5

TRACKPAD®

Ver. 2.0

Teacher's Manual

Extended Support for Teachers

ORANGE®
www.orangeeducation.in
www.thetouchpad.com

Teacher's Time Table

Periods / Days	0	I	II	III	IV	BREAK	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 to 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 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 needs 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.

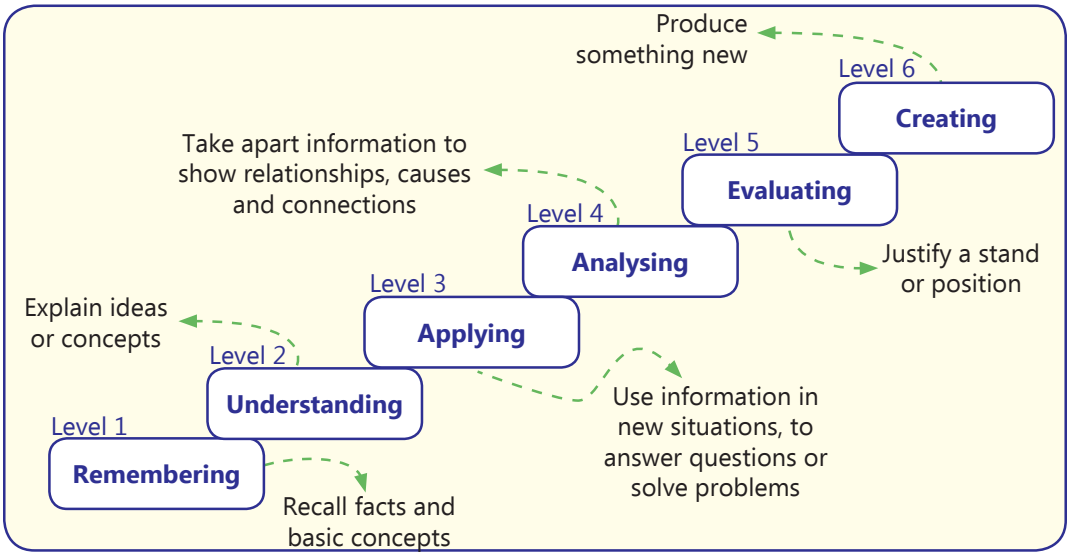
"Knowing yourself is the beginning of all wisdom."

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."

Class 5

LESSON PLAN

Trackpad Ver 2.0

1. Windows 10 – Advanced Features

Teaching Objectives

Students will learn about

- File Explorer
- Viewing Files and Folders
- Setting a Theme
- Disk Cleanup
- Components of File Explorer
- Color Settings in Windows 10
- Control Panel

Number of Periods	
Theory	Practical
2	2

Teaching Plan

Before starting the chapter, ask the students to read the comic given in page number 7 to understand the recap of the topic.

While teaching this chapter, tell the students that Windows is a GUI based operating system developed by Microsoft.

Make the students recall desktop as the first screen on which they can work.

Familiarize the students with the components of Windows 10 desktop covering Start button, Icons, Taskbar, and Desktop background.

Explain briefly about each of these components of Windows 10.

Share with the students the usefulness of Show Desktop button.

Tell the students about the Live Tiles and Taskbar.

Demonstrate the steps to resize, move and add tile.

Tell the students about File and Folder.

- Selecting a file/folder.
- Renaming a file/folder.
- Moving a file/folder.
- Creating a file/folder.
- Copying a file/folder.
- Deleting a file/folder.

Tell the students about Control Panel and steps involved in using the feature of it.

Share with the students about steps involved in using the feature of Time and Date setting and how to modify it.

Explain to the students how to change Mouse setting and steps involved in using it.

Demonstrate the students about the Sound settings and steps involved in modifying.

Explain about the Disk Clean Up to the student and also show the steps involved in this process.

Ask the students to solve the exercise **Quiz Bee** given on page number 11.

Ask the students to solve the exercise **I Know** given on page number 12.

Extension

Ask the students some oral questions based on this chapter.

Q. What is a file?

Q. What is a folder?

Q. What is a control panel?

Q. How can you change date and time?

Q. How can you change a mouse's settings?

Q. What are the steps to change the sound setting?

Q. What is a disk cleanup?

Evaluation

After explaining the chapter, let the students do the exercises given on Page 13 and 14 in the main course book as Assess Yourself. Tell them to solve the computational skill developing exercise as Coding Zone given on Page 14.

Take the students to the computer lab and let them practice the activity given in the Lab Activity section on Page 14 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to prepare a note on any one Gadget provided by Windows 10 on an A4 sheet of paper

2. Word 2016 – Advanced Features

Teaching Objectives

Students will learn about

- ☞ Changing the Font Style and Size
- ☞ Highlighting the Text

- ☞ Adding Bullets or Numbers to Text
- ☞ Line Spacing
- ☞ Finding and Replacing the Text
- ☞ Aligning the text
- ☞ Column Formatting

Number of Periods	
Theory	Practical
2	3

Teaching Plan

Before starting the chapter, ask the students to read the comic given in page number 15 to understand the recap of the topic.

Share with the students the default font and font size in a Word 2016 document.

Demonstrate to the students the method of changing font and font size.

Tell the students the steps involved in changing color of the selected text in the document.

Share with the students about the Bold, Italic and Underline features and the method of applying these features to the text. Demonstrate to the students the method of:

- Applying text effects
- Changing text alignment
- Highlighting the text

Introduce bullets as small symbol used to mark items in a list.

Show to the students the method of adding bullets or numbers to the items in a list.

Tell the students that a particular word or phrase in a document can be looked for with the help of Find feature.

Tell them that Word can go one step ahead and can replace that particular word or phrase by another word or phrase as required by the user using the Replace feature.

Demonstrate the steps to use Find and Replace features.

Explain to the students that line spacing means the blank space between two lines in a paragraph.

Further tell them about column formatting.

Ask the students to solve the exercise **Quiz Bee** given on page number 19.

Ask the students to solve the exercise **I Know** given on page number 18.

Extension

Ask the students some oral questions based on this chapter.

Q. Define formatting a text.

Q. What is the default font / font size of text in a document?

Q. What is the difference between bold and italic format of the text?

Q. What are text effects?

Q. Define text alignment.

Q. What are the different types of text alignment options?

Q. Why is shading added to text?

Q. What are bullets?

Q. When are bullets or numbers added to text?

Q. What is the difference between Find and Replace features?

Q. What is the meaning of Line Spacing?

Evaluation

After explaining the chapter, let the students do the exercises given on Page 21, 22 and 23 in the main course book as Assess Yourself. Tell them to solve the computational skill developing exercise as Coding Zone given on Page 24.

Take the students to the computer lab and let them practice the activity given in the Lab Activity section on Page 23 and 24 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

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

3. Formatting in PowerPoint

Teaching Objectives

Students will learn about

- Using Templates
- Working with Pictures
- Applying WordArt
- Modifying Background
- Inserting Shapes

Number of Periods	
Theory	Practical
2	2

Teaching Plan

Before starting the chapter, ask the students to read the comic given in page number 33 to understand the recap of the topic.

While teaching this chapter, tell the students that PowerPoint 2016 is used to create electronic presentations. Tell the students that a theme is a set of predefined layouts that can be used to add a professional touch to the presentations.

Introduce slide layout as arrangement of text, image, WordArt, Charts, etc. on a particular slide.

Share with the students the names of some commonly used slide layout options.

Demonstrate to the students the steps involved in changing the slide layout.

Tell the students that just like in Word document, WordArt can be added in a PowerPoint slide also.

Show to the students that the steps involved in Word and PowerPoint are almost similar.

Similarly, demonstrate to the students that Pictures from other files can also be added to a slide just like those inserted in Word.

Demonstrate the steps to choose a theme, change theme colours, fonts and backgrounds.

Introduce students with Slide Master and the steps involved in using this action into a presentation.

Ask the students to solve the exercise **Quiz Bee** given on page number 31.

Ask the students to solve the exercise **I Know** given on page number 26.

Extension

Ask the students some oral questions based on this chapter.

Q. What is WordArt?

Q. Can pictures be inserted on a slide?

Q. What is a template?

Q. What do you mean by customizing a template?

Q. Can you change background, colour, fonts, etc. of a template?

Evaluation

After explaining the chapter, let the students do the exercises given on Page 32 and 33 in the main course book as Assess Yourself. Tell them to solve the computational skill developing exercise as Coding Zone given on Page 34.

Take the students to the computer lab and let them practice the activity given in the Lab Activity section on Page 33 and 34 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

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.

4. Animation and Transition in PowerPoint

Teaching Objectives

Students will learn about

- ☞ Inserting Audio and Video Files
- ☞ Inserting SmartArt
- ☞ Animation
- ☞ Transition

Number of Periods	
Theory	Practical
2	3

Teaching Plan

Before starting the chapter, ask the students to read the comic given in page number 36 to understand the recap of the topic.

Explain to the students that transitions are used to determine how the presentation moves from one slide to the next.

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

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

Tell the students about the various categories of slide transitions available in PowerPoint.

Demonstrate the application of transitions to slides in a presentation.

Introduce animation as the feature that gives a moving effect to text and other objects on the slide.

Show to the students the steps involved in applying custom animation to various objects on a slide.

Tell the students the animation effects applied to different objects on a slide can be reordered.

Share with the students that running a presentation is called Slide Show.

Demonstrate to the students the various steps involved in running a slide show.

Ask the students to solve the exercise **Quiz Bee** given on page number 43.

Ask the students to solve the exercise **I Know** given on page number 41.

Extension

Ask the students some oral questions based on this chapter.

Q. What is an Animation?

Q. What is a Transition?

Q. How to add animation in a slide?

Q. How to add transition in a presentation?

Q. How to add audio in a presentation?

Q. How to add video in a presentation?

Evaluation

After explaining the chapter, let the students do the exercises given on Page 46, 47 and 48 in the main course book as Assess Yourself. Tell them to solve the computational skill developing exercise as Coding Zone given on Page 49.

Take the students to the computer lab and let them practice the activity given in the Lab Activity section on Page 48 and 49 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Divide the class into two teams. Ask one team to prepare presentation on different planets of the solar system. Use appropriate animation and transition effects.

5. Excel 2016 – An Introduction

Teaching Objectives

Students will learn about

- Excel 2016
- Starting Excel 2016
- Creating a New Workbook
- Working with Worksheet
- Saving a Workbook
- Exiting Excel 2016
- Uses of Excel 2016
- Components of Excel 2016 Window
- Entering Data in the Worksheet
- Opening a Workbook
- Closing a Workbook

Number of Periods	
Theory	Practical
2	3

Teaching Plan

Before starting the chapter, ask the students to read the comic given in page number 50 to understand the recap of the topic.

While teaching this chapter, tell the students that Excel 2016 is an application software that helps us to store and analyse data.

Tell the students that to enter data in a cell, simply click on the cell and enter data.

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

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 wrap** – 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.
- **Cell fills** – adding colours or shades in the cells.

Show to the students the steps involved in applying all of these formatting features on a worksheet.

Explain to the students that worksheet tab can be customized by changing its default name and colour.

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.

Familiarize the students with the various components of Excel 2016 window covering:

Title Bar, File Tab, Quick Access Toolbar, Ribbon, Formula Bar, Name Box, Worksheet Window, Worksheet Tab, Worksheet Tab Scrolling Buttons, Status Bar, Row, Column, Row and Column Heading Buttons, Cell, Active Cell, Mouse Pointer, Workbook and Cell Range.

Demonstrate to the students the steps to:

- Create a new workbook.
- Enter data in a worksheet.
- Adding a worksheet.
- Renaming a worksheet.
- Removing a worksheet
- Save a workbook.

Ask the students to solve the exercise **Quiz Bee** given on page number 54.

Ask the students to solve the exercise **I Know** given on page number 59.

Extension

Ask the students some oral questions based on this chapter.

Q. What is Excel 2016?

Q. What are the features of Excel 2016?

Q. Name any five components of Excel 2016.

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 exercises given on Page 59, 60 and 61 in the main course book as Assess Yourself. Tell them to solve the computational skill developing exercise as Coding Zone given on Page 62.

Take the students to the computer lab and let them practice the activity given in the Lab Activity section on Page 62 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to design their class time-table in Excel 2016.

6. Editing in Excel 2016

Teaching Objectives

Students will learn about

- Selecting a Range of Cells
- Undo and Redo Commands
- Deleting Cells, Rows Or Columns
- Copying the Data
- Autofill
- Changing the Column Width and Row Height
- Editing Cell Contents
- Deleting Cell Contents
- Inserting Cells, Rows Or Columns
- Moving the Data

Number of Periods	
Theory	Practical
2	3

Teaching Plan

Before starting the chapter, ask the students to read the comic given in page number 66 to understand the recap of the topic.

Tell the students that to enter data in a cell, simply click on the cell and enter data.

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

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:

- **Cell borders** – boundary around a cell or a series of cells.
- **Cell styles** – Pre-defined cell border, colour and formatting.
- **Cell fills** – adding colours or shades in the cells.

Show to the students the steps involved in applying all of these formatting features on a worksheet.

Explain to the students that worksheet tab can be customized by changing its default name and colour.

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.

Ask the students to solve the exercise **Quiz Bee** given on page number 70 and 71.

Ask the students to solve the exercise **I Know** given on page number 74.

Extension

Ask the students some oral questions based on this chapter.

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

Q. Define merging of cells.

Q. Define splitting of cells.

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?

Evaluation

After explaining the chapter, let the students do the exercises given on Page 76 and 77 in the main course book as Assess Yourself. Tell them to solve the computational skill developing exercise as Coding Zone given on Page 78.

Take the students to the computer lab and let them practice the activity given in the Lab Activity section on Page 79 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment 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

7. More on Scratch

Teaching Objectives

Students will learn about

- ☞ Variables in Scratch
- ☞ Controlling the movement of a Sprite
- ☞ Project: Chase the Starfish

Number of Periods	
Theory	Practical
2	3

Teaching Plan

Before starting the chapter, ask the students to read the comic given in page number 80 to understand the recap of the topic.

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

Tell the students what are variable using appropriate examples along with-

- Types of variables
- Creating variables

Explain the Sensing block to the students and the steps involve in the use of this block.

Bltocks	Functions
touching mouse-pointer ▼ ?	Checks if its sprite is touching the mouse-pointer, the edge, or another sprite. If the sprite is touching the selected object, the block returns a true value; if it is not, it returns 'false'. It is used with an if-then block.
touching color ?	Checks whether its sprite is touching a specified colour. If it is, the block returns 'true'. It is used with an if-then block.
ask What's your name? and wait	Makes an input box (with the specified text above it) and displays it at the bottom of the screen. The user can then enter text into it and submit it. The input is stored in an Answer block after that.
answer	Holds the most recent text entered with the Ask () and Wait block.
key space ▼ pressed?	Checks if the specified key is pressed. If the key is being pressed, the block returns 'true'; if it is not, it returns 'false'.

Also, show some programs or script for displaying the use of the same.

Ask the students to Create a project named as Chase the Starfish using different blocks.

Ask the students to solve the exercise **Quiz Bee** given on page number 84.

Ask the students to solve the exercise **I Know** given on page number 81.

Extension

Ask the students some oral questions based on this chapter.

Q. What is Scratch?

Q. What is a sensing block?

Q. What is a variable?

Q. What are different types of variables?

Evaluation

After explaining the chapter, let the students do the exercises given on Page 85 and 86 in the main course book as Assess Yourself. Tell them to solve the computational skill developing exercise as Coding Zone given on Page 87.

Take the students to the computer lab and let them practice the activity given in the Lab Activity section on Page 87 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

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

8. Creating Game in Scratch

Teaching Objectives

Students will learn about

- Adding a Backdrop to the Game
- Create a Sprite for the Game
- Code the Wheel Sprite
- Creating a Variable for the Game
- Adding Text to the Game
- Adding one More Sprite
- Code the Arrow1 Sprite
- Running the Game

Number of Periods	
Theory	Practical
2	3

Teaching Plan

Before starting the chapter, ask the students to read the comic given in page number 88 to understand the recap of the topic.

Define how to create a game in Scratch to the students.

Show the labelled steps to students for:

- Adding a backdrop to the game
- Adding text to the game
- Create a sprite for the game (Draw a circle for the wheel and Divide the circle into parts)
- Adding one more sprite
- Code the wheel sprite (Adding broadcast block)
- Code the Arrow1 sprite
- Creating a variable for the game (Adding block to Arrow1 and More Blocks)
- Running the game

Ask the students to solve the exercise **Quiz Bee** given on page number 89.

Ask the students to solve the exercise **I Know** given on page number 90.

Extension

Ask the students some oral questions based on this chapter.

Q. Write the steps for:

a. Adding a backdrop to the game
b. Adding text to the game
c. Create a sprite for the game
d. Adding one more sprite
e. Code the wheel sprite
f. Adding broadcast block
g. Code the Arrow1 sprite
h. Creating a variable for the game
i. Running the game

Evaluation

After explaining the chapter, let the students do the exercises given on Page 97 and 98 in the main course book as Assess Yourself. Tell them to solve the computational skill developing exercise as Coding Zone given on Page 99.

Take the students to the computer lab and let them practice the activity given in the Lab Activity section on Page 99 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to create a game for making a lucks draw after choosing a colour.

9. Computer Malware

Teaching Objectives

Students will learn about

- Malware
- Worms
- Ransomware
- Antivirus Software
- Virus
- Trojan Horse
- How can we Protect our Computers?

Number of Periods	
Theory	Practical
2	0

Teaching Plan

Before starting the chapter, ask the students to read the comic given in page number 101 to understand the recap of the topic.

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

Introduce computer virus as a program that can infect the system and/or duplicate itself reducing the storage space.

Share examples of some computer viruses with the students.

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

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.

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

Share the names of some commonly used antivirus programs.

Ask the students to solve the exercise **Quiz Bee** given on page number 104.

Ask the students to solve the exercise **I Know** given on page number 104.

Extension

Ask the students some oral questions based on this chapter.

Q. What is a malware?

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?

Evaluation

After explaining the chapter, let the students do the exercises given on Page 107 in the main course book as Assess Yourself. Tell them to solve the computational skill developing exercise as Coding Zone given on Page 109.

Take the students to the computer lab and let them practice the activity given in the Lab Activity section on Page 108 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

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

10. Internet and E-Mail

Teaching Objectives

Students will learn about

- What is E-Mail?
- Creating an E-mail Account
- Using an E-mail Account
- E-mail Address
- Components of an E-mail window

Number of Periods	
Theory	Practical
2	3

Teaching Plan

Before starting the chapter, ask the students to read the comic given in page number 110 to understand the recap of the topic.

While teaching this chapter, tell the students that the internet is a computer network that connects hosts and end systems throughout the world.

Introduce the concept of World Wide Web (WWW) with reference to basic terms covering web, web servers, posting/uploading, etc.

Explain to the students the process of how the web works.

Introduce web browser as software application designed to find hypertext documents on the web.

Show to the students the steps involved in the process of launching the web browser.

Tell the students about Uniform Resource Locator or URL (unique internet address) and their use while navigating on internet.

Make the students recall E-mail as the process of exchanging messages electronically through communications network by using a computer.

Share with the students the advantages and disadvantages of e-mail.

Explain the components of an e-mail address to the students.

Demonstrate in detail the steps involved in:

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

Ask the students to solve the exercise **Quiz Bee** given on page number 117.

Ask the students to solve the exercise **I Know** given on page number 112.

Extension

Ask the students some oral questions based on this chapter.

Q. What is World Wide Web?

Q. Define web server.

Q. How the web works?

Q. Expand URL?

Q. Define an e-mail.

Evaluation

After explaining the chapter, let the students do the exercises given on Page 117, 118 and 119 in the main course book as Assess Yourself. Tell them to solve the computational skill developing exercise as Coding Zone given on Page 119.

Take the students to the computer lab and let them practice the activity given in the 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.

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.

11. Evolution of Artificial Intelligence

Teaching Objectives

Students will learn about

- ☞ Artificial Intelligence
- ☞ Evolution of Artificial Intelligence
- ☞ From 2010 to present

Number of Periods	
Theory	Practical
1	0

Teaching Plan

Before starting the chapter, ask the students to read the comic given in page number 120 to understand the recap of the topic.

Define the term Artificial intelligence to the students with proper examples.

Demonstrate the evolution of AI with examples:

- 1950s
- 1970s
- 1980s
- 2000s

Show the examples to the students for AI devices and development from 2010 to present time, i.e.,

- Kinect for Xbox 360
- Siri
- Cortana
- Alexa
- Sophia
- Google Home

Ask the students to solve the exercise **Quiz Bee** given on page number 124.

Ask the students to solve the exercise **I Know** given on page number 122.

Extension

Ask the students some oral questions based on this chapter.

Q. Define Artificial Intelligence.

Q. Define the following year for the evolution of AI:

a. 1950s

b. 1970s

c. 1980s

d. 2000s

Q. Define the following:

a. Kinect for Xbox 360

b. Siri

c. Cortana

d. Alexa

e. Sophia

f. Google Home

Evaluation

After explaining the chapter, let the students do the exercises given on Page 125 and 126 in the main course book as Assess Yourself. Tell them to solve the computational skill developing exercise as Coding Zone given on Page 127.

Take the students to the computer lab and let them practice the activity given in the Lab Activity section on Page 127 in the main course book. This will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to learn about the AI devices they use in their day-to-day lives.