

Chapter 1

A. Fill in the blanks:

1. Physical
2. Bits
3. Software, Hardware
4. CPU

B. True or False:

1. True
2. False
3. False
4. False

C. Do it yourself.

D. Application based question:

1. She can use Printer for the same and it is an output device.

E. Tick mark:

1. An input
2. Byte
3. Braille Embosser
4. 3D Printer
5. Gigabytes

F. Answer the following:

1. Software and Hardware are the two major components of a Computer System.

The physical parts of a computer system are called Hardware and the term 'Software' refers to the set of instructions that tells the computer about the tasks to be performed and how these tasks are to be performed.

2. The four main characteristics of computer are:

- (a) High Speed
- (b) Accuracy
- (c) Storage Capability
- (d) Diligence

3. We will check the storage capacity of a Hard Disk by performing a double click on the Computer icon available on the Desktop. A window will be opened that displays icons of all hard disk. We can see the size of our hard disk by making a right click on its icon and selecting the Properties option from the Context menu.

4. (a) **OCR:** OCR stands for Optical Character Recognition. It is a type of Scanner which scans handwritten or printed text on paper and converts it into actual text which can be edited using a word processor.

(b) **Smart Card Reader:** Smart card Reader is a special machine that can easily read smart card information and verify it with the already stored information inside the computer system.

(c) **3D Printer:** A 3D Printer is a computer-aided manufacturing device that creates three dimensional objects from a digital file.

5. The use of Computers in the following fields are as follows:
- (a) **Banks:** Computers are used in Banks to create and maintain the accounts of customers.
 - (b) **Healthcare:** In the healthcare sector, computers are used to diagnose complicated diseases with more accuracy.
 - (c) **Education:** In the Education sector, computers are effectively used as teaching aids.
 - (d) **Entertainment:** In the Entertainment sector, computers are used for animation, graphical and sound technologies for movies.

Chapter 2

A. Fill in the blanks:

- | | | | |
|---------------|-------------|------------|---------------|
| 1. Program | 2. Four | 3. Machine | 4. Assemblers |
| 5. High Level | 6. Assembly | 7. Syntax | 8. Off, On |

B. True or False:

- | | | | |
|---------|----------|---------|----------|
| 1. True | 2. False | 3. True | 4. False |
| 5. True | 6. False | 7. True | 8. False |

C. Application based questions:

1. She must have used either C, C++ or Java.
2. He is using Fourth Generation Language.

D. Tick mark:

- | | |
|-------------------|------------------|
| 1. Source Program | 2. Interpreter |
| 3. Object Program | 4. John W. Tukey |

E. Answer the following:

1. Machine language, a first generation language is the only language that a computer understands.
2. Assembly language uses symbolic codes whereas machine language is completely based on Binary language.
3. The important features of High Level language are:
 - (a) Simple and User friendly Language
 - (b) Machine Independent Language
4. An Interpreter translates the program line by line whereas a compiler translates the whole program at once.
5. The three characteristics of Fourth Generation Language are:
 - (a) Highly User friendly and independent of any Operating System.
 - (b) Very high speed of execution.
 - (c) The process of software development is time reducing and cost saving.

Chapter 3

A. Fill in the blanks:

1. Organise
2. Copying
3. Windows 10
4. Send, Receive
5. Pictures

B. True or False:

1. False
2. True
3. False
4. True
5. False

C. Application based questions:

1. She will use Microphone for the same.
2. The best way to search her project is to type the project name in the Start menu Search Box.

D. Tick mark:

1. Disk Cleanup
2. Aero Peek
3. Jump List

E. Answer the following:

1. Windows Media Player runs and organises digital media files available in the Computer's memory.
2. Ripping a CD refers to the process of copying data from a CD to a Computer whereas Burning a CD refers to a process of copying data from computer to CD.
3. Windows Media Center is used to watch TV, movies and other video content on our PC.
4. In Windows 7, we can display two application windows side by side using the following steps:
 - (a) Open any two applications one by one. Make any one application window active.
 - (b) Right click anywhere on the blank portion of the Taskbar.
 - (c) Click on the Show windows side by side option from the shortcut menu.

By doing this, both application windows will be displayed side by side.

5. The term 'Disk Cleanup' refers to a process of removing unnecessary program files from the Hard disk of a Computer System.

Chapter 4

A. Fill in the blanks:

1. Main Document
2. Tab
3. Field
4. Tick
5. Right

B. True or False:

1. False
2. True
3. True
4. True
5. False

C. Application based questions:

1. She will add the contact details of these new clients in the Data Source.
2. (i) Create
(ii) This option pulls the information from the Outlook contacts list into our document.

D. Tick mark:

1. Record
2. Merge field
3. Type a new list
4. Pamphlets
5. Mailings tab

E. Answer in one word or a sentence:

1. Data Source or Mailing List
2. Mailings tab
3. Print Documents option
4. Field

F. Answer the following:

1. The term 'Mail Merge' refers to a process of sending the same letter to a number of people at different addresses.
2. Main Document and the Data Source are combined while using the Mail Merge feature.
3. Data Source consists of a mailing list. The data is organised in a tabular form along with the field names.
4. The Main Document contains the text that we wish to send to the Recipients.
5. The main steps involved in Mail Merge are creating a Mail merge document, creating Recipient's list and inserting Merge fields.
6. We should follow the given steps to create a new Recipient list for the main document:
 - (a) Go to the Mail Merge task pane and select Type a new list radio button under 'Select Recipients' section. After that, click on the Create button.
 - (b) The New Address List dialog box appears on the screen. Click on the Customize Columns button to remove or add fields.
 - (c) Enter data in the respective fields and click on the New Entry button.
 - (d) Enter the records and click on OK button.
 - (e) A Save Address List dialog box will be opened. Type a name in the File name: text box and click on the Save button.

Chapter 5

A. Fill in the blanks:

- | | | |
|-----------------|----------------|-----------------|
| 1. Insert Table | 2. Pen Color | 3. Shading |
| 4. Plot Area | 5. Data Series | 6. Draw Borders |

B. True or False:

- | | | | |
|----------|----------|---------|----------|
| 1. False | 2. True | 3. True | 4. False |
| 5. True | 6. False | 7. True | |

C. Application based questions:

1. He should use Title and Content slide layout for the same.
2. She should change the chart layout for the same.

D. Tick mark:

- | | | |
|----------------|-----------|--------------|
| 1. Cell | 2. Legend | 3. Alignment |
| 4. Table Tools | 5. Insert | 6. Six |

E. Answer the following:

1. We can insert a table in a presentation using the following two methods:

Method I: Go to the Insert tab and select Table> Draw Table option.

Method II: Go to the Table option on the Insert tab. A menu will appear.

Drag the mouse over the table grid to select the number of rows and columns that we want in the slide.

2. The step by step procedure to add new rows in a table are:
 - (a) Place the cursor in a table cell where we want to insert new rows.
 - (b) Click the right mouse button. A shortcut menu appears.
 - (c) Select the Insert option and click either on the Insert Rows Above or Insert Rows Below sub-option.
3. We can apply border to a table using the following steps:
 - (a) Select the cells/rows/columns that we want to modify.
 - (b) Go to the Design tab and click on the drop down arrow of Borders button in the Table Styles group.
 - (c) Select the All Borders option from the drop-down menu. The border will be applied on the selected cells/rows/columns.

To change the border color, follow the given steps:

 - (a) Select the table and go to the Design tab.
 - (b) Click on the Pen Color button in the Draw Border group. Choose the desired color from the color palette.
 - (c) The mouse pointer changes to a pencil shape. Drag the

mouse on the cell border and release the button. The border color of the selected table will be changed.

4. Align Text Left, Center, Align Text Right, Align Top, Center Vertically and Align Bottom are the six alignment buttons present on the Layout tab.
5. Category axis, also known as X-axis or Horizontal axis, is used to plot the subject of analysis whereas Value axis or Y-axis is used to plot the values.
6. Chart is an effective way to display data in a graphical and pictorial form.
The main components of a Chart are:
 - (a) Chart Area
 - (b) Category Axis
 - (c) Value Axis
 - (d) Data Series
 - (e) Category Name
 - (f) Plot Area
 - (g) Legend
 - (h) Chart Title
 - (i) Gridlines
7. We can delete the default data of a datasheet by moving the mouse pointer to the Blank button i.e., upper left corner of the column indicators and click on it. The entire datasheet will be selected. After selection, press the Delete key.
8. A method to change the Chart Type are as follows:
 - (a) Select the Chart and click on the Design tab under Chart tools.
 - (b) Click on the Change Chart Type button in the Type group. The Change Chart Type dialog box will appear. Select any chart type and click on OK button. The chart will change accordingly.

Worksheet 1

A. Fill in the blanks:

- | | | |
|--------------|------------|--------------|
| 1. Jump List | 2. Compute | 3. C++, Java |
| 4. Six | 5. Right | |

B. True or False:

- | | | |
|----------|----------|---------|
| 1. False | 2. False | 3. True |
| 4. False | 5. True | |

C. Tick mark:

1. Cell
2. Breaking down in small parts
3. Legend
4. Source Program
5. Taskbar

D. Answer in one word:

1. Disk Cleanup
2. MS PowerPoint
3. Horizontal Axis
4. Mail Merge
5. Binary

E. Answer the following:

1. Machine Language is the only language that a computer understands. It is expressed in binary form i.e, 0 and 1.
2. Burning a CD refers to a process of copying data from a computer to a CD.
3. The text that we wish to send to the recipients is the Main Document in Mail Merge.
4. Three new tabs will appear on the Ribbon when we insert a new chart in a presentation. These tabs are Design tab, Layout tab and Format tab.
5. The three important applications of Computer are:
 - (a) In the Research sector, computers are used by Scientists to perform complex calculations and data analysis with precision and accuracy.
 - (b) In the Education sector, computers are effectively used as teaching aids in classrooms.
 - (c) In the Banks, computers are used to create and maintain customer accounts.

F. Write the correct chart components:

1. Gridlines
2. Value Axis
3. Data Series
4. Category Name
5. Plot Area
6. Legend

Chapter 6

A. Fill in the blanks:

1. Transitions
2. Text, Objects
3. Action Button
4. Microphone
5. From Beginning
6. Play

B. True or False:

1. True
2. True
3. False
4. True
5. False
6. True
7. False

C. Application based questions:

1. He should use Objects option for the same which is available under the Insert tab.
2. She must use the Microsoft Clip Gallery option for completing the task.

D. Tick mark:

1. Slide Show
2. Animation
3. .wav
4. Animations

E. Answer the following:

1. Animation refers to the process of moving objects like text, graphics, charts in a slide. It is helpful to highlight important points while delivering a presentation.
2. The process of changing one slide to another during the Slide Show View is called Transition.
3. We should follow the given steps to insert own sound in our Presentation:
 - (a) Select the slide where we want to insert the recorded sound.
 - (b) Go to the Insert tab and select Record Audio option from the Audio drop down menu which is available under the Media group.
 - (c) Click on the Record button to start recording and click on the Stop button when we finish recording. Click on OK button.
 - (d) The recorded sound file will get inserted in the slide.
4. Action buttons are built-in button shapes that we can add to a presentation and set to link to another slide, play a sound, or perform some other actions.

Chapter 7

A. Fill in the blanks:

- | | | |
|----------|-------------------|------------------|
| 1. Three | 2. Merge & Center | 3. Formula |
| 4. Sheet | 5. Column | 6. Tab Scrolling |
| 7. F12 | | |

B. True or False:

- | | | | |
|----------|---------|----------|---------|
| 1. False | 2. True | 3. False | 4. True |
| 5. False | 6. True | | |

C. Application based questions:

1. She should type the new name 'Time Table' by double clicking on the Sheet tab and press Enter key.
2. He should use the Autosum option to calculate the expenses and perform a subtraction option on the total expenses and total money.

D. Tick mark:

- | | | |
|------------|-----------------|------------|
| 1. AutoSum | 2. Left Aligned | 3. 1048576 |
| 4. Name | 5. Equal to | 6. Three |

E. Answer the following:

1. Microsoft Excel is one of the most popular spreadsheet software. It is widely used to perform mathematical calculations.

2. A Workbook is like a notebook which consists of a number of pages whereas worksheets in a Workbook are like pages of a notebook.
3. A cell is an intersection of a column and a row in a Worksheet. In MS-Excel, a cell can contain upto 32767 characters.
4. The formula bar is a bar that shows the data and formulas that we have entered in an active cell. It is different from Name box in terms of data shown i.e, Name box displays the location of the cell pointer.
5. We can enter three types of data in an Excel worksheet which are as follows:
 - (a) **Numbers:** Numbers are values that consist of numerals from 0 to 9 and the special characters. By default, numbers are right aligned in a cell.
 - (b) **Text:** Text data may contain alphabets, numbers, spaces and special characters. By default, text data is left aligned in a cell.
 - (c) **Formulae:** A formulae is a mathematical equation involving number values, operators and cell addresses used for performing calculations on a worksheet.
6. We should follow the given steps to rename a Worksheet:
 - (a) Double click the Sheet tab that we want to rename. It will be highlighted.
 - (b) Type a new name and press the Enter key.

Chapter 8

A. Fill in the blanks:

- | | | |
|------------------|--------|-------------|
| 1. Format | 2. F4 | 3. Ctrl+F10 |
| 4. Cancel, Enter | 5. End | 6. Space |

B. True or False:

- | | | | |
|----------|----------|---------|---------|
| 1. False | 2. False | 3. True | 4. True |
| 5. False | 6. False | 7. True | |

C. Application based questions:

1. She should use Insert Sheet Columns option from the Insert drop down button in the Cells group on the Home tab.
2. She should use Autofill method for the same.

D. Tick mark:

- | | | | |
|-----------|---------------|----------|---------|
| 1. Ctrl+A | 2. Paste | 3. Ready | 4. Ctrl |
| 5. Ctrl+Z | 6. Apostrophe | | |

E. Answer in one word or one sentence:

1. To clear the contents of a cell.

2. F2

3. Using the space between Date and Time.

F. Answer the following:

1. We should follow the given steps to make modification in cell contents using the Edit mode:
 - (a) Select the cell and make a double click inside the cell. The insertion point will blink within the cell.
 - (b) Position the pointer at the desired place and change the contents.
 - (c) Press the Enter key. The changes will be entered in the current cell.
2. We can insert the multiple columns in a worksheet by selecting the same number of columns that we want to insert.
3. Undo command is used to undo the last action performed on a Worksheet whereas Redo command is used to quickly reverse the last action that we have done using Undo command.
4. We will select a range and non-adjacent cells in a worksheet by making the cells active and hold down the Ctrl key while we select the other cells.
5. We should follow the given steps to move data in a Worksheet:
 - (a) Select a cell or a range of cells. Position the mouse pointer at the edge of the selected cells.
 - (b) The pointer changes from a black cross symbol to a move pointer symbol.
 - (c) Drag the selected cell or range of cells to a new destination and release the mouse button. The data will be moved to a new location.
6. The two methods for copying data in a worksheet are:

Method I :

 - (a) Select the cell or a range of cells that we want to copy.
 - (b) Click on the Copy button in the Clipboard group. The moving dashed line will appear around the selected cells.
 - (c) Go to the cell location where we want to copy. Click on the Paste button in the Clipboard group. The text will be copied to a new or desired location.

Method II:

 - (a) Select the cell or a range of cells that we want to copy.
 - (b) Press Ctrl+C key combination. The moving dashed line will appear around the selected cells.
 - (c) Go to the cell location where we want to copy. Press Ctrl+V key combination. The text will be copied to a new or desired location.

7. Autofill is the easiest method to fill data in the cells automatically. We can use it in a Worksheet by follow the given steps:

- (a) Type any week day in a cell and position the Pointer at the lower right corner of the cell.
- (b) The mouse pointer changes into a thin black cross. Hold down the left mouse button and drag the fill handle up to the cells that we want to be filled in.
- (c) Release the button.

G. Look at the cells:

1.	Formula in C2	=A2*B2
2.	Formula in C3	=A3-B3
3.	Formula in C4	=A4/B4

Chapter 9

A. Fill in the blanks:

1. Hypertext
2. Style
3. Value
4. Container
5. Line Break

B. True or False:

1. True
2. False
3. True
4. False
5. False

C. Application based questions:

1. She will use the following syntax to set a background image on a webpage:
Background-image : value
Where value = URL(Path of the school image)
2. He will use HTML tag and CSS width or height properties for the same.

D. Tick mark:

1. <p>
2. Text Editor
3. <HR>
4. CSS
5. Declaration

E. Answer the following:

1. HTML stands for HyperText Markup Language. It is the most widely used language to design web contents for the Internet.
2. Tags: Tags are the special keywords enclosed between the angle brackets. They contain elements which define how the information on a web page is displayed.
Attribute: An Attribute is the property that provides additional information about an HTML element. It enhances the functionality of a tag.

3. An HTML element consists of an ON tag, content and an OFF tag.

The two types of HTML element are:

- (a) Container Elements: Container elements are those elements that include both ON and OFF tags. For example, <HTML>, <TITLE>
 - (b) Empty Elements: Empty elements are those elements that contain only ON tag. These elements do not enclose any data; instead they do some function on their own. For example,
 tag.
4. Heading tag is used to define different heading levels in an HTML document. It is basically used to emphasize the text. In HTML, a Paragraph tag is denoted by <P>, used to display a long piece of text on a web browser.
5. CSS is a style sheet that provides the set of style rules for defining the layout of HTML documents. Using CSS, we can control the color of the text, the style of fonts, the spacing between paragraphs, background images as well as a variety of other effects. The various methods to apply CSS in the HTML document are:
- (a) Inline Method
 - (b) Internal or Embedded Style Sheet
 - (c) External Style Sheet

Chapter 10

A. Fill in the blanks:

- 1. Case Sensitive
- 2. Computer Program
- 3. Guido Van Rossum
- 4. Reuse
- 5. Reddit

B. True or False:

- 1. False
- 2. False
- 3. True
- 4. True
- 5. False

C. Application based questions:

- 1. /t
- 2. The two features of Object Oriented Programming languages are:
 - (a) Concepts of Classes and Objects
 - (b) Code Reusability

D. Tick mark:

- 1. 1991
- 2. IDLE
- 3. Programming
- 4. Interactive
- 5. Classes

E. Answer the following:

1. A set of instructions that allows the computer to perform a specific task is called a computer program.
2. Computer programs are written in a language that the computer understands and can execute are called Programming languages.
3. Python is an interpreted, object-oriented, high level programming language for general purpose programming. It has a large library that provides a rich set of modules and functions for rapid application development.
4. In the Interactive mode, we can type the command in the window and the Python interpreter will execute the command and give us the result immediately whereas Script mode is used to write and save the programs in the form of a file.

Chapter 11

A. Fill in the blanks:

- | | | |
|----------------------------|-----------------|---------------|
| 1. Artificial Intelligence | 2. Intelligence | |
| 3. Learning | 4. Bias | 5. Algorithms |

B. True or False:

- | | | |
|----------|---------|----------|
| 1. False | 2. True | 3. False |
| 4. False | 5. True | |

C. Application based questions:

1. The decision based on human intelligence can be biased whereas the decision making capability of AI will be free from any bias.
2. The world of Artificial Intelligent machines is so wide. Some AI based machines are Chatbots, Voice Assistants etc.

D. Tick mark:

1. Problem Solving
2. Nature
3. All of these
4. Programming with AI
5. Both (b) and (c)

E. Answer the following:

1. Artificial Intelligent machines are able to carry out certain tasks that require human beings to use their intelligence.
2. The main objective of Artificial intelligent machines is to aid human capabilities and help us make advanced decisions.
3. After the existence of artificial intelligence technology, programming can be differentiated in two ways:

- (a) Programming with AI
- (b) Programming without AI

The main difference between these two are as follows:

S.No.	Programming With AI	Programming Without AI
1.	A computer program with AI can answer generic questions it is meant to solve.	A computer program without AI can answer the specific questions it is meant to solve.
2.	These programs can absorb new modifications by putting highly independent pieces of information together.	Modification in the program leads to change in the Programming structure.

4. The two merits of Artificial Intelligence are:
- (a) Artificial Intelligent Machines are able to perform the job continuously without getting bored or distracted.
 - (b) AI machines have a great power to detect smart card based system transactions fraud within a millisecond.
- In addition to merits, some demerits of AI are :
- (a) Artificial Intelligent machines are complex in nature.
 - (b) AI machines cannot be improved with experience.
5. The difference between Human Intelligence and Artificial Intelligence are:
- (a) Nature: Human Intelligence is natural whereas artificial intelligence is artificial in nature.
 - (b) Decision-making: Human decision making can be biased whereas the decision making capability of AI will be free from any bias.

Worksheet 2

A. Fill in the blanks:

- 1. Workbook 2. .WAV 3. F8
- 4. Playhead 5. Web Browsers

B. True or False:

- 1. True 2. True 3. True
- 4. True 5. False

C. Tick mark:

- 1. Animations 2. Merge & Center 3. Pencil
- 4. Button 5. F4

D. Answer in one word or a sentence:

1. Esc key
2. 1048576 rows and 16,384 columns.
3. Ctrl +Y
4. MS Excel
5. <HR>

E. Answer the following:

1. Animation refers to the process of moving objects like text, graphics, charts in a slide. It is helpful to highlight important points while delivering a presentation.
2. A Workbook is like a notebook which consists of a number of pages whereas worksheets in a Workbook are like pages of a notebook.
3. Autofill is the easiest method to fill data in the cells automatically. We can use it in a Worksheet by follow the given steps:
 - (a) Type any week day in a cell and position the Pointer at the lower right corner of the cell.
 - (b) The mouse pointer changes into a thin black cross. Hold down the left mouse button and drag the fill handle up to the cells that we want to be filled in.
 - (c) Release the button.
4. The main objective of Artificial intelligent machines is to aid human capabilities and help us make advanced decisions.
5. Tags: Tags are the special keywords enclosed between the angle brackets. They contain elements which define how the information on a web page is displayed.

Attribute: An Attribute is the property that provides additional information about an HTML element. It enhances the functionality of a tag.

F. Match the following:

S.No.	Column A	Column B
1.	Formula	Equal to Sign
2.	Insert a keyframe	Ctrl+F9
3.	To minimize the worksheet	F6
4.	Redo action	Ctrl+Y

G. Write the function of the following tools:

1. Stop
2. Record
3. Pen
4. Video