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Textbook for Class XII

Employability Skills

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राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद् NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

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Foreword

The National Curriculum Framework–2005 (NCF–2005) recommends bringing work and education into the domain of the curricular, infusing it in all areas of learning while giving it an identity of its own at relevant stages. It explains that work transforms knowledge into experience and generates important personal and social values such as self-reliance, creativity and cooperation. Through work, one learns to find one's place in society. It is an educational activity with an inherent potential for inclusion. Therefore, an experience of involvement in productive work in an educational setting will make one appreciate the worth of social life and what is valued and appreciated in the society. Work involves interaction with material or other people (mostly both), thus, creating a deeper comprehension and increased practical knowledge of natural substances and social relationships.

Through work and education, school knowledge can be easily linked to learners' life outside the school. This also makes a departure from the legacy of bookish learning and bridges the gap between the school, home, community and workplace. The NCF-2005 also emphasises on Vocational Education and Training (VET) for all those children, who wish to acquire additional skills and/or seek livelihood through vocational education after either discontinuing or completing their school education. VET is expected to provide a 'preferred and dignified' choice rather than a terminal or 'last-resort' option.

As a follow-up of this, NCERT has attempted to infuse work across subject areas and also contributed in the development of the National Skill Qualification Framework (NSQF) for the country, which was notified on 27 December 2013. It is a quality assurance framework that organises all qualifications, according to levels of knowledge, skills and attitude. These levels, graded from one to ten, are defined in terms of learning outcomes, which the learner must possess regardless of whether they are obtained through formal, non-formal or informal learning. The NSQF sets common principles and guidelines for a nationally recognised qualification system covering schools, vocational education and training institutions, technical education institutions, colleges and universities.

It is under this backdrop that Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal, a constituent of NCERT, has developed learning outcomes based modular curricula for vocational subjects from Classes IX to XII. This has been developed under the Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education of the Ministry of Human Resource Development.

This textbook takes care of generic skills embedded in various job roles in a comprehensive manner and also provides more opportunities and scope for students to engage with these common and necessary skills, such as communication, critical thinking and decision making in different situations pertaining to different job roles.

I acknowledge the contribution of the development team, reviewers and all institutions and organisations, which have supported in the development of this textbook.

NCERT would welcome suggestions from students, teachers and parents, which would help us to further improve the quality of the material in subsequent editions.

New Delhi June 2018 Hrushikesh Senapaty
Director
National Council of Educational
Research and Training

About the Textbook

Employability skills can be defined as soft skills, which employers look for in a potential employee. These are the skills that equip employees to carry out their responsibilities to the best of their abilities, ensuring client satisfaction. For example, the ability to explain what someone means in a clear and concise way through written and spoken means helps in fostering better relationship with the client or customer.

Similarly, handling stress that comes with deadlines for completing a work or target and ensuring that a person meets the deadlines can be done through effective self-management training. It can also be done by working cordially with other people from different disciplines, backgrounds and expertise to accomplish a task or goal.

In today's digital age, employers expect that employees are able to make use of elementary functions of information and communication technology to retrieve, access, store, produce, present and exchange information in collaborative networks using the Internet.

Students need to develop entrepreneurial skills so that they can develop necessary knowledge and skills to start their own businesses, thus, becoming 'job creators' rather than 'job seekers'. Potential employees need to develop green skills, which are technical skills, knowledge, values and attitudes needed in the workforce to develop and support sustainable social, economic and environmental outcomes in business, industry and community. Thus, as a student, one is expected to acquire a range of skills so that the person can meet the skill demands of the organisation that one would be working for or to set up and run one's own business.

This textbook on 'Employability Skills' covers communication, self-management, information and communication technology, entrepreneurial and green skills. It has been developed as per the learning outcome-based curriculum. The employability skills are embedded in the Qualification Packs of the different job roles in various sectors under the National Skill Qualification Framework. The textbook aims to provide learning experience through a blended approach of text and video-based interactive e-learning lessons. Running these e-learning lessons in classrooms would require a computer with Internet connection, projector

and sound system, which the school needs to provide to teachers and students. The teachers will guide the students to actively participate in class. The students can ask and answer questions, and follow the instructions to complete the exercises and activities.

VINAY SWARUP MEHROTRA

Professor and Head

Curriculum Development and Evaluation Centre

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PSSCIVE, Bhopal

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According to the 86th Constitutional Amendment Act, 2002, free and compulsory education for all children in 6-14 year age group is now a Fundamental Right under Article 21-A of the Constitution.

EDUCATION IS NEITHER A
PRIVILEGE NOR FAVOUR BUT A
BASIC HUMAN RIGHT TO
WHICH ALL GIRLS AND WOMEN
ARE ENTITLED

Give Girls Their Chance!



Communication Skills

Introduction

Communication is a two-way process through which information or message is exchanged between individuals using language, symbols, signs or behaviour. Speaking, listening, reading and writing are the parts of communication, which help us to understand others. To learn a language, one needs to develop four key skills, namely listening, speaking, reading and writing as shown in Figure 1.1.



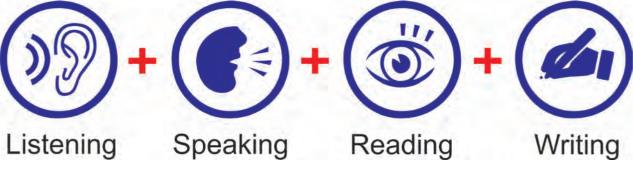


Figure. 1.1: Key communication skills

Speaking more than one language can help a person communicate well with people around the world. Learning English can help one communicate with people who understand English, besides the language the person has been exposed to since birth. The ability to communicate effectively is an essential skill in today's information age. Communication skills are needed to communicate effectively with people and customers.

This Unit on communication skills aims to help you to understand the importance of various aspects of communication and develop effective communication skills. You should try to learn as many languages as possible as it will help you to understand others' culture. It will also equip you with knowledge and skills, which are necessary to take advantage of the opportunities the twenty-first century offers. If you know many languages, you will be able to converse with people and read signage while travelling to different places.

Communication involves a sender, who encodes and sends a message through a channel, and a receiver, who decodes the message and gives feedback as shown in Figure 1.2. Feedback is important in communication as it helps in knowing whether the receiver has understood the message or not.

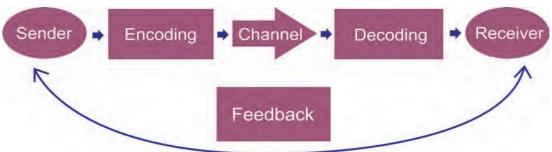


Figure 1.2: Elements of communication

Session 1: Active Listening

Effective communication involves skills that can be utilised to send messages that are clear, concise and accurate. Let us now try to understand what we mean by clear, concise and accurate.

A clear statement is one which conveys the exact message that you are trying to convey to the other person.

Here, we have two sentences. Now, which one do you think is a clear statement?

- (i) He went to his manager and said, "Please allow me to reach office at 11 AM on Tuesday, 11 June 2019, as I have an appointment with a dentist."
- (ii) He went to his manager and said, "Please allow me to reach late to the office on Tuesday, 11 June 2019, as I have an appointment with a dentist."



In the first sentence, you must have noticed that the time is mentioned, which makes the statement clear.

A concise statement is appropriately brief or to the point. Now, let us consider the two sentences given below.

- (i) The manager replied, "Alright, you may come late."
- (ii) The manager replied, "Alright, you may come late. But it is a matter of great concern that most employees come late and you are also developing the same habit."

Now, you can see that in the second sentence, there is no need to tell the employee about the concern that the employer had at the moment. This could have been shared at a different forum or separately.

An accurate statement is one that is factual, i.e., its correctness can be verified.

Now, once again, let us learn through examples.

- (i) She informed the office that 50 per cent of the books given for binding have been completed.
- (ii) She informed the office that most of the books given for binding have been completed.

Now, you can see that in the first sentence, a measurable information is mentioned, which makes the sentence accurate.

It is, thus, important to ensure that our communication is clear, concise and accurate. 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. Listening skill is one of the most important skills in communication. It is important to learn to give undivided attention to a person with whom a conversation is taking place.

Given below are some reasons why listening attentively is important.

- We listen to obtain information.
- We listen to understand.

Notes

- We listen to enjoy.
- We listen to learn.
- We listen to build and maintain relationships.
- We listen to resolve conflicts.

Without the ability to listen attentively, messages can be easily misunderstood. Thus, communication breaks down and the sender of the message can easily become frustrated or irritated.

Active listening

Active listening is an art, which comprises both a desire to comprehend, as well as, offer support and empathy to the speaker. It can affect your job effectiveness, the quality of your relationship with others, and hence, your overall well-being. 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:** It is a form of body language. It is one of the most important aspects in the communication process. 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, reducing the ringtone of your mobile phone or switching it off while attending a meeting or listening to someone will avoid distraction. Another 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 (Table 1.1). Now, let us see what each letter stands for.

Table 1.1: 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.	Hey S
S	Show that you are listening attentively to the speaker through gestures.	Hey
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.	
С	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.	Wait a minute

You have learned about various factors and stages of active listening. Now, let us try to understand how to overcome these barriers (Table 1.2).

Table 1.2: 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.

Practical Exercise

The teacher will facilitate these activities by showing you the e-learning lesson at http://www.psscive.ac.in/Employability_Skills.html. This will include videos and e-content for the above topics, as well as, detailed instructions for some activities given below.

Initial thinking activity

After watching the initial video in the e-learning lesson for this topic, write the answer of the question — why is it important to listen actively?

Activity 1

Group discussion

Factors affecting active listening

Material required

Notebook, pen, etc.

Procedure

- Form groups of three students each.
- Each group selects any one of the factors (as given in Table 1.2), which acts as a barrier to active listening.
- Discuss how it can affect or become a barrier to active listening in the following situations.
 - (i) Family gathering for a wedding ceremony
 - (ii) At a busy retail store
 - (iii) Team discussion during sports day at school
 - (iv) Birthday celebration of a friend
- Each group shares its experiences and ways to overcome these barriers.

Activity 2

Poster making

Active listening

Material required

Chart paper, pencil, sketch pens, etc.

Procedure

- Make a poster on either of the below mentioned scenarios using the acronym RESPECT, which you have studied in this Session for practising active listening.
 - (i) Depicting a conversation between two friends
 - (ii) Parent-child conversation

Activity 3

Role-play

Negative effects of not listening actively

Material required

Notebook, pen, etc.

Procedure

Scenario: Kapil works in an organisation. His manager Sunita is having a discussion with him regarding a marketing plan. As

soon as Kapil enters the meeting room, he sits in a slouched position. He has not kept his phone on silent mode and keeps looking at it frequently. Even though he is listening to Sunita, his thoughts seem to be elsewhere. At the end of the session, Sunita feels Kapil is disinterested and hands over the marketing plan to some other employee.

Check Your Progress

A. Multiple choice questions

Read carefully the questions given below and choose the correct option.

- 1. You work at the front desk of a telecom company. A customer approaches you while you are working. The customer has a query regarding a bill. What would you do?
 - (a) Not pay attention to the customer
 - (b) Keep the work aside and help the customer
 - (c) Continue doing your work while talking inattentively to the customer
 - (d) Ask the customer to talk to someone else
- 2. Which of the following can be a barrier to active listening?
 - (a) Noisy environment
 - (b) Not maintaining an eye contact with the speaker
 - (c) Not being attentive
 - (d) All of the above
- 3. Which of the following is not a stage of active listening?
 - (a) Receiving
 - (b) Understanding
 - (c) Non-responding
 - (d) Evaluating
- 4. What are the characteristics of an ideal message?
 - (a) Clear
 - (b) Concise
 - (c) Accurate
 - (d) All of the above

B. Short answer question (80-100 words)

1. Write down a situation you faced at school, wherein, you overcame a barrier and practised active listening.

What have you learnt?

After completing this Session, you will be able to:

- identify the barriers to active listening.
- identify the stages of active listening.
- follow the steps towards removing barriers for active listening.

Session 2: Parts of Speech

Introduction

In any language, parts of speech are the categories of words based on their function within a sentence. These are the 'building blocks' of a language.

When we speak or write, we use sentences to express ourselves. Therefore, sentences are important. A 'sentence' is a group of words that communicates a complete meaning, thought or action. For example, Raju goes to school.

A group of words, which does not make complete sense, is known as a 'phrase', for example, Raju goes.

A sentence always begins with a capital letter, and ends with a full stop, question mark or exclamation mark. Read aloud the examples given below.

- Did you work on your project?
- I completed it yesterday.
- That is good!

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. Each letter in the word MINTS refers to one capitalisation rule as shown in Table 1.3.

Table 1.3: Capitalisation rules

Alphabet	M	I	N	T	S
	M onths	I	Names	T itles	S tarting letter of sentences
Rule	Capitalise the first letter in the names of all months.	Capitalise the letter T' 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 (Table 1.4).

Table 1.4: Punctuation marks

Punctuation mark	Sign	Use	Example
Full stop	•	It shows the end of a sentence. It is also used to show short form of long words. For example, 'Professor' can be shortened as Prof., when used as a title before a name.	This is a sentence. This is another sentence. Sanjay is a Professor. His patients call him Prof. Sanjay.
Comma	,	Sometimes, we use comma to indicate pause in a sentence.	After the waiter gave me the menu, I ordered food.
		We can also use comma to separate items when we are listing more than two items in a row.	I bought apples, oranges and grapes.
Question mark	?	We use question mark at the end of a question.	What is your designation? How much is your work experience?
Exclamation mark	!	We use an exclamation mark at the end of a word or sentence to indicate a strong feeling, such as surprise, shock or anger.	What a pleasant surprise! You are late!
Apostrophe	(')	We use an apostrophe followed by an 's' to show that something belongs to someone.	That is Divya's desk. Are these Abdul's books?
		We also use an apostrophe to indicate the shortened form of some words in informal speech.	Let's go instead of Let us go! He isn't here instead of He is not here.

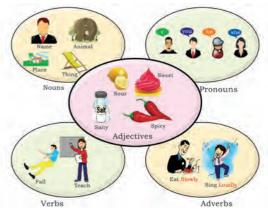


Figure 1.3: Basic parts of speech

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 (Table 1.5).

Table 1.5: Basic parts of speech

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	or other adverb. It answers	quickly wrote a letter." Quickly	Easily Always Inside Before

Sometimes, the same words can be used differently.

,	
Will you book a movie for 3 pm?	'Book' is used as an adverb.
I need to find my English book .	'Book' is a noun.
His total cricket score was 145.	'Total' is an adjective.
That is totally awesome.	'Totally' is an adverb.
She is always watching a football match.	'Football' is an adjective.
She got a new football for her birthday.	'Football' is a noun.
The experienced sailor was able to hold up the sail despite heavy storm.	'Sail' is a noun.
Satish was able to sail through despite the storm.	'Sail' is a verb.
Kapil promised his father that he will be a good boy.	'Promised' is a verb.
Kapil was unable to keep the promise given to his father.	'Promise' is a noun.

Let us now see how these words are used. Read out aloud the sentence given below.

Wow! Reema went to the studio and met a famous actor.

We already know that **Reema, studio** and **actor** are nouns. **Famous** is an adjective because it describes the actor (noun) and the words **went** and **met** are verbs because they describe an action.

What about the remaining words in this sentence — wow, to, the, and? What are these words called? We use such supporting words to join the main parts of speech together and to add information to the sentences that we frame. Let us now look at supporting parts of speech.

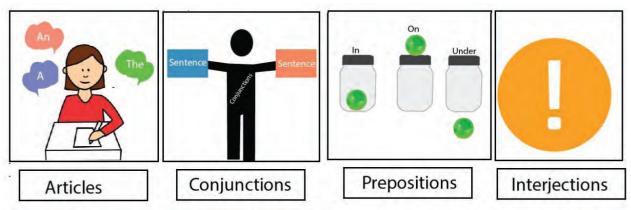


Figure 1.4: Supporting parts of speech

Supporting parts of speech

Along with the main 'Parts of Speech', there are some more words we need for connecting words, phrases, clauses or sentences. Such words are called 'supporting parts of speech'. (Figure 1.4 and Table 1.6).

Table 1.6: Supporting parts of speech

Supporting parts of speech	Use	Example
Articles	 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. 	The car stopped suddenly because a cat ran in front of it. A book An apple An umbrella The sun

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	 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!

Practical Exercise

The teacher will facilitate these activities by showing you the e-learning lesson at http://www.psscive.ac.in/Employability_Skills.html. This will include videos and e-content for the above topics, as well as, detailed instructions for the following activities.

Initial thinking activity

After watching the initial video in the e-learning lesson for this topic, write down what do you think was wrong with Seema's letter.

Activity 1

Group practice

Identifying 'parts of speech'

Material required

Notebook, pen, etc.

Procedure

- Form groups of four students each. Read aloud the paragraph given below.
 - "on sunday, i have an appointment to meet dr. patel in delhi. my house is neardr. patels clinic i went to a shop near the clinic on friday to buy vegetables I bought potatoes onions carrots and a cabbage dr. patel is a friendly man have you met him"
- This paragraph contains examples of parts of speech that you have learnt about in this Session. Identify as many parts of speech as you can and mark them. Discuss what was difficult in this activity. Write the paragraph with correct capitalisation and punctuation. A member of one group

volunteers and presents before the class what the group marked. The person writes the paragraph on the classroom board with the punctuations. The other students point out the mistakes, if any.

Activity 2

Group practice

Constructing sentences

Material required

Notebook, pen, etc.

Procedure

- Form pairs of students.
- List the five basic parts of speech that you have learnt in this Session.
- Select one of them and form two simple sentences, which use these parts of speech. For example, if you have chosen adjectives, form two sentences that have adjectives. For each part of speech, a volunteer reads out the sentences the group has framed.
- The other students say if it is correct or not.

Check Your Progress

A. Multiple choice questions

Read carefully the questions given below and choose the correct option.

- 1. What is a sentence?
 - (a) A group of ideas that form a complete paragraph
 - (b) A group of words that communicates a complete thought
 - (c) A set of rules that we must follow to write correctly
 - (d) A set of words that contains basic punctuation marks
- 2. Which of these sentences is capitalised correctly?
 - (a) I am Hungry.
 - (b) Divya and sunil are reading.
 - (c) The bucket is Full of water.
 - (d) She lives in Delhi.
- 3. Which of these sentences is punctuated correctly?
 - (a) Where are you going.
 - (b) I have a pen a notebook and a pencil.
 - (c) I am so happy to see you!
 - (d) This is my house.

B. Fill in the blanks

1. Fill in the correct nouns and verbs as given at the top of the table to complete the following sentences.

Nouns	Verbs
girl, girls, boy, milk, dog, student	skipping, riding, running, studying, drinking, barking
	(a) The is
* * *	(b) The are
	(c) The is
	(d) Raju is
Ť	(e) The is
**	(f) The is

C. Short answer question

1. Identify conjunctions and prepositions (remember, conjunctions join two sentences, while prepositions help answer the words 'where', 'when' and 'how') from the list given below and write them in the following columns.

Under, and, in, at, or, up

Conjunctions	Prepositions

What have you learnt?

After completing this Session, you will be able to:

- identify the basic parts of speech, such as nouns, pronouns, adjectives, verbs and adverbs.
- use capitalisation and punctuation rules for sentences.
- explain the usage of parts of speech and identify them in a sentence.
- identify supporting parts of speech, such as articles, conjunctions, prepositions and interjections.

Session 3: Writing Sentences

Introduction

A sentence is a group of words, which together expresses a complete idea that has meaning. A sentence is formed by putting together a group of words in sequence. This means that a sentence must be understood by others. A sentence, typically, contains a subject and an object, conveying a statement, question, exclamation, or command. Writing is constructed by putting sentences in sequence so that they are understandable.

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.

As you have studied in English classes, almost all sentences have a subject and a verb. Some also have an object.

- A subject is a person or thing that does an action.
- Verb describes the action.
- Object is the person or thing that receives the action. For example, read aloud the simple sentence "Nisha sells a laptop". Let us see the different parts of the sentence in Figure 1.5.

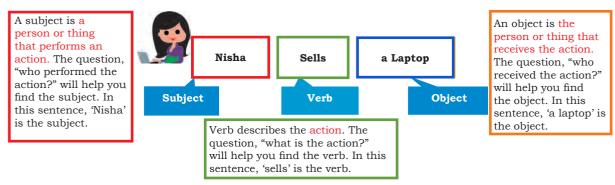


Figure 1.5: Parts of a sentence

Read aloud the sentences given in Table 1.7 to understand about subject, verb and object.

Table 1.7: Parts of a sentence

Sentence	Subject	Verb	Object
I wrote a letter.	I	wrote	a letter
He called the customer.	Не	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 object

The object in a sentence can be either **direct** or **indirect**. Direct objects are the ones directly 'acted on' by the action word (verb). If we ask — "What does Nisha sell?", the answer is 'laptop', which is direct object. A **direct object** answers the question 'what?'.

An **indirect object** answers the questions, such as "to whom" and "for whom".

For example, in the sentence — "Abdul gave a gift to his mother." The verb is 'gave'. What did Abdul give? A gift. To whom did Abdul give the gift? To his mother. Here, 'gift' is direct object and 'his mother' is indirect object.

Some sentences only have direct objects, while some have both direct and indirect objects.

Read out aloud the examples given in Table 1.8.

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

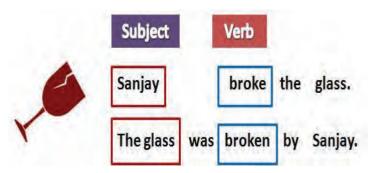


Figure 1.6: Types of sentences

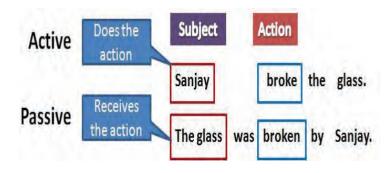


Figure 1.7: Active and passive sentences

Types of sentences — Category I

Active and passive sentences

What is the difference between the following two sentences?

- 1. Sanjay broke the glass.
- 2. The glass was broken by Sanjay.

The action (verb) in both the sentences is breaking of the glass. But the 'subject' in both the sentences is different. In the first sentence, the subject (Sanjay) does the action. In the second sentence, the subject (the glass) receives the action.

Read the sentences in Figure. 1.7 again.

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**.

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. Each of these have been described in Table 1.10.

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	Туре
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

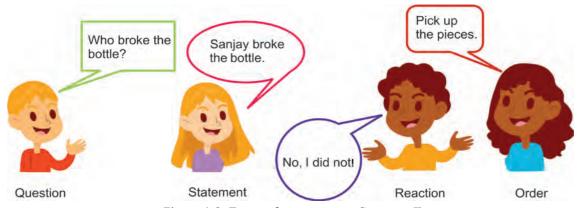


Figure 1.8: Types of sentences — Category II

You can see that each of these sentences have a different purpose.

Paragraph

A group of sentences forms a paragraph. While writing a paragraph, make sure the sentences have a common idea. When you want to write about a different idea, make a new paragraph. For example, if you are writing about your school, the first paragraph can be of sentences about the name, location, size and other such details. In the next paragraph, you can use sentences to describe what you like about your school.

I go to Government Higher Secondary School, Balachadi. It is not a very big school but has many good teachers. There are about 100 students in my school. My school is on the main road, very close to the city railway station. I love going to school and learning about new things. My school has a small playground, where I play cricket with my friends after the classes are over. It has a library also. I love my school.

Practical Exercise

The teacher will facilitate these activities by showing you the e-learning lesson at http://www.psscive.ac.in/Employability_Skills.html. This will include videos and e-content for the above topics, as well as, detailed instructions for some activities given below.

Initial thinking activity

After watching the initial video in the e-learning lesson for this topic, write if you think Sanjay and Dia were able to frame correct sentences.

Activity 1

Pair work

Making sentences

Material required

Notebook, pen, etc.

Procedure

- Form pairs of students.
- First, write three sentences having direct objects.
- Then, write three more sentences, containing both direct and indirect objects.
- Use different colours to mark the different parts of each sentence (subject, verb and object).

Activity 2

Pair work

Active and passive voice

Material required

Notebook, pen, etc.

Procedure

- With same pairs as above, write a paragraph on any topic. The paragraph should have at least two sentences in active voice and two in passive voice. One student reads out the paragraph that the person has written before the class.
- The class gives the feedback.

Activity 3

Pair work

Types of sentences

Material required

Notebook, pen, etc.

Procedure

- With the same pairs as above, make a list of minimum eight sentences. These should have at least two sentences of each type: declarative, interrogative, exclamatory and imperative.
- For each type of sentence, different volunteers read out their sentences before the class.
- The class, then, gives feedback on the correctness of the sentences.

Check Your Progress

A. Multiple choice questions

- 1. Identify the subject in the sentence, "The children played football".
 - (a) The children
 - (b) children played
 - (c) played
 - (d) football
- 2. Identify the object in the sentence, "The children played football."
 - (a) The children
 - (b) children played
 - (c) played
 - (d) football
- 3. Which of these sentences has/have both indirect and direct objects?
 - (a) I am working on a presentation.
 - (b) She bought a blue pen.
 - (c) The girls played cricket.
 - (d) He wrote a letter to his sister.
- 4. Which of these sentences is/are in passive voice?
 - (a) They are watching a movie.
 - (b) The clock was repaired by Raju.
 - (c) He is sleeping in the room.
 - (d) My pet dog bit the postman.

B. Short answer questions

- 1. Write one sentence of each type statement, question, exclamatory and order.
- 2. Which job role do you wish to pursue? Write two paragraphs (about 100–150 words) about that industry and your career preferences. Make sure you follow all rules about sentences and paragraphs that you have learnt.

Practice work

- Practise speaking in complete sentences with your classmates.
- Practise speaking with proper punctuations.
- Practise writing paragraphs on different topics.

What have you learnt?

After completing this Session, you will be able to:

- identify the different parts of a sentence.
- differentiate between active and passive voice.
- compose different types of sentences.



Self-management Skills

Introduction

Self-management, which is also referred to '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.

Students with strong self-management skills are better at doing certain things well, such as coming to class on time, paying attention, obeying teachers, parents and elders, working with discipline, etc. It helps a person to do better in studies or work. In order to do well at work and life, in general, one must be able to manage and improve oneself in various skills, including timeliness, discipline, problem solving and work habits. 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. Similarly, optimism, which is a mental attitude, reflecting a belief or hope,



can lead to positive and desirable outcomes. It helps us to achieve our dreams, continue working hard towards achieving success and live a happy life with a positive mindset.

"Optimism is the faith that leads to achievement. Nothing can be done without hope and confidence."

— Helen Keller

Motivation

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

A positive attitude makes a person happier, and helps build and maintain relationships. It even increases one's chances of success. In addition, it can help the person make better decisions. 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

It can take a little time and effort to build a positive attitude (Figure 2.1). 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.





Figure 2.1: Positive attitude

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. Practising 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.

Positive attitude is of immense value in a student's life. There are various situations that the student will encounter in life, wherein staying positive will keep the child going. The most common example would be during exam results. At times, a student does not get the desired result in exams. But it is important not to lose hope, accept the result gracefully and work harder with a positive attitude for the next exam.

Even during an interview for a dream job, a candidate may not get selected in the first attempt. However, with a positive attitude and persistent efforts, all dreams can be achieved. Thus, it becomes imperative for a child to learn to practise positive attitude in life at all times.

What is stress and how to manage it?

Stress is a state of feeling upset, annoyed and hopeless. There are times when we feel nothing is working right, we are not able to achieve our goals and feel hopeless. During such times, if we manage and control our emotions, it helps us to sail through. 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.



Figure 2.2: Stress

By managing stress effectively and maintaining a positive attitude, one can overcome any challenge and achieve heights in career. Managing stress effectively helps one maintain a healthy work–life balance.

Practical Exercise

The teacher will facilitate these activities by showing you the e-learning module for this lesson via http://www.psscive.ac.in/Employability_Skills.html. The module will include videos and e-content for the above topics, as well as, detailed instructions for some activities given below.

Activity 1

Role-play

Avoiding stressful situation

Material required

Pen or pencil, notepad or sheets of paper, etc.

Procedure

- Form groups of three Choose any one scenario from below. Situation 1: You have missed your school bus and are getting late. What will you do? Will you panic or call for help or try to find a way?
 - Situation 2: You have to perform your best in a cricket match so that you get a chance to play for your school at the national level. You have been anxious (worried or stressed). Will you lose your sleep worrying about it or go to the field and practice?
- Prepare a skit and perform within your groups. Two members will perform the skit and one member will observe and share the feedback.

Activity 2

Self-reflection

Material required

Pen or pencil, etc.

Procedure

• Complete the table given below by listing situation(s) that cause negative thinking, for example, not performing well in an exam. List how you can manage the situations.

Situations causing negative thinking	How to turn around for positivity

Notes

Check Your Progress

A. Short answer questions

- 1. Describe the ways you can make positive thinking a habit in life.
- 2. List the importance of positive thinking. Describe how it can help someone achieve one's goals.

What have you learnt?

After completing this Session, you will be able to:

- explain the meaning of motivation.
- describe the type of motives.
- differentiate between intrinsic and extrinsic motivation.
- · describe the meaning of positive attitude.
- identify the steps for being positive in life.

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. If you know the result you want to achieve, you can focus on the efforts required to achieve it. 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.

An ideal employee needs to be proactive and result driven. The person must always take necessary steps to achieve the set goals or targets.

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. Writing a goal requires that we should understand its purpose and objective. Let us try to understand how to define a goal.

- Identify what the goal is about, for example, customer satisfaction, speeding up the delivery process, etc.
- How the goal would make a difference? For example, will it enhance customer satisfaction, will it result in an increase in demand of a product or service, speed up the delivery process and result in better loyalty and quality of the product.

Use the acronym SMART to set goals. Let us see what each letter in SMART implies.

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S: Specific

Goals should be stated in specific terms. Vague goals are difficult to attain. Specific goals give us a concrete target. Hence, a goal should have a specific purpose.

M: Measurable

Goals should always be measurable. If we do not set our goals in measurable terms, it is difficult to assess whether we have achieved them or not.

• A: Action-oriented

Goals do not just come true on their own. Effective goal setting should include action-based steps that one will follow to achieve the goal.

- Actions that I am already taking towards achieving this goal
- Actions that I am not currently taking but will take towards achieving this goal
- Actions that I am not currently taking and need help to achieve the goal
- People and places from whom I can get help to achieve the goal

• R: Realistic

There are few things more damaging to our sense of self-efficacy than setting ourselves up for failure. Goals must always be realistically attainable.

• T: Timely

Goals must have deadlines. However, deadlines may change. But one must always set a deadline to get the job done within a specified time limit.

Examples of result-oriented goals

Examples of result-oriented goals are as follows.

- A student may set a goal of scoring high marks in an exam.
- An athlete may run five miles a day.
- A traveller may try to reach a destination city within **three hours**.

Practical Exercise

The teacher will facilitate these activities by showing you the e-learning lesson at http://www.psscive.ac.in/Employability_Skills.html. This will include videos and e-content for the above topics, as well as, detailed instructions for the activity given below.

Activity 1

Pair and Share

Aim in life

Material required

Pen or pencil, notepad, etc.

Procedure

- Form pairs of students.
- Make a list of things that you can do well.
- Write your aim in life.
- Share your notes with your partner and discuss your personal characteristics.
- One student volunteers and reads out the notes before the class.

Here is the format to do the activity.

- List what you believe you are as a person by starting the sentence with 'I am'.
- Next, list what you can do well by starting the sentence with 'I can' (I can sing well).
- List what you plan to do by starting the sentence with 'I will' (I will train myself in classical music).
- Finally, state your aim in life. Start the sentence with 'My aim is' (My aim is to become a singer).
- Making a list will help you to become self-aware and result oriented.

Check Your Progress

1. Fill in the table given below, which can help you to prepare an action plan to achieve the set results.

Results I want to achieve	What am I doing for achieving the results?	What should I do to achieve the results?
I want to score 80 per cent in quarterly exam.	I study for two hours daily.	I should study for three hours and practise sample test papers.

What have you learnt?

After completing this Session, you will be able to:

- identify ways to be result oriented.
- make an action plan.

Session 3: Self-awareness

Self-awareness is about understanding one's own needs, desires, habits, traits, behaviours and feelings. Let us try to understand this with a short story.

"A monk slowly walks along a road when he hears a galloping horse. He turns around to see a man riding the horse moving in his direction. When the man comes closer, the monk asks, "Where are you going?" To which the man replies, "I don't know, ask the horse" and rides away.

When we are not aware of ourselves, then we tread in a direction about which we are not clear. Therefore, it is important that we must be aware of ourselves. When one becomes self-aware, the person starts to become aware of everything and looks at things or situations objectively. It plays a critical role in how we understand ourselves and relate to others and the world around us.

Steps towards self-awareness

• The first step for practising self-awareness is gaining a greater awareness of one's emotions (Figure 2.3).



Figure 2.3: Various emotions a person experiences

• 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. Hence, personality development is the development of an organised pattern of behaviours and attitudes that makes a person distinctive. Personality development occurs by the ongoing interaction of temperament, character and environment. Culture also plays an important role in shaping personalities.

One's personality also affects the person's relationships with others. A positive personality can lead to better performance, increased productivity and cordial relationships with others.

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 (Figure 2.4).

- **Openness**: Individuals with openness to experience are, generally, creative, curious, active, flexible and adventurous. If a person is interested in learning new things, meeting new people and making friends, and likes visiting new places, the person can be called open-minded.
- **Consciousness**: Individuals, who listen to their conscience, are self-disciplined, do their work on time, take care of others before themselves and care about others' feelings.
- **Extraversion**: Extroverts are individuals, who love interacting with people around and are, generally, talkative. A person, who can easily make friends and make any gathering lively, is confident and an extrovert.

Notes

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Figure 2.4: The 'Big Five Factors' or Five Factor Model

- Agreeableness: Individuals having such a trait are, generally, kind, sympathetic, cooperative, warm and considerate. They accommodate themselves in any situation. For example, people who help and take care of others are, generally, agreeable.
- **Neuroticism**: Neuroticism is a trait, wherein, individuals show tendency towards anxiety, self-doubt, depression, shyness and other similar negative feelings. People, who have difficulty in meeting others and worry too much about things, show signs of neuroticism.

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

People falling under this cluster always mistrust others and are suspicious, even when there is no need to do so. For example, Varsha is a homemaker. A maid has been working at her house for two years. Despite having CCTV cameras installed at home, Varsha is always suspicious about the maid. She follows her all the time and keeps a tab on her movements. This causes stress between Varsha and her maid.

- Paranoid personality disorder: Paranoid personality disorder is characterised by distrust for others, including friends, family members and partners. People with such a disorder mostly hold grudges against others.
- Schizoid personality disorder: The term 'schizoid' refers to the natural tendency to direct attention toward one's inner life away from the external world. A person with schizoid personality disorder is detached and aloof, and prone to introspection and fantasy. The person shows little interest in forming personal relationships and seems to be emotionally cold.
- **Schizotypal personality disorder**: People with this type of personality disorder believe that they can influence other people or events with their thoughts. They often misinterpret behaviours. This causes them to have inappropriate emotional responses. They may consistently avoid having intimate relationships.

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. For example, Sunny is a student in a high school. Whenever he gets low marks, he is depressed and fights with his friends. He, also, does not try to learn from mistakes. His parents and teachers have tried talking with him but he feels angry, worthless and shouts at them.

- Antisocial personality disorder: People with antisocial personality disorder disregard social rules and obligations. They are irritating and aggressive, and act impulsively. They tend to lack guilt and fail to learn from experience. They may lie, steal or abuse, and may also get addicted to alcohol or drugs.
- **Borderline personality disorder**: People with borderline personality disorder essentially lack a sense of self-worth, and thus, experience feelings of emptiness and fears of abandonment. There is a

NOTES

- pattern of emotional instability, violent outbursts and impulsive behaviour. Suicidal threats and acts of self harm are common in people with such a personality disorder. They may have difficulty in dealing with stressful events.
- **Histrionic personality disorder**: People with histrionic personality disorder frequently try to gain more attention by being overly dramatic. They are extremely sensitive to criticism or disapproval, and can be easily influenced by others.
- Narcissistic personality disorder: People with narcissistic personality disorder believe that they are more important than others. They lack empathy for other people and tend to exaggerate their own achievements.

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. For example, Shikha is an elderly woman. She stays with her family. She has a habit of washing her hands at least 20 times a day. Even after washing her hands, she feels they are not clean, and continues rubbing or washing them. She neither talks to her grandchildren, nor does she participate in any family activity.

- **Avoidant personality disorder**: People with this type of disorder are socially inept, unappealing or inferior, and constantly fear being embarrassed, criticised or rejected. They avoid meeting others and often experience feelings of inadequacy, inferiority or unattractiveness.
- **Dependent personality disorder**: People with such a disorder are characterised by lack of self-confidence and an extra need to be looked after. They need a lot of help in making everyday decisions and surrender important life decisions to the care of others. They are heavily dependent on other people for their emotional and physical needs, and thus, usually, avoid being alone.

• **Obsessive-compulsive personality disorder**: People with such a disorder strongly stick to rules and regulations. They can be characterised by a general pattern of excessive concern with orderliness, perfectionism and attention to details. They feel extremely uncomfortable when unable to achieve perfection. They may even neglect personal relationships to focus on making a project perfect.

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'.

Practical Exercise

The teacher will facilitate these activities by showing you the e-learning module for this lesson via http://www.psscive.ac.in/Employability_Skills.html. The module will include videos and e-content for the above topics, as well as, detailed instructions for the activity given below.

Activity 1

Group discussion

Self-awareness

Material required

Pen or pencil, notepad, chart paper, etc.

Procedure

- · Form groups of three.
- Choose any one of the following situations and write down the personality disorders associated with these.
 - Kapil studies in a school. He disregards the rules set by the school, is irritable and does not talk much with either friends or family.
 - Jaya has been feeling fearful and empty for the last few days. She even tried to harm herself. What kind of personality disorder is this? How can you help her?

Notes

Check Your Progress

A. Multiple choice questions

Read the questions carefully and put a tick mark against the correct option.

- 1. Which of the following is not a parameter to describe an individual's personality?
 - (a) Self-confidence
 - (b) Openness
 - (c) Neuroticism
 - (d) Agreeableness
- 2. Which of the following is characterised by an extreme feeling of self importance?
 - (a) Narcissistic personality disorder
 - (b) Borderline personality disorder
 - (c) Dependent personality disorder
 - (d) None of the above
- 3. Ravi has feelings of emptiness, abandonment and suicide. What type of personality disorder is this?
 - (a) Borderline
 - (b) Dependent
 - (c) Avoidant
 - (d) Obsessive
- 4. Mona is helping her sister to overcome a personality disorder. What should she do?
 - (a) Talk to her sister
 - (b) Engage her in hobbies
 - (c) Help her build confidence
 - (d) All of the above

What have you learnt?

After completing this Session, you will be able to

- explain the meaning of personality.
- describe basic personality traits.
- describe common personality disorders.



Information and Communication Technology Skills

Introduction

Information and Communication Technology, called ICT in short, has become an integral part of our life. One must develop the ability to use digital technology and communication tools to access, manage, integrate, evaluate, create and communicate. In this Unit, you will learn about how to use spreadsheets and make presentations using a software.



Session 1: Getting Started with Spreadsheet

How do people generally maintain their expenses? They write down all expenses, such as school fee of their children; grocery, gas and electricity bills; money spent on festivals and clothes, etc., in a diary. Then, they note down how much was spent on each item. Finally, the total is calculated to find out how much they have spent in a month. But nowadays, people who know how to use a computer can use software to maintain an account of their expenses.

Let us now learn about spreadsheets, which are used for doing calculations on a computer.

A spreadsheet is an electronic document, which has rows and columns. It is used to store data in a systematic way and do calculations. For example, a grocery shop has many items. The shopkeeper keeps a track of the total quantity of each item, quantity sold, cost and selling price of each item, etc. All these details can be maintained using a spreadsheet as shown in Table 3.1. It will also help the shopkeeper do difficult calculations easily, such as finding out profit or loss.

Table 3.1: Goods in a grocery store

Item	Total quantity (kg)		Quantity left (kg)	Cost ₹/kg	Selling price ₹/kg
Wheat atta	250	115	135	28	31
Rice	160	57	103	46	50
Arhar daal	70	45	25	60	68
Sugar	200	145	55	40	45

Having understood what spreadsheets are, let us now understand the types of spreadsheet.

Types of spreadsheet

There are many types of spreadsheet available that have been created by different companies. Some of the most popular ones are given in Figure 3.1.

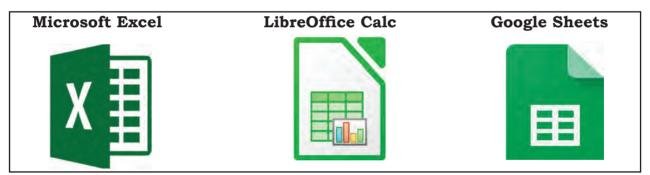


Figure 3.1: Popular spreadsheet software

In this Session, we will be learning how to use LibreOffice Calc. Most functions in different spreadsheets are same. If you know how to use one, you can easily use any other spreadsheet.

Steps to start LibreOffice Calc

1. The first thing you need to ensure is that LibreOffice must be installed on your computer.

- 2. Type LibreOffice Calc in the search bar of Windows.
- 3. Select LibreOffice Calc from the search results as shown in Figure 3.2. LibreOffice Calc will open a blank sheet as shown in Figure 3.3.
- 4. You can start typing and entering data as soon as you open the spreadsheet. However, to start using the spreadsheet, first you need to understand the components of a spreadsheet.

Components of a spreadsheet

In the spreadsheet, you can see a worksheet with cells placed in rows and columns. Now, let us learn what these are.

- 1. A **row** is an arrangement of cells in a horizontal (sleeping) manner. As shown in Figure 3.4, all marks for maths are in row number 3.
- 2. A **column** is an arrangement of cells in a vertical (standing) manner. As shown in Figure 3.4, Rajvir's marks are in column B.

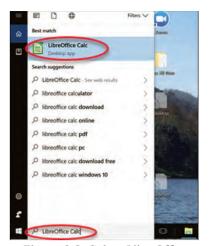
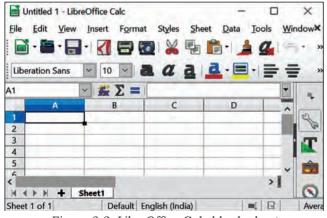
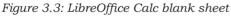


Figure 3.2: Select LibreOffice Calc from the search results





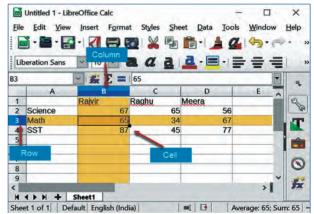


Figure 3.4: Rows and columns in a spreadsheet

3. 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 cell that is selected appears highlighted. In Figure 3.4, the selected cell is B3 — the cell in column B on row 3 — and it contains Rajvir's marks for maths.

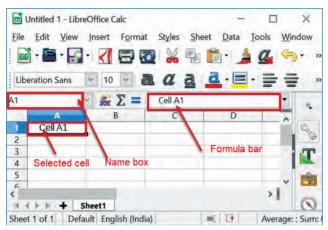


Figure 3.5: Formula bar in a spreadsheet

Whatever you type in, a cell appears in the area called **formula bar** as shown in Figure 3.5.

You also enter or edit data and formula directly into the Formula Bar.

- 4. The **name box** shows the location of the selected cell. The location of the cell is a combination of column and row. For example, A1, where A is the column name and 1 is the row number.
- 5. A **worksheet** is a collection of cells in the form of a grid (a network of lines that intersect each other, making rectangles). When you open a spreadsheet for the first time, you see a blank worksheet with the name 'Sheet1'.
- 6. A **workbook** is a spreadsheet that has one or more worksheets.

Practical Exercise

Run e-learning lesson at http://www.psscive.ac.in/ Employability_Skills.html. This will include videos and e-content for the above topics. Based upon the e-learning, do the following activity.

Initial thinking activity

How do you think a shopkeeper maintains a record of earnings and expenses?

Practical group exercise

Run the e-learning lesson to get details on how to run the activity.

Activity 1

Group practice

Working with LibreOffice Calc

Material required

Pen or pencil, notebook and computer with LibreOffice Calc, etc.

Procedure

- Divide the class into groups, depending on the number of computers available. Choose a group leader, who will direct this activity.
- The leader will start LibreOffice Calc on the computer as per the instructions given in the Session.

- Notes
- Each member of the group identifies one component of the spreadsheet. The other members should give feedback as to what is correct and what is not. The rest of the group members can also make notes of the components identified and make sure that none is left out.
- Write down the answers to the questions given below in your notebook. Then, run the e-lesson to see these questions.

Check Your Progress

A. Multiple choice questions

- 1. A ______ is an electronic document used to store data in a systematic way and perform calculations just like an expense sheet.
 - (a) spreadsheet
 - (b) worksheet
 - (c) workbook
 - (d) name box
- 2. Which of the following functions can be performed with the help of spreadsheets?
 - (1) Maintaining records
 - (2) Creating videos
 - (3) Analysing data
 - (4) Performing financial calculations
 - (5) Writing letters
 - (a) 1, 2, 3, 4, 5
 - (b) 1, 3, 4
 - (c) 1, 3, 5
 - (d) 3, 4, 5
- 3. Match the columns, and then, choose the correct answer.

1.	Grid of horizontal rows and vertical columns	A. Row
2.	Horizontal arrangement of cells numbered 1, 2, 3, 4	B. Workbook
3.	Where rows and columns meet or intersect	C. Columns
4.	Which contains one or more worksheets	D. Cell
5.	Vertical arrangement of cells named A, B, C, D	E. Worksheet

- (a) 1-E, 2-A, 3-B, 4-D, 5-C
- (b) 1-E, 2-B, 3-C, 4-D, 5-A
- (c) 1-A, 2-B, 3-C, 4-D, 5-E
- (d) 1-E, 2-A, 3-D, 4-B, 5-C
- 4. A _____ is an arrangement of cells in a horizontal manner.
 - (a) column
- (b) row
- (b) cell
- (c) worksheet

What have you learnt?

After completing this Session, you will be able to

- explain the importance and usage of spreadsheet.
- list different spreadsheet applications.
- open LibreOffice Calc and create a spreadsheet.
- identify components (parts) of a spreadsheet.

Session 2: Performing Basic Operations in a Spreadsheet

A spreadsheet can be used to perform various functions. Let us see how to enter, edit, delete data and use data functions effectively.

Steps to enter data

The steps to enter data in a particular cell in a spreadsheet are given below.

1. Click on the cell where you want to enter data as shown in Figure 1. For example, we click cell A1.



Figure 1: Click on a cell

2. Type text or number. As you type, you can see the data in the Formula Bar as well. Press Enter when you complete typing.



Figure 2: Type text or number

- 3. The cursor is set on the next cell, in this case A2. You can continue entering other data.
- 4. Notice that data in the cell will automatically (by default) be left aligned (near the left edge of the cell) as you have entered text as shown in Figure 3. If you enter numbers, they are right aligned in the cell. Remember that text is aligned to the left of the cell, while number is aligned to the right.

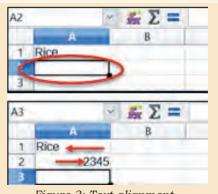


Figure 3: Text alignment

5. You can enter a formula in a cell by starting with '=' equal-to symbol as shown in Figure 4. This will do the calculations as given and display the results.

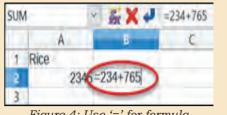


Figure 4: Use '=' for formula

Type of data

There are three main type of data — text, numbers and formula. Nowadays, it is also possible to enter pictures, audio, video and shapes in a spreadsheet. Let us see what they are used for. Raghu owns a shop. He keeps a record of all items, such as wheat, rice, daal, sugar, etc. He enters the name of the items, date of purchase, quantity purchased, cost price, selling price, etc. Using a spreadsheet, he can use text to enter names, numbers to enter quantity and date to show when an item was purchased.

Editing data in a cell

If Raghu wants to name the item 'Basmati rice' instead of 'rice', he can edit (correct) it in the spreadsheet.

There are various ways in which one can edit a cell as shown in Figure 3.6.

Method 1

- 1. Double click on the cell you want to edit. Then, type additional text in the cell or in the Formula Bar.

Figure 3.6: Editing text in a cell

2. Press **Enter**.

Method 2

- 1. Click on the cell you want to edit.
- 2. Correct the text in the Formula Bar.
- 3. Press **Enter**.

Method 3

(If you want to completely change the text in the cell, then do the following.)

- 1. Click on the cell.
- 2. Type the new text.
- 3. Press **Enter**.

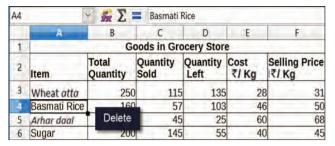


Figure 3.7: Deleting value in a cell

Deleting data in a cell

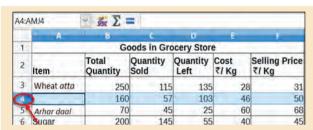
You can delete the value stored in a particular cell as shown in Figure 3.7. The steps to delete data in a cell are as follows.

- 1. Click on the cell.
- 2. Press **Delete** key on the keyboard. This deletes the text entry of that cell making it blank.

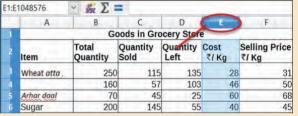
Selecting multiple cells

Now, if Raghu wants to delete the entire row related to 'basmati rice', he can select the entire row, and then, press '**Delete'**. After selecting multiple cells, a function will be performed on the cells that are selected. When a single cell is selected it is called **active cell**. When a number of cells is selected, it is called **cell range**. There are several ways in which multiple cells can be selected as shown in Table 3.2.

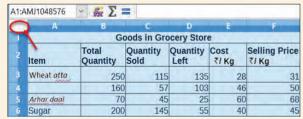
Table 3.2: Selecting multiple cells



To select an entire row, click the row heading.



To select a full column, click the column heading.



To select an entire worksheet, click the grey rectangle on the upper left corner of the worksheet.

		l n	-		-	-
	A	В	-	U	E	
1		G	oods in Gro	cery Stor	e	
2	Item	Total Quantity	Quantity Sold	Quantity Left	Cost ₹/ Kg	Selling Price ₹/ Kg
3	Wheat atta	250	115	135	28	31
ķ.		160	57	103	46	50
5	Arhar daal	70	45	25	60	68
6	Sugar	200	145	55	40	45

To select a range of cells, click on the starting cell, then hold down the mouse button and drag it till you have selected all the cells you want. Release the mouse button.

To select two or more rows that are not next to each other, select one row and hold down the **Control** key, and then, select the next row as shown in the figure given below.

A5	A5 🔀 🔀 🚍 Arhar daal								
	A	В	C	D	E	F			
1		G	oods in Gro	cery Store	9				
2	Item	Total Quantity	Quantity Sold	Quantity Left	Cost ₹/ Kg	Selling Price ₹/ Kg			
3	Wheat atta	250	115	135	28	31			
4		160	57	103	46	50			
5	Arhar daal	70	45	25	60	68			
6	Sugar	200	145	55	40	45			

Saving the spreadsheet in various formats

After entering data, you can save the spreadsheet in the same way as a Notepad or any other word file. Click **File**, and then, **Save** as shown in Figure 3.8. This will open a **Save As** dialog box. Type the **file name** and click **Save**.

The default **Save as type** is ODF Spreadsheet (.ods) but you can save the spreadsheet in other types, such as Microsoft Excel 2003 (.xls) as shown in Figure 3.9.

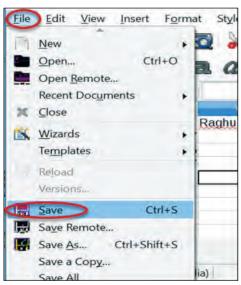


Figure 3.8: Saving the spreadsheet

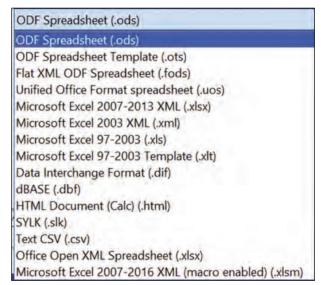


Figure 3.9: Saving in other formats

Closing the spreadsheet

Once you have saved the data, you can close the spreadsheet by clicking **File**, and then, **Close** as shown in Figure 3.10.

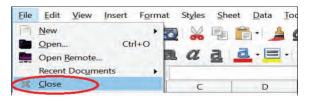


Figure 3.10: Closing the spreadsheet

Opening a spreadsheet

Click **File**, and then, select **Open**. This will show a dialog box with a list of existing files. Select the one you want to open and click **Open** as shown in Figure 3.11.

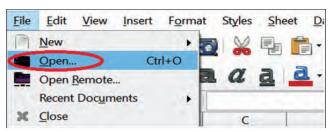


Figure 3.11: Opening a spreadsheet

Printing the spreadsheet

To print a spreadsheet, you can click **File**, and then, select **Print** from the drop-down or press

Ctrl+P on the keyboard as shown in Figure 3.12.

A **Print** dialog box appears. Select the printer, range of pages and number of copies to be printed, and click **OK** as shown in Figure 3.13.

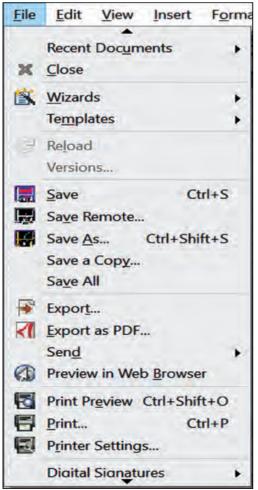


Figure 3.12: Printing the spreadsheet

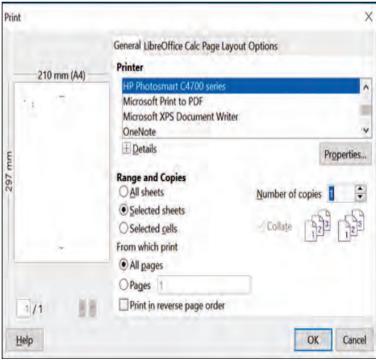


Figure 3.13: Print dialog box

Practical Exercise

Run e-learning lesson at http://www.psscive.ac.in/Employability _Skills.html. This will include videos and e-content for the above topics. Based upon the e-learning, do the following activity.

Initial thinking activity

How do you think a shopkeeper will delete an entry in his record book? How do you think a teacher deletes the name of a student, who has left the school, from the register?

Practical group exercise

Run the e-learning lesson to get details on how to run the activity.

Activity 1

Group practice

Working with data in LibreOffice Calc

Material required

Pen or paper, computer with LibreOffice Calc installed, etc.

Procedure

- Divide the class into groups, depending on the number of computers available. Select a group leader.
- The leader opens a spreadsheet. Each member enters one's name, roll number and date of birth in the spreadsheet.
- Other members watch and give feedback on what is done correctly and what could be done better.
- Your spreadsheet should look like the table given below.

Name	Roll No.	Date of Birth	
Sushil Kumar	123	15/10/01	
Meera Rao	124	26/12/03	

Check Your Progress

A. Multiple choice questions

- 1. The correct order of steps for entering data in a spreadsheet is:
 - (a) type the data, click the cell and press **Enter**.
 - (b) click the cell, type the data and press **Enter**.
 - (c) press **Enter**, click the cell and type the data.
 - (d) click the cell, press **Enter** and type the data.
- 2. What will you do to select an entire worksheet in a spreadsheet?
 - (a) Click the File tab and select properties from the list
 - (b) Click the grey row heading
 - (c) Click the grey rectangle in the upper left corner of the spreadsheet
 - (d) Click the grey column heading

Notes

What have you learnt?

After completing this Session, you will be able to:

- · identify type of data.
- · open a spreadsheet.
- enter, edit and delete data.
- select multiple cells.
- save and close a spreadsheet.
- · print a spreadsheet.

Session 3: Working with Data and Formatting Text

Data stored in a spreadsheet can be used in calculations, graphical representation and display of information. Let us learn more about working with data.

Using spreadsheet for addition

Ms Sharma is a teacher and has just started using a computer spreadsheet instead of her manual marks register. She has entered the marks of her students in various subjects as shown in Figure 3.14. Now, she wants to find out the total marks for each student. What should she do?

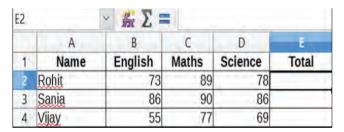


Figure 3.14: Students' marks

To find out the total marks for each student, she needs to add the marks in each subject. The symbol (operator) used for addition in a spreadsheet is '+' (plus). There are various ways to do addition in a spreadsheet. Let us explore them.

SUM =73+89+78 C A B D Name English Maths Science Total 78=73+89+78 2 Rohit 73 89 3 Sania 86 90 86 55 77 69 4 Viiav

Figure 3.15(a): Entering formula

Adding values directly

To do any calculation in a spreadsheet, you need to use '=' (equal-to) symbol, which tells the spreadsheet that a formula has been entered. Only then the spreadsheet will perform the calculation and display the result.

Ms Sharma can add values directly for each student, i.e., add the numbers directly, such as '=73+89+78' as shown in Figure 3.15(a).

When you type this in a cell and press **Enter**, the result, i.e., 240 will be displayed. Notice that the formula is displayed in the **Formula Bar** as shown in Figure 3.15(b).

Adding using cell address

Ms Sharma realised that she had entered the wrong marks for English. Now, she has to re-enter the total formula. That is a lot of work since there are 40 children in her class. Spreadsheet gives you a better way to calculate the total. Instead of using direct numbers in the formula, you can use cell addresses as shown in Figure 3.16(a).

For example instead of entering '=73+89+78', she can enter the cell addresses '=B2+C2+D2'. This will also give the same result. The advantage here is that even if there is a change in the marks, there is no need to type the numbers again in the **Total** field as shown in Figure 3.16(b).

All Ms Sharma needs to do is change the English marks. The total will automatically be calculated again. No change has to be made to the formula.

Notice in Figure 3.16(c), the English score for Rohit has changed from 73 to 66. The total changes to 233 automatically, even though there is no change in the formula i.e., '=B2+C2+D2' as shown in Figure 3.16(c).

E2		· 最 Σ =	=73+89	+78	
	A	В	C	D	E
1	Name	English	Maths	Science	Total
2	Rohit	73	89	78	240
3	Sania	86	90	86	
4	Vijay	55	77	69	

Figure 3.15(b): Formula displayed in Formula Bar

SUN	Л	× 最 X ◆	■ =B2+C2	!+D2	
	A	В	C	D	- 1
1	Name	English	Maths	Science	Total
2	Rohit	73	89	78	=B2+C2+D2
3	Sania	86	90	86	
4	Vijay	55	77	69	

Figure 3.16(a): Formula using cell address

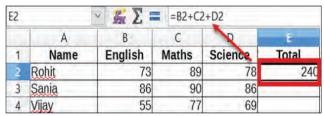


Figure 3.16(b): Total of three cells

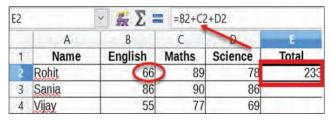


Figure 3.16(c): Total remains the same

Using mouse to select values in a formula

Now, to write the formula, Ms Sharma has to find out the cell address of each cell with marks and type it. This requires some effort. Spreadsheet makes the task

SUN	UM <u>₩ ∰ X 4 =B2+C2</u> -			1+		
	A	В	C	D	E	
1	Name	English	Maths	Science	Total	
2	Rohit	66	89	78	=B2+C2+	
3	Sania	86	90	86		
4	Vijay	55	77	69		

Figure 3.17: Using a mouse to select a cell

easier for Ms Sharma. Using a mouse, she can simply select the cell to be used in the formula instead of typing the cell addresses as shown in Figure 3.17. The steps are as follows.

- 1. Type '=' in the cell where you want to calculate the total.
- 2. Click the cell, which has English marks for Rohit. B2 will appear in the formula.
- 3. Type '+'.
- 4. Click the cell, which has maths marks for Rohit. C2 will appear in the formula.
- 5. Type '+'.
- 6. Click the cell (D2), which has science marks for Rohit.
- 7. Press **Enter.**

This will enter the same formula as before without Ms Sharma having to type the cell addresses for marks scored in each subject. This method is much easier, especially, when there may be many subjects.

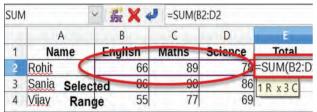


Figure 3.18(a): Using SUM() function

Using Sum() function Spreadsheet also gives

you functions that make it easier to do calculations. To add numbers, we have the **Sum()** function. This helps in adding the numbers in separate cells or in a cell range. In the example given in Figure 3.18(a) and (b), marks for Rohit are in one row, one after the other. As shown in Figure 3.18(a) and 3.18(b), the steps to use the SUM() function are as follows.

- 1. Type '=Sum(' in E2 where you want the total.
- 2. Now, click on English marks, i.e., B2, hold the left mouse button and drag till science marks, i.e., D2. This will select the marks for all three subjects.
- 3. Type ')' and press **Enter**.

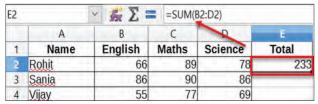


Figure 3.18(b): Steps to use SUM() Function

This displays the results in cell number E2 and the formula in the **Formula Bar**.

Copying and moving formula

Now, Ms Sharma has used the **Sum()** function to calculate the total for Rohit. Does she need to do the same steps 40 times for all 40 students? No! Spreadsheets provide a way to copy the formula from one cell to another. The values are automatically adjusted in the

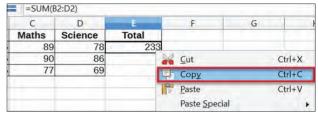


Figure 3.19: Copy formula

new cells. The steps to copy a formula are as follows.

- 1. Click on the cell with the formula.
- 2. Right-click and select **Copy** as shown in Figure 3.19 or press **Ctrl+c** on the keyboard. If you wish to move the formula to a new cell, i.e., delete it from the existing cell, select **Cut** or press **Ctrl+x** on the keyboard.
- 3. Click on the first cell, where you have to copy the formula.
- 4. Keeping the left mouse button down, drag till you reach the last cell, where you want the formula. Release the left mouse button.
- 5. Right-click and select **Paste** as shown in Figure 3.20 or press **Ctrl+v** on the keyboard.
- 6. The formula will be copied to all selected cells. It will calculate the total for each student.

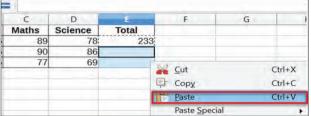


Figure 3.20: Paste formula

Ms Sharma is happy now. Spreadsheets have made her work simple. Now, all she has to do is enter the marks for all her students for each subject and the rest will be done by the spreadsheet. And, if some of the marks change, she does not have to do the calculations all over again.

Need to format cells and content

Geeta makes very neat notes in her copy. She underlines the headings and uses a black pen to write the sub-topics. Sometimes, she writes important words in capital letters to make them stand out. She even has a neat rough work column on the side. Everybody wants her notes as they are easy to read and understand, and the important points are clearly highlighted.

Electronic spreadsheets have many options to make your content look neat and and easy to read. This is called 'formatting'. There are many ways in which you can format the content in a spreadsheet. Let us work with some of them.



Figure 3.21: Change font

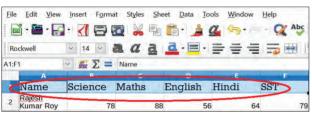


Figure 3.22: New font and size

Change text style and font size

In case you want to give a different style or a bigger size to the heading, you can change the text style using the **Font** drop-down as shown in Figure 3.21.

You can choose the style you like from the drop-down. The text in all selected cells will change.

Similarly, you can change the size of the text from from the font-size drop-down.

As you can see in Figure 3.22, the font and size of the heading have changed.

Align (arrange) text in a cell

Sometimes, we see that text is placed in the centre of the cell. How does this happen? In a spreadsheet, you can position the text in a cell to the left, right or center. This is the alignment feature of spreadsheet.

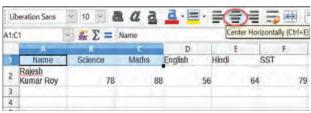


Figure 3.23: Align text

You can use the given icons on the **Tool Bar** to align the text.

In Figure 3.23, the text in cell A1, B1 and C1 has been aligned to the centre. You can see that only the selected cells have been aligned to the center.

Highlight text

We make headings of our documents and tables bigger and bolder than the rest of the text to make them stand out. We also underline important words or italicise them so that they, too, stand out. As shown in Table 3.3, there are many ways in which we can highlight the text in a spreadsheet.

Table 3.3: Highlighting text

Action	Shortcut keys	Tool Bar icon
To make text bold	Ctrl+b	Liberation Sans V 10
To underline text	Ctrl+u	A:C1 A B Underline (Ctrl+U) Rajesh Kumar Roy Name Name Rajesh Kumar Roy Name Name
To make text italic or slanting	Ctrl+i	A1:C1 A B I Name Science Rajesh Kumar Roy Name

Practical Exercise

Run the e-learning lesson at http://www.psscive.ac.in/ Employability_Skills.html. This will include videos and e-content for the above topics. Based upon the e-learning, do the following activities.

Initial thinking activity

Why do you think we need to format content in a spreadsheet?

Practical group exercise

Run the e-learning lesson to get details on how to run the activity.

Activity 1

Group practice

Formatting spreadsheets in LibreOffice Calc

Material required

Pen, computer with LibreOffice Calc installed, etc.

Procedure

- Divide the class into groups, depending on the number of computers. Choose a leader, who will direct the activity.
- The leader creates a table as shown in Figure 1. One member center aligns the Roll No. and Name columns.
- Another member makes all column headings bold. Now, some other member underlines the column headings. Another member can increase the size of column B to make the full name visible.

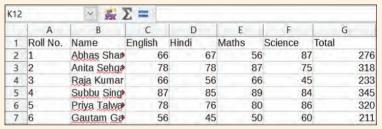


Figure 1: Activity 1 sample

Activity 2

Group practice

Basic calculations in LibreOffice Calc

Material required

Pen, paper, computer with LibreOffice Calc installed, etc.

Procedure

- Divide the class into groups, depending on the number of computers available. Each group will select a leader.
- The leader opens a spreadsheet. As shown in Figure 1, each member enters one's roll number, name, marks obtained in English, Hindi, maths and science, and calculates the total marks in column G.
- Each member can use a different method to calculate the total. Other members watch and give feedback on what was done correctly and what could have been done better. Your spreadsheet should look like the table given below.

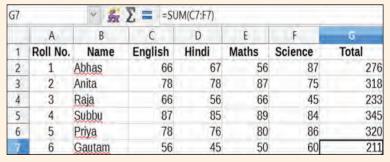


Figure 1: Activity 2 sample

Check Your Progress

Notes

A. Multiple choice questions

- 1. What is the default alignment of numbers in a cell?
 - (a) Left aligned
 - (b) Right aligned
 - (c) Center aligned
 - (d) Randomly aligned
- 2. "By default, the text in a cell is left aligned." State whether this is true or false.
 - (a) True
 - (b) False
- 3. What is the shortcut key to underline text in a spreadsheet?
 - (a) Ctrl+b
 - (b) Ctrl+i
 - (c) Ctrl+1
 - (d) Ctrl+u
- 4. Which of the following features is used to perform addition in spreadsheets?
 - (a) Format option
 - (b) Charts
 - (c) Graphs
 - (d) Formula
- 5. Which of the following signs define a formula?
 - (a) +
 - (b) /
 - (c) =
 - (d) +

What have you learnt?

After completing this Session, you will be able to:

- · add values directly in a spreadsheet.
- add values using formulas.
- add values using Sum() function.
- align (arrange) text in a cell.
- fit text into a cell.
- highlight the text.

Session 4: Advanced Features

IN SPREADSHEET

Let us take an example of 500 students in a school. Now, if the teacher wants to find the marks of a particular student, for example 'Seema', she will have to look through the entire list. It is a difficult process and may

take a long time as the teacher has to go through all 500 names. Now, if she arranges the names alphabetically, i.e., putting names starting with 'A' first, then names with 'B', and so on, finding a name will be easier. One knows that the name 'Seema', starting with the letter 'S', will come in the middle. This sorting or arrangement of words in order can help one find a particular word or name easily.

	A	В	C	D	E	F	G
1	Name	Science	Maths	English	Hindi	SST	TOTAL
2	Rajesh Roy	78	88	56	64	79	365
3	Zahira	45	56	78	45	78	302
4	Anupa	45	56	65	67	87	320
5	Sania	75	64	73	87	54	353
6	Dilip	15	83	68	56	65	287
7	Punit	84	72	76	45	74	351
8	Shikhar	81	93	88	37	85	384
9	Farida	65	65	34	85	34	283
10	Anshu	84	48	98	94	56	380
11	Bharti	45	39	55	57	77	273
12	Seema	49	45	44	55	44	237

Figure 3.24: Unsorted data

Sorting data

Let us take another example. Ms Sharma has all her students' subject marks and their totals in a spreadsheet as shown in Figure 3.24. If she wants to find out three students with the highest marks, she will have to search the entire list. This is even more difficult if there are 100 or more, students, for example, in the entire batch or school.

To make it easy, she can sort the data on the total marks so that she knows the rank of the students in the class. The steps to sort data are as follows.

- 1. Select all rows and columns that have to be sorted as shown in Figure 3.25.
- 2. Click on **Data**, and then, select **Sort** as shown in Figure 3.26.

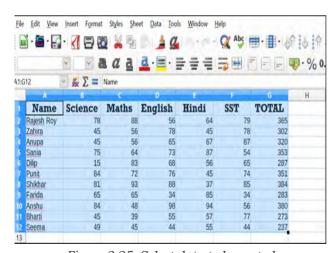


Figure 3.25: Select data to be sorted

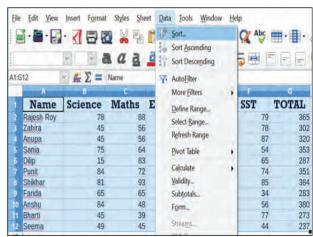


Figure 3.26: Click on Data, and then, select Sort

- 3. This will give a **Sort** dialog box as shown in Figure 3.27. Click on **Sort Key 1** and select total from the drop-down. By default the order is **Ascending**, which means from the lowest to the highest. We will change it to **Descending**. This will sort the data in the total field.
- 4. Click on **OK**.
- 5. As shown in Figure 3.28, the data will get rearranged in the entire list and the name of the student with the highest total marks will appear at the top, and then, the student with the next highest marks, and so on. Therefore, the names of top three students will appear in the beginning of the list and the name of the student with the lowest total marks will appear last.

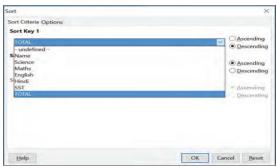


Figure 3.27: Sort dialog box

	A	В	C	D		F	G
1	Name	Science	Maths	English	Hindi	SST	TOTAL
2	Shikhar	81	93	88	37	85	384
3	Anshu	84	48	98	94	56	380
4	Rajesh Roy	78	88	56	64	79	365
5	Sania	75	64	73	87	54	353
6	Punit	84	72	76	45	74	351
7	Anupa	45	56	65	67	87	320
8	Zahira	45	56	78	45	78	302
9	Dilip	15	83	68	56	65	287
10	Farida	65	65	34	85	34	283 273
11	Bharti	45	39	55	57	77	273
12	Seema	49	45	44	55	44	237

Figure 3.28: Sorted data

Filtering data

Figure 3.29 has students from different sections and Ms Sharma wants to see the marks of students only from Class XII-A, what will she do?

To do this, Ms Sharma can use another feature of spreadsheet — 'Filters'.

The steps to apply filter to a table are as follows.

- 1. Click on the AutoFilter icon on the Tool Bar.
- 2. This will put filters at the top of each column as shown in Figure 3.30.
- 3. Click on the filter for 'class' column.
- 4. The drop-down will show a list of all the values in that column, for example, Class XII-A and XII-B.
- 5. By default, all values are checked or selected.

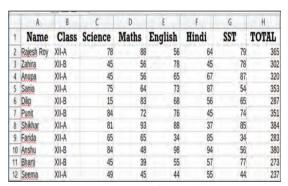


Figure 3.29: Unfiltered data

1	A Name -	B Clas:▼	C	D	E	F	G	Н
			Scienc -	Maths -	Englis -	Hindi -	SST -	TOTAL -
2	Rajesh Roy	XII-A	78	88	56	64	79	365
3	Zahira	XII-B	45	56	78	45	78	302
4	Anupa	XII-A	45	56	65	67	87	320
5	Sania	XII-A	75	64	73	87	54	353
6	Dilip	XII-B	15	83	68	56	65	287
7	Punit	XII-B	84	72	76	45	74	351
8	Shikhar	XII-A	81	93	88	37	85	384
9	Farida	XII-A	65	65	34	85	34	283
10	Anshu	XII-B	84	48	98	94	56	380
11	Bharti	XII-B	45	39	55	57	77	273
12	Seema	XII-A	49	45	44	55	44	237

Figure 3.30: Filters added

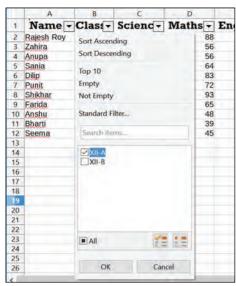


Figure 3.31: Selecting Class XII-A

- 6. If you want to see the data of students only from Class XII-A, uncheck Class XII-B as shown in Figure 3.31.
- 7. Click on **OK**.
- 8. Data of students only from Class XII-A will be dispalyed as shown in Figure 3.32.

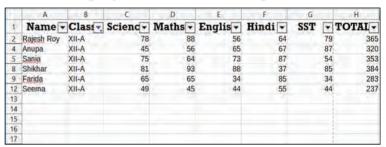


Figure 3.32: Filtered data

Protecting spreadsheet with password

If Ms Sharma is sharing the computer with other teachers and staff, she may want to protect her

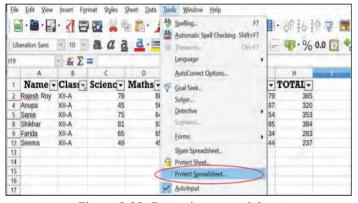


Figure 3.33: Protecting spreadsheet



Figure 3.34: Protect Document dialog box

data. She may not want anyone else to open and make changes to her work. She can do this by protecting her spreadsheet using a password. The steps to protect a spreadsheet are as follows.

- 1. Click on **Tools** and select **Protect Spreadsheet** as shown in Figure 3.33.
- 2. A **Protect Document** dialog box appears as shown in Figure 3.34.
- 3. Type in a **password**.
- 4. Type the same password in the **Confirm** textbox.
- 5. Click on **OK**.
- 6. Now, when you close the file and open it again, it will ask for the password. Remember this password so that you can open the file.

Another way of protecting a spreadsheet is as follows.

- 1. Click on **File**, and then, **Save As**.
- 2. A **Save As** dialog box will appear as shown in Figure 3.35.

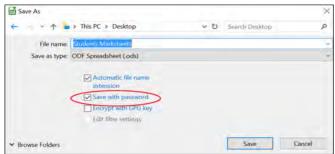


Figure 3.35: Save As dialog box

- 3. Type the file name and click **Save with password**.
- 4. Click on Save.
- 5. A **Set Password** dialog box appears as shown in Figure 3.36.



Figure 3.36: Set password dialog box

- 6. Type a password in the first textbox, and then, type the same password in the **Confirm** textbox.
- 7. Click on **OK**.
- 8. Now, when you try to open the file, it will ask for a password as shown in Figure 3.37.
- 9. Type the password and click on **OK**.

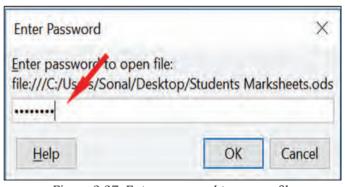


Figure 3.37: Enter password to open a file

Notes

Practical Exercise

Run the e-learning lesson at http://www.psscive.ac.in/ Employability _Skills.html. This will include videos and e-content for the above topics. Based on the e-learning, do the following activity.

Initial thinking activity

Why do you think we need to sort content in a spreadsheet?

Practical group exercise

Run the e-learning lesson to get details on how to run the activity.

Activity 1

Group practice

Sorting data in LibreOffice Calc

Material required

Pen or pencil, computer with LibreOffice Calc, etc.

Procedure

- Divide the class into groups, depending on the number of computers. Choose a leader, who will direct the activity.
- Open a new workbook. Enter your monthly expenses as shown in Figure 1. Sort the data in alphabetical order. Filter data to show expenses above ₹100.

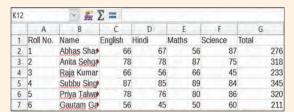


Figure 1: Activity 1 sample

Check Your Progress

A. Multiple choice questions

- 1. Which menu option will you use to sort data?
 - (a) Tools
 - (b) Data
 - (c) Format
 - (d) View
- 2. Mr Gupta has a spreadsheet with a list of 500 items in his shop. A customer comes and asks for a particular item. How should he arrange the data so that he can find that item fast? What would Mr Gupta do? He will:
 - (a) apply filter.
 - (b) sort the data.
 - (c) use password.
 - (d) format data.

- 3. Mr Verma shares the computer in his office with other colleagues. He wants to make sure no one sees the financial data he saves on the computer. What should he do?
 - (a) Lock the computer in a cupboard
 - (b) Change the password of his computer so that no one can use it
 - (c) Apply password to the financial data sheet
 - (d) Leave it as it is and hope that no one will open it

What have you learnt?

After completing this Session, you will be able to:

- · sort data.
- · add filters.
- protect spreadsheet with a password.

Session 5: Presentation Software

Ms Sharma wants to explain water cycle to her students. Mr Chaudhary wants to explain the working of a product to his clients and Dr Suman wants to give a lecture on her new research. All these people need to make an impact on their audience. They can use handmade charts or printed slides or make a digital presentation using a computer and 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

There are a number of presentation software available, such as

- 1. LibreOffice Impress
- 2. Microsoft Office PowerPoint

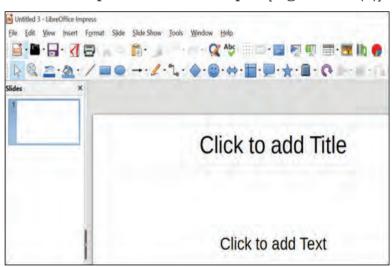
Notes

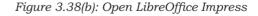
- 3. OpenOffice Impress
- 4. Google Slides
- 5. Apple Keynote

Most features in all these software are same. We will be discussing and using LibreOffice Impress to create presentations in this Session as it is a free and open software.

Steps to start LibreOffice Impress

- 1. First, you must ensure that LibreOffice Impress is installed on your computer.
- 2. Type 'LibreOffice Impress' in the search bar of Windows.
- 3. Select LibreOffice Impress from the search results as shown in Figure 3.38(a).
 - 4. LibreOffice Impress will open. Cancel the 'Select a template' dialog box.
 - 5. A blank presentation will open [Figure 3.38(b)].





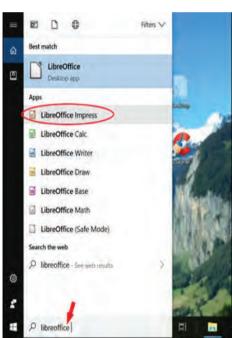


Figure 3.38(a): Select LibreOffice Impress from the search results

Adding text to a presentation

By default, there are two textboxes in the first slide. The top one is for the title and the lower (bigger) one for other details. We can click on the title box and type in a title. Similarly, we can click on the lower box and type in some details as given in Figure 3.39.

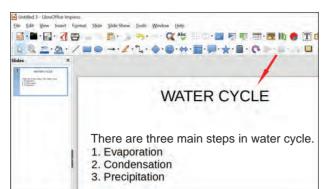


Figure 3.39: Adding text to a slide

In this way, we can start using LibreOffice Impress to make a presentation.

Practical Exercise

Run the e-learning lesson at http://www.psscive.ac.in/ Employability_Skills.html. This will include videos and e-content for the above topics. Based upon the e-learning, do the following activity.

Initial thinking activity

How do you make your projects?

Practical group exercise

Run the e-learning lesson to get details on how to run the activity.

Activity 1

Group practice

Creating presentation in LibreOffice Impress

Material required

Pen, notebook, computer with LibreOffice Impress, etc.

Procedure

- Divide the class into groups, depending on the number of computers.
- Choose a leader, who will direct the activity.
- Start LibreOffice Impress and create a new presentation with the title 'Advantages of using the Internet'.

Check Your Progress

A. Multiple choice questions

- 1. You have a summer vacation project on how to make biogas. You have done a lot of research, clicked pictures of biogas plants and taken videos of people, who use biogas. Now, you have to make a presentation before the class. What would you use?
 - (a) Chart paper
 - (b) Word document
 - (c) Presentation software
 - (d) Spreadsheet

Notes

- 2. What do you need to install on your computer to be able to run Impress?
 - (a) Google
 - (b) Microsoft Office
 - (c) LibreOffice
 - (d) Apple iOS
- 3. How many textboxes does the first slide of LibreOffice Impress have by default?
 - (a) 1
 - (b) 2
 - (c) 3
 - (d) 4

What have you learnt?

After completing this Session, you will be able to:

- describe the advantages of digital presentation.
- list various presentation software.
- list features of a presentation.
- create a new presentation.

Session 6: Opening, Closing, Saving and Printing a Presentation

In this Session, we will learn about opening, closing, saving and printing a presentation.

Steps to save a presentation

A digital presentation can be saved as a file on the computer. This can be opened later, viewed, edited, shared with friends and colleagues, and printed. It is important to save the presentation several times while working so that you do not lose data in case the computer shuts down or there is a power cut.

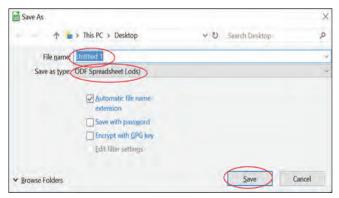


Figure 3.40: 'Save As' dialog box

The steps to save a presentation for the first time are as follows.

- 1. Click on **File**.
- 2. Select **Save As** or **Save** from the drop-down. This displays a **Save As** dialog box as shown in Figure 3.40.
- 3. You can select a folder where you want to save the file, for example **Desktop**.

- 4. By default, the File name is 'Untitled#' (# is a number). You can change it to the name of your choice.
- 5. The default **Save As type** is .ods. You can select other file types from the **Save As type** drop-down. You can save the file as MS Excel or HTML or text file.
- 6. Click on Save.

This will save the presentation on the computer. Later while working, you can simply click **File>Save** or press **Ctrl+s** on the keyboard to save the presentation.

Steps to close a presentation

The steps to close a presentation are as follows.

- 1. Click on **File**.
- 2. Select **Close** from the drop-down.
- 3. If you have not saved the changes before closing the file, it will prompt you with a 'Save Document?' dialog box as shown in Figure 3.41. You can decide whether you want to save or not or cancel.

Save Document? Save changes to document "Water Cycle.odp" before closing? Your changes will be lost if you don't save them. Save Don't Save Cancel

Figure 3.41: Save Document dialog box

Steps to open a presentation

The steps to open a presentation are as follows.

- 1. Open LibreOffice Impress.
- 2. Click on File.
- 3. Then, select **Open** from the drop-down.
- 4. This will display the **Open** dialog box as shown in Figure 3.42.
- 5. Browse and select the folder where your file is saved, for example **Desktop**.

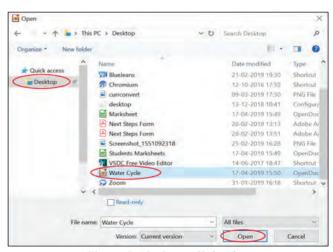


Figure 3.42: Open dialog box

6. Then, select the file, for example Water Cycle.

NOTES

- 7. Click on **Open**.
- 8. This will open the 'Water Cycle.ods' in LibreOffice Impress.

Steps to print a presentation

Before you try to print a file, please make sure that a printer is connected to the computer. The steps to print a presentation are as follows.

- 1. Click on **File**.
- 2. Select **Print** from the drop-down or you can press **Ctrl+p** on the keyboard.
- 3. A **Print** dialog box is displayed.
- 4. A printer attached to the computer is displayed in the dialog box.
- 5. Select the **number of copies** you want to print.
- 6. Select **All**, if you want to print all slides.
- 7. Select **Slides**, if you want to print few of them and provide the slide numbers.
- 8. Click on **OK**.

Practical Exercise

Run the e-learning lesson at http://www.psscive.ac.in/ Employability_Skills.html. This will include videos and e-content for the above topics. Based on the e-learning, do the following activity.

Practical group exercise

Run the e-learning lesson to get details on how to run the activity.

Activity 1

Group practice

Working on a presentation in LibreOffice impress.

Material required

Computer with LibreOffice Impress, pen, notebook, etc.

Procedure

- Divide the class into groups, depending on the number of computers. Each group will perform the following activities.
 - Save a presentation file by the name 'Water Cycle Project'
 - Close the file
 - Open the file again
 - Print the presentation
- Make sure that each student in the group gets a chance to perform at least one activity. Other members can watch and give feedback on what was done correctly and what could be improved upon.

Check Your Progress

Notes

A. Multiple choice questions

- 1. Which is the correct step to save a presentation?
 - (a) File>Save As>Type file name>Save
 - (b) File>Open>File name>Open
 - (c) File>Template>Save as Template
 - (d) File>Close>Save>OK
- 2. Which is the correct step to close a presentation?
 - (a) File>Save As>Type file name>Save
 - (b) File>Exit
 - (c) File>Close
 - (d) File>Export
- 3. Which is the correct step for printing a presentation?
 - (a) File>Print
 - (b) File>Print>Handout
 - (c) File>Print>Handout>OK
 - (d) File>OK

What have you learnt?

After completing this Session, you will be able to:

- save a presentation.
- close a presentation.
- · open a presentation.
- · print presentation slides.

Session 7: Working with Slides and Text in a Presentation

Let us assume you have to make a presentation about a product in your office. The time assigned for the same is five minutes. If you highlight the important points in the presentation, you can easily depict important information in a short span. Let us look at how we can make our presentation more effective.

Adding slide to a presentation

Ms Sharma listed all three steps of Water Cycle in the first slide. Now, she wants to explain each step. But it is not a good idea to put more information on one page. This will make the text jumbled, and difficult to read and understand.

Ms Sharma can add a new slide. Slides are like new pages, which are added to separate different topics in a presentation. Ms Sharma can add one slide each for evaporation, condensation and precipitation, and give more details related to each topic in three different slides. To add a new slide, do the following.



Figure 3.43: Adding a New Slide

- 1. Click on **Slide**.
- 2. Select **New Slide** from the drop-down as shown in Figure 3.43.
- 3. You can also press **Ctrl+M** on the keyboard.
- 4. This will add a blank **New Slide** to the presentation.
- 5. The layout or arrangement of textboxes, etc., will be similar to the previous one.

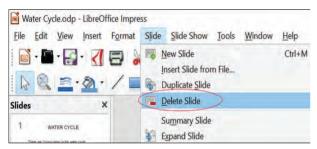


Figure 3.44: Delete Slide

Deleting slides

The steps to delete a slide are as follows.

- 1. Select the slide that you want to delete.
- Click on Slide.
- 3. Select **Delete Slide** from the drop-down as shown in Figure 3.44.
- 4. The selected slide will be deleted.
- 5. You can press '**Del**' key on the keyboard to delete the selected slide.

Adding and formatting text

The default layout of a LibreOffice Impress slide has two textboxes — one for the title and other for text. You can add text by simply typing on the keyboard.

If you have a blank slide with no textbox, you can insert a textbox using the option **Insert>Textbox** as shown in Figure 3.45. You can make this textbox of any size, and then, enter the text.



Figure 3.45: Formatting text

You can format the text in a presentation to make it look better or attractive.

There are many font styles available to change the way a text appears. Click on the **Font Style** drop-down to select a different style. This will change the way the text is written (Figure 3.45).

You can also change the size of the text by clicking on the **Font Size** drop-down and select the size (for example, 8, 12, 14, 22, etc.). The font size of the title is increased to make it stand out.

Highlighting text — bold, underline, italic

To highlight a text in LibreOffice, you can make it bold, underlined or italic, depending on the requirement.

First, select the text that has to be highlighted. Then, hover over the given icons in the **Properties** tab as shown in Figure 3.46. Select the icon required to perform the desired function, i.e., making it bold, italic, underlined or strikethrough.

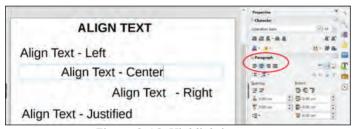


Figure 3.46: Highlighting text

Aligning text — left, right, center, justified

The text can be aligned either left, right, center or justified. Using the **Paragraph** option in the **Properties** tab as shown in Figure 3.47, the text can be aligned.

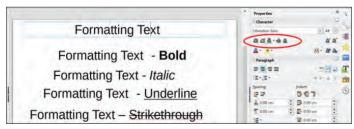


Figure 3.47: Aligning text

'Left or right aligned' means that text will be aligned to the left or right margin, respectively. 'Center' aligns Notes

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the text to the center of the page. 'Justify' aligns the text to the right and left margins.

Changing text colour

You can make the presentation even more interesting by giving different colours to the text.

The Font Color drop-down gives various colours from which you can choose and change the colour of the text as shown in Figure 3.48. Besides the **Font Color** drop-down, there is a **Highlight Color** drop-down. If you select a colour from the Highlight Color drop-down, it will change the background colour of the text.

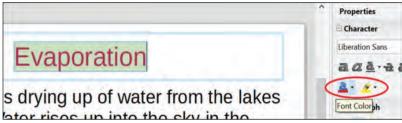


Figure 3.48: Changing text colour

In this way, you can make the presentation interesting and meaningful.

Practical Exercise

Run the e-learning lesson at http://www.psscive.ac.in/ Employability_Skills.html. This will include videos and e-content for the above topics. Based on the e-learning, do the following activity.

Practical group exercise

Run the e-learning lesson to get details on how to run the activity.

Activity 1

Group practice

Working with font styles, types in LibreOffice Impress

Material required

Computer with LibreOffice Impress, notebook, pen, etc.

Procedure

- Divide the class into groups, depending on the number of computers. Each group will perform the following activities.
 - 1. Insert a new slide.
 - 2. Type 'LibreOffice Impress'.
 - 3. Change the font to 'Open Sans'.
 - 4. Colour the text white.
 - 5. Colour the background green.

- 6. The text should appear as given in Figure 1.
- 7. Now, type 'Google'.





Figure 1: Activity 1 sample 1

- 8. Change the font to 'Bookman Old Style'.
- 9. Change the size to 54.
- 10. Colour the letters as given in the Figure 2.

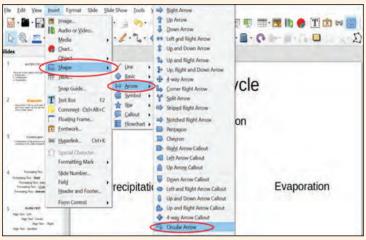


Figure 2: Activity 1 sample 2

Make sure each student in the group gets a chance to perform this activity. Other members can watch and give feedback on what was done correctly and what could be improved upon.

Check Your Progress

A. Multiple choice questions

- 1. Which menu option do you use to insert a slide?
 - (a) Edit
 - (b) Insert
 - (c) Slide
 - (d) Tools
- 2. How will you, usually, align the title of a slide?
 - (a) Left
 - (b) Right
 - (c) Center
 - (d) Justify
- 3. Which option will you use to change the colour of the text?
 - (a) Font Color
 - (b) Font
 - (c) Highlight Color
 - (d) Format

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What have you learnt?

After completing this Session, you will be able to:

- add a slide to a presentation.
- delete a slide in a presentation.
- enter and edit text in a presentation.
- format text in a presentation.

Session 8: Advanced Features used in Presentation

There are various advanced features used in a digital presentation. The use of graphics, charts and images can make the presentation more meaningful.

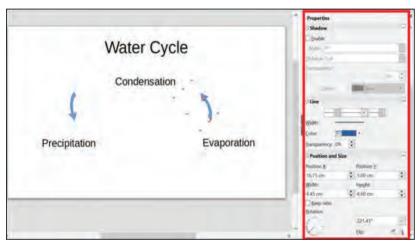


Figure 3.49: Inserting shape in a slide

Properties Shadow Enable Ansile Ans

Figure 3.50: Using Properties tab

Inserting shapes in presentation

You may want to use arrows to show the flow of a process in a presentation. For example, if you want to show how Water Cycle works — you can use arrows. LibreOffice provides numerous shapes, such as lines, square, circle, arrows, symbols, etc., that can be inserted into slides.

As shown in Figure 3.49, to insert an arrow, you must click on **Insert**, and then, select **Shape**. This has several options. Choose **Arrow** to see different types of arrow. Select the one required for the presentation, for example, '**Circular Arrow**'. In this way, you can select any shape you want.

Once a shape is inserted in a slide, you can use the **Properties** tab to make changes to the properties of the shape, such as colour, size, position, direction, etc.

Inserting clipart and images in presentation

A picture speaks a thousand words. We use a lot of images in a presentation to make it simple and interesting. The steps to insert a clipart or an image are as follows.

- 1. Click on **Insert** from the menu.
- 2. Select **Image** as shown in Figure 3.51.
- 3. An **Insert Image** dialog box appears as shown in Figure 3.52.
- 4. Browse through folders and select the image you want to use.

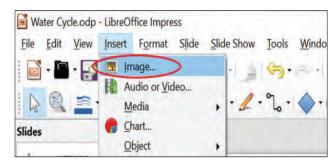


Figure 3.51: Select Image

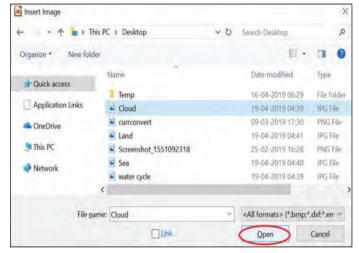


Figure 3.52: Insert Image dialog box

5. Click on **Open**.

In this way, you can insert images in your presentation slides and make it more interesting.

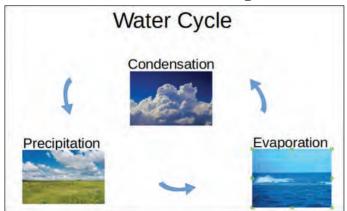


Figure 3.53: Images inserted in a slide

Changing slide layout

The default layout of a LibreOffice Impress slide contains one textbox for the title and one for content. Layout

Water Cycle

• Steps:

- Sun heats the water

- Steam/Water vapour

- Wind carries clouds

- Rain or snow

- Water flows into sea

Figure 3.54: Selecting the desired layout from the Layouts tab

helps to arrange the slide content in an organised way. However, you can change the slide layout as per the requirement.

In case, you want to insert an image of water cycle on one side and give the steps on the other, you can select a layout with one title and two boxes. You can do this by simply selecting the slide, and then, selecting the desired layout from the Layouts tab as shown in Figure 3.54. Having a layout helps to align the content in the desired way.

Practical Exercise

Run the e-learning lesson at http://www.psscive.ac.in/ Employability_Skills.html. This will include videos and e-content for the above topics. Based upon the e-learning, do the following activity.

Practical group exercise

Run the e-learning lesson to get details on how to run the activity.

Activity 1

Group practice

Working with slides in LibreOffice Impress

Time: 20 minutes Material required

Computer with LibreOffice Impress, notebook, pen, etc.

Procedure

- Divide the class into groups, depending on the number of computers. Each group will perform the following tasks.
 - Set the layout of the slide to Title and four content.
 - Insert two different shapes on the left, for example, star and diamond
 - Insert an image of star and diamond on the right.
 - Your slide should appear similar to the one given in Figure 1.



Figure 1: Activity 1 sample

Make sure that each student in the group gets a chance to perform at least one task. Other members can watch and give feedback on what was done correctly and what could be improved upon.

Check Your Progress

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A. Multiple choice questions

- 1. Which menu option will you click on to insert shapes and images?
 - (a) Format
 - (b) Tools
 - (c) Edit
 - (d) Insert
- 2. What are the steps to insert a square shape in a presentation?
 - (a) Insert > Shape> Line> Square
 - (b) Tools > Shape> Line> Square
 - (c) Insert > Shape> Basic > Square
 - (d) Format > Text > Basic> Square
- 3. What happens when you change the layout of a slide?
 - (a) The format of the text changes
 - (b) New slide is inserted
 - (c) The arrangement of content (text, images, shapes) changes
 - (d) The title gets aligned to the center of the slide

What have you learnt?

After completing this Session, you will be able to:

- insert shapes.
- · insert clipart and images.
- · change slide layout.

FURTHER READINGS

- https://edu.gcfglobal.org/en/powerpoint2016/inserting-pictures/1/
- https://www.gcflearnfree.org/excel2016/getting-started-with-excel/1/
- https://www.webucator.com/tutorial/learn-microsoft-excel/entering-data-microsoft-excel-worksheets.cfm
- https://www.gcflearnfree.org/excel2013/formattingcells/1/
- https://www.youtube.com/watch?v=sJqfvgD_qMI
- https://edu.gcfglobal.org/en/excel2013/filtering-data/1/
- https://edu.gcfglobal.org/en/powerpoint2016/creating-and-opening-presentations/1/
- https://edu.gcfglobal.org/en/powerpoint2007/viewing-and-printing-slides/1/
- https://edu.gcfglobal.org/en/powerpointxp/formattingtext/1/



Entrepreneurship Skills



Introduction

Entrepreneurs identify an innovation to seize an opportunity, mobilise funds, raise capitals and take calculated risks to open market or new business for products, processes and services.

Entrepreneurship development refers to the process of enhancing entrepreneurial skills and knowledge through structured training and institution building programmes. It focusses on an individual, who wishes to start or expand a business. Promising entrepreneurs need to be nurtured and helped to serve as role models and mentors for their communities. An entrepreneurship development programme must be designed in a way so as to help aspiring entrepreneurs recognise and design unique and innovative business opportunities based on an analysis of local conditions and their own skills.

Business opportunity surveys may provide advice to entrepreneurs but they must be analysed in the context of specific market situation in each case. To determine the market potential, it is useful to conduct need assessment or demand survey before programme formulation. Motivational intervention may be needed for initiating growth and development of an enterprise.

Training in entrepreneurship development needs to include support for — (a) entrepreneurship orientation and awareness, (b) development of competencies

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(knowledge, skills and attitudes) necessary to recognise a market opportunity and organise resources to meet it, and (c) improvement of business performance for growth and competitiveness. Motivation, besides increasing need for achievement of potential entrepreneurs, also helps them develop coping ability, tolerance to ambiguity and influencing capability.

The National Institute for Entrepreneurship and Small Business Development is a premier organisation of the Ministry of Skill Development and Entrepreneurship, Government of India, engaged in training, consultancy and research to promote entrepreneurship and skill development. The major activities of the Institute include training of trainers, management development programmes, entrepreneurship-cum-skill development programmes, entrepreneurship development programmes and cluster intervention.

Session 1: Entrepreneurship and Entrepreneur

The word 'entrepreneur' is derived from the French word *entreprendre*, which means 'to undertake'. Cole defines entrepreneurship as, "A purposeful activity to initiate, maintain and aggrandise profit-oriented business."

Stevenson and Jarillo define entrepreneurship as: "The process by which individuals pursue opportunities without regard to the resources they currently control." Entrepreneurship can, thus, be defined, as "an economic process, where an idea is generated or an opportunity is created, refined, developed and implemented, while being exposed to uncertainty to realise a profit by effective utilisation of resources".

Economists define an entrepreneur as someone, who brings in resources, labour, material and other assets into profit making combinations.

Psychologists define an entrepreneur as a person, who is, typically, driven by a psychological force, which creates a desire to obtain or attain something.

Sociologists define an entrepreneur as a person, whose actions would determine social status and contribute to societal development.

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Management gurus define an entrepreneur as a person, who has a vision and generates an action plan to achieve it.

Characteristics of entrepreneurship

On the basis of the above mentioned definitions, the following are some of the characteristics of entrepreneurship.

- It is an economic activity done to create, develop and maintain a profit-oriented organisation.
- It begins with identifying an opportunity as a potential to sell and make profit in the market.
- It deals with optimisation in utilisation of resources.
- It is the ability of an enterprise and an entrepreneur to take risks.

Entrepreneurship — art and science

Entrepreneurship is considered to be both an art and a science. For a subject to be considered as science, it needs to have a stepwise progression substantiated by valid proof like chemistry or physics. There are steps that need to be followed to attain a specific result. On the other hand, some subjects are categorised as art, where no specific way to attain a result is required and the skill of using the subject matter is of prime importance. An example of art is music. A musician can play music notes in any combination to create soothing and soulful music. Entrepreneurship is the perfect combination of art and science as it requires specific progression and procedures to be followed and also the skill to digress when required, and yet make the entire activity profitable and growth oriented.

An entrepreneur is someone, who has the capability to start an organisation by organising various resources required to make an opportunity purposeful. Entrepreneurs are not necessarily motivated by profit but may regard it as a standard for measuring achievement or success.

Qualities of a successful entrepreneur

Let us now consider the qualities that make an entrepreneur successful. There may be many qualities needed to successfully run an enterprise. However, the following qualities are considered important.

- (a) **Initiative**: In the world of business, opportunities come and go. An entrepreneur must be able to initiate action and take advantage of an opportunity. Once a person misses out on an opportunity, it may not come again. Therefore, taking initiative on the part of the entrepreneur is a must.
- (b) Willingness to take risks: In any business, there is an element of risk involved. It implies that it is not necessary that every business shall earn a profit. This deters individuals to take up risks and start a business. However, an entrepreneur always volunteers to take risks to run a business and be successful.
- **(c) Ability to learn from experience**: An entrepreneur may make mistakes. However, once an error is committed, it must be tried that it is not repeated as it may lead to heavy losses. Therefore, the person must have the ability to learn from experience.
- (d) Motivation: It is necessary for success in every walk of life. Once you get motivated to do something, you will not rest until you complete it. For example, sometimes, you become so intrested in reading a story or magazine that you do not sleep until you complete it. This kind of interest in work comes through motivation. It is an essential quality to become a successful entrepreneur.
- (e) Self-confidence: For achieving success in life, a person needs to have confidence in oneself. Someone, who lacks confidence, may not be able to achieve much in life or inspire others to work. Self-confidence is reflected in courage, enthusiasm and ability to lead. Therefore, a successful entrepreneur must have self-confidence.

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- (f) Hard work: There is no substitute for hard work in life. While running a business, one problem or the other may arise every day. The entrepreneur has to be vigilant so as to identify the problems and solve them as early as possible. This requires hard work on the part of the entrepreneur. The person cannot afford to say: "The office hours are over now and I will not work any longer." In some situations, the person may even have to work for the whole night. Thus, hard work is the secret of success for an entrepreneur.
- (g) Decision making ability: In running an enterprise, an entrepreneur has to take a number of decisions. Therefore, the person must be capable of making suitable and timely decisions. In the present world, things move very fast. If an entrepreneur does not have the ability to make suitable and timely decisions, the person may miss out on an opportunity and incur losses.

Type of entrepreneurs

There are many type of entrepreneurs, which include the following.

Service entrepreneurs

These entrepreneurs either create a new market for their services or provide a service in an existing market. They spot an idea and convert it into a service, which is unprecedented or not available in the market. It is irrespective of the nature and size of operations but is essentially a service.

Business entrepreneurs

These are entrepreneurs, who undertake business and trading activities and are not concerned with the manufacturing work. A business entrepreneur identifies the potential of a product in a market. From that point onwards, the business and trading entrepreneur is responsible for stimulating demand for the product. The product may be existent in a foreign market but the person is able to stimulate demand for the same in local market.

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Industrial entrepreneurs

An industrial entrepreneur is, essentially, a manufacturer, who identifies the needs of customers and creates products or services to serve them. Such an entrepreneur is product oriented, who starts through an industrial unit to create a product like electronic industry, textile unit, machine tools, manufacturing unit, etc.

Agricultural entrepreneurs

Agriculture has always been considered as a low-yielding entrepreneurship. Agriculturists have now introduced new and innovative technology to maximise the yield, giving birth to agriculture entrepreneurship.

Technical entrepreneurs

The Industrial Revolution gave birth to technical entrepreneurs, who use their technical expertise to create and offer machines, tools and methods. They constantly innovate to make industrial processes seamless and efficient. Technical entrepreneurs use their technical knowledge and skills to innovate.

Non-technical entrepreneurs

These entrepreneurs use their expertise in providing services to create a market for technical entrepreneurs. Their expertise is in non-technical aspects of a product or service, i.e., they are not concerned with the manufacturing process but have more to do with before and after the manufacturing process.

Professional entrepreneurs

Such an entrepreneur starts a business, nurtures it and makes it reach a point of self-sustenance. Once the project reaches that point, the entrepreneur sells the business and starts a new one, and then, follows the same cycle.

IT entrepreneurs

People who take up entrepreneurship in the field of Information Technology (IT) are called IT entrepreneurs.

The difference between IT entrepreneurs and technical entrepreneurs is that the latter work in the field of electronics, mechanical devices or even civil works, while IT entrepreneurs are confined to innovation in the field of Information Technology.

Women entrepreneurs

As the name suggests, when women take up entrepreneurship, they are called women entrepreneurs. A number of women entrepreneurs are taking initiatives in starting entrepreneurial activities and many of them have even made it to the top.

Social entrepreneurs

Individuals, who focus on developing solutions that benefit the society, are called social entrepreneurs. They develop, fund and implement solutions that are directed towards society, culture and environment. The term 'social innovator' is used interchangeably with social entrepreneurs.

Family business entrepreneurs

When a family or an individual runs a business successfully and passes it on to the next generation, then such an entrepreneur is, generally, termed as family business entrepreneur. The person, who is handed over the business or the functioning of an enterprise, is not the first generation entrepreneur. The person carries out all entrepreneurial activities as inherited in the same manner or introduces certain technological advancements to the existing way and method of the family business.



First generation entrepreneurs

First generation entrepreneurs are those who do not have any entrepreneurship background. They can be of different age groups and backgrounds. An individual, who starts at the age of 50 years without any entrepreneurship background, is also a first generation entrepreneur

and someone else, who starts at the age of 17 years, is also a first generation entrepreneur.

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Roles and functions of an entrepreneur

Some of the major functions performed by an entrepreneur are as follows.

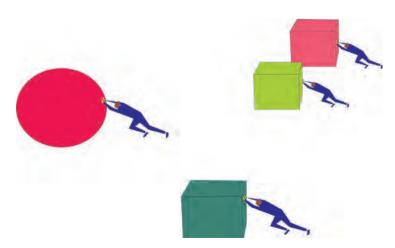
- (a) Identifying entrepreneurial opportunity: There are many opportunities in the world of business. These are based on human needs like food, fashion, education, etc., which are constantly changing. These opportunities are not realised by the general public. But an entrepreneur senses the opportunities faster than others. The entrepreneur, therefore, has to keep one's eyes and ears open at all times. A person, who wants to become an entrepreneur, requires imagination, creativity and innovativeness.
- **(b) Turning ideas into action:** Entrepreneurs must be capable of turning ideas into reality. They should be able to collect information regarding ideas, products and practices to meet the market demand.
- **(c) Feasibility study:** Entrepreneurs conduct studies to assess the market feasibility of a proposed product or service. They anticipate problems and assess quantity, quality, cost and sources of inputs required to run the enterprise. Such a blueprint of all activities is termed as a 'business plan' or 'project report'.
- **(d) Resourcing:** An entrepreneur needs various resources in terms of money, machine, raw material and workforce to run an enterprise successfully. An essential function of an entrepreneur is to ensure the timely availability of all these resources.
- **(e) Setting up an enterprise:** For setting up an enterprise, the entrepreneur may need to fulfil some legal formalities. The person must also try to find a suitable location, design the premises, install machinery and do many other works.

- (f) Managing the enterprise: One of the important functions of an entrepreneur is to run the enterprise. The person has to manage the workforce, material, finance and organise the production of goods and services. The person has to market each product and service, after ensuring appropriate returns (profits) of the investment. Only a well-managed organisation yields the desired results.
- **(g) Growth and development:** Once the enterprise achieves the desired results, the entrepreneur has to explore another higher goal for its growth and development. The person is not satisfied only with achieving a set goal but constantly strives for achieving excellence.

What motivates an entrepreneur?

Every human has a nature to create and pro-create, and to dream and work to fulfill those dreams. But not every human is able to handle failures. An entrepreneur, on the other hand, has the potential and willingness to overcome every hurdle that comes in way of the person's entrepreneurial endeavours. The person finds out ways and means to pursue one's dreams and fulfil the goals.

Following are some of the qualities that motivate an entrepreneur.



Standard of excellence

An entrepreneur constantly sets high standards and strives to attain the standard of excellence by working hard and showing innovativeness.

Uniqueness

For an entrepreneur, one of the most important qualities is to remain unique in everything the person does and the way it is done.

Focus on long-term goals

Long-term goals are those that are distant in terms of time period. An entrepreneur focusses more on what is to be achieved in distant future rather than in near future. The person will plan and work patiently to achieve the long-term goals.

Need to influence

The entrepreneur perceives one's ideas as revolutionary and expects them to influence the world in a substantial way. For most entrepreneurs, their ideas have impacted the world and some have completely changed the look of the world.

A wage employed person is someone, who works for an individual or organisation and gets paid for the same. An entrepreneur is a self-employed person, who strives to make the business better by taking risks and trying new ideas.

Entrepreneurship is the act of setting up and running a business, and taking risks in order to earn profits.

Nutan always had a passion for cooking. As a child, she had an accident and became wheelchair bound. It was a difficult situation. But it did not stop her from pursuing her dreams. Nutan got an internship in her neighbour's restaurant and learnt to work in the kitchen. Two years after working there, she decided to start a *dabba* (tiffin) service. She would prepare and send lunch to 100 people in an office building nearby. Eventually, she introduced a menu from where people could choose what food they wanted to have instead of everyone getting the same food. Here are some things you would have learnt from Nutan's story.

- 1. When she was working in her neighbour's restaurant, she was a wage employed person because she was working for someone.
- 2. She set up her food business. She was an entrepreneur as she was taking a risk by trying new ideas and introducing a menu.
- 3. Where there is a will, there is a way! We can do anything, if we decide.





Identifying opportunities and risk taking

A key question faced by budding entrepreneurs is finding the business opportunity that is right for them. Should the new venture focus on a new product or service? Should the venture select an existing product or service from one market and offer it in another, where it may not be available?

Some ways by which aspiring entrepreneurs can identify new business opportunities and evaluate their potential and risks are as follows.

- **Community concerns:** Look for issues that concern your community. Sometimes, starting locally can reap huge benefits. Identify the inefficiencies, analyse how an idea can help and evaluate the risks involved.
- **Personal experiences:** Many powerful world changing ideas come from the experiences and challenges an entrepreneur faces in life. If you aspire to become an entrepreneur, you must listen to the personal stories of successful entrepreneurs and draw inspiration. Their experiences may teach you powerful lessons in entrepreneurship and give an insight into some business strategies that you may adopt to become successful.
- **Research with others:** Speak to like-minded people, get involved through social groups and join local startup groups. Many a time, discussion with others opens various doors of opportunities. It also helps to learn the nuances of business.

For an entrepreneur, it is all about spotting the right opportunity and taking the leap of faith. Mark Zuckerberg thought about a simple idea of connecting with his college friends through Internet. His simple idea sparked the 'social movement', and today, almost all of us are connected through 'Facebook'.



Startups

A startup is a company that is in the first stage of its operations. A startup and a traditional business venture are different, most notably for the way they think about growth. A startup is often financed by the founders until the business gets off the ground, and it gets outside finance or investments.

We hear a lot about startups being founded these days. It can be in the field of technology, health care, food, virtual reality, etc. Let us understand more about startups.

 Startups can be started with minimum investment. Most startups thrive on an idea that involve technology or offer technology-driven solutions.
 For example, a lot of startups



have started online food delivery. With the help of a robust app, they partner with food service providers or restaurants, and help in the home delivery of food.

- Startups seek financial investment differently than most small businesses. They rely on capital that comes via angel investors or venture capital firms, while small business operations rely on loans and grants. A lot of Indian startups, too, have received funding from global investors.
- Startups come up with an innovative idea. At the same time, they like to get guidance and mentoring from an expert. Most people, who create startups, join various groups at local and global level for continued support by expert mentors and investors. 'Startup India', a flagship initiative of the Government of India, is intended to build an ecosystem for the growth of startup business. Startup policies have been formulated by the States. Under this scheme, new startups in India can avail regulatory and tax benefits, capital gain exemption, as well as, access to government funding, if they fulfil the criteria. (Website: http://startupindia.in).

Can you think of any startup around you? Have you read about any startup in newspapers? Discuss and list the names of three startups.

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Practical Exercise

Activity 1

Group discussion

The topic for discussion is — 'An entrepreneur is not born but created'.

Material required

Notebook, pen, etc.

Procedure

- Divide the class into two groups.
- Each group brainstorms and states points one for 'an entrepreneur is born' and the other for 'an entrepreneur is created'.

Activity 2

Group practice

Entrepreneurship quiz

Material required

Notebook, pen, etc.

Procedure

In this activity, we will identify and differentiate between entrepreneurs and wage employed people.

Instructions

- 1. Each row in the class shall be a group. Thus, we shall have four groups in the class.
- 2. Each group shall assign one person to be the 'buzzer' person. You must have seen game shows, where the person who wants to give an answer presses a button, and a loud beep sound is produced. That is a buzzer. We do not have a buzzer but we have benches! So, the 'buzzer' person from a group shall tap the bench if the person's group knows the answer.
- 3. The teacher will speak out aloud various professions. Each group must guess if that person is an entrepreneur or a wage employed person.
- 4. Discuss the difference between an entrepreneur and a wage employed person with the group.
- 5. Here are the situations.
 - (a) Rama is a vegetable seller, who sells only organic vegetables.
 - (b) Suresh runs a food delivery business that delivers food between 12 noon and 5 am.
 - (c) Sahida is a manager in a software company.
 - (d) John is a school teacher in a village.
 - (e) Gurdeep has a yoga centre that conducts classes for senior citizens.

Check Your Progress

A. Multiple choice questions

- 1. Salman tries new ideas as a tailor in a garment factory. Salman is a/an
 - (a) entrepreneur
 - (b) wage employed person
 - (c) labourer
 - (d) unskilled worker
- 2. Prashant works for Surabhi, who is a businesswoman. Prashant is an
 - (a) entrepreneur
 - (b) wage employed person
 - (c) skilled worker
 - (d) businessman
- 3. Ridhi owns a construction company and takes risky decisions in her work everyday. Ridhi is an ______.
 - (a) entrepreneur
 - (b) wage employed person

B. Short answer question

1. Name an entrepreneur you admire and what do you admire about the person.

What have you learnt?

After completing this Session, you will be able to:

- explain the qualities of an entrepreneur.
- what is entrepreneurship.

Session 2: Barriers to Entrepreneurship

You must have watched a 100m hurdle race for women or 110m hurdle race for men in school or stadium. Some of them were obstacle races, in which there would be hurdles — you would need to jump over to get to the end line and if you ran fast enough, you would win.

A business venture is a lot like hurdle race. It, usually, involves risks. A risk is any situation, which involves danger.

So, while running the race as an entrepreneur, many hurdles, such as financial constraints may come in way. These things can stop the person from achieving success. These are called 'barriers'. One day while going to school, a tree falls on road. It stops

all vehicles. It is a barrier that is stopping you from reaching school on time.

What do you think can be the barriers that entrepreneurs may face while running their ventures? Talk to some entrepreneurs in your area and find out. After having spoken with the entrepreneurs, you would have realised that they face a lot of barriers on their path to success. Whether it is lack of knowledge or lack of funding, there are various barriers that can prevent one from pursuing one's passion for entrepreneurship. Here are some of the most common barriers.

Environmental barriers

One of the biggest barriers that entrepreneurs face is environmental factors. Environmental factors can be many. But the most common ones include the following.

- Lack of adequate resources or raw material
- Non-availability of skilled labour
- Lack of requisite machinery and other infrastructure
- Unavailability of monetary resources on time

These barriers can be easily overcome by studying the market well enough before taking a decision about the venture. Research, market surveys and mentor guidance can help overcome such barriers.

The Indian Government has come up with various schemes to help small-scale entrepreneurs gain capital. Some of these are:

- Government Mudra Yojana https:// mudralsans.in/
- Credit Guarantee Scheme https://www.cgtmse.in/
- Stand-Up India Scheme https://www. standupmitra.in/

No or faulty business plan

"A goal without a plan is just a wish."

Every entrepreneur wants a successful business. But if a person does not make an action plan, it may lead



to a chaotic situation. Having a plan to reach the goal helps the person in knowing one's role in running a successful business and pushes everyone associated with it to work harder.

Personal barriers

How long will the business last? How much profit will it make? Will my customers like my product? Will I have enough money to support my family? These are the questions that might go through an entrepreneur's mind before the person actually starts a business venture. Establishing any new venture is a risk because there is always a fear of what may go wrong. Secondly, finding a suitable team is also a tedious job. A team of careless and non-suitable workers may cause damage to a business.

Self-doubt

It is easy to get discouraged when something goes wrong in a business. One starts doubting oneself and may even feel like giving up. Self-doubt comes when we do not have confidence in ourselves and our abilities.

One of the best ways to deal with self-doubt is to work towards one's goals. When we lack motivation, just looking at our goals and knowing that the tasks we are doing today are contributing to our long-term goals help us feel better. Having family and friends, who know our goals and support us when we are doubting ourselves, also help.

We are all scared of failing. We put in a lot of effort into our idea and give it our best to make it happen. Believing in ourselves is the first step towards crushing the fear of failure.

Forming a team and teamwork

Finding suitable people and training them to put in their best for the business is a tedious and dificult exercise. As an entrepreneur, one must find people, who think and feel like the rest of the team. When new people fit into the culture of the team, work can happen better and faster.





Entrepreneurship Skills

Practical Exercise

Activity 1

Entrepreneur interview

Material required

Notebook, pen, etc.

Procedure

In this activity, we will speak to an entrepreneur about the problems the person faces in business.

Instructions

- 1. Find an entrepreneur in your area.
- 2. Ask questions, such as how the person got the idea of starting the business and "what were the major difficulties that the person faced.
- 3. Note down the answers in your notebook.

Activity 2

Fishbowl of fears

Material required

Notebook, pen, etc.

Procedure

In this activity, we will talk about what we fear about entrepreneurship.

Instructions

- 1. We have learnt about the barriers that entrepreneurs face. Now, each one of us shall think about what we fear might be the biggest barrier for us when we start our business venture.
- 2. Sit in a circle.
- 3. Take a chit of paper and write down what barrier might stop you when you start a venture. Do not write your name on the chit.
- 4. Put all chits in the centre of the circle.
- 5. Each person will pick up a chit and read someone's fear. Then, the class will spend two minutes, and try to find out solutions for that person's fear. If the person wants to reveal one's name at this point, one can do so.
- 6. It is difficult to talk about one's fears in front of everyone. So, all students must listen to each other and extend support. They must not laugh when someone is sharing one's story.

Check Your Progress

Notes

A. Match the situations in the columns to the meaning of the word.

Situations		Word
(a)	Gauri has started a fashion designing store, where she sells clothes.	(i) Barrier
(b)	Akshay wants to start more classes in his school but is finding it difficult to hire teachers.	(ii) Risk
(c)	Shubham has a business of selling groceries. He wants to open a store that sells everything from clothes to shoes to bags, along with groceries.	(iii) Venture

B. Multiple choice questions

Identify and put a tick mark (\checkmark) against the type of barrier in each situation.

- 1. Mary believes that she will not have the ability to work with a team when she starts her business. The barrier she is facing is ______.
 - (a) getting capital
 - (b) self-doubt
 - (c) risk taking
- 2. Sayed knows what business he wants to do but does not know what steps he has to take to get it running. The barrier stopping him is ______.
 - (a) building the right team
 - (b) lack of plan
 - (c) risk taking
- 3. Harish has a rug business in India. He wants to start exporting rugs to Canada but does not know if they would sell there. The barrier he is facing is ______.
 - (a) self-doubt
 - (b) lack of plan
 - (c) selecting the right business idea

What have you learnt?

After completing this Session, you will be able to:

• identify barriers and fears related to becoming an entrepreneur.

Notes

Session 3: Entrepreneurial Attitudes

Entrepreneurs think and act differently from people who are wage employed. But how are they different? Let's read Bitti's story and understand.

Bitti is from the city of Bareilly in Uttar Pradesh. She attends her cousin's wedding but finds it very boring because nobody is dancing. She starts talking to people to find out the problem. Older uncles and aunties tell her that other people would judge them if they dance. Young people tell her that the DJ is not playing the latest music. After attending five more weddings, she realises that this is a problem that a lot of people face at weddings. She sees a business opportunity here.

Bitti, then, starts her wedding entertainment company. The company has two parts — a dance academy and a music business. The dance academy holds dance classes for children in the morning and for people above the age of 50 years in the evening. For the music business, she hires young people in the age group of 16–30 years to research on the latest popular music. At first, she finds it hard because she has no prior experience of running a business or working with a group of people so different from each other. But that does not stop her from putting in efforts into the business.

What did Bitti do or think differently from someone else? Discuss with your partner and write it in your notebook.

An attitude is a way of thinking or feeling about something. It can be positive or negative, good or bad. We shall learn about positive attitudes of entrepreneurs.

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.

After reading Bitti's story, the attitudes that make a successful entrepreneur are given in Figure 4.1.

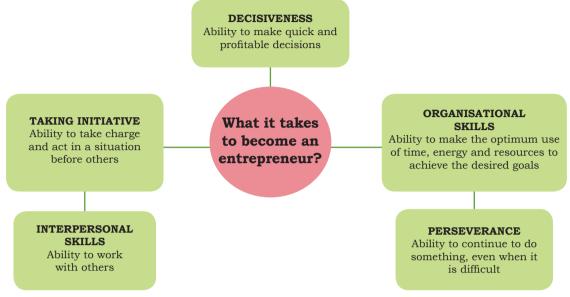


Figure 4.1: Attitudes of an entrepreneur

Check Your Progress

A. Multiple choice questions

- 1. The ability to continue to do something, even when it is difficult is called ______.
 - (a) initiative
 - (b) organisational skills
 - (c) perseverance
- 2. The ability to act in a situation before others do is
 - (a) interpersonal skills
 - (b) initiative
 - (c) perseverance
- 3. The ability to work with others is _____
 - (a) organisational skills
 - (b) interpersonal skills
 - (c) initiative

B. Short answer questions

- 1. What do you understand by attitude?
- 2. What do you understand by interpersonal skills? Share an example where you displayed interpersonal skills.

C. Match Bitti's actions from the attitudes we have learnt that an entrepreneur need to possess. Write them in the table given below.

Attitudes an entrepreneur need to possess	Bitti's actions
Decisiveness	She decides to start a dance academy after seeing a need and talking to people about it.
Initiative	
Interpersonal skills	
Perseverance	
Organisational skills	

What have you learnt?

After completing this Session, you will be able to:

• identify the attitudes that make an entrepreneur successful.

Session 4: Entrepreneurial Competencies

In the previous Session, we learnt about the attitudes that an entrepreneur need to possess to become successful. Here, we shall learn about the competencies required by a person to build entrepreneurial attitude. Competency is the ability to do something well. Figure 4.2 shows the attitudes and competencies required to become a successful entrepreneur.

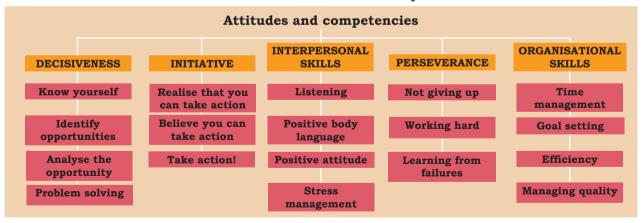


Figure 4.2: Attitudes and competencies to become a successful entrepreneur

The journey to understand our competencies first starts with understanding who we are. We grow and change every single day. We understand what we like and what we do not. We make mistakes and learn from them. It is important to stop and think about how we have changed as people over the years.

Sometimes while thinking about our life, we might judge ourselves too much. We do not like it when we make mistakes and think that we cannot do something because we have made a mistake. At those times, it is important to remember to see ourselves from the point of view of people around us. They may have positive things to say about us.

Let us learn about the entrepreneurial attitudes through different exercises.

Decisiveness

Decisiveness is the ability to make profitable and quick decisions. How does a person become decisive as an entrepreneur?

Decisiveness becomes the most important attribute while setting up a business venture. It is about identifying an opportunity and acting on it. An opportunity is a chance to do something, generally, the right time or moment to do something.

Decisiveness can be developed through the following process as shown in Figure 4.3.

DECISIVENESS Knowing yourself **Identify opportunities** You must know what is important for you — Figuring out the right moment and place where a What kind of problems do you want to solve? business will work is important. Who are the people you want to help? What do you see around that bothers you? What problems do they have? What are you good at that can help you solve these problems? What ideas do you have to solve them? Analyse the opportunity Problem solving The next step is to study your idea. After studying the customers and market, you If it works, why would it work? What problems may make changes to your idea. could stop the idea from becomming successful? What would be the final idea? What makes it What do the customers think about the idea? different from other ideas in the market? What is the competition for that idea? How will you use your strengths to make the idea successful?

Figure 4.3: Solving the decisiveness dilemma

Let us look at Ankur's entrepreneurial venture and try to understand his decisiveness.

Ankur manufactures and sells towels in his village at Dharamkot, Himachal Pradesh. For almost a year, his towels would not get sold in his village. Disappointed, he was about to shut down the business. That is when someone suggested that he sell the towels in a city. He showed some samples to people in Delhi. He realised that the quality of towels and the price at which he was producing was better suited for a city. The people in his village found his products expensive. So, he started producing softer towels for the city and cheaper ones for his village. His customers in both the places were happy.

Can you analyse Ankur's actions on four aspects of decisiveness? Give an explanation for each aspect.

Example: Identifying opportunity — Ankur realised that he could sell the towels in the city, as well as, his village.

Initiative

Initiative is the ability to take charge and act in a situation before others. Once you have decided what you want to do, the next step is taking action. There are times when we recognise what action we have to take but do not take it because we think we cannot do it. In such times, it is important to reach out to people we are working with to help us think about ideas and motivate us to believe in our abilities.

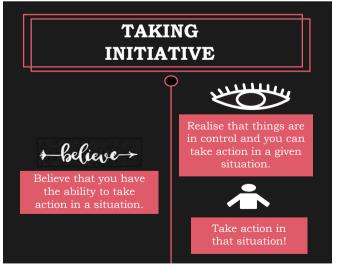


Figure 4.4: Taking initiative

Let us read story about Elton, who liked cutting and styling people's hair.

Elton was always interested in hairstyling. He knew the latest international styles and would keep trying them on his friends. But his family wanted him to work in a software company. After years of struggling with what to do, Elton spoke to his friends. They encouraged him and made him realise that he should take charge as it was his life. He gathered courage and spoke to his family. He explained that he had the talent to style hair and the skills to run an entrepreneurial venture because of what he had learnt in school and at home about business. His family was finally convinced and helped him set up a salon. He is now well-known for his skills in and around his town.

Discuss with your partner how Elton took the initiative to start his venture. List the steps he had to take to set it up.

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.

In our everyday life, we are always talking to people and working with them. Whether it is riding a bus or sharing lunch in class, we are constantly interacting with others. This is true for an entrepreneur as well.

Entrepreneurs work with people from different walks of life. They might work with them because of their talent and hard work. In such a case, the kind of people who work in a team might be different. They might look different, talk different and believe in different things. In such a case, it becomes important for an entrepreneur, as well as, every individual of the team to respect each other and their differences.

Therefore, 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.





Listening

It is important to listen when someone talks. When someone shares something, it is, generally, because the person might have thought about it or it is how one feels. Listening with interest to what someone is saying helps build trust with the person.

Body language

How would you feel if someone had a frown on the face, hands crossed and leaning back in the chair while talking? If you cannot picturise it, tell someone in your class to act it out and you shall know.

Our facial expressions, gestures and postures are important while working with people. While listening, if you show that you are interested in talking to the person with a smile and leaning forward in the chair, the person is likely to feel comfortable and talk more.

Positive attitude

Having a positive attitude, generally, implies being optimistic about situations, interactions and oneself. People with a positive attitude are hopeful and see the best even in difficult situations. However, if you have negative feelings, it is good to talk about it with someone you trust and find out why you are feeling like that.

Having a positive attitude is important while receiving and giving feedback. Feedback is giving information or criticism to someone to say what can be done to improve something. Feedback is important in the communication process. Without feedback no communication is complete. Therefore, during a feedback conversation, it is important to speak in a positive manner. One could start by talking about what the person is doing well, and then, mention what one can do better. In such a case, there are chances that the other person will listen with interest. This applies to you as well. It is important to stay open-minded in a feedback conversation

NOTES

Stress management

Have you ever been unable to sleep the night anxious before exam because you were about how you would perform? That state of mental pressure or tension is called 'stress'. Sometimes, one experiences stress while working with other people. Because there are people with different personalities working in a team, it can lead to stress for all. In such cases, managing stress becomes important for the health and well-being of everyone. Stress management refers to the different ways to deal with stress, so as to feel healthy, positive and refreshed.

There are many ways people deal with stress. Some of them are as follows.

- 1. Taking a walk in nature
- 2. Doing a physical activity like running swimming, etc.
- 3. Practising deep breathing exercises
- 4. Practising meditation or yoga

Perseverance

Perseverance is the ability to continue to do something, even when it is difficult. Let us read about it through Ravi's story.

After 20 years of being a successful entrepreneur in Lucknow, Ravi decided to move back to his village in Jaunpur. In his village, he decided to open a clothing store. He thought that because he had gained so much success in the city, he would open the shop with the same clothing style in the village as well.

Initially, some people came to try out his store's clothes but they said that the style did not match what they wanted. They wanted more variety and brighter colours.

Ravi was not disappointed. He decided to learn from the failure. He sold off the old clothes to his friend in a city and bought good quality clothes from a local seller. He also put posters outside his shop, so that people would feel welcome. After reading Ravi's story, you can understand that perseverance can be built in the following ways.

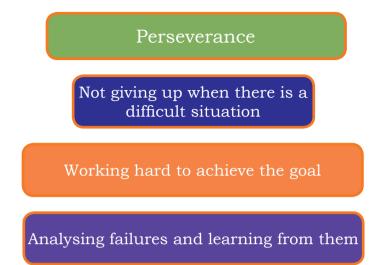
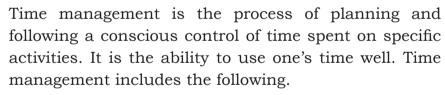


Figure 4.5: Building perseverance

Organisational skills

Organisational skills refer to the ability of making optimal use of one's time, energy and resources to achieve one's goals. Becoming better at these organisational skills would help an entrepreneur become successful. So, let us test these skills for ourselves. Organisational skills include the following.

Time management



- 1. Planning well
- 2. Setting goals
- 3. Setting deadlines
- 4. Giving important work responsibilities to other people in a team
- 5. Conducting the most important tasks first



Goal setting

A goal is somewhere we want to reach. It is the aim or result that we want from an activity. Goal makes us work harder, motivates us to complete what we start and achieve the target. It gives us direction, and usually, makes us put in more effort. The biggest difference between the first and second round of a game you played was that you had a goal for a second round. It is that goal, which would have made you work harder and smarter in the second round.



Efficiency

Efficiency is the ability to do things well, successfully, without wasting time. In the second round of the game, you would have utilised the abilities of your team members better. You would have divided work among your team members to be able to achieve the goal. Efficiency can be achieved by using material, i.e., the team's efforts, money and time well.



For example, Sama runs a manufacturing business. When she started, she would do everything — manufacturing, transportation and selling the material door-to-door. Now that her business has expanded, she takes care of the manufacturing section only to ensure that the quality of the material being used is maintained. Her team members take care of the transportation and sale of the manufactured products.

Managing quality

Managing quality in a business means setting and maintaining a standard of excellence for products or services being provided to customers. When the business venture starts growing, maintaining quality becomes the most important part because of the number of products being produced every day. In Ravi's story, even when he bought clothes from a local seller, he did not buy cheap ones. He bought good quality clothes because his customers were important to him.



Practical Exercise

Activity 1

Who am I?

Material required

Notebook, pen, etc.

Procedure

• In this activity, we talk about ourselves with the rest of the class.

Pre-work

On the day before the exercise is conducted, each student has to think about and select one person whom the student thinks knows one well. Once the student has that person in mind, get an object that represents the personality of the person to class. It can be the person's scarf, spectacles, bag, etc.

Instructions

- 1. Place a chair in the centre of the class.
- 2. Each person comes in front of the class with the object one has brought.
- 3. Each person shall use that object and stand behind the chair. They have to act like the other person and introduce themselves to the class. For example, if Reshma chooses her mother as the person who knows her best, she shall wear her *dupatta*, stand behind the chair and introduce Reshma to the class. She shall use these sentences like: "Reshma is my daughter. She is 17 years old. She is a happy child", etc. Every person has two minutes to introduce oneself.

Tip: You are all going on a journey to know each other. So, it becomes important to listen to each other with interest.

Activity 2

Group practice

Business ideas

Material required

Notebook, pen, etc.

Procedure

• In this activity, we shall come up with business ideas to solve the problems of different people.

Instructions

- 1. Form groups of four.
- 2. Write about a person or people that you care about and the problems they have.
- 3. Come up with solutions for those problems and write them in the following table.

Person	
Problem	
Ideas to solve the problem	

4. Now, it is time to talk to your customers. Speak to the people for whom you come up with solutions. Fill in the table given below while speaking to them.

Name of the person	
Do you have this problem?	
Does my idea solve your problem? Do you have suggestions to make my idea better?	
Is there anyone else who is solving your problem? What are they doing?	

- 5. Compare the ideas you have got from your customer with the original idea. Come up with a new idea that will be helpful to your customer.
- 6. Write down the strengths you have that will help you to successfully execute this new idea. Write them here.

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Activity 3

Group practice

Best out of waste

Material required

Notebook, pen, waste items for the activity, etc.

Procedure

• In this activity, let us make useful objects out of waste material.

Pre-work

The students shall work in groups of five. Each group has to bring any five items that have been lying as waste in their homes. These five items should be such that an object can be made out of them.

Instructions

- 1. Divide yourselves into your groups of five. Place the items you have brought on the bench.
- 2. Surprise time! You have to give your items to the team next to you.
- 3. You, now, have 15 minutes to make a useful object out of the material your team has.

Notes

NOTES

- 4. After completion, each team shall get two minutes to present one's object before the class based on the questions given below. Now, share your feelings on successfully making an object.
 - What was your original plan?
 - How did you feel when your items were taken away and a new set of items were given to you?
 - How did you successfully complete the task and make the object?

Activity 4

Pair and share

Let's grow together!

Material required

Notebook, pen, etc.

Procedure

In this activity, we will talk and help each other become better people.

Instructions

- 1. Find someone in class who knows you well.
- 2. Now, write down one thing that you see them do well. Then, write down one thing that you feel they can do better.
- 3. Now, share your opinion with each other, one-by-one.
- 4. You have five minutes to complete the activity.

Activity 5

Group practice

Snowball fight!

Material required

Notebook, pen, etc.

Procedure

• In this activity, we talk about a stress we have and learn one method to deal with it.

Instructions

- 1. Close your eyes and spend two minutes just listening to your breath.
- 2. After opening your eyes, write down a stressful feeling you are having on a piece of paper. It can be about your class, friends, home or anything else.
- 3. Crumple the sheet into a ball.
- 4. Now, gather in a circle and throw the paper balls at each other. Laugh loudly have fun!
- 5. Now, each person will pick up someone else's ball and read it out to the class.

Let's exercise our interpersonal skills in this activity!

Activity 6

Group practice

JAM — Just a Minute

Material required

Notebook, pen, etc.

Procedure

In this activity, let us see how much can we accomplish in 'Just a minute!'

Instructions

- 1. For the first round, take a pen and paper, and form groups of five.
- 2. Prepare a list of things, which are either red or blue in colour. You have one minute for this team activity.
- 3. Count the number of items you came up with in the first round.
- 4. For the second round, write a goal on the top of your team's paper. Ensure this number is greater than that of the first round. Example, if you had written 10 items as a team in round 1, try to set a goal of 15 items for round 2.
- 5. Now, write things, which are yellow or pink, in a minute. Start!
- 6. What was the difference between round 1 and round 2?
- 7. Were you able to achieve more in the second round? If yes, why?

Activity 7

My entrepreneurial attitude

Material required

Notebook, pen, etc.

Procedure

• Here, the student and the person's friend shall do an activity on rating themselves for entrepreneurial qualities.

Instructions

- 1. Rate yourself on the following parameters (1 lowest, 5 highest).
 - Interpersonal skills
 - · Taking initiative
 - · Decision making
 - · Hard work
 - Time management
- 2. Now, with your friend, who knows you well, do the activity. Ask your friend to rate you on each of the above parameters.

Notes

- 3. Find your score.
 - 5–11: you have some entrepreneurial attitude. You need to work on your skills.
 - 12–18: you are halfway there! There are some qualities you are very good at but there are also some you have to work on.
 - 19–25: you are entrepreneurial already! Keep working on your qualities.
- 4. After reading your rating and your friend's rating, discuss it with your teacher.

Check Your Progress

A. Match the situations to the type of attitude that an entrepreneur is showing.

	Situation	Attitude		
(a)	Aamir has been an entrepreneur for 15 years. His business has a culture, where people working with him are free to give feedback on his work and share new ideas for the business.	(i) Decisiveness		
(b)	Shanaya wants to start a sweet shop. After speaking to some people in her area, she finds out that nobody sells healthy sweets. She decides to make non-fried sweets.	(ii) Taking initiative		
(c)	Malvika has a book selling business. One day, a shipment of her books gets lost. This creates a lot of problems for her customers. She apologises to them and works hard for two days to get a new shipment by the next day.	(iii) Interpersonal skills		
(d)	Archana wants to start a 24×7 medical shop in her village. However, she does not know anything about medicines and has doubts about her selling skills. After talking to some people, she realises how important it is. Finally, she works with a pharmacist to set up a medical store.	(iv) Perseverance		

B. Short answer question

1. After taking your entrepreneurial report, you know what you are good at and what can be improved upon. How do you think you can improve? Write down three steps that you shall take.



Green Skills

Introduction

Today, we are experiencing unpredictable weather conditions due to climatic changes and environmental deterioration. Deterioration of the environment through depletion of resources, such as air, water and soil is taking place globally. Whether we work in a factory or in field, we need to be aware of the factors and systems that can be harmful to the environment. We must adopt practices that are environment friendly and avoid using processes that will harm our surroundings. For example, pollution is a major problem in most cities. We can check the rising pollution levels only if we are aware of the various ways of controlling and minimising it. We can plant trees near our houses, and use an eco-friendly mode of transport, such as bicycle, electric car, etc. We can take care of our environment in many ways. For example, we must not leave the tap running while brushing our teeth, use the leftover water in our bottles for watering plants, use cloth bags instead of plastic bags, buy eco-friendly products and reduce the usage of paper.

Using non-toxic and natural products for cleaning and washing

Cleaning products with sustainably sourced ingredients and natural oils that are biodegradable and available in eco-friendly packaging are conducive for the environment.



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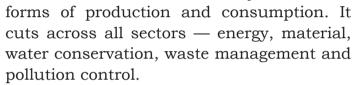
Using plants inside home and other places for air purification

Plants, such as Areca palm and rubber absorb harmful pollutants from the air.

Session 1: Green Jobs

A way we can contribute to the environment is by encouraging green jobs. Green jobs help protect and restore the environment. Green jobs could be in any sector or industry — traditional sectors, such as manufacturing and construction, and new sectors, such as renewable energy.

A green job is defined as one that helps bring about and maintain transition to environmentally sustainable



According to the United Nations Environment Program (UNEP), green jobs or green collar jobs are works in agricultural, administrative, research and development, manufacturing and service activities that

contribute substantially to preserving or restoring environmental quality. 'Environmental quality' is a set of properties and characteristics of the environment, either generalised or local, as they impinge on human beings and other organisms.

A green collar worker is one who is employed in the environmental sectors of the economy. Green collar workers include professionals, such as green building architects, environmental consultants, waste management or recycling managers, environmental or biological systems engineers, landscape architects, solar and wind energy engineers and installers, green vehicle engineers, organic farmers, environmental lawyers and business personnel dealing with green services or products. Green workers include electricians who install solar panels, plumbers who install solar water heaters, construction workers who build energy-efficient green buildings, technicians



and workers involved in establishing wind power farms, and those working for clean and renewable energy development.

At the enterprise level, green jobs can produce goods or provide services that benefit the environment, for example, green buildings or clean transportation. However, these green outputs (products and services) are not always based on green production processes and technologies. Therefore, green jobs can also be distinguished by their contribution to more environment friendly processes. For example, green jobs can reduce water consumption or improve recycling systems. India has adopted several measures for ensuring sustainability, renewable energy and energy efficiency in various sectors, for example, efforts are being made to reduce Carbon dioxide emission rates from vehicles in automotive sector, promoting use of nonfossil fuel (solar, hydro and wind) as energy sources for power generation in the power sector and enabling energy efficient technologies through the concept of green buildings in the construction sector.

The government, in association with private players, is also raising energy awareness, changing consumer behaviour, setting energy codes, and evolving energy efficiency design and technologies. To address the skilled workforce issues associated with sustainable development, the Ministry of Skill Development and Entrepreneurship has set up the 'Skill Council for Green Jobs'. It is working towards developing competencies of people in the domain of renewable energy, sustainable development and waste management.

Green jobs that exist over an array of occupational profiles of skills and educational backgrounds constitute entirely new type of jobs, but most build on traditional professions and occupations.

With the aim of providing a greener economy and creating environment friendly employment opportunities, the government is also providing impetus for green jobs as part of restructured growth strategies under its 'Make in India' campaign. 'Make in India' is designed to facilitate investment, ensure India's first modern metropolitan rail transport system, Delhi Metro, not only has helped commuters in Delhi save on commuting time per day but has also become the first rail-based methodology to garner 90,000 voluntary carbon credits for improving energy efficiency. It has not only created jobs for engineers, drivers, station attendants, signal staff, ticketing, construction and maintenance workers but also resulted in greening existing occupations and creating new occupations.

faster innovation, enhance skill development, protect intellectual property and build best in class manufacturing structures.

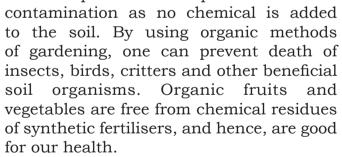
Benefits of green jobs

The greening of economy presents a major opportunity to start new businesses, develop new markets and lower energy costs. Green jobs that contribute to protecting the environment and reducing carbon footprint are becoming a key economic driver of the twenty-first century. 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.

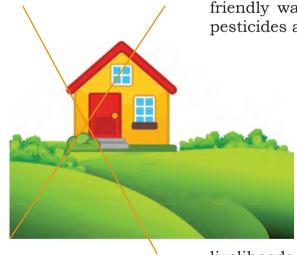
Green jobs in agriculture

Organic gardening and farming is the process by which we can grow plants and crops in an environment friendly way. It prevents toxic runoff as no synthetic pesticides are used. It prevents water pollution and soil



Farmers' cooperatives are one of the most effective means of reducing the risk in agriculture and strengthening the

livelihoods of small and marginal farmers. The process involves mobilising farmers into groups of 15–20 members at the village level (called Farmer Interest Groups or FIGs) and building their associations to an appropriate federating point, i.e., Farmer Producer Organisations (FPOs). FPOs are farmers' collectives



with membership consisting mainly of small or marginal farmers.

Some green jobs in the agriculture sector are in organic farming, integrated pest management, farm mechanisation and agriculture tourism. The *Krishi Vigyan Kendras* (KVKs) set up by the government, can be utilised to provide support activities like technology dissemination, training awareness to the local youth and farmers for collection, storage and reuse of agro-waste.



Green jobs in transportation

Use of energy-efficient vehicles and alternate fuels like Compressed Natural Gas (CNG) can help minimise greenhouse gas emissions. The new biofuel Policy announced by the Government of India on 10 August 2018 focusses on initiatives for enhanced use of biomass so as to improve the availability of ethanol through starch and sugar-based feedstock, develop ethanol technologies and increase the production of biodiesel for blending. Biofuels produced directly or indirectly from organic material, including BioCNG, Bio-methanol, etc., can generate green jobs.

The Energy Efficiency Services Limited (EESL), under the Ministry of Power, has launched an 'electric vehicle programme', which aims towards offering a comprehensive solution to facilitate the adoption of disruptive technology in India. The EESL seeks to create market for electric vehicle, a technology poised to boost e-mobility in the country. These encompass road, rail, sea and air based vehicles that use electric drive and take electric charge from an external source, or hydrogen in case of fuel cell electric vehicle. Some electric vehicle technologies are hybridised with fossil fuel engines (for example, plug-in hybrid electric vehicles, or PHEVs), while others use only electric power via a battery (battery electric vehicles). The emergence of electric drives as an alternate to internal combustion engines has opened opportunities for new entrants in the automotive market. Skill training of entrepreneurs in handling and maintenance of e-rickshaws can create more green jobs in the transportation sector.

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Green jobs in water conservation

There are green jobs in water harvesting and conservation. Rooftop rainwater harvesting refers to the process where rainwater is collected in tanks to be used later. It can be installed in all houses and buildings. It can also help increase the water table. Cycle-run water pumps are being used instead of electricity-run pumps. These do not consume electricity and provide a way for people to exercise.

Some common green jobs in the agriculture sector are related to water quality testing, water conservation, water management, etc.

Using bamboo channels for drip irrigation is an eco-friendly way to irrigate the land. It uses water efficiently without any wastage. It is cheaper to build, and after 2–3 years when the bamboo rots, it can be added to the soil as manure.

Green jobs in solar and wind energy



Solar and wind power plants provide clean energy. A Solar Photovoltaic Installer installs and maintains solar panels in homes, businesses or land. A solar lighting technician assembles, tests and repairs different types of solar photovoltaic home lighting system and streetlights. Some

common jobs in this sector are roofer, solar panel installation technician and field technician.

Green news

India is one of the few countries where forest and tree cover has increased in recent years. The total forest and tree cover is 24 per cent of the country's geographical area.

Green jobs in eco-tourism

Eco-tourism is intended to provide an experience to visitors to understand the importance of conserving resources, reducing waste, enhancing the natural environment and reducing pollution. This helps improve public image as the visitors feel good about being in an environment friendly place. Green jobs in eco-tourism include eco-tour guides and eco-tourism operators.

Green jobs in building and construction

Houses and buildings are becoming environment friendly. They use sustainable building material, and follow ecofriendly construction processes and green operations. Green building design provides an integrated approach to utilisation of renewable and non-renewable resources. It is important that future green building programmes and projects are established with strategies to address skill issues, including appropriate training. Skill development has a strategic role to play in promoting the development of green buildings. It is essential that there are enough workers equipped with appropriate skills so as to ensure that green buildings are developed on a large scale. Areas for green jobs in this sector include construction, landscape, gardening, maintenance of green components, water management, etc.

Green jobs in solid waste management

Solid waste is defined as any discarded solid fraction, generated from domestic units, trade centres, commercial establishments, industries, agriculture, institutions, public services and mining activities.

The Ministry of Urban Development, Government of India, has classified solid waste in 14 categories based on the source of origin and type of waste, i.e., domestic, municipal, commercial, industrial, institutional, garbage, ash, street sweepings, dead animals, construction and demolition waste, bulky, hazardous and sewage waste.

Solid waste management system includes collection, segregation, transportation, processing and disposal of waste. Green jobs related to waste management are in areas like e-waste recycling, solid waste management, waste reduction, waste auditing, waste control, etc.

Green jobs in appropriate technology

Appropriate technology is small-scale technology that is environment friendly and suited to local needs. Examples of appropriate technology are bike-powered or hand-powered water pumps, solar lamps in streetlights, solar buildings, etc. It is the simplest

Green news

The Indian Green Building Council (IGBC), part of the Confederation of Indian Industry (CII), was founded in the year 2001. The IGBC offers services, which include developing new green building rating programmes, certification services and green building training programmes.

technology that can get a job done in an environment friendly manner with locally available resources. The green jobs in appropriate technology may include areas, such as biogas production, water treatment filtration, farm mechanisation, rainwater harvesting, sanitation, lighting, food production, refrigeration, etc.

Practical Exercise

Activity

Group discussion

Green jobs

Material required

Pen, paper, etc.

Procedure

- Form groups, depending on the number of students present in a class.
- Every student will describe one green job that one would like to do. Each one of them will make a list and share it with the rest of the class.

Check Your Progress

A. Multiple choice questions

Read carefully all questions given below and choose the correct option.

- 1. Rita's children fall sick very often. They have cold and cough every month. What should Rita do?
 - (a) Grow organic food in kitchen garden
 - (b) Use air purifiers with HEPA filters
 - (c) Keep them inside the house all the time
 - (d) Paint her house with non-VOC paint
- 2. Jaanvi's children have grown up. They have a lot of clothes that are too small for them now. What should Jaanvi do with these old clothes?
 - (a) Throw them in the trash can
 - (b) Burn them
 - (c) Keep using them even though they are too small
 - (d) Donate them or make bags out of them

B. Short answer question

- 1. Name any two green jobs in the following sectors.
 - (i) Construction
 - (ii) Renewable energy

What Have You Learnt?

After completing this Session, you will be able to:

• identify green jobs in various industries and sectors.

Session 2: Importance of Green Jobs

You have learnt that jobs are understood as green when people working in these areas help reduce adverse environmental impacts, and help build environmentally, economically and socially sustainable enterprises and economies.

Limiting greenhouse gas emissions

Some of the greenhouse gases are Carbon dioxide, methane, Nitrous oxide, ozone and chlorofluorocarbons (CFCs). These are emitted due to burning of fossil fuels, using vehicles and refrigerants, and carrying out agricultural activities, etc. These gases can trap heat from the earth and prevent it from escaping into outer space. This causes the earth to heat, leading to 'global warming'. To reduce the emission of greenhouse gases, people are working towards reducing the use of fossil fuels by finding less polluting energy sources, such as Compressed Natural Gas (CNG).

Minimising waste and pollution

Instead of only thinking about how to recycle or reuse waste, we must work towards finding solutions on how to reduce the amount of waste produced. This will help in waste management.

In manufacturing plants and factories, managers try to find various ways to reduce the amount of waste produced at every step of the process. Here are some of the ways.

• Reusing scrap material

For example, in paper mills, damaged rolls are sent back to the beginning of the production line, i.e., they are added as raw material. In manufacture of plastic items, off-cuts and scrap are re-incorporated into new products.

Ensuring quality control

If the quality of products is maintained, there will be a decrease in rejected products, thus, reducing waste. Automated monitoring equipment are now being used, which can help identify production problems at an early stage.

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Waste exchange

This is where the waste product of one process becomes the raw material for another. It represents the way of reducing waste disposal through re-use.

• Managing e-waste

With advanced technology, we have also encountered problems in managing e-waste like old mobile phones, laptops and television sets. It is important to have sustainable development and plan judiciously for recycling e-waste.

· Use of eco-friendly material

Scientists have discovered various material, which are eco-friendly, for example, banana leaf and paper plates that are easily disposable, etc. These must be made easily available and their use needs to be encouraged.

Protecting and restoring ecosystems

Ecosystem is the community of living and non-living beings existing together, and interacting with and supporting each other. It is the perfect balance where every species can survive. Human activities, such as excess felling of trees can lead to destruction of the ecosystem, causing climate change and natural disasters, making it difficult for living beings to survive.

People are working now to help conserve the existing ecosystems and restore the degraded ones, using natural solutions. Forests and vegetation help stabilise slopes, and therefore, reduce the risk of landslides. Wetlands can help control floods. Avoiding cutting of forests, planting more trees, investing in soil health and restoration can control the emission of greenhouse gases.

Adapting to the effects of climate change

Climate will change based on the damage already done. Even though people are trying to control the emission of greenhouse gases, global warming will be there due

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to the damage already done in terms of felling of trees and using land for agriculture, etc. So, we have to adapt to those changes. This means, we must find ways to survive in the new climatic conditions. For example, if there is weather forecast of less rain, farmers will need to grow crops that can survive in drought conditions.

The Government of India launched the National Action Plan on Climate Change (NAPCC) in June 2008 to deal with climate change and related issues. The NAPCC comprises eight missions in specific areas of solar energy, enhanced energy efficiency, habitat, water, sustaining Himalayan ecosystems, forestry, agriculture and strategic knowledge for climate change, which address issues relating to mitigation of greenhouse gases and adaptation to the adverse impacts of climate change on environment, forests, habitat, water resources and agriculture.

Practical Exercise

Activity 1

Poster making

Material required

Chart paper, colour pencils, pictures, etc.

Procedure

- Form groups depending on the number of children present in a class.
- Collect pictures of green jobs and make a poster. Organise an exhibition in the front gate of your school.

Activity 2

Tree plantation

Material required

Seeds, soil, water, gloves, etc.

Procedure

• Identify an area where you can plant a sapling. Coordinate with your teacher for the kind of plant that can thrive at the selected location. For example, there are various plants that require less water. Now, plant a suitable seed or sapling. Name it if you want. Make sure that you water the plant regularly and take care of it.

Check Your Progress

A. Multiple choice questions

Read carefully the questions given below and choose the correct option(s).

- 1. There is a garbage bin in your canteen and it, generally, gets filled beyond capacity every day. What should you do?
 - (i) Ask the canteen management to get a bigger bin
 - (ii) Suggest ways to reduce the amount of garbage collected
 - (iii) Throw garbage on the floor and walk away
 - (iv) Talk to your friends about the problem
 - (a) (i), (ii), (iii)
 - (b) (i), (ii)
 - (c) (i), (iii), (iv)
 - (d) (i), (iv)
- 2. In a steel factory, a lot of utensils are being made. The manager finds a number of defective pieces, which have to be discarded. How can the person minimise the waste?
 - (a) Give it to kabaadiwala or scrapdealer
 - (b) Dump it in a landfill site
 - (c) Send it back to the production line to be melted
 - (d) Sell it in market

B. Short answer questions

- 1. List some ways by which we can reduce the amount of waste generated.
- 2. Explain the importance of green jobs in reducing the emission of greenhouse gases.

What have you learnt?

After completing this Session, you will be able to:

• explain the role and importance of green jobs.

GLOSSARY

Ability: is the physical and mental skill to do something.

Active cell: is the one that is selected.

Alignment: refers to the arrangement of text (left, right or

center aligned).

Attitude: is a way of thinking or feeling about something. **Barrier:** refers to a problem, rule or situation that prevents somebody from doing something, or makes something impossible.

Bold text: means making a text darker and thicker.

Capital: refers to the money available for starting a

business venture.

Cell: is the place where a row and column intersect.

Cell range: is a range of cells that are selected.

Column: refers to the vertical arrangement of cells.

Competence: refers to the ability to do something well.

Decisiveness: refers to the ability to make the right decisions at the

right time.

Digital presentation: is a presentation made on a computer using a software, which has text, images, video and audio, and various other features to make it attractive.

Efficiency: is the ability to do things accurately, successfully and without wasting the available resources.

Feedback: is an advice, criticism or information about how good or useful something or somebody's work is. It aims to help someone improve one's work.

Filter: refers to filtering data, which means selecting and displaying few records out of the total list.

Formatting text: refers to changing the look, size, colour, etc., of the text.

Formula Bar: is the place, where data or formula can be entered in the selected cell.

Goal: *is the aim or target one wants to achieve.*

Initiative: *is the ability to take charge and act in a situation before others.*

Interpersonal: is connected with relationships between two people.

Interpersonal skills: are the competencies required to work with two and more people.

Italicise text: *means making the text appear slanting to the right.*

Layout: is the arrangement of text, images, shapes, etc., on a slide.

Operator: is the symbol used in a computer to perform mathematical functions, such as addition(+), subtraction(-), multiplication(×) and division(÷)

Opportunity: *is a chance to do something, generally, the right time or moment to do something.*

Organisational skills: are the ability to use one's time, energy and resources well to be able to achieve one's goals.

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

Risk: is a situation, which has a chance of failure.

Row: is a horizontal arrangement of cells.

Sorting data: means arranging data in a particular order, for example in alphabetical order.

Stress: refers to the state of mental pressure, tension or anxiety.

Stress management: includes techniques aimed at controlling a person's stress level so that the person feels healthy and positive again.

Underline text: *means drawing a line under the text.*

Venture: is a new business activity that, usually, involves risks.

Wrap text: means adjusting the text within a cell so that it is fully visible without changing the column size.

Answer Key

3. (c)

4. (d)

Unit 1: Communication Skills

2. (a)

Session 1: Active Listening

A. Multiple choice questions

Session 2: Parts of Speech

A. Multiple choice questions

1. (b)

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Sessio	on 3: Work	ing	with Dat	аа	nd Form	att	ing Text	<u>.</u>	
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S	Session 5: Prese	ntation Soft	ware
A	A. Multiple cho	ice questio	ns
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	Session 6: Open	ing, Closing	, Saving and Printing a Presentation
A	A. Multiple cho	_	
	1. (a)	2. (c)	3. (c)
S	Session 7: Work	ing with Slid	les and Text in a Presentation
P	A. Multiple cho	_	
	1. (c)	2. (c)	3. (a)
S	Session 8: Adva	nced Feature	es used in Presentation
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S	Session 2: Impor	rtance of Gre	een Jobs
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