

Touchpad Modular Ver 2.0 Class-4

1. The Computer—An Overview

Teaching Objectives

Students will learn about

Working of a Computer

Processing Device

Teaching Plan

While teaching this chapter, tell the students that a computer system is made up of two types of parts-Hardware and Software.

Tell the students about the working of computer:

Share with the students that the first step is input, the second step is process and the third step is output.

Share with the students that this cycle of working of machines is called Input-Process-Output cycle or IPO cycle.

Introduce the term Input as giving instructions to the computer.

Tell the students that keyboard and mouse are used as input devices in a computer.

Introduce the term Process as action performed by computer on the instructions given by us.

Tell the students that Central Processing Unit (CPU) is processing device of a computer and is called Brain of the computer.

Introduce the term Output as result given by the computer after processing.

Tell the students that monitor and printer are used as output devices in a computer.

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

Extension

Ask the students some oral questions based on this chapter.

- Q. What does IPO stand for?
- Q. What is Input-Process-Output cycle?
- Q. Define Input / Process/ Output.

- Q. Name two input / output devices.
- Q. Which part of the computer is called Brain of the computer?
- Q. Why is CPU called brain of the computer?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 11 and 12 of the main course book as Exercise.

In Creative Assignment, activity like In The Lab given on Page 12 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Show some more machines with input and output to the students and ask the students to arrange these in correct order of the IPO cycle.

2. Personalizing Windows 10

Teaching Objectives

Students will learn about

□ Getting Started with Windows 10 □ Using the Computer Icon

File/Folder Creating a New Folder

□ Creating a New File □ Opening a File/Folder

Shortcut Menu

Teaching Plan

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 This PC icon. Tell the students about File and Folder.

Demonstrate to the students the steps to:

Creating a new folder.

Creating a new file.

Opening a file/folder.

Tell the students about Shortcut menu.

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

Extension

Ask the students some oral questions based on this chapter.

- Q. What is Windows 10?
- Q. Name the components of Windows 10 desktop.
- Q. Define Desktop Background.
- Q. What are icons?
- Q. In how many parts is the Start menu divided?
- O. What is a file?
- O. What is a folder?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 17 and 18 of the main course book as Exercise.

In Creative Assignment, activity In The Lab given on Page 18 of the main course book 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.

3. Introduction to Word 2016

Teaching Objectives

Students will learn about

■ Uses of Word 2016

Parts of Word 2016

Saving a Document

Printing a Document

Starting Word 2016

₩ Working with Word 2016

Opening a Saved Document

Teaching Plan

While teaching this chapter, tell the students that Microsoft Word is word processing software in the category of application software.

Make the students aware of the various uses of Word 2016.

Demonstrate to the students the steps involved in starting Word 2016.

Show the students the various components of Word 2016 window covering Title Bar, Quick Access Toolbar, Ribbon, Rulers, Horizontal and Vertical Scroll Bars, Text / Document Area and Status Bar.

Familiarize the students that while working on Word 2016, some frequently used keys other than alphabet and number keys are Spacebar, Enter, Delete and Backspace.

Demonstrate to the students the steps involved in:

- Creating a new file
- Selecting text
- Inserting text
- Undo/Redo
- Cutting/Copying and Pasting text
- Spell check
- Thesaurus
- Saving a document
- Opening a saved document
- Printing a document
- Closing Word 2016

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

Extension

Ask the students some oral questions based on this chapter.

- Q. What is Microsoft Word?
- Q. What are the various uses of Word 2016?
- Q. Name some important components of Word 2016 window.
- Q. Which company developed Word?
- Q. What are the shortcut keys to open / save / print a document?
- Q. What are the various ways in which the user can exit from Word 2016?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 26 and 27 of the main course book as Exercise.

In Creative Assignment, activity In The Lab given on Page 27 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to create a Word document on Myself. The students should take a printout of the document and paste it in their computer notebook / practical file.

4. Formatting in Word 2016

Teaching Objectives

Students will learn about

Changing Font, Font Size and Font Color Highlighting Text



Bold, Italic and Underline

Format Painter

Applying Border and Shading

Find and Replace

Applying Drop Cap Effect

Applying Text Effects

Changing Alignment

Changing Case

Adding Bullets and Numbering

Teaching Plan

While teaching this chapter, tell the students that formatting the text means changing the appearance and arrangement of the text.

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

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

Introduce highlighting feature of Word as marking important text and placing a colored rectangle over it.

Show to the students the steps involved in highlighting text.

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

Tell the students that Word has some in-built text styles which can be applied to the selected text.

Demonstrate to the students the steps of:

Applying text effects

• Changing alignment

Format Painter

Applying borders and shading

Introduce Change Case feature as changing text to upper, lower and other common capitalizations.

Show the students how to change case of the selected text.

Introduce Find and Replace as to find whether a particular word or phrase appears in a document or not.

Demonstrate to the students the steps to find or replace a word or phrase.

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.

Introduce the Drop Cap effect as when the first letter of the first word of a paragraph is bigger than the rest of the text.

Demonstrate to the students the steps to apply Drop Cap effect.

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

Extension

Ask the students some oral questions based on this chapter.

- Q. Define formatting a text.
- O. What is the default font / font size of text in a MS Word 2010 document?
- Q. What do you mean by highlighting text?
- 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 does Change Case option do?
- Q. What are bullets?

O.nWhen are bullets or numbers added to text?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 33 and 34 of the main course book as Exercise.

In Creative Assignment, activity In The Lab given on Page 34 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to collect write a paragraph on My Favourite Sport in MS Word 2010 applying various formatting features to make the paragraph attractive.

5. Graphics and Tables in Word 2016

Teaching Objectives

Students will learn about

ShapesSymbol™ Table

Working with Tables

Teaching Plan

While teaching this chapter, tell the students that although Word 2016 is a word processor, yet it allows three types of graphics to work upon – Shapes, WordArt and Pictures.

Familiarize the students with various categories of Shapes under Illustrations group of Home tab explaining use of Lines, Basic Shapes, Flowchart, Stars and Banners and Callouts.

Demonstrate to the students the steps involved in the process of:

Drawing a shapeInserting text

Tell the students the various types of modifications that can be done on the inserted shape – changing outline color, changing fill colour, adding shape effects like 3-D rotation and bevel.

Introduce WordArt as application to create text effects which are not possible through text formatting.

Demonstrate to the students the steps to:

- Insert WordArt in a document
- Insert Symbols (punctuations or special characters not found on keyboard)



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 in a Word document.

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

Demonstrate to the students the steps to:

- Add Rows or Columns
- Deleting Cells, Rows, Columns and Table
- Changing Column Width

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, Show to the students the steps to split a cell. (See Suggested Activities also)

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

Tell the students that Word 2016 allows to apply borders to tables and cells as well as to shade the cells and table.

Make the students understand that Word 2016 offers some built-in formats as Table Styles to apply to a table.

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

Extension

Ask the students some oral questions based on this chapter.

- Q. Name any three categories of Shapes in MS Word 2010.
- Q. What do you mean by formatting a shape?
- Q. What does Add Text option do?
- Q. What does Bevel do?
- Q. What is ClipArt?
- Q. Define Symbols.
- Q. What is a table?
- Q. Define a cell.
- Q. What is the shape of the mouse pointer while selecting a cell / row / column / table?
- 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 2016?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 44 and 45 of the main course book as Exercise.

In Creative Assignment, activity In The Lab given on Page 45 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to write a paragraph in Word 2016 on 'Festivals of India'. The paragraph must be supported with relevant pictures.

6. Page Formatting and Mail Merge in Word 2016

Teaching Objectives

Students will learn about

■ Header and Footer
■ Column and Column Break

Page Break and Line Break
Tabs

□ Indentation □ Page Margin
□ Page Orientation □ Page Size

Mail Merge

Teaching Plan

While teaching this chapter, tell the students that Word 2016 is an application software that can help us to create attractive and presentable documents.

Show to the students the main course book where book name and chapter name are appearing at the bottom of each page. Tell the students that this is called Footer of a page.

Make them understand that if the same or some other text appears on top of each page, it is called Header.

Demonstrate the steps involved in adding header and footer to a text document and tell them the various type of information can be shown as header and footer.

Explain the students about Column and Column Break as Word 2016 document is written into single column.

Tell the students the steps involved in inserting more than one columns.

Demonstrate the steps involved in inserting Page Break.

Introduce Tabs move the cursor one-half inch by default to the students.

Tell the students that Indentation is the distance of the text from either the left or the right margin. Explain the steps involved in indenting the text.

Tell the students that page margin is the white space all around the printed area of the paper.

Make the students understand how they can modify page margin settings for their document.



Introduce to the students the concept of orientation as the side of the paper along which the content of the document will be printed.

Tell the students about different types of orientations.

Show to them the steps involved in changing the page orientation in a document.

Introduce to the students Mail Merge as the feature used to create personalized letters to be sent to many persons.

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

Ensure that the scope of Teacher's Corner 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 page orientation?
- Q. What are page margins?
- O. What is the difference between header and footer in a document?
- Q. Which tab is used to add header/footer to a document?
- Q. What do you mean by Mail Merge?
- Q. How is mail merge helpful?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 51 and 52 of the main course book as Exercise.

In Creative Assignment, activity In The Lab given on Page 52 of the main course book 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.

7. Introduction to Internet

Teaching Objectives

Students will learn about

Uses of internetInternet terms

Requirements for an internet connection

Internet Explorer

Teaching Plan

While teaching this chapter, tell the students that Internet is a network in which millions of computers are connected to each other to share information and is an abbreviation of International Network.

Explain to the students the various uses of internet.

Share with the students the various requirements for an internet connection covering computer, telephone/cable line, modem/network card, software and company providing the connection.

Introduce the students to common internet terms like Website (collection of related web pages), Web Page (electronic page on a website), Home Page (main or first page of website), World Wide Web (largest collection of websites) and Web Browser (software to open websites).

Familiarize the students with the most common web browser, Microsoft Edge and its components covering Title Bar, Menu Bar, Toolbar and Address Bar.

Make the students understand the use of common tools on the toolbar covering Back, Forward, Refresh and Stop buttons.

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

Extension

Ask the students some oral questions based on this chapter.

- O. What is internet?
- Q. What are the uses of internet?
- Q. What are the requirements for an internet connection?
- Q. Define Website / Web Page / Home Page / World Wide Web / Web Browser.
- Q. What does WWW stand for?
- O. Which is the most common Web Browser?
- Q. Define Title Bar / Menu Bar / Toolbar / Address Bar.
- Q. What is the use of Back / Forward / Stop / Refresh button in a web browser?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 56 and 57 of the main course book as Exercise.

In Creative Assignment, activity In The Lab given on Page 57 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to paste a picture of Internet Explorer in their computer notebook / practical file and label its components and tools discussed in the chapter.

8. More Game of Google Blockly

Teaching Objectives

Students will learn about

Bird Game

□ Turtle Game



Touchpad MODULAR (Version 2.0)-IV (Lesson Plan)

Teaching Plan

While teaching this chapter, tell the students that they will learn about next games in Blockly.

Introduce to the students with Bird game and tell them about its uses.

Demonstrate the steps involved to play the Bird game.

Explain the students about the Turtle game and the uses of this game.

Tell the steps involved to play this game.

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

Extension

Ask the students some oral questions based on this chapter.

- Q. Which game uses Rotate the pen?
- Q. What does Bird game teaches?
- Q. What are the uses of Bird game?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 65 to 67 of the main course book as Exercise.

In Creative Assignment, activity like In The Lab given on Page 67 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity