

TRACKPAD

IT 402 OpenOffice 

Teacher's Manual

Extended Support for Teachers



www.orangeeducation.in
www.thetouchpad.com

Teacher's Time Table

Periods \ Days	0	I	II	III	IV	V	VI	VII	VIII
Monday									
Tuesday									
Wednesday									
Thursday									
Friday									
Saturday									



DEVELOPMENT MILESTONES IN A CHILD

Development milestones are a set of functional skills or age-specific tasks that most children can do at a certain age. These milestones help the teacher identify and understand how children differ in different age groups.

Age 5 - 8 Years	
Physical	<ul style="list-style-type: none"> • First permanent tooth erupts • Shows mature throwing and catching patterns • Writing is now smaller and more readable • Drawings are now more detailed, organised and have a sense of depth
Cognitive	<ul style="list-style-type: none"> • Attention continues to improve, becomes more selective and adaptable • Recall, scripted memory, and auto-biographical memory improves • Counts on and counts down, engaging in simple addition and subtraction • Thoughts are now more logical
Language	<ul style="list-style-type: none"> • Vocabulary reaches about 10,000 words • Vocabulary increases rapidly throughout middle childhood
Emotional/Social	<ul style="list-style-type: none"> • Ability to predict and interpret emotional reactions of others enhances • Relies more on language to express empathy • Self-conscious emotions of pride and guilt are governed by personal responsibility • Attends to facial and situational cues in interpreting another's feelings • Peer interaction is now more prosocial, and physical aggression declines

"If you cannot do great things, do small things in a great way."

Age 9 - 11 Years	
Physical	<ul style="list-style-type: none"> • Motor skills develop resulting in enhanced reflexes
Cognitive	<ul style="list-style-type: none"> • Applies several memory strategies at once • Cognitive self-regulation is now improved
Language	<ul style="list-style-type: none"> • Ability to use complex grammatical constructions enhances • Conversational strategies are now more refined
Emotional/Social	<ul style="list-style-type: none"> • Self-esteem tends to rise • Peer groups emerge

Age 11 - 20 Years	
Physical	<ul style="list-style-type: none"> • If a girl, reaches peak of growth spurt • If a girl, motor performance gradually increases and then levels off • If a boy, reaches peak and then completes growth spurt • If a boy, motor performance increases dramatically
Cognitive	<ul style="list-style-type: none"> • Is now more self-conscious and self-focused • Becomes a better everyday planner and decision maker
Emotional/Social	<ul style="list-style-type: none"> • May show increased gender stereotyping of attitudes and behaviour • May have a conventional moral orientation

Managing the children's learning needs according to their developmental milestones is the key to a successful teaching-learning transaction in the classroom.



“Family is the most important thing in the world.”



TEACHING PEDAGOGIES

Pedagogy is often described as the approach to teaching. It is the study of teaching methods including the aims of education and the ways in which such goals can be achieved.

Lesson Plans

A lesson plan is the instructor's road map which specifies what students need to learn and how it can be done effectively during the class time. A lesson plan helps teachers in the classroom by providing a detailed outline to follow in each class.

A lesson plan addresses and integrates three key components:

- Learning objectives
- Learning activities
- Assessment to check the student's understanding

A lesson plan provides an outline of the teaching goals:

Before the class:

1. Identify the learning objectives.
2. Plan the lesson in an engaging and meaningful manner.
3. Plan to assess student's understanding.
4. Plan for a lesson closure.



During the class:

Present the lesson plan.



After the class:

Reflect on what worked well and why. If needed, revise the lesson plan.

"Knowing yourself is the beginning of all wisdom."

Teaching Strategies

Numerous strategies have evolved over the years to facilitate the teaching-learning process in the classrooms.



Bloom's Taxonomy

Bloom's Taxonomy was created by **Dr Benjamin Bloom** and several of his colleagues, to promote higher forms of thinking in education instead of rote learning. There are three domains of learning: cognitive (mental), affective (emotional), and psychomotor (physical). However, when we refer to Bloom's Taxonomy we speak of the cognitive domain. Bloom's Taxonomy is a list of cognitive skills that is used by teachers to determine the level of thinking their students have achieved. As a teacher, one should attempt to move students up the taxonomy as they progress in their knowledge.



Teachers should focus on helping students to remember information before expecting them to understand it, helping them understand it before expecting them to apply it to a new situation, and so on.

"If you have no confidence in self, you are twice defeated in the race of life."

Part-A: Employability Skills

1. Communication Skills-I

Teaching Objectives

Students will learn about

- ☞ What Is Communication?
- ☞ Factors Affecting Perspectives in Communication
- ☞ Effective Ways of Communication
- ☞ 3P's of Public Speaking
- ☞ Phrases
- ☞ Construction of a Paragraph
- ☞ Use of Articles
- ☞ Perspectives in Communication
- ☞ Types of Communication
- ☞ Writing Skills
- ☞ What Is a Sentence?
- ☞ Parts of Speech
- ☞ When No Articles Are Used

Number of Periods

Theory

10

Teaching Plan

While teaching this chapter, tell the students that the word 'Communication' comes from the Latin word 'Communicare', which means 'to share'.

Explain to the students the following in detail:

- Elements of Communication Cycle
- Importance of Communication

Demonstrate the students about the Perspectives in Communication along with the factors affecting perspective in Communication.

Show the students the Effective Ways and Types of Communication along with its advantages and disadvantages:

- Verbal Communication
- Non-Verbal Communication
- Public Speaking
- Visual Communication

Make the students aware of 3P's of Public Speaking, i.e. Prepare, Practise and Perform.

Show the students the value of Writing Skills and their aspects like:

- Phrases
- Construction of a Paragraph
- Use of Articles
- What Is a Sentence?
- Parts of Speech
- When No Articles Articles Are Used

Extension

Ask the students some oral questions based on this chapter.

- Q. What is Communication?
- Q. Name some elements of communication.
- Q. What are the main reasons behind importance of communication?
- Q. What do you mean by perspectives in communications?
- Q. Name the factors affecting perspectives in communication.
- Q. What are the effective ways of communication?
- Q. Discuss the types of communication.
- Q. What are 3P's of communication?
- Q. Define writing skills.
- Q. What are phrases?
- Q. What is a sentence?
- Q. What are the rules for writing a paragraph?
- Q. Discuss parts of speech briefly.
- Q. What are articles?
- Q. When are no articles used in a sentence?

Evaluation

After explaining the chapter, let the students do the exercises given on Pages 32 to 36 in the main course book under Exercise.

Ask the students to try Competency-based/Application-based questions given on page 36 to imbibe elements like interdisciplinary and leadership & responsibility in them.

Take the students to the computer lab and let them practise the LAB ACTIVITY given on page 37 of the main course book. It will enhance the ability of the students and will serve as a leadership & responsibility, and creativity activity.

Ask the students to try CLASS ACTIVITY given on page 37 to inculcate communication and collaboration skills.

2. Self-Management Skills-I

Teaching Objectives

Students will learn about

- | | |
|--|--|
|  Self-Management |  Self-Management Skills |
|  Who Am I? |  Self-Confidence |
|  Steps for Building Self-Confidence |  Qualities of Self-Confident Person |



- 📖 Factors That Help in Building self -Confidence
- 📖 Self-Confidence Building Tips

Number of Periods

Theory

10

Teaching Plan

While teaching this chapter, tell the students that self-management is the modus of using the traits of one's personality in a righteous & authoritative way which leads to perfection.

Let the students know about positive results of self management.

Make the students aware of self-management skills. They are as follows:

- Self-Awareness
- Self-Motivation
- Self-Commitment
- Positive Thinking
- Time Management x
- Self-Confidence
- Self-Control
- Problem Solving
- Time Management
- Organisational Skills

Explain to the students how to understand one's own self. Knowing yourself, your strengths and weaknesses always helps you become a better person.

Demonstrate the students about the self-confidence and how to build it. Make the students aware of the qualities of a self confident person. Also share the factors that play a vital role in building it like:

- Social factors
- Cultural factors
- Physical factors

Tell the students some self-confidence building tips in detail.

Extension

Ask the students some oral questions based on this chapter.

Q. What is self-management?

Q. Define:

- | | |
|----------------------|--------------------------|
| a. Self-Awareness | b. Self-Control |
| c. Self-Confidence | d. Problem Solving |
| e. Self-Motivation | f. Self-Commitment |
| g. Positive Thinking | h. Time Management |
| i. Stress Management | j. Organisational Skills |

Q. What is important to know about your own self?

Q. Give some examples of strengths.

Q. Give some examples of weaknesses.

Q. What is self-confidence?

Q. Discuss briefly the steps to build confidence.

Q. What are the qualities of a self-confident person?

Q. Define the factors that play vital role in building self-confidence.

Evaluation

After explaining the chapter, let the students do the exercises given on pages 46 to 52 in the main course book under Exercise.

Ask the students to try Competency-based/Application-based questions given on pages 50 and 52 to imbibe elements like communication and leadership & responsibility in them.

Take the students to the computer lab and let them practise the LAB ACTIVITY given on page 53 of the main course book. It will enhance the ability of the students and will serve as an initiative and experiential learning activity.

Ask the students to try CLASS ACTIVITY given on page 53 to inculcate leadership & responsibility and creativity skills.

3. ICT Skills-I

Teaching Objectives

Students will learn about

- ☞ ICT
- ☞ Input Devices
- ☞ Output Devices
- ☞ Measuring Unit for Memory
- ☞ Motherboard
- ☞ Types of Operating Systems
- ☞ Booting
- ☞ Windows 10—An Operating System
- ☞ Files and Folders in Windows 10
- ☞ Managing Files and Folders in Windows 10
- ☞ Keyboard Operations in Windows 10
- ☞ Brief History of the Internet
- ☞ Terminologies of the Internet
- ☞ Applications of Internet
- ☞ Microsoft Edge
- ☞ Creating an Email Account
- ☞ Introduction to Social Media
- ☞ What is a Computer?
- ☞ Processing Device— (CPU)
- ☞ Computer Memory
- ☞ Peripheral Device Ports
- ☞ Understanding Operating System
- ☞ Functions of an Operating System
- ☞ Procedure for Starting a Computer
- ☞ Common Desktop Operations
- ☞ Mouse Operations in Windows 10
- ☞ Shutting down the Computer
- ☞ How does Internet Work
- ☞ Protocols
- ☞ Components of Internet
- ☞ Email
- ☞ Composing an Email
- ☞ Digital India

Teaching Plan

Before starting the chapter, define the meaning of ICT to the students in detail along with proper examples.



Trackpad Information Technology-IX (Lesson Plan)

Number of Hours

Theory

10

Tell the students that Information Technology is the use of hardware, software and networking technology for accessing, storing, retrieving and transmitting the information.

Explain the role of ICT to the students:

1. In Personal life

- Shopping
- Education
- Source of Information
- Communication
- Healthcare
- Entertainment
- Socializing

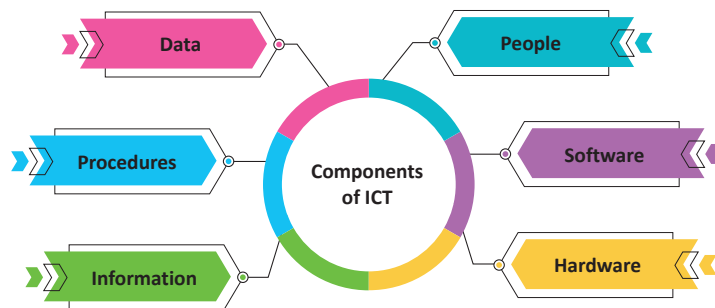
2 In Professional life

- Maintenance of Records
- E-Commerce
- E-Banking
- Handling of Accounts

Define the different ICT tools to the students in detail:

- Computers
- Smartphones and Tablets
- Radio and Television
- Internet and Emails

Share the components of ICT with the students in details:



Define what is a computer to the students and the basic operations of a computer which are Input, Process, Output and Storage. Also, share the IPO Cycle with example to the students.

Share the characteristics of a computer with the students which are:

- Speed
- Storage
- Accuracy
- Versatile
- Reliability

Explain to the students all the input devices in detail along with the brief working of these devices:

- Keyboard
- Light Pen
- Barcode Reader
- Mouse
- Touchscreen
- MICR
- Scanner
- Microphone

Tell the students that after taking the input from the input devices, the information is sent for processing. The computer uses its brain to process the information. The computer's brain is called the CPU or Central Processing Unit.

Explain to the students all the output devices in detail along with the brief working of these devices:

- Monitor
- Speakers
- Printer
- Projector
- Plotter

Explain the computer memory to the students in detail and also share that measuring unit for memory:

- Primary Memory
- Secondary Memory

Explain the following to the students in detail with proper example:

- Peripheral device ports
- Motherboard
- Operating System (UNIX, DOS, Windows, Linux and Mobile Operating System)
- Types of OS

Tell the functions of OS to the students along with booting and procedure for starting a computer. Also, share that Windows 10 is an operating system designed by Microsoft and released in 2015. It supports graphical user interface where work can be done easily by using simple mouse clicks.

Demonstrate to the students with the labelled steps for each action:

- Changing wallpaper
- Setting Screensaver
- Changing system time/date
- Controlling Speaker volume

Share the information about files and folders in Windows 10 with the students. Also, demonstrate to the students with the labelled steps for each action:

- Creating a file
- Creating a folder
- Rename a file/folder
- Deleting a file/folder
- Moving a file/folder
- Copy and Paste a file/folder
- Searching a file/folder

Share the mouse operations in Windows 10 with the students:

- Single-click
- Double-click
- Right-click
- Drag and drop
- Hovering

Tell the keyboard operations in Windows 10 to the students:

Shortcut keys	Task to be performed
Ctrl+N	Creating a new file
Ctrl+O	Open a file
Ctrl+S	Save a file
Ctrl+P	Print
Ctrl+X	Cut
Ctrl+V	Paste
Ctrl+F	Find option
Ctrl+C	Copy

Define the following to the students:

- Shutting down the computer
- Brief history of Internet
- How does Internet work
- Terminologies of Internet
- Protocols
- Applications of Internet
- Components of Internet
- Microsoft Edge
- Email
- Creating an Email Account
- Composing an Email
- Introduction to Social Media
- Digital India



Ask the students to solve the questions given on pages 79, 81 and 85 as **Quiz Bee**.

Ask the students to read the **PURE Fact** given on pages 66, 67, 77, 80, 86 and 91.

Extension

Ask the students some oral questions based on this chapter.

Q. What is ICT?

Q. Define the following:

- | | | |
|------------------------------|------------------|------------------|
| a. Title Bar | b. Communication | c. Entertainment |
| d. Education | e. Healthcare | f. Socializing |
| g. Internet Service Provider | h. E-Commerce | i. E-Banking |

Q. Define different ICT tools.

Q. Define characteristics of ICT tools.

Q. Define about different devices of the following:

- | | | |
|-------------------|----------------------|------------------|
| a. Input devices | b. Processing device | c. Output device |
| d. Storage device | | |

Evaluation

Encourage the students to walk-through the chapter thoroughly.

After explaining the chapter, let the students do the exercises given on pages 93 to 100 in the main course book as **Exercise (Solved and Unsolved Questions)**.

Take the students to the computer lab and let them practice the activity given in **Lab Activity** section on page 101 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment Activity.

Ask the students to practice the activity in class given in **Class Activity** section given on page 101 in the main course book. This will help the students to know the uses of ICT and able to connect devices to a computer.

Suggested Activity

Ask the students to prepare a collage to show the tools used in ICT.

4. Entrepreneurial Skills-I

Teaching Objectives

Students will learn about

- | | |
|---|--------------------------------|
| ☞ Definition of Business | ☞ Types of Business |
| ☞ Important Features of Different Types of Business | |
| ☞ Forms of Business Organisations | ☞ Steps of Starting a Business |

- ☞ Who is an Entrepreneur?
- ☞ Entrepreneurship Development
- ☞ Role of an Entrepreneur
- ☞ Challenges of an Entrepreneurship
- ☞ Difference between Businessman and Entrepreneur
- ☞ What is Entrepreneurship?
- ☞ Characteristics of an Entrepreneur
- ☞ Core Skills of a Successful Entrepreneur
- ☞ Rewards of an Entrepreneurship

Number of Hours

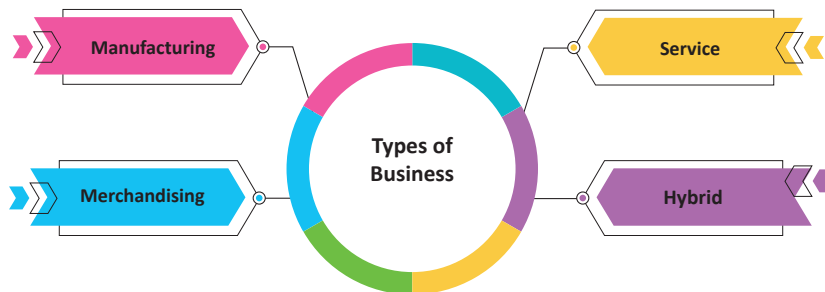
Theory

15

Teaching Plan

Before starting the chapter, tell the students that a business is a state of being busy as an individual or as an organization in a profit earning economic activity.

Share the types of business in detail with the students:



Explain the important features of different types of business in detail to the students:

- Manufacturing
- Service
- Merchandising
- Hybrid

Share the forms of business organizations with the students in details along with the advantages and disadvantages:

- Sole Proprietorship
- Partnership
- Corporation
- Limited Liability Company (LLC)

Define the steps for starting a business to the students. Also, explain the meaning of Entrepreneur along with the Entrepreneurship and its development.



Share the following to the students for a better understanding in details:

- Process of its development
- Characteristics of an Entrepreneur
- Role of an Entrepreneur
- Core Skills of a successful Entrepreneur
- Challenges of an Entrepreneurship



- Rewards of Entrepreneurship

Demonstrate the difference between Businessman and Entrepreneur.

Ask the students to solve the questions given on pages 104 and 106 as **Quiz Bee**.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is business?
- Q. What are the types of business?
- Q. Explain the different forms of business.
- Q. What is Entrepreneur?
- Q. What is Entrepreneurship?
- Q. What is the difference between Businessman and Entrepreneur?

Evaluation

Encourage the students to walk-through the chapter thoroughly.

After explaining the chapter, let the students do the exercises given on pages 112 to 118 in the main course book as **Exercise (Solved and Unsolved Questions)**.

Take the students to the computer lab and let them practice the activity given in **Lab Activity** section on page 119 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment Activity.

Ask the students to practice the activity in class given in **Class Activity** section given on page 119 in the main course book. This will help the students to know the world of Entrepreneurship and how to give a successful interview.

Suggested Activity

Ask the students to prepare their Resume in MS Word and submit its hardcopy to you.

5. Green Skills-I

Teaching Objectives

Students will learn about

- | | |
|--|---|
| ☞ Environment | ☞ Ecosystem |
| ☞ Relationship Between Society and Environment | |
| ☞ Natural Resources | ☞ Natural Resources Conservation |
| ☞ Saving Environment using 3R's | ☞ Factors Causing Environment Imbalance |
| ☞ Green Economy | ☞ Green Skills |
| ☞ Green Projects in India | |

Teaching Plan

Before starting the chapter, tell the students that 'Environment' word is derived from the French word 'Environia' which means "to surround". In simple terms, it refers to our surrounding consisting of physical, chemical and biological elements that maintain a balance between the living and non-living components.

Explain the difference between the natural and man-made environment to the students.

Tell the students that an ecosystem is defined as a community where living and non-living things interact with each other and their surrounding environment to form a balanced system. Also, tell them about the two components and two types of ecosystem:

Share the relationship between society and environment with the students in detail.

Tell the students about natural resources and natural resources conservation. Also, tell them about the need to conserve our national resources.

Share with the students about how to conserve our natural resources:

- Water Conservation
- Soil Conservation
- Energy Conservation
- Food Conservation
- Forest Conservation

Explain the 3R's used for saving environment to the students which are:

- Reduce
- Reuse
- Recycle

Demonstrate the factors that causes environment imbalance to the students in details:

- Population Explosion
- Pollution
- Global Warming
- Mining Activity

Explain to the students about green economy and the characteristics of it. Also, share the components and importance of green economy.

Show the students about purpose of Green Skills in details along with the green jobs and green projects in India.

Ask the students to solve the questions given on page 132 as **Quiz Bee**.

Ask the students to read the **Pure Fact** given on pages 121, 122, 126 and 129.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is environment?
- Q. What is ecosystem?
- Q. Differentiate between society and environment.
- Q. What are natural resources?
- Q. Define natural resource conservation.
- Q. Define the 3R's used for saving environment.
- Q. Name the factors causing environment imbalance.



- Q. What is global warming?
- Q. Define mining activity.
- Q. What is green economy?
- Q. What are green skills?

Evaluation

Encourage the students to walk-through the chapter thoroughly.

After explaining the chapter, let the students do the exercises given on pages 134 to 139 in the main course book as **Exercise (Solved and Unsolved Questions)**.

Take the students to the computer lab and let them practice the activity given in **Lab Activity** section on page 140 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment Activity.

Ask the students to practice the activity in class given in **Class Activity** section given on page 140 in the main course book. This will help the students to know about the Hazards of Deteriorating environment, factors affecting environment and factors influencing the same.

Suggested Activity

Ask the students to educate the residents of their society to Save Fuel by car pooling.

Part-B: Subject Specific Skills

1. Introduction to IT-ITes industry

Teaching Objectives

Students will learn about

- ☞ Information Technology
- ☞ Business Process Outsourcing (BPO)
- ☞ IT-BPM Industry
- ☞ Applications of IT
- ☞ Information Technology-Enabled Services (ITeS)
- ☞ Business Process Management
- ☞ Structure of The IT-BPM Industry

Number of Periods

Theory

2

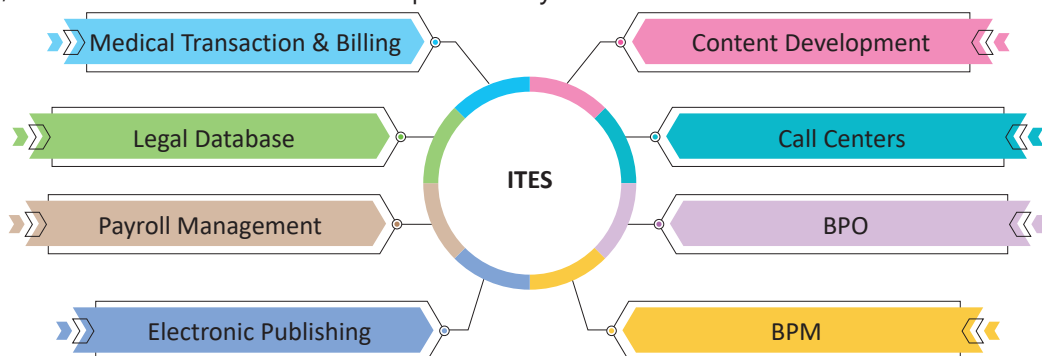
Practical

4

Teaching Plan

While teaching this chapter, tell the students that Information Technology (IT) is the use of hardware, software, database and networking technology for accessing, storing, retrieving and transmitting the information.

Teach the students about Information Technology-Enabled Services or web-enabled services in detail. Also, let them know about the services provided by ITeS.



Discuss the advantages of ITeS with the students.

Tell the students that business process outsourcing has been growing in popularity. Also, let them know about the most commonly outsourced services of BPO.

Explain the types of BPOs to the students with examples.

Teach them about Business Process Management in detail. Also, tell them how BPM helps in a business.

Discuss the three types of Business Process Management to the students. Those are:

- Integration-centric BPM
- Human-centric BPM
- Document-centric BPM

Tell them that the IT-BPM Industry is one of the most important sectors in the world. Also, share the four sub-sectors of this industry: Those are:

- IT Services
- Business Process Management
- Engineering and R&D
- Software Products Development

Explain the structure of the IT-BPM Industry to the students in detail.

Discuss the applications of IT to the students in detail. Those are:

- In-Home Computing and everyday life
- Library
- Workplace
- Education
- Entertainment
- Communication
- Business
- Science and Engineering
- Agriculture
- Banking
- Insurance
- Marketing
- Healthcare
- In government and Public Service

Extension

Ask the students some oral questions based on this chapter.

- Q. What do you mean by BPOs?
- Q. What is the advantage of ITeS?
- Q. What are the sub sectors of the IT-BPM Industry?
- Q. Define Human-centric BPM.
- Q. Give two examples of use of IT in everyday life.
- Q. What is the purpose of Business Process Management?
- Q. How has the collection and presentation of news changed with the rise of IT?

- Q. What does social networking refer to and what is its platform?
- Q. What were the primary modes of education before the advent of IT?
- Q. How has Information Technology facilitated banking operations?
- Q. What was the state of research in various fields before the availability of IT tools?
- Q. What is replacing the manual management of city traffic signals?
- Q. What impact have IT tools had on time and cost in business activities?
- Q. How did manufacturing units operate in the past in terms of manpower and tools?
- Q. What is the purpose of the Digital India program and its website?

Ask the students to read the **Pure Fact** given on pages 148 and 149.

Evaluation

After explaining the chapter, let the students do the exercises given on pages 159 to 164 in the main course book as **Exercise(Solved and Unsolved)**.

Ask the students to try Competency-based/Application-based questions, Group Discussion and Video-based Questions given on page 164 to imbibe elements like communication, and leadership & responsibility in them.

Take the students to the computer lab and let them practice the activity given in the **LAB ACTIVITY** given on page 165 of the main course book. It will enhance the ability of the students and will serve as leadership & responsibility, and creativity activity.

Suggested Activity

Ask the students to make a presentation on the topic "Applications of IT".

2. Data Entry and Keyboarding Skills

Teaching Objectives

Students will learn about

- ☞ Computer Keyboard—An Introduction
- ☞ Categories of Keys on the Keyboard
- ☞ Some Important Keys
- ☞ Deleting a Text
- ☞ Touch Typing—An Introduction
- ☞ Pointing Devices
- ☞ Select a Course
- ☞ How to Interpret Your Results
- ☞ Working with Lesson Editor
- ☞ Typing Accuracy
- ☞ Types of Keyboard Layouts
- ☞ Important Keys and their Functions
- ☞ Typing a Text, Sentence or a Paragraph
- ☞ Typing Ergonomics
- ☞ Positioning of Fingers on the Keyboard
- ☞ Rapid Typing Tutor
- ☞ Begin a Lesson
- ☞ Viewing and Analyzing Statistics
- ☞ Calculating Typing Speed
- ☞ Typing Rhythm



Teaching Plan

While teaching this chapter, tell the students that data entry is the process of entering data or information into a computer using input devices such as a keyboard.

Introduce them to the computer keyboard and types of keyboard Layouts. Those are:

- Qwerty Keyboard Layout
- Dvorak Keyboard Layout
- Colemak Keyboard Layout

Demonstrate the categories of keys on the keyboard to the students. Those are:

- Alphabet Keys
- Number Keys
- Special Character Keys
- Control Keys
- Function Keys
- Navigation Keys
- Toggle Keys
- Combination Keys
- Special Keys

Let them know the important keys and their functions.

Demonstrate some more important keys to the students. Those are given below:

- Home Row Keys
- Guide Keys
- Numeric Keypad

Demonstrate the following topics:

- To type text, a sentence or a paragraph
- Deleting a text
- Typing Ergonomics
- Touch typing--An Introduction
- Positioning of fingers on the keyboard
- Pointing devices
- Rapid typing tutor
- Components of the Main Window
- Select a course
- Begin a lesson
- How to interact with your results

- Viewing and Analyzing Statistics
- Working with Lesson Editor
- Calculating Typing Speed
- Typing Accuracy
- Typing Rhythm

Extension

Ask the students some oral questions based on this chapter.

- Q. What is the QWERTY keyboard layout and in which countries is it commonly used?
- Q. How does the DVORAK keyboard layout differ from the QWERTY layout, and what is its purpose?
- Q. What is the Colemak keyboard layout, and what does it offer as an alternative to QWERTY and DVORAK layouts?
- Q. What are the different categories of keys on a standard keyboard, and can you name some examples?
- Q. What is the purpose of the Home Row Keys on a keyboard, and where are they located?
- Q. Where is the numeric keypad typically positioned on a computer keyboard, and how many keys does it have?
- Q. What does typing ergonomics refer to, and why is it important?
- Q. Who invented touch typing, and when did it originate?
- Q. What are pointing devices, and how do they enable user interaction with a computer?
- Q. What is the Rapid Typing Tutor, and what are its intended uses?
- Q. How is typing accuracy measured, and what does it represent?
- Q. Can you explain the concept of Typing Rhythm and how it relates to touch typing?

Ask the students to solve the questions given on page 170 as **Quiz Bee**.

Ask the students to read the **Pure Fact** given on page 180.

Evaluation

After explaining the chapter, let the students do the exercises given on pages 186 to 192 in the main course book as **Exercise(Solved and Unsolved)**.

Ask the students to try Competency-based/Application-based questions, Group Discussion and Video-based Questions given on page 192 to imbibe elements like communication, and leadership & responsibility in them.

Take the students to the computer lab and let them practice the activity given in the **LAB ACTIVITY** given on page 193 of the main course book. It will enhance the ability of the students and will serve as leadership & responsibility, and creativity activity.

Suggested Activity

Ask the students to use their keyboarding skills, and enter a list of customer details (names, addresses, and phone numbers) into a spreadsheet accurately and efficiently.



3. Digital Documentation

Teaching Objectives

Students will learn about

- ✎ Limitations of Using a Typewriter
- ✎ Getting Started with OpenOffice Writer
- ✎ Start a New Document
- ✎ Close a document
- ✎ Non-Printing Characters
- ✎ Redo the Task
- ✎ Redo Jumping to a Given Page Number the Task
- ✎ Cut, Copy and Paste
- ✎ Spell Check and Grammar Check
- ✎ Formatting a Text
- ✎ Formatting a Page
- ✎ Page Preview before Printing
- ✎ Mail Merge
- ✎ Word Processor
- ✎ Writer Different Views of a Document
- ✎ Save a Document
- ✎ Open an Existing Document
- ✎ Undo the Task
- ✎ Selecting the Text
- ✎ Find and Replace
- ✎ Using Thesaurus
- ✎ Paragraph Formatting
- ✎ Creating and Working with Tables
- ✎ Printing a Document

Number of Periods

Theory

10

Practical

26

Teaching Plan

While teaching this chapter, tell the students that a person with good typing skills and knowledge of a word processor can work as a data entry operator in many government or private organizations.

Discuss the limitations of using a typewriter word processor, such as lack of editing capabilities, limited formatting options, and the need for manual correction.

Explain to students that using computer-based word processing software offers numerous advantages and features that overcome these limitations.

Introduce OpenOffice Writer as a powerful word processing software that allows for creating, editing, and formatting digital documents.

Explain the different views of a document available in OpenOffice Writer, such as Normal view, Web Layout view, and Print Preview.

Demonstrate how to start a new document and save it in a desired location on the computer.

Show students how to open an existing document from the computer's storage.

Explain the process of closing a document to exit OpenOffice Writer.

Teach students about non-printing characters and how they can be displayed to aid in document editing and formatting.

Introduce the undo and redo functions for reverting or redoing changes made in a document.

Show students how to select text for editing or formatting purposes.

Explain how to cut, copy, and paste text within a document to rearrange or duplicate content.



Demonstrate the find and replace function to quickly locate specific words or phrases and replace them if needed.

Show students how to utilize the spell check and grammar check features for error-free documents.

Introduce the use of the thesaurus for finding synonyms and enhancing vocabulary.

Teach students how to format text, such as changing font styles, sizes, and colors.

Explain paragraph formatting options, including alignment, indentation, and line spacing.

Demonstrate how to create and format tables within a document.

Show students how to format page settings, including margins, page orientation, and page numbering.

Introduce the page preview feature to visualize how the document will appear when printed.

Explain the process of printing a document using OpenOffice Writer.

Summarize the key points covered in the lesson, emphasizing the importance of digital documentation skills.

Encourage students to practice using OpenOffice Writer for various projects to enhance their word processing abilities.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is the purpose of a word processor?
- Q. What is OpenOffice Writer and what platforms can it be used on?
- Q. How can you view a document in OpenOffice Writer in different layouts?
- Q. What is the difference between Print layout and Web layout in OpenOffice Writer?
- Q. How can you enable the Full-Screen feature in OpenOffice Writer?
- Q. Which keys in a document are considered non-printing characters?
- Q. What does the 'Undo' option in a word processor allow you to do?
- Q. How does the 'Redo' option in a word processor function?
- Q. How does the 'Find and Replace' option in a word processor work?
- Q. What is the purpose of a thesaurus tool in a word processor?
- Q. How are superscripts and subscripts used in a document?
- Q. What is a paragraph in the context of a word processor?
- Q. What is a table in a word processor, and how is it structured?
- Q. What is the purpose of Mail Merge in a word processor document?
- Q. What is a 'Main Document' in the context of Mail Merge?
- Q. What is a 'Data Source' in the context of Mail Merge?

Ask the students to solve the questions given on pages 198 and 238 as **Quiz Bee**.

Ask the students to read the **Pure Fact** given on pages 194 and 196.

Evaluation

After explaining the chapter, let the students do the exercises given on pages 256 to 263 in the main course book as **Exercise(Solved and Unsolved)**.



Ask the students to try Competency-based/Application-based questions, Group Discussion and Video-based Questions given on pages 262 and 263 to imbibe elements like communication, and leadership & responsibility in them.

Take the students to the computer lab and let them practice the activity given in the **LAB ACTIVITY** given on page 263 of the main course book. It will enhance the ability of the students and will serve as leadership & responsibility, and creativity activity.

Suggested Activity

Ask the students to prepare digital documentation using word processing software to research and present information on an assigned topic from your curriculum, including headings, subheadings, and relevant visuals to enhance understanding and engagement for their class 10 peers.

4. Electronic Spreadsheet

Teaching Objectives

Students will learn about

- Introduction to Spreadsheet
- Creating a workbook
- Opening an existing workbook
- Navigation in A worksheet
- Types of Data
- Delete Row or Column
- Formatting Data in the Worksheet
- Find and Replace
- Cell Referencing
- Creating Charts
- Getting Started with OpenOffice Calc
- Saving a Workbook
- Printing a Worksheet
- Entering Data
- Insert a Column/Row
- What are Functions?
- Speeding up the Data Entry
- Sorting
- Filtering Data

Number of Periods

Theory

18

Practical

35

Teaching Plan

While teaching this chapter, tell the students that OpenOffice Calc is of great importance to those who maintain accounts for sales, and bills, or do mathematical calculations as it is used to create electronic spreadsheets using the data. Let us now read about OpenOffice Calc.

Discuss the importance of spreadsheets in organizing and analyzing data.

Explain to students that OpenOffice Calc is a powerful spreadsheet software that allows for creating and manipulating data in a structured manner.

Introduce OpenOffice Calc as a spreadsheet application used for calculations, data analysis, and data presentation.

Explain the different components of the Calc interface, such as the menu bar, toolbar, and worksheet area.

Demonstrate how to create a new workbook in OpenOffice Calc.

Teach students how to save a workbook to a desired location on the computer.

Explain the process of opening an existing workbook for further editing.

Show students how to navigate through a worksheet using cell references, arrow keys, and scroll bars.

Explain the different types of data that can be entered in a spreadsheet, such as text, numbers, dates, and formulas.

Demonstrate the proper techniques for entering data accurately and efficiently.

Teach students how to insert a column or row to accommodate additional data.

Explain the process of deleting a row or column when data is no longer needed.

Introduce the concept of functions and demonstrate how to use basic functions, such as SUM, AVERAGE, and COUNT, to perform calculations.

Explain how to format data in a worksheet, including changing font styles, cell borders, and background colors.

Demonstrate the use of conditional formatting to highlight specific data based on criteria.

Teach students how to use the Find and Replace function to locate and modify data in a worksheet.

Show them how to sort data in ascending or descending order based on specific columns.

Introduce the concept of cell referencing in formulas to perform calculations using data from different cells.

Explain the difference between absolute and relative cell referencing and when to use each.

Demonstrate how to create simple formulas, such as addition, subtraction, multiplication, and division, in a worksheet.

Teach students how to filter data in a worksheet to display specific records that meet certain criteria.

Demonstrate the process of creating simple charts, such as bar charts or pie charts, to visualize data in a visually appealing way.

Show students how to customize chart elements, such as titles, axes, and legends.

Summarize the key points covered in the lesson, emphasizing the importance of spreadsheet skills in data organization and analysis.

Encourage students to practice using OpenOffice Calc for various projects to enhance their spreadsheet abilities.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is the purpose of an electronic spreadsheet program?
- Q. What is the name of the open-source spreadsheet program available in the OpenOffice Apache suite?
- Q. What is a file called in OpenOffice Calc, and what is the default name for a worksheet?
- Q. How are rows accessed and identified in a worksheet?
- Q. How are columns accessed and identified in a worksheet?
- Q. What is the intersection of a row and column called in a spreadsheet?
- Q. How is each cell in a spreadsheet referred to?



- Q. What is a cell range in a spreadsheet, and how is it defined?
- Q. What is a function in a spreadsheet, and how is it represented?
- Q. How does the Autofill feature in a spreadsheet program work?
- Q. Why are charts considered an effective tool of communication in a spreadsheet program?

Ask the students to solve the questions given on pages 268, 271, 273, 282, and 284 as **Quiz Bee**.

Evaluation

After explaining the chapter, let the students do the exercises given on pages 305 to 313 in the main course book as **Exercise(Solved and Unsolved)**.

Ask the students to try Competency-based/Application-based questions, Group Discussion and Video-based Questions given on pages 312 to 314 to imbibe elements like communication, and leadership & responsibility in them.

Take the students to the computer lab and let them practice the activity given in the **LAB ACTIVITY** given on page 314 of the main course book. It will enhance the ability of the students and will serve as leadership & responsibility, and creativity activity.

Suggested Activity

Ask the students to use an electronic spreadsheet software to create a budget sheet for personal expenses, including income, expenses, and calculations for tracking and analyzing financial data.

5. Digital Presentation

Teaching Objectives

Students will learn about

- ☞ Characteristics of a Good Quality Presentation
- ☞ Getting Started with OpenOffice Impress
- ☞ Slide Views
- ☞ Creating a Presentation
- ☞ Viewing a Presentation
- ☞ Exporting a Presentation as HTML
- ☞ Running a Slide Show
- ☞ Using Help
- ☞ Copying and Moving Content
- ☞ Formatting the Text
- ☞ Slide Transition
- ☞ Adding Images
- ☞ Drawing Graphics Objects
- ☞ Working with Slide Masters
- ☞ Choosing a Slide Layout
- ☞ Opening an already existing Presentation
- ☞ Saving a Presentation as ODP
- ☞ Exporting a Presentation as PDF
- ☞ Closing a Presentation
- ☞ Working with the Slides
- ☞ Using Undo and Redo Options
- ☞ Custom Animation
- ☞ Using Tables in a Presentation
- ☞ Formatting using the Image Toolbar
- ☞ Grouping and Ungrouping Objects

Number of Periods

Theory

10

Practical

31

Teaching Plan

While teaching this chapter, tell the students that a presentation is a method of communication for the purpose of sharing ideas and information through visuals.

Begin by discussing the importance of creating effective presentations to engage and communicate with an audience.

Explain to students that OpenOffice Impress is a powerful presentation software that allows for creating visually appealing slideshows.

Discuss the characteristics of a good quality presentation, such as clear and concise content, visually appealing design, effective use of visuals, and engaging delivery.

Emphasize the importance of considering the target audience and the message when creating presentations.

Introduce OpenOffice Impress as a presentation application used for creating and delivering slideshows.

Explain the different slide views available in Impress, such as Normal view, Outline view, and Slide Sorter view.

Demonstrate how to create a new presentation in OpenOffice Impress.

Teach students how to save a presentation to a desired location on the computer.

Explain the process of opening an existing presentation for further editing.

Teach students how to choose a slide layout that suits the content of each slide.

Show them how to add and delete slides within a presentation.

Explain how to navigate through slides in different views and how to customize slide transitions.

Demonstrate how to add text, images, and graphics objects to slides.

Teach students how to format text using different font styles, sizes, colors, and alignment options.

Show them how to use the image toolbar to adjust the size, position, and other formatting options for images.

Explain how to draw graphics objects, such as shapes and lines, to enhance slide design.

Explain the concept of slide masters and demonstrate how to use them to customize the overall design and layout of slides.

Show students how to copy and move content within slides and between slides.

Teach them how to use the undo and redo options to revert or repeat actions.

Introduce the concept of custom animation and demonstrate how to add animation effects to objects on slides.

Explain how to customize the animation settings, such as duration and order of animations.

Teach students how to apply slide transitions to add visual interest and smooth transitions between slides.

Demonstrate how to run a slide show in OpenOffice Impress, including navigating through slides and using presenter view if available.



Explain the process of closing a presentation and saving any changes made.

Show students how to export a presentation as HTML or PDF for sharing or printing purposes.

Summarize the key points covered in the lesson, emphasizing the importance of creating visually appealing and engaging presentations.

Encourage students to practice using OpenOffice Impress to create their own presentations for various topics.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is the purpose of presentation software?
- Q. What is the name of the free and open-source application software used for designing digital presentations?
- Q. What is the difference between Normal View and Slide Show in presentation software?
- Q. What is the Presentation Wizard, and how does it assist in creating a presentation?
- Q. How can a presentation be converted into a PDF format?
- Q. What information can be found in the Help Menu of presentation software?
- Q. What are the four alignment options available for aligning text content in a presentation?
- Q. What is custom animation in a presentation, and which elements can be animated?
- Q. What does a Slide Transition refer to in a presentation, and when does it occur?
- Q. When does the Picture toolbar become active in presentation software?
- Q. What is the purpose of the Drawing toolbar in presentation software?

Ask the students to solve the questions given on page 328 as **Quiz Bee**.

Evaluation

After explaining the chapter, let the students do the exercises given on pages 361 to 369 in the main course book as **Exercise(Solved and Unsolved)**.

Ask the students to try Competency-based/Application-based questions given on page 369 to imbibe elements like communication, and leadership & responsibility in them.

Take the students to the computer lab and let them practice the activity given in the **LAB ACTIVITY** given on page 370 of the main course book. It will enhance the ability of the students and will serve as leadership & responsibility, and creativity activity.

Suggested Activity

Ask the students to create a digital presentation on the topic "IT-BPM Industry", incorporating text, images, and transitions to effectively convey their message.