

## NUMBER SYSTEM

### A. Complete the sentences.

1. The base of decimal number system is .....
2. The position of first digit towards left side of the decimal point is .....
3. The most widely used number system is .....
4. A binary number is made up of only .....
5. Hexadecimal number system provides shortcut method to represent .....
6. Binary addition is similar to the addition of .....

### B. Write 'T' for true and 'F' for false. Correct the false statements.

1. The word binary comes from 'Bi-' meaning three.  
.....
2. We cannot perform the addition operation on binary numbers.  
.....
3. The letters A to F represent the decimal numbers from 12 to 17 in hexadecimal number system.  
.....
4. A single binary digit (like '0' or '1') is called a 'byte'.  
.....

### C. Read the clues and answer the following:

1. It contains a decimal point. ....
2. It uses the digits 0 to 7. ....
3. It consists of 16 digits. ....
4. It is simply a manner of counting. ....
5. It is used as a shorthand representation of long binary numbers. ....

## ADVANCED FEATURES OF EXCEL

### A. Complete the sentences.

1. The filter can also be applied through Sort & Filter group under the Data tab by selecting the .....
2. The Data Bars option is used to add data bars to the cells having .....
3. The Highlight Cells Rules option is used to highlight all cells satisfying a given .....
4. The Top/Bottom Rules option is used to highlight some top or bottom cells in a .....
5. We can select the Conditional Formatting command from Styles group under the .....

### B. Write 'T' for true and 'F' for false. Correct the false statements.

1. The selected data in Excel is usually arranged in descending order.  
.....
2. Conditional Formatting is used to separate unwanted material from a mixture.  
.....
3. The conditional formatting applied to a data can be cleared by selecting New Rule option.  
.....

### C. Tick (✓) the correct option.

1. Numbers and Symbols in Excel can be sorted by using .....  

a. Sort A to Z	<input type="checkbox"/>	b. Find & Select	<input type="checkbox"/>
c. AutoSum	<input type="checkbox"/>	d. Conditions	<input type="checkbox"/>
2. The Sort & Filter command exist under the Editing group in the ..... tab.  

a. Home	<input type="checkbox"/>	b. Formula	<input type="checkbox"/>
c. Insert	<input type="checkbox"/>	d. Review	<input type="checkbox"/>

### MORE ON KRITA

#### a. Tick (✓) the correct option.

1. What is the default file extension when you save a Krita file?

a. .png

☐

b. .jpg

☐

c. .kra

☐

d. .psd

☐

2. Which menu is used to add a new layer in Krita?

a. File

☐

b. Edit

☐

c. Layer

☐

d. View

☐

3. Which of the following tools is used to move the canvas in Krita?

a. Move Tool

☐

b. Pan Tool

☐

c. Brush Tool

☐

d. Select Tool

☐

4. The shortcut key to undo an action in Krita is:

a. Ctrl + Y

☐

b. Ctrl + Z

☐

c. Ctrl + U

☐

d. Ctrl + A

☐

#### B. Competency-Based Questions.

Answer the following based on understanding and application.

1. Riya accidentally drew on the wrong layer. How can she identify and fix this mistake?
2. Why is it helpful to use multiple layers while creating digital art?

#### C. Rectify the Given Statements.

Rewrite the incorrect statements correctly.

1. Krita is mainly used for video editing and animations.

.....

2. Layers in Krita are only used to change the background color.

.....

## LISTS AND TABLES IN HTML5

### A. Complete the sentences.

1. The <TR> stands for .....
2. The description list is also known as .....
3. The <UL> tag is used to define an .....
4. The <TD> tag stands for .....
5. Tables represent the data in the form of .....

### B. Write 'T' for true and 'F' for false. Correct the false statements.

1. The VALIGN attribute of the <TD> tag is used to align the position of text in the cell horizontally.  
.....
2. A list is a collection of related tags.  
.....
3. Rows are further divided into cells by using the <TR> tag.  
.....
4. The COLOR attribute is used to change the background color of the table.  
.....
5. The BORDER attribute allows you to show borders only at specified sides.  
.....

### C. Explain the following:

1. CELLPADDING - .....
2. CELLSPACING - .....

## IMAGES, LINKS, AND FORMS IN HTML5

### A. Complete the sentences.

1. A link that connects to another place on the same web page is called an .....
2. HTML allows you to insert images inside the web pages through the .....
3. VLINK attribute is used to set the color of the .....
4. SCROLLAMOUNT attribute indicates the speed of the .....
5. JPEG stands for .....

### B. Write a short note on the following:

1. <MARQUEE> - .....
2. Anchor Tag - .....
3. Hyperlink - .....
4. <FRAMESET> - .....

### C. Write 'T' for true and 'F' for false. Correct the false statements.

1. The ALT attribute specifies the source or URL of the image that has to be inserted in the web page.  
.....
2. The RESIZE attribute is used to restrict the user from resizing the frame on the web page.  
.....
3. We cannot create internal linking in HTML web pages.  
.....
4. The <FRAMESET> tag divides the window into vertical frames by using ROWS attribute.  
.....
5. The <FRAMESET> tag is a container tag and written in place of the <BODY> tag.  
.....

## DEVELOPING MOBILE APPS

### A. Fill in the blanks using the hints given below:

**Hints:** Android Studio, Built-in Blocks , Gmail, delete, Components

1. For setting up the App Inventor, we should have a ..... account.
2. .... pane shows a list of all the components added to the screen in a hierarchical view.
3. .... is a commonly used Android Emulator.
4. .... are responsible for handling operations like Math, Text, Logic and Control.

### B. Answer the following questions:

1. What are the requirements for setting up the App Inventor?

.....

2. What is Design View of the App Inventor?

.....

3. What is the use of Palette Pane?

.....

4. What is an Emulator?

.....

### C. Guess who am I?

1. I arrange all the blocks for coding in the workspace.
2. I store the copy of all the blocks even when you exit App Inventor.
3. Properties of the components can be changed with my help.

.....

.....

.....

## GOOGLE APPS

### A. Answer the following questions:

1. What are Google slides? Write any 2 features of Google slides.

.....

.....

2. Write the steps to create a Youtube account.

.....

.....

### B. Number the steps to share a Google sheet.

- ☐ Enter the email address(es) of the people with whom you want to share the spreadsheet in the box. Or you can copy the link if you do not know the email address.
- ☐ Click on the Send button to share the file.
- ☐ Assign permission levels by clicking on the Settings button.
- ☐ Click on the Share button from the top-right corner of the spreadsheet. The Share with people and groups pop-up box appears.
- ☐ Type a message for the receiver in the Message box.
- ☐ Click on the status of the receiver. You can choose from Editor, Viewer or Commenter.

### C. Fill in the blanks.

1. Share icon is used to generate a link of the document to ..... and ..... access.
2. Hybrid and Satellite are the two kinds of ..... views.
3. When working ..... changes made to the Google docs are saved .....

## CYBER SECURITY

### A. Explain the following:

1. Optical mouse - .....  
.....  
.....
2. Face Recognition - .....  
.....  
.....
3. Decryption - .....  
.....  
.....

### B. Match the following:

- |                      |                                 |
|----------------------|---------------------------------|
| 1. Rootkit           | a. Antivirus                    |
| 2. Norton            | b. Malware                      |
| 3. Firewall          | c. Program in the Control Panel |
| 4. Disk Defragmenter | d. Network security system      |

### C. Write the names of four online backup services.

1. ....
2. ....
3. ....
4. ....



## ALGORITHMIC INTELLIGENCE

### A. Read the clues and answers the following:

1. It is set of steps in a sequential manner to solve a problem or to complete a task. ....
2. It is used to show the start and stop points of the flowchart. ....
3. It indicates a question or branch in the process flow. It is used when there are 2 options (Yes/No). ....
4. It shows the direction in which the process flows. ....

### B. Write 'T' for true and 'F' for false. Correct and rewrite the false statements.

1. Algorithm facilitates a programmer to analyse the problem in detail.  
.....
2. Decision symbol is used to start and stop the flowchart.  
.....
3. The flowchart should be dirty, unclear and hard to follow.  
.....
4. Once a flowchart is drawn, it becomes hard to write the program in any high-level language.  
.....

### C. Write the use of any three symbols in flowcharts.

1. ....
2. ....
3. ....

## TOKENS AND DATA TYPES IN PYTHON

### A. Complete the sentences.

1. break statement - .....
2. while statement- .....
3. for loop - .....

### B. Fill in the blanks.

1. The ..... statements are used as decision making statements in Python.
2. The print() function is used to ..... output on the screen.
3. The ..... statement forces execution of next iteration.
4. The statement print ("Python"+"Programming") will print .....
5. The ..... function use to take the input form the user.

### C. Write a Python program to print all the element of the following sequence:

['a','e','i','o','u']

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

## FUTURE OF ARTIFICIAL INTELLIGENCE

### A. Define the following waves of AI:

1. First wave

.....

.....

2. Second wave

.....

.....

3. Third wave

.....

.....

### B. Define Intelligent Security.

.....

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.....

.....

### C. Define Smart Highway.

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