases. As the piston reaches t.d.c., the cycle is complete.

Difference between diesel and petrol engines

- In diesel engine, air alone enters the cylinder during intake stroke and compressed during compression stroke.
- Diesel engines use higher compression ratio. Typical compression ratio for petrol engine is 9:1 and for diesel engine is 16:1.
- In diesel engine, fuel is injected or sprayed into the combustion chamber. In petrol engine mixture of air and fuel is supplied by the carburetor.
- Diesel engines have no ignition system. High temperature of the compressed air is sufficient to ignite the fuel.

- Diesel engines run on less volatile, heavier liquid fuel than that of petrol engine.
- For the same power output, diesel engines are heavier than petrol engines.

Advantages of diesel (compression-ignition) engine as compared with petrol engine

- Higher thermal efficiency
- Good torque at low speeds
- Less minor maintenance required on injection equipment than on spark-ignition equipment
- Usually runs for longer periods between overhauls.

Disadvantages of diesel (compression-ignition) engine as compared with petrol engine

- Higher initial cost
- Rougher running, particularly at idling speeds
- Heavier than petrol engine for the same power output
- Noisier
- Greater starting difficulty

Classification of diesel engines

Diesel engines can be classified as:

- Operating cycle:
 - (i) Two-stroke cycle diesel engine
 - (ii) Four-stroke cycle diesel engine
- Piston action:
 - (i) Single-acting engine
 - (ii) Double-acting engine
 - (iii) Opposed-piston engine
- Piston connection:
 - (i) Trunk-piston engine
 - (ii) Crosshead type engine.

Fuel Injection

The method used for introduction and burning of fuel in diesel engine is totally different from that of petrol engine. The fuel is injected into the highly compressed hot air where it burns. The major requirements of fuel injection system are as follows:

- It must meter the fuel accurately i.e. the quantity of fuel supplied should be in accordance with engine load and also the same amount of fuel should be supplied to each cylinder for each power stroke.
- It must time the fuel injection properly i.e., fuel injection should begin at the required moment.
- It must atomize the fuel properly i.e. it should break up the fuel stream into mist like sprays.
- It must distribute the fuel in the combustion space properly i.e. fuel penetrates to all parts of the combustion chamber where oxygen is available.

There are two methods of fuel injection:

- **Air Injection:** This system is now seldom used. In this method, compressed air is supplied to the spray valve by a special air compressor, which is attached to the engine.
- **Mechanical Injection:** In this system, the fuel is forced in, from a mechanical fuel injection pump through injectors. This consists of:
 - o Low Pressure Fuel Supply System
 - o Metering Injection System

Combustion Chamber

In a compression-ignition engine, at the end of the compression stroke, the fuel is ignited in the combustion chamber. The following types of combustion chambers are used:

- Open Combustion Chamber
- Turbulence Combustion Chamber
- Pre-combustion Chamber
- Air Cell
- Energy Cell

Petrol Engine

All petrol engines are based on the same principle. If you mix petrol and air and then compress the mixture, a tiny spark will cause it to explode; the power of this explosion can be used to work an engine.

Basic Design: The basic petrol-engine design consists of a hollow metal cylinder, in which a close-fitting piston is free to move up and down. The piston is connected to a rod, which is pivoted where it joins the piston. At the other end of the rod, called the connecting rod, is a bearing that allows it to rotate on the crankshaft, which itself is free to rotate.

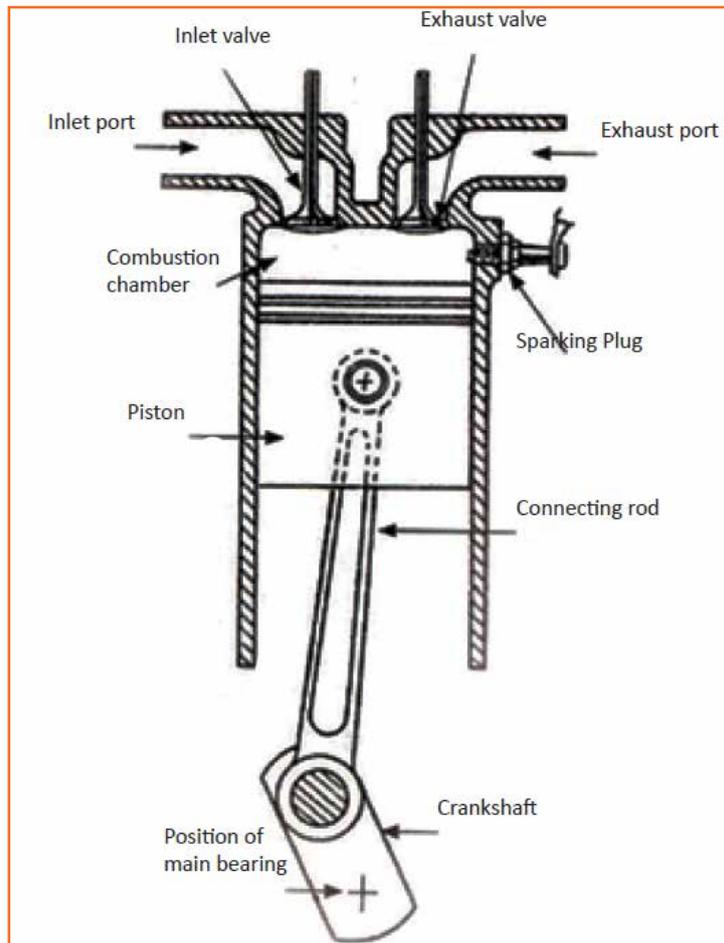


Fig: 2.3.4 Component Parts of the Basic Engine

Associated Terms

T.D.C. (top dead centre) —The position of the crank and piston when the piston is farther away from the crankshaft.

B.D.C. (bottom dead centre) —The position of the crank and piston when the piston is nearest to the crankshaft.

Stroke —The distance between B.D.C. and T.D.C. The stroke is controlled by the crankshaft.

Lead — Opening of valves before the time is known as lead, as opening of inlet valve even before the T.D.C. and opening of exhaust valve even before B.D.C.

Lag — Closing of valve after the time is called lag, as the inlet valve remains open even after T.D.C. and in the same way exhaust valve remains open even after T.D.C.

Overlap of valve — In most engines, the inlet valve opens at the time when the exhaust valve also remains open in the exhaust stroke. In this way both the inlet and exhaust valves remain open for some time. This timing is called overlap of valve.

Bore — The internal diameter of the cylinder.

Swept volume — The volume between T.D.C. and B.D.C.

Engine capacity — For piston engines, capacity of engine is called engine displacement or we can also say that in a single movement volume swept by all pistons of an engine. For larger engines engine capacity is measured in liters whereas for smaller engine measured in centimeters.

Engines having higher capacities are more powerful, consume more fuel but provide greater torque at lower rpm.

Clearance volume —The volume of the space above the piston when it is at T.D.C.

Compression ratio = Swept volume + Clearance volume/ Clearance volume

Brake horsepower (BHP): It is the power output of an engine at the flywheel.

$$\text{BHP} = 2\pi NT/4500$$

where N is rpm of the crankshaft and T is the torque produced.

Indicated horsepower (IHP) : It is the power developed in the engine cylinder.

$$\text{IHP} = P L A N \times K/4500$$

where,

P = Mean effective pressure in kg/cm²

L = Length of stroke in meters

A = Area of piston in cm²

N = No. of power strokes per minute

K = No. of cylinders

Frictional horsepower: It is the horsepower lost in the engine due to friction.

$$\text{FHP} = \text{IHP} - \text{BHP}$$

Mechanical efficiency: It is the ratio of the power delivered (BHP) and the power available in the engine (IHP). It is expressed in percentage.

$$\text{Mechanical efficiency} = \text{BHP} \times 100/\text{IHP}$$

Volumetric efficiency: It is the ratio of the volume of the mixture drawn in the cylinder during suction stroke and volume of the cylinder.

Throw: It is the distance between the centre of the crank pin to the centre of the main journal. The piston stroke is double the throw.

Cycles of Operation

Cycle is the process of an action, which repeats in a regular order. There are two ways in which an engine can be designed to operate:

- Four-stroke
- Two-stroke

Two-stroke cycle engine differs from four-stroke cycle engine in the following ways:

- The cycle is completed in two strokes instead of four
- It fires every time the piston reaches the top of its stroke
- It has no valves
- Its crankcase is sealed

Multi-cylinder Engines:

A smoother flow of power from the crankshaft is obtained when more than one cylinder is used. The multi-cylinder engines by cylinder arrangement are classified as follows:

- In-line type
- Horizontally opposed type
- Vee-type
- Radial type

Demonstrate



Demonstrate cycle of operation of four stroke and two stroke engine

1. **Four-stroke engine:** The cycle of operation is spread over four strokes
 - **Induction stroke:** Piston moves downwards by the crankshaft. Inlet valve is in open state and air and fuel mixture is sucked into the combustion chamber.
 - **Compression stroke:** The piston now moves up again, compresses the mixture in the combustion chamber. Both valves are closed.
 - **Power stroke:** The sparking plug ignites the compressed petrol/air mixture, which explodes and forces the piston down.
 - **Exhaust stroke:** As the piston starts to move upwards, the exhaust valve opens, so that the piston pushes the gas left over from the explosion out of the combustion chamber. As the piston begins to move down again, the inlet valve reopens and the next cycle starts again.
2. **Two-stroke Engine:** Two-stroke cycle engine employs the same sequence of operation as the four-stroke cycle but the cycle is completed as given below:
 - **First stroke (piston moves upwards):** Piston moves from b.d.c. to t.d.c. A vacuum is created under the piston on clearing the inlet port, fresh fuel-air mixture is admitted into the crankcase (suction). Pre-combustion mixture rushes above the piston into the combustion chamber via the transfer port. Burnt gases are pushed out via the exhaust port. Compression starts when the ports are closed.
 - **Second stroke (piston moves downwards):** Compressed mixture above the piston is ignited and burnt. High pressure and expansion of gases perform work till exhaust port clears. Below the piston the fuel-air mixture is pre-compressed after covering of the inlet port. When the transfer port opens, the mixture rushes over into the combustion chamber.

Ask



- Ask about different ways of classification of engine.
- Ask about operation of petrol and diesel engine.
- Ask about cycle of operation of four stroke and two stroke engine.

Activity



- Conduct a skill practice activity.
- Make pairs of students
- Tell each pair to draw the working of petrol and diesel engine in four stroke and two stroke mode.

Do



- Divide the class into four equal groups.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Notes for Facilitation



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

2.3.3: Fuel System

Resources to be Used



- Available objects like demo automobile fuel system, marker, duster, whiteboard, participant manual etc.

Say



- Vehicle fuel supply system is one of the important systems for the engine. It ensures smooth and constant fuel supply to engine's other peripherals.
- Automobile Fuel supply system consists of various devices and components for example Fuel pump, carburettor, fuel cells, filter, fuel cooler, fuel tank which are used for storing fuel and distributing it to internal combustion engine
- Components of Automobile Fuel Supply System:
 - o Automobile Filters
 - o Automotive LPG System
 - o Carburettor
 - o Fuel Cells
 - o Fuel Coolers
 - o Fuel Injection System
 - o Fuel Pump
 - o Fuel Tank
 - o Fuel Tank Cap
 - o Fuel Water Separator
 - o Intake Manifolds
 - o Nitrous Oxide System

Elaborate



Components of fuel system

- **Fuel Cap:** Cap of the fuel helps in protecting fuel from spilling out.
- **Fuel Tank:** Generally fuel tank is made by steel or plastic. Job of fuel tank is to store the fuel so that it can be used as and when required.

- **Fuel Pump:** Fuel pumps are mainly of two types i.e. mechanical or electrical. It supplies fuel to the engine.
- **Fuel Lines:** Fuel lines, made of mainly by two material i.e. steel or rubber, carry the fuel to the carburettor or fuel injectors.
- **Carburettor or Injection System:** Cars have either a carburettor or fuel injection system to mix the fuel with air. Most vehicles today have fuel injectors. Fuel injectors can be two types: throttle body or port. In a throttle body injection system, usually one fuel injector is used to supply fuel to all of the engine's cylinders. In a port injection system, there is one fuel injector for each cylinder.
- **Air Filter:** Air filters clean dirt and dust from the air that is being drawn into the engine. A dirty air filter decreases the air-fuel ration thus can result in low fuel efficiency by choking out the engines.
- **PCV Valve:** Positive crankcase ventilation (PCV) valve reduces air pollution, increases fuel economy and re-circulates excess gas. It also reduces air pressure within the engine.
- **Fuel Filter:** The fuel filter is usually situated between the fuel tank and the carburettor of injection system. Job of fuel filter is to clean the fuel before entering the engine. Clogged fuel filter reduce fuel delivery thus decreases the engine performance and cause excessive wear on the fuel pump.

Improving Fuel Economy:

Several factors contribute for fuel saving are:

- Checking and maintaining tire pressure
- Tuning-up the engine
- Checking the wheel alignment
- Use of air conditioning only when needed
- Oil change as per manufacturer suggestion
- Checking cooling system operation
- Avoiding dragging brakes
- Avoiding excessive idling
- Combining trips
- Moderating speed

Ask



- Ask about systems and subsystems available in an automobile.
- Ask about their understanding for the functioning of all systems and subsystems.

Do

- Show them all the systems and subsystems of automobile in workshop.
- Give them some brief about the working of all systems and subsystems of automobile with a demo.

Notes for Facilitation

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

2.3.4: Lubrication System

Resources to be Used



- Available objects like demo automobile lubrication system, marker, duster, whiteboard, participant manual etc.

Say



- In automobile job of lubrication system is to collect, clean, cool and re-circulate oil in the engine of a vehicle.
- The oil is used for two purposes:
 - o For lubrication of bearing surfaces
 - o For cooling the bearings by absorbing the friction-generated heat
- Need For Lubrication:
 - o Scoring of cylinders
 - o Excessive wear and burning of bearings
 - o Misfiring of cylinders
 - o Sticking of piston rings
 - o Engine deposits and sludge
 - o High consumption of fuel

Elaborate



Functions of Lubrication System:

- To distribute the lubricant to all the surfaces needing lubrication.
- To act as cooling agent and remove heat from engine parts.
- To reduce noise by absorbing shocks between bearings and other parts of the engine.
- To provide an effective seal between piston rings and cylinder walls.
- To function as a cleaning agent.

Types of Lubricants:

- Solid: Graphite, mica, soap stone or steatite
- Semi-solid: Grease

- Liquid: Mineral oil, vegetable oil, animal oil, etc

Engine Parts Which Require Lubrication:

- Crankshaft bearings
- Crankpins
- Big and small ends of connecting rod
- Bushes of gudgeon pin
- Inner walls of cylinders
- Piston rings
- Valve operating mechanism
- Timing gears
- Camshaft bearings

Main Parts of a Lubrication System:

- **Oil Pump:** Driven by the camshaft, the pump forces the oil from the sump to the main oil gallery. Four types of oil pumps are used: Gear type oil pump, Rotor Type oil pump, Vane type oil pump and Plunger type oil pump
- **Main Oil Gallery:** This runs the length of the engine. Holes drilled from the gallery allow oil to flow to the bearing surfaces.
- **Filters:** In addition to the gauze screen that prevents pieces of metal entering the pump, there is an external filter which can be replaced as and when required. Oil filter systems are two types: By-pass system and full-flow system.

Ask

- Ask about parts of lubrication system in an automobile.
- Ask about their understanding for the functioning of lubrication system.

Do

- Show them all the systems and subsystems of automobile in workshop.
- Give them some brief about the working of all systems and subsystems of automobile with a demo.

Notes for Facilitation

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

2.3.5: Cooling System

Resources to be Used



- Available objects like demo automobile cooling system, marker, duster, whiteboard, participant manual, demo cooling system etc.

Say



- Cooling system is required to take out the leftover of excess heat.
- Cooling system should be such that temperature is maintained within fairly close limits so that optimum compression ratio and maximum power is obtained.
- Purpose of cooling system is to bring the engine to working temperature as soon as possible and maintain the same.

Elaborate



Cooling Systems Types:

1. **Air cooling:** It is rarely used on cars although motorcycles utilize this system. In this, air is passed over the cylinder and the cylinder head. The advantages of air-cooling are:

- No radiator is required
- No danger of freezing water

2. **Liquid Cooling:** The majority of engines are water cooled because of the advantages:

- Mechanical noise is reduced
- Temperature of the various engine parts is more uniform

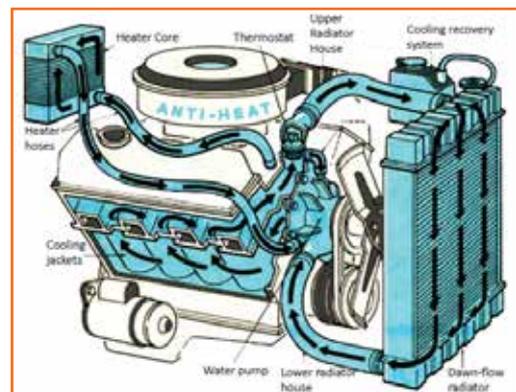


Fig: 2.3.5: Engine Cooling

Pump Circulation System:

A pump is used in all modern engines for positive circulation of coolant. From top of the engine coolant is pumped to the top of the radiator. During its flow through the radiator, heat is lost to the air. Coolant is then pumped back through the engine.

Various parts of the Pump Circulation System are:

- Water Pump

- Radiator
- Fan
- Thermostat
- Radiator Pressure Cap
- Hoses
- Water Jacket
- Antifreeze Mixtures

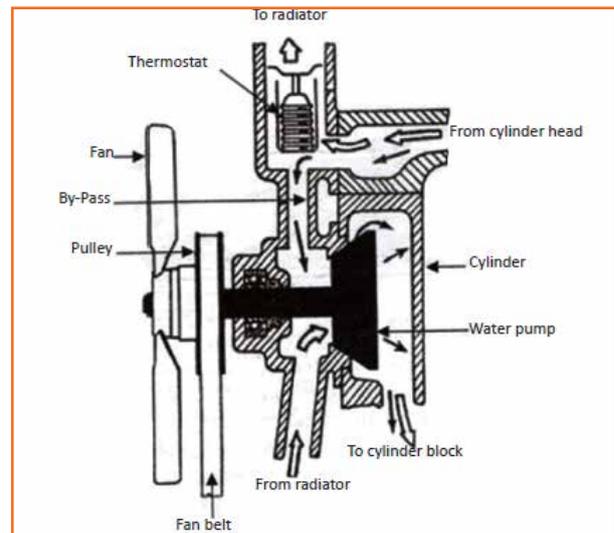


Fig: 2.3.6: Fan, Water Pump and Thermostat

Ask



- Ask about cooling system in an automobile.
- Ask about their understanding for the functioning cooling system.

Do



- Show them cooling system and its parts.
- Give them some brief about the functioning of cooling system with a demo.

Notes for Facilitation



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

2.3.6: Let us Understand Basics of Auto Electricals

Say

- Before understanding an automobile electrical system, we have to understand the basics of electrical system.
- Basic terminologies used in an electrical system are:
 - o **Current:** The movements of electrons along the conductor in a particular direction produce an electrical current.
 - o **Ampere:** The amount of electron flow is the current and the unit of current is Ampere. The electric current or Amperes (abbreviated amps) is measured by an Ammeter.
 - o **Direct Current:** If the electrons flow continuously in one direction along the conductor, the current is called direct current (abbreviated D.C.).
 - o **Alternating Current:** If the electrons flow in one direction and then flow back again and continue this back and forth motion, the current is called alternating current (abbreviated A.C.).
 - o **Volt:** Some device is required to apply the necessary pressure to make the electrons flow through the conductor. This potential difference normally maintained by a battery or generator is called the Electromotive Force (EMF) or voltage. The voltage or electrical potential of a circuit is measured by a voltmeter.
 - o **Ohm:** Capacity of material to resist the electrons flow is called resistance and resistance is measured in ohms. One ohm is the resistance of a wire in which an electrical pressure of one volt causes one ampere of electric current to flow.
 - o **Power:** Rate of doing work is called power. Mathematically represented as:

$$\text{Power} = \text{Work Done} / \text{Time}$$
 - o **Watt:** It is a unit of electrical power. A watt is equal to the energy expended per second by one ampere current under the pressure of one volt. It is denoted by the letter W and is measured by wattmeter.

$$\text{Wattage} = \text{voltage} \times \text{current} \text{ or } W = V \times I$$

Elaborate

Electric Circuits: A circuit is a complete path in which electrons travel from a power source (like battery) through a load like light bulb and then return back to the power source.

Types of circuit

Series Circuit: A series circuit is a circuit that has multiple loads and a single path to go through. Such as a circuit that is connected with a battery and three light bulbs.

$$I = \frac{V}{R_1 + R_2 + R_3}$$

- Parallel Circuit:** Like the series circuit, the parallel circuit passes through more than one load. However, the circuit gives the current more than one path to complete the circuit with. Since it has multiple paths, the current will encounter less resistance by moving through all of the paths at the same time.

$$I = \frac{V}{\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}}$$

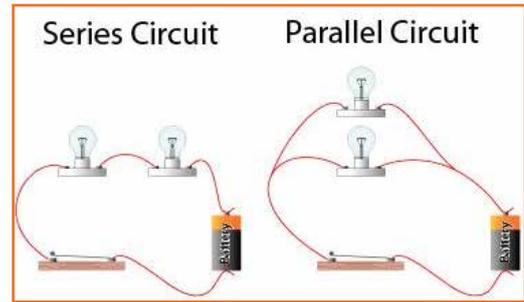


Fig: 2.3.7: Series circuit and parallel circuit

Comparison of Series and Parallel Circuits

S. No	Series Circuit	Parallel Circuit
1	Single path for the current flow	There is multiple path for the current to flow
2	Equivalent resistance is equal to the sum of its individual resistances, i.e. $R = R_1 + R_2 + R_3$	The reciprocal of the total resistance is equal to the sum of the reciprocal of the sum of individual resistances, i.e. $\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$
3	The current passing through all the resistances will be the same and equal to the main current	The current passing through each resistance is different (if not equal). Greater the resistance, lesser the current flowing through it.
4	The voltage in a series circuit is divided across each resistance according to the value of resistance. Greater the value of resistance, greater will be the voltage drop across it.	The voltage across each resistance is the same.
5	The total voltage applied is equal to the sum of the voltage drop in individual resistances, i.e. $V = V_1 + V_2 + V_3$	The total current of the circuit is equal to the sum of all the currents flowing through various resistances connected in parallel, i.e. $I = i_1 + i_2 + i_3$
6	The total resistance is greater than the greatest resistance connected in the series circuit.	The total resistance is less than the least resistance connected in the parallel circuit.

Tab: 2.3.2: Series and Parallel Circuit Comparison

Open and Closed Circuits

It is necessary that the electrical circuit be used when required and the current stopped when not wanted. To enable this to be done without dismantling the circuit each time, a switch is placed in the circuit. When the switch is in the off position, there is a break in the circuit and the electrons cannot flow and known as open circuit.

When the switch is in the “on” position and the electrons can flow, it is called a closed circuit.

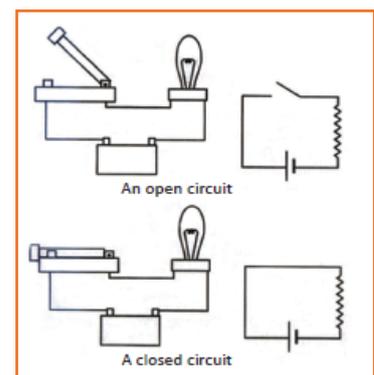


Fig: 2.3.8: Open and closed circuit

Ask

- Ask about terminologies used for electrical systems
- Ask about different types of circuits.
- Ask about open and closed circuits.

Do

- Show them formation of an electric circuit.
- Show them how to connect a circuit in series or parallel form.
- Show them connections of an open and closed circuit.

Activity

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

Skill Practice	Time	Resources
Make series and parallel circuit and calculate the value of resistance of the circuit	2 hours	Battery Ammeter Voltmeter Light bulb
		Wires and connectors

Do

- Make the pair of students
- Take them into workshop
- Provide the components and accessories require for making series and parallel electric circuit.
- Tell them to connect the components and accessories and make series and parallel electric circuit.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering question

Elaborate



Fuse

If there is no resistor in a closed circuit, a heavy or high current will flow and produce large amounts of heat in the wire and draw large quantities of power from the battery. The result is that the wire becomes very hot and in many cases burns. This is called a short circuit.

To prevent this happening, each normal circuit is protected by a fuse which is a device that holds a piece of thin wire and is placed in the circuit. If the heat in the wire should rise above an acceptable level, the wire in the fuse will heat and melt and open the circuit.

Fuse wires are exposed wires manufactured using materials which can melt easily and its specific resistance is high. Types of Fuses: Rewirable fuse and Cartridge fuse.

Lighting Systems:

Car lighting system consists of headlights arranged to provide visibility to the driver at night, as well as parking, stop, and directional signal lights and provide other drivers with information about the actions of a vehicle. Each of the various lighting circuits is controlled by one or more switches connected in series with the battery and lights.

- **Headlights:** Most cars have two head-lights with both upper and lower beams. They are mounted at the same level and both front side of the vehicle. A headlight consists of housing, the reflector, the light diffusing glass and the bulbs along with their sockets.
- **Side Lamps:** The side and tail lamps are very small headlamps having reflectors. Their covers are opalescent or fluted so that light is dispersed. They are needed not only under driving conditions but also during night parking of the vehicle.
- **Brake warning Light:** When the driver press the foot paddle to apply the brake, a switch is closed. It completes the circuit having two rear warning red lights. It gives an indication to the rear traffic that the vehicle is slowing down.
- **Dash Light:** These are provided at the dashboard for making the different gauges and meters easily visible.
- **Cab and Body Light:** These are required in the interior of the vehicle for the convenience of the driver and the passengers.
- **Ignition Warning Light:** Battery discharge takes place when the engine is at rest or is idling at a speed less than that of the cut-out contacts opening. During stitching on the ignition it is shown up by the ignition warning red light on the instrument panel.
- **Flashing Direction Indicator:** It is based on hot-wire principle. The thermal elongation of a thin resistance wire under the influence of current passing through it is made use of for controlling the blinker contacts.
- **Windshield Wipers:** The blades of a wiper are actuated by a small electric motor. Presently we are using two types of motor.
- **Reciprocating Wiper Motor:** In this the motor shaft rotation motion is converted into reciprocating

motion of one blade by means of gear system with crank. The second blade is made to move through suitable linkage.

- **Rotating Wiper Motor:** The drive shaft rotates and this motion is converted into reciprocating motion outside the motor and transmitted to the blades of the wipers.
- **Electric Horn:** As horn is used as a warning device on motor vehicles, it should be such that:
 - o The note emitted by it is neither too musical nor too hoarse
 - o It is able to make itself heard above the general noise of the traffic
 - o It requires little maintenance and adjustment

Switches: Switches make it possible to open and close the circuit. They are placed in series in the circuit they control. There are many different types, which can be operated by pulling, pushing, or turning.

Fuses and Circuit Breakers: These are provided to protect the electrical apparatus in a circuit from excessive current flow that would result in damage from overheating (fire). A fuse has a piece of metal with a low melting point, enclosed in a glass tube, which has metal caps at both ends.

Measuring Instruments

- **Speedometer:** Most speedometers are of mechanical type, although electronic models are used in some cars. A flexible drive cable consisting of a strong outer sheath containing a rotating wire core is driven by the gearbox. At the dashboard end, the core is connected to the speedometer, and spins a circular magnet at speed of the car. The magnet applies a pull on an aluminium disc connected to the speedometer pointer, which is lightly sprung towards the zero stop.
- **Odometer:** Sometimes called a 'milometer', records the total distance travelled by the car since manufacture. It is invariably built into the same housing as the speedometer since it is driven by the same cable.
- **Fuel Gauge:** Fuel gauges are electrically operated. A float, rather similar to the ball-cock float used in domestic water tanks, is mounted inside the fuel tank. The float arm operates the variable resistor, which restricts the flow of electric current according to the position of the float.
- **Temperature Gauge:** The temperature of a water-cooled engine will become dangerously high during a fault in the cooling system. Job of temperature gauge is to measure the cooling water temperature at its hottest point, which is usually in the return flow from the cylinder head.
- **Oil-pressure Gauge:** Nearly all cars have a low-pressure' oil warning light, which comes on if the pressure drops too far. Often a pressure gauge is fitted as well, particularly in sports cars or expensive models.
- **Battery Charging Light:** It is important to know when the battery charging system fails. An indication of this is provided by the 'generator' or 'ignition warning' light. If the generator is feeding power into the battery, the light remains out. If power is flowing out of the battery the light will come on.

- **Ammeter:** An ammeter is a meter designed to measure electric current and is occasionally fitted. This meter shows the rate of flow of electricity either into or out of the battery.

Spark Plug

A spark plug consists of mainly three parts:

- Centre electrode
- Earth electrode
- Insulator separating the two electrodes

Spark Plug Defects and Remedies

Defect	Remedy
Plugs fouled by engine oil entering combustion chamber.	Clean plugs with solvent; if fouling is frequent, use a hotter type plug
Plugs fouled by too rich mixture	Clean plugs; adjust carburetor; reduce excessive choking
Plugs badly covered with carbon from poor ignition	Tune-up ignition system. Clean plugs
Burnt electrodes or broken lower insulators caused by overheating	Check cooling system, ignition timing, etc., for causes of overheating. Use new plugs
Red, brown, or yellow oxide deposits on plug interior that short the insulator	Clean off deposits with sand blast. Re use plugs if they tell well
Plug gap incorrect	Adjust plug gap to specified value

Tab: 2.3.3: Spark plug defects and remedies

Do



- Show them automobile lighting system and its components.
- Give them some brief about the functioning of lighting system and its components with a demo.
- Bring along both types of fuses to the class and show it to the students.

Notes for Facilitation



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

2.3.7: Running System & Transmission

Resources to be Used



- Available objects like marker, duster, whiteboard, participant manual, demo clutch and gearbox etc.

Say



- In a front engined rear-wheel-drive vehicle, power is transmitted from the engine through the clutch and the gearbox to the rear axle.
- The devices having two rotating shaft generally need a clutch for either locking both the shafts or decouple the shafts.
- Clutch job is to connect both the shafts either for locking together so that they can rotate at the same speed or decoupled to rotate at different speed.
- In an automobile clutch is required because engine spins as it started whereas wheels do not follow the same. To stop the vehicle without stopping the engine wheels needs to be disconnected from the engine.

Elaborate



Main Parts of clutch:

1. A driving member - Driving member is made up of flywheel. It is basically placed on the engine
2. Crankshaft. Pressure plate or driving disc is bolted to the flywheel.
3. A driven member - Clutch plate act as driven member in clutch assembly. On the clutch shaft clutch plate can slide freely in to and fro direction.
4. An operating member - The operating member of clutch assembly is a pedal or lever. This liver is pressed to disengage driving and driven plate.

Functions of Clutch:

- To disengage the engine and transmission to allow for gear changing.
- To permit gradual taking up of load.

Types of Clutch:

- **Cone Clutch:** The friction surface of a cone clutch is conical and it acts as a disk or plate. To transmit torque by friction cone clutch uses two conical surfaces.
- **Dog Clutch:** For locking two shafts together or for locking gear to the shaft dog clutch is used.

- **Centrifugal Clutch:** Centrifugal force used to connect two shafts in centrifugal clutch. A centrifugal clutch is not only used in vehicles like mopeds and other application where positioning of the clutch is defined by the speed of engine for example chains-saw.
- **Multiple Plate Clutch:** It contains multiple driving plate stacked with multiple driven members.
- **Torque limiter Clutch:** It is also called slip clutch or safety clutch. When a machine encounters higher resistance, rotating shaft is getting slipped by using this type of clutch.

Demonstrate



Clutch Assembly Fitting On Engine

1. Make sure the flywheel face is clean and without dust or scratches. Also, check if the starter gear ring is in good condition.
2. Use input shaft for centering the assembly for fitting the clutch assembly.
3. Fit clutch plate on the flywheel surface, while fitting ensure that proper surface of clutch plate is fitted on flywheel.
4. Fit the pressure plate assembly the above clutch plate.
5. Fit all the bolts on flywheel with pressure plate assembly.
6. While fitting the plate check inside of the pressure plate for any scratches, make sure it is clean. Do not forget to remove input shaft which taken for centering assembly.
7. Fit clutch bearing with yoke on the input shaft.
8. Ensure clutch housing is properly fitted on the crankcase. Care should be taken for proper alignment of all plates with input shaft.
9. Yoke is then connected to clutch paddle through cable rod.

Say



- To transmit & modify the torque to wheels required by the driver and is actuated by gear lever which select required gear ratio also enable neutral position & able to reverse vehicle.
- While transmitting power it also modifies the torque (Power) as per the road condition.
- When vehicle is starting from rest its required high torque (tractive effort) is required at driving wheels. This is obtained by set of gears & gear set is enclosed in metal casing called gear box.
- Main components of gear box are: gear box, input shaft, main shaft assembly, counter shaft assembly, bearings, oil seal, gear shifter mechanism, synchromesh rings, synchronizing cone etc.
- Propeller shaft is a mechanical part and generally referred as driving shaft. It is basically used to transmit torque and rotation to the drive train.

- Propeller shaft basically carry torque and have the capability of torsion and sheer stress which is more or less equal to the distance between input torque and the load.
- Universal Joint allows transmission of power between gearbox & rear axle as the rear axles are positioned at different planes in chassis.
- Differential is a device which is used to reduce the speed of the inner wheels and increase the speed of the outer wheels when taking turns and also maintain speed of all wheels same while going straight.
- Differential contains drive shaft as input and two drive wheels as output. The drive wheels rotation is coupled by their connection to the roadway.
- Main components of differential are: differential assembly, pinion assembly, crown wheel and ring gear, rotating cage, differential sun gear, planet gear, axle shaft with gearing, planet gear pin, universal joint etc.

Elaborate



Front Wheel Drive:

On a front wheel drive vehicle, the transmission is usually combined with the final drive to form what is called a transaxle.

Transaxle is a device setup in the transmission gear box which combines multiple components like clutch, final drive in a single unit.

In front wheels drive layout vehicle front wheels are driven. Most of the new cars are front wheel drive cars due to compact packaging.

Rear Wheel Drive:

In rear wheel drive mounting of transmission is mainly done on the back of engine.

Before reaching to the final drive it passes through the torque converter and then after transmission and drive shaft.

Four Wheel Drive:

Four wheel drive layout is basically the drive-trains which is basically having two-wheel drive with an option of four-wheel drive capability part-time. This mechanism is usually found in pickup trucks and other off-road vehicle.

Propeller Shaft, Universal Joint, Slip Joint

In case of Front engine & rear wheel drive type of vehicles namely Maruti Van, Mahindra Scorpio, Tata Sumo Trucks, buses etc. propeller shaft transmit the engine torque from gear box to the differential.

Propeller shaft consists of universal joint & slip joint. Some time in truck/buses two propeller shafts with center bearing is being used.

Function of Differential:

Differential receives torque (in layman's word power) from the gear box and transmit this power to the wheels in perpendicular direction. While transmitting power it also modifies the torque (Power) as per the road condition. Namely while starting the vehicle from rest position, while climbing the hill or accelerating the vehicle or pulling the load etc.

Differential also allows each wheel to rotate at different speed when vehicle takes turn. As you know the outer wheel turns faster than the inner wheel.

There is no need of propeller shaft since the power is not transmitted from the front to back wheel. This is more efficient as power loss is minimal and it is also economical.

Activity



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

Skill Practice	Time	Resources
Clutch Assembly Fitting On Engine	2 hours	Clutch assembly fitting, tools
		Car

Do



- Divide the class into four equal groups.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Notes for Facilitation

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

2.3.8: Tyre and Wheels

Resources to be Used

- Available objects like marker, duster, whiteboard, participant manual, demo tyre and wheel etc.

Say

- Tyres are made of rubber, and are reinforced with a synthetic fabric and steel wires.
- There are two kinds in popular use, cross-ply and radial.
- Wheels are connected to the front and rear axles. As power is supplied to either front or rear axle, axle shafts turn the wheels and the vehicle moves.
- There are three types of wheels:
 - o Pressed steel disc
 - o Light alloy
 - o Wire
- The wheel assembly consists of hub, rim, tyre and tube or tubeless tyre.
- Wheels carry the load of vehicle & transmit the torque to the tyres.

Elaborate

Tyres

Functions of Tyres:

- Tyre work as main suspension, reduce the effect on vehicle during rough surface. It also gives frictional contact with the road surface.
- Helps in moving the vehicle through driving wheels.
- The front tyre guides the direction of vehicle.
- The tyres tolerate the brakes to slowdown or stop the vehicle.
- Grip the road thus provide good traction. This enables the vehicle to accelerate, brake, and steer without skidding.

Construction of Tyre:

- Many modern cars do not use Cross-ply tyres.
- A number of textile plies are placed across each other, in alternate direction running bead to

bead.

- Depend on size and load factor it has to carry decide the number of plies.

The following points are important for efficient running of the vehicle:

- tyre pressure
- tyre balancing
- tyre rotation
- tyre specification

Wheel

Wheel assembly should be:

- Able to withstand the driving and braking torque
- Able to absorb road shocks
- Statically and dynamically balanced
- Able to grip the road surface



Fig: 2.3.9: Types of Wheels

Demonstrate



Wheel fixing on hub:

1. Wheel studs & nuts are attached to the hub or axles flange.
2. The taper on wheel nut secures & centers the wheels.
3. Wheels are fixed with tyre.
4. Wheel studs are usually right hand threads. If it is left hand threads, it is marked with "L".
5. While fixing wheel applies correct torque. Nuts should be tightened in diagonal pattern.

Activity



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

Skill Practice	Time	Resources
Wheel fixing on hub	2 hours	Wheel assembly fitting, tools
		Car

Do



- Divide the class into four equal groups.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.
- Give them activity to write what are the advantages and disadvantages of Steel and alloy wheels.

Notes for Facilitation



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

2.3.9: Vehicle Control Systems

Resources to be Used



- Available objects like marker, duster, whiteboard, participant manual, steering system etc.

Say



- A system integrating control surfaces or other devices responsible for adjusting and maintaining the altitude, heading and speed of a vehicle in accordance with signals received from a guidance system.
- A steering system is providing a mechanical support to the driver to control of the location of the front wheels, as road bumps or other forces act against them.
- Steering assembly contains steering wheel as a necessary component. Driver is controlling the steering wheel.
- Steering system responds as per activity performed by the driver on steering wheel.
- In modern car it is equipped with the safety feature, specifically during collision when the driven is thrown against the wheel the column on which steering wheel is mounted get collapse.

Elaborate



Steering system

Functions of steering system: It is used to change the direction of the vehicle desired by the driver. It converts the rotary motion of steering Wheel in to angular motion in order to turn the front wheels which in turn controls the rear wheel.

Components of Steering System: Steering wheel, steering shaft, steering column, steering gear box, pitman arm, center link, steering linkages, tie rod assembly and ball joint assembly.

Components in Rack and Pinion Gear Box used in Mechanical Steering System: Rubber Bellows, Pinion, Rack, Inner Ball Joint and Tie Road.

Components in Hydraulic Power Steering: Power Steering Pump, Belt, Pulley, Rotary Valve and Piston for Rack.

Components used in EPS (Electronic Power Steering): Conventional power steering system was working on hydraulic power steering system (HPS). The benefit of using EPS over HPS is that it eliminates many small components like fluid, drive belt, pulley, pump hoses etc. For this reason, electric steering systems tend to be smaller and lighter than hydraulic systems.

Based on the position of assist motor EPS is classified in four types:

1. Column Assist type (C-EPS)
2. Pinion Assist type (P-EPS)
3. Direct drive type (D-EPS)
4. Rack assist type (R-EPS)

Notes for Facilitation

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

2.3.10: Brake System

Resources to be Used

- Available objects like marker, duster, whiteboard, participant manual, demo brake system, piston, brake cylinder fittings, master cylinder fitting, wheel assembly fittings etc.

Say

- Brake is a mechanical device which helps in reducing or controlling motion. From the moving system it absorbs the energy to perform its operation.
- Braking system achieve the following objectives:
 - o A service brake operated by a foot brake paddle.
 - o A parking or emergency brake operated by a hand brake lever.
- Friction brakes transmit the force to the tyres and the tyres further transmit it to the road.
- Ask students if the brakes are meant to drive fast or to drive slow?

Elaborate

Braking system

Functions of braking system:

- To aid in vehicle speed control and to stop it when and where desired.
- To hold the vehicle in place without the presence of the driver after it actually has been brought to a complete stop.

Classification of braking system

- Drum brake
- Disc brake
- Mechanical brake
- Hydraulic brake
- Air brake
- Vacuum-assisted brake

Working of brake system

1. Apply brake by pressing the paddle; brake oil in the master cylinder gets pressurized. This

pressurized oil pressure is equally transmitted to all the inlet of the four wheel cylinders through four metallic pipes and through rubber hosing pipe.

2. Piston within wheel cylinder block will be pushed outside due to this pressurized oil which in turn will make Brake liner fly out and hold the rotating brake drum and thus brake will be applied equally on all four wheels.
3. Release pressure from the brake paddle, loner retainer spring will push the piston within wheel cylinder block back to original position.
4. Due to inward pressure of the piston, oil from the wheel cylinder block is pushed back to the reservoir tank.

Master cylinder assembly

Master cylinder is the central component of the braking system. Its connection to the brake paddle is through a lever arrangement, which provides considerable mechanical advantage. The movement of the piston, when the brake paddle is depressed, creates a pressure in the chamber behind it. The pressure is transmitted through the hydraulic fluid to the wheel cylinders.

Working of master cylinder

1. Advantage of separate outlets is whenever pressure leakage occurs in either one, front or rear wheels braking system, the other works fine.
2. When brake paddle is pressed, the master cylinder piston moves forward to force the brake oil to go to the brake system with pressure.
3. This pressurized brake oil is transmitted to all our wheel cylinders through pipelines.

Wheel Cylinder

When the hydraulic pressure is applied between two piston cups, the pistons are forced out. This causes movement of brake shoe actuating pins, due to this brake shoe comes in contact with brake drums with force.

Demonstrate



Assembly Procedure of Double Piston Brake Wheel Cylinder

1. Clean the wheel cylinder housing & make sure oil inlet & out let holes are clean & clear.
2. Ensure the piston sealing rubber cap is fitted properly, then insert Piston.
3. Fit rubber boot on the neck of the wheel cylinder body.
4. On the other side of the housing – Insert tension spring and then insert another piston.
5. Fit rubber boot on the neck of the wheel cylinder body.
6. Fit bleeding screw properly.

Assembly Procedure of Brake System Master Cylinder

1. Properly clean the master cylinder body. Make sure that all holes are clean Dust free and no rust should be inside.
2. Make sure all rubber seals are properly fitted on pistons.
3. Before inserting piston, make sure to apply brake fluid on piston as well as inside the body of Master Cylinder.
4. Fit the locking screw on the body for piston No. 1.
5. Now insert "long piston" along with spring keeping the spring in front side.
6. Adjust and lock the locking clip properly in the slot of master cylinder body.
7. Fit the Rubber Booster with Push Rod on the second Piston.
8. Connect Master Cylinder Assembly to the Brake Booster on the studs and tighten it properly using suitable bolt.
9. Properly fit valves inside both outlet ports.
10. Fit Front and rear brake metallic pipe to the respective valve marked on outlet port.
11. Check the type of brake oil required on cap of Reservoir Tank.
12. Fill brake oil either Dot 3 / Dot 4 as mentioned on the reservoir cap, up-to the MAX mark.
13. Ensure reservoir cap with float assembly is fitted properly with electrical connection.
14. Tighten the cap on reservoir tank.

Wheel Cylinder Assembly

1. Place wheel cylinder assembly on the back plate.
2. Make sure bleeding nozzle is on bottom side.
3. Screw tightening hole on wheel cylinder and back plate matches with each other.
4. Fix Brake Shoe on both the side slots of wheel cylinder.
5. Attach tension springs to both the side liners.
6. Now fix loner retainer spring.
7. Fix one end of rubber hosing pipe on brake oil inlet hole of the wheel cylinder and another end on the metallic pipe for the brake oil attached to master cylinder.

Activity

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

Skill Practice	Time	Resources
Assembly of piston brake cylinder	2 hours	Piston brake cylinder fittings, tools
Assembly of master cylinder	2 hours	Master cylinder fittings, tools
Assembly of wheel cylinder	2 hours	Wheel cylinder fittings, tools

Do

- Divide the class into four equal groups.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Notes for Facilitation

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

2.3.11: Suspension System

Resources to be Used



- Available objects like marker, duster, whiteboard, participant manual, demo suspension system, etc.

Say



- The automobile frame and body are mounted on the front and rear axle not directly but through the springs and shock absorbers. The assembly of parts, which perform the isolation of parts from the road shocks, pitch and roll is called suspension system.
- **Components of Suspension System are:** Coil springs, leaf springs, shock absorbers, spring shackles, stabilizer etc.
- **Main advantages of suspension system are:**
 - o Suspension is softer
 - o Wheel wobbling is reduced
 - o Tendency of fitting of the wheel on one side caused by road vibration is reduced
 - o More space for engine accommodation
 - o Under steer is promoted as a result un sprung weight is low
 - o Spring movement is not transmitted form one wheel to other wheel

Elaborate



Functions of suspension system:

- It helps in avoiding any damage in frame and body of the vehicle from road shock
- It gives stability to the vehicle
- It protects the goods and passengers from road shock
- While driving, cornering or braking it provides good road holding
- It gives cushioning effect
- It provides comfort

Requirements of Suspension System

- There should be minimum deflection
- It should be of low initial cost

- It should be of minimum weight
- It should have low maintenance and low operating cost
- It should have minimum tyre wear

Independent Suspension System

The McPherson strut is known as type automobile suspension system. In this system telescopic damper's top is used as the upper steering pivot.

McPherson struts consist of a wishbone or considerable firmness link stabilize by a derived link and for hub or axel of the wheel it provide bottom mounting point. Lateral and longitudinal location of the wheel is provided by lower arm system.

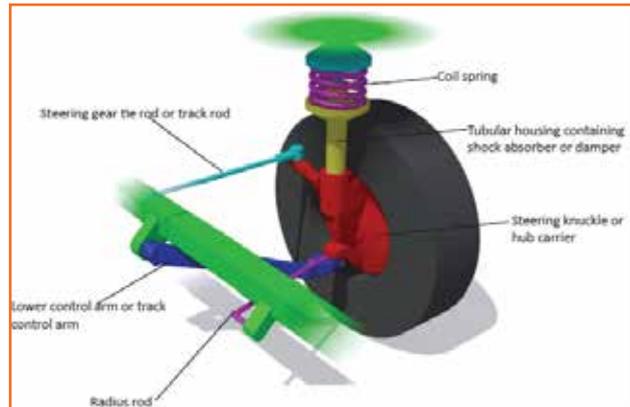


Fig: 2.3.10: McPherson Strut System

Leaf-Spring Suspensions:

- A leaf spring is a steel plate or stack of clamped steel plates.
- Leaf spring which is mainly used in today's truck is mainly manufactured from spring steel.
- It is a middle alloy steel and is tempered using heat treatment.
- It is having significant capacity to bend further and come back to its position thus no permanent bending.
- Leaf springs may consist of a single leaf or a series of leaves clamped together, known as a spring pack.

Spring Pack Principle:

- Self-dampening
 - o The purpose behind use of multiple clamped leaves instead of using single metal cut piece of same shape is due to the impact of load on the spring.
 - o The friction between leafs offers a self dampening feature to the spring pack
- Interleaf friction
 - o Individual leaves should never be lubricated or painted during assembly of spring pack as it will reduce interleaf contact friction.
 - o Leaves are clamped by the center-bolt plays very critical role in the whole process. Due to load of tension leaves define the self-dampening ability of the spring assembly.
- Shock absorbers not necessary
 - o Multi-leaf spring pack eliminates need of shock absorbers.

Types of Suspensions

Several types of suspensions assembly have been developed to make riding in vehicle safer and more comfortable. Most cars have independent front suspension systems in which each front wheel is attached separately and can move independently of the others.

Some vehicles have independent rear suspensions. Dependent type of rear suspension is used in older rear-wheel drive vehicles and some trucks also use it as it incorporates the rear drive-axle assembly. Traditionally, double-wishbone suspensions and strut suspensions have been the most common suspension systems found on consumer vehicles.

Double-Wishbone Suspension

Double-wishbone suspension systems use a shorter upper control arm and a longer lower control arm that hold the wheel to the frame. Wheels move up and down movement is managed by control arms, kind of like a hinge allows a door to swing open and closed. The lower arm is larger because it bears most of the load when the vehicle shifting up and down. Control arm's inboard end is having rubber bushings, and a ball joint at the outboard end of the control arm allows the wheel to rotate and pivot.

Notes for Facilitation

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

2.3.12: Ignition System

Resources to be Used



- Available objects like marker, duster, whiteboard, participant manual, demo ignition system, etc.

Say



- Ignition system is the electrical circuit necessary to ignite the fuel-air mixture in the different cylinders at different times. Some car engines have an electronic ignition system.
- These systems use electronic parts, such as capacitors and transistors, to produce the ignition voltage and to control it.

Elaborate



In electronic ignition system a timer is employed in the distributor instead of contact breaker. This timer may be a pulse generator or a Hall-effect switch, which triggers the ignition module, also called the electronic ignition control unit (E.C.U.). This control unit primarily contains transistor circuit whose base current is triggered off and on by timer, which results in the stopping and starting of the primary current. Apart from this, working of electronic ignition system is like conventional electrical point-type system. Electronic ignition systems provide better ignition (spark at spark plug) during all engine operating speeds and loads. Since it has no distributor points to burn or wear, less maintenance is required.

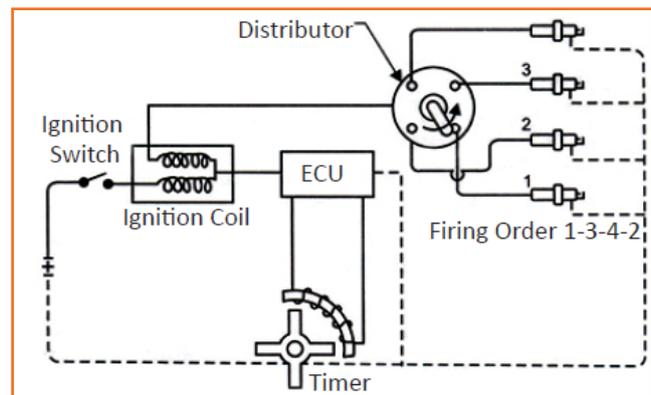


Fig: 2.3.11: Simplified Diagram for an Electronic Ignition System

Notes for Facilitation



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

2.3.13: Tools & Equipment

Resources to be Used



- Available objects like marker, duster, whiteboard, participant manual, tools and equipments required etc.

Say



- During servicing and inspection of material various types of tools and equipments required. In this session we learn about those of tools and equipments.
- Proper handling and operation of tool is very important, otherwise this can be dangerous for you and others also.

Elaborate



Wrenches

There are various designs and size of Wrenches. Adjustable, open-end, box-end, combination, and speciality wrenches are important tools to have while doing basic maintenance and repair work.

Wrench size increase normally by increase of 1 millimeter (mm). A metric wrench set may have the following sizes: 7mm, 8mm, 9mm, 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, etc. Standard wrenches commonly increase by 1/16" for each wrench size increase.

Adjustable Wrench

Adjustable wrenches are versatile. To apply it on standard nuts and bolts jaw can be adjusted. Fixed sized jaw wrench does not fit tightly on the fastener. Head of an adjustable wrench may not fit in all locations and is not as strong.

Combination Wrench

The two most common types of wrench ends are box and open. A combination wrench will have a box-end on one end where as an open-end on the other. The box-end usually has 6-points or 12-points. Box-end 6-point is utilized when a great amount of torque is required to minimize the chance of striping the fastener (i.e., a nut or bolt). An open-end is handy when the fastener position will not allow access with the box-end.

Ratchets

Ratchets are used in combination with sockets. It helps in turning nuts and bolts quickly. A ratchet is actually acts as a lever with a rotating mechanism. The pivoting mechanism allows the user to tighten or loosen a fastener without removing the tool. Ratchets are sized as square driver head.

Standard Sockets

There are two types of sockets i.e. regular type or deep well type. Deep well sockets can fit over the threads of a long bolt. Sockets are available in metric and standard size and have points inside to fit over the fastener.

Standard Equipment for a Modern Service Station

- Hydraulic jack
- Air compressor
- Car lift
- Axle stands
- Plug cleaning and testing equipment
- Battery charging and testing equipment
- Equipment for repair of tyres
- Wheel balancer
- Pullers
- Decelerometer
- Kit for resetting of valves
- Vacuum gauge
- Compression gauge

Large workshops should have the following additional equipment:

- Equipment for alignment of chassis
- Alignment gauges for camber, caster and king-pin
- Equipment for testing of brakes
- Brake bleeder and filler m
- Stroboscope
- Equipment for cylinder boring and honing
- Valve grinder
- Tyre test tank and vulcanizer
- Test rigs for carburetor and fuel pump
- Portable electrical equipment for testing dynamo, distributor, ignition and timing
- Headlamp beam checker
- Drilling machine, grinding machine and center lathe

For servicing of compression-ignition engines, the following additional equipment is also needed:

- Equipment for testing and cleaning of nozzles
- Fuel injector tester
- Fuel pump tester
- Nozzle and needle grinding and lapping machines

Do 

- Show the tools and equipments to the students.
- Demonstrate the use of tools and equipments.
- Explain the use of tools and equipments.

Activity 

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

Skill Practice	Time	Resources
Using had tools and equipments	2 hours	All hand tools and equipments

Do 

- Ask them to get into pairs for practice.
- Go around and make sure they are doing it properly.

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.
- Tell participants to complete the questions at the end of the unit.
- Ensure that every participant answer all the questions.

UNIT 2.4: Skill - Automotive Technician

Unit Objectives

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

1. Understand Core / Generic Skills

Resources to be Used

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

Do

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

Say

Writing Skills

- Record and document the basic details of repairs and maintenance performed on various aggregates/components
- Record all diagnostics done by senior technicians as per the prescribed format recommended by the OEM/ auto component manufacturer
- Write legibly in at least one language

Reading Skills

- Read the basic specification of a vehicle or any other component or part
- Read work orders, specifications etc. related to the job including instructions mentioned on the job card
- Read the service circulars/ sign boards placed in the workshop with respect to the overall process

to be followed for service, repair and maintenance of the vehicle

- Read any specific safety related guideline (applicable for CNG/ LPG/ Electric vehicle)

Oral Communication (Listening and Speaking Skills)

- Interact with customer / service advisor and senior technicians
- Interact with team members including colleagues in the workshop to work efficiently

Professional Skills

Decision making:

- Judge when to seek assistance from a superior.
- Decide on the level of top up required of various lubricants / oil / coolant / grease for routine maintenance of the vehicle after judging the current levels.

Plan and Organize:

- Plan work according to the required schedule and location.
- Organize the schedule to complete the work on the vehicle timely in case other aggregate repairs/ maintenance work is also required to be done.
- Organize the workplace and work according to the principles of 5S.

Customer centricity:

- Ensure that customer needs are assessed and every effort is made to provide satisfactory service.

Problem solving:

- Assist in repairs under the supervision of the senior technician
- Bring any noticeable issues (both in the aggregates currently working or any other aggregate on which there is no work to be done) to the attention of the supervisor.

Analytical thinking:

- Evaluate the complexity of the tasks to determine if he/she needs any assistance from the senior technician.

Critical thinking:

- Analyse, evaluate and apply the information gathered from observation, experience, reasoning or communication to act efficiently.



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3. Perform Vehicle Cleaning and Washing

Unit 3.1 – Role and Job Description - Washer

Unit 3.2 – Performance Criteria for Washer

Unit 3.3 – Knowledge & Understanding Washer



ASC/N1101

Key Learning Outcomes

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

1. Identify and operate various equipments used for vehicle wash
2. Identify and use various cleaning solution and other consumables used for vehicle cleaning
3. Carry out pre-wash procedure as per service station guidelines
4. Clean and wash exterior of the vehicle
5. Clean and wash interior of the vehicle
6. Clean and wash dickey and engine compartment
7. Carryout drying process of the vehicle

UNIT 3.1: Role and Job description - Washer

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

1. Describe the role of Washer for cleaning of vehicles
2. Describe the role of Washer for washing the vehicles

Resources to be Used

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

Do

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

Say

- Washer is also known as a Washing Attendant and Cleaner
- **Brief Job Description:** The job of washer is to wash, scrub and polish the interiors and exteriors in the vehicle which include glass also for protection of appearance. After PDI is done on the vehicle, washer also uses pressurized water to clean exterior surface before the delivery of vehicle.
- **Personal Attributes:** An individual on this job should be willing to work for long hours as a part of the team cleaning vehicle especially on days of high number of first time deliveries. The individual must have a strong eye to see even the minute scratches/ dust on different vehicle structure and surface which would have to be cleaned.
- **Role Description:** Wash, scrub and polish the interiors and exteriors of vehicles to protect their appearance
- **Your Role:** Performs all tasks related to vehicle cleaning and washing.
- The job of washer is very important as the customer judges the service quality by washing quality. So if the washing job is good a customer gets a good first impression and helps in better CSI.

UNIT 3.2: Performance Criteria for Washer

Unit Objectives

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

1. Describe the performance criteria for Washer for :
 - o Cleaning body parts & exterior of the vehicles
 - o Cleaning interior of the vehicles
2. Explain organizational context for washing

Resources to be Used

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

Do

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

Say

- **The following points are the good performance indicators:**
 - Inspect parts, equipment, or vehicles for cleanliness
 - Understand the instructions given by supervisor regarding the washing, routine and any other specific cleaning requirements
 - Mix cleaning solutions, abrasive compositions, or other compounds as advised by a supervisor
 - Scrub, scrape, or spray machine parts, equipment, or vehicles, using scrapers, brushes, clothes, cleaners, disinfectants, insecticides, acid, abrasives, vacuums, or hoses
 - Transport materials, equipment, or supplies to or from work areas, using carts or hoists
 - Pre-soak or rinse machine parts, equipment, or vehicles parts by immersing objects in cleaning solutions or water, manually or using hoists

- Operate and activate cleaning equipment or machines and notify the supervisors in case of any malfunctions
- Turn valves or handles on equipment to regulate pressure or flow of water, air, steam, or abrasives from sprayer nozzles
- Clean:
 - o Interior and exterior surfaces of vehicles
 - o Plastic work inside cars, using paintbrushes
 - o Vehicle windows
 - o Seat frames, backs and bottoms and blacken tyres
 - o Driver seat, seating area, windshield, drivers side glass and vehicle dash
 - o Passenger grab rails and stanchions
 - o Floor to remove gum, dirt and grease
 - o Electrical & Electronic component, couplers, connection etc.
- Rinse objects and place them on drying racks
- Use cloth, squeegees, or air compressors to dry surfaces
- Sweep, shovel, or vacuum loose debris or salvageable scrap into containers
- Maintain specified distance and pressure while washing engine compartment
- Remove debris and other dirt containers from work areas
- Maintain cleanliness of the work and shop areas to ensure a safe work

Knowledge of the Company / Organization and it's Processes:

- **SOP:** standard operating procedures of the dealership for vehicle cleaning
- **SOP:** standard operating procedures recommended by the dealership for using water hose pipe or any other machine which may be required to carry out the exterior or interior cleaning
- Documentation requirements for each procedure carried out as part of roles and responsibilities as specified by the organisation
- Organisational and professional code of ethics and standards of practice
- Safety, health and environmental policies and regulations for the workplace as well as for automotive trade in general (e.g. safe practices while working in pits/ under vehicles)

UNIT 3.3: Knowledge & Understanding Washer

Unit Objectives

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

1. Identify and operate various equipments used for vehicle wash
2. Identify and use various cleaning solution and other consumables used for vehicle cleaning
3. Carry out pre-wash procedure as per service station guidelines
4. Clean and wash exterior of the vehicle as per organization washing process
5. Clean and wash interior of the vehicle as per organization washing process
6. Clean and wash dickey and engine compartment as per organization washing process
7. Carryout drying process of the vehicle as per organization washing process

Resources to be Used

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

Do

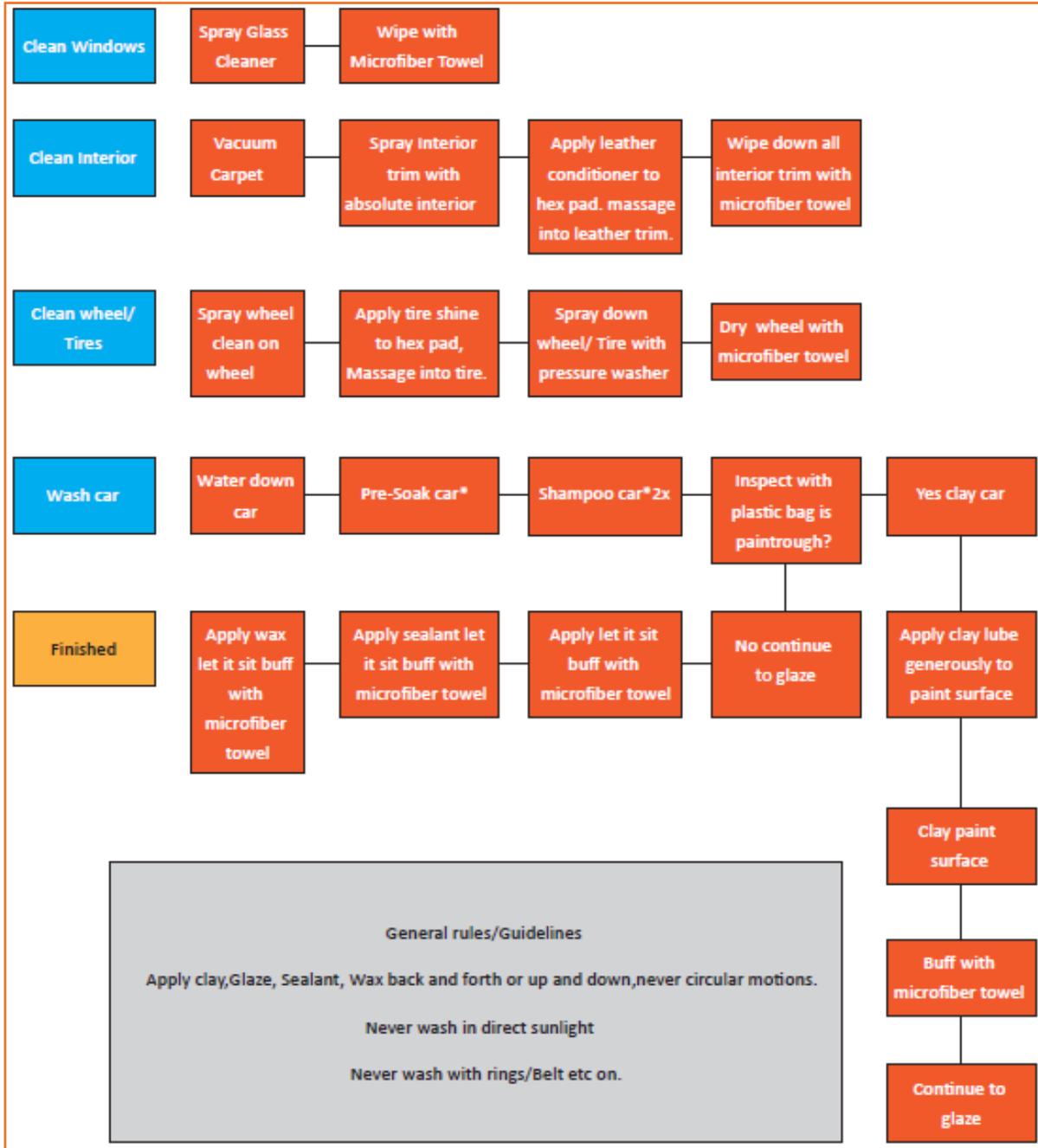
- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about car interior and exterior washing process, material and tools required for washing.

3.3.1: Let us First Understand - The Cleaning / Washing Process

Elaborate



Process Diagram:



Ask



- Ask about procedure of cleaning windows
- Ask about procedure of cleaning car interior
- Ask about washing car

Notes for Facilitation



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

3.3.2: How to Achieve the Ultimate Car Wash?

Resources to be Used



- Available objects like car washing material i.e. cleaning solution, buckets, brush, dry cloth etc.

Say



- **Pre rinse:** This is one of the important stages of car care process. In this process dirt and slit are getting removed, also to remove it from panel gaps to make sure they do not get stuck in wash mitt/sponge which can cause marring. For rinsing the panel pressure washer or hose is used to work from top to down.
- **Customer Settings:** This is a very Critical aspect and customer would not want any of the settings that he /she is comfortable to be changed so mark the same if necessary and check this at the final stage(Settings such as Seat Height/Position, Radio Channel, Rear View Mirrors, Cooling positions etc).
- **Pre-wash:** Pre-wash stage is also known as detailing stage and it is vital to achieve a swirl free car wash. The logic behind a pre-wash is make sure all light dirt such as road dirt, road salts and bug splatter which is on vehicle paintwork is removed from car.

In case if washer is missing this stage and this dirt are not removed from vehicle paint they can later cause swirl marks and wash defacement. To support the pre-wash process citrus is used in cleaning which is sprayed on the surface of body and allowed to dwell.

After around 5 minutes pressurized wash is used to re-rinse the surface of body so that vehicle gets ready for two-bucket wash.

- **Two bucket wash:** This is known as one of the major process of vehicle washing process. In this process vehicle and paintwork is physically washed using a wash sponge along with the car shampoo solution.

Fill the first bucket with fresh water this is also called rinsing bucket. Fill the second bucket around $\frac{3}{4}$ with the water and then after add car shampoo and mix is properly. Make sure mixture should feel thick during touch otherwise add more shampoo (Appropriate Foam ratio).

Start from the top portion of the car and work away down. Soak washing sponge in car shampoo solution and with light pressure sweep the wash sponge gently from side to side to remove the dirt. Squeeze the water out of the mitt on the paintwork and then wipe backwards and forwards.

Once your sponge is cleaned properly soak it back into the car shampoo solution bucket and continue this process for cleaning till completion

- **Rinsing:** This stage of washing process is mainly done after washing, panel per panel on a hot or sunny day or after fully washing the whole car. If using a pressure washer or a hose, set this to give a steady stream of water. Rinse the body from top to bottom using ample amount of fresh water this will allow sheet off of the paintwork.
 - **Drying:** The drying stage of washing process is one of the very important stages as in this stage there is possibility of paint damage thus needs to be carried out very carefully. While drying the car, you should must proceed methodical and gentle manner. Start from the top keep the process running towards down. Using a jumbo microfiber drying towel gently wipe the surface dry using no pressure.
- Precautions:** A washing person should not wear any watch, Bracelet Rings etc in hand. He should not have belt buckle or even exposed trouser or shirt buttons as they can cause scratches in cars being cleaned.

Demonstrate



- Take participant in workshop and practically demonstrate functioning car washing process i.e.
 - o Pre-rinse
 - o Prewash
 - o Two bucket wash
 - o Rinsing
 - o Drying
 - o Final Inspection before moving out from Washing Process.
- Make sure each participant should actively participate in the demonstration.

Ask



- Ask about car washing process
- Ask about two bucket wash method
- Ask about drying and rising process

Activity

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

Skill Practice	Time	Resources
Car washing process	2 hour	Car washing material
		Car

Do

- Divide the class into four equal groups.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Notes for Facilitation

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

3.3.3: Vehicle Washing Process

Say



There are 7 stages of Vehicle washing process:

Stage-1: Air Blowing

Stage-2: Underbody & Engine Compartment Washing

Stage-3: Spare Wheel & Dickey Cleaning

Stage-4: Top Wash

Stage-5: Engine Compartment Cleaning

Stage-6: Vehicle Exterior & Glass Cleaning

Stage-7: Vehicle Interior Cleaning /Polishing

Stage-8: Final Inspection

IMPORTANT NOTE:- For Under Chassis Washing Pressure to be HIGH in Jet Form where as for Body Wash the Pressure to be LOW as well as in Mist /Spray Form.

Elaborate



Stage-1: Air Blowing

Equipments required: Air Compressor, air gun, dust mask, goggles, table for washing mats and blowing air, washing point, brush and car washer.

Process:

1. Remove Mats and blow compressed air
2. Wash Mats using brush & Soap Solution (Rubberised Only) Not to be done for Carpets
3. Dry washed Mats by blowing compressed air
4. Switch-On blower after air blowing in compartment to remove dust from A/C Louvers
5. Remove Grease from Door Latch using cloth

Stage-2: Underbody & engine compartment washing

Equipments required: Water connection, pressurized water spraying gun – 02 nos., gum boot, hand gloves and lift/hoist.

Process:

1. Wash the vehicle underbody starting from front side to rear side using pressurize water gun
2. Wash the engine compartment, radiator & condenser grill
3. Wash wheel arch and wheel rim using pressurized water gun

Stage-3: Spare wheel & Dickey cleaning

Equipments required: Air gun, pressurized water spraying gun – 02 nos., gum boot, hand gloves, nylon brush, washing solution, cloth and sponge.

Process:

1. Remove spare wheel, jack handle, toolkit from Dickey
2. Clean the Dickey the Dickey area with a cloth & surrounding area with pressurized water
3. Wash the spare wheel rim with soap solution & clean the rubber of Tyre with nylon brush
4. Dry the spare wheel using compressed pressurized air & then clean them with a cloth & place it back in dickey.

Stage-4: Top Wash

Equipments required: Air gun, pressurized water spraying gun – 02 nos., gum boot, hand gloves, 2 buckets, washing solution, cloth, sponge and tar remover.

Process:

1. Pre wash the vehicle body and door jambs
2. Before starting washing make sure all Grease, Dirt Stains and Tar must be removed by applying a strong soap solution / Tar remover by scrubbing it with approved chemical /simple diesel, ensure NOT to use Petrol/Thinner as this could cause Paint Fade /Rub OFF.
3. Apply car wash solution with a soft cotton terrycloth rag or with sponge
4. Do not move rag in circular direction as it may produce swirl marks on body
5. Finally wash the vehicle from top then side panels and bottom area. Make sure entire soap is removed.
6. Blow compressed air to clean water from engine compartment. Air pressure should be 2.5 Kg / Sq cm.

Stage-5: Engine Compartment Cleaning

Equipments required: Dressing solution, cloth/rug, sponge, battery jelly and grease

Process:

1. Blow compress air to clear / remove water from engine compartment
2. Appropriate Precautions to be taken to cover Critical Electrical/Electronic Components as water could damage the critical electrical/electronics Components.
3. Wipe engine compartment with clean cloth
4. Clean following area properly:
 - a. Firewall
 - b. Front Grill
 - c. Hood hinges
 - d. Apron

5. Clean underbody area of hood and grease the hood latch
6. Apply battery jelly / Spray at battery terminal to avoid sulphation
7. Apply dressing solution to all plastic parts like engine cover, hoses, Air filter unit, front grill & plenum

Stage-6: Vehicle exterior and glass cleaning

Equipments required: Dressing solution, micro fibre cloth/rug, sponge, tyre polish, body polish and step stool.

Process:

1. Wipe the entire vehicle exterior starting from top using micro fiber rug for cleaning
2. Wipe the entire vehicle door glasses & windshield glass with clean rag so that it won't leave any water strain on it.
3. Clean outside rear view mirror & IRVM with clean soft cloth
4. Use proper stool to clean up the roof top, do not step on running board /Bonnet/Roof/Fenders etc.
5. Clean the door, running board, fuel lid area
6. Clean tail gate from inside, clean tail lamps, head lamps, fogs and HMSL
7. Clean the wheel rim with separate cloth, wash it frequently before reusing it
8. Apply polish to front and rear bumper, mud flaps, cowl top garnish cover, tyre, door still etc.

Stage-7: Vehicle interior cleaning

Equipments required: Upholstery cleaner, micro fibre cloth/rug, sponge, soft cloth, vacuum cleaner, dashboard cleaner, grease and car freshener.

Process:

1. Vacuum clean the vehicle interior, carpet, front and rear seat, door map pockets, dickey area, floor console, glove box etc.
2. Re-Fix rubber matting & put branded paper floor mat
3. Clean sun visors, dashboard, centre console, steering wheel, floor console, instrument panel, A/C louvers, roof lamps, seat belts, front and rear seats by using soft cloths.
4. Clean inner door trims, door beading, inner weather strip, door map pockets, grab handles, seat slider, door hinges with cloth.
5. Apply grease to door engine & lubricate seat sliding slider
6. Apply polish to dashboard, instrument panel, centre console, floor console, A/C louvers, map pocket, grab handle, door inner trim, door molding with foam & wipe extra polish with soft cloth. Do not apply on steering wheel (As this could cause slip which would be detrimental).
7. Clean seat cover with soft cloth & upholstery cleaner for PU & lather seat cover only
8. Finally spray car freshener in passenger compartment

Demonstrate



- Take participant in workshop and practically demonstrate functioning car washing stages i.e.
 - Stage-1: Air Blowing
 - Stage-2: Underbody & Engine Compartment Washing
 - Stage-3: Spare Wheel & Dickey Cleaning
 - Stage-4: Top Wash
 - Stage-5: Engine Compartment Cleaning
 - Stage-6: Vehicle Exterior & Glass Cleaning
 - Stage-7: Vehicle Interior Cleaning
 - Stage-8: Final Inspection
- Make sure each participant should actively participate in the demonstration.

Activity



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

Skill Practice	Time	Resources
Car washing stages	4 hour	Car washing material
		Car

Do



- Divide the class into four equal groups.
- Go around and make sure they are doing it properly.
- Wrap the unit up after summarizing the key points and answering questions.

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.
- Tell participants to complete the questions at the end of the unit.
- Ensure that every participant answer all the questions.



4. Plan & Organize Work to Meet Expected Outcomes

Unit 4.1 – Performance criteria for Planning & Organizing Work

Unit 4.2 – Knowledge & Understanding: Planning & Organizing
Work



Key Learning Outcomes

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

1. Perform the job within given time as per quality standards / work schedule
2. Identify and manage resources and use it efficiently and effectively
3. Perform in accordance with the organizational policies and procedures
4. Manage your time effectively at work
5. Apply best practices to keep your workplace clean
6. Acquire knowledge and understanding required for planning & organizing

UNIT 4.1: Performance Criteria for Planning & Organizing Work

Unit Objectives

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

1. Perform the job within given time as per set quality standards / work schedule
2. Identify resources and use it efficiently and effectively

Resources to be Used

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

Do

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

Say

- Keep immediate work area clean and tidy
- Learn, understand and implement the principles of “5 S”
- Treat confidential information as per the organization’s guidelines
- Work in line with organization’s policies and procedures
- Work within the limits of job role
- Obtain guidance from appropriate people, where necessary
- Ensure work meets the agreed requirements

UNIT 4.2: Knowledge & Understanding - Planning & Organizing Work

Unit Objectives

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

1. Perform as per the organizational policies and procedures
2. Manage your time effectively at work
3. Apply best practices to keep your workplace clean

Resources to be Used

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

Do

- Greet and welcome the participants to the next session of the program.
- Before starting the session ask them do they have any doubts pertaining to the previous unit.
- Capture their responses on board and share them wherever necessary.
- Tell them that they will learn about organization policies and procedure, time management and 5S safety approach.

4.2.1: Organization Policy & Procedures

Say



- Most of the organizations usually formulate set of policies, principles and guidelines to reach long term goals.
- The policies and procedures are designed by the organization to control and establish decisions. This help the organization to take corrective action and activities within the organization take place with the set boundaries.
- A policy is a set of procedures which define the guidelines for dealing with human resource management issues in the organization. It communicates an organization's values and the organization's expectations of employee's behaviours and performance.
- Workplace policies also strengthen and simplify SOPs (standard operating procedure) in a workplace.
- Every company has different policies and procedures. Company should explain its policies and procedures to their employee in detail within first week of employment.
- When you work in any organization, you have particular tasks to do as part of your job. If you work within the roles, responsibilities and boundaries of your job description, you will also be working in line with the organization's beliefs and values.
- When you work in any organization, you have particular tasks to do as part of your job. If you work within the roles, responsibilities and boundaries of your job description, you will also be working in line with the organization's beliefs and values.

Elaborate



Benefits of Organizational Policies & Procedures

- Helps us to abide with employment policies and its associated legislation
- To make sure regularity and reliability in decision making and operational procedures
- Save time when a new problem can be handled quickly and effectively by following existing policy through an existing policy
- Provide the support system for business planning
- Assist in performance assessment and strengthen accountability
- Clarify functions and responsibilities
- Help employees know what is expected of them with respect to standards of behaviour and performance
- Acts as strategy in decision making process in a regular working pattern thus reduces dependency to ask help from seniors
- Help us to adopt a consistent and clear response across the company to continually refer to situations

involving employee interaction

- Allow us to demonstrate good faith that employees will be treated fairly and equally

Examples of Common Workplace Policies

- Code of conduct
- Recruitment policy
- Internet and e-mail policy
- Mobile phone policy
- Non-smoking policy
- Drug and alcohol policy
- Health and safety policy
- Anti-discrimination and harassment policy
- Grievance handling policy
- Discipline and termination policy



Fig: 4.2.1: Common Workplace Policies Examples

Work within the Limit of Your Job Role

The tasks you do in your job are directed by:

- Your job description
- Codes of practice, regulations and laws
- Workplace policies and procedures

The organization's beliefs (or philosophy) are its main goal or aim. The goals worked out by the people who start the service and should describe the reason the service was first set up or the reason the service exists. For example, the service may exist to provide information and support to people with disabilities. The belief or goal of the service is supported by its policies and procedures.

Work in line with Organization Policies & Procedures

There are many ways that you can keep information private and confidential. For example:

- Do not use the person's full name if you are speaking to them on the telephone or talking to them in a public space such as a waiting room. Always be aware that other people may hear your conversation.
- Do not talk about customer or co-workers in social situations or give away information that might identify a person.

You should not share customer information with your co-workers without the customer's permission even though you work closely together and are employed by the same organization.

Always follow your organization's procedures about destroying private or confidential information. Make sure information not to be recycled – be locked away when they are not being used – are disposed of properly such as shredded.



Fig: 4.2.2: Keep Organizational Information Private and Confidential

Guidance from Appropriate People

You may experience situations when you have problems doing your job well. Unexpected things can happen to change the day-to-day operations of an organization or workplace.

When you have difficulties in carrying out your duties, you need to report these problems to your supervisor. It is important that you report problems to your supervisor so that solutions can be found.

Managing Time/Materials/Cost Effectively

In your work environment you may need to perform various types of task. You need to clearly understand what is expected of you.

You must have a clear understanding of what you are expected to do and you must also know how you should work with other team members.

Ask

- Ask about need of organization policies and procedures
- Ask about general policies and procedures follow in automobile industry
- Ask about necessity of confidentiality in organization policies and procedures

Notes for Facilitation

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

4.2.2: Time Management

Say



- Time management is the process of planning and practicing control over the time given to a specific task, especially to increase effectiveness, efficiency and productivity. It is an activity with the goal to increase the overall advantage of a set of activities within the limited condition of a limited time.
- As a leader, you will want to accomplish many things in your time of office. The best favour you can do for yourself is to determine what those goals are and make sure your efforts are always directed toward their achievement.
- Do prioritize and control your work.
- As you prioritize tasks and set deadlines, you will want to organize your plans and actions. Organize our plans, but it is important for you in today's environment to use planner as it includes calendar and enough space to make notes.
- The strategies we have mentioned so far have all concerned common business practices. Say "No" to work which is not in your plan.
- Everybody has various set of commitments and concerns, but for better accomplishment focus on the task at a moment is very much required.
- Achievement of goals needs to be celebrated so that a healthy balance in life between work and play can be maintained. After completing a task or finish project you need to be rewarded by yourself.

Elaborate



As our time is always in demand, we need to think about how to use our time and for more effective time management we need to consider certain strategies. Time management does not mean to work harder or for longer period but it help us to work smartly so that we can finish our work easily and quickly.

If we can manage our time more effectively, we will be rewarded in a variety of ways:

- We will be more competent in our routine job and also can support others
- We can accomplish great success in every role as a leader
- On a personal level, you will certainly feel healthier, more energetic, and in a generally better mood.

Obstacles to Effective Time Management

There are many factors contributing to disturbance due to which it becomes for us in effective management of our time.

- Objective is not clear
- Disorganization
- Inability to Say “No”
- Interruptions
- More Interruptions
- Periods of Inactivity
- Too Many Things at Once
- Stress and Fatigue
- All Work and No Play

The obstacle we face in our day to day life is not very difficult to resolve. The most important thing is to identify existence of obstacle which is affecting our ability in time management. After identifying the obstacle we start think solution to resolve it.

Set Clear Goals

Effective goals share a number of characteristics in common. Effective goals should be:

- S** - Specific
- M** - Measurable
- A** - Achievable
- R** - Realistic
- T** - Time-based

Prioritizing work

It is important to make a list of tasks periodically that confront you and prioritize them. Below mentioned technique may help in prioritizing:

- **Do** – Choose most important task from the list which you consider as important for your organization. These are the task you need to do yourself.



Fig: 4.2.3: Prioritize

- **Delegate** – There could be many persons in an organization who possess various skills and experience to carryout variety of task. Delegating not only helps to free up your time so that we can do other works but also ensures resources applied can be used more effectively through certain degree of motivation.
- **Delay Until another Time** – There are too many things close to the dead line which creates a dangerous situation. It is always good to consider when things are due, how long it will take to accomplish and your current workload.
- **Delete** – If we set our goals as explained earlier, we will experience that some of these goals are not achievable or realistic, or that they are just not important.

When you prioritized your task it is important for you to:

- **Address the Urgent** – Things having short-term consequences should be tackled first.
- **Accomplish What You can Early** – Reports, registrations and requests that can be handled early should come next. Don't put off until tomorrow what you can do today.
- **Attach Deadlines to Things You Delay** – Attaching deadlines to things we delayed – When we are very sure that things can definitely wait be careful in taking such decision by adding a deadline for that task in our schedule.

Organize

As you prioritize tasks and set deadlines, you will want to organize your plans and actions. Some time we are using paper and pencil to organize our plans, but it is important for you in today's environment to use planner as it includes calendar and enough space to make notes. Most of the planners are equipped with calendar space, space to note down daily activities, contact information, and "to do" lists. Look for the planner which satisfy your need and start using it. You will feel like it is an essential tool for you to manage your time.

Learn When to Say "NO"

As strategies first thing you need to learn is to say "NO" when it is appropriate. Your life in an organization has always been about giving all that you can to serve your organization.

When we say no it does not mean that we are closing the door of our responsibility. It should be considered as we are very serious to meet our in-hand commitments and achieve it as far as possible within allotted time.

To be able to say "NO", you will have to accept these three principles:

- We should realize that we cannot do every thing

- We should not undertake the task or project that we are not sure to complete within the allotted time frame.
- We will not make commitments that are not consistent with the goals and objectives I have set for myself.

Use Your Waiting Time

Other factors contribute personal time management skill for making good use of your “waiting time.”

You need to think over everyday how much time you spend doing nothing?

Use your waiting time is to always make sure you have something with you that you can accomplish in the event that you are kept waiting. For instance:

- Reading Correspondence
- Writing Letters or Memos
- Reading or Listening to Tapes

Focus On Task

When you serve as a leader you are managing many activities and we cannot cut ourselves from this fact. There is no way around this fact. But, one important strategy to keep in mind is to concentrate completely on the current task.

Manage Prime Time

When you plan your tasks, think about your own “prime time.” If you do your best work early, plan to do the routine tasks later in the day and concentrate on the more challenging tasks when you are at your best. If you don’t really get going until later, handle the routines in the morning and save the more difficult tasks for later.

Ask



- Ask about importance of time management
- Ask about criteria for managing your time
- Ask about factors need to consider for time management

Activity



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

Explain



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

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.
- Tell participants to complete the questions at the end of the unit.
- Ensure that every participant answer all the questions.

4.2.3: Workplace Cleanliness

Say



- In the workplace, hygiene is very important. Through the introduction of some sensible office policies, make sure that your workplace is clean and hygienic as possible. Workplaces should be safe and clean with minimal exposure to germs.
- Many workers find themselves overwhelmed by the amount of junk and clutter on their desks. By sparing a few minutes each day, the office surroundings can be professional, healthier and less stressful.
- Poor housekeeping and hiding hazards can cause frequent accidents which can cause injuries.
- These are foundational to Kaizen (continuous improvement) and a manufacturing strategy based “Lean Manufacturing” (waste removing) concepts.
- 5S is one of the activities that will help ensure our company’s survival.

Elaborate



5S Approach

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

Some new concepts are:

- Red Tag Process for tagging, removing and disposing of items that are not needed in the work area.
- Lean Manufacturing concept that seek continuous improvement by removing waste in processes.

Some Japanese words you need to know:

- Kaizen (pronounced “kizen”) – Improvement
- Kaizen Event and 5S Event – Planned improvements to a specific area or process (usually take 3 to 5 days). 5S Events focus on making 5S improvements.
- Muda (pronounced “moo da”) – waste
- Gemba (pronounced “gimba”) – workplace
- Kanban (pronounced “kon bon”) – Pull type inventory control system. Items are only produced to meet customer’s needs. The request to produce more is signaled from an upstream operation and/or customer orders.

- Value Stream Map – A diagram of all processes needed to make and deliver the product to the customer.

Phases of 5S:

Japanese term	English Term	Meaning in Japanese Context
Seiri	Sort	<ul style="list-style-type: none"> • Dispose off unnecessary items or properly remove. • Do work simply by removing obstructions. • Stop buildup of needless things. • Calculate necessary items for costing and other factors. • Remove all parts not in use. • Separate unwanted items from the workplace. • Define a red-tagged area to keep unnecessary items. • Waste removal.
Seiton	Set	<ul style="list-style-type: none"> • For items to be easily available arrange them all properly • By arranging work station in such a way that all tooling / equipment is in close proximity that can avoid loss and misuse of time. • Work on first come and first serve basis method • All work should be complete on regular basis
Seiso	Shine	<ul style="list-style-type: none"> • Workplace should be completely clean and clear • Stop weakening of machinery and equipment • Keep workplace safe and clean
Seiketsu	Standardize	<ul style="list-style-type: none"> • Regulate the best practices in the work area. • Keep high standards at workplace organization at all times. • Keep everything in order and according to its standard. • Everything in its right place.
Shitsuke	Sustain	<ul style="list-style-type: none"> • To maintain in working order • Also translates as “do without being told” • Regular audits to be perform • Discipline and Training

Waste (Muda)

Some of the main forms of waste are:

- Overproduction
- Waiting for materials, machines or instruction
- Transportation or movement
- Excessive inventory
- Inefficient machine processing and/or operation
- Producing defects
- Part or line changeover or machine setup
- Inadequate housekeeping
- Miscommunication or inadequate instruction

Good Housekeeping

To ensure good housekeeping:

- Pick up anything you find lying on the floor
- Store all tools properly
- Spilled oil, water or any other liquid should be wiped up immediately
- Creepers, jacks and other such floor equipment should not be left scattered around
- Be careful about projection e.g. jack handles. See that they don't project from under the car

Ask

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

Activity

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

Field Visit



- Tie up with workshops for doing 5 S there and make a visit to show the process.

Notes for Facilitation



- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.
- Tell participants to complete the questions at the end of the unit.
- Ensure that every participant answer all the questions.
- Say students to complete the exercises given in end of unit.



5. Work Effectively as Team

Unit 5.1 – Performance Criteria for Working Effectively as Team
Unit 5.2 – Knowledge & Understanding: Working Effectively as Team



Key Learning Outcomes

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

1. Interact & communicate effectively with colleagues including member in the own group as well as other groups
2. Use all forms of verbal and non-verbal communication to communicate clearly and effectively with your colleagues, supervisors, customers and other stakeholders
3. Demonstrate communication skills
4. Judge your customers' body language and accordingly use an appropriate approach to deal with them
5. Apply the best practices for grooming to look presentable and make good impression on your customers
6. Use proper personal etiquettes at workplace
7. Acquire knowledge and understanding required for team working

UNIT 5.1: Performance Criteria for Working Effectively as Team

Unit Objectives

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

1. Interact & communicate effectively with colleagues including member in the own group as well as other groups.

Do

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

Resources to be Used

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

Say

- Maintain clear communication with colleagues (by all means including face-to-face, telephonic as well as written)
- Work with colleagues to integrate work
- Pass on information to colleagues in line with organizational requirements both through verbal as well as non-verbal means
- Work in ways that show respect for colleagues
- Carry out commitments made to colleagues
- Let colleagues know in good time if cannot carry out commitments, explaining the reasons
- Identify problems in working with colleagues and take the initiative to solve these problems
- Follow the organization's policies and procedures for working with colleagues

UNIT 5.2: Knowledge & Understanding - Working effectively as team

Unit Objectives

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

1. Use all forms of verbal and non-verbal communication to communicate clearly and effectively with your colleagues, supervisors, customers and other stakeholders
2. Discuss the importance of communication skills
3. Judge your customers' body language and accordingly use an appropriate approach to deal with them
4. Apply the best practices for grooming to look presentable and make good impression on your customers.
5. Use proper personal etiquettes at workplace

Resources to be Used

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

Do

- Greet and welcome the participants to the next unit of the program.
- Ask form the students, what they understand by the team work and how it helps them at workplace.
- Discuss their answers.
- Explain them what is a team and how team work helps them in their career growth.
- Tell them how team work helps them in accomplishing their career goals.
- Explain them the characteristics of a good team.
- Explain them as a professional, what your team mates expect from you and how you have to meet their expectation as a good team player.

5.2.1: Communication Skills

Say

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

5.2.2: Technical Knowledge

Say

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

Elaborate

Elements of communication

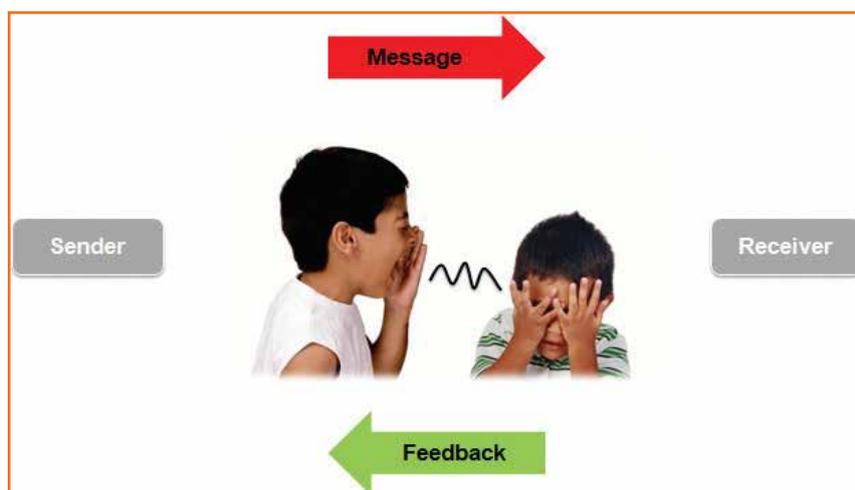


Fig: 5.2.1: Process of Communication

1. **Sender:** The person who shares information, ideas or solutions to other with a purpose is called sender or communicator.
2. **Message:** This is the ideas or information of the communication.
3. **Receiver:** When a person receives the message which is meant for him is called receiver. Job of receiver is not limited to receive the message only but also to understand it properly so that desired objectives can be achieved.
4. **Feedback:** The process of making sure that receiver has received the correct message and understood the sense of message by the sender.

Components of effective communication

Various researches have shown that an effective communication consists of:

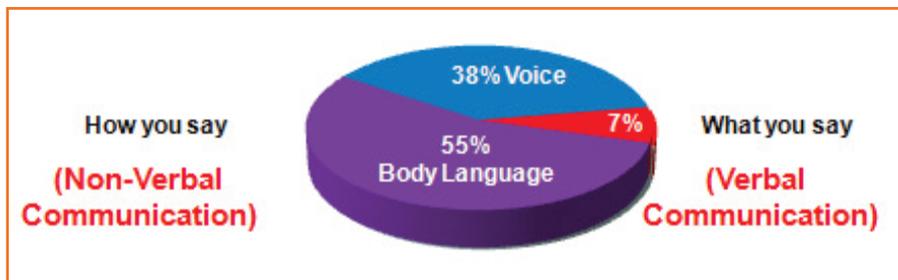


Fig: 5.2.2: Process of Communication

Team Activity



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

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

Do



- Ask them to get into pairs for practice and do some casual conversation.
- Go around and make sure they are doing it properly.

5.2.3: Verbal Communication

Say



- Verbal communication means you listen to a person to understand what message the person is trying to convey. The speaker has the advantage of immediate feedback. This type of communication is best for conveying emotions and can involve storytelling and critical conversations.
- Verbal communication consists of sharing thoughts through the meaning of words.
- Dealership Executives are not that educated and hence have poor vocabulary. Because of this Dealership Executives feel inferior and lack confidence. But, they should understand that words account for only 7% in conversations and do not matter that much. Instead by improving their voice and body language, they can do a better job of communicating.
- Verbal communications are of two types: written and oral communication.

Elaborate



How to improve verbal communication

Some of the ways through which you can improve your verbal communication are:

- Read newspapers/magazines, etc.
- Practice using 10-15 new words everyday
- Avoid using slangs
- Think before you speak

Activity



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

Explain



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

5.2.4: Non-Verbal Communication

Say



- A nonverbal communication can also be called Body language because this communication does not involve any verbal interaction but mere observation of the people involved in the communication. Both verbal and written communications convey nonverbal communication and are also supported by body language, eye contact, facial expression, posture, touch and space.
- Speech requires the presence of a voice that can be modulated. Vocal features that contribute to our interpretation of spoken language such as voiced pauses or intonation plays an important part to help us understand what is said to us.
- Speech is a small part of communication process. Most of the time it is considered that most of the information is conveyed by non verbal communication, voice tome, facial expression, eye contacts and other gestures, standing posture and so on.

Elaborate



Components of Non-verbal Communication:

- Voice
- Body language

Voice

It is a specified quality, pitch and tone of vocal sound.

For an effective communication, voice has 38% importance.

Characteristics of a Good Voice:

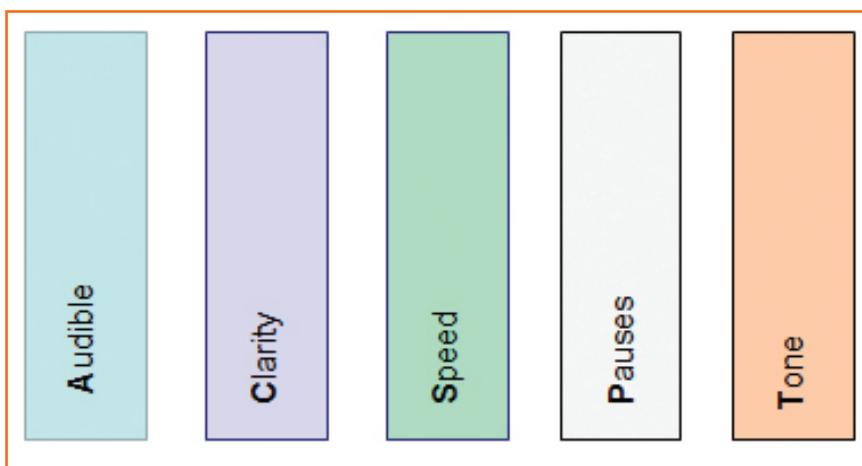


Fig: 5.2.3: Characteristics of a Good Voice

Body language

Body movement within communication process is basically representing to emphasize what we want to say and also to express our emotion and attitudes. While saying something some time body movement can also cause a conflict. If the person you are communicating with is a skilled observer can easily note you behavior to use as a clue of your feeling or thinking process.

Our human face is capable to reflect our expression and distortions. These reflection is getting interpreted depend on the situation we are communicating. For example we reflect shy expression on face when are asked any embarrassing question.

For an effective communication, Body Language has 55% importance.

Components of Body Language:

- Body Posture
- Gestures
- Facial Expressions
- Eye Movements

Observe Your Customers' Body Language:

- How they sit
- How they stand
- How they use their hands and legs
- What they do while talking to you

Customers touching their hair or yawning while interacting, for instance, can indicate boredom. By understanding the customer's feelings through their body language, you can change the manner in which you interact with them.

Activity

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

Explain

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

5.2.5: Listening Skill

Say



- Listening is one of the most significant skills one can have. To become a better listener it is important that you practice active listening at all time of verbal communication.
- Active listening is one of the important skill of our communication process but many time as a communicator we spend our energy on what we wanted to say and not much focusing on what the other party wanted to say.
- Listening is basically the ability of a person to receive message properly and accurately interpret it in the communication process.
- Listening is considered as the key factor for successful communication process.

Elaborate



Listening is basically the ability to accurately receive and interpret messages.

Over and average a person spend around 70% of their time in some type of communication. Out of this 70% communication time 45% spend in listening, 30% in speaking, 16% in reading and 9% in writing.

If you interrupt before your speakers have finished their sentences, then the focus has shifted to you from the speakers. Also, you are communicating to the speakers that your ideas are more important. Besides, it's rude to interrupt.

Follow these tips to become an attentive listener:

- Focus on the speaker. Pay attention to what the speaker is saying. Look directly in the eye of your speaker.
- Take notes: This will help you stay alert.
- Reconfirm and ask questions: Always reconfirm your understanding by repeating the information that was shared with you. Ask questions to understand the message better. These tips will e sure that you heard what was said.
- Remove Distractions: Focus on the instruction received. We should avoid mobile phone use, shuffling paper, looking outside from window or other similar activities. If you are performing these activities, listening process get disturbed and speaker will get a message that you are not taking interest.

Activity



- Call 3 students.
- Give a student a written piece. Ask him to read it out loudly to the other 2 students.
- Provide one student with earphones to listen to music while listening to the information.
- Let the other person listen to it without any distraction.
- At the end of the reading, ask both the student to tell what has been read out.
- As a matter of fact we would find out that the person who has put all his attention in listening would yield better results in comparison to the other one.

Explain



- Discuss with the students the importance of being an active speaker in a debate where counter questioning is allowed.

5.2.6: Writing Skill

Say



- Writing forms an important form of communication. A better writing skill allows our messages to be communicated effectively with clarity.
- It is also having advantage to spread it to a larger audience comparatively face to face or telephonic discussion.
- The medium using which we communicate with the help of written to convey the message is called written communication.

Elaborate



Use the following do's and don'ts for written communication:

- Use simple language
- Highlight important words
- Use appropriate salutation and greeting
- Keep your sentences short and to the point
- Proof read the text before sharing

Tips for written communication:

- Do write with the reader in mind. If you're writing about a technical subject for a non-technical reader, avoid using technical jargon and acronyms they may not know.
- Be clear about what you are actually trying to communicate. Use short words and sentences to get across your point. It can be useful to use a list of bullet points rather than paragraph to make it easier to read and understand the information.
- Use salutation – Sir/Ma'am, Mr./Mrs./Ms., etc. – and Greeting – Good Morning, Hi, etc.
- Choose an appropriate font and size for your writing. Wingdings and Comic Sans are obviously out and anything less than 8-point will give your readers a headache.

Activity



- Ask students to form pair
- Ask students to write a fire accident report to the management.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.

5.2.7: Grooming

Say



- An art of keeping your body and mind clean is Personal Grooming. It is very important that everyone should take care of their hygiene cleanliness. Due to this, one would not just look good but feel healthy to. Taking care of your body appearance is imperative. Once you enter your store/department you need to be dressed in full uniform as per company standards, and also properly groom yourself as per the service ethics.
- Grooming is basically the state, condition, manner or style in which a person appears.
- Good personal grooming can make you look good. Looking good usually improves your self-esteem and confidence.
- Dressing is also an important part of personal grooming. Clothes should be clean and free of stains, holes, and wrinkles. Properly fitting clothes look best. Wearing clothing that is too big or small in size can make a person look untidy.
- For lady sales executive, dress code would be Salwar kurta/Saree/T-Shirt with Jeans.
- Tips for dressing

T-shirt

- Wear well-ironed T-shirt
- Make sure the collars are clean
- Tuck the shirt in the pant
- Wear normal fit, fit shouldn't be too loose or too tight

Trousers/Jeans

- Wear well-ironed trousers/jeans
- Make sure it's not low waist
- Avoid boot cut styles
- Avoid stuffing the pockets

Shoes

- Make sure they are neat and clean
- Ensure they are not too colourful
- Wear clean socks
- Ensure your shoes fit well, neither too tight or too loose

Belt

- Wear a Black color belt
- Ensure it's made of good leather
- Ensure it's not too long and not too short

- Avoid belts with flashy buckles

Watch

- Wear a good quality watch
 - Ensure it's simple with straight or classy lines
 - Make sure it's not flashy
- Personal grooming not only makes us presentable but also makes us feel confident about ourselves. Good personal hygiene is essential for good health. Habits that are considered personal grooming include, bathing, dressing, applying makeup, hair removal and taking care of one's teeth, nails and skin.

Ask



- Ask the students to write about why one's uniform should be neat, clean and ironed.
- Ask the students to discuss the importance of uniform in school.
- Also ask them to discuss about incidents when they formed an opinion about others based on their dress

5.2.8: Etiquette

Say



- Office etiquette is important because bad manners at work can be bad for business by negatively affecting employee morale and productivity.
- Etiquette is basically polite behavior and courtesy, a person is expected to follow.
- Certain etiquettes that should be kept in mind are as follow:
 - o Stand straight, make eye contact and turn towards people when they are speaking and genuinely smile at people.
 - o Follow the dress code prescribed by the organization.
 - o Limit personal calls especially when you are working in a manufacturing unit.
 - o Eat and smoke to the designated areas only otherwise it may disturb other people.
 - o Apart from certain etiquettes, certain ethics are also expected to be followed by the employees of an organization. Ethics are basic rules regarding how people of a particular profession/professional setting are supposed to work. Certain work ethics include:
 - o Discipline: It takes a certain level of commitment to finish your tasks every day. Only with discipline one can stay fixed on goals and determined to complete his assignment.
 - o Commitment to work: A strong sense of commitment to work affects how an individual work and the amount of work he does. When a worker is committed to work he turns up on time, puts in his best efforts and completes the projects to the best of his ability.
 - o Punctuality: It shows that you are dedicated to your work, interested in the work and capable of handling responsibility. Being punctual shows your professionalism and commitment to work.

Activity



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

5.2.9: Rapport Building

Say



- By improving your overall communication skills, you can build rapport with people at your work.
- Rapport is basically “Getting along well with others”.
- Rapport building helps us:
 - o Establish feelings of Harmony, Goodwill and Trust
 - o Know more about the prospect’s mood, attitude, style, needs, values and interests
 - o Get the prospect talking
 - o Promote open communication, develop trust and improve the probability of deal closure

Elaborate



Barriers to Rapport Building:

- Lack of interest
- Lack of understanding
- Hesitation

To overcome these barriers and to build rapport, you need to understand the different types of customers, which brings us to our next topic “Customer Types”.

5.2.10: Team work

Say



- Tell them now they will learn about supporting and guiding team members.
- Tell the participants; while working in an organization they have to support and guide other team members also.
- A good team is the one that motivates its members to have a positive attitude, perform better.
- Team work is a very important part of working life. They can have a big impact on the profitability of an organization, team and individual performance, company reputation, etc.

Do



- Acknowledge their response and encourage them to share their views with the group.
- Make sure participants express their views but at the same time should not deviate from the main topic.

Elaborate



Lessons from the Geese:

Teams are much more effective than individuals for work. Let's look at an example from Mother Nature to learn how an effective team works.

The geese actually fly in a group on their long flight of migration.

The flapping of the geese that are in front of the formation creates a draft for the geese at the rear reducing air resistance. This indicates their true sense of responsibility towards the fellow beings.

When the leader of the formation of the geese is tired, it goes back and another goose then comes in the front to lead the group of Geese. So, these Geese have no fixed leadership or hierarchy.

No goose likes to fly out of formation because it would get tired easily. Even if it does fly out of formation, it quickly comes back to its place. So, Geese have amazing team sense!

Geese also make a lot of noise while they fly. But it's interesting to note that the noise is not made by the geese leading the formation, but by the Geese in the back of the formation, which serve to support and keep everyone going. Isn't that the unique vocal support?

If one goose is ill and falls out of formation, a few of others stay with it, to be with it until it gets well or dies. Now, that's what we call team spirit!

Geese are unique as a team. The team behaves as a cohesive whole with a common goal of reaching a particular destination in mind. Team members help each other since they can collectively achieve much more than they can alone.

As explained about the Geese, being a human if we are sharing common set of direction and have consider our community can move fast and reach to our goal in shorter period because we move with trust on each other.

Considering the Geese if we follow their footsteps we will be connected with the persons who could lead us to reach our destination. We willing accept help from others and offer our help to others.

It pays to take turns in doing the hard tasks and share the leadership. As with Geese, people are interdependent on each other's skills, capabilities and unique arrangements of gifts, talents and resources.

We need to make sure we are encouraging each other in the team. In teams where there is encouragement, the production is much higher.

If we have as much sense as Geese, we will stand by each other in difficult times as well as when we are strong. Now, what do you say to that!!!

Team Player Styles:

Contributors

The following are the key characteristics of Contributors:

- Logical
- Efficient
- Organized
- Proficient
- Relevant
- Pragmatic
- Systematic
- Dependable
- Responsible

Contributors tend to be task-oriented. Their strengths lie in sharing information with the team and making sure every aspect of a work is taken care of.

Collaborator

The following are the key characteristics of Collaborators:

- Cooperative

- Flexible
- Confident
- Forward-looking
- Conceptual
- Accommodating
- Generous
- Open
- Visionary
- Imaginative

Collaborators are highly goal-oriented.

Communicator

Here are the key characteristics of Communicators:

- Tactful
- Helpful
- Friendly
- Patient
- Informal
- Relaxed
- Supportive
- Encouraging
- Considerate
- Spontaneous

The Communicator is a process-oriented member who is an effective listener.

Challenger

The key characteristics of Challengers are:

- Candid
- Ethical
- Questioning

- Honest
- Truthful
- Outspoken
- Principled
- Adventurous
- Aboveboard
- Brave

The Challenger is a member who questions the goals, methods and even the ethics of the team. He is willing to disagree with the leader and encourages the team to take calculated risks.

Activity



- Divide students into teams and give them equal amounts of newspaper, gum, cello tapes – no scissors or blade should be used. Ask them to construct a castle in 30 mins. Best team will be identified based upon the following criteria:
 - Which team can build the tallest, structurally-sound castle?
 - Which team can build a castle the fastest?
- Divide students into teams and in each team, 1 person should be the player. The player should not speak throughout the game, The eyes of the player will be tied and the rest of the team should direct him towards the exit of the room. The player should not touch any object till he/she reaches the exit door. Also, the team members should make sure they give him the proper clue for the directions. There is one more requirement. The player should first be directed to a place where the marker pen is placed. The player needs to pick it and then go towards the exit door. The team should co-ordinate amongst them and helps the player throughout the game. Time limit is 15 mins for each team.
 - o Questions to ask during the review:
 - o Did you come up with a strategy before starting the challenge?
 - o Did you adapt your game plan?
 - o How did you feel being blindfolded? Did you always trust your communicators?
 - o Did you get frustrated at any point?

Notes for Facilitation



- Summarize the main points of the session with the participants.
- Ask them if they have any query pertaining to the topics taught in the session.
- Encourage them to ask questions and answer their queries satisfactorily.

5.2.11: Resolving Conflict

Say



- Conflict - It can be defined as a serious disagreement or argument.
- Conflict exist in almost all organization and some time it is also consider positive as it helps in healthy exchange of ideas and creativity.
- Unsolved problems may lead to increased levels of bitterness and frustration
- By deciding not to say something that would make you sound aggressive or frustrated, you can avoid unnecessary conflicts.
- Conflicts take place when people are rigid and are not willing to cooperate with each other.

Elaborate



To resolve conflicts in a team, you should use these steps:

- Examine what is causing trouble
- Discuss the issue with the conflicting party
- Clarify expectations and roles
- Find an option which benefits all
- Utilize constructive feedback
- Reach agreements

You should always depersonalize conflicts by adopting these steps:

- Focus on issues not personalities
- Encourage both sides to be objective
- Evaluate concerns of both sides
- Encourage people to listen to other's view
- Encourage points of agreement
- Don't dwell on anger

Use the following do's to resolve complaints:

- Be warm to the others
- Show empathy
- Acknowledge the other's feelings
- Listen actively

- Isolate the core problem
- Provide a satisfactory resolution and an alternative
- Follow-up after the resolution

Avoid the following don'ts to resolve complaints:

- Take a confrontational attitude
- Make assumptions
- Use technical or professional jargon
- Pass the blame
- Make unrealistic commitments
- Exceed your authority
- Sacrifice your company's interest

Follow these best practices for giving feedback effectively:

- Hold the discussion in private
- Remain calm
- Show empathy
- Discuss the most important issues only
- Support your argument with facts, figures and observed behaviour
- Try to reach an agreement
- Summarise your understanding

Activity



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

Explain



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

5.2.12: Conduct at Workplace

Elaborate



Creativity:

- Improved Productivity – Successful teams develop the ability to accomplish more and faster.
- Improved Creativity – cross functionality application of different minds to the task usually produces original out of the box thinking.
- Focus – Properly tasked teams can solve intractable organizational problems.
- Development – serving on a team participating in team activity provides good development experience sometimes fast track for team members.
- Employee satisfaction – successful teams often have a good time members also have a sense of achievement.

Working in Teams:

- Managers: hold Conventional managerial responsibility and are drawn from the hierarchical culture of the organization.
- Facilitators: these are neutral, objective individuals who are chosen for their process consulting skills.
- They may also act as arbitrators in times of conflict between managers and team players.
- Team leader: These are often the department supervisors who must work with managers and facilitators and help them to shape the team.
- Team Players: these are the members of the team who share a common goal or purpose. They must be trained and developed to assume the special skills and responsibilities of self-management.
- Support Groups: these are clusters of individual who work with the team supporting them with **specific required- e.g. the human resource, finance and administration departments.**

Ask



- Ask students about advantages of team work
- Ask students about importance of teamwork

Key Learning Outcomes

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

1. Perform as per the need of resources to maintain a safe, secure working environment
2. Maintain safe & secure workplace
3. Assess your responsibilities for workplace safety
4. Use best practices to remove potential hazards from your workplace and prevent accidents
5. Apply appropriate strategies to deal with emergencies at workplace

UNIT 6.1: Performance Criteria for Healthy, Safe & Secure Work Environment

Unit Objectives

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

1. Perform as per the need of resources to maintain a safe, secure working environment

Do

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

Resources to be Used

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

Say

- Comply with organization's current health, safety and security policies and procedures
- Report any identified breaches in health, safety, and security policies and procedures to the designated person
- Coordinate with other resources at the workplace to achieve the healthy, safe and secure environment for all, incorporating all government norms esp. for emergency situations like fires, earthquakes etc.
- Identify and correct any hazards like illness, accidents, fires or any other natural calamity safely and within the limits of individual's authority
- Report any hazards outside the individual's authority to the relevant person in line with organizational procedures and warn other people who may be affected
- Follow organization's emergency procedures for accidents, fires or any other natural calamity. Identify and recommend opportunities for improving health, safety, and security to the designated person
- Complete all health and safety records are updates and procedures well defined

UNIT 6.2: Knowledge & Understanding - Healthy, Safe & Secure Work Environment

Unit Objectives

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

1. Maintain safe & secure workplace
2. Assess your responsibilities for workplace safety
3. Use best practices to remove potential hazards from your workplace and prevent accidents
4. Apply appropriate strategies to deal with emergencies at workplace

Resources to be Used

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

Do

- Greet and welcome the participants to the next unit of the program.
- Ask form the students, what they understand about health & safety at workplace.
- Discuss their answers.

6.2.1: Importance of Safe & Secure Working Place

Say



- Workplace safety play an important role in organization as it boosts the productivity.
- If the workers in the organization feel safe they can work with their full capabilities and potential and it also reflect positivism in the working environment.
- Measures needs to be taken to eliminate risks at work and ensure a safe and comfortable environment for the employees.

Elaborate



The responsibilities of the employers for maintaining safe workplace are:

- Healthy workplace should be provided
- Train the worker as per their job profile
- Maintain training records (who, what and when)
- Establish and maintain a comprehensive occupational health and safety program, including a written health & safety policy and an incident investigation procedure
- Support supervisors, safety co-ordinators and workers in their health and safety activities
- During potential hazard reporting action should be taken immediately
- During incident instant investigation should be initiated
- Provide adequate first aid facilities and services
- Ensure supply of personal protective equipment as per nature of job

The responsibilities of the supervisors for maintaining safe workplace are:

- Instruct workers in safe work procedures
- Train workers for all tasks assigned to them, and check that their work is being done safely
- Ensure that only authorized, adequately trained workers operate tools and equipment or use hazardous chemicals
- Ensure that equipment and materials are properly handled, stored and maintained
- Enforce health and safety requirements
- Correct unsafe acts and conditions
- Identify workers with problems that could affect safety at the worksite

- Develop health and safety rules and inspect the workplace for hazards

The responsibilities of the workers for maintaining safe workplace are:

- Know and follow health and safety requirements affecting your job
- If you don't know how to do something safely, ask for training before you begin work
- Work safely, and encourage your co-workers to do the same
- If unsafe condition is observed try to correct it and inform supervisor
- In case of any injury should be immediately reported to first aid attendant and supervisor
- Take the initiative. Make suggestions to improve health and safety

Ask



- Ask three aspects are important for progress of safety.
- Ask the essential elements necessary for safety
- Ask about the good safety practices
- Ask about responsibilities of employer and worker

Notes for Facilitation



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

6.2.2: Workplace Hazards

Say



- The situation which can create threat to human life, property of workplace or environment is defined as hazard.
- Most of the hazards are hidden in nature which reflects theoretical risk but the fact is that if it becomes active it may lead to emergency.
- Hazards are sometimes classified into three modes: dormant, armed and active

Elaborate



The common types of hazard are:

- A situation which cause physical harm to body or create extreme stress is referred as physical hazard. A physical hazard may be natural or human made also.
- Chemical hazards are substances which can create harm to human health, harm body parts, property or environment. Chemical hazard may be natural or human made also.
- Biological hazards – In this type of hazard biological agents plays a crucial role can cause harm to human health or body parts. These biological agents can be fungus, bacteria, viruses, parasites and foreign toxins.
- Psychological hazards usually taken place due to stressful working environment. Here potentially a person could be a hazard when affected psychological disturbance through stress or shift patterns and when a person is under the influence of alcohol, illness and lack of training.
- Electrical hazards are dangerous condition where a worker can or does make electrical contact with equipment or a conductor. From that contact, the person may sustain an injury from shock, and there is a potential for the worker to receive burn or blast injury.

Reporting of any hazard incidents

Follow your organization structure to report any hazards/incident to the relevant person.

Structure could be different from organization to organization.

Ask



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

Activity



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

Notes for Facilitation



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

6.2.3: Organization's Emergency Procedures

Say



- Every workplace should have a plan for dealing with emergencies. You should be instructed in that plan within your first few days on the job and have refresher training from time to time.
- A workplace emergency is an unforeseen situation that threatens employees, customers, or the public; disrupts or shuts down your operations; or causes physical or environmental damage. Emergencies may be natural or manmade and include - floods, hurricanes, tornadoes, fires, toxic gas releases, chemical spills, radiological accidents, explosions, civil disturbances, and workplace violence resulting in bodily harm and trauma.
- The best way is to prepare to respond to an emergency before it happens. Few people can think clearly and logically in a crisis, so it is important to do so in advance.
- The company must determine potential hazards and the appropriate controls and protective equipment for those hazards. Personal protective equipment for emergency may include items such as - Safety glasses, goggles, or face shields for eye protection, hard hats and safety shoes for head and foot protection, proper respirators, chemical suits, gloves, hoods, and boots for body protection from chemicals, special body protection for abnormal environmental conditions such as extreme temperatures; and any other special equipment or warning devices necessary for hazards unique to the worksite.

Elaborate



Once you have been trained, you should be able to answer these questions:

- Where the emergency phone numbers are posted?
- Where are the fire extinguishers and how and when should they be used?
- What other specialized equipment may be needed in an emergency, and how it is used?
- Where are the fire alarms and fire exits?
- What is the evacuation plan for the building?
- What should you do during an earthquake?
- In case of evacuation, where outside the building is the assembly point and who should you report to?

It is the discipline of dealing with and avoiding both natural and manmade disasters.

You should follow these steps for medical emergency procedures:

- An emergency medical service should be available near to your dealership
- At least one person should be trained enough to handle any medical emergency

- First-aid supplies should be available at the dealership
- Check – Call – Care route should be followed

You should follow these emergency instructions in case of fire:

- Activate the ALARM.
- Evacuate the area.
- Call the fire department.
- Fight the fire only if:
 - o You know how.
 - o The fire is small.
 - o You are confined to the area where it started.
 - o You have a way out.
 - o You can work with your back to the exit.
 - o You have the right type of extinguisher.
 - o You are confident in operating it effectively.
- DO NOT fight the fire if:
 - o You are not very sure and have any doubts.
 - o It is spreading very fast and crossed the starting area.
 - o Escape route is blocked.

Follow these steps for fire prevention:

- Don't unnecessarily accumulate trash and litter
- Keep the workplace areas neat and clean
- Keep yourself updated about location of fire alarm boxes and extinguishers
- Make sure you have knowledge about various types of fire extinguishers and confident to use them
- Store hazardous materials in designated areas
- Keep exits free of obstructions
- Know location of emergency exits and procedures
- Handle flammable liquids with caution

Fire extinguishers

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

Class A

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



Class B

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



Class C

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



Class D

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



Notes for Facilitation

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

Activity



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

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

Do



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

Field Visit



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

6.2.4: Evacuation Procedures in Emergency

Say



- An evacuation plan lays out how to exit a warehouse safely during an emergency. Every member of the warehouse and visitors should be familiar with several ways to leave the warehouse and know a safe meeting place outside the building. In simple terms 'Emergency evacuation plan is the immediate and urgent movement of people away from the threat or actual occurrence of a hazard'.
- Certain areas have been designated as 'Safe assembly points' in a warehouse. It is advisable that all the warehouse colleagues should assemble at the specified assembly points in case of an emergency. This is useful for the responsible personnel (departmental safety officers/ fire wardens/supervisors etc.) to know the whereabouts of their colleagues in the event of any disaster or accidents. The specific assembly points should have been indicated in the fire escape routes maps posted at the area.
- First aid mock drills will test the efficiency of the emergency response procedures required in a non-emergency situation and to educate the warehouse employee to react quickly during the critical emergency times. This could be of any types like fatal injuries to a co-worker, snake bite mock drill, fire accidents etc

Elaborate



As the first step a layout must be made of the building, including:

- Evacuation Routes
- Fire Extinguisher (Locations)
- Fire Alarm Stations (Locations)
- First Aid Kit (Locations)

The second step for evacuation procedures for workers & visitors in case of emergency includes creating a map of the parking lot and surrounding buildings.

This must show the Rally Point. Rally Point must be a safe distance from the building. It must be easily accessible, out of the way of emergency services, and should not be beside the fire hydrant.

Ask



- What do you understand by a workplace emergency?
- What is an emergency action plan?
- What PPE can be used during emergency?

Notes for Facilitation

- Find out from the students what according to them emergency situations are.
- Give the overview of the prevention measures taken by companies to deal with the emergency situations.

6.2.5: Auto Shop Safety

Say



- Personal Safety: Observe the following general safety precautions while working in automotive workshop
- Don't indulge in horseplay
- Don't scatter the tools etc. on the operating machinery
- Don't keep sharp objects or tools in your pocket
- See that your dress is suited to the job. It should not be loose which may get caught in the moving machinery
- Never use compressed air for blowing out dirt from your clothes
- While chipping, grinding or using air hose or doing any other job where there is danger of flying particles, goggles must be worn

Ask



- What procedures we have to follow in autoshop for safety
- Ask about areas in auto shop, where safety is the major concern.

6.2.6: Workshop Equipment and Safety

Say



- Personal Safety: Observe the following general safety precautions while working in automotive workshop.
- Don't indulge in horseplay.
- Don't scatter the tools etc. on the operating machinery.
- Don't keep sharp objects or tools in your pocket.
- See that your dress is suited to the job. It should not be loose which may get caught in the moving machinery.
- Never use compressed air for blowing out dirt from your clothes.
- While chipping, grinding or using air hose or doing any other job where there is danger of flying particles, goggles must be worn.
- When car is jacked up, make sure the jack is properly centered and will not slip.

Ask



- What procedures we have to follow in autoshop for safety
- Ask about areas in auto shop, where safety is the major concern.

6.2.7: Safety with Hand Tools

Say



- Use the correct tool for the job in hand
- Use the tool correctly
- Keep the tools clean and in good working condition
- Grease or oil on tools should be wiped off as it is difficult to hold and use such tools
- Store the tools in their proper places

Ask



- List hand tools available in an auto shop
- Ask about safety measures required when using hazardous equipments

6.2.8: Safety with Power Tools

Say



- Electric shock: The safety precautions are —
 - o Don't use damaged chords
 - o Don't stand in water or even wear wet shoes when working with electrical equipment
 - o Make sure the electrical equipment is properly earthed
- Flying metal chips the safety precautions is — ALWAYS WEAR GOGGLES
- Injuries due to unsafe use of tools: The safety precautions are:
 - o Carefully study the instructions before using any equipment
 - o Keep hands and clothes away from moving parts
 - o Make sure the electrical equipment is properly earthed
 - o When working on devices like clutches, valves etc. which have springs, make sure the springs will
 - o Don't adjust or oil moving part of a machine

Ask



- List power tools available in a auto shop
- Ask about safety measures required when using hazardous equipments

Notes for Facilitation



- Show the steps for handling of hand tools.
- Precautions when using powered tools.
- Using power tools.

6.2.9: Safety Equipment

Say

- When working on vehicles, think safety first. You should use the proper tools and clothing to protect yourself.
- PPE Required in auto shop are:
 - o Eye Protection is a must when working on cars. Eyes are so fragile. Safety glasses and goggles will help prevent foreign materials from entering your eyes. These are especially important when inspecting the underbody of a vehicle and working around chemicals.
 - o Use earplugs or earmuffs when the work area is excessively loud. Noise with high decibel levels can damage your hearing.
 - o Use work gloves when you are performing work on tyres or exhaust. Extremely worn tyres can have sharp steel belts poking from the tread. Exhaust systems can be hot and have rusty holes that can cut your hands. Use disposable latex gloves when you are working with chemicals, oils, and grease

Ask

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

Do

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

Notes for Facilitation

- Summarize the main points.
- Ask participants if they have any doubts.
- Encourage them to ask questions.
- Answer their queries satisfactorily.
- Tell participants to complete the questions at the end of the unit.
- Ensure that every participant answer all the questions.
- Say students to complete the exercises given in end of unit.



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7. Employability & Entrepreneurship Skills

Unit 7.1 – Personal Strengths & Value Systems

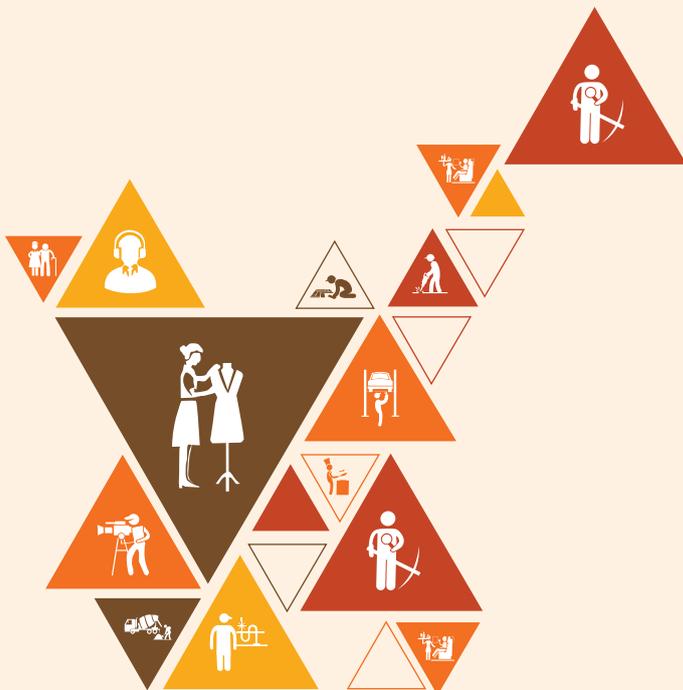
Unit 7.2 – Digital Literacy: A Recap

Unit 7.3 – Money Matters

Unit 7.4 – Preparing for Employment & Self Employment

Unit 7.5 – Understanding Entrepreneurship

Unit 7.6 – Preparing to be an Entrepreneur



Introduction: Employability and Entrepreneurship Skills

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

Ice breaker

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

Five of Anything Ice Breaker Steps:

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

Expectation Mapping

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

Defining Objectives

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

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

In order to effectively facilitate this workshop:

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

General instructions for role playing:

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

UNIT 7.1: Personal Strengths & Value Systems

Key Learning Outcomes



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

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

UNIT 7.1.1: Health, Habits, Hygiene: What is Health?

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

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

Say

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

Ask

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

Say

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

Role Play

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

Summarize

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

Say 

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

Activity 

- Health Standard Checklist from the Participant Handbook.

Ask 

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

Say 

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

Do 

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

Summarize 

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

Ask **Discuss:**

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

Say 

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

Activity 

- Health Standard Checklist: Hygiene

Say

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

Do

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

Ask

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

Summarize

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

Ask

- What is a habit?

Say

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

Summarize

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

UNIT 7.1.2: Safety

Unit Objectives

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

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

Resources to be Used

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

Say

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

Team Activity

Safety Hazards

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

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

Ask

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

Say

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

Do

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

Say

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

Do

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

Ask

De-briefing

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

Summarize

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

UNIT 7.1.3: Self Analysis- Attitude, Achievement Motivation: What is Self Analysis?

Unit Objectives

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

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

Resources to be Used

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

Activity

- This is a paper pencil activity.

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

Do

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

Say

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

Team Activity

Tower building

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

Do 

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

Ask 

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

Say 

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

Ask 

- Is your attitude positive or negative?

Say 

- Let me tell you a story :

It's Little Things that Make a Big Difference.

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

Ask 

- What did you learn from this story?

Activity **What Motivates You?**

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

Do 

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

Say



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

Summarize



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

UNIT 7.1.4: Honesty & Work Ethics

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

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

Say

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

Do

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

Team Activity

Case Study Analysis

Scenario 1

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

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

Scenario 2

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

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

Scenario 3

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

Scenario 4

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

Say

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

Do 

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

Summarize 

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

UNIT 7.1.5: Creativity and Innovation

Unit Objectives

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

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

Resources to be Used

- Participant Handbook
- Chart papers
- Marker pens

Ask

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

Say

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

A.P.J. Abdul Kalam

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

Water filter/purifier at source

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

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

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

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

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

Solar seeder

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

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

Looms for physically challenged

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

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

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

Ask 

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

Say 

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

Team Activity 

- This is a group activity.

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

Activity De-brief

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

Do 

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

Summarize

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

Notes for Facilitation

- Source for stories on innovations:

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

UNIT 7.1.6: Time Management

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

Does this sound like you?

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

Example

- Let's look at these two examples:

Example 1:

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

Example 2:

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

Ask

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

Activity



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

Say



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

Ask



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

Say



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

Activity



Effective Time Management

- This activity has two parts:

PART 1 TO-DO LIST

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

PART 2 URGENT-IMPORTANT GRID

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

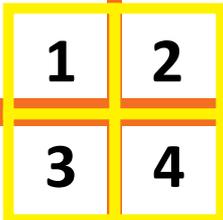
- **Category 2: Not Urgent/Important**
 - This is where you want to spend most of your time.
 - This category allows you to work on something important and have the time to do it properly.
 - This will help you produce high quality work in an efficient manner.
 - The tasks in this category are probably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

TO- DO list format

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

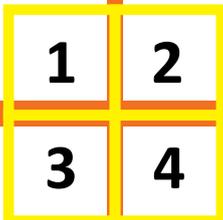
URGENT-IMPORTANT GRID

<p>URGENT/ IMPORTANT</p> <ul style="list-style-type: none"> • Meetings • Last minute demands • Project deadlines • Crisis 	<p>NOT URGENT/ IMPORTANT</p> <ul style="list-style-type: none"> • Planning • Working towards goals • Building relationship • Personal commitments
<ul style="list-style-type: none"> • Interruptions • Phone calls/ E-mails • Other people's minor demands <p>URGENT/ NOT IMPORTANT</p>	<ul style="list-style-type: none"> • Internet surfing • Social media • Watching TV <p>NOT URGENT/ NOT IMPORTANT</p>



URGENT/ IMPORTANT GRID format

<p>URGENT/ IMPORTANT</p>	<p>NOT URGENT/ IMPORTANT</p>
<p>URGENT/ NOT IMPORTANT</p>	<p>NOT URGENT/ NOT IMPORTANT</p>



Do

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

Say

Activity De-brief:

How can we balance tasks between the four categories?

How to manage time through this grid?

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

Summarize

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

Notes for Facilitation

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

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

UNIT 7.1.7: Anger Management

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

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

Say

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

Do

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

Activity

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

Ask

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

Say

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

Do

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

Activity

Trigger points and Anger Management Techniques Activity

Anger Triggers

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

Result of your anger:

--

Write the techniques that you use to manage your anger:

Anger Management Techniques

Say

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

Do

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

Ask

De-brief questions:

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

Summarize

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

Notes for Facilitation

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

UNIT 7.1.8: Stress Management: What is stress?

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

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

Say

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

Ask

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

Say

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

Do

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

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

Team Activity

Case Study Analysis

Scenario 1

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

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

Scenario 2

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

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

Scenario 3

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

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

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

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

Scenario 4

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

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

Ask**De-brief questions:**

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

Say

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

Do

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

Say

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

De-brief:**Scenario 1**

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

Scenario 2

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

Scenario 3

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

Scenario 4

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

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

Do 

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

Scenario 5

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

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

Say **De-brief:**

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

Summarize



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

Notes for Facilitation



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

UNIT 7.2: 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 7.2.1: 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 7.2.2: MS Office and Email: About MS Office

Unit Objectives

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

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

Resources to be Used

- Participant Handbook
- Computer Systems with MS Office

Ask

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

Say

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

Explain

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

Ask

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

Say

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

Do

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

Demonstrate

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

Practical

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

Summarize

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

UNIT 7.2.3: E-Commerce

Unit Objectives

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

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

Resources to be Used

- Computer System with internet connection
- Participant Handbook

Ask

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

Say

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

Ask

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

Say

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

Team Activity

E-commerce examples

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

Say

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

Do

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

Say

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

Explain

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

Say

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

Role Play

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

Ask 

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

Say 

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

Do 

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

Ask 

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

Say 

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

Summarize 

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

UNIT 7.3: 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 7.3.1: Personal Finance – Why to Save?

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

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

Example

- Let's look at these two examples:

Example 1:

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

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

Example 2:

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

Ask

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

Say

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

Ask

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

Say

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

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

Ask

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

Say

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

Team Activity

Personal Finance- Why to save

- This activity has two parts:

PART 1

WAYS TO SAVE MONEY

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

PART 2

HOW WILL YOU USE THE MONEY

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

Do

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

Activity De-brief

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

Say



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

Summarize



You can summarize the session by discussing:

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

UNIT 7.3.2: Types of Bank Accounts, Opening a Bank Account

Unit Objectives

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

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

Resources to be Used

- Account opening sample forms
- Participant Handbook

Ask

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

Example

- Let's look at the given example:

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

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

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

Ask

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

Say

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

Ask

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

Say

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

Team Activity

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

Activity De-brief

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

Say

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

Ask

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

Say

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

Team Activity

Opening a Bank Account

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

PART 1

FILLING A BANK ACCOUNT OPENING FORM

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

Activity De-brief

How did you design the form?

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

Do



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

Summarize

**Note:**

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

Sample Bank Account Opening form.

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

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

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

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

Declaration:

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

Place:

Date:

Signature / LTI of Applicant

Nomination:

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

Place:

Date:

Signature / LTI of Applicant

Witness(es)*

1. _____

2. _____

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

UNIT 7.3.3: Costs: Fixed vs. Variables: What are Fixed and Variable Costs?

Unit Objectives

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

- Differentiate between fixed and variable costs

Resources to be Used

- Participant Handbook
- Blank sheets of paper
- Pens

Ask

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

Say

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

Team Activity

Identify the type of cost

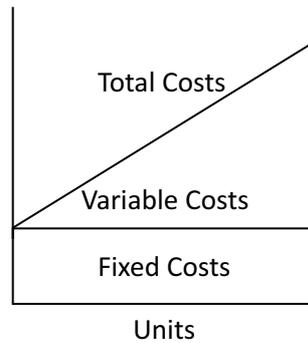
1. Rent
2. Telephone bill
3. Electricity bill
4. Machinery
5. Insurance
6. Office supplies/ Raw materials
7. Employee salaries
8. Commission percentage given to sales person for every unit sold
9. Credit card fees
10. Vendor bills

Do

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

Say

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



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

Team Activity

Fixed vs. Variable Costs

- This is a group activity.

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

Activity De-brief

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

Do

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

Summarize

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

Notes for Facilitation

- Answers for the activity - Identify the type of cost

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

UNIT 7.3.4: Investments, Insurance and Taxes

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

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

Example

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

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

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

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

Say

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

Ask

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

Say

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

Say

- We will have a quiz today.

Team Activity

- The activity is a quiz.

Do

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

Summarize

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

Notes for Facilitation

Questions for the quiz

1. What are bonds?
Bonds are instruments used by public and private companies to raise large sums of money.
2. Who issues the bonds?
Private and public companies issue the bonds.
3. Why are bonds issued?
To raise large amount of money as it cannot be borrowed from the bank.
4. Who is the buyer of stocks and equities?
The general public is the buyer.
5. What types of scheme is the Sukanya Samridhi Scheme?
Small Saving Scheme
6. What is the difference between mutual and hedge funds?
Mutual funds are professionally managed financial instruments that invest the money in different securities on behalf of investors. Hedge funds invest in both financial derivatives and/or publicly traded securities.
7. Why is a loan taken from the bank to purchase real estate?
To lease or sell to make profit on appreciated property price.
8. Name the two types of insurances?
Life Insurance and Non-life or general insurance
9. Which insurance product offers financial protection for 15-20 years?
Term Insurance
10. What is the benefit of taking an endowment policy?
It offers the dual benefit of investment and insurance.
11. Mr. Das gets monthly return on one of his insurance policies. Name the policy?
Money Back Life Insurance

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

It offers the dual benefit of investment and insurance

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

Marine Insurance

14. After what duration is the income tax levied?

One financial year

15. What is long term capital gain tax?

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

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

Securities Transaction Tax

17. What is the source of corporate tax?

The revenue earned by a company.

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

VAT or Value Added Tax

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

Sales Tax

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

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

UNIT 7.3.5: Online Banking, NEFT, RTGS, etc.

Unit Objectives

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

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

Resources to be Used

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

Ask

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

Say

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

Do

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

Say

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

Do

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

Summarize

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

Notes



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

UNIT 7.4: 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 7.4.1: Interview Preparation: How to Prepare for an Interview?

Unit Objectives

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

- Discuss the steps to follow to prepare for an interview

Resources to be Used

- Participant Handbook

Ask

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

Say

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

Activity 1

- Introducing Yourself

Do

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

Ask

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

Say

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

Do

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

Activity 2

- Planning the right attire

Do

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

Summarize

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

UNIT 7.4.2: Preparing an Effective Resume: How to Create an Effective Resume?

Unit Objectives

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

- Discuss the steps to create an effective Resume

Resources to be Used

- Participant Handbook
- Blank papers
- Pens

Ask

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

Say

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

Do

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

Say

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

Activity

Case Study Analysis

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

Candidate Details

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

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

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

Job Posting

* Do you see yourself as a HOUSEKEEPING SUPERVISOR?

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

THE LOCATION:

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

Salary: Negotiable

Industry: Travel / Hotels / Restaurants / Airlines / Railways

Functional Area: Hotels, Restaurants

Role Category: Housekeeping

Role: Housekeeping Executive/Assistant.

Desired Candidate Profile

Friendly, pleasant personality, Service - oriented.

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

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

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

Education-

UG: Any Graduate/ Diploma holder

PG: Post Graduation Not Required

Say

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

Do

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

Summarize

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

Notes for Facilitation

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

Nipesh Singla

#1XX7, Sector XX-D

Chandigarh-160018

Mobile No: 91-988XXXXX01

E-mail: nxxxxxxxxla@gmail.com

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

Professional strengths:

- Proficient in housekeeping
- Experienced in and capable of working with a diverse work force
- Team player and friendly in nature
- Successful working in a multi-cultural environment

- Detail oriented, flexible, and adaptable
- Knowledge of Microsoft Word, Excel, Access and PowerPoint

Educational background:

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

Professional internships:

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

Volunteer Work:

- Student volunteer at children's hospital in Chandigarh.

Nipesh Singla

UNIT 7.4.3: Interview FAQs

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Say

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

Do

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

Role Play

Conduct a role play for the situation given.

Situation 1

- The interviewer will start by asking the interviewee a few generic questions such as:
 - ♦ What is your name?
 - ♦ Tell me something about yourself?
 - ♦ Can you tell me something about your family?
- Then, the interviewer will bluntly ask the following questions:
 - ♦ How do you explain this huge time gap in your resume?
 - ♦ What is the reason for this?
 - ♦ Weren't you looking for a job or is it that no one selected you?

Say

De-brief:

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

Role Play

Conduct a role play for the situation given.

Role Play – Situation 2

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

Say

De-brief:

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

Role Play

Conduct a role play for the situation given.

Role Play – Situation 3

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

Say

De-brief:

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

Role Play

Conduct a role play for the situation given.

Role Play – Situation 4

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

Say

De-brief:

- Don't provide unreal and idealistic answers.
- Your answers should be honest yet diplomatic. In a situation like this, the interviewer does not expect you to provide a specific timeline.
- You can say something like, “I would like to stay with the company as long as I can contribute constructively and develop as an employee, within the organization, professionally and financially.”

Role Play

Conduct a role play for the situation given.

Role Play – Situation 5

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

Say

De-brief:

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

Role Play

Conduct a role play for the situation given.

Role Play – Situation 6

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

Say

De-brief:

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

Role Play

Conduct a role play for the situation given.

Role Play – Situation 7

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

Say

De-brief:

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

Explain

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

Do

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

Activity

Mock Interview Questions

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

Summarize

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

UNIT 7.4.4: Work Readiness – Terms and Terminology

Unit Objectives

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

- Identify basic workplace terminology

Resources to be Used

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

Ask

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

Say

- Let's start this unit with an activity.

Team Activity

Workplace terminology

- This is a group activity conducted in three parts.

Part 1

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

Activity De-brief

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

Do

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

Say 

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

Ask 

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

Say 

- Let's now continue the activity.

Team Activity **Terms and Terminology**

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

Part 2

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

Activity De-brief

- Ask the groups to share the flow charts and the new terms they added while preparing the flow chart.

Do 

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

Say 

- Let's go ahead with the activity.

Team Activity **Terms and Terminology**

- The activity continues with the same group members.

Part 3

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

Activity De-brief

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

Do

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

Summarize

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

UNIT 7.5: 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 7.5.1: Concept Introduction (Characteristic of an Entrepreneur, types of firms/ types of enterprises)

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Say

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

Team Activity

Quiz Questions

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

Do

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

Ask

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

Say

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

Summarize

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

Notes for Facilitation

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

UNIT 7.5.2: Leadership and Teamwork

Unit Objectives

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

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

Resources to be Used

- Participant Handbook
- Blank sheets of paper
- Pens

Do

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



Say

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

Say

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

Ask

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

Say 

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

Ask 

- Do you consider yourself a team player?

Team Activity **Long Chain**

- This is a group activity.

Do 

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

Say **De-brief:**

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

Say 

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

Summarize 

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

UNIT 7.5.3: Communication Skills: Listening & Speaking: The Importance of Listening Effectively

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Activity 1

Activity – Chinese Whisper

Step 1: Form a circle.

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

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

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

Compare them and have a great laugh!

Ask

De-brief questions:

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

Say

- No, the original message was not same at the end of game.
- The barriers to communication like language, disturbance and noise, poor listening skills, boredom, poor speaking skills, etc. are the potential reasons this happens.
- There are various aspects to communication. Speaking skills and listening skills are two major components to any communication. There is always some room for improvement in the way we communicate.
- It is important to accept the reality of miscommunication and work to minimise its negative impacts.

Say

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

Ask

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

Say

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

Do

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

Activity 2

Riddles:

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

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

Do they have a 26th of January in England?

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

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

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

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

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

Answers:

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

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

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

First of all, you would light the match.

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

Every SINGLE person died, but those two were married.

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

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

Ask**De-brief question:**

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

Say

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

Activity 3**Elevator Pitch:**

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

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

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

Do

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

Notes for Facilitation



- Tell the participants to follow these steps to create a great pitch, but bear in mind that you'll need to vary your approach depending on what your pitch is about.
 1. **Identify Your Goal:** Start by thinking about the objective of your pitch. For instance, do you want to tell the potential clients about your organization? Do you have a great new product idea that you want to pitch to an executive or do you want a simple and engaging speech to explain what you do for a living?
 2. **Explain What You Do:** Start your pitch by describing what your organization does. Focus on the problems that you solve and how you help people. Ask yourself this question as you start writing: what do you want your audience to remember most about you? Keep in mind that your pitch should excite you first. After all, if you don't get excited about what you're saying neither will your audience. People may not remember everything that you say, but they will likely remember your enthusiasm.
 3. **Communicate Your USP:** Your elevator pitch also needs to communicate your unique selling proposition or USP. Identify what makes you, your organization or your idea unique. You'll want to communicate your USP after you've talked about what you do.
 4. **Engage with a Question:** After you communicate your USP, you need to engage your audience. To do this, prepare open-ended questions (questions that can't be answered with a "yes" or "no" answer) to involve them in the conversation. Make sure that you're able to answer any questions that he or she may have.
 5. **Put it all Together:** When you've completed each section of your pitch, put it all together. Then, read it aloud and use a stopwatch to time how long it takes. It should be no longer than 20-30 seconds. Remember, the shorter it is, the better!

Example:

Here's how your pitch could come together:

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

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

Summarize



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

UNIT 7.5.4: Problem Solving & Negotiation Skills

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

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

Say

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

Ask

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

Say

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

Team Activity

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

Do 

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

Say **De-brief questions:**

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

Ask 

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

Say 

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

Ask 

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

Say 

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

Summarize 

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

Activity 

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

Do 

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

Ask 

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

Say 

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

Ask 

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

Say 

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

Say 

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

Role Play 

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

Do 

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

Problem solving Scenario 1

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

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

Problem solving Scenario 2

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

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

Another set of customers lodged complaint about the misconduct and rude behaviour of a particular staff member. You often hear from your customers that the orders don't get delivered on time or wrong products get delivered.

You have already been struggling with shortage of staff and such complaints are a serious concern as it is hampering your brand image. What strategies will you adopt to solve this problem?

Negotiation Scenario 1

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

Negotiation Scenario 2

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

Notes for Facilitation**Facilitating Role Plays****Preparing for the activity**

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

Conducting the activity

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

Summarize

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

UNIT 7.5.5: Business Opportunity Identification: Entrepreneurs and Opportunities

Unit Objectives

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

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

Resources to be Used

- Participant Handbook
- Blank sheets of paper
- Pens

Ask

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

Say

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

Do

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

Activity

Do your SWOT analysis

Strength

What are your strengths?
What unique capabilities do you possess?
What do you do better than others?
What do others perceive as your strengths?

Weakness

What are your weaknesses?
What do your competitors do better than you?

Opportunity

What trends may positively impact you?
What opportunities are available to you?

Threat

Do you have solid financial support?
What trends may negatively impact you?

Do

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

Ask

De-brief questions:

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

Summarize

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

UNIT 7.5.6: Entrepreneurship Support Eco-System

Unit Objectives

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

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

Resources to be Used

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

Ask

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

Say

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

Ask

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

Say

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

Team Activity

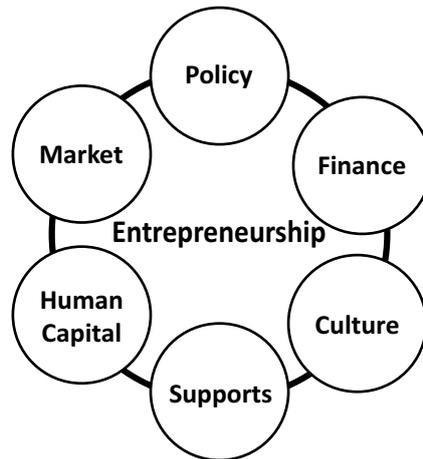
- Making a poster showing the entrepreneurship support eco-system.

Do

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

Activity De-brief

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



Ask

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

Say

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

Team Activity

- Presentation on key schemes to promote entrepreneurs

Do

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

Activity De-brief

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

Summarize

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

UNIT 7.5.7: Risk Appetite & Resilience

Unit Objectives

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

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

Resources to be Used

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

Ask

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

Example

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

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

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

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

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

Say

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

Say

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

Team Activity

Risk Appetite

- This is a group activity.

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

Activity De-brief

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

Do

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

Ask

- Do you think all entrepreneurial ventures are successful?
- What happens if the first venture is not successful?
- Should the entrepreneur stop when faced with challenges or face them?

Example

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

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

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

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

Say 

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

Say 

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

Team Activity **Entrepreneurship and Resilience**

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

Activity De-brief

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

Do 

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

Summarize 

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

UNIT 7.5.8: Success and Failures

Unit Objectives

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

- Discuss how to deal with failure

Resources to be Used

- Participant Handbook

Ask

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

Example

- Let's have a look at this example.

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

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

Say

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

Ask

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

Say

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

Team Activity

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

Notes for Facilitation

Facilitating Role Plays

Preparing for the activity

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

Conducting the activity

1. Introduce the activity. Emphasize that role playing provides participants with an opportunity to apply their new knowledge, skills, and tools in situations that simulate actual interactions with customers.
2. Ask participants to form pairs. Direct the members of each group to choose who will play the roles. Remind the groups that each participant should be given the opportunity to play/practice the different roles.
3. Conduct a demonstration so that participants become familiar with the expectations related to the roles and support materials.
4. To maintain spontaneity of the interactions during the role play, ask the participants not to discuss the details of their roles prior to the role play.
5. Give the pairs 15-20 minutes to conduct the role play.
6. Circulate among the groups to answer any questions that may arise and provide guidance as needed.
7. After all the pairs have finished with the role play, conduct a de-briefing session on each role play.
8. Ask the groups to take five minutes to talk about what happened during the role play. The groups should discuss the questions given in the de-briefing for each role play. Encourage participants to provide constructive criticism during their discussions.
9. Conclude the activity by asking participants to think about whether and how they might use scripted role plays in their real life.

Summarize

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

UNIT 7.6: 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 7.6.1: Market Study/ The 4Ps of Marketing/ Importance of an IDEA: Understanding Market Research

Unit Objectives

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

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

Resources to be Used

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

Ask

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

Example

- Let's have a look at this example.

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

Say

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

Team Activity

Market Study

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

Activity De-brief

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

Do 

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

Say 

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

Ask 

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

Say 

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

Say 

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

Team Activity **4 Ps of Marketing**

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

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

Activity De-brief

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

Do 

- Instruct the participants that this is group work.
- Divide the class into four groups.
- Give each group a chart paper.
- Assign each group a target audience for selling the pens:
 1. Rural villagers
 2. Rural middle class
 3. Urban middle class

4. Upper end rich people

- Tell the participants that they have to design a marketing strategy keeping the 4Ps of Marketing in mind.
- Give the participants 20 minutes to discuss and come up with their strategy.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit

Activity De-brief

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

Say

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

Summarize

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

UNIT 7.6.2: Business Entity Concepts

Unit Objectives

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

- Recall basic business terminology

Resources to be Used

- Participant Handbook

Say

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

Activity

- The activity is a quiz.

Do

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

Summarize

- Summarize the unit by discussing the key points.

Notes for Facilitation

QUESTIONS FOR THE QUIZ

1. What does B2B mean?
Business to business
2. What is a financial report?
A comprehensive account of a business' transactions and expenses
3. Who is a sales prospect?
A potential customer
4. How is working capital calculated?
Current assets minus current liabilities

5. What is an estimation of the overall worth of a business called?

Valuation

6. You are buying a house. What type of transaction is it?

Complex transaction

7. How will you calculate the net income?

Revenue minus expenses

8. How is Return on Investment expressed?

As percentage

9. How will you calculate the cost of goods sold?

Cost of materials minus cost of outputs

10. What is revenue?

Total amount of income before expenses are subtracted.

11. What is a Break-Even Point?

This is the point at which the company will not make a profit or a loss. The total cost and total revenues are equal.

12. What is the formula used to calculate simple interest?

*$A = P(1 + rt); R = r * 100$*

13. What are the three types of business transactions?

Simple, Complex and Ongoing Transactions

14. The degrading value of an asset over time is known as

Depreciation

15. What are the two main types of capital?

Debt and Equity

UNIT 7.6.3: CRM & Networking

Unit Objectives

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

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

Resources to be Used

- Participant Handbook

Ask

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

Say

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

Do

- Divide the class into four groups of maximum six participants depending on the batch size.
- Give one case study to each group.
- Instruct them to read the case carefully.
- The group is expected to analyse and discuss the case amongst them and find a solution to the given problem.
- Put down the discussion points (de-brief questions) on the board. Give the class 5-10 minutes to discuss the case and note down their solutions.
- At the end of 10 minutes, the team should present their case solution to the class.

Team Activity

Case Study Analysis

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

Scenario 2

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

Scenario 3

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

Scenario 4

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

Say

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

Do 

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

Say 

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

Activity **Group Discussion**

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

Summarize 

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

UNIT 7.6.4: 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 7.6.5: Procedures and Formalities for Bank Finance

Unit Objectives

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

- Describe the procedure and formalities for applying for bank finance

Resources to be Used

- Participant Handbook
- Bank loan/finance form sample

Ask

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

Say

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

Do

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

Summarize

- Close the discussion by summarizing the important documents needed for bank loan.
- Ask the participants if they have any questions related to what they have talked about so far.

Notes for Facilitation



- Checklist of documents is provided as resources for the session.
- You can make some copies and distribute it during the group activity.
- Download sample loan application forms from any nationalised bank's website. Print sufficient copies to circulate it amongst the groups.

CHECKLIST OF DOCUMENTS TO BE SUBMITTED ALONG WITH LOAN APPLICATION (Common for all banks)
1. Audited financial statements of the business concern for the last three years
2. Provisional financial statements for the half – year ended on _____
3. Audited financial statements of associate concern/s for the last three years
4. Copy of QIS II for the previous quarter ended on _____
5. Operational details in Annexure I
6. CMA data for the last three years, estimates for current year and projection for the next year
7. Term loan/DPG requirements in Annexure II
8. List of machinery in respect of machinery offered as security in Annexure III
9. Additional details for export advances furnished in Annexure IV
10. Property statements of all directors/partners/proprietor/guarantors
11. Copies of ITAO of the company for the last three years
12. Copies of ITAOs/WTAOs of the directors/partners/proprietor and guarantors
12. Copies of certificate from banks and financial institutions certifying the latest liability with them
14. Copy of board resolution authorizing the company to apply to your bank for the credit facilities mentioned in application
15. Copy of memorandum and article of association (in case of limited company)/partnership deed (in case of partnership firm)
16. Cash budget for the current year and next year in case of contractors and seasonal industries

UNIT 7.6.6: Enterprise Management – An Overview: How to Manage Your Enterprise?

Unit Objectives

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

- Discuss how to manage their own enterprise

Resources to be Used

- Participant Handbook

Ask

- Having set-up a business, do you think it is possible to do everything on your own?
- Does one require trained persons for help?
- What does management mean?

Say

- Let's have a look at this example:

Kapil had a small business that was beginning to pick up pace. He wanted to expand his business, and therefore employed few more people. One day, as he was walking past Ramesh, one of his new employees, he overheard Ramesh talking rudely to a customer on the phone. This set him thinking. Kapil realised that he should have regular team meetings to motivate his employees and speak with them about any problems they might be facing during work. He should also conduct training sessions on new practices, soft skills, and technology, and develop work ethics manual for managing his enterprise.

Say

- Was Kapil correct in his approach or he should have scolded Ramesh instantly in front of his other employees?
- Discuss “Enterprise Management – An Overview” with the participants as given in the Participant Handbook.

Say

- Let's learn how to effectively manage an enterprise or business through an activity.

Team Activity

Enterprise Management

- This is a group activity.
- Design a matrix listing the topics and key words that are needed to run an enterprise effectively and smoothly.

Activity De-brief

- Have each group present their matrix.
- Encourage participants of the other groups to ask question about each other's presentation.

Do

- Instruct the participants that this is group work.
- Divide the class into small groups of 4.
- Give each group a chart paper and coloured pen.
- Tell the participants that they have to make a matrix they need to fill.
- They have to write the main topics and key words that will help them effectively manage their enterprise.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Summarize

- Ask the participants what they have learned from this exercise/activity.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the importance of effective management to run an enterprise as given in the Participant Handbook.

UNIT 7.6.7: 20 Questions to Ask Yourself before Considering Entrepreneurship

Unit Objectives

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

- List the important questions that every entrepreneur should ask before starting an enterprise

Resources to be Used

- Participant Handbook
- Blank sheets of paper
- Pens

Ask

- Why do you want to become an entrepreneur?

Say

- It is very important to know why you want to become an entrepreneur. Your personal goals for becoming an entrepreneur play a key role in the success of your business. Your goals should be clear well before you start your business.
- Apart from the goals, the other aspects of business that you need to bear in mind are the potential problems that you may face to set-up, your areas of interest, and all the other dimensions of the business.
- Let's understand it better with the help of some questions that every entrepreneur should ask before starting their own business.
- Open the Participant Handbook section named '20 Questions to Ask Yourself Before Considering Entrepreneurship'. You have to answer the questions individually.
- Then, we will have a class discussion on all the questions.

Do

- Read out the questions one by one in front of all the participants.
- Participants have to answer all the one by one questions.
- Give the class 10-15 minutes to note down their answers.
- At the end of 15 minutes, open the discussion for all the questions.
- Moderate the discussion by focusing on the relevant points.
- Keep a check on time and don't let the discussion get sabotaged or lose track of time. Ensure all the questions are covered and discussed.

Summarize

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

Annexure I

Training Delivery Plan

Training Delivery Plan			
Program Name:	Certificate Course in Car Washer and Assistant Service Technician		
Qualification Pack Name & Ref. ID	Car Washer and Assistant Service Technician - ACS/Q1417		
Version No.	1.0	Version Update Date	7-03-2017
Pre-requisites to Training (if any)	5th Standard pass		
Training Outcomes	<p>By the end of this program, the participants will be able to:</p> <ol style="list-style-type: none"> 1. Assist in routine servicing of vehicles 2. Assist in maintenance of vehicles 3. Assist in repairs of vehicles 4. Clean bodywork and exteriors of vehicle 5. Clean the interiors of vehicle 6. Plan & Organize activities for required outcome 7. Work effectively in team 8. Maintain healthy, safe & secure work environment 		

Sl. No	Module Name	Session Name	Session Objectives	NOS Reference	Methodology	Training Tools/ Aids	Duration
1	Introduction	Icebreaker	<ul style="list-style-type: none"> • Acquire knowledge of automobile history • Describe different types of automobile • Classify automobile industry • Explain service process of automobile workshop 		Group Activity: Passing the Parcel	Whiteboard/ Markers, Computer, Projector, screen	5 hour

2	Assist in service, maintenance and repair of the vehicle	Overview of auto industry, car maintenance and repair processes	<ul style="list-style-type: none"> • Explain role of auto service technician in automobile service to meet required responsibilities • Explain the organizational context for the automobile service station • Operate various tools and equipment required for vehicle diagnostic • Operate various tools and equipment required for vehicle repair • Identify the various components of automobile • Explain the function of the major automobile components and subassembly • Demonstrate the working of the automobile major aggregates and sub-assemblies 	ASC/ N01401 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, PC 11,PC12, PC13, PC14, PC15, PC16 KB1, KB2, KB3, KB4, KB5	<ul style="list-style-type: none"> • Facilitator-led-discussion • Videos 	Whiteboard/ Markers, Computer, Projector, Image Recognition tools , Lever Type Grease Gun, Chisel- Drop Forge, Oil Can - Wesco Type, Centre Punches, Two Leg Puller, Hammer Ball Peen, Single arm Torque wrenches, Cross Wheel Spanner, Vernier Callipers, Micrometre, Digital Multimeter, Hacksaw frame With Blade, Tyre Pressure Gauge, Hydro meter, Plastic Hammer, Spark Plug Sockets, Magnetic Pickup Tool, Hydraulic jacks, Air Compressor and Hoses, Tyre Inflator,	150 hrs
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			<ul style="list-style-type: none"> • Assist in diagnosing the defect and performance issues in various component / sub-assemblies of the vehicle • Assist in routine servicing and maintenance requirements of the vehicles • Assist in repair job of major aggregates and sub assemblies of the vehicle • Help in preparing vehicle checklist • Help in preparing document for the repair work 			<p>Battery Charger, Screw Extractor Set, Wheel Chocks, Two Post lift, Diagnostic tool, Brake Bleeder, Tyre Changer (Trufit), Pneumatic Tools, Diesel Engine mounted on stand, Petrol Engine mounted on stand, Exhibits-Clutch, System, Gear Box mounted on stand, Propeller shaft, Differential mounted on stand, Starter Motor, Alternator, Steering System, Air Assisted Brake System, Brake System Hydraulic, Fuel Pump, Water Pump, Radiator, Fuel Filter, Oil Filter, Wall charts on various engine systems, Tool Board</p>	
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						Diagnostic Equipments, First aid Kit, Personal protective equipments, Fire extinguisher	
3	Perform vehicle cleaning and washing	Car washing process, equipment requirements	<ul style="list-style-type: none"> Identify and operate various equipments used for vehicle wash Identify and use various cleaning solution and other consumables used for vehicle cleaning Carry out pre-wash procedure as per service station guidelines Clean and wash exterior of the vehicle Clean and wash interior of the vehicle Clean and wash dickey and engine compartment Carryout drying process of the vehicle 	ASC/ NO1101 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, PC 11,PC12, PC13, PC14, PC15 KB1, KB2, KB3, KB4, KB5, KB6, KB7, KB8, KB9	<ul style="list-style-type: none"> Facilitator-led-discussion Skill Practice (Activity) 	Whiteboard, Marker, Computer, Projector , Air Compressor, Air gun, Table for Mat wash, Car Washer, Pressurized water spraying gun, Step Stool, Upholstery cleaner, Bucket, Vacuum cleaner, Car wash bay, Dressing Solution, Tar remover, Brush, Foaming brush, Cotton cloth/ Rug, Sponge, Body polish, Tyre polish, Car freshener, Personal protective equipments, First aid kit	150 hrs

4	Plan and organize work to meet expected outcomes	Planning and work organizing, organization policies and procedure, time management, goal focus	<ul style="list-style-type: none"> • Perform the job within given time as per quality standards/work schedule • Identify and manage resource and use it efficiently and effectively • Perform in accordance with the organizational policies and procedures • Manage his/her time effectively at work • Apply best practices to keep workplace clean • Acquire knowledge and understanding required for planning & organising. 	ASC/ N0001 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9 KB1, KB2	<ul style="list-style-type: none"> • Facilitator-led-discussion • Skill Practice (Activity) 	Whiteboard/ Markers, Computer, Projector, screen typical 5 S literature	45 hrs
5	Work effectively in a team	Communication skills, team work, conflict resolution	<ul style="list-style-type: none"> • Interact & communicate effectively with colleagues including members in the own group as well as other groups • Use all forms of verbal and non-verbal methods to communicate clearly and effectively with colleagues, supervisors, customers and other stakeholders 				

			<ul style="list-style-type: none"> • Judge customers' body language and use an appropriate approach to deal with them • Apply the best practices for grooming to look presentable and make good impression on customers • Use proper personal etiquette at workplace • Acquire knowledge and understanding required for team working 	<p>ASC/ N0002</p> <p>PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, KB1, KB2</p>	<ul style="list-style-type: none"> • Facilitator-led-discussion • Skill Practice (Activity) 	<p>Whiteboard/ Markers, Computer, Projector, screen, case studies</p>	50 hrs
6	Maintain a Healthy, Safe and Secure working environment	Health and safety at workplace, hazards, emergency procedures and plan, fire evacuation	<ul style="list-style-type: none"> • Perform as per organisation policies & procedures to maintain a safe, secure working environment • Maintain safe & secure workplace • Use best practice to remove potential hazards at workplace and prevent accidents • Apply appropriate strategies to deal with emergencies and accidents at workplace • Apply relevant norms to the vehicles and spare parts to ensure no damage to the environment 	<p>ASC/ N0003</p> <p>PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9</p> <p>KB1, KB2, KB3, KB4</p>	<ul style="list-style-type: none"> • Facilitator-led-discussion • Skill Practice (Activity) 	<p>Whiteboard/ Markers, Computer, Projector, Fire extinguisher, First aid, BS IV- VI and disposal of hazardous items and parts to provide an overview</p>	50 hrs

Annexure II

Assessment Criteria

CRITERIA FOR ASSESSMENT OF TRAINEES

Assessment Criteria for Fitter – Levelling, balancing and alignment	
Job Role	Car Washer and Assistant Service Technician
Qualification Pack	ASC/Q1417, v1.0
Sector Skill Council	Automotive

Sr. No.	Guidelines for Assessment
1	Assessment to be conducted by ASDC as per competency output defined in the NOS/QP and the assessment criteria provided in the NOS/QP
2	Assessment to be carried out by a third party Assessment Body duly affiliated to the SSC.
3	ASDC assessments will be comprehensive and cover all aspects of acquired knowledge, practical skills and also basic ability to communicate. Accordingly, evaluation process would include: <ol style="list-style-type: none"> i. Theory/Knowledge test ii. Practical demonstration test iii. Face to Face Viva-Voce
4	Theory/Knowledge assessment will be carried out on line through a link provided for each assessment that generates a random paper from a bank of questions available at the back end. <ul style="list-style-type: none"> - Exception to an online test in favour of Paper Test would be subject to non-availability of requisite broad band and/or hardware. - On line test would be conducted in the presence of an ASDC assessor till web enabled proctoring is deployed.
5	ASDC assessor would be conducting Practical and Viva as per the criteria provided in the NOS/QP.
6	Cut off criteria for certification (Marks obtained in %):80 %

Assessment outcome (NOS Code and Description)	Assessment criteria (PC)	Total Marks	Out Of	Marks Allocation	
				Theory	Skills Practical
ASC/N1401 Assist in service, maintenance and repair of the vehicle	PC1. collect and safely handover personal belongings of customer like phone, pen, documents etc, at the time of taking a vehicle for servicing or repairs	100			4

PC2.	place the vehicle on a suitable platform, before the painting actually starts			4
PC3.	assist in organising the secure parking area and moving vehicles around as directed			4
PC4.	lift raw materials, finished products, and packed items, manually or using hoists			4
PC5.	understand the auto component manufacturer specifications related to the various components/ aggregates in the vehicle			5
PC6.	ensure that service, maintenance and repair activities are carried out on the vehicle without causing damage to any other aggregate/ component			4
PC7.	run errands at the direction of the senior technician such as getting fetching parts, tools, gauges, instruments, fixtures, workshop supplies, taking vehicles to dealerships etc.			5
PC8.	assist in performing service or repair of vehicles under supervision of senior technician			5
PC9.	dismantle aggregates like wheels, suspension system, steering column, braking system, engine assembly etc.			5
PC10.	count and report serviced or repaired vehicles to determine if product orders are complete			5
PC11.	assist in maintaining and managing the workshop, tools, equipment and machinery in required conditions			4
PC12.	follow standard operating procedures specially vehicle service manuals for using workshop tools and equipments			4
PC13.	ensure any malfunctions or repair requirements observed in vehicles (and beyond own scope of work) are reported to the concerned person			4

	PC14. ensure any malfunctions observed in tools and equipments are reported to the concerned persons				4
	PC15. assist in fitting and balancing the replaced and refitted parts				5
	PC16. ensure that trainings organized by the OEM from time-to-time are attended and knowledge levels are upgraded (esp. in case of newly launched products, product refreshes)				4
	All KA, KB for the NOS			30	
		Total	100	30	70
ASC/N1101 Perform vehicle cleaning and washing	PC1. inspect parts, equipment, or vehicles for cleanliness	100			5
	PC2. understand the instructions given by supervisor regarding the washing, routine and any other specific cleaning requirements				4
	PC3. mix cleaning solutions, abrasive compositions, or other compounds as advised by a supervisor on work instructions				5
	PC4. scrub, scrape, or spray machine parts, equipment, or vehicles, using scrapers, brushes, clothes, cleaners, disinfectants, insecticides, acid, abrasives, vacuums, or hoses as per work instructions				5
	PC5. transport materials, equipment, or supplies to or from work areas, using carts or hoists				5
	PC6. pre-soak or rinse machine parts, equipment, or vehicles parts by immersing objects in cleaning solutions or water, manually or using hoists following W.I.				4
	PC7. operate and activate cleaning equipment or machines and notify the supervisors in case of any malfunctions				5
	PC8. turn valves or handles on equipment to regulate pressure or flow of water, air, steam, or abrasives from sprayer nozzles following W.I.				5

	PC9. clean: interior and exterior surfaces of vehicles; plastic work inside cars, using paintbrushes, vehicle windows, seat frames, backs and bottoms and blacken tyres, driver seat, seating area, windshield, drivers side glass and vehicle dash; passenger grab rails and stanchions; floor to remove gum, dirt and grease; electrical & Electronic component, couplers, connection etc.				5
	PC10. rinse objects and place them on drying racks				5
	PC11. use cloth, squeegees, or air compressors to dry surfaces				4
	PC12. sweep, shovel, or vacuum loose debris or salvageable scrap into containers				5
	PC13. maintain specified distance and pressure while washing engine compartment				4
	PC14. remove debris and other dirt containers from work areas				5
	PC15. maintain cleanliness of the work and shop areas to ensure a safe work environment				4
	All KA, KB for the NOS			30	
		Total	100	30	70
ASC/N0001 Plan and organise work to meet expected outcomes	PC1. keep immediate work area clean and tidy	100			7
	PC2. treat confidential information as per the organisation's guidelines				8
	PC3. work in line with organisation's policies and procedures				8
	PC4. work within the limits of job role				8
	PC5. obtain guidance from appropriate people, where necessary				8
	PC6. ensure work meets the agreed requirements				7
	PC7. establish and agree on work requirements with appropriate people				9
	PC8. manage time, materials and cost effectively				8
	PC9. use resources efficiently with minimal wastage				7
	All KA, KB for the NOS			30	
		Total	100	30	70

ASC/N0002 Work effectively in a team	PC1. maintain clear communication with colleagues (by all means including face-to-face, telephonic as well as written)	100			9
	PC2. work with colleagues to integrate work				8
	PC3. pass on information to colleagues in line with organisational requirements both through verbal as well as non-verbal means				9
	PC4. work in ways that show respect for colleagues				8
	PC5. carry out commitments made to colleagues				9
	PC6. let colleagues know in good time if cannot carry out commitments, explaining the reasons				9
	PC7. identify problems in working with colleagues and take the initiative to solve these problems				9
	PC8. follow the organisation's policies and procedures for working with colleagues				9
	All KA, KB for the NOS			30	
		TOTAL	100	30	70
ASC/N0003 Maintain a healthy, safe and secure working environment	PC1. comply with organisation's current health, safety and security policies and procedures	100			9
	PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person				9
	PC3. coordinate with other resources at the workplace to achieve healthy, safe and secure environment for all incorporating government norms esp. for emergency situations like fires, earthquakes etc.				9
	PC4. identify and correct any hazards like illness, accidents, fires or any other natural calamity within the limits of individual's authority				9
	PC5. report any hazards outside the individual's authority to the relevant person in line with organisational procedures and warn other people who may be affected				9



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