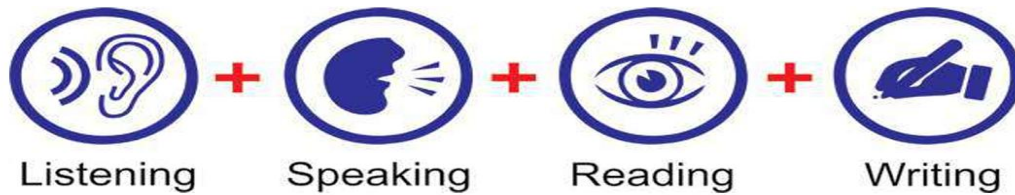


Unit 1: Communication Skills 1

- Session 1 Active Listening
- Session 2 Parts of Speech
- Session 3 Writing Sentences

Communication is a two-way process through which information or message is exchanged between individuals using language, symbols, signs or behaviour. To learn a language, one needs to develop four key skills, namely listening, speaking, reading and writing.



Communication involves a sender, who encodes and sends a message through a channel, and a receiver, who decodes the message and gives feedback. Feedback is important in communication as it helps in knowing whether the receiver has understood the message or not.

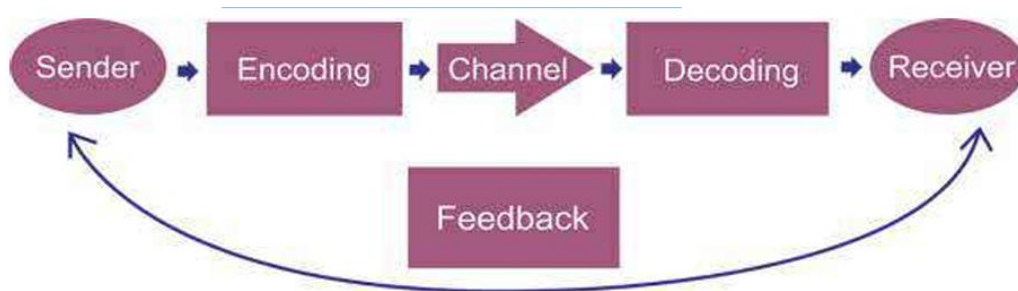


Figure 1.2: Elements of communication

Session 1: Active Listening

Effective communication involves skills that can be utilised to send messages that are clear, concise and accurate.

- A clear statement is one which conveys the exact message that you are trying to convey to the other person.
- A concise statement is appropriately brief or to the point.
- An accurate statement is one that is factual, i.e., its correctness can be verified.

Effective communication skills help us to communicate the message correctly, precisely and completely. Lack of communication skills can result in confusion, frustration, wasted effort and missed opportunities.

Listening skill

Every effective conversation starts with listening. It is important to learn to give undivided attention to a person with whom a conversation is taking place. Without the ability to listen attentively, messages can be easily misunderstood.

Active listening

Active listening allows you to understand the problems and collaborate to develop solutions. The various factors that affect active listening are as follows:

Eye contact: Maintaining an eye contact with the person you are talking to sends a signal to the speaker that “Yes, I am talking to you or listening to you”. Avoiding eye contact could mean that you do not want to listen to the person speaking to you.

Gestures: These indicate to the speaker if you are listening or not. Keep your hand and feet still while talking to someone.

Avoiding distractions: You need to identify the things that distract you. You must physically remove the distractions in order to listen attentively. For example, is that you should avoid glancing at the wristwatch frequently.

Giving feedback: Feedback can be positive or negative. But in both the cases, one needs to be polite so that the person to whom the feedback is being given is not hurt or offended.

Stages of active listening

The best kind of listening is ‘active listening’. It happens when you hear, understand, respond and remember what is being said. The five stages of active listening are as follows.

1. **Receiving:** It involves listening attentively.
2. **Understanding:** It is an informed agreement about something or someone.
3. **Remembering:** It refers to the retrieval or recall of some information from the past.
4. **Evaluating:** It is about judging the value, quantity, importance and amount of something or someone.
5. **Responding:** It is about saying or doing something as a response to something that has been said or done.

How to ensure active listening?

You can remember the acronym ‘RESPECT’ to ensure active listening.

R	Remove distractions that may hamper listening. For example, reducing the volume of television, radio or mobile phone while talking to a person.
E	Eye contact refers to looking at the speaker while listening.
S	Show that you are listening attentively to the speaker through gestures.
P	Pay attention and focus on what the speaker is saying.
E	Empathise and feel the emotions of the speaker. Empathy is the ability to share someone's feelings or experiences by imagining what it would be like to be in that person's situation.
C	Clarify doubts. Ask questions to clarify doubts.
T	Tune yourself to the timing of the speaker, i.e., wait for the speaker to finish, and then, respond.

Overcoming barriers to active listening

Factors	How a factor can become a barrier?	How to overcome the barrier?
Being pre-occupied	When pre-occupied, you may not be listening to a person carefully.	Do not let emotions take over your mind. Keep away phones and digital devices.
Noise and visual distractions	You may not be able to hear the other person clearly in a noisy environment.	Create a conducive environment to avoid misinterpretations and distractions.
Past experiences or mindset	You may have developed biases or prejudices based on past experiences and interactions.	Avoid developing biases and be objective in your approach when interacting with others.
Personal factors	Your personal feelings may affect your listening, for example, your preconceptions about the other person.	Allow the other person to finish speaking, and then, respond.

Session 2: Parts Of Speech

Parts of speech are the categories of words based on their function within a sentence.

A 'sentence' is a group of words that communicates a complete meaning, thought or action. A group of words, which does not make complete sense, is known as a 'phrase'.

Using capitals We know that all sentences begin with a capital letter. It is easy to know what to capitalise if you remember the acronym 'MINTS'. MINTS is a set of simple rules that help you to capitalise words correctly.

Alphabet	M	I	N	T	S
	Months	I	Names	Titles	Starting letter of sentences
Rule	Capitalise the first letter in the names of all months.	Capitalise the letter 'I' when used as a word.	Capitalise the first letter in the names of people, places, rivers, seas and oceans, mountains, islands and days.	Capitalise the first letter in the titles used before people's names.	Capitalise the first letter in every sentence.
Example	I will go to college in June.	Every day, I play tennis with him.	This Tuesday, Vidya is in Rajasthan.	Dr Shah and Mr Patel work together.	The cat ran out of the house.

Punctuation

There are 15 basic punctuation marks or signs used in English. These include full stop or period, comma, question mark, exclamation mark, apostrophe, colon, semi-colon, dash, hyphen, parenthesis, quotation mark, bracket, brace, ellipsis and bullet point.

Basic parts of speech

The different types of words we use in sentences are called parts of speech. The basic parts of speech are nouns, pronouns, adjectives, verbs and adverbs.

Parts of speech	What they do	Example sentence	Example words
Noun	Nouns are words that refer to a person, place, thing or idea. They are 'naming words'.	In the sentence: "Reema wrote a letter." Both Reema and letter are nouns.	Dog India Sanjay
Pronoun	A pronoun is a word used in place of a noun.	In the second sentence: "Reema wrote a letter. She is tired." She is used in place of the noun Reema. It is a pronoun.	I They He You
Adjective	Adjective is a word that describes other words.	In the sentence: "Reema wrote a long letter." Long is an adjective that describes the noun 'letter'.	Small Blue Sharp Loud
Verb	Verb is a word that shows action.	In the sentence: "Reema wrote a letter." Wrote is a verb. It tells what action Reema did.	Run Eat Think Sit
Adverb	Adverb is a word that adds meaning to a verb, adjective, or other adverb. It answers the questions — how? how often? when? and where?	In the sentence: "Reema quickly wrote a letter." Quickly is an adverb. It tells us how Reema did the action (writing).	Easily Always Inside Before

Supporting parts of speech

We use supporting words to join the main parts of speech together and to add information to the sentences that we frame.

Supporting parts of speech	Use	Example
Articles	<ul style="list-style-type: none"> The words 'a', 'an' and 'the' are known as articles. Articles are, generally, used before nouns. 'An' is used before words with a vowel (a, e, i, o, u) sound. 'A' is used before nouns starting with a consonant (all except those starting with a, e, i, o and u) sound. 'The' is used to refer to specific or particular words. 	<p>The car stopped suddenly because a cat ran in front of it.</p> <p>A book An apple An umbrella The sun</p>

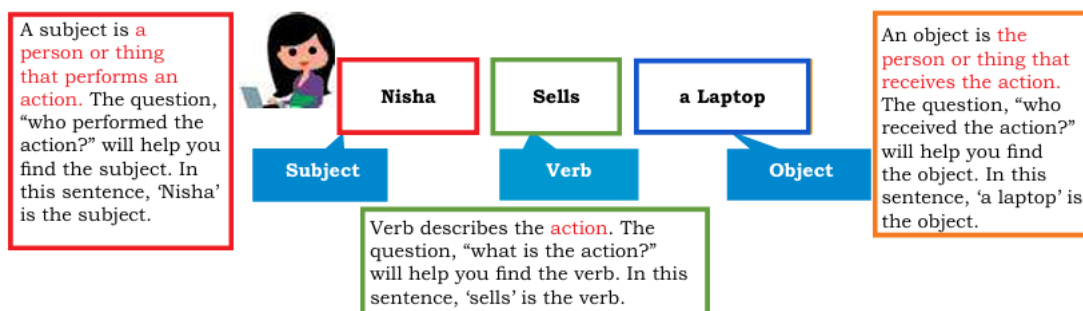
Conjunctions	Conjunctions are words that join two nouns, phrases or sentences. Some common conjunctions are 'and', 'or' and 'but'.	Instead of – Sheela went to the market. I went to the market. Sheela and I went to the market. Instead of – Do you want oranges? Do you want apples? Do you want oranges or apples?
Prepositions	<ul style="list-style-type: none"> Prepositions connect one word with another to show the relationship between them. They, usually, answer the questions 'where', 'when' and 'how'. Some common prepositions are 'on', 'at', 'under' and 'in'. 	The cat is on the roof. The shop is at the end of the road. Rahul is standing under the tree. I live in Delhi.
Interjections	These words express strong emotions, such as happiness, surprise, anger or pain. They have an exclamation mark at the end.	Wow! Oh! Oh no! Thanks! Help!

Session 3: Writing Sentences

A sentence is a group of words, which together expresses a complete idea that has meaning. A sentence, typically, contains a subject and an object, conveying a statement, question, exclamation, or command.

Simple sentence A simple sentence is one that has only one subject and one predicate or has only one finite verb.

Complex sentence A complex sentence is one, which consists of two or more coordinate clauses, joined by a coordinating conjunction.



Sentence	Subject	Verb	Object
I wrote a letter.	I	wrote	a letter
He called the customer.	He	called	the customer
She packed the product.	She	packed	the product
Dia and Sanjay booked a cab.	Dia and Sanjay	booked	a cab

Types of objects

The object in a sentence can be either direct or indirect. Direct objects are the ones directly ‘acted on’ by the action word (verb). An indirect object answers the questions, such as “to whom” and “for whom”.

Table 1.8: Direct and indirect objects

Sentence	Verb	Verb + what?	Verb + by whom/to whom?	Direct object	Indirect object
Reema bought stationery.	bought	stationery		stationery	
Fatima and Sonia played tennis.	played	tennis		tennis	
He offered a coffee to me.	offered	coffee	me	coffee	me
The manager assigned us projects.	assigned	projects	us	projects	us

Types of sentences

Category I : Active and passive sentences: Sentences, where the subject does an action, are known to be in active voice. Sentences, in which the subject receives an action, are known to be in passive voice.

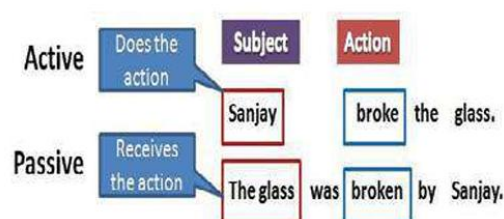


Figure 1.7: Active and passive sentences

Table 1.9: Active and passive sentences

Active voice	Passive voice
She wrote an email.	An email was written by her.
He opened the door for the customer.	The door was opened by him for the customer.
Mohan sold a bike.	The bike was sold by Mohan.

Examples of active and passive sentences

Active	Passive
I did not beat him.	He was not beaten by me.
Kapil made a profit yesterday.	A profit was made by Kapil yesterday.
The tiger was chasing the deer.	The deer was being chased by the tiger.

Types of sentences —

Category II : There are mainly four types of sentences, i.e., declarative, interrogative, exclamatory and imperative.

Table 1.10: Types of sentences — Category II

Statement or declarative sentence	Question or interrogative sentence	Emotion, reaction or exclamatory sentence	Order or imperative sentence
It provides information or states a fact. It always ends with a full stop (.). This is the most common type of sentence.	This type of sentence asks a question. It always ends with a question mark (?).	An exclamatory sentence expresses a strong emotion, such as joy, sadness, fear or wonder. It always ends with an exclamation mark (!).	These sentences show an order, command, request or advice. It can end with a full stop or an exclamation mark (. or !).
Read aloud the examples given below.			
I go to office.	Did you go to office?	I received the prize for the best employee!	Go to office today.
It is very cold.	How is the weather?	Oh, it's very cold!	Wear your sweater.
I completed my project.	Did you complete your project?	I completed my project!	Complete your project.

Examples of types of sentences — Category II

Sentence	Type
Where is my I-card?	Interrogative
My arms ache from planting those saplings!	Exclamatory
Reading mythology will make you more aware.	Declarative
Come with us right now.	Imperative
No way! I don't want a tattoo!	Exclamatory
Get out of the bed immediately!	Imperative

Paragraph: A group of sentences forms a paragraph.

Unit 2 Self-management Skills

Self-management, which is also referred to as 'self-control', is the ability to control one's emotions, thoughts and behaviour effectively in different situations. This includes motivating oneself, and working towards achieving personal and academic goals. To manage oneself well, a person needs to develop the following.

- **Positive thinking:** to think that one can get things done and be happy.
- **Result orientation:** to dream big and achieve the desired or set results.
- **Self-awareness:** to be aware of one's personality traits and make the best out of one's strengths.

Session 1: Motivation And Positive Attitude

Motivation and positive thinking can help us overcome fears and take up new challenges. Motivation is derived from the word 'motive'. Thus, directing behaviour towards certain motive or goal is the essence of motivation. An individual's motivation may come from within (intrinsic motivation) or be inspired by others or events (extrinsic motivation).

Intrinsic motivation: It includes activities for which there is no apparent reward but one derives enjoyment and satisfaction in doing them. It occurs when people are internally motivated to do something because it brings them pleasure. They think it is important or feel what they are learning is significant. Incentives related to the motive or goal can satisfy one's needs.

Extrinsic motivation: It arises because of incentives or external rewards. Lack of motivation or incentives may lead to frustration, for example, employees who are kept on contractual basis for a long time may get frustrated and leave an organisation.

Positive attitude

People, who maintain a positive or optimistic attitude in life situations and challenges, are able to move forward than those with a negative attitude. Positive attitude helps improve mental and physical health.

Ways to maintain positive attitude

Following are some ways that can help one maintain a positive attitude:

Start the day with a morning routine. Say positive affirmations, smile often and think about the tasks to be accomplished during for the day.

Feed the mind with positivity, read motivating books, listen to music with uplifting lyrics, watch inspiring movies, etc.

- **Be proactive.** A proactive person decides how one must feel regardless of what may be going around or what the day may bring.

- **Focus on constructive and positive things.** Do not approach life with 'problems'. Approach it with 'solutions'.
- **Learn from failures.** Think what could have been better and work towards the goals.
- **Learn to focus on the present.** Negativity mostly stems out from anxiety of the past and future events.
- **Move towards your goals and dreams.** Be cheerful and work hard to achieve the dreams.

Here are some more techniques that can help you to maintain a positive outlook in the long run.

- **Physical exercise and fresh air:** Following a healthy lifestyle is essential for students. Practicing yoga, meditation and deep breathing exercises help improve blood circulation and relax the body. Taking a walk or playing in the park helps one to get a lot of fresh air, which helps in becoming more active.
- **Healthy diet:** A healthy and balanced diet is important for a healthy body and mind. Eating a balanced diet, such as daal, roti, green vegetables and fruits provides the strength required to do daily work efficiently.
- **Organise academic life:** By keeping class notes organised, completing assignments on time and keeping track of all deadlines, stress can be reduced to a great extent. When you are not stressed, you can channelise your mind to achieve the goals.
- **Adequate sleep:** A good night sleep for at least seven hours is important so that the mind and body can get recharged to function better the next day.
- **Holidays with family and friends:** Visiting a relative's place, such as grandparents' house or a new place during summer vacation can help one break the monotonous normal routine and come back refreshed.

What is stress and how to manage it?

Stress: Stress is a state of feeling upset, annoyed and hopeless. Some of the ways to manage stress are given below:

- Stay positive and analyse what is going wrong in a certain situation. Resolving the situation is easy once understood.
- Maintain an accomplishment sheet and enter even small achievements.
- Keep your thoughts in present. Pondering over past issues makes us feel upset and helpless.
- Talk to friends and family for comfort.
- Practise meditation and yoga.
- Whenever you feel negative thoughts are taking over, take a look at your accomplishment sheet.

Session 2: Result Orientation

Result orientation is a term used to describe a person's ability to recognise what results are important and the steps needed to be taken to achieve them. It means to focus on the result of an assigned task. Hence, result orientation describes an individual or organisation that focusses on outcome rather than the process that has been used to produce a product or deliver a service.

How to become result oriented?

(i) **Set clear goals:** Setting clear and accurate goals is the first step one needs to take to meet the targets.

(ii) **Prepare an action plan:** An action plan describes the way a person or an organisation will meet the set objectives. It gives a detail of the steps to be taken to achieve the target. Therefore, it consists of several actions or steps that need to be taken, and changes that need to be made. Each action, step or change should include the following information.

- What changes will occur after the actions?
- Who will carry out the changes?
- When will the changes take place?
- How long will the changes stay?
- What resources are needed to carry out the changes?
- Who should know and what should be communicated?

(iii) **Use the right resources and tools:** One must evaluate the resources and tools needed to achieve those results and whether they are available. For example, you may want to clear the college entrance exam with 70 per cent marks. Do you have the books to study for the exam? If not, from where and how can you get them?

(iv) **Communicate with mentors and peers:** One must talk to teachers, seniors and mentors for help in setting realistic goals.

(v) **Make a calendar:** One must make a calendar to monitor the progress at regular intervals.

(vi) **Work hard:** One must work hard and believe in one's dreams.

Goal setting

Goal setting helps us to understand what we want, how to achieve it and how do we measure our success. Use the acronym SMART to set goals.

SMART Goals for Students

SMART Component	Definition	Student Example
S – Specific	Clearly states what you want to achieve	"I want to improve my math grades by practicing algebra daily."

M – Measurable	Includes a way to track progress or success	"I will aim to score at least 80% in my next three math tests."
A – Achievable	Realistic given your current resources and time	"I'll study 30 minutes each day using my school textbook and online videos."
R – Relevant	Aligns with your academic or personal goals	"Improving math will help me prepare for engineering entrance exams."
T – Time-bound	Has a clear deadline or timeframe	"I will reach this goal by the end of the current semester."

Session 3: Self-Awareness

Self-awareness is about understanding one's own needs, desires, habits, traits, behaviours and feelings.

Steps towards self-awareness

- The first step for practising self-awareness is gaining a greater awareness of one's emotions.
- The second step to practising self-awareness is making a habit of tracking one's feelings.
- The third step for practising self-awareness is expanding one's practice to areas of life beyond the person's feelings.

Personality and personality traits

- Personality is a cluster of thoughts, feelings and behaviours that make a person unique and different from others.
- Personality traits are defined as relatively lasting patterns of thoughts, feelings and behaviours that distinguish individuals from one another.
- Personality development is the development of an organised pattern of behaviours and attitudes that makes a person distinctive.

There are five parameters that describe an individual's personality. These five dimensions are also called the '**Big Five Factors**' and the model is referred to as the '**Five Factor Model**', which is abbreviated as **FFM**.

Trait	Description
Openness	Reflects creativity, curiosity, flexibility, and adventurousness. Open-minded individuals enjoy learning, meeting new people, and exploring new places.
Conscientiousness	Involves self-discipline, punctuality, empathy, and responsibility. Such individuals care for others and complete tasks diligently.

Extraversion	Characterized by sociability, confidence, and talkativeness. Extroverts energize social settings and easily make friends.
Agreeableness	Indicates kindness, cooperation, and warmth. Agreeable people are considerate and adapt well to different situations.
Neuroticism	Associated with emotional instability, anxiety, and self-doubt. Individuals may struggle with social interactions and excessive worry.

Common personality disorders

Personality disorders involve long-term patterns of thoughts and behaviour that are unhealthy and rigid. A personality disorder is a way of thinking, feeling and behaving that deviates from worldly expectations and causes distress, which lasts over time.

Cluster A: Suspicious Personality Disorders

People in this cluster usually appear odd, eccentric, and suspicious of others.

Disorder	Key Features	Social Behavior	Emotional Traits	Example/Signs
Paranoid Personality Disorder	Extreme mistrust and suspicion of others	Keeps distance, doubts even family and friends	Holds grudges, easily offended	Varsha suspects her maid despite CCTV proof
Schizoid Personality Disorder	Prefers to be alone , detached	Avoids relationships, little interest in others	Emotionally cold, aloof, enjoys inner world	Spends time in fantasy/daydreaming
Schizotypal Personality Disorder	Odd beliefs (e.g., thoughts can control events)	Avoids close/intimate relationships	Inappropriate or unusual emotional responses	Misinterprets others' actions and behavior

Cluster B: Emotional and impulsive

This personality disorder is characterised by unstable moods and behaviours, which lead to unhealthy and unstable relationships, emotional instability and feeling of worthlessness.

Disorder	Key Features	Social Behavior	Emotional Traits	Example/Signs
Antisocial Personality Disorder	Break rules, act impulsively, aggressive	Ignore laws and social norms, may lie or steal	Lack guilt, don't learn from mistakes	Addiction, repeated fights, criminal acts
Borderline Personality Disorder	Weak sense of self, fear of abandonment	Unstable relationships, clingy but push people away	Intense mood swings, self-harm, suicidal threats	Violent outbursts, can't handle stress well
Histrionic Personality Disorder	Overly dramatic, attention-seeking	Always want to be the center of attention	Very sensitive to criticism, easily influenced	Loud, emotional, exaggerates stories for attention
Narcissistic Personality Disorder	Believe they are superior	Show-off, look down on others	Lack empathy, arrogant	Boastful about achievements, demand admiration

Cluster C: Anxious

This personality disorder is characterised by feelings of worry, anxiety or fear, which have the potential to affect one's daily routine.

Disorder	Key Features	Social Behavior	Emotional Traits	Example/Signs
Avoidant Personality Disorder	Feel socially inferior or unattractive	Avoid social interactions to escape criticism/rejection	Constant fear of embarrassment, rejection	Avoids parties or group work due to fear of judgment
Dependent Personality Disorder	Lack self-confidence, need others' care	Rely on others for decisions and support	Afraid of being alone, clingy	Always asks others to decide even small matters
Obsessive-Compulsive Personality Disorder (OCPD)	Strong focus on rules, order, and perfection	Neglect relationships to complete tasks perfectly	Stressed if perfection not achieved	Spends hours arranging files but ignores friends/family

Steps to overcome personality disorders

- Talk to someone. Most often, it helps to share your feelings.
- Look after your physical health. A healthy body can help you maintain a healthy mind.
- Build confidence in your ability to handle difficult situations.
- Engage in hobbies, such as music, dance and painting. These have a therapeutic effect.
- Stay positive by choosing words like 'challenges' instead of 'problems'.

MCQs on Personality Disorders

1. **Varsha constantly doubts her maid of stealing, even though CCTV cameras prove otherwise. She keeps following her maid's movements and never trusts her.**
Which disorder does this indicate?
a) Schizoid Personality Disorder
b) Paranoid Personality Disorder ☒
c) Avoidant Personality Disorder
d) Borderline Personality Disorder
2. **Ramesh prefers to live alone, avoids social gatherings, and spends most of his time in daydreams. He shows little interest in forming friendships and appears emotionally cold.**
Which disorder does this describe?
a) Schizotypal Personality Disorder
b) Schizoid Personality Disorder ☒
c) Histrionic Personality Disorder
d) Dependent Personality Disorder
3. **Seema believes she can control events with her thoughts. She misinterprets other people's behavior and avoids close relationships because of strange beliefs.**
Which disorder is this?
a) Schizotypal Personality Disorder ☒
b) Narcissistic Personality Disorder
c) Obsessive-Compulsive Personality Disorder
d) Antisocial Personality Disorder
4. **Rahul often lies, steals, and breaks laws. He shows no guilt and never learns from punishment. He frequently gets into fights and abuses alcohol.**
Which personality disorder does he most likely have?
a) Borderline Personality Disorder
b) Antisocial Personality Disorder ☒
c) Histrionic Personality Disorder
d) Avoidant Personality Disorder
5. **Meena has frequent mood swings and violent outbursts. She often threatens self-harm when people don't give her attention. She is very scared of being abandoned.**
Meena is showing signs of:

- a) Borderline Personality Disorder ☒
 - b) Avoidant Personality Disorder
 - c) Schizoid Personality Disorder
 - d) Narcissistic Personality Disorder
6. **Rita loves being the center of attention. She behaves in an overly dramatic way, exaggerates stories, and feels upset when she is ignored.**
This is most likely:
- a) Narcissistic Personality Disorder
 - b) Histrionic Personality Disorder ☒
 - c) Paranoid Personality Disorder
 - d) Obsessive-Compulsive Personality Disorder
7. **Arun always boasts about his achievements, looks down on his classmates, and believes he is superior. He shows little concern for others' feelings.**
Arun is showing symptoms of:
- a) Narcissistic Personality Disorder ☒
 - b) Antisocial Personality Disorder
 - c) Schizotypal Personality Disorder
 - d) Dependent Personality Disorder
8. **Sonia avoids social gatherings because she feels unattractive and fears people will reject or criticize her. She constantly feels inferior to others.**
Sonia most likely has:
- a) Avoidant Personality Disorder ☒
 - b) Schizoid Personality Disorder
 - c) Borderline Personality Disorder
 - d) Histrionic Personality Disorder
9. **Neha finds it very hard to make even small decisions without asking her parents. She depends on them for both emotional and daily needs, and hates being alone.**
Which disorder does this suggest?
- a) Dependent Personality Disorder ☒
 - b) Avoidant Personality Disorder
 - c) Narcissistic Personality Disorder
 - d) Schizoid Personality Disorder
10. **Karan is obsessed with perfection. He spends hours arranging his books in order and rewriting notes neatly. He often ignores friends and family to finish his tasks exactly as he wants.**
Karan is likely suffering from:
- a) Obsessive-Compulsive Personality Disorder ☒
 - b) Paranoid Personality Disorder
 - c) Antisocial Personality Disorder
 - d) Histrionic Personality Disorder

UNIT 3 Information and Communication Technology Skills

Session 1: Getting Started with Spreadsheet

A spreadsheet is an electronic document, which has rows and columns. It is used to store data in a systematic way and do calculations.

Types of spreadsheets



Figure 3.1: Popular spreadsheet software

Components of a spreadsheet

- A row is an arrangement of cells in a horizontal (sleeping) manner.
- A column is an arrangement of cells in a vertical (standing) manner.
- A cell is a rectangle shaped box, where the row and column meet. You can enter text, numbers, date, formula, etc., in a cell.
- The name box shows the location of the selected cell. The location of the cell is a combination of column and row.
- A worksheet is a collection of cells in the form of a grid (a network of lines that intersect each other, making rectangles).
- A workbook is a spreadsheet that has one or more worksheets.

Session 2: Performing Basic Operations in a Spreadsheet

Type of data

There are three main types of data — text, numbers and formula. Nowadays, it is also possible to enter pictures, audio, video and shapes in a spreadsheet.

When a single cell is selected it is called active cell. When a number of cells is selected, it is called cell range.

Deleting data in a cell, Saving the spreadsheet in various formats, Printing the spreadsheet

Session 3: Working With Data And Formatting Text

Using Sum() function

Copying and moving formula – ctrl C, ctrl X

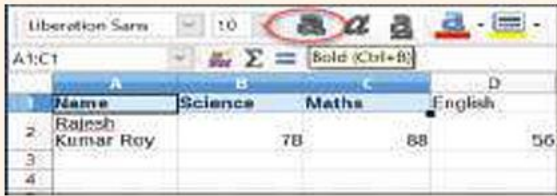
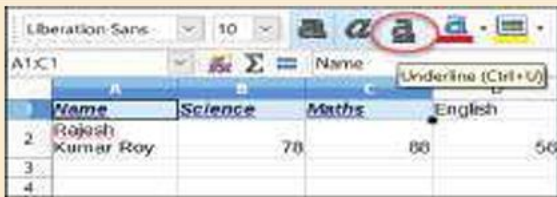
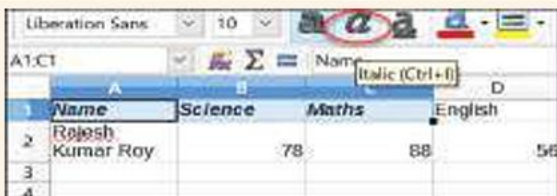
Paste – ctrl V

Change text style and font size

Align (arrange) text in a cell

Highlight text

Table 3.3: Highlighting text

Action	Shortcut keys	Tool Bar icon
To make text bold	Ctrl+b	
To underline text	Ctrl+u	
To make text italic or slanting	Ctrl+i	

Session 4: Advanced Features In Spreadsheet

Sorting data

Click on Data, and then, select Sort

Filtering data

Protecting spreadsheet with password

Click on Tools and select Protect Spreadsheet

Another way of protecting a spreadsheet is as follows. 1. Click on File, and then, Save As. Type the file name and click Save with password. Click on Save. A Set Password dialog box appears, type password, click on OK.

Session 5: Presentation Software

Presentation software is being widely used to make digital presentations. It has many advantages, which are as follows.

1. They are interesting as they have features like images, videos, animation and music.
2. Making changes in digital presentations is easy.
3. A digital presentation can be shown to a much larger audience by projecting on a screen.
4. The presentation can be printed and distributed to the audience.

Presentation software available

1. LibreOffice Impress
2. Microsoft Office – PowerPoint
3. OpenOffice Impress
4. Google Slides
5. Apple Keynote

Adding text to a presentation

Session 6: Opening, Closing, Saving And Printing A Presentation

Session 7: Working With Slides And Text In A Presentation

Adding slide to a presentation, Deleting slides, Adding and formatting text

Highlighting text — bold, underline, italic

Aligning text — left, right, center, justified

Changing text colour

Session 8: Advanced Features Used In Presentation

Inserting shapes in presentation - click on Insert, and then, select Shape

Inserting clipart and images in presentation

Changing slide layout

The default layout of a LibreOffice Impress slide contains one textbox for the title and one for content. Layout helps to arrange the slide content in an organised way.

Unit 4 Entrepreneurship Skills

Session 1: Entrepreneurship And Entrepreneur

Entrepreneurship is the process of turning an idea into a business by taking risks, using resources wisely, and trying to make a profit.

An **entrepreneur** is a person who starts and runs a business. They take risks, use resources, and create opportunities to earn money, improve their status, or help society.

Characteristics of entrepreneurship for students:

- It is an activity to start and run a business to earn profit.
- It starts by finding an opportunity to sell something and make money.
- It focuses on using resources (like money, time, and materials) in the best way.
- It involves taking risks to start and grow the business.

Entrepreneurship — art and science

Entrepreneurship as Science – Like science, entrepreneurship follows certain steps and processes to achieve results, just like in chemistry or physics.

Entrepreneurship as Art – Like art, it also depends on creativity, skills, and personal talent. For example, a musician can create music in different ways, and an entrepreneur can use new ideas in different ways.

Conclusion – Entrepreneurship is both an art and a science because it needs proper methods and planning (science) as well as creativity and skills (art) to make a business successful.

Qualities of a Successful Entrepreneur

1. **Initiative** – Take action quickly and grab opportunities before they are lost.
2. **Risk-taking** – Be ready to face risks, as profit is never guaranteed.
3. **Learn from mistakes** – Don't repeat errors; improve with experience.
4. **Motivation** – Stay driven and work with passion until goals are achieved.
5. **Self-confidence** – Believe in yourself to lead and inspire others.
6. **Hard work** – Be ready to work tirelessly, even beyond office hours.
7. **Decision-making** – Take timely and correct decisions to avoid losses.

Type of entrepreneurs

Types of Entrepreneurs

1. **Service Entrepreneurs** – Provide new or existing services in the market.
2. **Business Entrepreneurs** – Focus on trade/business, not manufacturing; create demand for products.
3. **Industrial Entrepreneurs** – Manufacturers who make products to meet customer needs (e.g., textile, machines).
4. **Agricultural Entrepreneurs** – Use modern technology in farming to increase yield.
5. **Technical Entrepreneurs** – Use technical skills to invent/innovate machines, tools, and methods.
6. **Non-technical Entrepreneurs** – Focus on services before/after manufacturing (marketing, distribution, etc.).
7. **Professional Entrepreneurs** – Start a business, grow it, then sell it and start another one.
8. **IT Entrepreneurs** – Innovate in the field of Information Technology (software, apps, etc.).
9. **Women Entrepreneurs** – Businesses started and run by women.
10. **Social Entrepreneurs** – Work on solutions for society, culture, or environment (social good).
11. **Family Business Entrepreneurs** – Inherit and continue a family-run business.
12. **First-Generation Entrepreneurs** – People who start a business without any family business background.

Mnemonic: “Some Big Ideas Are Too Nice, People In Work Should Focus First.”

Breakdown:

- **S** – Service entrepreneurs
- **B** – Business entrepreneurs
- **I** – Industrial entrepreneurs
- **A** – Agricultural entrepreneurs
- **T** – Technical entrepreneurs
- **N** – Non-technical entrepreneurs
- **P** – Professional entrepreneurs
- **I** – IT entrepreneurs
- **W** – Women entrepreneurs

- **S – Social entrepreneurs**
- **F – Family business entrepreneurs**
- **F – First-generation entrepreneurs**

Roles and functions of an entrepreneur

Functions of an Entrepreneur

1. **Identifying opportunities** – Spot business chances in changing human needs (food, fashion, education, etc.).
2. **Turning ideas into action** – Convert ideas into real products or services.
3. **Feasibility study** – Check if the idea is practical, profitable, and possible (make a business plan).
4. **Resourcing** – Arrange money, raw materials, machines, and workers.
5. **Setting up the enterprise** – Complete legal formalities, choose location, set up premises and machinery.
6. **Managing the enterprise** – Run the business by managing people, materials, money, production, and marketing.
7. **Growth and development** – Aim for higher goals and continuous improvement.

Mnemonic: “Our Amazing Friend Rahul Sets Many Goals.”

Breakdown:

- **O – Opportunities (Identifying opportunities)**
- **A – Action (Turning ideas into action)**
- **F – Feasibility study**
- **R – Resourcing**
- **S – Setting up the enterprise**
- **M – Managing the enterprise**
- **G – Growth and development**

What motivates an entrepreneur?

Qualities that Motivate an Entrepreneur

1. **Standard of excellence** – Always sets high goals, works hard, and tries to do things better and more innovative.
2. **Uniqueness** – Tries to be different and original in ideas and methods.
3. **Focus on long-term goals** – Plans patiently for the future instead of only short-term success.
4. **Need to influence** – Believes their ideas can make a big impact on people, society, or even the world.

Mnemonic: “Every Unique Leader Inspires.”

Breakdown:

- **E – Excellence (Standard of excellence)**
- **U – Uniqueness**
- **L – Long-term focus**
- **I – Influence (Need to influence)**

Identifying opportunities and risk taking

Ways to Identify New Business Opportunities

1. **Community concerns** – Look for problems or needs in your local area. Solving them can create good business opportunities.
2. **Personal experiences** – Use your own challenges or learn from stories of successful entrepreneurs to get ideas.
3. **Research with others** – Talk to like-minded people, join groups, and share ideas. Discussions often lead to new opportunities.

Entrepreneurship is about spotting the right opportunity and taking the risk. Example: Mark Zuckerberg started Facebook with a simple idea of connecting college friends.

Startups

A startup is a company that is in the first stage of its operations.

Difference between a Startup and a Traditional Business Venture

Point	Startup	Traditional Business
Goal	To grow fast, scale quickly, and often bring innovation.	To earn steady profits and ensure stability.

Innovation	Usually based on a new idea, product, or technology.	Based on tried-and-tested products/services.
Risk	High risk, but also high potential reward.	Lower risk, more predictable returns.
Funding	Often depends on investors, venture capital, or crowdfunding.	Usually funded by personal savings, loans, or family funds.
Growth	Rapid and aimed at large markets.	Slow and steady, usually limited to local/regional markets.
Flexibility	More adaptable, can pivot/change direction quickly.	More fixed structure, changes slowly.

Key Points about Startups

- **Minimum Investment** – Startups usually begin with a small investment, mostly based on an idea.
- **Technology-driven** – Many startups use technology to solve problems (e.g., apps, websites, digital platforms).
- **Examples** – Online food delivery startups like Swiggy and Zomato are popular in India.
- **Funding** – Startups often raise money from angel investors or venture capitalists, unlike small businesses that rely on loans.
- **Mentoring** – Startup founders seek guidance from experts, mentors, and global/local startup groups.
- **Government Support** – The Government of India supports new businesses through Startup India initiative, which provides tax benefits, funding opportunities, and an ecosystem for growth.

Quiz: Startups

Q1. Startups usually begin with:

- a) A large investment
- b) A small investment
- c) No investment at all
- d) Only government funding

Q2. Which of the following is an example of a technology-driven startup?

- a) Grocery shop in the market
- b) Swiggy

- c) Tailor shop
- d) Stationery shop

Q3. Startups usually raise money through:

- a) Bank loans only
- b) Angel investors and venture capital firms
- c) Pocket money from family
- d) Local shopkeepers

Q4. True or False:

Startup India is a government initiative to support new startups with tax benefits and funding.

Q5. Fill in the blank:

A lot of startups in India, like _____ and _____, focus on online food delivery.

Session 2: Barriers To Entrepreneurship

Barriers to Entrepreneurship

1. Environmental Barriers

- Lack of raw materials/resources
- Non-availability of skilled workers
- No proper machinery or infrastructure
- Delay in getting money/funds

How to overcome: Do market research, surveys, and take guidance from mentors.

Government schemes to support entrepreneurs:

- Pradhan Mantri Mudra Yojana (PMMY): mudra.org.in
- Credit Guarantee Scheme (CGTMSE): cgtmse.in
- Stand-Up India Scheme: standupmitra.in

2. No or Faulty Business Plan

- Without a proper action plan, business can get messy.
- A business plan helps assign roles and motivates everyone to work harder.

3. Personal Barriers

- Fear of failure: *Will my business last? Will I make profit? Will customers like my product?*

- Worry about money for family needs.
- Difficulty in finding a suitable and reliable team.

4. Self-doubt

- Feeling discouraged when things go wrong.
- Losing confidence in oneself.

How to overcome:

- Focus on long-term goals.
- Get support from family and friends.
- Believe in yourself to fight fear of failure.

5. Forming a Team & Teamwork

- Finding the right people is hard.
- Team members must share the same values and work culture.
- A good team makes work faster and more effective.

In short: Barriers include environmental issues, poor planning, personal doubts, lack of confidence, and weak teamwork. But with research, government schemes, motivation, and strong teams, these barriers can be overcome.

Session 3: Entrepreneurial Attitudes

The attitude an entrepreneur has is different from that of a wage employed person. A wage employed person has to do one's job and not worry about the company. But the entrepreneur thinks and acts differently. The person not only thinks about one's work but also about the work of one's employees and the work required for the growth of the company. The attitudes that make a successful entrepreneur are given in Figure 4.1.

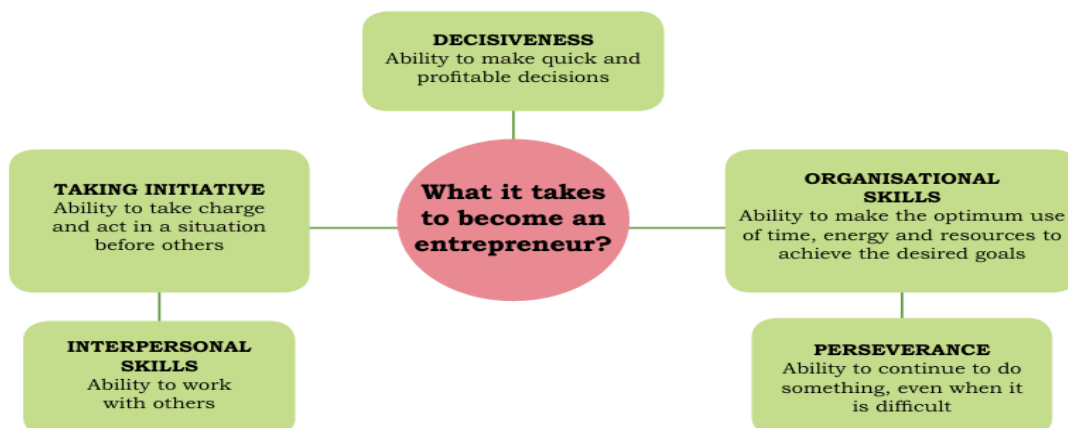


Figure 4.1: Attitudes of an entrepreneur

Session 4: Entrepreneurial Competencies

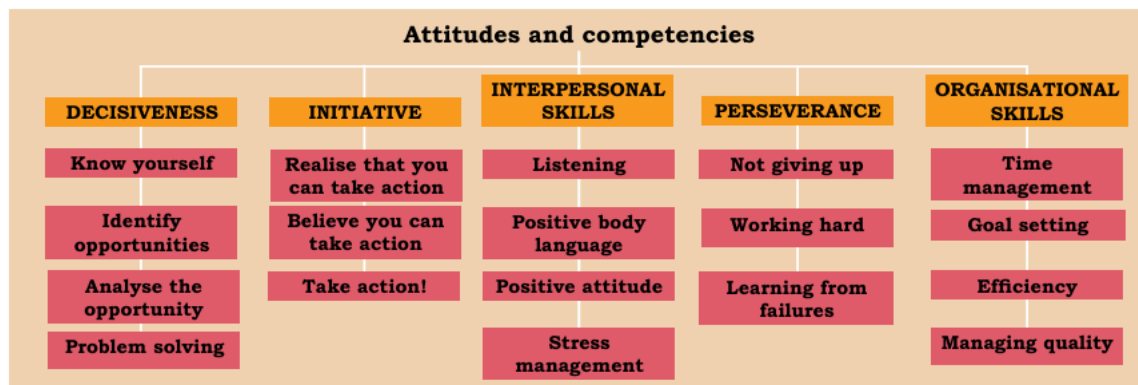


Figure 4.2: Attitudes and competencies to become a successful entrepreneur

Decisiveness

Decisiveness is the ability to make profitable and quick decisions.

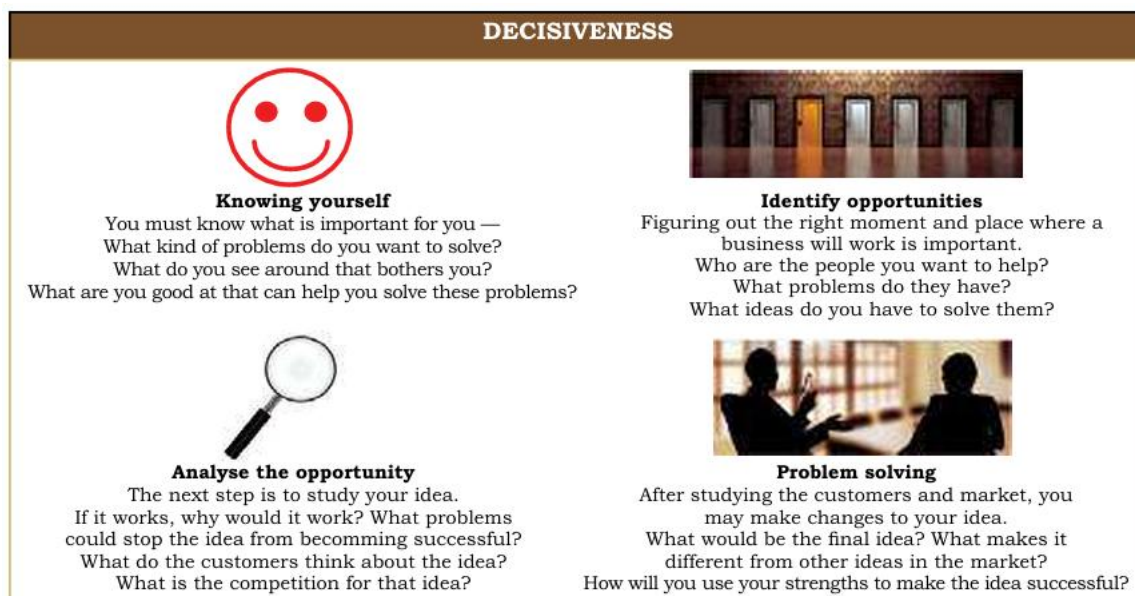


Figure 4.3: Solving the decisiveness dilemma

Initiative

Once you have decided what you want to do, the next step is taking action. Initiative is the ability to take charge and act in a situation before others.



Figure 4.4: Taking initiative

Interpersonal skills

Interpersonal means dealing with relationships. It is between two or more persons. Interpersonal skills, thus, mean the competencies required to work with other people.

If the entrepreneur wants one's business venture to grow and do better, the person has to work with a number of people. Thus, it becomes important that we learn how to interact with people. Some ways to do that are as follows:

Essential Soft Skills

1. Listening

- Listening carefully shows respect and interest.
- Builds trust with the speaker.
- Makes communication meaningful.

2. Body Language

- Facial expressions, gestures, and posture matter.
- Negative body language: frown, crossed arms, leaning back → shows disinterest.
- Positive body language: smile, eye contact, leaning forward → shows you care.

3. Positive Attitude

- Means being optimistic and hopeful, even in difficult times.
- If feeling negative → share with someone you trust.
- Important in feedback:
 - Start with what the person is doing well.
 - Then suggest improvements.

- Stay open-minded when receiving feedback.

4. Stress Management

- Stress = mental pressure or tension (e.g., before exams or while working in teams).
- Managing stress is necessary for health and teamwork.

Ways to manage stress:

1. Walking in nature
2. Physical activity (running, swimming, etc.)
3. Deep breathing exercises
4. Meditation or yoga

Perseverance

Perseverance is the ability to continue to do something, even when it is difficult.

Perseverance can be built in the following ways:

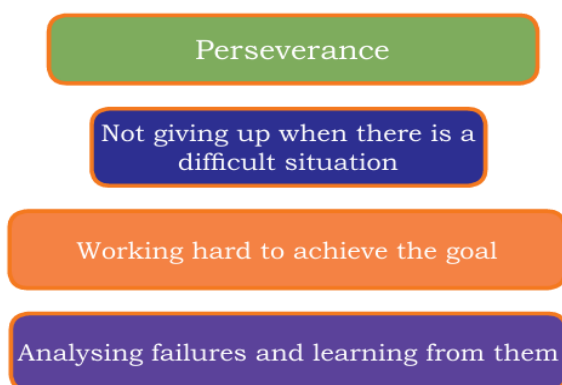


Figure 4.5: Building perseverance

Organisational skills

Organisational skills refer to the ability of making optimal use of one's time, energy and resources to achieve one's goals. Organisational skills include the following:

Time Management, Goal Setting & Efficiency

1. Time Management

Using time wisely by planning and controlling activities.

Key steps:

1. Plan well
2. Set clear goals

3. Fix deadlines
4. Share responsibilities in a team
5. Do the most important tasks first

2. Goal Setting

- A goal = target/aim we want to achieve.
- Goals motivate us to work harder and smarter.
- Goals give direction and make us put in more effort.
Example: In a game, the second round is better because you now have a goal to win.

3. Efficiency

- Doing things well and on time without wasting resources.
- Means using team efforts, money, and time wisely.
- Work division = better results.
Example: In the second round of the game, you divided tasks → worked more efficiently.

4. Managing Quality

- Maintaining a standard of excellence in products or services.
- As a business grows, quality is the most important factor.
- Customers trust and return when quality is good.
Example: Ravi bought good-quality clothes for his customers instead of cheap ones → built trust.

Unit 5 Green Skills

Session 1: Green Jobs

What are Green Jobs?

- Jobs that **protect and restore the environment**.
- Can be in **traditional sectors** (like manufacturing, construction) or **new sectors** (like renewable energy).
- Aim: **Sustainable production & consumption**.

Examples of Green Sectors

1. **Energy** – solar, wind, hydro power
2. **Water conservation**
3. **Waste management & recycling**
4. **Pollution control**
5. **Eco-friendly construction (green buildings)**

Who are Green Collar Workers?

- Professionals & skilled workers who work in environmental sectors.

Examples:

- Green building architects
- Environmental consultants & lawyers
- Waste management managers
- Solar/wind energy engineers & installers
- Organic farmers
- Green vehicle engineers
- Electricians (install solar panels)
- Plumbers (install solar water heaters)
- Construction workers (build green buildings)

At Enterprise Level

Green jobs help by:

- Producing **eco-friendly products & services** (e.g., clean transportation, green buildings).
- Using **green production processes** (reduce water use, improve recycling).

India's Efforts for Green Jobs

1. **Reducing CO₂ emissions** in vehicles
2. Promoting **renewable energy** (solar, wind, hydro)
3. **Green buildings** in construction sector
4. Government + private sector = energy awareness & efficiency
5. **Skill Council for Green Jobs** → trains workforce in renewable energy, waste management & sustainability

Government Initiatives

- **Skill Council for Green Jobs** – develops skills in renewable energy & waste management.
- **Make in India** – promotes green economy by:
 - Encouraging investment
 - Supporting innovation
 - Enhancing skill development
 - Building world-class, eco-friendly manufacturing

Benefits of green jobs

Green jobs help:

- increase the efficiency of energy and raw material.
- reduce greenhouse gas emissions.
- control waste and pollution.
- protect and restore ecosystems.
- support adaptation to the effects of climate change.

Green Jobs in Different Sectors:

1. Agriculture

- **Organic farming & gardening:** Grow crops without chemicals → protects soil, water, insects, and birds.
- **Farmers' cooperatives:** Small farmers form groups (FIGs → FPOs) to reduce risk and improve livelihood.
- **Other green jobs:** Integrated pest management, farm mechanisation, agriculture tourism, water conservation, water quality testing.
- **Government support:** Krishi Vigyan Kendras (KVKs) provide training and technology for farmers.

2. Transportation

- Use energy-efficient vehicles & alternate fuels (CNG, biofuels).
- Electric vehicles (EVs): EV adoption, e-rickshaw maintenance, hybrid & battery-electric vehicles.
- Biofuel initiatives: Ethanol, biodiesel, BioCNG to reduce greenhouse gases.

3. Water Conservation

- Rooftop rainwater harvesting → collects rainwater for reuse.
- Cycle-run water pumps → eco-friendly & exercise-friendly.
- Bamboo drip irrigation → saves water, eventually enriches soil.

4. Solar & Wind Energy

- Solar Photovoltaic Installer: installs & maintains solar panels.
- Solar lighting technician: assembles & repairs solar lighting.
- Other jobs: Roofer, field technician, maintenance personnel.

5. Eco-tourism

- Promotes resource conservation, waste reduction, and pollution control.
- Jobs: Eco-tour guides, eco-tourism operators.

6. Building & Construction

- Use sustainable materials and eco-friendly processes.
- Green building skills: construction, landscape, gardening, water management, maintenance of green features.

7. Solid Waste Management

- Includes collection, segregation, transport, processing, and disposal of waste.
- Types: Domestic, municipal, industrial, e-waste, hazardous, etc.

- Jobs: E-waste recycling, waste reduction, auditing, control.

8. Appropriate Technology

- Small-scale, eco-friendly tech suited to local needs.
- Examples: Bike/hand-powered pumps, solar lamps, solar buildings.
- Jobs: Biogas production, water treatment, rainwater harvesting, sanitation, food production, refrigeration.

Sector	Examples of Green Jobs	Key Activities / Focus
Agriculture	Organic farming, integrated pest management, farm mechanisation, agriculture tourism, water conservation	Grow crops naturally, reduce chemical use, conserve water, support small farmers (FPOs)
Transportation	Electric vehicle technicians, e-rickshaw maintenance, hybrid/biofuel vehicle specialists	Use energy-efficient vehicles, alternate fuels, biofuels, reduce emissions
Water Conservation	Rainwater harvesting specialists, bamboo drip irrigation, water quality testing	Collect and conserve water, efficient irrigation, maintain water quality
Solar & Wind Energy	Solar panel installers, solar lighting technicians, field technicians	Install & maintain solar/wind energy systems, clean power generation
Eco-tourism	Eco-tour guides, eco-tour operators	Promote environmental awareness, reduce waste, enhance natural surroundings
Building & Construction	Green building designers, landscapers, gardeners, water management experts	Construct eco-friendly buildings, manage renewable resources, maintain green infrastructure
Solid Waste Management	E-waste recyclers, waste auditors, waste controllers	Collect, segregate, process, and safely dispose of solid & hazardous waste
Appropriate Technology	Biogas producers, solar lamp installers, water treatment technicians	Use small-scale, eco-friendly tech to meet local needs sustainably

Session 2: Importance Of Green Jobs

Protecting the Environment & Combating Climate Change

1. Limiting Greenhouse Gas Emissions

- **Greenhouse gases:** Carbon dioxide, methane, nitrous oxide, ozone, CFCs.
- **Sources:** Burning fossil fuels, vehicles, refrigerants, agriculture.
- **Problem:** These gases trap heat → global warming.
- **Solutions:**
 - Use cleaner fuels (e.g., CNG)
 - Reduce fossil fuel use
 - Promote renewable energy

2. Minimising Waste & Pollution

- Focus on **reducing waste production**, not just recycling.
Ways to reduce waste:
 - a. **Reusing scrap materials** – e.g., paper mill offcuts, plastic scraps.
 - b. **Quality control** – reduce defective products → less waste.
 - c. **Waste exchange** – one process's waste becomes another's raw material.
 - d. **E-waste management** – recycle old electronics (phones, laptops, TVs).
 - e. **Eco-friendly materials** – e.g., banana leaf plates, biodegradable products.

3. Protecting & Restoring Ecosystems

- **Ecosystem:** Community of living & non-living beings supporting each other.
- **Problems:** Deforestation, habitat loss, climate change.
- **Solutions:**
 - Plant more trees, avoid cutting forests
 - Invest in soil health & restoration
 - Protect wetlands to control floods
 - Use natural solutions to restore degraded areas

4. Adapting to Climate Change

- Even with reduced emissions, global warming continues due to past damage.
- Adaptation strategies include:
 - Building flood-resistant infrastructure
 - Using climate-resilient crops in agriculture
 - Preparing communities for natural disasters