

Chapter-1

Number Systems

TESTING TIME

A. 1. b

2. c

3. c

4. c

5. a

B. 1. Number system

2. Binary

3. 10

4. 16

5. 8

C. 1. False

2. False

3. True

4. True

5. False

D. 1. There are four major number systems- decimal, binary, octal and hexadecimal.

2. Decimal number system is a base 10 number system having 10 digits from 0 to 9. This means that any numerical quantity can be represented using these 10 digits.

3. Hexadecimal number system has 16 symbols-0 to 9 and A to F where A to F is equal to 10 to 15, respectively.

Example : the weight and position of the digits in the number 2F7 is :

| | | | |
|------------|--------|--------|--------|
| Face value | 2 | F | 7 |
| Position | 2 | 1 | 0 |
| Weights | 16^2 | 16^1 | 16^0 |

Here, F=15

So, the number becomes $2 \times 16^2 + 15 \times 16^1 + 7 \times 16^0 = 512 + 256 + 7 = 759$ in decimal number system.

4. Octal Number system is a base 8 number system having 8 digits from 0 to 7.

Example The weight and position of the digits in the octal number 4155 is:

| | | | | |
|------------|-------|-------|-------|-------|
| Face Value | 4 | 1 | 5 | 5 |
| Position | 3 | 2 | 1 | 0 |
| Weight | 8^3 | 8^2 | 8^1 | 8^0 |

So, the number becomes $4 \times 8^3 + 1 \times 8^2 + 5 \times 8^1 + 5 \times 8^0 = 2048 + 64 + 40 + 5 = 2157$ in decimal number system.

5. The rules of binary multiplication are as follows.

| Case | A x B | Product |
|------|-------|---------|
| 1 | 0 x 0 | 0 |
| 2 | 0 x 1 | 0 |
| 3 | 1 x 0 | 0 |
| 4 | 1 x 1 | 1 |

ACTIVITY TIME

A. Page No. 9 and 10

B. Page no. 9 and 10

Chapter-2

Control Panel in Window 10

TESTING TIME

A. 1. b

2. a

3. a

4. a

5. b

B. 1. Large Icons View

2. Clock and region

3. Control Panel

4. Default Button

C. 1. True

2. True

3. True

4. False

5. False

D. 1. Control Panel is a part of windows OS that allows you to view and change settings of the computer systems.

2. Category view is the default view of control Panel. It shows a list of categories such as system and security, Hardware and sound, programs, etc. While Large Icons View shows a complete list of all control panel items without grouping into categories.

3. Hardware and Sound Category.

4. Button Configuration, Double Click Speed & Click Lock.

ACTIVITY TIME

- A.** a. Control Panel Window
- b. Large Icon view
- c. Small Icon view

Chapter-3

Advanced features of excel 2016

TESTING TIME

A. 1. c

2. b

3. c

4. a

5. b

B. 1. Sort A to Z

2. Bar chart

3. Chart

4. Data Table

5. Conditional

C. 1. False

2. True

3. True

4. True

5. False

D. 1. Arranging the data of a worksheet either in ascending or descending order is known as sorting. While the filter feature allows you to view only the selected data in a range, while hiding data temporarily.

2. To filter data in a worksheet, follow these steps.

Step-1 Select any cell in range of cell you want to filter

Step-2 Click the sort and filter button in the editing group on the home tab and select the filter option

Step-3 Click any drop-down arrow to apply a filter to that column.

Step-4 Click ok, you can see a filter button next to the program field indicating that a filter has been applied.

3. A Chart has many components,

(i). Axes : A chart has three axes, x-axis, y-axis, z-axis.

(ii). Axis title: It is the heading given to an axis.

(iii). Chart Area: The chart area includes all objects and elements in a chart.

4. The Pie chart displays data for a single data series in the form of a pie (Circle). A Doughnut chart is a variant of the pie chart. It also represents the relationship of the parts of data to the whole.

5. Step-1 Select the chart and click the more button in the chart styles group on the design tab.

Step -2 Select the desired chart style from the gallery.

Step-3 the selected style is applied to the chart.

ACTIVITY TIME

- A. 1. Filter
2. Quick Layout
3. Conditional Formatting
4. Sort & Filter
5. Change Chart Type

Chapter-4

Advanced Tools in Flash CS6

TESTING TIME

A. 1. c.

2. c

3. c

4. a

5. b

B. 1. Flash

2. Distort

3. Tint Animation

4. Modify

5. corner

C. 1. False

2. True

3. False

4. False

5. True

D. 1. Flash is a software platform used for creating computer animations, cartoons, graphics, animated logos, mobile –based applications etc.

2. Such as white background , default width and height (550 X 400 px), etc.

3. Gradient fill is used to produce a three- dimensional colour look by blending one colour into another. Flash provides two types of gradient styles: Linear and radial.

4. Distort option allows you to distort the shape only from the corners. While the envelop option allows you to distort the shape from any point. To distort an image follow these steps:

Step-1 Select the desired object or a part of it which you want to distort using the selection tool.

Step-2 Right click on the selected part and click distort or envelop option.

Step-3 Click and drag any of the handles inwards or outwards to distort the shape of the object.

5. To use a shape tween with text you need to break apart the text one step further so it loses any of the text tool properties and becomes like a drawn image.

ACTIVITY TIME

A. Step-1 double-click

Step-2 Modify

Step-3 Transform, Vertical

B. Step-1 Selection

Step-2 Paint Bucket

Step-3 Fill color

Chapter-5

Working with Layers

TESTING TIME

A. 1. a

2. c

3. b

4. a

5. b

B. 1. Timeline

2. Layer 1

3. Top

4. Eye

5. Masking

C. 1. True

2. False

3. False

4. True

5. True

D. 1. Layers are like a set of transparent sheets placed together on the top of each other to form a complete image. Layers help you create large and complex animations.

2. To rename a layer follow these steps:

Step-1 Right click on the desired layer and select properties.

Step-2 Type the new name for the layer in the name text box and click ok.

Step-3 Double click on the name of the layer and then type the new name for the layer.

3. To insert a new layer in flash document, follow these steps.

Step-1 Select the layer before which you want to insert a new layer.

Step-2 Click the insert menu, point to timeline and then select layer from the submenu that appears.

Step-3 Click the new layer button.

4. To change the order of the layer, follow these steps:

Step-1 Insert a new layer above the stars layer and rename it to meteoroid.

Step-2 Select the spray brush tool choose the yellow color and set the brush width and height to 9 px.

Step-3 Click and drag the spray brush on the stage to draw meteoroids.

Step-4 Now, select the meteoroid layer, click and drag the selected layer, to place it after the moon layer.

Step-5 Release the mouse button when the layer is placed at the desired place.

5. Hiding a layer means that the contents of that layer are not visible and locking a layer means that the contents of that layer cannot be edited.

To lock all the layers in the timeline, simply click the lock or unlock all layers icon on the timeline header.

ACTIVITY TIME

A. See page no.55

Chapter-6

Looping and Graphics in Small Basic

TESTING TIME

A. 1. c

2. b

3. a

4. c

5. b

6. c

B. 1. While

2. Pixels

3. Negative

4. Fill Ellipse

5. Pen Width

C. 1. False

2. True

3. True

4. False

5. True

D. 1. Loops play an important role in any programming language. They allow you to repeat a set of statements a number of times without writing them again and again.

2. Small basic provides two types of loops, For Loop and While Loop.

- For Loop is used to repeatedly execute a group of statements for a specified number of times.
- While Loop, sometimes a situation arises when we do not know the exact number of times a loop is to be executed.

3. The Counter variable increment by some other value by using the step keyword with for Loop. You can give both a positive number and a negative number with the step keyword.

4. The Graphics Window provides graphics related input and output functionality. The background colour Property is used to set the background colour.

5. To make the text bold use font bold, to make text italics use font Italics in the properties of graphic window object.

6. The default value of the Pen colour is black and pen width is 2.

ACTIVITY TIME

Syntax

1. DrawText (x,y, Text)
2. DrawEllipse(x,y, width, height); where (x,y) are the coordinates of the center point of the ellipse
3. Fill Rectangle (x, y, width, height)
4. Draw Triangle(x1, y1, x2, y2, x3, y3), were (x1, y1), (x2, y2) and (x3, y3) are the coordinates of the triangle, which specify the three vertices of the triangle.

Example

1. Write a program to display fancy text on graphics window.
2. Write a program to draw an ellipse filled with yellow color.
3. Write a program to drawtricolour flag on the graphics window.
4. Write a program to draw three filled triangles at random positions.

Chapter-7

Introduction to HTML

TESTING TIME

A. 1. c

2. c

3. a

4. b

5. c

6. c

B. 1. Editor

2. Elements

3. Html

4. F5

5. Strike

C. 1. False

2. True

3. True

4. False

5. False

D. 1. HTML (Hyper text markup language) is a computer language used to create web pages in the form of documents to display on the world wide web (www).

2. a. HTML element is the collection of start tag, its attributes, an end tag and everything in between. On the other hand an HTML tag (either

opening or closing) is used to mark the start or end of an element, as you can see in the above illustration.

2. b. The break elements
 is an empty elements which is used to insert a break in a line in an HTML document. While the horizontal rule element <HR> defines a thematic break with a horizontal line between paragraph level elements in the body of the HTML documents.

3. To highlight some text in a web page,

- The bold element defines bold text.
- The italic element <i> defines italic text.
- The underline element <u> defines underline text.

4. Heading tags indicate headings on a webpage by using code to tell a web browser how to display content.

5. CSS is a type of language that can be used to format an HTML web page which you have created in a WYSIWYG or a text editor.

ACTIVITY TIME

A. Across

2. Subscript
5. H1
6. Plum
7. Link

Down

1. Notepad
3. Break
4. CSS
5. HTML

Chapter-8

Properties in CSS

TESTING TIME

A. 1. c

2. c

3. a

4. c

5. a

B. 1. Three

2. Hyphen

3. Text Decoration

4. Length or Percentage

5. Pixels

C. 1. False

2. False

3. True

4. True

5. True

D. 1. CSS is a type of language that can be used to format an HTML web page which you have created in a WYSIWYG or a text editor.

2. CSS has the following rules,

- A hyphen (-) is used between two consecutive words in a property.

- A semi-colon (;) is used after every declaration in every style of inserting a styled sheet.
- If mention of length values is in pixels, then the px keyword is used at the end of the name of value.
- Style keyword is used as an element in the <HEAD> tag.

3. Properties of text settings, Color, text align, Text-Transform, Text-Indent, Line-Height, text Decoration.

4. Text Align is used to set the horizontal alignment of the text. While the border width is used to set the width of the border.

5. The margin property defines the space around an HTML element. The margin specifies a shorthand property for setting the margin properties in one declaration. The margin-bottom specifies the bottom margin of an element.

ACTIVITY TIME

1.
 - a. This property is used to set the position of the image set as the background.
 - b. This property is used to set the case of the text.
 - c. This property is used to set the size of the text.

2.

| | |
|------|--|
| H2 | |
| Body | |
| P | |

Chapter-9

Internet Services

TESTING TIME

A. 1. c

2. c

3. a

4. c

5. a

B. 1. Screen Saver

2. Show desktop

3. Live

4. Personalize

5. Taskbar

C. 1. True

2. False

3. True

4. False

5. True

D. 1. Social networking refers to an online group of people who share their data and services using some social networking sites. Examples of social networking site are Face book, Twitter, Link edin, Instagram and you tube.

2. Microblogging is an online broadcast medium that exists as a specific form of blogging.

3. The sort massages broad casted on twitter are called tweets.

4. Instagram (also known as IG or Insta) is another social networking site similar to facebook, however with a different interface and types of services it provides. It basically made for sharing photos and videos from a smartphone.

5. Cloud Computing refers to manipulating, organizing, and accessing the hardware and software resources on a cloud. The cloud computing software is not required to installed locally on the PC which makes it platform independent and hence it helps in making one's business applications portable and public.

6. To open Google drive, follow these steps.

Step-1 Sign into your Google account

Step-2 Click the Google apps and select the drive option.

Step-3 Click the my drive button and then click upload files option.

Step-4 Choose the desired files and click the open button.

ACTIVITY TIME

- A. a. 2004
- b. 2006
- c. 2008
- d. 2003
- e. 2012

Chapter-10

Computer Viruses

TESTING TIME

A. 1. b

2. b

3. b

4. c

5. a

B. 1. Internet

2. Virus

3. Targets

4. Worm

5. Macro

C. 1. False

2. True

3. False

4. False

5. True

D. 1. Opening attachments or links from unknown or spoofed emails,
Downloading software from malicious sites.

2. Program Virus infect executable program files, such as those with extension like. BIN, .COM, .EXE, .OVL, .DRV (driver) and .SYS (device driver).

Macro viruses infect data files. These viruses attach themselves to a file such as a word document or spreadsheet macro.

3. Harmful Effect:

- I. Corrupt executable program files such as word processor and operating system.
- II. Delete information from files.
- III. Monitor activity and steal important data such as credit card information, account number and password
- IV. Slow down the system by occupying most of the memory space
- V. Rename all files with a single name

4. Spyware is a type of malware that is installed on computers and gathers information about the users without their knowledge.

5. You can easily detect a virus attack on your computer,

- Unexpected pop-up windows start to appear on your screen
- Unable to open some files or notice changes in file size
- Frequently hanging of the system
- Reformatting the hard disk

ACTIVITY TIME

- a. (ii)
- b. (v)
- c. (iv)
- d. (i)
- e. (iii)a

Work Sheet-1

(Chapters 1 to 5)

1. Fill in the blanks.

- a. 2
- b. Sorting
- c. Envelop
- d. Clock & Region
- e. Negative

2. Tick the correct option.

- a. ii
- b. i
- c. iii
- d. ii
- e. i
- f. iii

3. True/False.

- a. True
- b. True
- c. False
- d. False
- e. True
- f. True

4. Define the following terms.

- a. Radix – the total number of digits used in a number system is called its base of radix.
- b. Content View - each file and folder is displayed on a separate row, on which you can see detailed information about each file and folder.
- b. Ampersand & Operator - In programming, a double ampersand is used to represent the Boolean AND operator such as in the C statement, if (x >= 100 && x >= 199).
- c. Custom Filtering – allows you to filter data based on certain specific conditions.
- d. Flipping means to turn an image horizontal or vertical.

5. Application based questions.

- a. 18490390
- b. Content View
- c. + Operator to combine two text values . This technique is called BODMAS.
- d. Click anywhere in the chart. This displays the Chart Tools, adding the Design, Layout, and Format tabs. On the Format tab, in the Current Selection group, click the arrow next to the Chart Elements box, and then select the chart element that you want to format.
- e. Click the selection tool in the tools panel and double –click on the image to select it. Click modify on the menu bar. Point to transform and then click the flip vertical or horizontal.
- f. To change the order of the layer, follow these steps:

Step-1 Insert a new layer above the stars layer and rename it to meteoroid.

Step-2 Select the spray brush tool choose the yellow color and set the brush width and height to 9 px.

Step-3 Click and drag the spray brush on the stage to draw meteoroids.

Step-4 Now, select the meteoroid layer, click and drag the selected layer, to place it after the moon layer.

Step-5 Release the mouse button when the layer is placed at the desired place.

6. Answers the following questions.

- a. The digital information and instruction in a computer are represented through a two state system – ON and OFF. ON is represented as 1 and OFF as 0.
- b. Eight different views are available to view files and folders, Including extra large, large, medium, small, list, details, tiles, and content.
- c. A Mixed reference is a reference that refers to a specific row or column. For example, \$A1 or A\$1.
- d. Arranging the data of a worksheet either in ascending or descending order is known as sorting. While the filter feature allows you to view only the selected data in a range, while hiding data temporarily.
- e. A Tint Tween uses a classic tween or motion tween to change a symbol's tint over time.
- f. Think of layer in flash as clear pieces of film stacked on top of each other.

Work Sheet-2

(Chapters 6 to 10)

1. Fill in the blanks.

- a. Constant
- b. Circle
- c. Horizontal Rule
- d. Facebook
- e. Bootkits

2. Tick the correct option.

- a. iii
- b. i
- c. ii
- d. ii
- e. i
- f. iii

3. True/False.

- a. False
- b. False
- c. True
- d. True
- e. True

4. Define the following terms.

- a. Looping - Loops play an important role in any programming language.

- b. Resolution – Number of pixels per square inch on a computer screen is called the resolution of the screen.
- c. Attributes specify the properties for the HTML elements. They are always specified inside the opening tag after the tag name.
- d. A Bulletin board system or BBS is a computer server running software that allows users to connect to the system using a terminal program.
- e. Vault – If it detects an unknown virus, it quarantines the infected file. Such a file is stored in a special area called quarantine or vault.

5. Application based questions.

- a. FOR loop is used to perform iteration from starting to end.
- b. She needs to specify coordinates of x and y axis from starting to end point .
- c. <Body> Attributes
- d. yes, you can send an invitation or greeting card via any social networking sites.
- e. Worms.

6. Answers the following questions.

- a. The Inner loop is nested inside the outer loop. Nested loops are useful when for each pass through the outer loop, you need to repeat some action on the data in the outer loop.
- b. The Sound Command produces sound of a specific frequency for a specific duration from the PC Speaker.
- c. The break element
 is used to insert break line, the horizontal rule <HR> defines a thematic break with a horizontal line between paragraph and the paragraph element <P> is a container element which is used to define a paragraph in HTML.
- d. Newsgroup or discussion groups are used to exchange messages and files through use net, which was established in 1980 and continues as one of the oldest computer networks.
- e. Boot Sector Viruses infect the boot sector of a hard disk, CD/DVD or a pen drive. For example Poly boot.B, Stoned Virus.

Program Viruses infect executable program files, such as those with extensions like .BIN, .COM, .EXE, .OVL, .DRV and .SYS. for example Acid Rain, Alien. 298, umbrella.