

## 1. Fundamental of a Computer

### Checkpoint



- A.** 1. a                      2. b                      3. a                      4. a                      5. a                      6. c  
7. b                      8. c
- B.** 1. F                      2. F                      3. T                      4. F
- C.** 1. Impact              2. Webcam              3. Joystick              4. Pixels              5. Microprocessor              6. USB
- D.** 1. A touchscreen is a screen sensitive to touch. We can interact with a computer by touching areas on the screen.  
2. The motherboard is the system board or main circuit board. Many electronic components are attached to the motherboard or are built into it.  
3. A Computer takes the data as input, processes and then gives result as an output.  
4. Hard Disk is permanently fixed in the system unit. It is usually used for permanent mass storage.  
5. It is very small in size usually 1–1.5 inches. These are used in mobile phones and digital cameras.  
6. CR-ROM, CD-RW and CD-R.
- E.** 1. Three components of CPU are: ALU, CU & MU.  
2. Limitation of a computer are:  
(i) Lack of decision-making ability  
(ii) Lack of intelligence  
(iii) Lack of emotions  
3. Impact printers create an image on a paper by striking the paper with a metal. Example of Impact printer is Dot matrix printer.  
Non-impact printer create an image on a paper by spraying ink on the paper. Example of Non-impact printer is Inkjet printer.



4. **RAM** can be of two types:

1. Dynamic RAM (DRAM)
2. Static RAM (SRAM)

**Dynamic RAM** requires continuous power to refresh the data stored.

**Static RAM** (SRAM) also needs constant power to hold on to data, but it doesn't need to be continually refreshed the way DRAM does. However, SRAM is significantly faster and uses less power than DRAM.

5. The data and instructions that are entered into the computer using input devices are to be stored inside the **memory**. There are two types of memory:

1. Primary Memory
2. Secondary Memory





### Primary Memory

This is the main memory of the computer. CPU can directly access this memory. It is fixed on the motherboard of the computer.

### Secondary Memory



This memory is permanent in nature and is not directly accessed by the CPU. It allows users to store data that may be easily retrieved. It is cheaper as compared to primary memory.

- a. It acts as a portable hard drive and is easy to use as it is small and can be carried in a pocket and plugged into any computer with a USB drive. Pen drive has storage capacity of upto 1TB.
- b. An optical disc is an electronic data storage medium that can be written to and read using a low powered laser beam.

F. 1.  2.  3.  4. 

Hard Disk                      Memory Card                      Blu-Ray Disc                      Pen Drive



A. 1.  2. 

Input                                      Output

3.



Input

4.



Input

- B.** 1. Plotters      2. Joystick      3. Speakers      4. Microphone      5. Pen drive
- C.** ☐ 2 Pen Drive      ☐ 4 CD  
☐ 3 DVD      ☐ 1 Hard Disk

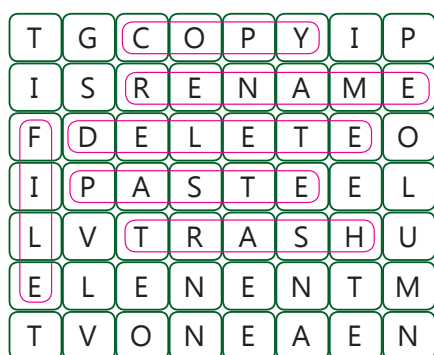
## 2. Managing Files or Folders in Ubuntu

### Checkpoint



- A.** 1. a      2. a      3. a      4. b
- B.** 1. downloads    2. Folder      3. subfolder    4. Home directory
- C.** 1. T      2. T      3. F      4. F
- D.** 1. f      2. a      3. d      4. e      5. b      6. c
- E.** 1. Home directory is a type of folder. It shows all the system generated directories.  
 2. It is easier to work with organised files/folders.  
 3. Trash folder stores the deleted file temporarily before being deleted permanently.
- F.** 1. When we copy a file, it remains at the original location also. But, if we move a file, it won't be available at the original location.  
 2. To rename a file or folder, follow these steps:  
     **Step 1:** Select the file or folder.  
     **Step 2:** Select Rename option.  
     **Step 3:** Type new name in File name box. Click on Rename button.





## Periodic Assessment-1

(Based on chapters 1 & 2)

- A.** 1. Scanner 2. Motherboard 3. Graphics Tablet 4. External Hard-drive  
5. Picture file 6. Text file
- B.** 1. Webcam 2. Joystick 3. Bytes 4. Memory card  
5. Shift + Delete key 6. subfolder
- C.** 1. Web camera 2. Ctrl + X and Ctrl + V

## 3. Drawing Objects in LibreOffice Writer

### Checkpoint



- A.** 1. b 2. c 3. b 4. c
- B.** 1. Line Color 2. Text 3. Toolbar 4. Selection
- C.** 1. T 2. F 3. F 4. F
- D.** 1. It is a rectangular box that contains text.  
2. Oval tool is used to draw a circle.  
3. It is used to Fill color in closed shapes.  
4. Delete key is used to remove an object from the working area.
- E.** 1. To add 3D effect to the shape, follow these steps:  
**Step 1:** Select the shape.  
**Step 2:** Click on Toggle Extrusion option.  
2. To add stars and banners in the document, follow these steps:



**Step 1:** Click the Stars and Banners option.

**Step 2:** Choose the desired shape.

**Step 3:** Hold the left mouse button and drag till you find it in the desired size. Click outside the shape.

3. To insert an image from a file, follow these steps:

**Step 1:** Click Insert menu.

**Step 2:** Click on Image option.

**Step 3:** Choose the desired image, you want to insert.

**Step 4:** Click on Open button.

4. To apply effects to the text, follow these steps:

**Step 1:** Select the text.

**Step 2:** Click on Character option from the Sidebar.

**Step 3:** Click on Font Color down arrow.

**Step 4:** Choose desired colour from the Color palette.

### Mind Boggler



- 4 Click outside the shape.
- 3 Hold the left mouse button and drag till you find it in the desired size.
- 2 Chose the Star shape from the pop-up menu.
- 1 Click on Stars and Banners tool from the Drawing Toolbar.

## 4. Creating Tables in LibreOffice Writer

### Checkpoint



- A.** 1. a                  2. b                  3. c                  4. a
- B.** 1. F                  2. T                  3. T                  4. F                  5. F                  6. F
- C.** 1. In a table, the horizontal lines are called rows.  
2. Insert menu is used to insert an image.  
3. Merging cells are used to combine cells.
- D.** 1. To insert a table using Table menu, follow these steps:  
**Step 1:** Click on Table menu.  
**Step 2:** Click on Insert Table option.
2. To select a row in the table, follow these steps:  
**Step 1:** Keep the mouse pointer on the left most corner of any row you want to select. The mouse pointer will change into a block right arrow.

**Step 2:** Click the mouse button once. The row gets selected.

3. To calculate Sum using Table properties toolbar, follow these steps:

**Step 1:** Press the Sum Tool from Table Properties toolbar.

**Step 2:** Select the columns to add and press Enter key.

4. To insert column in a table, follow these steps:

**Step 1:** Select the cell and click on Table menu.

**Step 2:** Select Insert option.

**Step 3:** Select Columns option.

**Step 4:** Enter total number of columns to be inserted.

**Step 5:** Define the position where the column should be inserted before or after the selected cell.

**Step 6:** Click on OK button.

**Mind Boggler**








1. Background and Shading

2. Table grid

## Periodic Assessment-2

(Based on chapters 3 & 4)

- A.**
-  Curve tool is used to draw various curve shapes.
  -  Fontwork Gallery tool is used to add the attractive font style text.
  -  Symbol tool is used to add different symbols in the document.
  -  Block arrow tools are used to add arrows in block shapes.
  -  Free-form tool is used to draw curved lines.
- B.**
1. Merge Cells
  2. Split Cells
  3. Align-Top
  4. Insert
  5. Table Properties
- C.**
1. Split Cells
  2. Toggle Extrusion
  3. Merge cells



# Test Sheet-1

(Based on chapters 1 to 4)

## Section A

- A.** 1. a                      2. b                      3. a                      4. c                      5. a                      6. b  
7. b.                      8. b.                      9. c.                      10 a.
- B.** 1. Impact              2. USB                      3. Read Only Memory              4. Downloads  
5. Subfolder              6. Line Color              7. Table
- C.** 1. F                      2. F                      3. T                      4. F                      5. T

## Section B

- A.** 1. The motherboard is the system board or main circuit board. Many electronic components are attached to the motherboard or are built into it.  
2. Hard disk is a storage device used to store a large amount of data.  
3. Home directory is a type of folder. It shows all the system generated directories.  
4. Oval tool is used to draw a circle.  
5. a. The horizontal lines are called rows.  
b. The vertical lines are called columns.  
c. The intersection of a row and a column is called a cell.
- B.** 1. (i) Lack of decision-making ability  
(ii) Lack of intelligence  
(iii) Lack of emotions
2. Primary Memory is the main memory of the computer. CPU can directly access this memory. It is fixed on the motherboard of the computer.  
Secondary Memory is permanent in nature and is not directly accessed by the CPU. It allows users to store data that may be easily retrieved.
3. To rename a file or folder, follow these steps:  
**Step 1:** Select the file or folder.  
**Step 2:** Select Rename option.  
**Step 3:** Type new name in File name box. Click on Rename button.
4. To insert an image from a file, follow these steps:  
**Step 1:** Click Insert menu.  
**Step 2:** Click on Image option.  
**Step 3:** Choose the desired image, you want to insert.  
**Step 4:** Click on Open button.



5. Every cell has a cell address which is shown in the address bar of the Formula bar.

To add formula in a table, follow these steps:

**Step 1:** Click inside the cell where formula has to be written.

**Step 2:** To Calculate sum press the Sum tool from the Table Properties Toolbar.

**Step 3:** Select the columns to add and press Enter key.

## 5. Customizing Slides in LibreOffice Impress





### Checkpoint



- A.** 1. a                      2. b                      3. b                      4. c
- B.** 1. Title                    2. Five                    3. Outline                4. Slide pane
- C.** 1. F                        2. T                        3. F                        4. F
- D.** 1. The slide layout is the arrangement of text, images, charts, etc. on a particular slide.  
2. Normal view is used to change the slide layout.  
3. Title placeholder, Text placeholder and Content placeholder.
- E.** 1. To change slide background, follow these steps:  
**Step 1:** Right-click on the slide's empty area.  
**Step 2:** Click on Background tab.  
**Step 3:** Choose desired background.  
**Step 4:** Click on OK button.
2. After every presentation the tradition is to distribute printed document related to the topic. This is called a handout. This view allows us to set the layout of our handout and edit it the way we want it for print.
3. To insert an image, follow these steps:  
**Step 1:** Click on Gallery icon from the Sidebar.  
**Step 2:** Choose a category from the right pane.  
**Step 3:** Right-click on the desired image and choose Insert option.

### Mind Boggler



- A.** 1. Text placeholder                      2. Title placeholder                      3. Content placeholder
- B.** 1.  Insert Tabel                                      2.  Insert Image
3.  Insert Video                                      4.  Insert chart





## 6. Animation and Special Effects in LibreOffice

### Impress

#### Checkpoint



- A.** 1. b                      2. c                      3. a                      4. c
- B.** 1. F                      2. F                      3. F                      4. T
- C.** 1. Duration    2. Misc    3. navigation                      4. Plus
- D.** 1. Five types of animation effects are present in the slide pane.  
2. Move up & Move Down and Preview Effect.  
3. Remove Effect is used to remove an animation effect.
- E.** 1. **Step 1:** Select the object to apply animation. Click on Animation icon from the Sidebar.  
**Step 2:** Click the Add Effect (+) icon in the Animation pane.  
**Step 3:** Click on Down arrow in the Category: box. Select desired effect.  
2. To apply Slide Transition, follow these steps:  
**Step 1:** Click on Slide Transition option from the Sidebar.  
**Step 2:** Select the transition you want to apply from the Slide Transition pane.  
**Step 3:** Click on Play button.  
3. To apply Master Slides using Sidebar, follow these steps:  
**Step 1:** Click on Master Slides icon from the Sidebar.  
**Step 2:** Choose the desired style from the Master Slide pane. Selected style is immediately applied to all the slides.

#### Mind Boggler



1. Master Slides
2. Font color

## 7. Introduction to LibreOffice Calc

#### Checkpoint



- A.** 1. c                      2. b                      3. c                      4. a
- B.** 1. Title bar    2. Slider    3. Cell Address    4. Horizontal



- C.** 1. T                      2. T                      3. F                      4. F
- D.** 1. Active cell and Title bar  
2. Auto calculation and Functions  
3. Number and Text
- E.** 1. To start Calc, follow these steps:  
**Step 1:** Click on Show Application icon from the Launcher.  
**Step 2:** Type Calc in the search box.  
**Step 3:** Click the Calc icon from the search result area.
2. To use Auto Fill feature, follow these steps:  
**Step 1:** Type first number. Move the cursor to the bottom corner of the cell.  
**Step 2:** Drag till where you want the series to fill.
3. To Select non-contagious rows and columns:  
**Step 1:** Select the first column or row by clicking the row or column header.  
**Step 2:** Hold down the Ctrl key and keep left clicking the desired row or column header till the desired ones are selected.
4. To save a spreadsheet, follow these steps:  
**Step 1:** Click on File menu.  
**Step 2:** Click on Save or Save As option from the drop-down menu.  
**Step 3:** Select the location and give the file name.  
**Step 4:** Click on Save button.

### Mind Boggler



	A	B	C	D
1	Computer			
2		Hindi		
3			English	
4			Science	
5	Maths			
6				Social Studies
7		EVS		
8				

1. A5      2. C3      3. A1      4. B6      5. B2      6. D6      7. C4      8. B7



## 8. More on Internet

### Checkpoint



- A.** 1. a                      2. c                      3. c                      4. a
- B.** 1. information                      2. search engines                      3. downloading                      4. uploading
- C.** 1. F                      2. T                      3. T                      4. F
- D.** 1. c                      2. a                      3. d                      4. b
- E.** 1. Internet is a global network of millions of computers and computer networks all over the world.  
2. Facebook, Instagram and Twitter . (any three)  
3. Mark Zuckerberg is the founder of Facebook
- F.** 1. (i) E-mail: E-mail is an online communication system. With e-mail, you can send and receive electronic messages which work like writing letters.  
(ii) Online Shopping: You can buy and sell products all over the world through the Internet. It is called online shopping.  
2. Computer System: It is an integrated system with all the different types of input, output, processing and storage devices.  
Telephone and Cable Lines: These help in establishing a link between the different computers and the servers.  
Modem: Modem transfers digital information over telephone lines and vice-versa.  
Web Browser: It helps the user in opening and displaying the different web pages.  
ISP: It is a company that provides Internet access on payment of a monthly fee.

### Mind Boggler



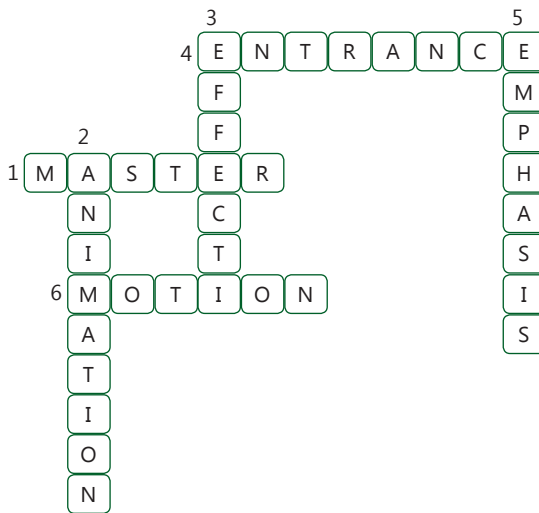
1. URL                      2. SURFING                      3. PROTOCOL                      4. INTERNET

## Periodic Assessment-3

(Based on chapters 5 to 8)

- A.** 1. Shift + Spacebar key  
2. Hold Ctrl key and click on the cell you want to select.

B.



## 9. Data Processing

Checkpoint



- A. 1. a      2. b      3. c
- B. 1. Data refers to the raw input. When this data is processed, the outcome received is known as information.
2. Decoding is the process of converting a coded message into understandable language.
- C. Information can be represented in the form of tables, pictures, etc.

Mind Boggler



C. 1.



No Parking

2.



Veg & Non-Veg

3.



Pedestrian Crossing

4.






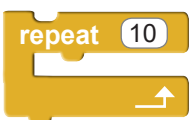
U-Turn Prohibited

# 10. Programming in Scratch

## Checkpoint



- A.** 1. b                      2. a                      3. b                      4. b
- B.** 1. T                      2. T                      3. T                      4. F                      5. T
- C.** 1. Pen                      2. 360°                      3. regular                      4. stamp

- D.** 1.  To start the execution of the script.
2.  To put Sprite's pen down, so that it will draw as it moves on the screen.
3.  To stop the execution of the script for the specified time.
4.  To repeat a set of block & for a specified number of time.
- E.** 1. Polygon is a closed figure with all sides of equal length and all angles of equal size.
2. Pen block is used to draw shapes and plot coloured pixels on the screen. This block puts Sprite's pen down, so that it will draw as it moves on the screen.
3. Stamp block is used to draw patterns.
- F.** 1. You can change the direction of the Sprite by using the Turn block under the Motions block menu. The turn 15 degree clockwise block will turn the Sprite in clockwise direction by the specified number of degrees. The turn 15 degree anticlockwise block will turn the Sprite in anti-clockwise direction by the specified number of degrees.
2. Steps to draw polygons:
- Step 1:** Drag the Repeat block from Control blocks menu.
- Step 2:** Drag the motion block: move 52 steps and turn 32.7 degrees.
- Step 3:** Drag wait block set value 1 secs.
- Step 4:** Change the Repeat value and Turn value accordingly.
- Step 5:** Set Pen size to value 1 and add blocks: pen down & clear.
- Step 6:** Run the Sprite.
3. To draw a triangle by using repeat command: Repeat move 100 steps Turn 120 degrees.



Do it Yourself

## 11. Concept of Smart Living

### Checkpoint



- A.** 1. b                      2. b                      3. a
- B.** 1. Light                2. AI                      3. Smartphone                4. Smart smoke detectors
- C.** 1. Smart Homes are homes that use internet connected devices to empower remote monitoring and management of appliances and devices such as for lighting and heating.  
The following are the benefits of smart homes:
- i. Smart Homes are great in saving power.
  - ii. They are installed with smart security devices which helps in protecting the home and its belongings.
  - iii. They are connected to multiple devices and all of those devices can be accessed easily all at once with the help of a smartphone.
  - iv. They are installed with gadgets which can be accessed remotely and can control various functions.
2. Smart Cameras, Smart Smoke Detectors, Smart Lighting, Smart TV
- D.** 1. This device sounds an alarm when smoke is detected. It can warn you if there is fire in your home.
2. Smart TV allows its users play music, movies, or change channels using Internet. And all this can be controlled with your voice.

### Mind Boggler



- C.** 1. VIDEO DOORBELL
2. SMART SPEAKER
3. SMART HUB

## Periodic Assessment-4

(Based on chapters 9 to 11)

A. 1.



Smart Speaker

2.



Smart Camera

3.



Smart Smoke Detectors

B. 1.



To repeat a block of code forever

2.



To change the shade of the current pen color

3.



To start the execution of the script

C.

A	1	E	5	I	9	M	13	Q	17	U	21		
B	2	F	6	J	10	N	14	R	18	V	22		
C	3	G	7	K	11	O	15	S	19	W	23	Y	25
D	4	H	8	L	12	P	16	T	20	X	24	Z	26

1. 3 15 13 16 21 20 5 18

COMPUTER

2. 4 1 20 1

DATA

3. 9 14 6 15 18 13 1 20 9 15 14

INFORMATION

## Test Sheet-2

(Based on chapters 5 to 11)

### Section A

A.

1. (i)

2. (iii)

3. (ii)

4. (iii)

5. (ii)

6. (ii)

7. (iii)

8. (i)

9. (i)

10. (i)

B.

1. Title

2. Slide Pane

3. Duration

4. Smart Homes

5. AI

6. Stamp

7. Title bar

C.

1. F

2. F

3. F

4. T

5. T

6. F

7. F

## Section B

- A.**
1. The slide layout is the arrangement of text, images, charts, etc. on a particular slide.
  2. Data refers to the raw input which is when processed becomes information.
  3. Pen Block allow a Sprite to draw shapes on the screen.
  4. Auto calculation and Functions
  5. Internet is a global network of millions of computers and computer networks all over the world.
- B.**
1. To change slide background, follow these steps:  
**Step 1:** Right-click on the slide's empty area.  
**Step 2:** Click on Background tab.  
**Step 3:** Choose desired background.  
**Step 4:** Click on OK button.
  2. To apply Slide Transition, follow these steps:  
**Step 1:** Click on Slide Transition option from the Slidebar.  
**Step 2:** Select the transition you want to apply from the Slide Transition pane.  
**Step 3:** Click on Play button.
  3. The following are the benefits of a Smart Home:
    - \* Smart Homes are great in saving power. For example, people often forget to switch off their lights when they go to sleep. Smart Homes can detect when the user is asleep and accordingly switch off the lights.
    - \* They are installed with smart security devices which helps in protecting the home and its belongings.
    - \* They are connected to multiple devices and all of those devices can be accessed easily all at once with the help of a smartphone.
    - \* They are installed with gadgets which can be accessed remotely and can control various functions. For example, a person can control the temperature of the Smart Home.
  4. To use Auto Fill feature, follow these steps:  
**Step 1:** Type first number. Move the cursor to the bottom corner of the cell.  
**Step 2:** Drag till where you want the series to fill.
  5. Uses of Internet are:
    - (i) E-mail: E-mail is an online communication system. With e-mail, you can send and receive electronic messages which work like writing letters.
    - (ii) Online Shopping: You can buy and sell products all over the world through the Internet. It is called online shopping.

