Class **8** 

# **ANSWER KEY**

#### Thinkcode Ver 2.0

# 1. Computer Networking



#### Exercise

**A.** 1. a 2. b

**B.** 1.T 2.T

3. T 4. T

3. c

C. 1. protocol 2. SMTP 3. router 4. mesh 5. NIC

- D. 1. Protocol is a set of rules that governs the communication between the computers over a network.
  - 2. The components needed for a network are:

(i) Network Interface Card (NIC)

(ii) Hub or switch

4. a

(iii) Router

5. T

(iv) Modem

- (v) Networking Cable (Ethernet Cable)
- 3. A client is a computer which depends on the server for all the resources.

A server controls the access to the hardware and software on the network.

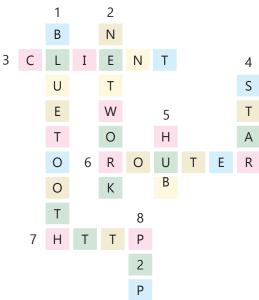
- 4. Topology refers to the geometric arrangement of computers or nodes in a network.
- **E.** 1. Computer network means a system of interconnected computers. The advantages of computer network are:
  - (i) The information can be easily shared by the people.
  - (ii) It helps in reducing the cost of hardware.
  - (iii) Store information on one centralised location.
  - (iv) Reliability implies backing up of information. If a system crashes, then the information is accessible on another workstation for future use.
  - (v) Reduction in installation cost.
  - 2. LAN is a digital communication system that interconnects a larger number of computers and other peripheral devices within a radius of less than 1 km.

MAN consists of two or more local area networks or campus area networks together that usually spans several buildings in the same city or town.

**F.** 1. Ring topology

2. Network server





# 2. Introduction to Adobe Photoshop CC



#### Exercise

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

**B.** 1. advanced 2. tiny dots 3. .psd 4. began 5. Application

- **C.** 1. Pixels are the short for Picture Element. The computer screen comprises of tiny little dots. These tiny dots are known as pixels.
  - 2. The Paint Bucket Tool in Photoshop fills adjacent pixels that are similar in color in the image. It fills with either the selected foreground color or with a pattern.
  - 3. Rasterizing means the text will be converted into pixels, allowing you to make image adjustments that normally do not work with text layer. Rasterize is the process of converting a vector image to a raster image.
  - 4. Layers panel contains all the layers present in the Photoshop document. Whenever you add an image into a Photoshop document, a new layer is created.
  - 5. A layer can be defined as one image stacked on top of another to form a complete image.

- **E.** 1. Selection tools are used to select certain areas of the image to work without affecting the unselected areas. Some of the Selection tools are Rectangular Marquee Tool, Elliptical Marquee Tool and Lasso Tool
  - 2. Some of the blending brush combinations of the Mixer brush are Dry, Moist, Wet, Very Wet, etc. Follow the below steps to use the Mixer Brush Tool:
    - **Step 1:** Open a new document and select the Mixer Brush Tool from the Tools panel.
    - **Step 2:** Select the desired brush from the Brush Presets Picker in the Options bar.
    - **Step 3:** To sample a color either you can click on the Current brush load from the Options bar and select the desired color or press Alt key and click from where you wish to sample color in the current image.
    - **Step 4:** Set various options in the Options bar according to your preferences. Specifying the percentages of Wet, Load, Mix and Flow effects the outcome on the canvas.
    - Step 5: Click and drag the mouse on image to paint.
  - 3. Slice Tool divides an image or layout into smaller sections called slices which can be exported and developed separately. This is mainly used for web publications. These small slices can be saved as a separate file and can be modified using the Save for Web command. The slices created manually are called user-slices. As we create user-slices, Photoshop automatically divides the rest of the area.
  - 4. Quick Selection Tool makes a selection based on the color and contrast of the same color in the image that you wish to select. It remembers all the consecutive strokes. This way you can make different selections in a single image also. Quick selection tool is used to select a bigger area to work whereas the magic wand tool is used to work with a specific area. Hence Magic wand tool is better that the quick selection tool.
- F. 1. Background/Foreground
- 2. Horizontal Type tool
- 3. Move tool

G. a. Gradient Tool



- 1. Vertical Type Tool
- 2. Gradient Tool
- 3. Color Replacement Tool

4. Lasso Tool

5. Crop Tool

# 3. More on Photoshop CC



#### Exercise

A 1 a

2. b

- 3. b
- 4. a

- B. 1. Background
- 2. Info
- 3. Red Eye
- 4. Sharpen

- **C.** 1. (i) Delete a layer by clicking on the Delete layer button.
  - (ii) Add a style to a layer by clicking on the Add a layer style button.
  - 2. A Ruler Tool is a handy tool that you can use to measure and draw outlines in any direction.
  - 3. Blur Tool makes the image hazy or softens the pixels of an image. It helps to highlight the main object in the image.
- **D.** 1. The various options of the Image menu are as follows:
  - (i) Adjustments: It allows you to access various tools for changing the brightness, contrast, levels, exposure, vibrancy, hue/saturation, and color balance of an image.
  - (ii) Canvas Size: It allows you to change the width and height of the whole working area according to your requirement.
  - (iii) Reveal All: It expands the canvas as large as necessary to reveal full image when an image been moved beyond the canvas boundary.
  - (iv) Apply Image: It allows you to apply a Blend Mode to the layer. It opens a dialog box with Source and Target tabs. From the Source tab, you can choose a layer on which blend modes will be applied. From the Target tab, you can select different blend modes to apply.
  - 2. Spot Healing Brush Tool is also known as texture replacement tool because it blends the wrong or bad texture of one area in an image with the good or fine texture area of the same image. The result of the spot removal may vary depending on the complexity of the image. It can be used to remove the acne or skin blemishes and scars completely from an image.
  - 3. Steps to draw a straight path segment are:
    - **Step 1:** Create a new document in Photoshop or open an existing image.
    - **Step 2:** Select the Pen Tool to from the Tools panel and set the mode of the Pen Tool to Path from the Options bar.
    - **Step 3:** Click on a point to start the path.
    - **Step 4:** Press the Shift key and click on the next point to draw a straight path.
    - **Step 5:** To close the shape, return to the first point and click once when the small circle appears.

Perform the below steps to draw a curved path segment:

- **Step 1:** Click to create the second point and drag with the Pen Tool before you release the mouse button. You will see handles appear. These handles determine the acuteness of the curve and its direction.
- **Step 2:** Click on the small square at the end of the handle line and drag the mouse around to adjust the handles.
- **Step 3:** When you are satisfied with the shape of the curve, release the mouse button.
- **E.** 1. History Brush Tool
  - 2. Horizontal Type Tool



1. Layers Panel 2. Eraser Tool 3. Hand Tool 4. Blur Tool 5. Magic Wand Tool



### **Periodic Assessment 1**

(Based on chapters 1 to 3)

- A. 1. Ring 2. Tree 3. Bus 4. Star 1. e 2. d 3. a 5. b B. 4. c C. Layer filtering options ₽ Knd Indicates layer visibility Layers Add layer mask Delete layer Link layer ស្រាល្ធ 🖼 🗉 🗊 Create new layer add a layer style Create new fill or Create a adjustment layer new group
- 4. Images, Links and Frames in HTML



A.	1. b	2. c	3. c	4. c	5. b
В.	1. F	2. F	3. F	4. T	5. F
C.	1. internal link	2. <a></a>	3. DIRECTION	4. <frameset></frameset>	5. NAME

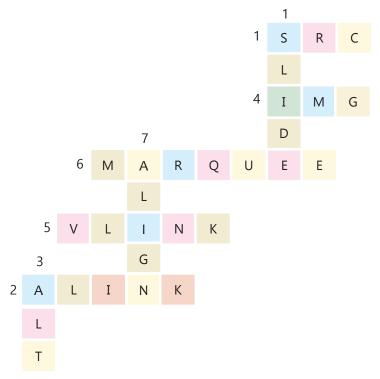
- **D.** 1 . HREF stands for Hypertext Reference.
  - 2. ALINK attribute is used to set the color of the active link.
  - 3. Frames are the different sections or parts of a web page.
  - 4. Border specifies the thickness of the border surrounding the image.
  - 5. The ROWS attribute of the <FRAMESET> tag is used to divide the window horizontally.
- **E.** 1. a. The SCROLLAMOUNT attribute is used to specify the speed of the moving object in a marquee.
  - b. The HREF means Hypertext Reference which takes reference to the address of the web page.

- c. The ALT attribute specifies the alternate text to be displayed in the web browser, if the provided image is not found. It is used with <img>.
- 2. (i) **SRC attributes:** It specifies the source or URL of the image that has to be inserted in the web page. For example, <IMG SRC="C:/Mydocuments/lily.jpg">
  - (ii) **ALIGN attribute:** It aligns the image with respect to the text placed adjacent to the image. Image can be aligned left, right, middle, bottom and top. For example,

```
<IMG SRC="lily.jpg" ALIGN="right">
```

- 3. The attributes of the <FRAME> tag are:
  - (i) **FRAMEBORDER:** This attribute is used to define whether a border is to be created around the frame or not.
  - (ii) **NORESIZE:** This attribute is used to restrict the user to resize the frame on the web page.
  - (iii) **SRC:** This attribute is used to define the URL or path of the web page which is to be linked to the frame.
- **F.** 1. <FRAMESET> tag
  - 2. Yes, by using <MARQUEE> tag
  - 3. < IMG > tag





# 5. Ethics and Safety Measures in Computing



A.	1. a	2. c	3. c	4. b	5. a
B.	1. T	2. F	3. F	4. T	5. F
C.	1. Trademark	2. Plagiarism	3. Patent	4. Phishina	5. Spam

- **D.** 1. Software piracy means illegal use of software.
  - 2. Hacking is the unauthorised access to computer system for the purpose of destroying the system or stealing important information from the system.
  - 3. Patents and Copyright are the two examples of intellectual property rights.
  - 4. Two ways to stop Cyberbullying are:
    - (i) Don't disclose your personal information like address, phone number and school name online with unknown people.
    - (ii) Be careful about sharing private information with others online as this could be shared with or seen by people with malicious intent.
  - 5. Computer Ethics are the common guidelines that we need to follow while using the computer.
- **E.** 1. Patent is the right that gives an inventor the complete right to make, use, and sell his or her work for a specific time period.

On other hand, Trademark is a symbol or word legally registered or established used as representing a company or product.

2. Internet is Network of Networks, means International Network.

Three disadvantages of Internet:

- (i) **Wastage of Time:** It is a wastage of time as with the excessive use of the Internet people get addicted to it and spend lots of time on surfing.
- (ii) **Virus and Spam Attacks:** Internet has also increased the cases of virus attacks. Users can lost their data and programs in these virus attacks.
- (iii) **Loss of Personal Information:** We share our personal information over the Internet that can be misused by cyber criminals to harm you.
- 3. Three protective measures to avoid Plagiarism:
  - (i) We should always mention the source of information.
  - (ii) We should rephrase the content as per our requirement to avoid Plagiarism.
  - (iii) We should use quotation marks to write the word or lines written by someone else.

- 4. Three ways to stay protective online:
  - (i) Be cautious while using your password online.
  - (ii) Don't entertain strangers or suspicious mails.
  - (iii) Don't share your personal details with anyone online.
- **F.** 1. She can preview her e-mail to decide whether it is a spam mail or not.
  - 2. He can look for the green lock sign at the left most side of the address bar in the browser. This signifies that the website is secure.



### **Periodic Assessment 2**

(Based on chapters 4 & 5)

- **A.** 1. It is used to divide the window into vertical sections.
  - 2. It is used to define whether a border is to be created around the frame or not.
  - 3. It is used to restrict the user to resize the frame on web page.
  - 4. It is used to set the color of the active link.
  - 5. It is used to set the color of the visited links.
  - 6. It is used to specify the place in which the linked web page will open.



- **B.** 1. Forum is an online discussion site where people with same interests can post messages, share their views and get other's ideas on a certain topic of their choice.
  - 2. Computer Ethics are the common guidelines that we need to follow while using the computer. These are also known as Etiquettes that tell us how to use the internet wisely.
  - 3. Plagiarism is simply taking other person's work, and instead of giving credit to the person who actually prepared that, presenting it as your own work.
- C. She can use anchortag to accomplish her task. Anchortag can used as <A> Hyperlink Text </A>.
  For example, <A HREF="Homework.html"> Homework </A>

#### **Test Sheet 1**

A.

(Based on chapters 1 to 5)								
1. (This question was printed incorrectly in the book, please correct this question in your textbook)								
Which of these terms describe a computer that is connected to a network?								
a. Node	b. Unit	c. Device	d. Attachment					
Ans. a.								
2. (This question wa	s printed incorrectly i	n the book, please co	rrect this question in your textbook)					
A computer net	vork that spans accre	oss a city can be call	ed as					
a. LAN	b. MAN	c. WAN	d. CAN					
Ans. b.								
3. (This question wa	s printed incorrectly i	n the book, please co	rrect this question in your textbook)					
Which of the foll	lowing tools is not fo	ound on the Tools pa	anel?					
a. Gradient	b. Crop	c. Layer	d. Brushy					
Ans. c.								
4. (This question wa	s printed incorrectly i	n the book, please co	rrect this question in your textbook)					
Which command	d lets you add few cu	ishion pixels at the b	oorder of objects in your photos?					
a. Calculation	b. Apply image	c. Trap	d. Flow					
Ans. c.								
5. (This question wa	s printed incorrectly i	n the book, please co	rrect this question in your textbook)					
Which of these t	ools changes all com	nparable pixels to tra	ansparent?					
a. Eraser Tool	b. Magic Eraser To	ol c. Background Era	ser Tool d. None of these					
Ans. b.								

6. (This question was printed incorrectly in the book, please correct this question in your textbook) Which of the following attributes is not used with the <IMG> tag?

a. SRC b. FRAME c. HEIGHT d. BORDER Ans. b.

7. c 8. b 9. a

**B.** 1. internal link2. Eyedropper3. began4. Spam5. Router

6. NIC

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

- **D.** 1. HREF stands for Hypertext Reference.
  - 2. Sharpen Tool increases the contrast of the pixels at the edges thus increasing the focus on the image.
  - 3. Cyberbullying is the use of electronic media such as smartphones, computers and tablets to harass or attack a person. It is also known as online bullying.
  - 4. A Ruler Tool is a handy tool that you can use to measure and draw outlines in any direction.
  - 5. Rasterizing means the text will be converted into pixels, allowing you to make image adjustments that normally do not work with text layer. Rasterize is the process of converting a vector image to a raster image.
  - 6. There are mainly five components of a network which are as follows:
    - **Sender:** A sender is a computer that wants to send information to other computer connected to the network.
    - **Receiver:** A receiver is a computer which is expecting the data from other computer on the network.
    - **Transmission Medium:** A transmission medium is a communication channel through which information is transferred from one computer to another on a network.
    - **Message:** A message is the information or data which needs to be transferred from one computer to another.
    - Protocol: A protocol is a set of standard rules used for communication.
- E. 1. <A HREF = "Display.html"> Display </A>
  - 2. Plagiarism is simply taking other person's work, and instead of giving credit to the person who actually prepared that, presenting it as your own work.

Two ways to prevent plagiarism are:

- (i) We should always mention the source of information.
- (ii) We should rephrase the content as per our requirement to avoid Plagiarism.
- 3. **Adjustments:** It allows you to access various tools for changing the brightness, contrast, levels, exposure, vibrance, hue/saturation, and color balance of an image.

Auto Tone: It automatically adjusts the black point and white point in an image.



Auto Contrast: It adjusts image contrast automatically.

**Auto Color:** It adjusts the contrast and color of an image.

- 4. Slice Tool divides an image or layout into smaller sections called slices which can be exported and developed separately. This is mainly used for web publications. These small slices can be saved as a separate file and can be modified using the Save for Web command. The slices created manually are called user-slices. As we create user-slices, Photoshop automatically divides the rest of the area.
- 5. A LAN is a digital communication system that interconnects a larger number of computers and other peripheral devices within a radius of less than 1 km.

MAN consists of two or more local area networks or campus area networks together that usually span several buildings in the same city or town.

# 6. Google Apps



#### Exercise

**A.** 1. c 2. a 3. b 4. a 5. c

**B.** 1. Sundar Pichai 2. encryption 3. share 4. Roadmap, Satellite, Terrain

5. saved

- **C.** 1. Google Drive is a cloud-based storage service. With Google Drive, multiple users can access a single file at the same time, at different locations and from different devices.
  - 2. Google Slides is an online version of Microsoft PowerPoint developed by Google in 2006.
  - 3. Google Maps is a digital navigation program that provides detailed information about the geographical regions of any particular area. Google Map was launched on February 8, 2005.
  - 4. Google mail or Gmail is one of the best and free mailing apps accessible through a web browser over the Internet.
- **D.** 1. Follow the below steps to open Google Docs:
  - **Step 1:** Click on the Google apps button.
  - **Step 2:** Click on the Docs icon from the drop-down menu. The Start a new document page appears.
  - Step 3: Click on the Blank template.
  - 2. Some of the features of YouTube are:
    - (i) Users can search for any particular keyword and watch videos
    - (ii) Create a personal YouTube channel.
    - (iii) Upload videos to your channel.

- (iv) Like/Comment/share other YouTube videos.
- (v) Users can subscribe/follow other YouTube channels and users.
- 3. YouTube is the most widely used video sharing application where users can upload their videos, share, comment, watch and like other videos.
  - Broadcasting a video is easy using YouTube.
- 4. Google introduced Google Sheets, a spreadsheet application on March 9, 2006. It works like any other spreadsheet tool, but since it is an online app, it offers much more than just the spreadsheet tools.

Perform the following steps to share a spreadsheet:

- Step 1: Click on the Share button from the top-right corner of the spreadsheet.
- **Step 2:** Enter the email address(es) of the people with whom you want to share the spreadsheet in the box.
- **Step 3:** Assign permission levels by clicking on the Settings button.
- **Step 4:** Click on the status of the receiver.
- **Step 5:** Type a message for the receiver in the Message box.
- Step 6: Click on the Send button to share the file.

Perform the following steps to protect a spreadsheet:

- **Step 1:** Select the Data à Protected sheets and ranges option from the menu bar. You can lock editing of some cells in a sheet or even a cell range in a sheet.
- **Step 2:** Select the data you would like to protect or choose Range or Sheet, to protect an entire sheet.
- Step 3: Click on Set permissions button.
- E. 1. View button

2. Google Maps



### **Activity Zone**

- 1. Google Slides
- 2. YouTube
- 3. Google Sheets
- 4. Broadcast yourself

- 5. Google Docs
- 6. Google Drive

# 7. Latest Technological Developments



#### Exercise

**A.** 1. b

2. a

3. a

4. b



Thinkcode (Version 2.0)-VIII (Answer Key)

B.	1. Augmented	Reality	2. R	PA	3. Virtual	4. RP			
C.	1. (This question	n was printed incor	rectly in the I	book, please corr	ect this questi	ion in your textbook)			
	The Mimo monitor is used to check SIDS (Sudden Infant Death Syndrome).								
	Ans. T								
	2. F	3. T	4. F						
D.		1. Rapid prototyping is used to create models to quickly test a new product before mass production. 3D Printing can be termed as a RP method.							
	industry thro process from	ough the use of ro	bots. The p ts. Robotic a	urpose of RPA is	s to transfer t	g certain tasks in an the execution of the IT structure without			
	3. (This question	n was printed incor	rectly in the l	book, please corr	ect this questi	ion in your textbook)			
	Name any tw	o 3D printing me	thods.						
	Ans. Direct 3	D Printing and Bir	nder 3D Prin	ting.					
E.	to superim can see. In in the real distinguish	<ol> <li>a. Augmented Reality is the blending of Virtual Reality and real life. AR is using technology to superimpose information such as sounds, images and text on the real world that we can see. Images are created by developers within applications that blend in with content in the real world. AR users can in teract with virtual content in the real world and can also distinguish between virtual and real content.</li> <li>b. Virtual Reality refers to a virtual world that the user can interact with. While in VR, the</li> </ol>							
	user cannot easily distinguish between what is real and what is virtual. VR provides a timmersive experience to the user. These technologies find the greatest use in entertainm sports/gaming, close interactive eye to eye communication and aided shopping experier Some examples are Oculus Rift and Google cardboard.								
	2. Applications	of AR are:							
	(i) SixthSens	se device	(ii)	Google Glass					
	(iii) Star Wall	(	(iv)	Coloring book					
	<b>Applications</b>	of VR are:							
	(i) Oculus F	Rift	(ii)	VR in education	n (	iii) VR in medical			
	a virtual nety Each connect any human ir	work where a mon ted device has a ur ntervention. The co we environment. Tl	nitoring cen nique identif onnected de	ter ensures that ier and can trans vices gather and	everything is fer data over share data ak	achines for creating s working smoothly. the network without bout their usage and gerators, televisions,			
	1 The applicati	one of 2D Printing	a ara:						

4. The applications of 3D Printing are:

(i) Education

(ii) Rapid Prototyping (RP) Method

(iii) Medicines

(iv) Construction

(v) Art and Jewelry

5. AR stands for Augmented Reality, in this technology virtual objects are created and visualized alongside with real life objects. Whereas VR or Virtual Reality is completely virtual yet it feels real. While using the AR tech, you can partially see the real world, whereas the VR tech completely cuts you off from the real world. It takes you to a virtual world where everything is just a simulation.



K	J	I	R	R	Т	I	G	V	D	Α	V	Χ	Z
F	G	K	R	D	F	U	Р	В	С	D	S	K	Z
R	0	В	0	Т	I	С	S	J	Н	F	G	S	F
D	F	S	S	Т	Α	R	W	Α	L	K	W	R	M
G	D	С	Р	G	F	F	R	R	Т	R	W	Н	I
С	Z	С	Е	F	D	Н	D	Е	Υ	D	S	G	М
Н	J	K	Α	K	L	Н	G	S	Н	J	L	Т	0
V	I	R	Т	U	Α	L	R	Е	Α	L	I	Т	Y
G	G	0	0	G	L	Е	G	L	Α	S	S	Е	W
F	D	S	W	Α	S	D	F	Н	W	Е	R	F	S

### **Periodic Assessment 3**

(Based on chapters 6 & 7)

- **A.** 1. Gallery 2. Flipkart 3. Gmail
- **B.** 1. Gaming App 2. Productivity App 3. Entertainment App
- **C.** 1. Google Drive is a cloud-based storage service. With Google Drive, multiple users can access a single file at the same time, at different locations and from different devices.
  - 2. Google Maps is a digital navigation program that provides detailed information about the geographical regions of any particular area. Google Map was launched on February 8, 2005.
  - 3. Augmented Reality is the blending of Virtual Reality and real life. AR is using technology to superimpose information such as sounds, images and text on the real world that we can see. Images are created by developers within applications that blend in with content in the real world. AR users can interact with virtual content in the real world and can also distinguish between virtual and real content.
  - 4. 3D Printing is the process of making a physical object from a three-dimensional physical model which was first developed at MIT (Massachusetts Institute of Technology) in the 1980's.



# 8. Conditional Statements in Python

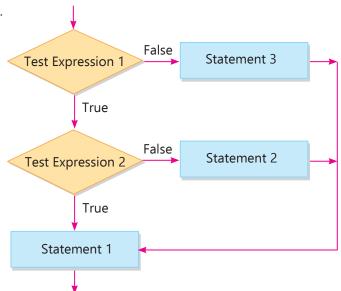


1. c 2. a 3. d 4. b 5. c B. 1. F 2. F 3. F 4. T 5. T C. 3. false 1. if 2. true 4. else

**D.** 1. Decision making in Python is done by called conditional statements which decide the flow of program execution.

```
2. if (Test Expressions_1):
   Indented block 1
   elif (Test Expression_2):
   Indented block 2
   elif (Test Expression_3):
   Indented block 3
   else:
   Indented block
3. if (Test Expression):
   Indented statement block
   # if block ends here
```

**E.** 1.



```
2. um = float(input("Enter the distance measured in centimeter : "))
    """ 1 inch = 2.54 centimeters"""
    inc = num/2.54
    print("Distance in inch : ", inc)
```



### **Activity Zone**

- 1. First number is greater than second number.
- 2. Positive number.
- 3. Above ten and also about 20!
- 4. b is not greater than a.

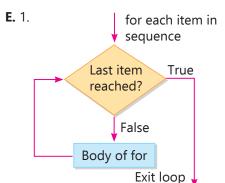
# 9. Python—Loop and Functions



#### Exercise

A. 1. b 2. a and b 3. a 4. a 5. c B. 1. inbuilt 2. while 3. non-zero, false 4. infinite 5. break, continue C. 1. F 2. F 3. T 4. F 5. T

- **D.** 1. Looping refers to the process of repeating a set of statements repeatedly on the basis of a condition until the condition is falsified.
  - 2. The syntax of for loop is for <variable> in <iterator>: Statements
  - 3. A function is a block of organized and reusable code used to perform a single or related action.





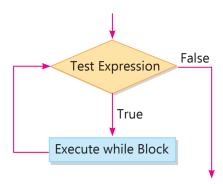
2. The while statement executes a set of statements repeatedly, until the logical expression evaluates to true. When the condition becomes false, the control comes out of the loop.

The syntax of while statement is given below.

Syntax:

while (test expression):

Statements



3. The break is a keyword in Python which is used for bringing the program control out of the loop. When a continue statement is encountered inside a loop, control of the program jumps to the beginning of the loop for next iteration, skipping the execution of rest of the statements of the loop.



### **Activity Zone**

- 1.55
- 2. apple

banana

cherry

- 3. 2
  - 4
- 4. 0
  - 0
  - 1
  - 0
  - 2
- 5. 0
  - 1
  - 2
  - 0

### **Periodic Assessment 4**

(Based on chapters 8 & 9)

```
A. # Python program to determine whether a given number is prime or not
   n = int(input("Please enter the number: "))
    #Check if the given number is greater than 1
   if n > 1:
        for i in range (2, n//2):
            if (n \% i) == 0:
                print(n,"is not a prime number")
                break
       else:print(n,"is a prime number")
   else:
      print(n,"is not a prime number")
  # Python program to determine the factorial of a given number
   n = int(input('Enter a number: '))
   fact = 1
   if n < 0:
       print('Factorial does not exist for negative numbers.')
   elif n == 0:
        print('The factorial of 0 is 1')
   else:
        for i in range (1, n+1):
            fact = fact*i
   print('Factorial is', fact)
C. 1. if...elif...else 2. if...elif...else
                                   3. if...else
                                                  4 input()
```

### **Test Sheet 2**

(Based on chapters 6 to 9)

A.	1. c	2. a	3. c	4. a	5. b
	6. c	7. a	8. a	9. d	
B.	1. hybrid	2. install	3. in-built	4. Augmented Reali	ty
	5. Satellite, Terrain,	Roadmap	6. saved		
C.	1. F	2. T	3. F	4. F	5. F
	6. F				



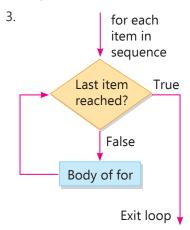
- **D.** 1. An app is a software program primarily developed for hand-held smart devices such as mobile and tablet.
  - 2. Looping refers to the process of repeating a set of statements repeatedly on the basis of a condition until the condition is falsified.
  - 3. Google Docs is a free online word processing program. It is similar to Microsoft Word.
  - 4. Rapid prototyping is used to create models to quickly test a new product before mass production. 3D Printing can be termed as a RP method.

```
5. um = float(input("Enter the distance measured in centimeter : "))
    """ 1 inch = 2.54 centimeters"""
    inc = num/2.54
    print("Distance in inch : ", inc)
```

- 6. Decision making in Python is done by conditional statements which decide the flow of program execution. In Python, three types of decision making statements which are if, if... else and if...elif...else statements.
- **E.** 1. Internet of Things is a system of connected computing devices, mechanical and digital machines for creating a virtual network where a monitoring center ensures that everything is working smoothly. Each connected device has a unique identifier and can transfer data over the network without any human intervention.

A lightbulb that can be switched on using a smartphone app, a motion sensor or a smart thermostat in your office or a connected streetlight are examples of IoT devices.

- 2. Follow the below steps to open a document:
  - **Step 1:** Click on the Google apps button.
  - **Step 2:** Click on the Docs icon from the drop-down menu. The Start a new document page appears.
  - **Step 3:** Click on the Blank template.



4. Web apps are actually web applications which give a user experience similar to native apps. These apps are not deployed on the app store.

Some of the examples of the Web apps are OLX, Flipkart and Pinterest.

Native apps are platform dependent which means that these apps are primarily developed for a specific platform. Some of the examples of native apps are Camera, Microphone, Gallery and Address book.

5. By using while loop:

```
limit = int(input(" Please Enter the limit Value : "))
Sum = 0
N = 1
while N <= limit:
if(N % 2 == 0):
print(N)
Sum = Sum + N
N = N + 1
print("The Sum of Even Numbers from 1 to", limit, "is: ", Sum)
By using for loop:
Sum = 0
limit = int(input(" Enter the last number of the range : "))
for even in range(1, limit+1):
if(even % 2 == 0):
print(even)
Sum = Sum + even
print("The Sum of the even numbers till", limit, "is: ", Sum)
```