TRACKGPT

iPro Ver. 5.0

7

Teacher's Manual
Extended Support for Teachers

ORANGE
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Teacher's Time Table

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

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.
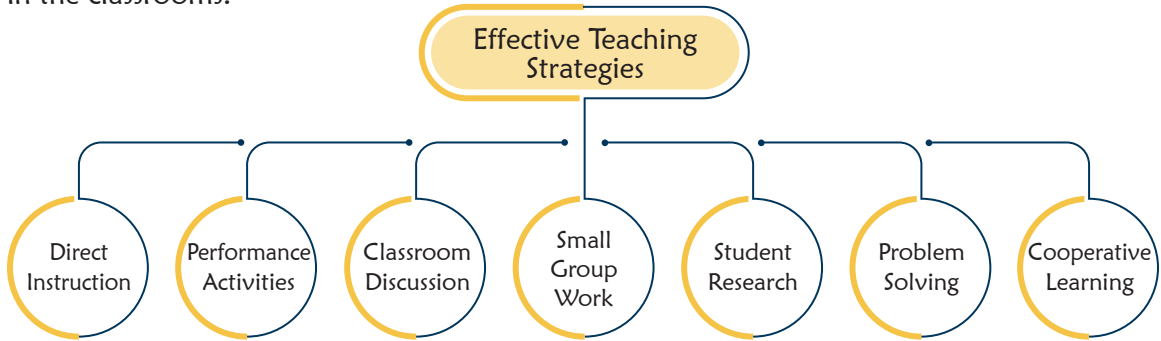
During the class

Present the lesson plan.

After the class

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

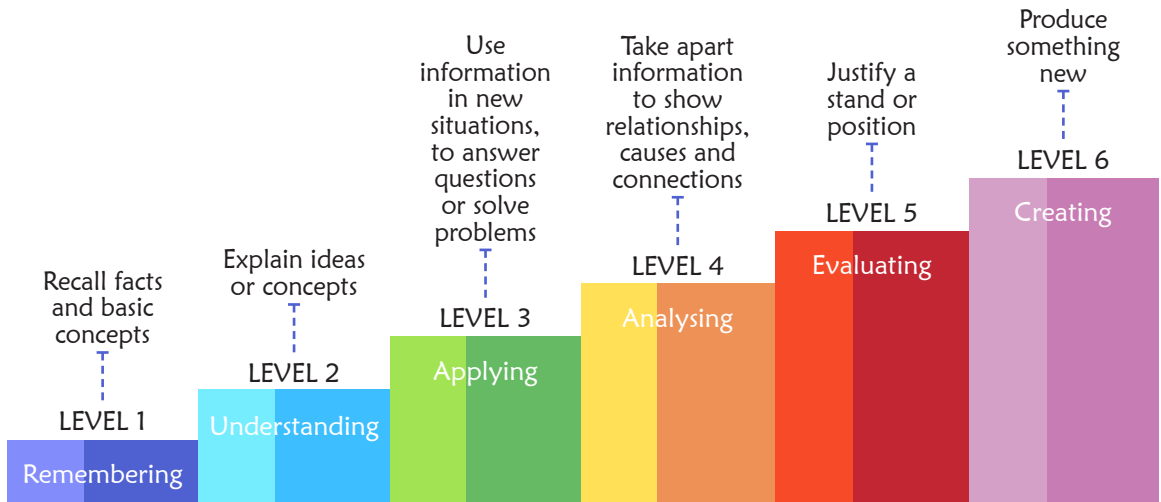" Knowing yourself is the beginning of all wisdom. "

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

Effective Teaching Strategies

- Direct Instruction
- Performance Activities
- Classroom Discussion
- Small Group Work
- Student Research
- Problem Solving
- Cooperative Learning

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.

Recall facts and basic concepts
LEVEL 1
Remembering

Explain ideas or concepts
LEVEL 2
Understanding

Use information in new situations, to answer questions or solve problems
LEVEL 3
Applying

Take apart information to show relationships, causes and connections
LEVEL 4
Analysing

Justify a stand or position
LEVEL 5
Evaluating

Produce something new
LEVEL 6
Creating

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."

LESSON PLAN

1 Computer–Hardware Components

Teaching Objectives

Students will learn about

✦ Hardware

✦ New Trends in Hardware

Number of Periods	
Theory	Practical
2	2

Teaching Plan

While teaching this chapter, tell the students that a computer system is madeup of two components hardware and software.

Explain to the students what is hardware and some of the internal hardware components of a computer:

- CPU
- Motherboard
- SMPS
- Disk Drive
- Modem
- Ports
- Sound Card
- Video Card

Familiarise the students with the various external hardware components of computer system covering

- **Input Devices**
    - o Keyboard
    - o Mouse
    - o Scanner–Hand-Held Scanner, Flatbed Scanner, Sheetfed Scanner
    - o Webcam
    - o Graphic Tablet
    - o Joystick
    - o Microphone
    - o Touchscreen
- **Output Devices**
    - o Monitor
    - o Printer–Dot matrix printer, Inkjet Printer, Laser Printer
    - o Plotters
    - o Speakers
    - o Projector
- **Storage Devices**
    - o Hard disks
    - o Compact Disc
    - o DVD
    - o Blue-ray Disc
    - o Flash Drive
    - o Pen Drive
    - o Memory Card

Tell the students about new trends in hardware such as:

- Wireless Devices
- Virtual keyboard
- 3D Camera
- Skylake
- LaCie SAFE Hard Drive
- Portable Printers
- Finger Mouse

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 Hardware?

Q.   What are the internal hardware components of a computer system?

Q.   Name any five external hardware components.

Q.   Differentiate between Hand-held and Sheetfed Scanner.

Q.   Name any two types of printers and how they differ from each other.

Q.   What is finger mouse?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 17 to 19 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 20 of the main course book. Help the students to solve these questions.

In Creative Assignment, activities like Digital Drills given on page 20 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 list of hardware devices in the computer lab and classify them as input/output devices.

2 Number System

Teaching Objectives

Students will learn about

- ✦ Number System
- ✦ Binary to Decimal Conversion
- ✦ Decimal to Binary Conversion
- ✦ Operations on Binary Numbers

Teaching Plan

While teaching this chapter, tell the students that a number system is simply a method of counting.

Number of Periods	
Theory	Practical
3	1

Introduce base or radix as the total number of digits used in a number system.

Inform them that there are four important types of number systems – Decimal (base 10), Binary (base 2), Octal (base 8) and Hexadecimal (base 16).

Make the students recall the method of writing expanded form of a number under Decimal number system.

Inform them that just like decimal number system:

- Add one more bullet In decimal number system, the numbers are expressed using ten digits, 0 to 9 and expanded with base 10.

- In octal number system, the numbers are expressed using eight digits, 0 to 7 and expanded with base 8.

- In hexadecimal number system, the numbers are expressed using fifteen digits, 0 to 9 and A to F, and expanded with base 16.

Show to the students the method of converting:

- Decimal number to Binary number by successive division by 2 and arranging the remainders in reverse order (Refer Suggested Activity 1 also).

- Binary number to Decimal number by multiplying digits with 2 raise to the power of place of that digit starting from 0 on the left (Refer Suggested Activity 2 also).

Share the rules of binary addition and subtraction.

Show to the students the method of carrying out mathematical operations on binary numbers and verifying the results by corresponding conversions to decimal numbers.

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 numbers system?

Q.   What is the radix of decimal / binary / octal / hexadecimal number system?

Q.   Which digits are used to express a decimal / binary / octal / hexadecimal number?

Q.   What is the value of addition of binary digits 1 and 1?

Q.   What is the value of subtraction of binary digits 0 and 1?

Q.   Which number system is used by computers?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 26 to 28 as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 29. Help the students to solve these questions.

In Creative Assignment, activities like Tangible Task given on page 29 will enhance the ability of the students and serve as a Communication, Collaboration & Teamwork activity.

Suggested Activity

1. Convert the last four digits of your parents' mobile numbers into binary number.
2. Ask the students to prepare a comparative chart with four columns, the first one listing the digits used in Hexadecimal number system and in the remaining three columns, their equivalent value under decimal, binary and octal number systems.

3 Computer Virus

Teaching Objectives

Students will learn about

✦ What is a Computer Virus?   ✦ Types of Computer Virus

✦ How does a Computer Get Infected with a Virus? ✦ How do you know your PC Has a Virus?

✦ How to Prevent Your PC from a Virus?   ✦ Malware

✦ Antivirus   ✦ Firewall

Teaching Plan

While teaching this chapter, tell the students that a computer virus can destroy the programs and files saved in a computer.

Number of Periods	
Theory	Practical
3	2

Tell the students about the harms that may be caused by a computer virus.

Explain the student types of computer network.

Explain to the students the various methods by which a computer system may get infected with virus.

Make the students aware of the symptoms that tell that a computer system is infected by a computer virus.

Explain in detail to the students the various methods by which prevention can be taken from a computer virus.

Explain the student Malware is harmful software designed to damage or disrupt computers.

Introduce the students to the concept of antivirus as a program developed to detect and remove virus from a computer system.

Tell the student A firewall is a security system that controls network traffic and blocks unauthorised access.

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 computer virus?

Q. State any two harms caused by a computer virus.

Q. State any two methods by which a computer may get infected by computer virus.

Q. State any two symptoms that show that a computer system has been infected by a virus.

Q. State any two ways in which the user can prevent from a computer virus.

Q. What is antivirus program?

Q. What is the main purpose of an antivirus program?

Q. What does a firewall do?

Q. What is malware?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 35 to 38 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 38 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 38 of the main course book will enhance the ability of the students and serve as a Digital Literacy and Experiential Learning activity.

Suggested Activity

Ask the students to collect information about any computer virus and narrate it in the class.

4 Ethics and Safety Measures in Computing

Teaching Objectives

Students will learn about

✦ What is Internet?

✦ What are Internet Ethics?

✦ Safety Measures while using Computer/Internet

✦ Computer Ethics

✦ What is Unethical Practices?

✦ Digital Footprints

Teaching Plan

While teaching this chapter, tell the students that what is Internet and what are its advantages & disadvantages.

Introduce computer ethics and etiquettes.

Tell the student Internet ethics.

Share examples of some unethical practices involving computers:

Number of Periods	
Theory	Practical
3	2

- Plagiarism
- Phishing
- Spamming
- Software Piracy
- Cyber bullying
- Hacking
- Individual right to privacy

- Intellectual property rights
  - o Copyright
  - o Patent
  - o Trademark

Tell the students about the safety measures to be followed while using computer/internet.

Explain to the students what is digital footprints and delete digital footprints.

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 plagiarism?

Q. State any two advantages and two disadvantages of internet.

Q. State any two methods by which a computer may be used unethically.

Q. State any two types of intellectual property rights.

Q. What is digital footprint?

Q. What is the main purpose of computer ethics and etiquettes?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 47 to 49 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 50 of the main course book. Help the students to solve these questions.

In Creative Assignment, activities like Tangible Task and Digital Drills given on page 50 of the main course book will enhance the ability of the students and serve as a Interdisciplinary, Creativity & Innovativeness and Ethical & Moral Reasoning activity.

Suggested Activity

Ask the students to collect information about ethical practices to be followed while using computer/ Internet and make a chart on the same using MS Word.

5 Spreadsheets—An Introduction

Teaching Objectives

Students will learn about

✦ Features of Excel 2021   ✦ Starting Excel 2021
✦ Components of Excel 2021 Window   ✦ Types of Data

- ✦ Creating a New Workbook
- ✦ Saving a Workbook
- ✦ Entering Data in the Worksheet

Teaching Plan

Number of Periods	
Theory	Practical
3	1

While teaching this chapter, tell the students that MS Excel is application software that is used to store and analyse data.

Explain to the students the features of Excel 2021 in detail.

Demonstrate to the students the steps to start Excel 2021.

Familiarise the students with the various components of Excel 2021 window covering Title bar, Quick access toolbar, Ribbon, File tab, Name box, Formula bar, Select all button, Workbook, Worksheet, Worksheet tabs, Worksheet tab navigation button, Status bar, Row, Column, Row and Column heading, Cell, Active cell and Mouse pointer.

Tell the students that Excel 2021 offers various data types to be entered in a cell covering Numbers, Text, Date and Time.

Demonstrate to the students the steps to:

- • Create a new workbook
- • Enter data in a worksheet
- • Save a workbook

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 Excel 2021?

Q. What are the features of Excel 2021?

Q. Name any five components of Excel 2021.

Q. Define Formula Bar / Name Box / Row / Column / Cell / Active Cell / Cell Range.

Q. State the situation when Number / Text / Date and Time data type used for.

Q. State the shortcut key to save an Excel worksheet.

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 56 to 58 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 59 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 59 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 table in this format for their family members.

S.No.	Name	Relation with Me	Date of Birth	Age

6 More on Spreadsheets

Teaching Objectives

Students will learn about

- Selecting Cell in a Worksheet
- Using Undo and Redo Features
- Inserting Rows/Columns
- Formatting Spreadsheets
- Using Formulas to Perform Calculation
- Copying/Moving Data
- Column Width and Row Height
- Merging Cells
- Autofill
- Order of Operation

Teaching Plan

While teaching this chapter, tell the students that In Excel, select cells by clicking, dragging, or using shortcuts for specific ranges, rows/column, or the entire worksheet.

Number of Periods	
Theory	Practical
3	2

Tell the students the methods of modifying data by cut, copy and paste.

Tell the student use the Undo (Ctrl + Z) to reverse actions and Redo (Ctrl + Y) to restore undone actions, both accessible from the Quick Access Toolbar.

Explain to the students the steps involved in changing row height and column width – both manually and automatically.

Tell the students that Excel allows inserting blank rows and columns at the required place in the worksheet.

Demonstrate to the students how two or more cells can be merged into one and also how a cell can be split up into two or more cells.

Explain some worksheet formatting features of Excel like:

- Word Text – displaying multiple lines of text in a cell.
- Format numbers – applying various data types to the cells.
- Cell borders – boundary around a cell or a series of cells.
- Cell styles – Pre-defined cell border, colour and formatting.
- Fill color – adding colours or shades in the cells.
- Text color – adding colour in the text.

Introduce to the students AutoFill feature of Excel as automatically filling a series of data in the worksheet and the steps involved in the same.

Tell the students that Excel has some built-in formulas called functions.

Share with the students the basic elements and rules of writing a formula in Excel.

Tell them the order of operation followed in Excel.

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 the use of Excel software?

Q.   Name any five components of an Excel window?

Q.   What is the difference between Cut and Copy options?

Q.   What does it mean when data in a cell is displayed as #####?

Q.   Define merging of cells.

Q.   Define splitting of cells.

Q.   What is wrap text feature of Excel?

Q.   Name any three number formats available in Excel.

Q.   What is meant by border of a cell?

Q.   What is the use of AutoFill feature?

Q.   What are Functions in Excel?

Q.   Name the different elements of a formula in Excel.

Q.   What is the order of operation followed in Excel?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 71 to 73 as Tech Trivia and Answer Arcade. After solving the course book exercises, tell the students to solve Code Clues activity given on page 73. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 74 will enhance the ability of the students and serve as a Digital Literacy, Creativity & Innovativeness activity.

Suggested Activity

Ask the students to design their class time-table in Excel 2021.

7   Database and DBMS—An introduction

Teaching Objectives

Students will learn about

✦   Concept of a Database

✦   Advantages of a Database System

✦   Types of Databases

✦   Terms Related to a Database

- ✦ Access 2021
- ✦ Creating a Database
- ✦ Types of Views in Access
- ✦ Creating a Table
- ✦ Exiting Access 2021
- ✦ Components of Access 2021
- ✦ Data Types in Access 2021
- ✦ Naming Conventions for Field Name
- ✦ Opening an Existing Databse

Teaching Plan

Number of Periods	
Theory	Practical
3	2

While teaching this chapter, tell the students that the computerised database system was introduced in 1960s.

Introduce the student that: Database as organizing data in a manner which helps to store and retrieve a large amount of data efficiently.

Share with the students the advantages of a database system.

Explain to the students the meaning of the two types of databases – Flat File Database and Relational Database.

Draw on board and explain the structure of a database to the students explaining about table, fields, records, primary key, query, report and form.

Introduce Access 2021 as a powerful and easy to use Relational Database Management System and is a part of MS Office Suite.

Demonstrate the steps to start Access 2021.

Familiarise the students with the various components of Access 2021 window covering Quick Access Toolbar, Title Bar, Ribbon, Navigation Pane, Navigation Buttons, Work Area, Objects Tabs and Status Bar.

Demonstrate to the students the two ways of creating a database as:

- Creating a blank database
- Creating a database using Templates

Explain different data types used in Access 2021 covering Text, Memo, Number, Auto Number, Date/Time, Yes/No, OLE, Hyperlink and Lookup Wizard.

Discuss with the students the use of the different types of views in Access 2021 as Datasheet view and Design view.

Share with the students the rules for defining field names in Access 2021.

Tell the students that Tables can be created in three ways.

Demonstrate to the students the steps to create a Table:

- In Design view
- In Datasheet view

Show to the students the method to opening am existing database and exit Access 2021.

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 database.

Q.   What is Database Management System?

Q.   Explain DBMS.

Q.   Name the different types of databases.

Q.   What type of database is Access 2021?

Q.   Give any two advantages of Database System.

Q.   Define Table / Query / Report / Form.

Q.   Name any three data types used in Access 2021.

Q.   What does OLE stands for?

Q.   What are the rules for writing field names?

Q.   What is the use of Field Name / Description in the Table design window?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 88 to 90

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 90 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 91 of the main course book will enhance the ability of the students and serve as a Digital Literacy, Creativity & Innovativeness activity.

Suggested Activity

Ask the students to create a table storing information about details of their ten friends and sort the records in the table in alphabetical order.

8   More on Access

Teaching Objectives

Students will learn about

✦   Forms in Access

✦   Queries in Access

✦   Reports in Access

Number of Periods	
Theory	Practical
4	2

Teaching Plan

While teaching this chapter, tell the students that Access is used to create tables and maintain records in a database along with preparing Forms, Queries and Reports.

Introduce Forms as objects used to add, edit and display data from tables in a user friendly manner.

Share with the students that a Form can be displayed in three views – Form View, Design View and Layout View.

Demonstrate to the students the steps to create a Form.

Explain different types of Forms covering Multiple Items, Datasheet, Split Form and Modal Dialog.

Familiarise the students with the Navigation Bar of the Form window to view and navigate between records in a Table.

Tell the students that the appearance of the Form can be formatted using Design and Format tabs.

Introduce Query as the object that can give information which the user might not be able to find by looking at the Table directly.

Explain the different types of Queries as: Select Query, Parameter Query, Action Query, Crosstab Query and SQL.

Tell the students about the relationship between the Primary Key and the Foreign Key.

Show to the students the steps to define relationships between tables.

Demonstrate the steps to create a query.

Introduce Report as an object used to organise and present data in a user friendly format for printing purpose.

Demonstrate the steps to:

- Create a Report

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 Form / Query / Report.

Q. Name the different views in which a Form can be displayed.

Q. Name the different types of Forms in MS Access.

Q. Where is Navigation Bar located?

Q. Name the different types of Queries.

Q. Define Primary Key / Foreign key.

Q. Name any four parameters of Query window.

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 99 to 101 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 102 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 102 of the main course book will enhance the ability of the students and serve as a Digital Literacy, Creativity & Innovativeness activity.

Suggested Activity

Using the Table created in the previous chapter create a query to display names of friends whose name starts with A or D.

9   Lists and Tables in HTML

Teaching Objectives

Students will learn about
- Creating Lists
- Creating Tables

Number of Periods	
Theory	Practical
2	2

Teaching Plan

While teaching this chapter, tell the students that HTML tags are used to create a web page.

Introduce list as collection of related items.

Tell the students that there are three types of lists – Ordered List (Numbered List), Unordered List (Bulleted List, Nested List) and Definition List (Description List).

Explain the use of <OL> tag to create ordered lists, <UL> tag to create unordered lists and <DL> tag to create definition lists. (See Suggested Activity 1 also).

Explain the use of <TABLE> tag and its child tags covering <TR>, <TD>, <TH> and <Caption>.

Explain the Css properties used with <Table> tag covering border, border-style, border-color, border-spcing, width, padding, background-color, color.

Tell the students that all the attributes except ROWSPAN and COLSPAN are taken up by <TR> tag also.

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 List / Table.

Q.   How many types of Lists can be created in HTML?

Q. Name the different types of Lists that can be created in HTML.

Q. What is an Ordered / Unordered / Definition List?

Q. Name the attributes of <OL> tag.

Q. Name the tags used to create Definition List.

Q. Name the tags that can used to create different kinds of tables.

Q. What are the attributes of <TABLE> / <TD> tag?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 114 to 116 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 116 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 117 of the main course book will enhance the ability of the students and serve as a Digital Literacy, Experiential Learning activity.

Suggested Activity

Ask the students to create:

1. List of favourite games of 10 friends.

2. Table of car names and their models.

10 More on Html

Teaching Objectives

Students will learn about

✦ Inserting Images

✦ Adding Audio & Video

✦ Forms in HTML5

✦ Linking Web Pages

✦ Frames

Teaching Plan

While teaching this chapter, tell the students that HTML allows inserting images and frames on web pages as well as interlinking them.

Number of Periods	
Theory	Practical
3	2

Tell the students that HTML supports JPEG, GIF and PNG image formats.

Tell the students that <IMG> tag is used to insert images and it takes the attributes as Src, Width, Height and Alt.

Demonstrate to the students the use of <IMG> tag and its attributes.

Make the students understand that a hyperlink is an underlined text or an image which when clicked takes the user to some other location.

Demonstrate the use of <A> tag and its attributes to hyperlink web pages (See Suggested Activity also).

Share with the students Use 'a:link', `a:visited`, `a:hover`, and `a:active` in CSS to style hyperlinks for unvisited, visited, hover, and active states.

Tell the student Use HTML5 `<audio>` and `<video>` tags with `src`, `controls`, and `autoplay` attributes to embed media, supporting formats like MP3, WAV, MP4, and WebM, though browser compatibility may vary.

Introduce Frames as a feature to display more than one web page on a single screen of the web browser.

Explain the use of <IFRAME> tag to create and define frames on a web page.

Tell the student the `<FORM>` tag in HTML is used to create forms for user input, with attributes like `ACTION`, `METHOD`, and `ENCTYPE` to control data submission.

Explain to the student the `<INPUT>` tag in HTML creates interactive fields like text boxes, radio buttons, checkboxes, and buttons for user input in forms.

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.   Which tag is used to insert images on a web page?

Q.   State the use of SRC / WIDTH / ALIGN /ALT attribute of IMG tag.

Q.   Which image formats are supported by HTML?

Q.   Which tag is used to link web pages?

Q.   Name the attributes that can be taken by IFRAME tag.

Q.   What does the <INPUT> tag do in HTML forms?

Q.   What is the purpose of the METHOD attribute in the <FORM> tag?

Evaluation

After explaining the chapter, let the students do the course book exercises given on pages 139 to 142 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 142 of the main course book. Help the students to solve these questions.

In Creative Assignment, activity like Digital Drills given on page 143 of the main course book will enhance the ability of the students and serve as a Digital Literacy, Experiential Learning activity.

Suggested Activity

Ask the students to create an e-shopping web site listing categories of items on home page and details of items on separate category pages.