

Worksheets

1. Know about the Computer

A. State whether the following statements are true or false.

1. The output unit displays the processed information to the user.
2. Dot Matrix Printer works very similar to a keyboard.
3. An inkjet printer produces hard copy by spraying ink onto a paper.
4. Control unit manages the activities of peripherals.
5. Secondary memory is volatile.

B. Choose the correct answer.

1. Which printer uses dry ink to produce hard copy?
 - (a) Inkjet printer
 - (b) Laser printer
 - (c) Dot matrix printer
 - (d) Colour printer
2. Which of the following is true for OMR?
 - (a) Takes normal printed or hand written text as input
 - (b) Creates a digital image of the text
 - (c) Recognises the darkened circles
 - (d) Used to convert books and documents into electronic files
3. Which of the following is not an example of secondary memory?
 - (a) RAM
 - (b) Pen drive
 - (c) Optical disk
 - (d) Magnetic tape
4. Which of the following checks the validity of bank cheques?
 - (a) OCR
 - (b) OMR
 - (c) Barcode reader
 - (d) MICR
5. Which of the following is not true for a computer?
 - (a) A computer consists of four functionally independent main parts.
 - (b) All the operations are coordinated by the ALU.

- (c) Memory unit stores program data.
- (d) The information that is less frequently accessed is kept in primary memory.

C. Match the following.

Column A	Column B
1. Logic instructions	(a) Main memory
2. Arithmetic instructions	(b) Permanent memory
3. Control unit	(c) AND, OR, NOT, XOR
4. Secondary memory	(d) Addition, Multiplication, Division, Subtraction
5. Primary memory	(e) Extracts instructions from memory decodes and executes them

D. Fill in the blanks.

- 1. A computer is a combination of _____ and _____ components.
- 2. Instructions or data given to the computer by the user are either stored in the _____ or immediately used by the _____ to perform the desired operation.
- 3. Whenever a key is pressed, one corresponding word or number is _____ into its equivalent _____ code over a cable and fed into the _____ or _____.
- 4. OMR sheet has circles that need to be filled with a dark _____ or _____.
- 5. Magnetic Ink is a special ink that contains particles of _____.

E. Answer the following questions.

- 1. Differentiate between Dot Matrix printer, Laser printer and Inkjet printer.
- 2. Describe CPU in detail.
- 3. Illustrate the organisation of computer components.
- 4. Enlist the advantages of a computer.
- 5. Write a short note on memory unit.

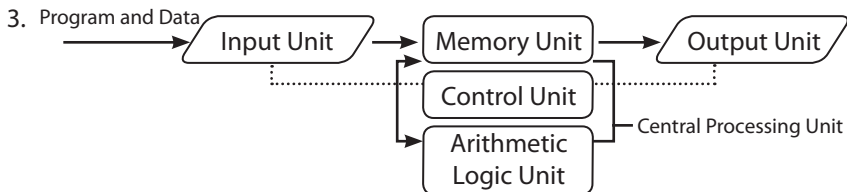
Answers to Worksheet

- A.** 1. True 2. False 3. True 4. True 5. False
B. 1. (b) 2. (c) 3. (a) 4. (d) 5. (c)
C. 1. (c) 2. (d) 3. (e) 4. (b) 5. (a)
D. 1. hardware, software 2. memory, processor
 3. translated, binary, memory, processor 4. pencil, ink 5. iron oxide

E. 1.

Dot Matrix Printer	Laser Printer	Inkjet Printer
It works very similar to a typewriter and creates the impression by striking on the paper.	An inkjet printer produces hard copy by spraying ink onto a paper.	A laser printer uses laser beam and dry ink to produce hard copy.
It produces output in black and white.	It produces output both in black and white, and in colour.	It gives a very high quality output.

2. The Central Processing Unit (CPU) is the brain of a computer where the processing of input data is done. The CPU consists of two components.
- Arithmetic Logic Unit (ALU): It performs arithmetic and logic operations. Arithmetic instructions include addition, subtraction, multiplication, division while logic instructions include AND, OR, NOT and XOR operations.
 - Control Unit (CU): It is a piece of hardware that manages the activities of peripherals. It extracts instructions from memory, decodes and executes them.



4. Few advantages of a computer are as follows.
- It stores large amount of data.
 - It performs tasks at a high speed.
 - It performs calculations quickly and accurately.
 - It does repeated work with same speed and accuracy.
5. Memory unit stores program data. Memory unit consists of two types of memory—primary memory and secondary memory. Primary memory is also called main memory. This memory is directly accessed by the CPU for reading and storing. Primary memory is further divided into two types—Read Only Memory (ROM) and Random Access Memory (RAM). Secondary memory is used to store large amount of data and programs. It is also called permanent memory because it is non-volatile. The information that is less frequently accessed is kept in secondary memory. Magnetic disks and tapes, optical disks and pen drive are a few examples of secondary memory.

2. Types of Software and Computer Languages

A. State whether the following statements are true or false.

1. A computer cannot operate without a software.
2. A computer software manages and controls the hardware so that application software can perform required tasks.
3. The most important system software is the operating system.
4. 5GLs are designed to reduce the level of programming efforts.
5. When a computer is switched on, the first program that is loaded in the memory is the Text editor.

B. Choose the correct answer.

1. A/an _____ is a program that enables a computer to interact with the hardware devices.
(a) driver (b) diagnostic tool
(c) compiler (d) assembler
2. An/a _____ translates a program line by line, passing each line to the CPU for execution before the next line is interpreted.
(a) compiler (b) assembler (c) translator (d) interpreter
3. The _____ translates a complete program at once before passing it on to the CPU.
(a) assembler (b) compiler (c) translator (d) interpreter
4. An _____ is generally used for hardware programming.
(a) compiler (b) assembler (c) translator (d) interpreter
5. _____ occupies low memory and is very fast as it is executed directly by CPU.
(a) Binary code (b) Machine language
(c) Compiler (d) Assembler

C. Match the following.

Column A

1. C++
2. Cold Fusion
3. Artificial intelligence
4. Text editor
5. Translator

Column B

- (a) High speed of execution
- (b) Programming software
- (c) Compiler, interpreter and assembler
- (d) High level language
- (e) Fifth generation language

D. Fill in the blanks.

1. _____ is a program that translates a set of instruction codes to machine level language.
2. Computer understands _____ language only.
3. Instructions are given in the form of _____.
4. Machine language is also considered as _____ language.
5. A program written once in high level language can be run on different types of _____.

E. Answer the following questions.

1. How is second generation language different from third generation language?
2. Describe the classification of system software.
3. Write a brief note on fifth generation languages.
4. Differentiate between system software, application software and programming software.
5. What is the purpose to develop fourth generation languages?

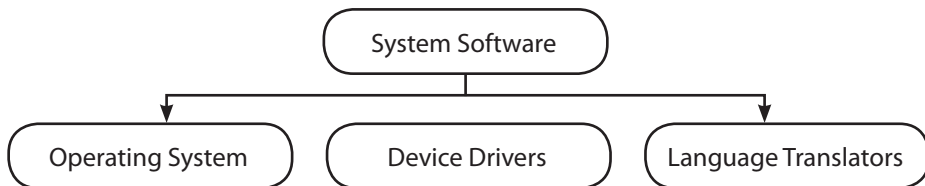
Answers to Worksheet

- A.** 1. True 2. True 3. True 4. True 5. False
- B.** 1. (a) 2. (d) 3. (b) 4. (b) 5. (b)
- C.** 1. (d) 2. (a) 3. (e) 4. (b) 5. (c)
- D.** 1. Language translator 2. machine 3. binary digits
4. low level 5. processors

E. 1.

Second Generation Language	Third Generation Language
Second generation language (2GL) refers to the assembly language. This language uses mnemonic codes or symbols instead of 0 and 1.	Third generation language (3GL) refers to a high level language. A high level language is simple to learn, write and understand, and is very similar to the English language.
Computer understands only machine language, so assembler converts assembly language into machine language. Since programming in this is time consuming, it is also considered as a low level language.	Program written once in high level language can be run on different types of processors but needs to be translated into machine language by translator programs. Compiler and interpreter are the two types of translators used.
For example, 0010 means ADD in binary language, but in assembly language it is directly written as 'ADD'	Basic, C, C++ and COBOL are some examples of high level languages.

2.



- **Operating System:** The most important system software is the operating system. When a computer is switched on, the first program that is loaded in the memory is the operating system. It act as an interface between the user and the hardware. Windows, Linux and Mac OS are some popular operating systems.
 - **Device Drivers:** A driver is a program that enables a computer to interact with the hardware devices like printer and pen drive.
 - **Language Translators:** Language translator is a program that translates a set of instruction codes to machine level language. There are three types of translators: compiler, interpreter and assembler.
3. Fifth generation language (5GL) is the language used in the field of artificial intelligence. It is designed to reduce the level of programming efforts. Here the users specify the required output they want, while the computer determines the sequence of instructions that will accomplish those results. Thus, scientists are trying to develop artificial intelligence in computers so that they can think and take decisions themselves.

4.

System Software	Application Software	Programming Software
System software refers to the programs designed to control the operation of a computer system. It is a computer software which manages and controls the hardware so that application software can perform required tasks.	An application software allows the users to perform one or more specific tasks without having any knowledge of computer programming. Application software includes programs that do specific work for a user.	A programming software allows the programmer to develop a program for computer application.
System software are further classified into operating system, device drivers and language translators.	Word Processor, Spreadsheet and PowerPoint are some application software.	Text editors and diagnostic tools are some programming software.

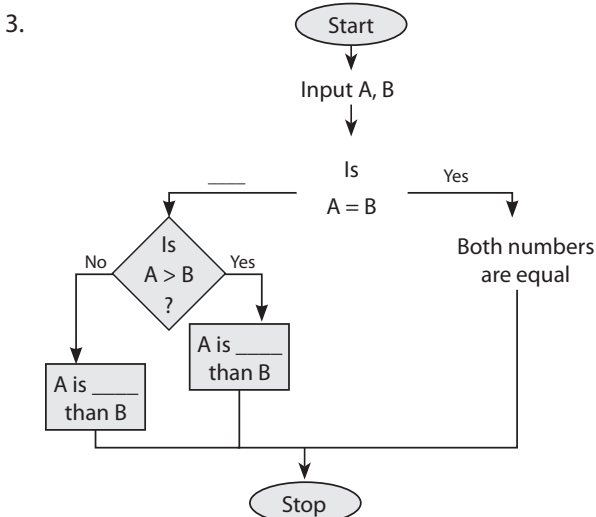
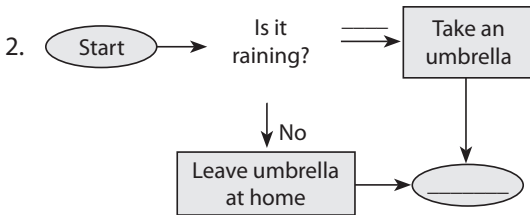
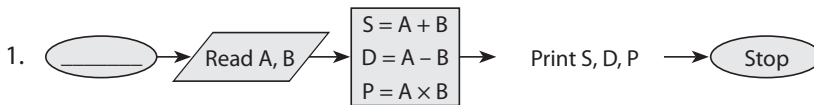
5. The purpose of fourth generation languages (4GLs) is to reduce programming time, effort and cost by offering different methods of generating code automatically from a simpler framework. It has a very high speed of execution.

3. More on Flowcharts

A. State whether the following statements are true or false.

1. Algorithm helps to understand the logic of a system better.
2. Problems can be analysed in a more effective way using a flowchart.
3. Program acts as a guide or blue print during the system analysis and program development phase.
4. Flowchart becomes simplified if the program logic is complicated.
5. Flowchart has to be completely redrawn in case of alterations.

B. Complete the given flowcharts by writing the instructions and drawing the missing symbols.



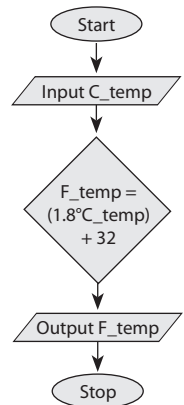
C. Fill in the blanks.

- _____ is a step-by-step procedure to solve a particular problem.
- Computer follows a set of predefined instructions given by the user. This set of instructions is called _____.
- A flowchart is a pictorial representation of steps of an _____ used for solving a particular problem.
- In a flowchart, each operation is represented by a _____ connected by arrows.
- Flowchart serves as good program _____.

D. Answer the following questions.

- Read the given flowchart and answer the following questions.
 - Is the flowchart correct? If no redraw the correct flowchart.
 - What does the above flowchart depict?
 - Write down the output for the following input.

(i) -10 (ii) 72 (iii) -6



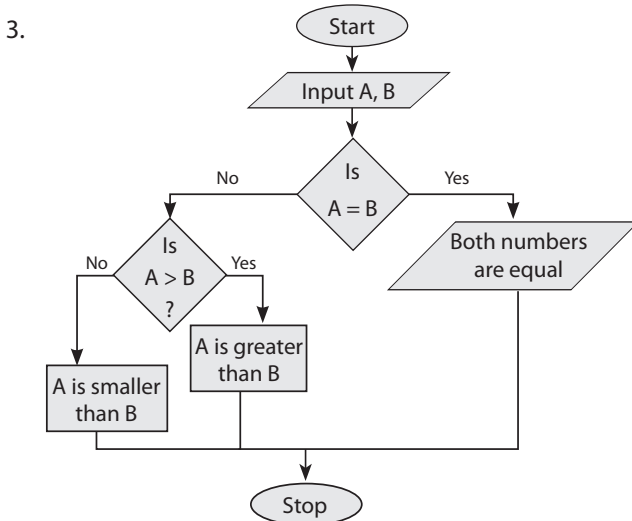
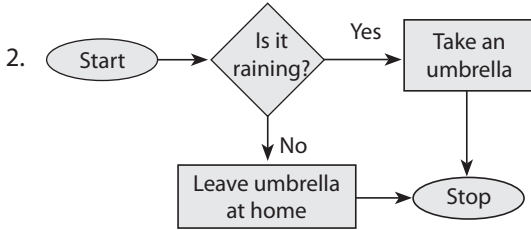
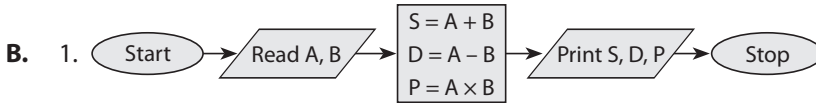
- Complete the given table.

Symbol	Name	Function
	Start/Stop	An _____ is used to indicate the beginning and the end point
	Input/Output	A _____ is used to indicate the acceptance of input from the user or the output or the result concluded.
	Arrows	A _____ is a connector that connects various geometrical shapes. The arrow's direction represents the flow of the sequence
	Process	A _____ represents steps involving processing of data
	Decision Box	A _____ represents steps involving a decision to be taken on the basis of a specific condition
	Connector	A _____ is a circle which connects one part of a flowchart to another

- What information is conveyed through a flowchart?
- How is branched flowchart different from looping flowchart?
- Differentiate between algorithm, flowchart and a program.

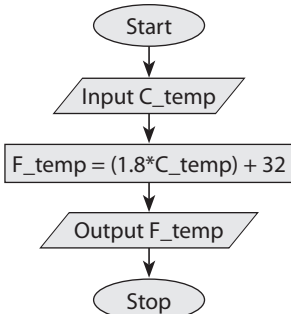
Answers to Worksheet

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



- C.** 1. Algorithm 2. program 3. algorithm 4. specific geometric shape
5. documentation

- D.** 1. (a) No



(b) The given flowchart depicts the conversion of temperature in Celcius scale to Farenheit scale.

(c) (i) -10°C

$$= [1.8 * (-10)] + 32$$

$$= -18 + 32$$

$$= 14^{\circ}\text{F}$$

(ii) 72°C

$$= [1.8 * 72] + 32$$

$$= 129.6 + 32$$

$$= 161.6^{\circ}\text{F}$$

(iii) -6°C

$$= [1.8 * (-6)] + 32$$

$$= -10.8 + 32$$

$$= 21.2^{\circ}\text{F}$$

2. Oval, parallelogram, line, rectangle, diamond, connector

3. A flowchart conveys the following information.

- Sequence in which steps should be performed
- Steps involved in obtaining user input or giving an output
- Steps to be repeated
- Different conditions involved in handling the process
- Steps describing the processing of data

4.

Branched Flowchart	Looping Flowchart
Sometimes the flow of steps in an algorithm can branch into multiple paths based on how a particular condition works out. Branching is the process of following one or two or more alternate paths of computations.	Sometimes few steps in an algorithm have to be repeated for a specific number of times. This is known as a loop. A loop is the sequence of instructions that repeats a specified number of times until a particular condition is met.

5.

Algorithm	Flowchart	Program
Algorithm is a step-by-Step procedure to solve a particular problem.	A flowchart is a pictorial representation of steps of an algorithm used for solving a particular problem. In a flowchart, each operation is represented by a specific geometric shape connected by arrows.	Computer follows a set of predefined instructions given by the user. This set of instructions is called program.

4. Introduction to MS Small Basic

A. State whether the following statements are true or false.

1. A string is always enclosed within single quotes.
2. Constants are the variables whose value change during the execution of a program.
3. Operators are the symbols used to perform various operations on variables or constants.
4. A string contains a sequence of characters, 0–9 and special symbols like % ? , # etc.
5. Relational operators compare two values and return True (1) or False (0).

B. Choose the correct answer.

1. _____ combine two or more relational expressions and return the result as True or False.
(a) Logical operator (b) String constants
(c) Variables (d) Statements
2. _____ are the reserved words in programming.
(a) Strings constants (b) Variables
(c) Keywords (d) Statements
3. Which of the following is true for Writeline () statement?
(a) The text written within the double quotes is printed as it is. It shifts the pointer to the next line after printing the message.
(b) It makes the pointer stay on the same line after printing the message.
(c) It only takes string value as input.
(d) It can be either an integer or floating type.
4. Which of the following is true for Writeline () statement?
(a) The text written within the double quotes is printed as it is. It shifts the pointer to the next line after printing the message.
(b) It makes the pointer stay on the same line after printing the message.
(c) It only takes string value as input.
(d) It can be either an integer or floating type.
5. Which of the following is a Keyword?
(a) Math. Min (N1, N2)
(b) Read () and Read Number ()
(c) EndSub
(d) AND

C. Match the following.

Column A

1. AND
2. OR
3. Math. Min (N1, N2)
4. Math. Pi
5. Math. Abs (N)

Column B

- (a) It gives the absolute value of a number.
- (b) It returns the value of Pi.
- (c) It returns 'True' only if both the relational expressions are 'True'.
- (d) It returns 'True' if at least one of the relational expressions is 'True'.
- (e) It compares two numbers and returns the smallest of the two numbers.

D. Fill in the blanks.

1. Microsoft Small Basic has inbuilt _____ which can perform all the calculations.
2. Every instruction in Small Basic is called a _____.
3. Every instruction follows certain set of rules called _____.
4. A _____ is a location in a computer memory that is used to store data temporarily.
5. A _____ contains a list of characters.

E. Answer the following questions.

1. Differentiate between logical operators and relational operators.
2. Write a short note on statements.
3. Differentiate between the types of constants.
4. Describe Math Library Functions
5. Write a detailed note on variables.

Answers to Worksheet

- A.** 1. False 2. False 3. True 4. False 5. True
- B.** 1. (a) 2. (c) 3. (a) 4. (b) 5. (c)
- C.** 1. (c) 2. (d) 3. (e) 4. (b) 5. (a)
- D.** 1. Math Library functions 2. statement 3. syntax
4. variable 5. string variable

E. 1.

Logical Operators	Relational Operators
Relational operators compare two values and return True (1) or False (0).	Logical operators combine two or more relational expressions and return the result as True or False.
AND, OR are the logical operators	>, <, =, <=, >= and <> are the relational operators

2. Every instruction in Small Basic is called a statement.
- ◆ Writeline () and Write (): Writeline () statement is used to write a line of text in a window. The text written within the double quotes is printed as it is. It shifts the pointer to the next line after printing the message. Write () statement works very similar to writeline (). It makes the pointer stay on the same line after printing the message.
 - ◆ Read () and Read Number (): Read () statement reads the line of text from the window. It only takes string value as input. Read Number () statement reads the numeric value. It can be either an integer or floating type.

3.

Numeric Constant	String Constant
A numeric constant contains integer values. It can either be positive or negative.	A string constant contains a sequence of characters, 0–9 and special symbols like % ? , # etc. within double quotes.
224, -7.4 and +12 are some examples.	"RAM" and "+61432" are some examples.

4. Small Basic provides Math Library that contains various functions to perform mathematical calculations. Following are the different functions used in Small Basic.

Function	Purpose	Example	Result
Math. Min (N1, N2)	It compares two numbers and returns the smallest of the two numbers	Math. Min (10, 5)	5
Math. Max (N1, N2)	It compares two numbers and returns the greatest of the two numbers.	Math. Max (10, 5)	10
Math. Remainder (N1, N2)	It gives the remainder when two numbers are divided.	Math. Remainder (10, 5)	0
Math. Abs (N)	It gives the absolute value of a number.	Math. Abs (-42.23)	42.23
Math. Pi	It returns the value of Pi.	Math. Pi	31,4159

5. A variable is a location in a computer memory that is used to store data temporarily. There are some rules that need to be followed while naming a variable.

- The first character of the variable name should be a letter, followed by any letter, digit or underscore character. For example, B, B2 and B_4 are some valid names.
- String variable names should have \$ symbol as the last character. NAME\$ and A_1\$ are some examples.

There are two types of variables.

Numeric Variable: A numeric variable holds only the numeric value. Numeric variables are further divided into the following.

- **Integer Type:** This type holds only integer values. It does not contain any decimal point. 56, 78 and -9876 are some examples.
- **Floating Type:** It holds a value that contains a decimal point. 78.98 and -54.8 are some examples.

String Variable: A string variable contains a list of characters. A string is always enclosed within double quotes, within these quotes it can be either a number or characters. "Basic" and "1 2 3 4 5 6" are some examples.

5. More on PowerPoint

A. State whether the following statements are true or false.

1. Charts simplify the process of comparison.
2. A sound can also be recorded and added to a presentation.
3. The ability to move objects, text and charts on the slide is called transition.
4. Exit effect controls the manner in which an object exits from the slide during the slide show.
5. The way one slide follows the other on the screen is called animation.

B. Complete the steps.

1. Changing background, colours and patterns

_____ -click on the Chart Area and select the _____ option from the list. A 'Format Chart Area' dialog box appears. Click on the _____ icon. Select the fill border, colour and other desired options. Click on the _____ icon. Select the desired effect. Click on the _____ icon. Select the size, position and alternate text of your choice.

2. Adding video

Click on the Insert tab. Click on the _____ in the 'Media' group of the _____ tab. A drop-down menu appears. Select the Video on _____ option. An 'Insert Video' dialog box appears on the screen. Select the desired video file and then click on the _____ button. The Format and Playback tabs appear. You can format the inserted video by clicking on the _____ tab. Click on the Play _____.

3. Editing chart data

Select the chart. The _____ tab for the chart appears. Click on the _____ button in the 'Data' group. The _____ containing the data opens on the screen. Edit data in the spreadsheet. The chart in the _____ displays the changes made in the data of the _____.

C. Match the following.

Column A

1. Insert tab
2. Table Styles group
3. View Gridlines
4. Text Directions
5. Arrange Text

Column B

- (a) Alignment group
- (b) Arrange group
- (c) Ribbon
- (d) Draw Table option
- (e) Table group

D. Fill in the blanks.

1. A _____ is used to organise the information in a tabular format.
2. Columns are vertical series of cells whereas rows are _____ series of cells.
3. The _____ tab is used to format a table.
4. _____ (Table Group) shows or hides the gridlines in the table.
5. Charts are an effective way to display data in a _____ form.

E. Answer the following questions.

1. Write steps to apply transition effect to a presentation.
2. Describe the options under Layout tab to modify the table.
3. Enlist the steps to apply border on the table.
4. Write a note on animation.

Answers to Worksheet

- A.** 1. True 2. True 3. False 4. True 5. False
- B.** 1. Right, Format Chart Area, Fill & Line, Effects, Size & Properties
2. Video button, Insert, My PC, Insert, Format, button
3. Design, Edit Data, spreadsheet, slide, spreadsheet
- C.** 1. (c) 2. (d) 3. (e) 4. (a) 5. (b)
- D.** 1. table 2. vertical, horizontal 3. Design
4. View Gridlines 5. pictorial
- E.** 1. • Select the slides to which transition effect is to be applied. Click on the Transitions tab. Select the desired option from the 'Transition to This Slide' group.
- You can also add sound to your slide by clicking on the drop-down arrow of the Sound button in the 'Timing' group. Select the sound of your choice.
 - You can specify the duration of the transition in the 'Duration' box of the 'Timing' group.
 - To apply the transition to all slides, click on the Apply to All button present in the 'Timing' group.
 - To select how to advance a slide, select On Mouse Click or After option from 'Advance Slide'. You can advance a slide automatically after a few seconds.
 - To preview the transition of the current slide, click on the Preview button in the 'Preview' group of the 'Transitions' tab.
2. The Layout tab provides the following options to modify a table.
- View Gridlines (Table Group): It shows or hides the gridlines in the table.
 - Insert Rows and Columns (Rows & Columns Group): It inserts rows and columns above, below, left and right of the current column.
 - Delete Tables, Rows and/or Columns (Rows & Columns Group): It deletes table, rows and columns.
 - Merge or Split Cells (Merge Group): It merges or splits the selected cells.
 - Increase or Decrease Cell Size (Cell Size Group): It sets the height and width of the selected cell.
 - Align Text, Text Directions, Cell Margins (Alignment Group): It aligns the text within the cells, changes text direction and specifies the margin for the selected cell.
 - Fix the Height and Width (Table Size Group): It sets the width and height of the table.
 - Arrange Text (Arrange Group): It arranges the text of the table.
3. • Select the rows or columns to be modified. Click on the drop-down arrow of the 'Borders' tool in the 'Table Styles' group. Select All Borders option. Borders will be applied on the selected rows and columns.
4. The ability to move objects, text and charts on the slide is called animation. Using animation, multiple pages can be displayed rapidly in a sequence such that the images appear to be in motion. Following are the different categories of animation effects.
- Entrance: This effect decides the manner in which an object enters a slide during the slide show. It makes the object focus, fade, etc.
 - Emphasis: This effect makes an object shrink or grow in size, change colour, etc.
 - Exit: This effect controls the manner in which an object exits from the slide during the slide show.
 - Motion paths: This effect make an object move up or down, left or right, etc.

6. MS PowerPoint: Giving Presentations

A. State whether the following statements are true or false.

1. PowerPoint allows you to record a narration for the slide show.
2. As we record narration, PowerPoint stores slide files separately so that the slides are synchronised with the narrations recorded by us.
3. Speaker notes or notes pages allow creating notes for each slide.
4. Slides should be of consistent design throughout the presentation.
5. The text under bullets should be long sentences.

B. Fill in the blanks.

1. The _____ group on the Slide Show tab contains many options for the slide show.
2. The Set Up Slide Show option is available in the _____ group of _____ tab.
3. Set Up Slide Show option allows you to set _____ on how the slide show will be presented.
4. Using Rehearse Timings feature, we can save timing for each _____ and _____.
5. _____ or _____ are the notes added to the slides as a reference for the speaker.

C. Answer the following questions.

1. Write the groups and tabs for the following.
 - (a) Spelling button
 - (b) From Beginning button
 - (c) Notes Page option
 - (d) Rehearse Timings option
2. Enlist the tips for an effective presentation.
3. Write the steps to perform the following tasks.
 - (a) To run a slide show
 - (b) To check spelling errors
 - (c) To rehearse timings
 - (d) To record narration
4. Describe the options Set Up Show window includes.

Answers to Worksheet

- A.** 1. True 2. True 3. True 4. True 5. False
- B.** 1. Slide show 2. Set Up, Slide Show 3. preferences
4. slide, animation 5. Speaker notes, notes pages
- C.** 1. (a) Review tab, Proofing group
(b) Slide Show tab, Start Slide Show group
(c) View tab, Presentation Views group
(d) Slide Show tab, Set Up group
2. While designing and running a presentation, keep the following points in mind.
- Slides should be of consistent design throughout the presentation.
 - Use high-quality graphics and pictures to make the presentation attractive.
 - Remove unnecessary information from the presentation.
 - Use contrasting background and text colours.
 - Limit bullet points and text. Do not use more than six bullets per page.
 - Limit to three fonts for the text in a presentation.
 - Use consistent fonts throughout the presentation.
 - The text under bullets should be short ideas, not long sentences.
 - Add web links to your presentation and use hyperlinks between the slides.
 - Prepare the introduction and conclusion.
3. (a) • To start the slide show, click on the From Beginning button or the From Current Slide button of the 'Start Slide Show' on the 'Slide Show' tab.
• Use the arrow keys on the keyboard to move forward or backward in a presentation. Press the Escape (Esc) key to end the slide show.
- (b) • Click on the Review tab. Click on the Spelling button in the 'Proofing' group.
• A 'Spelling' box appears on the right side of the slide. Change the spelling or ignore the suggested changes.
- (c) • Click on the Rehearse Timings option from the 'Set Up' group of the 'Slide Show' tab.
• You will be taken to a full screen view of the presentation. Practise speaking and advance the slides as required in the presentation.
• Click on the Next button on the 'Recording' toolbar in the upper-left corner.
• When you reach the end of the show, a dialog box appears displaying the total time of your presentation. Click on the Yes button if you are satisfied with the timing.
- (d) • Click on the Record Slide Show option from the 'Set Up' group of the 'Slide Show' tab. It will give two options Start Recording from Beginning and Start Recording from Current Slides.
• Click on any one of the options. Click on the Start Recording button.
• Speak in the microphone when the 'Recording' dialog box appears on the screen.
• To stop recording, click on [X] button. Total time of the slide show is displayed on the left button on the screen.

4. Set Up Show window includes many options like Show type, Show slides, Show options, Advance slides and Multiple monitors.
- Show type: It allows to configure the presentation for one of the three basic slide show types: Presented by a speaker (full screen), Browsed by an individual (window) or Browsed at a kiosk (full screen).
 - Show options: To run the show indefinitely until you press Esc, select the Loop continuously until 'Esc' check box. You can also run a show with or without narration.
 - Pen color: It selects the pen colour to be used.
 - Laser pointer color: It selects the colour of the laser pointer.
 - Show slides: To include all slides in the slide show, select All or choose From and enter starting and ending slide numbers if you want to display just some slides in the slide show.
 - Advance slides: You can choose to change the slides manually by pressing the Enter key or by clicking on the slide. To set the show to proceed automatically, select Using timings, if present.
 - Multiple monitors: This option is used to select the monitor from the drop-down list in the 'Multiple monitors' area if the computer has two monitors.

7. The Mail Merge

A. State whether the following statements are true or false.

1. The data is organised in a tabular form with the field names.
2. Directory is used to print a catalogue that requires printing multiple records per page.
3. We cannot check whether Microsoft Word has picked up the data source same as we had typed.
4. After merging of the Main Document and the Data Source is done, we can complete the mail merge procedure.

B. Complete the given steps.

1. To preview merged data

Click on the Preview Results button on the _____ group of the _____ tab. The first record will be displayed. Click on the _____ button to view the remaining _____.

2. To finish and merge

Click on the Finish & Merge option in the _____ group of the _____ tab. A drop-down list appears. Click on the _____ option. A _____ dialog box appears. Select the All option and click on the _____ button.

3. To print letters

Click on the Finish & Merge button in the _____ group of the _____ tab. A drop-down list appears. Click on the Print Documents option. The _____ dialog box appears. Define the desired _____ settings and click on the OK button.

4. To insert record fields

Place the cursor where you want to insert the record fields. Click on the Insert Merge Field button in the _____ group of the _____ tab. The 'Insert Merge Field' dialog box appears with the list of field names. Click on the field name and click on the _____ button. After inserting all the fields, click on the Close button. To separate the field names in a document, press the _____ key.

5. To create a new recipient list

Select the Type a new list radio button under _____. Click on the Create option. A _____ dialog box will appear on the screen. Click on the _____ button to add or remove fields. Enter the data in the fields and click on the _____ button. Click on the _____ button. _____ dialog box appears. Specify a name in the 'File name' box. Click on the _____ button. The 'Mail Merge Recipients' dialog box appears. To change any detail, click on the _____ button. Click on _____ button. Click on the _____ option.

C. Fill in the blanks.

1. The body of the letter which contains the text to be sent to all recipients is called the _____.
2. Data Source consists of a _____.
3. The Data Source is combined with the _____ so that the field names can be used in the _____.
4. Mail merge reads the data source and _____ merges it with the main document to generate _____ for all the records found in the data source.
5. _____ is used for composing and designing multiple documents for which only the _____ information varies.



Answers to Worksheet

- A.**
 - 1. True
 - 2. True
 - 3. False
 - 4. True
- B.**
 - 1. Preview Results, Mailings, Next Record, records
 - 2. Finish, Mailings, Edit Individual Documents, Merge to New Document, OK
 - 3. Finish, Mailings, Merge to Printer, print,
 - 4. Write & Insert Fields, Mailings, Insert, Close, Enter
 - 5. Select recipients, New Address List, Customize Columns, New Entry, OK, Save Address List, Save, Edit, OK, Next: Write your letter
- C.**
 - 1. Main Document
 - 2. mailing list
 - 3. Main Document, Main Document
 - 4. physically, letters
 - 5. Letter, recipient

8. More on Microsoft Word 2016

A. State whether the following statements are true or false.

1. The space between lines and paragraphs can either be increased or decreased.
2. Symbols can also be formatted in a document.
3. Symbols can be selected from Word's Symbol dialog box.
4. We cannot add text or picture as a watermark in the document using the Custom Watermark option.
5. To edit the equation, we click on the Equation.

B. Complete the given steps.

1. To apply watermark to a document

Click on the Design tab. Click on the _____ option in the _____ group. A drop-down list appears. Select the watermark of your choice. It will be applied to the _____ document.

2. To insert equations

Place the cursor in the document where you want to insert the equation. Click on the _____ tab. Select the _____ option from the _____ group. Select the Equation button from the _____ group. A drop-down menu appears. Select the appropriate _____ structure or click on the Insert New Equation option. If you select an equation structure, the required equation will be inserted in the document.

3. To insert symbols and special characters

Place the cursor in the document where you want to insert the symbol. Click on the _____ tab. Select the Symbols option from the _____ group. From the drop-down menu, select the appropriate symbol from the _____ group. If your required symbol is not shown, click on the _____ option. The 'Symbol' dialog box appears. Select the required symbol and click on the _____ button.

C. Fill in the blanks.

1. A footnote is placed at the bottom of a _____.
2. An endnote is placed at the _____ of a _____.
3. _____ are signs or special characters that can be inserted in a document.
4. Watermark refers to an _____ or _____ which is shown as a faded _____ behind the text in a document.
5. The purpose behind using a watermark is to avoid _____.

D. Answer the following questions.

1. Write the tabs for the following groups.
(a) Footnotes group (b) Paragraph group (c) Illustrations group
(d) Text group (e) Page Background group
2. Why are footnotes and endnotes used?

Answers to Worksheet

- A.**
1. True
 2. True
 3. True
 4. False
 5. True
- B.**
1. Watermark, Page Background, entire
 2. Insert, Symbol, Test, Symbols, equation
 3. Insert, Text, Symbol, More Symbol, OK
- C.**
1. page
 2. end, document
 3. Symbols
 4. image, text, imprint
 5. duplicacy
- D.**
1. (a) Reference tab
(b) Home tab
(c) Insert tab
(d) Insert tab
(e) Design
 2. Footnotes and endnotes are used by the author to provide details like bibliographical information, copyright information and explanatory information. The footnote is used in a document to give comments or references for the text. The endnote is used to give references for the sources of the text.

9. Formulae and Functions

A. State whether the following statements are true or false.

1. The relational operators are used to compare two values. They give the result in true or false.
2. The arithmetic operators perform calculations only with numeric values.
3. The logical operators are used to compare two or more relational expressions.
4. The logical operators give the result in true or false.
5. If the formula in A3 is $= A1 + A2$ and you copy the same formula to B3, then Excel automatically changes the cell address in the formula.

B. Choose the correct answer.

1. What is the formula for simple interest?
 - (a) $P*R*T/100$
 - (b) $P+R+T/100$
 - (c) $P-R-T/100$
 - (d) $100/P*R*T$
2. In _____, the formula in the copied cell changes according to the change in the position of the cell pointer.
 - (a) absolute reference
 - (b) relative reference
 - (c) mixed reference
 - (d) functions
3. An absolute reference is specified using the _____ sign along with the column and row number of the cell.
 - (a) #
 - (b) @
 - (c) \$
 - (d) *
4. Identify the mixed reference from the following.
 - (a) $= \$B2*\$$
 - (b) $= B2*C\$2$
 - (c) $= B2*C2$
 - (d) $= \$B2*C\2
5. _____ are the predefined commands that act on a cell or a range of cells and perform calculations.
 - (a) Functions
 - (b) Reference
 - (c) Statements
 - (d) Programs

C. Match the following.

Column A

1. LCM
2. Sum
3. Average
4. Max
5. Min

Column B

- (a) Returns the largest value in the given range
- (b) Returns the smallest value in the given range
- (c) Returns the least common multiple of integers
- (d) Returns the sum total of the range values
- (e) Returns the average of the range values

D. Fill in the blanks.

1. A formula in Excel begins with an equal to _____ sign.
2. The function consists of two parts: the _____ and the _____.
3. The arguments are included within the _____.
4. To get AutoSum, click on the AutoSum button in the _____ group on the _____ tab.
5. Excel provides all its functions in the _____ group of the _____ tab.

- E.**
1. Describe the types of cell referencing.
 2. Write a note on function library.
 3. Enlist the rules to use a function.
 4. Enlist some common error results displayed in Excel.
 5. What does data in a formula consist of?

Answers to Worksheet

- A.** 1. True 2. True 3. True 4. True 5. True
B. 1. (a) 2. (b) 3. (c) 4. (d) 5. (a)
C. 1. (c) 2. (d) 3. (e) 4. (a) 5. (b)
D. 1. (=) 2. function name, arguments
3. round brackets 4. Function Library, Formulas
5. Function Library, Formulas

- E.** 1. There are three types of cell referencing in Excel.
- Relative Reference: In relative reference, the formula in the copied cell changes according to the change in the position of the cell pointer. For example, if the formula in A3 is = A1 + A2 and you copy the same formula to B3, then Excel automatically changes the cell address in the formula.
 - Absolute Reference: An absolute reference is specified using the \$ sign along with the column and row number of the cell. For example, \$B\$4 is an absolute reference. The purpose of \$ sign is fixed to a specific location. This type of referencing is used when we do not want to change the address of the cell while copying the formula to another cell.
 - Mixed Reference: Mixed reference is a combination of relative reference and absolute reference. In this type, either the row or column has to remain fixed. \$B4 is an example of mixed reference.
2. Excel provides all its functions in the Function Library group of the Formulas tab. Excel includes the functions like Math and Trig, Text and Data & Time.
- LCM function returns the least common multiple of integers.
 - GCD function calculates the greatest common divisor of two or more integers.
3. Following rules should be followed while using a function.
- A function must begin with an equal to (=) sign.
 - A function name must be a valid name. Sum and Average are some examples.
 - A function name must be followed by opening and closing parenthesis.
 - Arguments should be enclosed in the parenthesis.
4. Following are some common error results displayed.
- # N/A: Data is not available.
 - # VALUE!: The formula contains an invalid operation.
 - # DIV/0!: Division by zero is being performed.
 - #####: The column is not enough to display the number.
 - #NAME?: The Excel does not recognise the text in a formula.
5. The data in a formula consists of any of the following.
- Value: String or numeric
 - Cell address: A1, B4 and so on
 - Functions: MAX, MIN, SUM and more
 - Operators: +, -, *, / and more
 - Parenthesis: ()

10. Adobe Flash Professional CS6

A. State whether the following statements are true or false.

1. Ink is used to draw freehand lines with modifications.
2. Smooth is used to draw smooth and curved lines.
3. Paint Bucket tool is used to fill colour in an object.
4. Eraser tool is used to erase anything drawn on the Stage.
5. Ink Bottle tool is used to change properties like stroke colour and angle.

B. Choose the correct answer.

1. Flash files have an extension _____.
(a) .fla (b) .flh (c) .flx (d) .fls
2. By default, the _____ size is 550 × 400 pixels.
(a) image (b) stage (c) panel (d) work area
3. Timeline Panel is divided into frames.
(a) panels (b) stages (c) timeline (d) frames
4. The _____ is a collection of tools that are used to perform activities.
(a) Tools Panel (b) Property Inspector
(c) Menu Bar (d) Work Area
5. Straighten is the default mode for _____ tool.
(a) Paint Bucket (b) Pencil (c) Pen (d) Brush

C. Complete the following steps.

1. To draw a curve

Click on the _____ tool on the 'Tools Panel' and draw a line. Click on the _____ tool on the 'Tools Panel'. Move the pointer or the line. When _____ shape changes, click and drag the line to draw the curve. Release the mouse button when the _____ is drawn.

2. To import an image

Click on the _____ menu. Click on the Import option. Select the _____ option. An 'Import' window appears. Select the _____ from where you want to import the image and select the _____. Click on the _____ button. The file gets imported to the _____.

3. To draw thick lines

Click on the _____ tool in the 'Tool Panel'. Select the brush _____ and brush _____ from the 'Tools Panel'. Drag the mouse on the Stage to draw lines.

4. To draw precise paths in the form of straight lines or curves

Click on the _____ tool on the 'Tools Panel'. Click on the Stage to define _____ and _____ at a distance. _____-click on the last point to complete the path. Select the _____ colour and _____ from the 'Property Inspector' dialog box.

5. To draw lines on the Stage

Click on the _____ tool in the 'Tools Panel'. In the 'Property Inspector' dialog box, select the desired _____ colour and _____ style. Click and drag in the direction where you want to draw a line. Release the mouse button. A line will be drawn on the Stage.

D. Fill in the blanks.

1. Rectangle tool is used to draw _____ and _____ shapes.
2. Pen tool is used to draw precise paths in the form of _____ or _____.
3. The _____ and _____ of the segment can be adjusted afterwards.
4. Text tool is used to type text on the _____.
5. Brush tool is used to draw _____ lines.

E. Answer the following questions.

1. Explain the different modes of Eraser tool.
2. Describe the three possible modes of Pencil tool.
3. Differentiate between Lasso tool, Free Transform tool and Selection tool.

Answers to Worksheet

- A.** 1. False 2. True 3. True 4. True 5. False
- B.** 1. (a) 2. (b) 3. (d) 4. (a) 5. (b)
- C.** 1. Line, Selection, pointer's curve
 2. File, Import to Stage, location, file, Open, stage
 3. Brush, size, shape
 4. Pen, point A, point B, Double, stroke, height
 5. Line, stroke, line
- D.** 1. square, rectangular 2. straight lines, curves
 3. angle, length 4. Stage
 5. thick
- E.** 1. Eraser tool is used to erase anything drawn on the Stage. It has five different modes.
- Erase Normal: It erases all the lines over which the tool is dragged.
 - Erase Fill: It erases only the filled area of an object and the outlines remain unaffected.
 - Erase Selected Fills: It erases the selected part of an object.
 - Erase Lines: It erases the strokes without affecting the fills.
 - Erase Inside: It erases only the area of filled part of an object.
2. The Pencil tool has three possible modes: Straighten, Smooth and Ink.
- Straighten: It is the default mode. It automatically straightens the line drawn by the Pencil tool.
 - Smooth: It is used to draw smooth and curved lines.
 - Ink: It is used to draw freehand lines with no modifications.

3.

Lasso Tool	Free Transform Tool	Selection Tool
Lasso tool selects the Irregular area of the drawing.	Free Transform tool is used to scale, rotate and skew any object in Flash.	The Selection tool is used to select a single or multiple objects on the Stage and to change the straight line into curve.

11. More about the Internet

A. State whether the following statements are true or false.

1. A message that we send using the Internet passes through several networks before reaching the recipient.
2. Communication can be processed through instant messaging, e-mail or video conferencing.
3. Network connects computers and the users of those computers.
4. Networking allows easy sharing of information and resources.
5. A network is a system that provides its users with unique capabilities.

B. Choose the correct answer.

1. A network in an office building, school or home usually contains a single _____.
(a) LAN (b) MAN
(c) WAN (d) network
2. Cable network is an example of _____.
(a) MAN (b) WAN
(c) LAN (d) network
3. _____ is an example of WAN.
(a) Client (b) Server
(c) Internet (d) Data sharing
4. A device that transmits packets of information between the _____ and the _____ is called a router.
(a) client, server (b) LAN, WAN
(c) WAN, MAN (d) LAN, MAN
5. A _____ finds the best path to send information between the computers.
(a) LAN (b) router
(c) MAN (d) WAN

C. Match the following.

Column A

1. Google Duo
2. Viber
3. E-commerce
4. Internet TV
5. Yahoo Messenger

Column B

- (a) SonyLIV
- (b) Chat application
- (c) Video conferencing application
- (d) Voice and video calls
- (e) Ebay.com

D. Fill in the blanks.

1. Internet is a _____ of networks.
2. A _____ connects network devices over a country and covers a larger area than that of MAN.
3. _____ connects the computers of the same or different cities.
4. _____ connects network devices over a short distance and is managed by a single person or organisation.
5. Networking facilitates the sharing of _____ devices.

E. Answer the following questions.

1. Differentiate between LAN, WAN and MAN.
2. Define the following terms.
 - (a) Chat
 - (b) Video conferencing
 - (c) P2P
 - (d) Server
 - (e) Clients
3. What is a computer network?
4. What are the benefits of a computer network?
5. Write a brief note on netiquette.

Answers to Worksheet

- A.** 1. False 2. True 3. True 4. True 5. True
- B.** 1. (a) 2. (a) 3. (c) 4. (a) 5. (b)
- C.** 1. (c) 2. (d) 3. (e) 4. (a) 5. (b)
- D.** 1. network 2. Wide Area Network (WAN) 3. Metropolitan Area Network (MAN)
4. Local Area Network (LAN) 5. hardware

E. 1.

LAN	WAN	MAN
Local Area Network (LAN) connects network devices over a short distance and is managed by a single person or organisation.	A Wide Area Network (WAN) connects network devices over a country and covers a larger area than that of MAN.	Metropolitan Area Network (MAN) connects network devices over a city and covers a larger area than that of LAN.
A network in a office building, school or home usually contains a single LAN.	Internet is an example of WAN.	Cable network is an example of MAN.

2. (a) Chat is a text-based communication between two or more users. A chat is a short message that enables other participants to respond quickly.
- (b) Video conferencing is a form of communication that includes exchange of audio and video at the same time between people sitting at geographically separate locations.
- (c) When we use a chat program to send instant messages, our computer acts as a server as we send message and as a client when we receive it. This is called peer-to-peer communication (P2P).
- (d) A computer that provides the required information or acts as storage is called server.
- (e) The computers that get the requested information are called clients.
3. A computer network is a group of computers linked to each other through wired medium or a wireless medium. A network is a system that provides its users with unique capabilities.
4. • Connectivity: Network connects computers and the users of those computers.
- Data sharing: Networking allows easy sharing of information and resources.
- Device sharing: Networking facilitates the sharing of hardware devices. For example, multiple users can share a single hardware device like a printer.
- Communication: The communication can be processed through instant messaging, e-mail or videoconferencing.
5. Netiquette are the set of rules to be followed while using the Internet.
- Never reveal your address, phone number or any other personal information to a stranger in a chat room. There is a chance that he/she may not be the person he/she is claiming to be.
 - Never agree to meet an online friend alone. If you go to meet a person, take an elder with you and arrange to meet at a public place like a park or a mall.
 - All information available on the Internet is not correct. So, verify the information through multiple sources before using it.