

# TRACKGPT

iPro Ver. 5.0

6

## TEACHER'S MANUAL

Extended Support for Teachers



[www.orangeeducation.in](http://www.orangeeducation.in)

Teacher's Time Table

VIII						
VII						
VI						
V						
B R E A K						
IV						
III						
II						
I						
0						
Periods / Days	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

The image features a central grid titled "Teacher's Time Table". The grid has columns labeled V through VIII at the top and rows labeled I through IV on the left side. A horizontal bar across the middle contains the letters B, R, E, A, K. Below the grid are labels for days of the week: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

	V	VI	VII	VIII
I				
II				
III				
IV				
BREAK				
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				

The background is decorated with various scientific icons: a microscope, test tubes, a light bulb, a DNA helix, a planet Saturn, a magnifying glass, a pencil, a flame, a virus, a battery, a comet, and a space station.

# 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

- 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

- 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

- Vocabulary reaches about 10,000 words
- Vocabulary increases rapidly throughout middle childhood

## Emotional/ Social

- 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

- Motor skills develop resulting in enhanced reflexes

### Cognitive

- Applies several memory strategies at once
- Cognitive self-regulation is now improved

### Language

- Ability to use complex grammatical constructions enhances
- Conversational strategies are now more refined

### Emotional/ Social

- Self-esteem tends to rise
- Peer groups emerge

Age  
11 - 20 Years

### Physical

- 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

- Is now more self-conscious and self-focused
- Becomes a better everyday planner and decision maker

### Emotional/ Social

- 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



## 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. ”

## Categories of Computers and Computer Languages

### Teaching Objectives

Students will learn about

- ★ Categories of Computers
- ★ Computer Languages
- ★ Some other Special Computers
- ★ Language Translator

### Teaching Plan

While teaching this chapter, tell the students that how computers are classified on basis of their:

Number of Periods	
Theory	Practical
3	2

- Type
- Purpose
- Size, speed, processing power and price

Tell the students about classification of computers on basis of their type or functioning:

- Analog Computers
- Digital computers
- Hybrid computers

Explain to the students about classification of computers on basis of their purpose:

- General purpose computers
- Special purpose computers

Tell the students about classification of computers on basis of their size, speed and processing power:

- Microcomputers such as Desktop, Laptop, Tablet, etc.
- Minicomputer like PDP-11, PDP-8, HP-3000 etc.
- Mainframe computer such as IBM zSeries, IBM 4381, ICL 39, etc.
- Supercomputers like Pace, Titan, Sunway TaihuLight, Mihir, etc.

Share with the students the importance and usefulness of some other special computers:

- Embedded computers like Digital camera, ATM, Microwave, etc.
- Handheld computers like Smartphone, PDA, Smart watch, Gaming consoles, etc.

Give a brief account of different computer languages:

- Low level languages such as Machine language and Assembly language.
- High level language such as 3GL, 4GL and 5GL.

Tell the students about advantages and disadvantages of HLL.

Explain to the students about the concept of language translator and its working.

Explain to the students that assembler, compiler and interpreter are three main types of language translator.

Ensure that the scope of Teacher's Truff given at the end of the chapter has been covered.

### Extension

Ask the students some oral questions based on this chapter.

- Q. Name some ways in which computers are classified.
- Q. What is a minicomputer?
- Q. What is a microcomputer?
- Q. Differentiate between analog and digital computers?
- Q. What are mainframe computers? What are they used for?
- Q. How many generations of computers languages are there?
- Q. Give three characteristic features of Third / Fourth / Fifth generation of computer languages.
- Q. What is a computer language?
- Q. What are three main types of language translator?

### Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 14 to 17 of the main course book as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 17 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 18 of the main course book will enhance the ability of the students and serve as a Digital Literacy activity.

### Suggested Activity

Ask the students to prepare a collage of different models of computers classified on the basis of size, speed and processing power.



### Teaching Objectives

Students will learn about

- ✦ Copying or Moving Files/Folders
- ✦ Searching for Files or Folders
- ✦ Different File Formats
- ✦ Sorting of Files
- ✦ Using Multiple Applications

### Teaching Plan

Number of Periods	
Theory	Practical
3	2

While teaching this chapter, tell the students that how computers work on data and how data in a computer can be arranged in the form of files or folders.

- Copying files/folders from one drive to another drive
- Moving files/folders from one drive to another drive
- Copying files/folders from one device to another device
- Copying file or folder from a pen drive to computer

Tell the students about sorting of files and different ways in which files and folders can be arranged in a computer.

- Sorting of files – Sorting by name, Sorting by size, Sorting by type, Sorting by date of creation or modification.

Explain to the students about searching of files or folders:

- Searching of files using windows explorer
- Searching for a file using wildcard characters – Searching of files using asterisk (\*), Searching of files using question mark (?)

Tell the students about using multiple applications in windows.

Explain to the students about different file formats used in windows.

- JPEG
- MP4
- MP3
- DOCX
- XLSX
- PPTX

Ensure that the scope of Teacher's Truff given at the end of the chapter has been covered.

### Extension

Ask the students some oral questions based on this chapter.

- Q. Explain how data can be arranged in a computer.
- Q. What is the procedure to copy files from one drive to another drive?
- Q. What is the difference between copying and moving a file/folder?
- Q. What is the procedure to copy file/folder using a pen drive to computer?
- Q. What do you mean by sorting of files? What are some ways in which data can be sorted?

Q. How many ways are there to search a file or folder using wildcard characters?

Q. Explain following file formats:

- JPEG      ■ MP4      ■ DOCX      ■ XLSX      ■ PPTX

### Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 30 to 32 of the main course book as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 33 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 33 of the main course book will enhance the ability of the students and serve as a Digital Literacy activity.

### Suggested Activity

Ask the students to explore different drives in their computers (under teachers or parents supervision) and sort files according to:

- File type
- Date
- Name

## 3

## Word Processor—Tabular Representation

### Teaching Objectives

Students will learn about

- ✦ Inserting a Table
- ✦ Selecting Cells, Rows, Columns and Table
- ✦ Deleting Rows or Columns
- ✦ Merging Cells
- ✦ Moving and Resizing Tables
- ✦ Table Styles
- ✦ Entering Data in a Table
- ✦ Inserting Rows or Columns
- ✦ Changing Columns Width and Row Height
- ✦ Splitting Cells
- ✦ Applying Border and Shading
- ✦ Aligning Text in a Table

### Teaching Plan

While teaching this chapter, tell the students that a table is an arrangement of text in the form of columns and rows.

Also tell them that an intersection of a row and a column is called a cell.

Demonstrate to the students the method of inserting a table and entering data in a table in a Word document.

Explain the student enter data in a table, click on a cell, type the data, and press the Tab key to move to the next cell.

Number of Periods	
Theory	Practical
4	2

Show to the students how to select a cell, a group of cells, a row, a column or the whole table.

Show to the student insert and delete rows or columns in a table, use the Table Layout tab and follow the guided steps.

Introduce the student adjust column width or row height, use the Table Layout tab and input values in the respective spin boxes.

Introduce merging of cells as combining two or more cells in the same row or the same column into a single cell.

Show to the students the steps to merge two or more cells. Introduce splitting of cells as dividing one cell into two or more cells.

Explain the student that split a cell into two or more cells, use the Split Cells option under the Table Layout tab.

Demonstrate to the students the steps to move a table and resize a table.

Tell the students that Word 2021 allows to apply borders to tables and cells as well as to shade the cells and table.

Make the students understand that Word offers some built-in formats as Table Styles to apply to a table.

Tell the student align text in a table, use the alignment options available in the Table Layout tab to set the desired position of the text within the cells.

Ensure that the scope of Teacher's Truff given at the end of the chapter has been covered.

### Extension

Ask the students some oral questions based on this chapter.

Q. What is a table?

Q. Define a cell.

Q. How do you insert a table in Word?

Q. What should you do to edit data in a table cell?

Q. How do you select an entire column in a table?

Q. What is the purpose of shading in a table?

Q. Where do you find the options to align text in a table?

Q. What are Table Styles in Word?

Q. Can more rows or columns be added to a table?

Q. Define merging/splitting of cells.

Q. What is the difference between moving a table and resizing a table?

Q. What is the use of Table Styles feature of Word 2021?



## Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 43 to 45 of the main course book as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on pages 45 and 46 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 46 of the main course book will enhance the ability of the students and serve as a Creativity and Innovativeness and Experiential Learning activity.

Encourage the students to do Project Work given at end of the main course book.

## Suggested Activity

Ask the students to create a comparative mark sheet for your marks in different subjects for last three classes.

# 4

## Word Processor—Mail Merge

### Teaching Objectives

Students will learn about

- ✦ Mail Merge
- ✦ Creating a Data Source
- ✦ Merged Document
- ✦ Creating Mail Merge
- ✦ Merge Fields

### Teaching Plan

Number of Periods	
Theory	Practical
4	2

While teaching this chapter, tell the students introduce to the students Mail Merge as the feature used to create personalised letters to be sent to many persons.

Explain the advantages of mail merge and how it helpful in creating personalised letters to be sent to many persons.

Explain the components of mail merge. Tell them the various steps involved in creating a mail merge.

Show the student Create the main document for the invitations by typing the standard message to invite friends, teachers, and relatives to the charity cultural program.

Demonstrate to the student the steps to:

- Create a data source
- Merge fields
- Merged document

Ensure that the scope of Teacher's Truff given at the end of the chapter has been covered.

## Extension

Ask the students some oral questions based on this chapter.

- Q. What do you mean by Mail Merge?
- Q. How is mail merge helpful?
- Q. What is the purpose of a data source in mail merge?
- Q. What are merge fields used for in mail merge?
- Q. What is a merged document?

## Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 52 to 54 as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 54. Help the students to solve these question.

In Creative Assignment, activity like Digital Drills given on page 55 will enhance the ability of the students and serve as Digital Literacy and Interdisciplinary activity.

## Suggested Activity

Ask the students to create an electronic invitation (personalised) for inviting middle school teachers to a thank you performance organised by Grade 6-8 students.

# 5 Presentation—Visual Effects

## Teaching Objectives

Students will learn about

- ★ Slide Views
- ★ Animation
- ★ Importing Data from other Applications
- ★ Slide Transition
- ★ Uses of Media Clips and Action Buttons

## Teaching Plan

While teaching this chapter, tell the students that PowerPoint 2021 is used to create electronic presentations.

Tell the students that PowerPoint allows you to switch between different views, such as Normal, Slide Sorter, Notes Page, and Reading View, Outline, via the View tab.

Introduce the Slide transitions control how your presentation moves between slides and can be added from the Transitions tab.

Tell the student Animations in PowerPoint include Entrance, Emphasis, Exit, and Motion Paths, with options to adjust timing, manage effects in the Animation Pane, and remove them.

Number of Periods	
Theory	Practical
3	2

Demonstrate the steps involved in inserting a video file into a presentation.

Show to the students how sound and audio files can be inserted into a presentation.

Show the adding a action button.

Explain the student PowerPoint 2021 enables importing files from Word, Excel, Paint, and Acrobat Reader to enhance your presentation.

Ensure that the scope of Teacher's Truff given at the end of the chapter has been covered.

### Extension

Ask the students some oral questions based on this chapter.

Q. Can we add video files on a slide?

Q. Define transition.

Q. How many transitions can be applied to a slide?

Q. What happens if more than one slide transitions are added to a slide?

Q. What is meant by animation in PowerPoint?

Q. Can we reorder the animations applied to different objects on a slide?

Q. What is a Slide Show?

### Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 69 to 71 as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 71. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 72 will enhance the ability of the students and serve as Creativity & Innovativeness and Digital Literacy activity.

### Suggested Activity

Divide the class into two teams. Ask one team to prepare charts on various types of pollution. Ask the other team to prepare a PowerPoint presentation on the same topic. Make the students share the benefits enjoyed and limitations faced by each team while working on their project.

## 6

## Scratch Programming—Game Creation

### Teaching Objectives

Students will learn about

- |                       |                      |
|-----------------------|----------------------|
| ✦ Staring Scratch     | ✦ Choosing a Sprite  |
| ✦ Resizing Sprite     | ✦ Deleting a Sprite  |
| ✦ Choosing a Backdrop | ✦ Sprite's Direction |

- ✦ Understanding Blocks
- ✦ Use of Loops Blocks
- ✦ The Pen Block
- ✦ Drawing a Circle
- ✦ Creating Some More Programs
- ✦ Use of Conditional Control Blocks
- ✦ Working with Two Sprites
- ✦ Drawing a Polygon
- ✦ Drawing Patterns

## Teaching Plan

While teaching this chapter, tell the students that Scratch is a block-based programming language.

Number of Periods	
Theory	Practical
3	2

Demonstrate to the students the steps to start Scratch 3.0.

Make the students understand the features of Scratch.

Familiarise the students with the various components of Scratch window covering Title bar, Menu bar, Tabs, Go button, Stop button, Blocks Palette, Coding area, Script, Stage area, Sprite, Backdrop and Sprites info pane.

Show to the students the steps to:

- Choose a sprite from the Library
- Resize a sprite
- Delete a sprite

Make the students recall backdrop as background of the stage.

Tell the students the steps to change the backdrop in Scratch.

Introduce Scratch, a sprite's direction is the angle it faces on the stage (0° up, 90° right, 180° down, 270° left) and can be adjusted using Turn blocks in the Motion palette.

Introduce Blocks in Scratch are puzzle-like pieces used to create scripts, which are sequences of commands executed from top to bottom, with categories like Motion, Looks, Sound, Events, and more.

Tell the students the Conditional control blocks in Scratch, like if...then and if...then...else, let you execute actions based on specific conditions, enabling sprites to respond differently to true or false scenarios.

Demonstrate the Loop blocks in Scratch, like Repeat, Repeat Until, and Forever, let you automatically repeat instructions, saving time and effort in your projects.

Explain the using two sprites in Scratch allows you to create interactive projects where characters like Bear and Ben can interact, respond to events, or tell a story.

Tell the students about Pen blocks in Scratch allow sprites to draw trails, patterns, and shapes with customisable colours and effects.

Demonstrate to steps to:

- Draw a polygon
- Draw a circle
- Draw patterns

Share with the students the create some more programs.

Ensure that the scope of Teacher's Truff given at the end of the chapter has been covered.

### Extension

Ask the students some oral questions based on this chapter.

- Q. What is Scratch?
- Q. What are the features of Scratch?
- Q. Name the various components of Scratch window.
- Q. Define Sprite / Stage / Scripts Area / Green Flag / Stop button.
- Q. What is a backdrop in Scratch?
- Q. What are Scratch blocks?
- Q. What are Looks blocks?
- Q. What is the use of Pen blocks?
- Q. What is the use of Operators blocks?

### Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 90 to 92 of the main course book as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 93 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 93 of the main course book will enhance the ability of the students and serve as a Coding & Computational Thinking, Experiential Learning activity.

### Suggested Activity

Ask the students to develop the story of Rabbit and Tortoise in Scratch.

## 7

## HTML—An Introduction

### Teaching Objectives

Students will learn about

- |  |                            |
|--|----------------------------|
| ✦ Introducing HTML                     | ✦ HTML Tags and Attributes |
| ✦ Rules for Writing HTML5 Codes        | ✦ HTML5 Document Structure |
| ✦ Creating and Saving an HTML Document | ✦ Basic HTML Tags          |
| ✦ Editing an Existing HTML Document    | ✦ Introducing CSS3         |
| ✦ Text Properties                      | ✦ Background Properties    |
| ✦ Font Properties                      | ✦ Margin Properties        |



## Teaching Plan

While teaching this chapter, tell the students that websites consist of millions of pages called web pages which contain text, graphics, audios, videos and links to other pages.

Number of Periods	
Theory	Practical
3	2

Introduce Hypertext Markup Language (HTML) as language that describes the structure of a web page.

Make the students understand the meaning of the terms like hypertext and markup language.

Tell the students about the tools needed for working with HTML.

Make the students aware about the different types of HTML editors – WYSIWYG editor and Text editor.

Familiarise the students with basic HTML terms like tags, container tags, empty tags, block level tags, text level tags, nesting tags and attributes.

Tell the students about the concept of nesting of tags.

Tell the student about the concept of Attributes.

Share with the students the general rules followed for writing HTML codes.

Show to the students a HTML document and make them understand and identify the various sections and structure of the HTML document.

Demonstrate to the students the steps involved in:

- Creating a HTML document
- Saving a HTML document
- Previewing a web page

Tell the students about the meaning and use of basic HTML tags covering `<!DOCTYPE html>`, `<HTML>`, `<HEAD>`, `<TITLE>` and `<BODY>` tags along with their attributes.

Tell the students about some more HTML tags like Heading, Paragraph, Line Break, Horizontal Ruler (and its attributes), Bold, Italic, Superscript and Subscript tags.

Demonstrate to the students the steps involved in designing a web page using the various HTML tags discussed.

Show the students the method of editing an existing HTML document.

Tell the student CSS3 is used to style HTML pages, offering inline, internal, and external methods for design and layout.

Explain the student text properties style text by adjusting font, alignment, decoration, and transform.

Share with student CSS background properties customise the background colour, image, position, and size of a web page.

Explain the student CSS font properties modify the font's family, size, style, weight, and line height for design and readability.

Tell the student that margin properties create space around elements, with values in pixels or percentages for top, right, bottom, and left sides.

Ensure that the scope of Teacher's Truff given at the end of the chapter has been covered.

## Extension

Ask the students some oral questions based on this chapter.

- Q. What is HTML?
- Q. Define hypertext and Markup language.
- Q. Name the different types of HTML editors.
- Q. What are tags and attributes?
- Q. State the rules followed while writing HTML codes.
- Q. Name the text editor most commonly used to write HTML codes.
- Q. State the use of <HTML> / <HEAD> / <BODY> / <TITLE> tags.
- Q. What is the difference between container tags and empty tags?
- Q. What is the purpose of the margin property in CSS?
- Q. Name some common CSS font properties.
- Q. How can you modify the background of a web page using CSS?
- Q. What is the purpose of the <style> tag in an HTML document?

## Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 112 to 114 as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 114. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 115 will enhance the ability of the students and serve as Collaboration & Teamwork, Coding & Computational Thinking activity.

## Suggested Activity

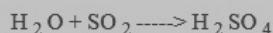
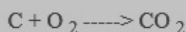
Ask the students to develop a similar web page in HTML.

### Basics of writing chemical formulas

The valency is used to write chemical formulas. The valency is written at the top right corner of the chemical symbol of the element. For example, valency of Sodium is 1 and is denoted as:



A chemical reaction is denoted as:



### Teaching Objectives

Students will learn about

- ✦ Internet Services
- ✦ Cyber Threats
- ✦ Netiquettes
- ✦ Cyber Security

### Teaching Plan

While teaching this chapter, tell the students that internet is used for a wide variety of services including communication, shopping and banking.

Tell the students that internet services allow us to perform different types of operations over the internet.

Explain how internet plays an important role in communication through e-mails, video conferences, voice-over-internet protocol, chat, social network and newsgroup.

Demonstrate the steps to use:

- VoIP services

Share with the students how internet is used to:

- Send greetings in the form of e-greetings.
- Send and receive money through e-banking.
- Store data and information through cloud storage.
- Stay safe online by protecting your info and using privacy settings.

Tell the student Netiquette involves respectful online communication, such as being kind, thinking before posting, and respecting others' opinions.

Tell the student Cyber threats, like diddling, Phreaking, cloning, carding, hacking, cracking and data involve exploiting digital systems for personal gain or harm.

Make the students understand the difference between hacking (practice of modifying computer hardware and software for legal purposes) and cracking (practice of modifying computer hardware and software for illegal purposes).

Tell the student cyber security protects systems and data from attacks, caused by internet growth and security weaknesses.

Ensure that the scope of Teacher's Truff given at the end of the chapter has been covered.

### Extension

Ask the students some oral questions based on this chapter.

Q. Name some internet services.

Number of Periods	
Theory	Practical
2	2

- Q. Define Video Conferencing / VoIP.
- Q. What are the advantages of VoIP?
- Q. Define chatting / social networking / blogging.
- Q. What is meant by cloud storage?
- Q. What are the different types of cyber-threats?
- Q. Differentiate between hackers and crackers.
- Q. What is the meaning of netiquette?
- Q. What is a cyber threat?

### Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 125 to 127 of the main course book as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 128 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 128 of the main course book will enhance the ability of the students and serve as a Communication, Ethical and Moral Reasoning activity.

### Suggested Activity

Ask the students to collect information about different types of major cyber-crimes committed in last one year.

## 9 E-mail an Introduction

### Teaching Objectives

Students will learn about

- ✦ E-mail
- ✦ Emoticons and Acronyms

### Teaching Plan

While teaching this chapter, make the students recall E-mail as the process of exchanging messages electronically through communications network by using a computer.

Explain the student that features of E-mail.

Share with the students the advantages of e-mail.

Explain the e-mail address to the students.

Demonstrate in detail the steps involved in:

Number of Periods	
Theory	Practical
2	2

- Creating an e-mail account
- Composing and Sending an e-mail (with reference to fields like To, Cc, Bcc and Subject)
- Reading a received e-mail
- Login in to an e-mail account
- Login out from the e-mail account (tell them the importance of this step)

Introduce the terms emoticons (representation of facial expressions), acronyms (word formed from initial letters of a multi-word name).

Write some commonly used emoticons and acronyms on the class board to elaborate the concept.

Ensure that the scope of Teacher's Truff given at the end of the chapter has been covered.

### Extension

Ask the students some oral questions based on this chapter.

- Q. Define an e-mail.
- Q. What do you understand by emoticons?
- Q. What is an acronym?
- Q. Define the some features of E-mail.

### Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 137 to 139 as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 139. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 140 will enhance the ability of the students and serve as a Digital Literacy and Communication activity.

### Suggested Activity

Ask the students to create an e-mail account. Tell them to design a birthday invitation card and send this card as an attachment to ten friends and/or relatives.

## 10 More on Internet

### Teaching Objectives

Students will learn about

- ★ Google Drive
- ★ E-Commerce
- ★ Blogging
- ★ Podcasting

Number of Periods	
Theory	Practical
2	2

## Teaching Plan

While teaching this chapter, tell the student Internet provides advanced features such as cloud storage, e-commerce, blogging, and podcasting. Cloud storage lets us upload, organise, and share data from anywhere.

Demonstrate the application of Google drive

Show to the students the steps involved in organizing files and folders in Google drive.

Demonstrate the steps of these:

- Uploading a file
- Organising files and folders

Tell the students about advanced and disadvantages features of internet such as:

- E-commerce

Tell the students about E-commerce and different modes of payment available at different E-commerce platforms:

- Debit or credit cards
- Net banking
- E-wallet
- Cash on delivery

Demonstrate the steps to shop online on any e-commerce website.

Show to the students about the a blog and explain blogging.

Demonstrate the steps to create a blog on blogger.com.

Explain to the students about the podcasting.

## Extension

Ask the students some oral questions based on this chapter.

- Q. What is e-commerce?
- Q. What do you mean by cash on delivery?
- Q. What is a blog?
- Q. Who is a blogger?
- Q. What do you mean by a podcast?
- Q. Define cloud storage service.
- Q. What is Google docs?

## Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 153 to 155 as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on pages 155 and 156. Help the students to solve these questions. In Creative Assignment, activity like Digital Drills given on page 156 will enhance the ability of the students and serve as Digital Literacy, Collaboration and Teamwork activity.

## Suggested Activity

Divide the class into two teams. Ask one team to prepare charts on various e-commerce websites. Ask the other team to prepare a online blog on the same topic. Make the students share the benefits enjoyed and limitations faced by each team while working on their project.

