1. Computer Languages

Answers of Book

DO AND LEARN!

1. Fill in the blanks.

Ans. (a) The language that a computer can understand is called a **machine language**.

(b) Computer languages can be divided into **four** categories.

(c) The symbol __**0**__ stands for the absence of an electric pulse and __**1**__ stands for the presence of an electric pulse in a binary code.

(d) Translating programming languages into binary is known as **translator system**.

(e) Artificial intelligence is an example of __**4th**__ generation language.

2. Write True (T) or False (F).

Ans. (a) Prolog is an example of a procedure-oriented language. F

(b) 4GLs are designed to reduce the overall time, effort and cost of software development. T

(c) Interpreters convert code into machine code when the program is run. T

(d) High-level computer languages use formats that are machine-dependent. F

(e) Machine language is the lowest and most elementary level of programming language. T

3. Tick (✓) the correct option.

Ans. (a) **High Level language** is also known as 'Symbolic Programming Language.'

　(i) Low level language　　(ii) Middle level language

　(iii) High Level language　(iv) 4GL language

(b) **Low level language** was the first type of programming language to be developed.

 (i) Middle level language   (ii) 4GL language

 (iii) Low level language   (iv) High level language

(c) C++ and C# are examples of **Object-oriented languages.**

 (i) Logic-oriented languages

 (ii) Object-oriented languages

 (iii) Procedure-oriented languages

 (iv) None of these

(d) FORTRAN, ALGOL, C, BASIC, and ADA are all examples of **Procedure-oriented** languages.

 (i) Object-oriented   (ii) Logic-oriented

 (iii) Low level   **(iv) Procedure-oriented**

(e) Which of the following languages is machine-independent?

 (i) Machine   (ii) Assembly

 (iii) Java   (iv) None of these

4. Answer the following questions.

(a) Differentiate between an interpreter and a compiler.

Ans. Compiler: The whole source code or program is converted into object code in one go and errors are listed out together. Once the program is error free, the process of compilation (translation of high level program into object code) is repeated and the object code is generated as well as stored.

Interpreter: It converts programs into machine language line by line. A line is translated, and if error free, it is executed; otherwise, the conversion stops and the interpreter waits for the error to be corrected.

(b) Write briefly about the following:

 (i) 4GLs

 (ii) Object-oriented languages

 (iii) Low level languages

Ans. (i) **4GLs:** 4GLs are mainly non-procedural languages which use English-like syntax to design the instructions. Their main use is in the areas of artificial intelligence and databases.

Some examples of fourth generation languages are SQL and LISP.

(ii) **Object-oriented languages:** These languages use the object oriented programming method as the design approach for solving a given problem. In this programming language, a problem is divided into a number of objects which can interact by passing messages to each other. C++ and C# are examples of object-oriented programming languages.

(iii) **Low level languages:** Also known as binary language, a low level language consists of strings of 0's and 1's. It is directly understood by the machine (computer) and needs no translation at all. The 0's and 1's are actually codes which are converted into electrical signals. The 'off' state of electrical signal is identified by 0 and the 'on' state is identified by 1.

(c) Write two advantages and two disadvantages each of:

(i) Middle Level Languages

(ii) High Level Languages

Ans. (i) **Advantages of Middle Level Languages:**

1. Programs written in machine language are replaceable by mnemonics, which are easier to remember.

2. Faster execution and efficient programming.

Disadvantages of Middle Level Languages

1. Long programs written in such languages cannot be executed on small computers.

2. It takes a lot of time to code or write the program, as it is more complex in nature.

(ii) **Advantages of High Level Languages:**

1. They are user friendly.

2. They are similar to English and use the English vocabulary and well-known symbols.

Disadvantages of High Level Languages:

1. A high level language has to be translated into machine language by a translator, which takes time.

2. The object code generated by a translator might be inefficient compared to an equivalent assembly language program.

(d) Machine language is difficult to use and understand. Justify the statement by giving reasons.

Ans. Since machine language uses a string of 0's and 1's only, it is difficult to develop and use this language.

(e) Write briefly about procedure-oriented languages.

Ans. **Procedure-oriented Languages:** In this language, a program is written as a sequence of procedures. Each procedure contains a series of instructions for performing a specific task. In this type of programming, a code once written in the form of a procedure can be used any number of times in the program by only specifying the corresponding procedure name. Examples of procedure-oriented languages are FORTRAN, ALGOL, C, BASIC and ADA.

COMPUTER TIME

1. Open a blank Word 2013 document. Type the advantages and disadvantages of different types of languages discussed in this lesson.

Ans. Do it yourself.

2. In groups of five, explore Google to find out information on Artificial Intelligence (AI). Prepare a presentation using MS PowerPoint and present it in the class.

Ans. Do it yourself.

Answers of Suggested Class Activities

Ans. 1. Also, known as binary language, low language consists of strings of 0's and 1's. It is directly understood by the machine (computer) and needs no translation at all. The 0's and 1's are actually codes

which are converted into electrical signals. The 'Off' state of electrical signal is identified by 0 and 'On' state is identified by 1.

2. High level languages are basically symbolic languages that use English words and/or mathematical symbols rather than mnemonic codes. Each instruction in the high level language is translated into many machine language instructions that the computer can understand. Examples: BASIC, C++.

3. Fourth generation language or 4GLs are mainly non-procedural languages which use English-like syntax to design the instructions. Their main use is in the area of Artificial Intelligence (AI) and databases. Some examples of fourth generation languages are: SQL, LISP, etc.

4. Compiler: The whole source code or program is converted into object code in one go and the errors are listed out together. Once the program is error-free, the process of compilation (translating high level program into object code) is repeated and the object code is generated as well as stored.

   Interpreter: It converts programs into machine language line by line. A line is translated, and if error free, it is executed; otherwise, conversion stops and the interpreter waits for the error to be corrected. Interpreted third generation languages are relatively slow because they are translated whenever there is a need of execution.

Answers of Worksheet

I. **1.** (a) **2.** (b) **3.** (c) **4.** (a) **5.** (b)

II. **1.** (b) **2.** (c) **3.** (d) **4.** (e) **5.** (a)

2. More About PowerPoint
Answers of Book

DO AND LEARN!

1. Fill in the blanks.

Ans. (a) In PowerPoint, to apply animation, select the **Animations** tab.

(b) The **Entrance** effect controls how an object enters a slide.

(c) A **Motion** path moves an object within the slide along a predetermined path.

(d) Applying an animation effect to the whole slide is called slide **transition**.

(e) The **Playback** tab has the options to control how an audio will play.

2. Write True (T) or False (F).

Ans. (a) Animation gives colours to objects on slides in a presentation. F

(b) We can apply only one animation effect to an object present on a slide. F

(c) Entrance, Emphasis, Exit, and Motion Paths are different categories of animation effects. T

(d) The Emphasis effect controls how an object takes exit from a slide. F

(e) We can record our own sound or audio and add it to our presentation. T

3. Tick (✓) the correct option.

Ans. (a) Which of the following can be inserted to a slide?

    (i) Images   (ii) Sound

    (iii) Movies   **(iv) All of these**

(b) Animations make a slide show more **Attractive**.

    (i) Heavy   (ii) Clean

    (iii) Attractive   (iv) All of these

(c) Animations are of two types:

    (i) Animation and Motion Paths

    (ii) Slide timings and Transitions

    (iii) Animation and Transition

    (iv) Transition and Effects

(d) Which of the following is not an animation effect?

    (i) Emphasis   (ii) Entrance

    (iii) Round   (iv) Motion Paths

(e) Applying animation effects to the whole slide is called **Slide transition**.

    (i) Slide animation   (ii) Animation

    (iii) Motion   **(iv) Slide transition**

4. Answer the following questions.

(a) What do you understand by the term 'Animation' with respect to a PowerPoint presentation? Explain briefly.

Ans. To give life to your presentation, PowerPoint provides various animation and transition tools. With the help of these tools, you can change the way objects appear, move and disappear on the slide.

(b) Name the different categories of animations that can be applied to different objects on a slide. Write the significance of each.

Ans. The different categories of animations are:

  ○ **Entrance:** This effect controls how the object enters the slide. For example, with the Bounce animation the object will appear on to the slide and then bounce several times.

  ○ **Emphasis:** Emphasis animation effects determine how the slide object calls attention towards itself while it is on the slide. These animations are often triggered by a mouse click. For

example, you can set an object to spin when you click the mouse.

○ **Exit:** This effect controls how the object exits from the slide. For example, with the Fade animation the object will simply fade away.

○ **Motion Paths:** A motion path moves an object on the slide along a predetermined path like a circle or a line.

(c) Differentiate between animation and transition. Give one example of each.

Ans. Animation effects can be given to individual objects present on a slide. They can be of different types like Entrance, Emphasis, Exit and Motion Paths.

Transition is an animation technique in Flash in which the slide as a whole isanimated. For example: how a slide enters, exits or appears while the slide show is going on.

(d) Write the steps to insert an audio to a slide in a PowerPoint 2013 presentation.

Ans. To insert an audio to a slide in a PowerPoint presentation, follow these steps:

1. Select the slide on which you want to add the audio file.

2. Select the Insert tab and click the Audio drop-down arrow from the Media group and select Audio on My PC from the drop-down menu that appears.

3. Locate and select the desired audio file, then click Insert.

4. The audio file will be added to the slide and will be selected by default. You can click the play/pause button to play the audio file.

(e) Meera has created a PowerPoint presentation from a topic in her Science book. She has added interesting animation effects to objects on the slides. To one of the objects in slide number 5, she has applied five different animation effects. While previewing the presentation, she realised that the order of the animations is not correct. Help Meera change the order to the correct sequence. Write the steps in your notebook.

Ans. Meera can change the order of the slides by following these steps:

1. Select the number label of the effect needs to be changed.
2. From the Animations tab, click the Move Earlier or Move Later command to change the order.

COMPUTER TIME

Create a PowerPoint presentation on the topic 'Trees are our best friends'. Use and apply all the PowerPoint tools that you have learnt till now. Search for some appropriate audio and video clips from the Internet at home with the help of your parents and bring them in a pen drive to school. With the permission of your teacher, add these in the presentation you are making.

Ans. Do it yourself.

Answers of Suggested Class Activities

A. **1.** Exit **2.** Animation **3.** Animation **4.** Re-order **5.** Transition

B. **1.** It is a tool in PowerPoint with the help of which you can change the way objects appear, move and disappear on the slide.

2. Entrance: This effect controls how the object enters the slide. For example, with the Bounce animation the object will appear on to the slide and then bounce several times.

Emphasis: Emphasis animation effects determine how the slide object calls attention towards itself while it is on the slide. For example, you can set an object to spin when you click the mouse.

Exit: This effect controls how the object exits from the slide. For example, with the Fade animation the object will simply fade away.

3. If you select a new animation from the Animations group, it will replace the object's current animation. However, if you wish to apply more than one animation on to an object, like an Entrance and an Exit effect, follow the given steps:

Step 1: Select the object.

Step 2: Click the Animations tab.

Step 3: In the Advanced Animation group, click the Add Animation button to view the available animations.

Step 4: Select the desired multiple animation effects.

Answers of Worksheet

I.   **1.** (c)   **2.** (b)   **3.** (a)   **4.** (b)   **5.** (d)

II.   **1.** F   **2.** F   **3.** F   **4.** T   **5.** T

4. Mail Merge with MS Word 2013

Answers of Book

DO AND LEARN!

1. Fill in the blanks.

Ans. (a) **Mail Merge** is a useful tool which allows you to create multiple letters, labels, envelopes and name tags.

(b) While performing a mail merge, you need a Word document and a **mailing list** which is typically an Excel workbook.

(c) The mail merge process has **three** documents involved in creating and printing letters and e-mails.

(d) **Main document** contains the data which is used to fill in information in your main document.

(e) **Merged document** is a combination of the main document and the mailing list.

2. Write True (T) or False (F).

Ans. (a) The address on the envelope or the body of a letter or an e-mail message is different for each version of the merged document. `F`

(b) Mailing list contains the addresses to be printed on the labels or envelopes. `T`

(c) Information is gathered from the mailing list and inserted into the main document, resulting in the merged document. `T`

(d) Excel has a very useful feature called mail merge. `F`

(e) The mail merge process has three documents involved in creating and printing letters and e-mails. `F`

3. **Tick (✓) the correct option:**

Ans. (a) Start Mail Merge option is present in the **Mailings** tab.

(i) Review   (ii) References

(iii) Mailings   (iv) View

(b) The last step in the mail merging process is **Merging the data with the main document**.

(i) Saving/Exporting

(ii) Creating a data source

(iii) Merging the data with the main document

(iv) Defining the merge fields

(c) **Start from a template** changes the view and gives you the option to choose your document.

(i) Use the current document

(ii) Start from existing document

(iii) Start from a template

(iv) None of these

(d) The **Step by Step Mail Merge Wizard** option is available under which section of the Mailings tab?

(i) Envelopes   (ii) Labels

(iii) Start Mail Merge   (iv) Select Recipients

(e) Click **Address block** to add the recipients' addresses at the top of the document.

(i) Address block   (ii) Greeting line

(iii) Electronic postage   (iv) More items

4. **Answer the following questions.**

(a) What is Mail Merge?

Ans. Word has a very useful feature called Mail Merge. This feature allows you to create multiple letters, labels, envelopes, name tags and much more using information stored in the form of a list, a database, or a spreadsheet.

(b) Write briefly about each of the following:

　(i) Main document

　(ii) Mailing list

　(iii) Merged document

Ans. (i) **Main Document:** This document contains text and graphics that are identical for each version of the merged document. For example, the address on the envelope or the body of a letter or an e-mail message.

(ii) **Mailing List:** This document contains the data which is used to fill information in your main document. For example, your mailing, which list contains the addresses to be printed on the labels or envelopes.

(iii) **Merged Document:** This document is a combination of the main document and the mailing list. Information is gathered from the mailing list and inserted into the main document, resulting in a merged document (letters, e-mails, labels or envelopes) personalised for different people on the mailing list.

(c) What is the use of the Edit recipient list option of Mail Merge?

Ans. The Edit recipient list option lets you open the list, edit it or make changes and select and deselect recipients to whom the document is to be sent.

(d) What are the three main stages of Mail Merge?

Ans. Three main stages of Mail Merge are:

　(i) Create the main document.

　(ii) Create a data source.

　(iii) Merge the main document with the data source.

(e) Mr Ashok wants to invite his friends for his retirement party. He does not know how to use Mail Merge to invite all his friends at once. Help him by suggesting the steps required to perform the Mail Merge process.

Ans. 1. Open a blank Microsoft Word document and select the Mailings tab.

2. Click Start Mail Merge. A drop-down list appears.

3. Choose Step-by-Step Mail Merge Wizard from the drop-down list.

4. Select your document type as Letters and Click Next: Starting document.

5. Select the starting document from the options. Select Use the current document and then click Next: Select recipients.
6. Now click Type a new list from the Select recipients options and click the Create link under Type a new list option to type the name and address of recipients.
7. On clicking, the New Address List dialog box will appear.
8. Type the recipient information in the table. To add more entries, click the New Entry button and after adding all the recipients, click OK.
9. On clicking the OK button, the Save Address List dialog box appears. Give a file name and click the save button.
10. On saving the list, the Mail Merge Recipients dialog box will appear. Here, you can add or remove your recipients from the merge. Once completed, click the OK button.
11. Click Next: Write your letter.
Now you're ready to write your letter. When it's printed, each copy of the letter will be the same; only the recipient data (such as the name and address) will be different.
12. Place the insertion point in the document where you want the information to appear. Choose one of the four placeholder options: Address block, Greeting line, Electronic postage, or More items.
13. Click Address block to add the recipients' addresses at the top of the document.
14. In the Insert Address Block dialog box, check or uncheck boxes and select options on the left until the address appears in the way you want it to.
15. Preview the letters to make sure the information from the recipient list appears correctly in them. You can use the left and right scroll arrows to view each document.
16. Click Print to print your letters or Edit individual letters to further personalise the letters.

COMPUTER TIME!

You are celebrating your birthday by throwing a party for your friends and relatives. Write a letter in MS Word and use the Mail Merge tool to send the

letter to 10 of your good friends.

Ans. Do it yourself.

Answers of Suggested Class Activities

A. (a) For sending a message to all students of a class.

   (b) For printing labels for each student with same message (to be pasted on their notebooks).

   (c) For sending invitation letters of Annual Day celebrations to all the parents.

B. 1. (a)   **2.** (b)   **3.** (a)   **4.** (c)

Answers of Worksheet

I.   1. Mail Merge   **2.** Mailing List   **3.** Select Recipients

   4. Letters   **5.** Complete the Merge

II.   1. F   **2.** F   **3.** T   **4.** T   **3.** F

III.   1. It is a tool that helps in creating and sending multiple documents with minimum effort.

   2. Recipient list contains information like name, address, etc. of all the people who will be sent the mail.

   3. Letter is the document containing message that has to be merged with the recipient list.

   4. Data Source contains information like name, address, etc. of all the recipients who will be sent the mail.

   5. Creating a Main Document or and the Template

      (a) Creating a Data Source

      (b) Defining the Merge Fields in the main document

      (c) Merging the Data with the main document

      (d) Saving/Exporting

IV.   1. A   **2.** S   **3.** S   **4.** S   **5.** A

5. More About MS Excel 2013-Editing

Answers of Book

DO AND LEARN!

1. Fill in the blanks.

Ans. (a) In order to format a group of cells in any form, we need to **select** them first.

(b) **Number** group is also known as the Formatting group.

(c) **Decrease Indent** moves your content closer to the cell border.

(d) **Alignment** group buttons are useful in setting the location, direction and rotation of the text within a cell.

(e) **Merge and Center** is used to combine and centre the text of cells into a single large cell in Excel.

2. Write True (T) or False (F).

Ans. (a) Use the Shift key along with the arrow keys to select the range of cells.   T

(b) Wrap text is used to decrease font size in Excel.   F

(c) Font Color is used to apply and change the font colour of text in Excel.   T

(d) Percentage Format is used to calculate the percentage of the given number.   F

(e) Formats such as General, Number, Currency and Accounting, etc., are part of the Number group.   T

3. Tick (✓) the correct option.

Ans. (a) To select non-adjacent cells and cell ranges, hold the **Ctrl** key and click on the cells.

    (i) Ctrl   (ii) Shift

    (iii) Alt   (iv) Enter

(b) Click on any cell in the row and then press **Shift + Space** to select that row.

    (i) Ctrl + Space   (ii) Alt + Space

    (iii) Shift + Space   (iv) Ctrl + Shift + Space

(c) The option to Insert or delete a row or column is present under the **Cells** group of the Home tab.

    (i) Editing   (ii) Styles

    (iii) Alignment   **(iv) Cells**

(d) The **fourth** group is the Number Group of the Home tab.

    (i) first   (ii) third

    (iii) fourth   (iv) fifth

(e) **Orientation** rotates the direction of text of a cell (i.e., vertically or horizontally) in Excel.

    (i) Hyphenation   **(ii) Orientation**

    (iii) Wrap text   (iv) None of these

4. Answer the following questions.

(a) Name the three tabs of the Home group used for formatting cells.

Ans. Font, Alignment, Number.

(b) Write in brief about each of the following:

   (i) Number group

  (ii) Formatting cells

Ans. (i) **Number group:** The Number group is located in the Home tab. We may call the Number group as the Formatting group as well.

Various options available under Number group are:

○ **Number Format –** Applies a number format to numbers.

○ **Percentage Format –** Applies a percentage format to number entered in the worksheet.

○ **Accounting Number Format –** Applies an accounting number format to numeric entries.

- ○ **Percent Style –** Applies a percent format to numbers.
- ○ **Comma Style –** Applies a comma format to numbers.
- ○ **Increase Decimal –** Used to increase decimal places for numbers.
- ○ **Decrease Decimal –** Used to decrease decimal places for numbers.

(ii) **Formatting cells:** The entire content of a cell uses the same formatting by default, which can make it difficult to read a workbook with a lot of information. Basic formatting can customise the look of your workbook, allowing you to draw attention to specific sections and making your content easier to view and understand. You can use three groups of the Home tab for this. They are the Font group, the Alignment group and the Number group.

(c) Write the keyboard shortcut to select the entire worksheet in Excel.

Ans. Ctrl + A.

(d) Write about the Bold, Italic and Underline options of the Font group of Excel.

Ans. (i) **Bold –** Used to make text bold in Excel.

(ii) **Italic –** Used to make text italic in Excel.

(iii) **Underline –** Used to underline text in Excel.

(e) Mr Albert wants to insert a column between two existing columns in an Excel worksheet but he does not know how to do it. Help him by telling him the steps to insert the required column.

Ans. Mr Albert will follow these steps:

1. He will right click on the column name where the new column is to be inserted.

2. Then, he will select the Insert option from the menu that appears to insert the column.

COMPUTER TIME!

1. Open MS Excel and enter the roll numbers, names, class and addresses of 10 of your friends. Use the Font group tools to make it look impressive.

Ans. Do it yourself.

2. Using Ms Excel, create your daily study schedule.

Ans. Do it yourself.

3. Open MS Excel and insert the data shown in the figure. Insert a missing column named 'Date of Order' between 'Name' and 'Item' and enter appropriate data in the new column.

Zone	Name	Item	Units	Unit Cost	Total
Central	Smith	Desk	2	125.00	250.00
Central	Kivell	Desk	5	125.00	625.00
Central	Gill	Pencil	7	1.29	9.03
Central	Jardine	Binder	11	4.99	54.89
Central	Andrews	Pencil	14	1.29	18.06
Central	Gill	Pen	27	19.99	539.73

Ans. Do it yourself.

Answers of Suggested Class Activities

A. 1. We can edit a cell using one of the following methods:

(a) Double-click inside the cell and make changes.

(b) Select the cell to be edited → make changes in the formula bar and press the Enter key.

(c) Click the cell to be edited → Press the F2 key from the keyboard and make required changes

2. Alignment group.

3. By clicking inside the cell.

4. Select the cell and retype to change text or double-click the cell to make changes.

5. Yes. By using the AutoFill tool.

6. It is used to combine and centre text in cells into a single large cell.

7. (i) Click on the letter at the top of column to select the entire column.

   (ii) Click on the row number to select the entire row.

8. **Decrease Indent** – Used to shift the text of a cell closer to the cell border in Excel.

   Increase Indent – Shifts text of a cell away from the cell border in Excel.

9. Select the cell → press the Delete button from the keyboard.

10. The AutoFill feature of MS Excel allows you to fill in a series of values in a worksheet. We use this tool to save time and effort for filling multiple entries automatically.

B. **1.** Ctrl+X   **2.** Ctrl+C   **3.** Ctrl+V   **4.** Ctrl+O   **5.** Ctrl+S   **6.** Ctrl+A

   7. Ctrl+Z

Answers of Worksheet

I.   **1.** (b)   **2.** (c)   **3.** (a)   **4.** (b)   **5.** (a)

II. **1.** number   **2.** clicking   **3.** Delete   **4.** Ctrl+C   **5.** Orientation

6. SmartArt Graphics with PowerPoint 2013

Answers of Book

DO AND LEARN!

1. Fill in the blanks.

Ans. (a) You can click the **Insert a SmartArt Graphic** icon present in the placeholder to add a SmartArt.

(b) **SmartArt** allows you to provide information in a more presentable form with the help of graphics.

(c) For complex SmartArt graphics, working in the **task pane** is often faster.

(d) Creating a chart with **Excel** is the best way if your data changes regularly.

(e) PowerPoint also includes several **SmartArt styles**, which allows you to quickly modify the look of your SmartArt.

2. Write True (T) or False (F).

Ans. (a) You can delete any bullets you're not using to remove the shapes in PowerPoint. `T`

(b) It is difficult to transform traditional bullet points into an eye-catching SmartArt graphic with PowerPoint 2013. `F`

(c) Whenever you select a SmartArt graphic, the Design and Format tabs appear on the right side of the Ribbon. `T`

(d) You cannot make a chart in PowerPoint. `F`

(e) You can also add text by clicking the desired shape and then typing. `T`

3. Tick (✓) the correct option.

Ans. (a) You can convert a SmartArt back to text. To do so, go to the **Design** tab present on the right side of the Ribbon.

   (i) View   **(ii) Design**

   (iii) Animations   (iv) Format

(b) From the Insert tab, select the SmartArt tab in the **Illustrations** group.

   (i) Tables   (ii) Images

  (iii) Illustrations   (iv) Add-ins

(c) To change the colour of a SmartArt graphic, select the Design tab under **SmartArt Tools**, click the Change Colors command and choose the desired colours from the drop-down menu.

   (i) Drawing Tools   (ii) Chart Tools

  (iii) SmartArt Tools   (iv) None of these

(d) To change the style of a SmartArt, select the desired style from the **SmartArt Styles** group.

   (i) Layouts   (ii) Create Graphic

   (iii) Reset   **(iv) SmartArt Styles**

(e) The text written inside a SmartArt graphic will appear in the graphic and will resize itself to **fit inside** the shape.

   (i) cover   **(ii) fit inside**

   (iii) overlap   (iv) None of these

4. Answer the following questions.

(a) Write a short note on the SmartArt feature of PowerPoint 2013.

Ans. SmartArt feature helps you to provide information in a more presentable form with the help of graphics rather than just using text. There are a number of styles available to choose from and use them to illustrate many different types of ideas.

(b) Can you insert a chart in a slide? If yes, write the steps to do this.

Ans. Yes. To create a simple chart from scratch in a slide, follow these steps:

1. Select the slide in which you want to insert the chart.

2. Select the Insert tab and select Chart in the Illustration group.

3. Select the chart type and then double-click on the chart of your choice or click OK.

4. Replace the placeholder data with your own data and information in the worksheet that appears.

5. Click the Close button once you have entered the desired data.

(c) Write the steps to insert SmartArt graphics.

Ans. To insert a SmartArt graphic, follow these steps:

1. Select the slide on which you want the SmartArt graphic to appear.
2. From the Insert tab, click the SmartArt tool from the Illustrations group.
3. The Choose a SmartArt Graphic dialog box will appear. Select a category from the left, choose the desired SmartArt graphic and then click the OK button.

   The selected SmartArt graphic will appear on the current slide.

(d) Ms Diksha wants to change the colours of the SmartArt graphics that she has created. Help her do this task.

Ans. Ms Diksha can follow these steps:

1. Select the SmartArt on the slide.
2. Select the Design tab under SmartArt tools and click the Change Colors button.
3. Choose the desired colours from the menu that appears.

(e) Mr Krish has some text on his slide. He wants to convert the text into SmartArt graphics. Help him in converting the existing text to a SmartArt.

Ans. Mr Krish can follow these steps to convert text into a SmartArt graphic:

1. Right-click the list or paragraph he wants to convert into a SmartArt.
2. He will take the mouse pointer over Convert to SmartArt. A list of SmartArt options will appear. From here, he can select the desired SmartArt graphic.

COMPUTER TIME

1. Create a PowerPoint presentation on the topic 'Computer Viruses'. Also add SmartArt graphics on any one slide.

Ans. Do it yourself.

2. Create a PowerPoint presentation on 'A Balanced Diet'. Also, create a chart on any one slide.

Ans. Do it yourself.

Answers of Suggested Class Activities

1. (d)   **2.** (e)   **3.** (a)   **4.** (b)   **5.** (c)

Answers of Worksheet

I.   **1.** Column Chart   **2.** Line Chart   **3.** Pie Chart   **4.** Bar Chart

II.   **1.** Pie Chart   **2.** Column Chart   **3.** Line Chart   **4.** Bar Chart
5. Stacked Chart

7. Introduction to Python

Answers of Book

DO AND LEARN!

1. Fill in the blanks.

Ans. (a) syntax (b) Python (c) F5 (d) 1991 (e) Read Eval Print Loop

Ans. (a) A **syntax** is a set of grammatical rules for instructing a computer or computing device to perform specific tasks.

(b) **Python** is a General-purpose Object Oriented Programming language.

(c) You can press the __F5__ key from the keyboard to execute the Python file.

(d) Python was released in the year __1991__.

(e) REPL stands for **Read Eval Print Loop**.

2. Write True (T) or False (F).

Ans. (a) There are four modes to use the Python interpreter. `F`

(b) The code of a Python file gets executed via the Python shell. `T`

(c) To execute the script by the interpreter, you have to tell the interpreter the name of the file. `T`

(d) The result is immediately displayed on the Python shell as soon as the Python interpreter interprets the command with the interactive mode. `T`

(e) If you need to write a long piece of Python code, use the script mode. `T`

3. **Tick (✓) the correct option.**

Ans. (a) The >>> indicates that the Python shell is ready to **execute**.

    (i) close   **(ii) execute**

    (iii) display   (iv) move

(b) Python is named after the name of the **comedy show**.

    (i) python snake   **(ii) comedy show**

    (iii) comedian   (iv) None of these

(c) The keyboard shortcut to open a module is **Ctrl + O**.

    (i) Ctrl + O   (ii) Alt + O

    (iii) Alt + M   (iv) Ctrl + M

(d) A Python file gets saved with the **.py** extension.

    (i) .pyt   **(ii) .py**

    (iii) .pyh   (iv) .pyn

(e) You must create and save a file before executing your code with the **Script** mode.

    (i) Interactive

    (ii) Script

    (iii) Execution

    (iv) None of these

4. **Answer the following questions.**

(a) Write in brief about any three features of the Python language.

Ans. ❍ Python can be used on a server to create web applications.

    ❍ Python can connect to database systems. It can also read and modify files.

    ❍ Python can be used to handle Big Data and perform complex mathematical calculations.

    ❍ It is used for developing applications and projects based on Artificial Intelligence. [Any 3]

(b) Differentiate between the Interactive mode and the Script mode of the Python Interpreter.

Ans. (i) **Interactive Mode:** Interactive mode, also known as Read Eval Print Loop (REPL), provides us with a quick way of running a block or a single line of Python code. Without passing the Python script file to the interpreter, it gets executed directly.

(ii) **Script Mode:** In this mode, the source code is stored in a file with the .py extension and the interpreter is used to execute the contents of the file. If you need to write a long piece of Python code, use the script mode. Note that you can use any text editor for this, including Sublime, Atom, Notepad++, etc. To execute the script by the interpreter, you have to give it the name of the file.

(c) Mention any two advantages and two disadvantages of using the Interactive mode of Python.

Ans. (i) **Advantages of using the Interactive Mode**

1. Helpful when your script is short and you want immediate results.

2. Faster as you only have to type a command and then press the Enter key to get the results.

(ii) **Disadvantages of using the Interactive Mode**

1. Editing the code in interactive mode is hard as you have to move back to the previous commands or else you have to write the whole command again.

2. It's very tedious to run long pieces of code.

(d) Write the steps to execute a piece of code in the Script mode.

Ans. 1. In the interactive mode, select the File tab and then select New File.

2. Write the command in the Python shell.

3. Now select the File tab and then select Save As to save the file.

4. The Save as dialog box will appear. Give the file name and click the Save button.

5. Click the Run button and select Run Module to execute the Python file.

6. A separate Python shell will open with the output.

(e) Write the benefits of using Python language over other programming languages.

Ans. 1. It is very easy to learn.

2. It can be used for developing AI projects.

3. It is an open-source language.

COMPUTER TIME

1. Execute the following code in both Interactive mode and Script mode.

(a) 4 + 6 -2

(b) 10 + 8 – 7

(c) 7 * 3 + 2

(d) 14 / 2 + 4

Ans. Do it yourself.

2. Write a program in Python shell to print your roll no., name and class.

Ans. Do it yourself.

Answers of Suggested Class Activities

A. **1.** programming   **2.** Python   **3.** Interactive   **4.** .py

5. Run module

B. **1.** (d)   **2.** (e)   **3.** (a)   **4.** (b)   **5.** (c)

Answers of Worksheet

1. Yes, Python is highly case-sensitive.

2. Python is a General-purpose Object Oriented Programming language, so even if you are new to programming, you can learn Python without facing any issues. It is derived from programming languages such as ABC, Modula 3, Smalltalk and Algol-68. This language is also used for developing Artificial Intelligence (AI) applications and projects.

3. Python is an open-source language because it can be downloaded free of cost with source.

4. Interactive Mode and Script Mode.

5. Interactive Mode provides a quick way of running blocks or a single line of Python code.Without passing the Python script file to the interpreter, it gets executed directly.

6. In Interactive mode, the codes are not passed to an interpreter as they get executed directly. In Script mode, the source code is stored in a file with the .py extension and the interpreter is used to execute the contents of the file.

7. Step 1: In interactive mode, click on the File tab and select New File.

   Step 2: Write the command in Python shell.

   Step 3: Now click on File tab and select Save As to save the file.

   Step 4: On clicking Save As, the Save As dialog box will appear. Now give the file name and click the Save button.

   Step 5: Click on the Run button and select Run Module to execute the Python file.

8. Animation with Flash CS3

Answers of Book

DO AND LEARN!

1. Fill in the blanks.

Ans. (a) **Timeline** is a record of every frame, layer and scene in your movie.

(b) **Stage** is also called the virtual canvas.

(c) **Panels** helps you to view, organise, and change elements in your Flash document.

(d) Flash creates a tabbed panel-group known as the **Property Inspector**.

(e) In Flash, the panel-group has two tabs: **Properties** tab and **Parameters** tab.

2. Write True (T) or False (F).

Ans. (a) Stage is the actual area in which your movie is displayed ⬚ T

(b) FPS stands for Flash Per Second. ⬚ F

(c) Several buttons have flyouts, which are like submenus for the toolbars. ⬚ T

(d) Icons that appear in the Options section at any given time, do not depend on which tool you've selected. ⬚ F

(e) When you are creating something in Flash, you are drawing one of the two things: a stroke or a fill. ⬚ T

3. Tick (✓) the correct option.

Ans. (a) It displays text and menus for choosing symbols and scenes to work upon.

    (i) Timeline   (ii) Edit bar

    (iii) Stage   **(iv) Property Inspector**

(b) Each Flash document consists of __3__ basic items.

    (i) 4　　　　　　　　　　　　(ii) 5

    (iii) 2　　　　　　　　　　　**(iv) 3**

(c) Flash's default setting is __12__ frames per second.

    (i) 10　　　　　　　　　　　(ii) 8

    (iii) 7　　　　　　　　　　　**(iv) 12**

(d) In Flash Professional, the panel has a third tab named the **Filters** tab.

    (i) Filters　　　　　　　　(ii) Properties

    (iii) Parameters　　　　　　(iv) Timeline

(e) On clicking the Background colour control, the pointer changes to **Eyedropper**.

    (i) Hand　　　　　　　　　**(ii) Eyedropper**

    (iii) Arrow　　　　　　　　(iv) None of these

4. Answer the following questions.

(a) What all things can you create using Adobe Flash CS3?

Ans. A few of the things that can be created with Flash are:

○ Drawings and animations

○ Multimedia websites

○ Banner ads

○ Tutorials

○ Full-length ads and product presentations

○ Customer service kiosks

○ Television and film effects

○ Games and other programs

(b) Differentiate between Colour Tools and View Tools.

Ans. (i) **Colour Tools:** When you are creating something in Flash, you are drawing one of two things: a stroke, which is a plain line or outline, or a fill, which is the area within an outline. Before you click one of the drawing icons to begin drawing, you can

use these tools to choose a colour from the colour palette, and Flash applies that colour to the Stage as you draw.

(ii) **View Tools:** At times, you may draw a picture that is so big that you can't see it all on the Stage at one time or perhaps draw something that you want to modify pixel by pixel. When either of these situations occurs, you can use the tools that Flash displays in the View section of the Tools panel. These tools are used to zoom in, zoom out and pan around the Stage.

(c) What is the role of Timeline in a flash document?

Ans. The Timeline determines the order in which the frames appear in and for how long each frame stays onstage. If you've decided to organise the images on your frames into separate layers, the Timeline is where you specify how you want your layers stacked: which layer you want on top, which one beneath that, and so on.

(d) Write briefly about the following:

(i) Option Tools

(ii) View Tools

Ans. (i) **Options Tools:** Icons that appear in the Options section at any given time, depend on which tool you've selected. For example, if you select the Zoom tool from the View section of the Tools panel, the Options section displays an Enlarge icon and a Reduce icon that you can use to change the way the Zoom tool works.

(ii) **View Tools:** At times, you may draw a picture that is so big that you can't see it all on the Stage at one time or perhaps draw something that you want to modify pixel by pixel. When either of these situations occurs, you can use the tools that Flash displays in the View section of the Tools panel. These tools are used to zoom in, zoom out and pan around the Stage.

(e) Write the steps to change the background colour.

Ans. To change the background colour, follow these steps:

1. Open the Document Properties dialog box. To assign your Stage a new colour, choose one from the Background colour control in the Document Properties dialog box.

2. Click the Background colour control.

   The pointer changes to an eyedropper, and a set of swatches appears.

3. Click OK.

COMPUTER TIME

Ans. Do it yourself.

Answers of Suggested Class Activities

A.

T	O	O	L	S	G	J	N	O	J
I	K	K	V	Y	T	R	P	O	W
M	S	U	M	U	I	A	L	Y	E
E	M	T	K	R	N	N	G	S	B
L	D	A	U	E	K	T	J	E	C
I	T	B	L	N	N	E	R	I	A
N	W	S	O	H	F	R	D	C	M
E	K	O	U	S	E	F	O	K	N

B. 1. (b)   **2.** (a)   **3.** (c)   **4.** (a)   **5.** (c)

Answers of Worksheet

I.   **1.** Document Properties   **2.** View Tools   **3.** Timeline   **4.** Panels
5. Modify → Document

II.   **1.** (c)   **2.** (d)   **3.** (a)   **4.** (e)   **5.** (b)

III.   **1.** Flash is an animation software by Adobe.

2. It is a record of every frame, layer and scene in your movie.

3. The Stage, located at the center of your Flash workspace, is your virtual canvas. This is the area where you will draw the pictures and eventually string them together to create your own animation.

4. ○ Selection and Drawing tools

   ○ View tools

   ○ Color tools

   ○ Options tools

5. ○ Timeline: A record of every frame, layer and scene in your movie.

   ○ Edit bar: It displays text and menus for choosing symbols and scenes to work upon.

   ○ Stage: It is the actual area in which your movie displays.

9. More About Flash

Answers of Book

DO AND LEARN!

1. **Fill in the blanks.**

   Ans. (a) **Tools panel** is the most used panel in Flash.

   (b) **Selection** tool helps to select and modify an object's shape.

   (c) The two tools in the View section of the Toolbox are **Hand** tool and **Zoom** tool.

   (d) With the help of the **Zoom** tool, we can see the object or picture with a larger view and modify it at the right place as required.

   (e) To make break picture, press the **Ctrl + B** key.

2. **Write True (T) or False (F).**

   Ans. (a) When we need to change in order to make different shapes of a drawn graphic in the document, we use the Selection tool.　　　　　T

   (b) FPS stands for Frames Per Second.　　　　　T

   (c) A blank key frame is also called a layer.　　　　　F

   (d) 'F8' is the keyboard shortcut to convert an object into a symbol.　　　　　T

   (e) Animations can be created with the frame-by-frame technique only.　　　　　F

3. **Tick (✓) the correct option.**

   Ans. (a) The keyboard shortcut to show/hide the Property Inspector is:

   　　(i) CTRL+F2　　　　　(ii) CTRL+F5

   　　(iii) CTRL+F3　　　　(iv) CTRL+F4

(b) **Library** is a storage facility for all media elements used in a Flash file.

    (i) Library   (ii) Instance

    (iii) Symbol   (iv) Tween

(c) The **Ink Bottle** tool is used to change the stroke colour.

    (i) Paint Bucket   **(ii) Ink Bottle**

    (iii) Fill color   (iv) None of these

(d) Pressing the **Shift** key while drawing a line will draw straight, horizontal, vertical or diagonal lines.

    (i) Ctrl   (ii) Alt

    (iii) Enter   **(iv) Shift**

(e) Which of the following is not a technique of animation in Flash?

    (i) Frame-by-frame   **(ii) Size Tweening**

    (iii) Shape Tweening   (iv) Motion Tweening

4. Answer the following questions.

(a) What do you understand by the term 'Frame Rate' with respect to animation in Flash?

Ans. The rate, stated in frames per second (fps), at which each frame in an animation is played back for the user, is called the frame rate.

(b) Differentiate between key frame and blank key frame.

Ans. (i) **Key frame:** A frame in which you establish exactly what should appear on the stage at that particular time.

(ii) **Blank key frame:** It is simply a frame with no content. In a new Flash document, you have one blank key frame by default.

(c) What is the use of the Eye dropper tool in a Flash document? Give one example.

Ans. Eye Dropper Tool: This tool helps to pick any colour from a picture or graphic and use it in case the colour is not available in the Colors palette. Open any coloured picture and pick the colour using the Eye Dropper tool. Now, use the colour anywhere in your document as required.

(d) Name different types of animation techniques available in Flash. Write briefly about each technique.

Ans. Different animation techniques available in are:

(i) **Frame-by-Frame Animation:** Frame-by-frame animation is how cartoons have been animated since the early days of animation. Using this method, the animator draws a figure or scene one frame at a time, drawing slight differences between each frame. When the frames are viewed in rapid sequence, the differences between them create the illusion of change or motion. In Flash, animators impose frame-by-frame animations over still images or other types of animation to avoid redrawing an entire scene for every animation frame.

(ii) **Tweened Animation:** In tweened animation, all a user has to do is to define the contents of the first and the last frame of a particular animation. After this, Flash will generate all the frames between the two defined frames on its own. For all the animations where you have to change the shape or position of an object over time during an animation, you can use tweened animations.

Tweened animations work very fast and are of small size. There are two types of tweened animations that can be created in Flash:

1. Motion tweening
2. Shape tweening

(e) Ananya wants to create an animation showing a boy moving ahead step-by-step. Help her do this by writing the steps she should use to accomplish this task.

Ans. Ananya can follow these steps by using frame-by-frame animation:

1. In frame 1, draw the boy.
2. Insert a keyframe in the next frame and change the position of the boy slightly ahead.
3. Keep repeating step 2 until the boy reaches a certain distance on the stage.
4. Save and play the animation.

COMPUTER TIME

1. Start Flash CS3 on your computer. Take a screenshot of the starting window and paste it on a Word document. Now, using drawing tools, label the following:

    (a) Property Inspector
    (b) Timeline
    (c) Frames
    (d) Stage
    (e) Tool Panel

Ans. Do it yourself.

2. Create a new Flash CS3 document and do the following:

    (a) Draw any picture using all the drawing tools taught in this lesson.
    (b) Fill appropriate colours as desired.
    (c) Type a caption using the Text tool.
    (d) Convert it into a symbol and use the frame-by-frame animation technique to move the picture.

Ans. Do it yourself.

Answers of Suggested Class Activities

R	S	L	S	D	L	A	Y	E	R
T	R	A	N	S	F	O	R	M	W
L	Y	S	T	A	X	Z	S	Y	T
I	C	S	L	Z	Q	W	B	N	W
B	O	O	U	S	K	T	J	T	E
R	S	Q	P	G	V	T	R	I	E
A	W	S	Y	M	B	O	L	C	N
R	M	G	I	Q	V	X	V	K	X
Y	X	G	R	A	D	I	E	N	T

Answers of Worksheet

I. **1.** It is a free-hand tool used to select an object and delete the unwanted parts from it.

    2. It is used to remove or rub any mistakes you make in your drawings.

    3. It is used to draw a star or polygon.

    4. It helps to select and modify an objects shape.

    5. It is used to change the stroke colour.

II. **1.** Ink Bottle tool   **2.** Text tool   **3.** Pencil tool   **4.** Polygon tool

    5. Eraser tool.

III. **1.** (a)   **2.** (c)   **3.** (a)   **4.** (b)   **5.** (a)

10. Computer Virus

Answers of Book

DO AND LEARN!

1. Fill in the blanks.

Ans. (a) **Antivirus** is a program that protects a computer from virus.

(b) A **Trojan Horse** cannot replicate itself.

(c) **Worm** is a malicious software.

(d) A virus has the ability to **replicate** itself.

(e) An illegal copy of software is **pirated** software.

2. Write True (T) or False (F).

Ans. (a) A Trojan is an antivirus program. `F`

(b) A virus harms only the hardware and not the data of a computer. `F`

(c) Always scan your e-mail attachments before opening them. `T`

(d) Polymorphic viruses try to escape the antivirus programs. `T`

(e) A virus does not affect the speed of a computer. `F`

3. Tick (✓) the correct option.

Ans. (a) **Boot sector viruses** take control when you start your computer.

　　(i) Polymorphic viruses 　　　(ii) Macro viruses

　　(iii) File infector viruses 　　**(iv) Boot sector viruses**

(b) A virus infects a computer system if the latest, updated version of **Antivirus** is not installed on the computer.

　　(i) Trojan 　　　　　　　**(ii) Antivirus**

　　(iii) Pirated software 　　　(iv) Flash Drive

(c) To stay safe, **Never** download unexpected text or email attachments from websites you don't trust.

    (i) Always   (ii) Sometimes

    (iii) Never   (iv) None of these

(d) A computer virus is a **Software program**.

    (i) Piece of hardware   **(ii) Software program**

    (iii) Useful program   (iv) Both (i) and (ii)

(e) A **Resident virus** virus can execute any time an operating system loads.

    (i) Web scripting virus   (ii) Worm

    (iii) Resident virus   (iv) Trojan horse

4. Answer the following questions.

(a) Name the different types of computer virus.

Ans. Boot sector virus, web scripting virus, resident virus, polymorphic virus, micro virus.

(b) Name any five sources through which a computer can be infected by a virus.

Ans. Sources of Virus:

    (i) Infected secondary storage device

    (ii) While downloading content from the Internet

    (iii) Through e-mail attachments

    (iv) Spam mails

    (v) Unexpected pop-up windows

(c) What are the best ways to avoid computer viruses?

Ans. The following are some precautions which can protect a computer system from viruses:

○ Avoid clicking on any pop-up advertisements.

○ Always scan your e-mail attachments before opening them.

○ Always scan the files that you download using file sharing programs.

- Use a trusted, latest version of antivirus, such as Norton Antivirus, and keep it updated with the latest virus definitions.
- Always visit trustworthy websites only.
- The latest version of firewall should be installed on the computer.
- USB drives should be scanned for viruses, and should not be used on infected computers.
- Spam or unknown e-mails should not be opened and must be deleted without opening.
- Unauthorised or pirated software should not be installed on the computer.
- Always keep a backup of your data on a regular basis. The backup can be used if the virus deletes or modifies your data. There are some great software that can back up your data automatically.
- Never download songs, videos or files from suspicious websites.
- Never share your personal data with people you don't know over the Internet.

(d) Define worm. How does it infects a computer system?

Ans. A computer worm is a type of malicious software program whose primary function is to infect other computers while remaining active on infected systems. It has the following features:

(i) It is self-replicating malware, which means that it can create multiple copies of itself and spread to uninfected computers.

(ii) Worms often use those parts of an operating system that are automatic and invisible to the user.

(iii) A computer worm infection spreads without the user's interaction.

(iv) Computer worms may spread through infected storage media such as floppy disks, pen drives, infected hard disks, etc., which, when used on a system, would infect other storage devices connected to the system.

(e) Differentiate between polymorphic viruses and macro viruses.

Ans. (i) **Polymorphic Virus:** A polymorphic virus changes its code each time an infected file is executed. It does this to escape antivirus programs.

(ii) **Macro Virus:** Macro viruses are written in the same macro language used for software applications. Such viruses spread when you open an infected document, often through e-mail attachments.

(f) Jayati is working on a very important project on her computer. She is taking information about the topic from the Internet also. Suddenly her computer becomes very slow. She restarts the computer and is shocked to find that her project file has been deleted.

(i) What could have gone wrong?

(ii) Mention any two precautions that Jayati should have followed while using the internet.

Ans. (i) Jayati's computer could be infected by virus.

(ii) ○ Jayati should have installed a good quality antivirus on her computer.

○ She should not open e-mails from unknown senders.

COMPUTER TIME

Prepare a PowerPoint presentation on the topic 'Computer Virus'. Collect some new information on the topic from the Internet and incorporate it in the presentation.

Ans. Do it yourself.

Answers of Suggested Class Activities

A. **1.** (c)   **2.** (e)   **3.** (a)   **4.** (d)   **5.** (b)

A. **1.** WORM   **2.** ANTIVIRUS   **3.** SPYWARE   **4.** SPAM   **5.** TROJAN

Answers of Worksheet

I. **1.** Malware   **2.** Trojan Horse   **3.** Spam   **4.** Boot Sector
    5. pirated software.
II. **1.** T   **2.** F   **3.** F   **4.** F   **5.** T
III. **1.** (c)   **2.** (a)   **3.** (d)   **4.** (b)   **5.** (b)

11. Internet Services

Answers of Book

DO AND LEARN!

1. Fill in the blanks.

Ans. (a) Internet services can be categorised into **four** different categories.

(b) A learning system based on formalised teaching with the help of electronic resources is known as **e-learning**.

(c) Messages written on Twitter are known as **tweets**.

(d) **Facebook** is a social networking website where users can post comments, share photographs and post links or other interesting content on the Web.

(e) **E-shopping** is a form of electronic commerce which allows consumers to directly buy goods or services from a seller over the Internet.

2. Write True (T) or False (F).

Ans. (a) Private tweets can be read by anyone who is using Twitter. **F**

(b) Facebook was founded by Mark Zuckerberg. **F**

(c) Photos, documents and other files cannot be attached to an e-mail. **F**

(d) Data security cannot be controlled while sharing information using cloud computing. **F**

(e) WWW stands for World Wide Web. **F**

3. Tick (✓) the correct option.

Ans. (a) Instant Messaging is a **Communication** service.

(i) Social Networking   **(ii) Communication**

(iii) Online   (iv) Information Retrieval

(b) **E-Banking** is an electronic payment system that enables the customers of a bank to conduct a range of financial transactions through the financial institution's website.

   (i) E-Banking   (ii) E-Shopping

   (iii) E-Learning   (iv) E-Ticketing

(c) **Facebook** is a real-time social networking site.

   (i) Twitter   (ii) Google

   (iii) Facebook   (iv) None of these

(d) **Facebook** is one of the best ways to stay connected with famous personalities.

   (i) Facebook   (ii) Internet

   (iii) Twitter   (iv) Chatting

(e) **Conferencing** means talking to other people over the Internet.

   (i) Gossiping   (ii) Communicating

   (iii) Conferencing   (iv) Chatting

4. Answer the following questions.

(a) Name the four different categories of Internet services.

Ans. The Internet provides many kinds of services to the user. These services can be categorised into four different types. They are:

- Communication Services
- Information Retrieval Services
- Social Networking
- Online Services

(b) Write in brief about each of the following:

   (i) Information Retrieval Services

   (ii) Video Conferencing

   (iii) E-Banking

Ans. (i) Information retrieval services offer easy access to information present on the Internet. Some of them are:

   › E-Learning   › Research   › News

(ii) Video conferencing is a technology that allows users in different locations to have face-to-face meetings without having to move to a single location together. This technology also saves the time, expense, and hassle associated with business travel. Uses for video conferencing include holding routine meetings, negotiating business deals and interviewing job candidates.

(iii) E-banking, also known as Internet banking or virtual banking, is an electronic payment system that enables the customers of a bank or other financial institutions to conduct a range of financial transactions through the financial institution's website. Using this, a client executes banking transactions via electronic means.

(c) Write a short note on cloud computing.

Ans. Cloud computing is the delivery of computing services including servers, storage, databases, networking, software, analytics, and intelligence over the Internet, i.e., 'the cloud', to offer faster innovation and flexible resources. You pay only for the cloud services that you use, helping lower your operating costs.

Advantages of Cloud Computing:
○ Easy implementation
○ Readily manageable
○ Accessibility
○ Easy collaboration and sharing among users in multiple locations
○ No hardware requirement

Disadvantages of Cloud Computing:
○ Data security cannot be controlled while sharing information.
○ No back up
○ Bandwidth issues

(d) Discuss the features of e-mail.

Ans. Features of E-mail:
○ **Free and Global Delivery:** Sending an e-mail is virtually free, except for the cost of the Internet service. E-mail can be sent to anyone anywhere around the world.

- ○ **Speed:** An e-mail can be sent and received by many people at one go over the Internet.

- ○ **File attachment:** An e-mail can include one or more file attachments, allowing a person to send documents, pictures or other files with an e-mail.

- ○ **Eco friendly:** Sending an e-mail is environment friendly as it does not require paper, thus conserving paper resources.

(e) What do you understand by the term 'social networking'? Explain briefly.

Ans. Social Networking: Social networking allows exchange of information between applications on the Web, such as Facebook and Twitter.

Facebook is a social networking service and website started in February 2004. It was founded by Mark Zuckerberg. Facebook is a social networking website where users can post comments, share photographs and post links or other interesting content on the Web,

Twitter is an American online news and social networking service on which users post and interact with messages known as 'tweets'. Users use mobile phones or computers to send and read messages, called 'tweets'.

COMPUTER TIME

Visit a bank with your parents and find out how it is using computers with networking and the Internet for its various operations. Note down the points and make a PowerPoint presentation on it. You may add some more points after searching from the Internet.

Ans. Do it yourself.

<u>Answers of Suggested Class Activities</u>

1, 2 and 3: Students can do these activities on their own.

Answers of Worksheet

I. **1.** (c)   **2.** (d)   **3.** (e)   **4.** (a)   **5.** (b)

II. **1.** E-MAIL   **2.** FACEBOOK   **3.** TWITTER   **4.** CLOUD
   5. NETWORKING

III. **1.** (b)   **2.** (c)   **3.** (a)   **4.** (d)   **5.** (c)

✎ TESTING TIME – 1

(BASED ON LESSONS 1 TO 3)

1. Match the following:

Ans. (a) 0's and 1's   (i) Animation effect

      (b) Mnemonics   (ii) Taskbar

      (c) Emphasis   (iii) Machine language

      (d) Pin a program   (iv) Notification area

      (e) Date and time   (v) Assembly language

2. Write the purpose of each of the following categories of animation effects in PowerPoint.

Ans. (a) Entrance: **This effect controls how the object enters the slide. For example, with the Bounce animation the object will appear on to the slide and then bounce several times.**

      (b) Emphasis: **Emphasis animation effects determine how the slide object calls attention towards itself while it is on the slide. These animations are often triggered by a mouse click. For example, you can set an object to spin when you click the mouse.**

      (c) Exit: **This effect controls how the object exits from the slide. For example, with the Fade animation the object will simply fade away.**

      (d) Motion Paths: **A motion path moves an object on the slide along a predetermined path like a circle or a line.**

3. Label the following figure of the taskbar of Windows 8.1.

Ans.

Start

Notification Area

Show Desktop

9:45 PM
6/28/2019

Icons

Taskbar

Date and Time

4. Unscramble and write the correct term related to computer languages.

Ans. (a) S S A M E L B R E   **<u>ASSEMBLER</u>**

       (b) T N I R E R E P E T R   **<u>INTERPRETER</u>**

       (c) E R P M L C O I   **<u>COMPILER</u>**

       (d) N E M M N I O C S   **<u>MNEMONICS</u>**

5. Answer the following questions.

   (a) We need a translator for high level languages. Justify the statement giving reasons.

Ans. We need a translator because a computer understands only machine language. Therefore, the programs written in high level languages need to be converted into machine language for processing.

   (b) What is meant by 0's and 1's in machine language?

Ans. The 0's and 1's are codes which are converted into electrical signals. The 'off' state electric signal is identified by 0 and the on state is identified by 1.

   (c) Mention any two advantages of applying animation effects to a slide show.

Ans. Two advantages are:
1. They make the slide show interesting.
2. They add life to the slides.

   (d) What do you understand by pinning a program? Write in short giving one example.

Ans. Bringing a program icon on the taskbar is called pinning. For example, if you work very often in MS Word, you can pin its icon on the taskbar so that you can open it quickly.

   (e) Where is the Date and Time tool present on the desktop of Windows 8.1? Mention any two tasks that can be performed with the help of this tool.

Ans. Date and Time tool is present in Notification Area of the taskbar on the extreme right. With this tool, we can:
1. Change the date
2. Change the time zone

✏️ TESTING TIME – 2

(BASED ON LESSONS 4 TO 6)

1. Write 'Agree' or 'Disagree' for each of the following statements.

Ans. (a) Mail Merge tool is available in MS Excel. **Disagree**

(b) In Mail Merge, we can choose the addresses from the list to which we do not want to send a mail. **Agree**

(c) We cannot select non-adjacent cells in an Excel worksheet. **Disagree**

(d) Formatting tools are available in the 'Styles' tab in MS Excel. **Disagree**

(e) is the SmartArt icon of PowerPoint. **Disagree**

2. Arrange the following steps of Mail Merge in the correct sequence.

Ans. (a) Select the starting document.

(b) Choose Step-by-Step Mail Merge Wizard from the drop-down list.

(c) Preview the letters.

(d) Print your letters or edit individual letters.

(e) Select the recipients from the address file.

Ans. (a)–(b) (b)–(a) (c)–(d) (d)–(e) (e)–(c)

3. Write briefly about each of the following Excel tools.

Ans. (a) **Decrease Font Size:** Used to decrease font size in Excel.

(b) **Align Right:** Used to align the text of a cell to the right side in Excel.

(c) **Wrap Text:** Used to wrap lengthy text of a cell in multiple lines in Excel.

(d) **Merge and Center:** Used to combine and centre the text of cells into a single large cell in Excel.

(e) **Insert Row:** This option helps to add a new row or rows between existing rows.

4. Match the following keyboard shortcuts with the correct command.

Ans. (a) Ctrl +A   (i) Italics
        (b) Ctrl + B   (ii) Undo
        (c) Ctrl + I   (iii) Bold
        (d) Ctrl + Y   (iv) Redo
        (e) Ctrl + Z   (v) Select all

5. Answer the following in one word.

Ans. (a) Viewing the final merged document before printing it.   **Preview**

        (b) Keyboard shortcut for underlining.   **Ctrl + U**

        (c) Group on the Excel window that contains the Increase Decimal tool.   **Number**

        (d) A tool present in the 'Illustrations' group of the PowerPoint Ribbon.   **SmartArt**

        (e) A chart type.   **Column**

✏️ TESTING TIME – 3
(BASED ON LESSONS 7 TO 11)

1. Match the following:

Ans.
(a) Open source   (i) Flash
(b) File extension   (ii) Trojan Horse
(c) Adobe   (iii) Animation
(d) Frame-by-frame   (iv) .py
(e) Malicious   (v) Python

- (a) Open source → (iv) .py
- (b) File extension → (iii) Animation
- (c) Adobe → (i) Flash
- (d) Frame-by-frame → (ii) Trojan Horse
- (e) Malicious → (v) Python

2. Name the Internet service being mentioned in each of the following.

Ans.
(a) Sending a letter to somebody   **E-mail**
(b) Communicating live via text messages   **Instant messaging**
(c) Face-to-face meetings without having to move to a single location.   **Video conferencing**
(d) Learning through the Internet.   **E-learning**
(e) Buying goods online   **E-shopping**

3. Identify and name the computer virus.

Ans.
(a) I attack when you boot your computer.   **Boot sector virus**
(b) I can take sensitive information and harm your network.   **Spyware**
(c) I can change my code each time an infected file is executed.   **Polymorphic Virus**
(d) I am the junk mail in your e-mail account.   **Spam**
(e) My primary job is to infect other computers while remaining active on infected systems.   **Worm**

4. Write short note on each of the following.

(a) Interactive mode of Python language

Ans. ○ Interactive mode, also known as Eval Print Loop (REPL) provides a quick way of running blocks on a single line of Python code. Without passing the Python script to the interpreter, it gets executed directly.

(b) Timeline in Flash CS3

Ans. The Timeline determines the order in which the frames appear in and for how long each frame stays onstage. If you've decided

to organise the images on your frames into separate layers, the Timeline is where you specify how you want your layers stacked: which layer you want on the top, which beneath that, and so on.

(c) Trojan horse virus

Ans. Trojan horse is a program that appears harmless but is actually malicous. Unexpected changes to the computer settings and unusual activities even when the computer is idle are strong indications that a Trojan is residing on the computer. Unlike a computer virus, a Trojan horse is neither able to replicate itlself, nor can it propagate without the user's assistance.

(d) Motion tweening in Flash

Ans. This type of animation requires users to define the starting position of a key frame as well as the ending position. Flash will then fill all the frames that lie between the defined frames and create an animation. An object has to be converted into a symbol so that the motion tween can be applied.

5. Answer the following questions briefly.

(a) Mention any two uses of the Python language.

Ans. 1. Python can be used on a server to create web applications.
   2. Python can connect to database systems. It can also read and modify files.

(b) What is the purpose of Flash software?

Ans. It is used to create animations.

(c) Name any three techniques of Flash animations.

Ans. Frame-by-Frame, Motion tween and Shape tween.

(d) What do you understand by the term 'Pirated software'?

Ans. An illegal copy of software is called pirated software.

(e) Write a short note on E-learning.

Ans. A learning system based on formalised teaching with the help of electronic resources is known as e-learning. While teaching can be based in or out of the classrooms, the use of computers and the Internet forms a major component of e-learning.

PROJECT WORK

Ans. Do it yourself.